3R-1012

Release Report/ General Correspondence

Enterprise RA

Date: Apr-Jun 2014

مەلكىيە بىلىدى _{ئە} يەھ
<u>District I</u>
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 8, 2011 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

				Sa	nta Fe	e, NM 87	505					
<u></u>	<u> </u>	F	Releas	e Notific	atior	n and C	orrective	Actio	on	<u></u>		ومنعانكي بمحمالك مورديم
					OP	ERATO	3		Initial	Report		Final Report
Name of C	ompany:	Enterprise F	-ield Ser	/ices LLC		Contact: Thomas Long						
Address: 6	14 Reilly A	ve, Farmin	gton, NN	87401		Telephone No. 505-599-2286						
Facility Na	me: Latera	al K-31				Facility Typ	be: Natural Ga	as Gatl	hering L	ine		
Surface Ov	wner: State	ə		Mineral C)wner:	BLM			API No	о. Э.		
				LOCA		OF REL	EASE					
Unit Letter	Section	Township	Range	Feet from	North	South	Feet from	East	Nest	County		· · · · · · · · · · · · · · · · · · ·
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<u>::</u> ::						7/26/2014	@ 8:00 p.m.		7/26/201	14 @ 12:30) a.m.	
Was Immed	late Notice		e 🗔 No		wirod	If YES, To	Whom? Notific	ation to	NMOCD	– Cory Sr	nith	
						Data and				OIL C	ONS	DIV DIST D
By whom? Was a Wate	rcourse Be	ached?		· · · ·		If YES V	Hour:	the W	atercourse	<u> </u>		014 0131. 3
	-		🗌 Yes	🛛 No						۲ A	UG 1	1 2014
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Thereby cer rules and re which may e relieve the c ground wate operator of r	uly that the gulations al endanger pu perator of l er, surface v responsibilit	Information (l operators a ublic health c iability should vater, humar y for complia	given above are require for the envire d their ope the health or ance with a	to report and ronment. The rations have f the environme any other fede	accepta allor file alled to ent. In a ral, stat	certain relea certain relea ance of a C adequately addition, NN e, or local la	ase notifications 141 report by th investigate and IOCD acceptan	age and and pe ne NMO remedi ce of a lations.	understa rform cor CD mark iate conta C-141 rep	nd that pur rective act ed as "Fina mination the port does r	rsuant ions fo al Rep nat po not reli	or releases ort" does not se a threat to eve the
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Signature:	- 70	a Pa	<u>ild</u>						\wedge	-11-		
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Title: Directo	or, Environn	nental				Approval Da	ate: 9/2/20	14	Expiration	Date:		/
E-mail Addr	ess:jefields	@eprod.com	1			Conditions o	of Approval:			Attache	ed 🗌	
Date:	<u>8-7-</u>	20/4	Phor	e: (713)381-6	684	·			<u> </u>			
Attach Addi	uonal She		ssary				~JZ14	251	5676	6		
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District I 1625 N. French Dr., Hol District II 811 S. First St., Artesia, District III 1000 Rio Brazos Road, District IV 1220 S. St. Francis Dr.,

District I 1625 N. French District II	Istrict I State 525 N. French Dr., Hobbs, NM 88240 Energy Miner istrict II Energy Miner				ate of inerals	New Mex and Natura	ico I Resources		Form C-141 Revised August 8, 2011			
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						OPERA	ГOR		🔲 Initia	al Report	\boxtimes	Final Report
Name of C	ompany: E	Enterprise Fi	eld Servie	ces LLC		Contact: T	nomas Long					
Facility Na	me: Lindr	Ave, Farmin ith Unit #3	gton, NM	8/401		Telephone Facility Ty	No. 505-599-2	286 r Statio				
Surface Ov	vner: Jica	rilla Tribal	Land	Mineral (Owner:	Jicarilla Ti	ribal Land		APINO	······		
				LOC		N OF DF	I FASE		1/11/10	<u>.</u>		
Unit Letter	Section 18	Township 24N	Range 5W	Feet from the 1865	North	SouthLine	Feet from the 925	East	West Line	County Rio Arrib	a	<u> </u>
L	-1	Lati	tude <u>3</u>	6.310617	.)	Longitud	le -107.3962	273		1		
				NAT	URE	OF REL	EASE					
Type of Rele	ease: Natur	al Gas/Fire				Volume of	Release: 13.75	MCF	Volume F	Recovered: N	lone	
Source of Re	elease: Flow	back from a	vent line			Date and H	Hour of Occurrer @ 10:30 a.m.	nce:	Date and 11:31 a.n	Hour of Dis 1.	covery:	6/6/2014 @
Was Immed	iate Notice (Given?	Yes [] No 🗍 Not R	equired	If YES, To	Whom? Cory S	Smith – N	MOCD			nIST. 3
By Whom?	Thomas Lo	ng			•	Date and I	Hour 6/6/2014 @	5:44 p.n	n phone ca	Il nind Ghiai	s. DIV	010
Was a Water	rcourse Rea	ched?]Yes 🛛	No		If YES, V	olume Impacting	the Wate	ercourse	JU	N 20	2014
If a Waterco	urse was Im	pacted, Desci	ibe Fully.	k								
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I hereby cert regulations a public health should their or the enviro federal, state	tify that the all operators or the envi operations h onment. In a e, or local la	information g are required to ronment. The nave failed to addition, NMC ws and/or reg	iven above to report and acceptance adequately OCD accept ulations.	t is true and comp nd/or file certain to ce of a C-141 rep r investigate and rotance of a C-141	olete to t release n ort by th remediat report d	he best of my otifications a e NMOCD m e contaminat loes not reliev	knowledge and nd perform corre- larked as "Final ion that pose a the e the operator o	understar ective act Report" d ireat to gr f responsi	nd that purs ions for rele loes not reli round water ibility for c	suant to NM6 eases which ieve the oper c, surface wa ompliance w	OCD rul may end ator of 1 ter, hum ith any o	es and langer iability an health other
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Signature:	Yor Field) <u>Fúld</u>	ð			Approved by	Environmental	Specialis	t: Jona	HD.	K	1
Title: Dire	ector, Field	Environmenta				Approval Da	te: 9/8/20	KJ	V Expiration	Date:	(
E-mail Addr	ess: jefields	@eprod.com	·			Conditions o	f Approval:		••••••••••••••	Attached		
Date: 6	-17-2	ON	Phone	: (713) 381-6684								
* Attach Add	itional She	ets If Neces	sary				nSK	1425	1346	97		
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District I	L. Hobbs	NM 88240		St	ate of 1	New Mex			F	rm C 1/1		
District II	Artoria NM	99210		Energy Mi	nerals a	and Natura	l Resources		Revised August 8, 2011			
District III	Pood Arto	00210		Oil C	Conserv	ervation Division			mit 1 Copy	to appropria	te Distri	ict Office in
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			Rele	ease Notific	cation	and Co	orrective A	ction	I			
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Name of Co	Name of Company: Enterprise Field Services LLC						iomas Long	96				
Facility Nar	ne: Later:	al K-39 Gat	hering L	ine	i	Facility Typ	e: Natural Gas	Gatheri	ng Line			
Surface Ow	ner: BLN	1		 Mineral ()wner B							
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Unit Letter	Section	Township	Range	LOCA Feet from the	North/	South Line	EEASE Feet from the	Fast/V	Vest Line	County		
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	[l			<u> </u>					
		Lat	itude	36.04130		_ Longitud	e <u>-107.52189</u>	<u>)</u>				
				NAT	URE	OF REL	EASE					
Type of Relea	ase: Natura lease: Inter	al Gas and Na	tural Gas l	_iquids		Volume of Release: 8.86 MCF Volume Date and Hour of Occurrence: Date Date			Volume R	dume Recovered: Unknown the and Hour of Discovery: 2/8/2014		
						2/8/2014 @	<u>p 2:00 p.m.</u>		@ 2:00 p.	m.		2/0/2014
Was Immedia	ate Notice (Given?	IYes □	No 🖾 Not R	eonired	If YES, To	Whom?		I	շույդ օրբ	712	1
By Whom?						Date and F	lour			NU CONC	nTI	- <u></u>
Was a Water	course Read	ched?				If YES, Vo	olume Impacting t	he Wate	ercourse.	nista Dist.	- <u>1969</u> -	
		L	Yes 🗵	No							-	
If a Watercou	irse was Im	pacted, Descr	ibe Fully.	*		· · · ·						
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condensate/w	ater mix.		(r r				
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I hereby certi	fy that the	information g	iven above	is true and comp	lete to th	e best of my	knowledge and u	nderstar	nd that purs	uant to NMC	CD rul	es and
regulations al public health	ll operators or the envi	are required t ronment. The	o report al e acceptant	nd/or file certain r ce of a C-141 repo	elease no ort by the	otifications as NMOCD m	nd perform correc arked as "Final R	tive acti eport" d	ions for rele oes not reli	ases which r eve the opera	nay end ator of li	anger iability
should their c	perations l	nave failed to	adequately	investigate and r	emediate	e contaminati	on that pose a thr	eat to gr	ound water	, surface wat	er, hum	an health
or the environ federal, state,	or local la	addition, NMC ws and/or regi	DCD accep ulations.	otance of a C-141	report do	bes not reliev	e the operator of	responsi	bility for co	mpliance wi	th any o	other
					OIL CON	SERV	ATION	DIVISIO	N			
Signature: /w truth							\cap	$\langle \cap$		\square		
Printed Name: Jon Fields					Approved by Environmental Specialist:							
Title: Directo	or, Environi	mental				Approval Da	$\frac{1}{12} \frac{1}{12} \frac$		Expiration I	Date:		
E-mail Addre	ess: jefields	@eprod.com			0	Conditions o	f Approval:			Attached	П	
Date: 4-	2-201	14	Phone	: (713)381-6684						/ Mached		
A 441- A J J:	tional Sha	etc If Neces	any									

* Attach Additional Sheets If Necessary

Incident # NCS1411141725

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Enterprise Products Lateral K-39 Pipeline Release Latitude North 36.04130, Longitude West -107.521890 Unit A Section 13 T25N R7W Rio Arriba County, New Mexico March 13, 2014

RCVD APR 7'14 OIL CONS. DIV. DIST. 3



Submitted To:

Enterprise Products Field Environmental-San Juan Basin 614 Reilly Avenue Farmington, NM 87401

Submitted By:

Souder, Miller & Associates 401 West Broadway Farmington, NM 87401 (505) 325-7535



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1.0 Executive Summary

On February 13, 18, 19, 20, 2014, Souder, Miller & Associates (SMA) responded to a hydrocarbon release associated with the Lateral K-39 pipeline release. The table below summarizes information about the release and remediation activities.

	TABLE 1: RELEASE INFORMATION								
Name		Lateral K-39	Pipeline Release						
	Latitude	Latitude/Longitude Section, Township							
Location	36.04130 -107.521890 (NE ¼ /NE ¼) Section 13		T 25N, R 7W						
Date Reported	February 8, 2	014		•					
	Thomas Long]							
Land Owner	Bureau of La	nd Management	(BLM)						
Reported To	New Mexico	Oil Conservation	Division (NMOCD)	and BLM					
Diameter of Pipeline	6 inches								
Source of Release	Pipe Corrosic	on							
Release Contents	Natural Gas/0	Natural Gas/Condensate							
Release Volume: Natural Gas	8.86 MCF								
Release Volume: Liquids/Condensate	Unknown								
Nearest Waterway	Tributary of C	ibolo Mesa Cany	/on						
Depth to Groundwater	Greater than	100 feet							
Nearest Domestic Water Source	Greater than	1,000 feet							
NMOCD Ranking	0								
SMA Response Dates	February 13,7	18,19, 20, and 21	, 2014						
Subcontractors	West States I	Energy and Energy	gy Maintenance Se	ervices (EMS)					
Disposal Facility	Envirotech La	andfarm							
Yd ³ Contaminated Soil Excavated and Disposed	194								

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2.0 Introduction

On behalf of Enterprise Products Operating, LLC. (Enterprise), SMA has prepared this report that describes remediation of a hydrocarbon release associated with the 6-inch pipeline release. The release was due to corrosion of the spiral weld pipeline. Approximately 8.86 thousand cubic feet (MCF) of natural gas was lost and the amount of liquids/condensate released lost is unknown. The release was reported February 8, 2014 and was located in (NE $\frac{1}{4}$ /NE $\frac{1}{4}$) Unit A, Section 13, Township 25 North, Range 7 West, 36.04130, -107.521890, Rio Arriba County, New Mexico. Figure 1, Vicinity Map, illustrates the location of the release.

3.0 Site Ranking and Land Jurisdiction

The release site is located approximately 5,500 feet east of an unnamed tributary of Cibolo Mesa Canyon on land owned by BLM with an elevation of approximately 6,905 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be greater than 100 feet below ground surface (bgs).

SMA searched the New Mexico State Engineer's Office online water well data base for water wells in the vicinity of the release. No recorded wells were located within 1,000 feet of the site. Two wells were located within a 1 mile radius of the site. There is no anticipated impact to these wells.

The physical location of this release is within the jurisdiction of BLM and NMOCD. This release location has been assigned a NMOCD ranking of 0, which requires a soil remediation standard of 10 parts per million (ppm) benzene, 50 ppm total benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and 5,000 ppm total petroleum hydrocarbons (TPH). Table 2 illustrates site ranking rationale.

4.0 Summary of Field Activities

On February 13, 2014 SMA mobilized to the release site to oversee excavation activities and to delineate the release area through field screening using a calibrated photoionization detector (PID). Enterprise and West States Energy began excavation activities which were halted due to high levels of benzene. West States Energy was unable to repair the spiral weld pipeline on February 13, 2014. On February 18, Energy Maintenance Services repaired the pipeline using I-Wrap. During the excavation, soil samples were collected for field screening to determine the extent of the release. Under the supervision and direction of SMA, EMS excavated and transported the hydrocarbon

impacted soil for offsite disposal. The soil was transported to Envirotech Landfarm near Bloomfield, NM. Table 3 summarizes the field screening results. Field notes for these events are included in Appendix A.

The final excavation measured approximately 24 feet long by 16 feet wide with an excavation depth of 12 feet below ground surface. Field screening of the excavated material determined that the soils removed were not suitable for use as backfill material. Approximately 194 cubic yards of impacted soil was transported to Envirotech Landfarm.

All laboratory soil samples were field screened with a calibrated PID. Samples meeting field screening criteria were submitted for laboratory analysis per United States Environmental Protection Agency Method 8021 BTEX, and 8015 Diesel Range Organics (DRO) and Gasoline Range Organics (GRO) to Hall Environmental Analysis Laboratory of Albuquerque, New Mexico. Figure 3 illustrates the extent of the excavation and laboratory results.

5.0 Conclusions and Recommendations

As noted in Section 3.0 of this report, NMOCD Guidelines for Remediation of Leaks, Spills, and Releases have established the following action levels for contaminants of concern with a site ranking of 0: 10 ppm benzene, 50 ppm total BTEX, and 5,000 ppm TPH. Laboratory analysis of the excavation detected benzene, total BTEX, and TPH (GRO/DRO) at concentrations below the NMOCD Guidelines for all samples. All samples had non-detectable concentrations of contaminants except for samples SC-12 and SC-25 which contained 12 ppm and 17 ppm of DRO, respectively. The impacted soil was hauled off site for disposal. Soil contaminant concentrations are illustrated in Figure 3. A summary of laboratory analysis is included in Table 4. Laboratory report is included in Appendix D.

SMA recommends no further action at this site.

6.0 Closure and Limitations

The scope of our services consisted of the performance of a preliminary spill assessment and stabilization, regulatory liaison, oversight and control of remediation operations, disposal arrangements and documentation, project management, and preparation of this summary report. All work has been performed in accordance with generally accepted professional environmental consulting practices.

If there are any questions regarding this report, please contact either Steve Moskal or Reid Allan at 505-325-7535.

Submitted by:

Reviewed by:

SOUDER, MILLER & ASSOCIATES

These Made

Steve Moskal Project Scientist

I. alle

Reid S. Allan, PG Principal Scientist

Engineering • Environmental • Surveying

FIGURES

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Copyright 2014 Souder, Miller & Associates - All Rights Reserved

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P:15-Enterprise MSA (2014) 5122855'BG7 - Lateral K-39/CADICivil/LOCATION MAP.twg, CJF, 3/5/2014 11:18 AM



Copyright 2014 Souder, Miller & Associates - All Rights Reserved

P:\5-Enterprise MSA (2014) 5122855\BG7 - Lateral K-39\CAD\Civil\LOCATION MAP.dvg, GJF, 3/5/2014 11:19 AM



Copyright 2014 Souder, Miller & Associates - All Rights Reserved

P:15-Enterprise MSA (2014) 5122855/BG7 - Lateral K-39/CAD/CM//LOCATION MAP.dwg. SJM, 3/14/2014 9:49 AM

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TABLES

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Enterprise Products Table 2: Site Ranking

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Depth to Groundwater	NMOCD Numeric Rank for this Site	Source for Ranking	Notes		
< 50 BGS = 20 50' to 99' = 10		Verified using Google earth and Topo maps; Field verified	Groundwater is assumed to be greater than 100 feet below the ground		
>100' = 0	0	ficia vernica.	surface.		
Ranking Criteria for Horizontal Distance to Nearest Surface Water	NMOCD Numeric Rank for this Site	Source for Ranking	Notes		
< 200' = 20 200'-1000' = 10		Verified using Google Earth and Topo maps; Field verified	Release is located approximately 5,500 feet East of an unnamed		
>1000' = 0	0	neu verneu.	Canyon		
Ranking Criteria for Horizontal Distance to a Water Well or Water Source	NMOCD Numeric Rank for this Site	Source for Ranking	Notes		
<1000' from a water source? <200' for a private domestic water source? YES OR NO to BOTH. YES = 20. NO = 0	0	New Mexico State Engineer's Office online	No recorded water wells located with 1,000 feet. Two wells located within		
		water well data base	a 1 mile radius.		
Total Site Ranking	0				
Soil Remedation Standards	0 to 9	10 to 19	>19		
Benzene	10 PPM	10 PPM	10 PPM		
BTEX	50 PPM	50 PPM	50 PPM		
ТРН	5000 PPM	1000 PPM	100 PPM		



Enterprise Products Table 3: Summary of Excavation Field Screening Results (PPM)

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Lateral K-39 Pipeline Release 3/13/2014

FIELD SCREENING RESULTS SUMMARY									
Date	Time	Field screening Reference	Sample Depth (Feet BGS)	PID Reading	Lab Sample Collected Y/N				
2/13/2014	10:51	SC-1 S Wall	2.0	1330.0	N				
2/13/2014	10:53	SC-2 N Wall	2.0	156.9	Ň				
2/13/2014	10:55	SC-3 W Wall	2.0	455.7	N				
2/13/2014	10:57	SC-4 E Wall	2.0	193.8	N				
2/13/2014	10:59	SC-5 NW Stockpile	4.0	2638.0	N				
2/13/2014	11:01	SC-6 SW Stockpile	4.0	3728.0	N				
2/13/2014	11:04	SC-7 SE Stockpile	4.0	2505.0	N				
2/13/2014	11:40	SC-8 12' NE RP	1.0	446.2	N				
2/13/2014	11:45	SC-8 12' NE RP	2.0	445.7	N				
2/13/2014	11:50	SC-8 12' NE RP	3.0	590.1	N				
2/13/2014	12:05	SC-8 12' NE RP	4.0	278.3	N				
2/18/2014	11:40	SC-1: 12' N	3.0	1779.0	N				
2/18/2014	12:00	SC-2 NE (15' NW of RP)	3.0	99.0	N				
2/18/2014	12:02	SC-3 15' NE of RP)	3.0	256.0	N				
2/18/2014	12:05	SC-4 RP	6.0	1749.0	N				
2/18/2014	12:25	SC-5 E Wall	5.0	53.0	N				
2/18/2014	12:26	SC-6 S Floor RP	7.0	772.0	N				
2/18/2014	12:27	SC-7 W Wall	3.0	308.0	N				
2/18/2014	13:05	SC-6	10.0	662.0	N				
2/18/2014	13:10	SC-8 SE corner 15' from RP	4.0	169.0	N				
2/18/2014	13:15	SC-9 S Wall 8' S of RP	4.0	609.0	N				
2/18/2014	13:40	SC-10 SW Stockpile	0.0	98.0	N				
2/18/2014	13:45	SC-11 W Wall	4.0	246.0	N				
2/18/2014	13:49	SC-12 N Wall 15' from RP	6.0	449.0	N				
2/19/2014	11:03	SC-12 N Wall 15' from RP	8.0	1418.0	N				
2/19/2014	10:52	SC-9 S Wall 10' S of RP	8.0	735.4	N				
2/19/2014	10:54	SC-5 E Wall 10' E. of RP	8.0	666.1	N				
2/19/2014	10:55	SC-11 W Wall 10' W of RP	8.0	662.8	Ň				
2/19/2014	13:15	SC-13 S. Wall 15' from RP	9.0	326.7	N				
2/19/2014	14:05	SC-14 18' S. of RP	2.0	517.3	N				
2/19/2014	14:08	SC-15 E Wall 18' from RP	12.0	140.7	N				
2/19/2014	14:17	SC-16 20' S. of RP	1.0	68.7	N				
2/19/2014	15:05	SC-17 NW corner 18' from RP	11.0	109.6	N				
2/19/2014	15:40	SC-18 SW corner 18' from RP	12.0	263.2	NN				
2/20/2014	10:38	SC-19 21' S of RP	11.0	553.8	N				
2/20/2014	10:40	SC-20 21' SW RP (black staining)	4.0	190.4	N				
2/20/2014	11:00	SC-21 22' SE of RP	11.0	160.2	<u>N</u>				
2/20/2014	11:25	SC-12 N Wall 15' from RP	12.0	97.2	Y				
2/20/2014	11:30	SC-22 W Wall 13' from RP	12.0	36.9	Y				
2/20/2014	11:55	SC-23 S Wall 25' from RP	12.0	37.1	Y				
2/20/2014	11:58	SC-24 SW Wall 24' from RP	12.0	84.5	N				
2/20/2014	12:01	SC-25 W Stockpile Base (bedrock)	12.0	41.6	Y				
2/20/2014	12:27	SC-15 E Wall 18' from RP	12.0	83.2	Y				
2/20/2014	13:22	SC-27 W Stockpile	12.0	33.6	Y				
2/20/2014	13:25	SC-26 Mid Stockpile	12.0	221.8	I N				



Enterprise Products Table 4: Summary of Laboratory Analysis Results in mg/Kg Lateral K-39 Pipeline Release 3/13/2014

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	LABORATORY ANALYTICAL SUMMARY										
Date	Time	Sample ID	Sample Depth (Feet BGS)	Method 8015 GRO	Method 8015 DRO	Method 8021 Benzene	Method 8021 BTEX				
NMOCD G	iuidelines	NMOCD Site Ra	nking: 0	5,000	0 ppm	10 ppm	50 ppm				
2/20/2014	11:22	SC-12: N. Wall	12.0	<4.9	12.0	<0.98	<2.0				
2/20/2014	11:30	SC-22: W. Wall	12.0	<4.8	<10	· <0.048	<0.095				
2/20/2014	11:55	SC-23: S. Wall	12.0	<4.6	<10	<0.046	<0.093				
2/20/2014	12:01	SC-27: W. Stockpile	12.0	<4.9	<10	<0.049	<0.098				
2/20/2014	12:27	SC-15: E. Wall	12.0	<5.0	<10	<0.050	<0.099				
2/20/2014	13:22	SC-25: Base Bedrock	12.0	<4.8	17.0	<0.048	<0.096				

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APPENDIX A FIELD NOTES

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Release Information								
Name	Lateral K-39	2/13/14						
	Latitude/	/Longitude						
Location	36.40445, 107.52	. 157°						
	Section, Tow	vnship, Range						
	S13, T25N, R7W							
Reported To	Tom Long							
Area Supervisor	kith Roddy; matt melvin	r Field operations						
Diameter of Pipeline	(o ¹¹ (?)							
Source of Release	Spiral weld pipe							
Release Contents	Nat. Gas/condensate							
Release Volume	? unknaun							
Subcontractor	West States (2/18/14)							
Disposal Facility	& Envirotech Lord Erm	, Hill Top						
Yd ³ Contam. Soil	& approx 200 yrds3							

Ems is to be schedule no entry (2/13/14) CLIENT EPCO

DATE 2/18/14 BY 55m/RKW





SOUDER, MILLER & ASSOCIATES Serving - New Mexico • Colorado • Arizona • Utah • Texas

* SUBJECT Lateral K-39 PROJECT 5122855 BG7PAGE

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	Field S	Screen	ing		
	Location Name			D	ate
latur	K-39			2/18/	14
Location Name	Description	Depth (Feet BGS)	Time Collected	Time Screened	PID Reading (ppm)
30-163	121 N	3'	11:40	11:55	1779
SG 2 @ 3'	ME CUS MUSSERE	3'	1200	12:15	99
SC 3	NEROMAN ! (15' NERP)	31	12,02	13:16	256
5C-4	RP	(e ¹	1205	12:17	1749
54-5	DE WALL	5	1225	1238	53
Sc-6	5 Floor RP	7 '	1226	12:39	772
56-7	W W411	3'	12:27	12:40	308
50-6		101	1305	@ 1310	662
SC-8	SEBArfinner	•4*	13/0	1320	169
50-9	5 WALL Si Sigp	4'	1315	1322	609
56-10	500 shale file		1340	1358	98
SC -11	W WALL	41	1345	1400	z46
56-12	N WALL (15' from	6	13:47	1401	449

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Field Screening								
CATER	Location Name			2/19/14 Date				
Location Name	Description	Depth (Feet BGS)	Time Collected	Time Screened	PID Reading (ppm)			
SC-12 N. Wall	15' NOS RP	8	1050	j103	14/8			
SC-9 J. way	10's of RP	8'	1052	1104	735,4			
SC-S E. wall	10'E OP RP	8'	1054	1105	(ele.)			
SC-11 W. Wall	10'w. of 69	8'	1055	1106	462.8			
SC-13 Sicuali	Studil 15' from RP	q1	1315	1330	326.7			
50-14	1840 3. RP	2.0'	1405	1412	517,3			
5-15	E wall pr'from RP	12'	1408	1413	140.7			
SC-16	20' 5. RP	1,	1417	1425	68.7			
56-17	New corner 18' from RP	11'	1505	1515	109.6			
5-18	SW corner 18' from R.P.	12)	1540	1500	263,2			

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		Field S	ocreen	ing		
		Location Name			D	ate
	Lateral	K-39	<u> </u>		2/20	14
	Location Name	Description	Depth (Feet BGS)	Time Collected	Time Screened	PID Reading (ppm)
	SC-19	21' S. RP	11'	1038	1050	553.8
	sc- 20	21 SW RP Black Starry)	41	1040	1051	1.90.4
	50-21	22, 2E of Kb	11	1100	1110	160.2
	50-12	Nwall 15' from RP	12'	1125	1142	972
	80-22	W Wali 13' from R.P.	12'	1130	1143	36.9
A Contraction	52-23	Soo wall = 25' from RR	12'	1155	1210	37,1
A A	SC-29	Siv. wall 2241 From RP	12'	1158	1211	84.5
	Sc.25	W. Stockpile (Base) (Brdrock)	12'	1201	1212	41.6
	3 621 56-15	Et: Wall 18'from R.P.	12'	1227	1250	83.2
	50-2 7	BW. Stockpile	ia'	1322	1338	33.6
0	55-24	mid Stockpile	fram 12'	1325	1339	221.8

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CLIENT EPCD

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DATE 2-13-14 BY STV4

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	Field	Screen	ing							
<u></u>	Location Name									
Lateral	K-39			2/13/	14					
Location Name	Description	Depth (Feet BGS)	Time Collected	Time Screened	PID Reading (ppm)					
SC- 1	Swall \$ 2'	2'	1051	1120	1330					
56-2	Nuall @ 2'	2'	1053	1121	156.9					
50-3	W. Wall	۵`	1055	1122	455.7					
SC-4	E. Wall	2`	1057	1123	193,8					
ses	New Stockpile	Ectavatives to 4'bys	1059	1124	2683					
50.6	Sw Stockoile	11	1101	1125	3728					
sc-7	SE Stackpile	11	1164	1126	2505					
50-8	12' NE RP	i	1140	1155	446.2					
50-8	36.40489,107.52161	2'	11 45	1201	445.7					
JC-8		3	1150	1207-	590.1					
5C-8 V	refusal (ppy)	41	1205	1209	278.3					
	11 - 37 1									

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SITE PHOTOGRAPHY

Site Photographs Enterprise Products Lateral K-39 Pipeline Release



Photo 1: Photo of the Lateral K-39 Pipeline release point during the beginning of excavation activities.



Photo 2: View during the beginning of the Lateral K-39 Pipeline excavation, facing west.

Site Photographs Enterprise Products Lateral K-39 Pipeline Release



Photo 3: Continued excavation of the Lateral K-39 Pipeline, facing east.



Photo 4: View of the total extent of the Lateral K-39 Pipeline excavation, facing west.

Site Photographs Enterprise Products Lateral K-39 Pipeline Release



Photo 5: Photo documentation of contaminated soils being loaded for offsite disposal.



Photo 6: Backfilling of the Lateral K-39 Pipeline excavation, facing north.

APPENDIX C

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SOIL DISPOSAL DOCUMENTATION

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Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 *Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

REQUESTFOR ATTROVAL TO ACCELT SOLID WASTE
1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401
2. Originating Site: Lateral K-39 Natural Gas Gathering Line
3 Logation of Material (Street Address City State or ULSTR):
Unit A, Section 13, T25N, R7W; 36.40413, -107.52189
 4. Source and Description of Waste: Hydrocarbon impacted soils associated with a release from a natural gas gathering line. 5. Estimated Volume <u>50</u> d³ bbls Known Volume (to be entered by the operator at the end of the haul) <u>yd³ / bbls</u>
5 CENEDATOD CEDTIFICATION STATEMENT OF WASTE STATUS
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, Thomas Long representative or authorized agent for <u>Enterprise Field Services, LLC</u> do hereby
PRINT & SIGN NAME COMPANY NAME
regulatory determination, the above described waste is: (Check the appropriate classification)
RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. Operator. Use Only: Waste Acceptance Frequency Monthly Weekly Per Load
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)
🗆 MSDS Information 🗆 RCRA Hazardous Waste Analysis 📄 Process Knowledge 📄 Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
1, There say 2-13-14, representative for Enterprise Field Services, LLC authorize Envirotech to
Generator Signature complete the required testing/sign the Generator Waste Testing Certification.
I,, representative forEnvirotech, Incdo hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
6. Transporter: West States Energy Contractors (WSEC)
OCD Permitted Surface Waste Management Facility
Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility Permit # NM-01-0011 Address of Facility: #43 Road 7175, South of Bloomfield NM Method of Treatment and/or Disposal:
🗌 Evaporation 📋 Injection 🔲 Treating Plant 🛛 Landfarm 🔲 Landfill 🔲 Other
Waste Acceptance Status:
PRINT NAME
SIGNATURE: TELEPHONE NO.:



Bill of Lading

MANIFEST # 46006 DATE 2.20.14 JOB # 97057-0624

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD	CON	APLETE DESCRIPT	TION OF SHIPMEN		TRANSPORTING COMPANY					
NO.	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	ENterPris	LFI 5	CONIT	F 39	12	_	Ems	1	1132	Enoch Sudy
2	0 u	t ti	4 L	F-29	12	-	EMS	2	15:20	Enck Seeles
					24					(
					d-1-					
RESULT	S:	LANDFARM	A	2,	EL		NOTES:		<u></u>	
<291	CHLORIDE TEST	EMPLOYEE:	Cary Re	sins	on			·····		
L	PAINT FILTER TEST	Certifi	cation of above re	ceival & pla	cement					
By signin mentione	By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load									
TRANSPO	TRANSPORTER CO. EMS NAME Erick Sector signature Swich Seely									
COMPANY CONTACT Milly Sunchez PHONE (505) 793-4426 DATE 2.20-14										
Sianature	ignatures required prior to distribution of the legal document.									



Bill of Lading

MANIFEST # 46005

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD	C	OMF	PLETE DESCRIPT	ION OF SHIPME	TRANSPORTING COMPANY						
NO.	POINT OF ORIGIN		DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
r	Enter Prise Lat # 39		LFII.5	CON + SOIL	F	10		YUCCA	AFy	1127	
2	6	9	y U	4 4	F-29	10		4. 4	AFY	15:50	MARAN
						20					7/17
RESULT		_		1	11.	Ē	2	NOTES:			
2291		l	EMPLOYEE:	laup!	ofm	pon		·			
L	PAINT FILTER TEST	1	Certifi	cation of above re	ceival & pla	cement					
By signing mentione	By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load.										
TRANSPO	TRANSPORTER CO. YUCCU NAME NAME NAME NAME NAME SIGNATURE										
COMPAN	COMPANY CONTACT Mike(EMS) PHONE 305 793-4426 DATE 2 2014										
Signature	ignatures required prior to distribution of the legal document.										



Bill of Lading

MANIFEST #	46004	
2.20		(

DATE 2.20-14 JOB # 97057-0621

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD	CON	IPLETE DESCRIPT	TION OF SHIPMEN	TRANSPORTING COMPANY						
NO.	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Enterprise Lat K-39	LFII-5	Con't Soil	FSA	1Õ		Ritchey	271	1127	An Thite
2	U U	a a	u u	F-29	10	-	k I	271	15:50	An Rite
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								•.		
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RESULTS	3:	LANDFARM	1		EL	-	NOTES:			
<291		EMPLOYEE:	bang Ro	ling	m					***************************************
	PAINT FILTER TEST	Certifi	Certification of above receival & placement							
By signing mentioned	y signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material is from the above location has not been added to or tampered with. I certify the material has been added to or tampered with the locat.									

TRANSPORTER CO. P. Hebey	NAME (VIIT KITCHOC SIGNATURE) m TRITING
COMPANY CONTACT Mike (Ems)	PHONE 505. 793-4426 DATE 2-20-14
Signatures required prior to distribution of the legal document.	


MANIFEST # 45991

DATE 2-15-14 JOB # 97057-0621

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD	СОМІ	PLETE DESCRIPT	TION OF SHIPME	NT			TRANSPO	RTING	COMPA	NY
NO.	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
2	ENTERPOSE LAF K-39	154-5	cont Soil	E-2A	QB	-	Rifchey's	71	12:35	Colm TRitch
2	и <i>ч</i>	4 4	CR CR	E-29	18		u u	21	17:10	Jun Thiteley
				-	31.					
					20					
RESULTS	S:	LANDFARM	6		/ EL	/	NOTES:			
< 291	CHLORIDE TEST	EMPLOYEE:	Aler	L	<u> </u>					·····
	PAINT FILTER TEST	Certifi	cation of above re	ceival & pla	cement					
By signing mentioned	g as the driver/transporter, I d d Generator/Point of Origin a	certify the material nd that no additior	hauled from the a nal material has be	bove location	on has not	been ado b the loa	ded to or tampered v d.	with. I ce	ertify the	material is from the above
TRANSPO		hey		Elv1	NTR	1th	signature	- Ann	_7	Titchy
COMPANY	CONTACT SHA	nl	PHONE	793	441	4	DATE	<i>(</i>		, -
Sionature	s required prior to distribution	n of the legal docu	ment.	· · ·	2	-				



MANIFEST # _____45990

DATE 2-19-14 JOB # 97057-0621

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD		COMF	PLETE DESCRIPT	ION OF SHIPMEN	NT			TRANSPO	RTING	COMPAI	NY
NO.	POINT OF ORIGI	N	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
2	ENTERPENSE CAT K-39		LF.F5	cont soit	E-29	18		YUCCA	AF.Y	12:39	- (Mansh
2	er '	le	4	r f	E-29	18		'n U	A.F.4	17:10	KUNN
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RESULT	S:		LANDFARM	\mathcal{L}		1 EL		NOTES:	<u>انا</u>	I	
1291	CHLORIDE TEST	1	EMPLOYEE:	Alton	i to		_				
	PAINT FILTER TEST	1	Certifi	cation of above red	ceival & pla	cement					
By signin mentione	g as the driver/transpor d Generator/Point of Or	ter, I c igin ai	ertify the material nd that no additior	hauled from the a nal material has be	bove location	on has not r mixed inte	been add	ded to or tampered to	with I ce	ertify the	material is from the above
TRANSPO	DRTER CO. <u>Vica</u>			NAME(leny	Ann	ta	SIGNATURE	11	IVA	<u> </u>
COMPAN				PHONE	()		-	DATE		\mathcal{Y}	<u> </u>
Signature	es required prior to distr	ibutior	n of the legal docu	<i>ment.</i> White - Compar	ny Records, Yello	ow - Billing, Pink	- Customer			-	san iuan ranmelurbon 578.126



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MANIFEST # 45973 DATE 2-18-14 JOB # 99057-0621

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD		COM	PLETE DESCRIPT	FION OF SHIPME	NT			TRANSPO	ORTING	COMPA	NY
NO.	POINT OF ORIG	AIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
2	Enterfrise Lat K39		1F0-5	Cont Soit	F-29	20	-	Ritchuys	571	13:10	Cham Telton
2	le 4	(u 4	<i>c</i> (4	E-29	20	-	Ritchey's	571	17.28	from T & Heking
						2D					
						10					
									1		
					+						
				<u>}</u>							
					<u> </u>						
 				<u> </u>							
RESULT		1		0 L			L	NOTES:			
1011	PAINT FILTER TEST		Certifi	cation of above re	ceival & pla	cement					· ·
By signin	g as the driver/transpo d Generator/Point of C	orter, I (Drigin a	certify the material	hauled from the a	bove locati	on has not	been ad	L ded to or tampered d.	with. I ce	ertify the	material is from the above
TRANSPO		en	ay		VIUN	TK	Ite	be SIGNATURE	din.	Ξ×.	itches
COMPAN		An	y ne	PHONE	793	4424		DATE	d-1	81	4
Signature	es required prior to dis	tributio	n of the legal docu	ıment.		•		-7	•		, ,

White - Company Records, Yellow - Billing, Pink - Customer



MANIFEST # ____45972___

DATE 2-18-14 JOB # 97057-0621

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD	СОМ	PLETE DESCRIPT	TION OF SHIPME	NT			TRANSP	ORTING	COMPAN	VY
NO.	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
2	ENACTRISC CAT K 39	LFII-5	Cont Soic	F-29	18	-	YUCLA	AF-4	1,202	- MON
				-	18				~	
					10					J
		· · · · · · · · · · · · · · · · · · ·								
					i					
 		, 								
RESULT	S: CHLORIDE TEST	LANDFARM EMPLOYEE:	2000	1			NOTES:			
	PAINT FILTER TEST	Certifi	cation of above re	ceival & pla	cement					
By signin mentione	g as the driver/transporter, 1 o d Generator/Point of Origin a	certify the material nd that no addition	hauled from the a	bove location	on has not or mixed inte	been ad b the loa	ded to or tampered d.	with. I ce	rtify the	material is from the above
TRANSPO	PRTER CO			enry A	hinto	`	SIGNATURE	= <u>-</u> [-[]]	MM	
COMPAN			PHONE	0			DATE	<u> </u>	<u> </u>	
Signature	es required prior to distribution	n of the legal docu	Ment. White - Compa	ny Records Valla	w . Billing Disk	- Customer		ľ		

White - Company Records, Yellow - Billing, Pink - Customer

APPENDIX C

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LABORATORY ANALYTICAL REPORTS

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

February 28, 2014

Steve Moskal Souder, Miller and Associates 401 W. Broadway Farmington, NM 87401 TEL: (505) 325-5667 FAX (505) 327-1496

RE: Lateral K-39

OrderNo.: 1402839

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 6 sample(s) on 2/21/2014 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 <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Project: Lateral K-39

1402839-001

Ξ

Lab ID:

Client Sample ID: N. Wall @ 12' (SC-12) Collection Date: 2/20/2014 11:20:00 AM Received Date: 2/21/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE OR	GANICS				Analyst	BCN
Diesel Range Organics (DRO)	12	9.9	mg/Kg	1	2/26/2014 9:56:06 AM	11854
Surr: DNOP	85.7	66-131	%REC	1	2/26/2014 9:56:06 AM	11854
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: JMP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	2/24/2014 3:58:07 PM	11849
Surr: BFB	81.0	74.5-129	%REC	1	2/24/2014 3:58:07 PM	11849
EPA METHOD 8021B: VOLATILES					Analyst	: JMP
Benzene	ND	0.98	mg/Kg	1	2/24/2014 3:58:07 PM	11849
Toluene	ND	0.98	mg/Kg	1	2/24/2014 3:58:07 PM	11849
Ethylbenzene	ND	0.98	mg/Kg	1	2/24/2014 3:58:07 PM	11849
Xylenes, Total	ND	2.0	mg/Kg	1	2/24/2014 3:58:07 PM	11849
Surr: 4-Bromofluorobenzene	92.0	80-120	%REC	1	2/24/2014 3:58:07 PM	11849

Matrix: SOIL

Oualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Metho	od Blank
·	E	Value above quantitation range	Н	Holding times for preparation or analysi	s exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 1 of 9
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	r age r or y
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Project: Lateral K-39

1402839-002

Lab ID:

Client Sample ID: W. Wall @ 12' (SC-22) Collection Date: 2/20/2014 11:30:00 AM Received Date: 2/21/2014 10:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE (ORGANICS				Analyst	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	2/25/2014 2:09:35 PM	11854
Surr: DNOP	87.2	66-131 [/]	%REC	1	2/25/2014 2:09:35 PM	11854
EPA METHOD 8015D: GASOLINE RANG	BE				Analyst	JMP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	2/24/2014 6:20:49 PM	11849
Surr: BFB	83.2	74.5-129	%REC	1	2/24/2014 6:20:49 PM	11849
EPA METHOD 8021B: VOLATILES					Analyst	JMP
Benzene	ND	0.048	mg/Kg	1	2/24/2014 6:20:49 PM	11849
Toluene	ND	0.048	mg/Kg	1	2/24/2014 6:20:49 PM	11849
Ethylbenzene	ND	0.048	mg/Kg	1	2/24/2014 6:20:49 PM	11849
Xylenes, Total	ND	0.095	mg/Kg	1	2/24/2014 6:20:49 PM	11849
Surr: 4-Bromofluorobenzene	95.2	80-120	%REC	1	2/24/2014 6:20:49 PM	11849

Matrix: SOIL

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Metho	od Blank
E Value above quantitation range H Holdi		Holding times for preparation or analysis	s exceeded		
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 2 of 9
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	. uge = 01 >
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Project: Lateral K-39

1402839-003

Lab ID:

Client Sample ID: S. Wall @ 12' (SC-23) Collection Date: 2/20/2014 11:55:00 AM Received Date: 2/21/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS				Analyst	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	2/25/2014 2:32:01 PM	11854
Surr: DNOP	87.8	66-131	%REC	1	2/25/2014 2:32:01 PM	11854
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst	: JMP
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	2/24/2014 7:18:06 PM	11849
Surr: BFB	80.0	74.5-129	%REC	1	2/24/2014 7:18:06 PM	11849
EPA METHOD 8021B: VOLATILES					Analyst	: JMP
Benzene	ND	0.046	mg/Kg	1	2/24/2014 7:18:06 PM	11849
Toluene	ND	0.046	mg/Kg	1	2/24/2014 7:18:06 PM	11849
Ethylbenzene	ND	0.046	mg/Kg	1	2/24/2014 7:18:06 PM	11849
Xylenes, Total	ND	0.093	mg/Kg	1	2/24/2014 7:18:06 PM	11849
Surr: 4-Bromofluorobenzene	88.9	80-120	%REC	1	2/24/2014 7:18:06 PM	11849

Matrix: SOIL

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Metho	od Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis	s exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 3 of 9
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	1 450 5 01 5
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Project: Lateral K-39

1402839-004

Lab ID:

Client Sample ID: W. Stockpile (SC-27) Collection Date: 2/20/2014 12:01:00 PM Received Date: 2/21/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE OF	RGANICS				Analyst	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	2/25/2014 2:54:23 PM	11854
Surr: DNOP	69.2	66-131	%REC	1	2/25/2014 2:54:23 PM	11854
EPA METHOD 8015D: GASOLINE RANGE	:				Analyst	JMP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	2/25/2014 11:12:18 AM	11849
Surr: BFB	83.6	74.5-129	%REC	1	2/25/2014 11:12:18 AM	11849
EPA METHOD 8021B: VOLATILES					Analyst	JMP
Benzene	ND	0.049	mg/Kg	1	2/25/2014 11:12:18 AM	11849
Toluene	ND	0.049	mg/Kg	1	2/25/2014 11:12:18 AM	11849
Ethylbenzene	ND	0.049	mg/Kg	1	2/25/2014 11:12:18 AM	11849
Xylenes, Total	ND	0.098	mg/Kg	1	2/25/2014 11:12:18 AM	11849
Surr: 4-Bromofluorobenzene	95.6	80-120	%REC	1	2/25/2014 11:12:18 AM	11849

Matrix: SOIL

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	Level. B Analyte detected in the associated		od Blank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis	s exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 4 of 9
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	i uge i oi >
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Batch

Analyst: BCN

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: E. Wall @ 12' (SC-15) Collection Date: 2/20/2014 12:27:00 PM

 Project:
 Lateral K-39
 Collection Date: 2/20/2014 12:27:00 PM

 Lab ID:
 1402839-005
 Matrix:
 SOIL
 Received Date: 2/21/2014 10:00:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed

 EPA METHOD 8015D:
 DIESEL RANGE ORGANICS
 Analyses
 Analyses
 Analyse

Diesel Range Organics (DRO)	ND	10	mg/Kg	1	2/25/2014 3:16:57 PM	11854
Surr: DNOP	70.9	66-131	%REC	1	2/25/2014 3:16:57 PM	11854
EPA METHOD 8015D: GASOLINE RANG	ε				Analyst	JMP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	2/24/2014 8:15:16 PM	11849
Surr: BFB	82.8	74.5-129	%REC	1	2/24/2014 8:15:16 PM	11849
EPA METHOD 8021B: VOLATILES					Analyst	JMP
Benzene	ND	0.050	mg/Kg	1	2/24/2014 8:15:16 PM	11849
Toluene	ND	0.050	mg/Kg	1	2/24/2014 8:15:16 PM	11849
Ethylbenzene	ND	0.050	mg/Kg	1	2/24/2014 8:15:16 PM	11849
Xylenes, Total	ND	0.099	mg/Kg	1	2/24/2014 8:15:16 PM	11849
Surr: 4-Bromofluorobenzene	92.7	80-120	%REC	1	2/24/2014 8:15:16 PM	11849

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Metho	od Blank
	Е	Value above quantitation range	н	Holding times for preparation or analysi	s exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 5 of 9
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	r uge 5 or 5
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates Project: Lateral K-39

1402839-006

Lab ID:

Client Sample ID: Base-Bedrock @ 12' (SC-25) Collection Date: 2/20/2014 1:22:00 PM Received Date: 2/21/2014 10:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE O	RGANICS				Analyst	BCN
Diesel Range Organics (DRO)	17	10	mg/Kg	1	2/25/2014 3:42:25 PM	11854
Surr: DNOP	69.4	66-131	%REC	1	2/25/2014 3:42:25 PM	11854
EPA METHOD 8015D: GASOLINE RANG	E				Analyst	JMP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	2/25/2014 11:40:55 AM	11849
Surr: BFB	83.3	74.5-129	%REC	1	2/25/2014 11:40:55 AM	11849
EPA METHOD 8021B: VOLATILES					Analyst	JMP
Benzene	ND	0.048	mg/Kg	1	2/25/2014 11:40:55 AM	11849
Toluene	ND	0.048	mg/Kg	1	2/25/2014 11:40:55 AM	11849
Ethylbenzene	ND	0.048	mg/Kg	1	2/25/2014 11:40:55 AM	11849
Xylenes, Total	ND	0.096	mg/Kg	1	2/25/2014 11:40:55 AM	11849
Surr: 4-Bromofluorobenzene	94.9	80-120	%REC	1	2/25/2014 11:40:55 AM	11849

Matrix: SOIL

Onalifiana	*	Valua avagada Maximum Contaminant Laval	р	Analyte detected in the associated Metho	nd Blank
Quanners:		value exceeds maximum Containmant Level.	D	Analyte detected in the associated metho	o Diank
	Е	Value above quantitation range	Н	Holding times for preparation or analysis	s exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 6 of 9
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	1 450 0 01 >
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	Souder,	Miller and Ass	ociates							
Project:		<-39 								
Sample ID	LCS-11854	SampType	LCS	Test	Code: EPA	Method	8015D: Diese	I Range C	Organics	
Client ID:	LCSS	Batch ID:	11854	R	tunNo: 169	40				
Prep Date:	2/24/2014	Analysis Date:	2/25/2014	S	eqNo: 487	667	Units: mg/K	g		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC L	_owLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	48	10 50.00	0	95.5	60.8	145			
Surr: DNOP	····	4.2	5.000		83.2	66	131			
Sample ID	MB-11854	SampType	MBLK	Test	Code: EPA	Method	8015D: Diese	I Range C	Organics	
Client ID:	PBS	Batch ID:	11854	R	unNo: 169	40				
Prep Date:	2/24/2014	Analysis Date:	2/25/2014	S	eqNo: 487	668	Units: mg/K	g		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC L	owLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	ND	10							
Surr: DNOP		8.0	10.00		80.0	66	131			
Sample ID	MB-11896	SampType	: MBLK	Test	Code: EPA	Method	8015D: Diese	l Range C	rganics	
Client ID:	PBS	Batch ID:	11896	R	unNo: 169	68				
Prep Date:	2/25/2014	Analysis Date:	2/26/2014	S	eqNo: 488	286	Units: %REC	;		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC L	_owLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		8.2	10.00		81.5	66	131			
Sample ID	LCS-11896	SampType	LCS	Test	Code: EPA	Method	8015D: Diese	l Range C	rganics	
Client ID:	LCSS	Batch ID:	11896	R	unNo: 169	68				
Prep Date:	2/25/2014	Analysis Date:	2/26/2014	S	eqNo: 488	287	Units: %REC	;	7	
Analyte		Result P	QL SPK value	SPK Ref Val	%REC L	_owLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.3	5.000		86.9	66	131			
Sample ID	MB-11903	SampType	MBLK	Test	Code: EPA	Method	8015D: Diese	l Range C	rganics	
Client ID:	PBS	Batch ID:	11903	R	unNo: 169	68				
Prep Date:	2/26/2014	Analysis Date:	2/26/2014	S	eqNo: 488	291	Units: %REC	;		
Analyte		Result P	QL SPK value	SPK Ref Val	%REC L	_owLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		8.0	10.00		79.6	66	131			
Sample ID	LCS-11903	SampType	LCS	Test	Code: EPA	Method	8015D: Diese	I Range C	rganics	
Client ID:	LCSS	Batch ID:	11903	R	unNo: 169	68				
Prep Date:	2/26/2014	Analysis Date:	2/26/2014	S	eqNo: 488	292	Units: %REC	;		

Qualifiers:

Analyte

Surr: DNOP

* Value exceeds Maximum Contaminant Level.

Result

4.0

PQL

- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSD limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded

LowLimit

66

HighLimit

131

ND Not Detected at the Reporting Limit

80.8

- Sample pH greater than 2.
- RL Reporting Detection Limit

SPK value SPK Ref Val %REC

Р

5.000

Page 7 of 9

%RPD

RPDLimit

Qual

28-Feb-14

WO#: 1402839

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Souder, Miller and Associates

Client:

Value above quantitation range Е

Qualifiers:

*

- Analyte detected below quantitation limits J
- 0 RSD is greater than RSDlimit
- RPD outside accepted recovery limits R
- Spike Recovery outside accepted recovery limits S
- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Sample pH greater than 2. Р
- RL **Reporting Detection Limit**

Page 8 of 9

Project: Lateral	K-39									
Sample ID MB-11849	SampT	ype: ME	3LK	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	e	
Client ID: PBS	Batch	ID: 11	849	F	RunNo: 1	6926				
Prep Date: 2/21/2014	Analysis D	ate: 2/	24/2014	S	SeqNo: 4	87278	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 800	5.0	1000		80.5	74.5	129			
Sample ID LCS-11849	SampTy	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	e	
Client ID: LCSS	Batch	ID: 11	849	F	RunNo: 1	6926				
Prep Date: 2/21/2014	Analysis D	ate: 2/	24/2014	S	SeqNo: 4	87279	Units: mg/l	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	71.7	134			
Surr: BFB	880		1000		87.8	74.5	129			

WO#:

1402839

28-Feb-14 .

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	Soude	er, Miller and	Associa	ites							
Project:	Latera	ıl K-39					_				
Sample ID	MB-11849	Samp	Туре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	PBS	Batc	h ID: 11	849	F	RunNo: 1	6926				
Prep Date:	2/21/2014	Analysis [Date: 2/	24/2014	S	SeqNo: 4	87295	Units: mg/M	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		ND	0.050								
Toluene		ND	0.050								
Ethylbonzono		ND	0.050								
Yulonoo Totol		ND	0.000								
Curry & Deam	0	0.02	0.10	1 000		02.4	00	400			
Surr: 4-Bron		0.92		1.000		92.1	80	120			
Sample ID	LCS-11849	Samp	Type: LC	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	LCSS	Batc	h ID: 11	849	F	RunNo: 10	6926				
Prep Date:	2/21/2014	Analysis [Date: 2/	24/2014	S	SeqNo: 4	87296	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.0	0.050	1.000	0	102	80	120			
Toluene		1.1	0.050	1.000	0	109	80	120			
Ethylbenzene		1.1	0 050	1 000	0	107	80	120			
Yvlenes Total		33	0.10	3 000	0	109	80	120			
Curr A Drom	ofluerobonzono	0.05	0.10	1 000	0	05.5	20	120			
				1.000		35.5		120			
Sample ID	1402839-001A	MS Samp	Туре: МS	5	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID:	N. Wall @ 12'	(SC-1 Batc	h ID: 11	849	F	RunNo: 10	6926				
Prep Date:	2/21/2014	Analysis (Date: 2/	24/2014	S	SeqNo: 4	87299	Units: mg/M	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.93	0.049	0.9823	0	95.2	67.4	135			
Toluene		1.1	0.049	0.9823	0.005285	107	72.6	135			
Ethylbenzene		1.1	0.049	0.9823	0	110	69.4	143			
Xylenes, Total		3.3	0.098	2.947	0	113	70.8	144			
Surr: 4-Bron	nofluorobenzene	0.95		0.9823		97.0	80	120			
Sample ID	1402839-001A	MSD Samp	Type: MS	SD	Tes	tCode: EF	PA Method	8021B: Volat	tiles		
Client ID:	N. Wall @ 12'	(SC-1 Batc	h ID: 11	849	F	RunNo: 16	6926				
Prep Date:	2/21/2014	Analysis [Date: 2 /	24/2014	5	SeqNo: 4	87300	Units: mg/k	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1	0.049	0.9852	0	107	67.4	135	12.1	20	
Toluene		1.2	0.049	0.9852	0.005285	120	72.6	135	12.1	20	
Ethylbenzene		1.2	0.049	0.9852	0	121	69.4	143	10.3	20	
Xvlenes Total		3.7	0.099	2.956	0	124	70.8	144	8.96	20	
Surr: 4-Brom	noffuorobenzene	0.98		0.9852	-	99.0	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Page 9 of 9

- P Sample pH greater than 2.
- RL Reporting Detection Limit

WO#: 1402839

28-Feb-14

HALL, Environmental Analysis Laboratory	Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87105 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com	Sample
Client Name: SMA-FARM	Work Order Number: 1402839	
Received by/date:	02/21/14	

Sample Log-In Check List

Client Name: SMA-FARM	/ Work	Order Number	: 1402839		RcpiNo	1
Received by/date:	q = op/	21/14				
Logged By: Michelle (Garcia 2/21/20	14 10:00:00 Al	vi	minul	Gonue	
Completed By: Michelle (Garcia 2/21/20	14 12:03:51 PI	N	Michille	· Chana	
Reviewed By:	A AK col	adul			-family	
Chain of Custody	J p - vole	21/19		<u></u>	· ·	
1 Custody seals intact on s	sample bottles?		Yes 🗌	No []	Not Present 🗹	
2. Is Chain of Custody com	plete?		Yes 🗹	No 🗌	Not Present	
3. How was the sample deli	vered?		<u>Courier</u>			
Log In						
4. Was an attempt made to	cool the samples?		Yes 🗹	No] NA 🗆	
5. Were all samples receive	ed at a temperature of >0° (C to 6.0°C	Yes 🗹	No 🗌		
6. Sample(s) in proper cont	tainer(s)?		Yes 🔽	No 🗌] .	
7. Sufficient sample volume	for indicated test(s)?		Yes 🗹	No 🗌]	
8. Are samples (except VO/	A and ONG) properly preser	rved?	Yes 🗹	No 🗌		
9. Was preservative added	to bottles?		Yes 🗋	No 🗹	NA 🗌	
10.VOA vials have zero hea	dspace?		Yes 🗌	No [No VOA Vials 🗹	
11 Were any sample contai	ners received broken?		Yes 🗌	No 🔤	# of preserved	
12 Deep served watch h	ettle lebele9		Van M	No [bottles checked	
(Note discrepancies on c	hain of custody)		Tes 🖭		(<2	or >12 unless noted)
13. Are matrices correctly ide	entified on Chain of Custody	1?	Yes 🗹	No 🗌	Adjusted?	
14. Is it clear what analyses	were requested?		Yes 🗹	No 🗌]	
15. Were all holding times at	ble to be met?		Yes 🗹	No 🗌	Checked by:	
(If no, notify customer for	authorization.)					
Special Handling (if ap	plicable)					
16. Was client notified of all	discrepancies with this orde	r?	Yes 🗌	No 🗌	NA 🗹	 '
Person Notified:		Date:		Vages, 2-66(17978, 114 - 1177-11		
By Whom:		Via:	🗌 eMail	🗋 Phone 🗌 Fa	ax [] In Person	
Regarding:		·····			المراجع المراجع من المراجع المر	
Client Instructions:	110 March 2010 - 2010 - 2010 - 2010 - 2010 - 2010 - 2010 - 2010 - 2010 - 2010 - 2010 - 2010 - 2010 - 2010 - 2010			······································		
17. Additional remarks:				<u> </u>		

18. Cooler Information

Cooler N	o Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good	Yes			

<u> </u>	hain	-ot-Cu	ustody Record	i um-Arouna	rime:					Ŀ.	4 4 1		FN	v		01		ENT	'A1	
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Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NO.	BTEX) M	BTEX + MT	TPH 8015E	TPH (Meth	EDB (Meth	PAH's (831	RCRA 8 M	Anions (F, L	8081 Pestic		8270 (Sem			Air Bubbles
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<u>eliu</u>	1721	Ave	stulice 100	Muli	Gos	2012/14 1000	a	110	af	an	50						-	_		
If lf	f necessary	samples sut	omitted to Hall Environmental may be subc	ontracted to other a	ccredited laboratori	es. This serves as notice of this	, possi	ibility.	Any si	ub-con	tracted	lata w	vill be cl	early r	otated	i on ti	ne analyl	ical report		

State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-141 Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Fran	icis Dr., Sant	a Fe, NM 8750	5	Sa	anta H	Fe, NM 875	05				
			Rel	ease Notific	catio	on and Co	orrective Ac	tion			·······
						OPERA	FOR	🗌 Ini	tial Repo	ort 🖂	Final Report
Name of Co	ompany: E	Enterprise Fi	eld Servi	ces LLC		Contact: Th	iomas Long				· · ·
Address: 6	14 Reilly A	Ave, Farmin	gton, NM	87401		Telephone N	No. 505-599-228	5			
Facility Nai	me San Ju	an 30-6 #18	A Drip	l'ank	i	Facility Typ	e: Condensate/Dr	ip Tank			
Surface Ow	mer: BLM			Mineral C	Owner	BLM		APIN	10.	· · · · ·	
				LOCA	ATIC	N OF REI	LEASE	_			
Unit Letter	Section	Township	Range	Feet from the	Nort	hSouthLine	Feet from the	East/West I	Jine	County	
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		La	uue	30.81035		Longitud	e <u>-107.49845</u>				·
				NAT	ΓURI	E OF REL	EASE				
Type of Rele	ase: Conde	ensate and Pro	duced Wa	iter		Gas Relea	Release: Unknown se: 3-5 bbls of	N Volume	Recovere	ed: Unkn	own
						Condensa	te/Water				
Source of Re	elease: Froz	e/Cracked off	loading va	lve		Date and H	lour of Occurrence:	Date an	d Hour of	f Discover	y: 1/20/2014
Was Immedi	ate Notice (Given?			••••••••	If YES, To	Whom?	<u></u>	up.m.		
]Yes] No 🛛 Not R	equired	i					
By Whom?	Thomas Lo	ng				Date and H	lour:				
Was a Water	course Rea	ched?]Yes 🖂	3 No		If YES, Vo	olume Impacting the	e Watercourse.			
If a Waterco	urse was Im	pacted, Descr	tibe Fully.	*. n Takan * A conc	doncoto	/produced wet/	r ralanza apposiator	with a fragon/	arealized a	fflooding	valua on o 215
BBL tank. T	The release i	emained insid	de the seco	ondary containment	nt. The	e tank was pum	ped down to remov	e any residual t	fluids and	the valve	was replaced.
								-			
		· ·						<u> </u>			
Describe Are	ea Affected	and Cleanup .	Action Tal	ken.* Remediation (4) feet deep	n activ	ities completed	on January 24, 201	4. The final ware e	as excava	tion was a	pproximately
NMOCD ap	proved land	farm. A third	party env	ironmental contac	ctor coi	rective action	report is included w	ith this "final"	c-141.	and transp	
•											
I hereby cert	ify that the	information g	iven above	e is true and comp	olete to	the best of my	knowledge and und	lerstand that pu	irsuant to	NMOCD	rules and
regulations a	Il operators	are required t	to report a	nd/or file certain i	release	notifications a	nd perform correcti	ve actions for r	eleases wi	hich may e	endanger
should their	operations l	nave failed to	adequately	v investigate and i	remedi	ate contaminati	on that pose a threa	t to ground wat	ter, surfac	e water, h	uman health
or the enviro	nment. In a	addition, NMO	OCD accep	ptance of a C-141	report	does not reliev	e the operator of re	sponsibility for	complian	nce with ar	iy other
federal, state	, or local la	ws and/or reg	ulations. 7				OIL CONS	FRVATION		STOR	-/
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E-mail Addr	ess: jefields	@eprod.com				Conditions o	f Approval:				
	- /								Atta	cnea 🔟	
Date: 5	- 13-20	<i></i>	Phone	: (713)381-6684		l					
Attach Addi	itional She	ets If Necess	sary		:	HNCS	1414949	793		/	\frown
							V	N 77 -		($\overline{\Omega}$



Animas Environmental Services, LLC

www.animasenvironmental.com

624 E. Comanche

505-564-2281

Durango, Colorado 970-403-3084

Farmington, NM 87401

February 19, 2014

Thomas Long Enterprise Field Services, LLC 614 Reilly Avenue Farmington, New Mexico 87401

Via electronic mail with delivery confirmation receipt to: tjlong@eprod.com

RE: Release Assessment Report Enterprise Trunk A-LP San Juan 30-6 #18A Drip Tank Release SE¼ SW¼, Section 31, T30N, R8W Rio Arriba County, New Mexico

OIL CONS. DIV DIST. 3 MAY 19 2014

Dear Mr. Long:

On January 24, 2013, Animas Environmental Services, LLC (AES) completed an assessment associated with a release of an estimated volume of less than five barrels (bbls) pipeline liquids from the Enterprise Field Services, LLC (Enterprise) Trunk A-LP San Juan 30-6 #18A drip tank. The release was discovered on January 20, 2014, and resulted from a failed manway gasket.

1.0 Site Information

1.1 Location

Location – NE¼ SE¼, Section 18, T30N, R6W, Rio Arriba County, New Mexico Well Head Latitude/Longitude – N36.81035 and W107.49843, respectively Release Location Latitude/Longitude – N36.81037 and W107.49888, respectively Surface Owner – Bureau of Land Management Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, May 2013

1.2 NMOCD Ranking

In accordance with New Mexico Oil Conservation Division (NMOCD) release protocols, action levels were established per NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) prior to the assessment. The release was given a ranking score of 10 based on the following factors:

 Depth to Groundwater: A cathodic well report dated July 1980 reported the depth to groundwater at 100 feet below ground surface (bgs). AES personnel further assessed the depth to water determination using topographical interpretation, Global Positioning System (GPS) elevation readings, and visual reconnaissance. AES personnel concluded that depth to groundwater at the site was greater than 100 feet bgs. (0 points)

- Wellhead Protection Area: The release location is not within a wellhead protection area. (0 points)
- Distance to Surface Water Body: The release is located approximately 360 feet to the southwest of an unnamed ephemeral wash draining to Frances Creek and eventually to Navajo Lake. (10 points)

The ranking score of 10 dictates that concentrations for impacted soils left in place must be below the NMOCD action levels of 10 mg/kg benzene, 50 mg/kg total benzene, toluene, ethylbenzene, and xylenes (BTEX), and 1,000 mg/kg total petroleum hydrocarbons (TPH) as gasoline range organics (GRO) and diesel range organics (DRO).

1.3 Assessment and Mitigation

On January 14, 2014, Enterprise contractors completed an excavation of petroleum hydrocarbon impacted soils in the release area around the condensate tank at the location. AES provided field screening for excavation guidance and prior to backfilling the excavation, collected a total of three confirmation soil samples for field screening and laboratory analysis from the walls and base of the final excavation. The final excavation measured approximately 19 feet by 10 feet by 4 feet deep and terminated on shale with sandstone lenses. The excavation was backfilled with clean, imported material, and the impacted soil was transported to the Envirotech Landfarm for proper disposal. Soil sample locations and final excavation extents are included on Figure 3. The Envirotech Bills of Lading and a photograph log are included in the Appendix.

2.0 Soil Sampling

A total of three composite soil samples (SC-1 through SC-3) were collected from the walls and the base of the final excavation during the assessment. Each composite sample was field screened for volatile organic compounds (VOCs) and submitted for laboratory analysis.

2.1 Field Screening

2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

2.2 Laboratory Analyses

Samples collected for laboratory analysis were placed into new, clean, laboratorysupplied containers, which were then labeled, placed on ice, and logged onto a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil samples were laboratory analyzed for:

- BTEX per U.S. Environmental Protection Agency (USEPA) Method 8021B; and
- TPH (GRO/DRO) per USEPA Method 8015D.

2.3 Field Screening and Laboratory Analytical Results

Soil field screening results showed that VOC concentrations via OVM ranged from 67.8 ppm in SC-1 to 2,107 ppm in SC-2. Results are included in Table 1 and on Figure 3.

	Date	Sample Depth	VOCs via OVM
Sample ID	Sampled	(ft bgs)	(ppm)
NMOCD	Action Level*		100
SC-1	1/24/14	1 to 4	67.8
SC-2	1/24/14	1 to 4	2,107
SC-3	1/24/14	4	636

Table 1. Soil Field Screening VOC Results Trunk A-LP San Juan 30-6 #18A Drip Tank Release Assessment, January 2014

*Action level determined by the NMOCD ranking score per NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (August 1993)

Laboratory analytical results showed that benzene concentrations were below laboratory detection limits in SC-1 and SC-2, and at 0.56 mg/kg in SC-3. Total BTEX concentrations ranged from below laboratory detection limits in SC-1 up to 79.9 mg/kg in SC-3. TPH concentrations ranged from 8.14 mg/kg in SC-1 up to 701 mg/kg in SC-3. Laboratory analytical results are included in Table 2 and on Figure 3. The laboratory analytical report is attached.

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH – GRO (mg/kg)	TPH – DRO (mg/kg)
NMOCD	Action Level*		10	50	1,0	00
SC-1	1/24/14	1 to 4	<0.05	<0.05	8.14	<29.9
SC-2	1/24/14	1 to 4	<0.05	0.94	21.5	<29.9
SC-3	1/24/14	4	0.56	79.7	455	246

Table 2. Laboratory Analytical Results – Benzene, Total BTEX, and TPH	
Trunk A-LP San Juan 30-6 #18A Drip Tank Release Assessment, January 2014	

*Action level determined by the NMOCD ranking score per NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (August 1993)

3.0 Conclusions and Recommendations

Action levels for releases determined by NMOCD ranking score per NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (August 1993), and the release was assigned a ranking score of 10. Field screening of SC-1 through SC-3 showed VOC concentrations above the NMOCD action level of 100 ppm in SC-2 and SC-3, with the highest VOC reading recorded in SC-2 (2,107 ppm). Laboratory analytical results reported benzene, total BTEX, and TPH below the applicable NMOCD action levels in SC-1 and SC-2, but above total BTEX action level in SC-3 with 79.7 mg/kg. However, verbal approval to backfill the excavation was given on January 27, 2014, by Brandon Powell of the NMOCD. No further work is recommended for the Trunk A-LP San Juan 30-6 #18A drip tank release.

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

Sincerely,

Heather M. Woods

Heather Woods, P.G. Project Manager

Elizabeth V Mervely

Elizabeth McNally, P.E.

Thomas Long Enterprise Trunk A-LP San Juan 30-6 #18A Drip Tank Release Assessment Report February 19, 2014 Page 5 of 5

Attachments:

.

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map Figure 3. Excavation Sample Locations and Results, January 2014 Bills of Lading (Envirotech 45713 and 45731) Photograph Log Laboratory Analytical Reports (Envirotech P401077)

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Field Screening and Laboratory Analytical Results											
Sample ID	Date	Depth (ft)	OVM- PID (ppm)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH - GRO (mg/kg)	TPH - DRO (mg/kg)				
NMOC	D ACTION L	EVEL	100	10	50	1,0	000				
SC-1	1/24/14	1 to 4	67.8	< 0.05	<0.05	8.14	<29.9				
SC-2	1/24/14	4	2,107	< 0.05	0.94	21.5	<29.9				
SC-3	1/24/14	1 to 4	636	0.56	79.7	455	246				
ALL SAMPLES WERE COMPOSITE SAMPLES. ALL SAMPLES WERE ANALYZED PER EPA METHOD 8021 AND 8015.											







MANIFEST # 45713 DATE - 24-14 JOB # 97057-0419

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD	COMF	LETE DESCRIPTION OF SHIPMENT					TRANSPORTING COMPANY			
NO.	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
	ENTER PRENKALP SJ 30-6 #184	LFI-5	Contigor	(29	12	(Ems 1	16900	12:30	Advin Herbert
7				-	12					
							· · · · · · · · · · · · · · · · · · ·			
RESULTS:					NOTES:					
<292	CHLORIDE TEST	EMPLOYEE:	And)	_	······			
	PAINT FILTER TEST	Certific	cation of above red	ceival & pla	cement					

By signing as the driver/transporter, I certify the material hauled from the above location has not been added to or tampered with. I certify the material is from the above mentioned Generator/Point of Origin and that no additional material has been added or mixed into the load. 1.1. 1. 1.

TRANSPORTER CO	NAME Melvin Horbert	SIGNATURE Alban Hafer
COMPANY CONTACT C.M.S. USA. AN.	PHONE (505) 333-2003	DATE 01/24/2014
Signatures required prior to distribution of the legal document.		



MANIFEST # <u>45731</u> DATE <u>1-27-14</u> JOB # <u>47057-0619</u>

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

LOAD	COMPLETE DESCRIPTION OF SHIPMENT							TRANSPORTING COMPANY				
NO.	POINT OF ORIG	iIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE	
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						70						
						20						
RESULT	S:		LANDFARM	61	·	D E	L	NOTES:		A		
<292	CHLORIDE TEST	1	EMPLOYEE:	Hin	e L		\leq					
	PAINT FILTER TEST	1	Certific	cation of above re	ceival & pla	cement		<u> </u>				
By signin mentione	g as the driver/transpo d Generator/Point of O	rter, 1 c rigin ai	ertify the material nd that no addition	hauled from the a al material has be	bove locatio	on has not r mixed int	been ad	ded to or tampered	I with. I ce	ertify the	material is from the above	
TRANSPO	RTER CO.	-		NAME	Junt	Ritch	7	SIGNATUR	<u>An</u>	m1	KIKK	
COMPAN				PHONE	632	3550	8	DATE	<u>~</u>	287_1	<u>L/</u>	
Signature	s required prior to dist	ributior	n of the legal docu	ment		-				v	1	

White - Company Records, Yellow - Billing, Pink - Customer

Photo #1	
Client: Enterprise Field Services, LLC	
Project: Trunk A-LP San Juan 30-6 #18A Drip Tank	
Taken by: Heather Woods	
Date: January 24, 2014	
AES Project No.	Description:
140121	View of final excavation looking south.

Photo #2	
Client:	
Enterprise Field	
Services, LLC	
Project: Trunk A-LP San Juan 30-6 #18A Drip Tank	
Taken by: Heather Woods	
Date: January 24, 2014	
AES Project No.	Description:
140121	View of final excavation looking north.



Analytical Report

Report Summary

Client: Animas Environmental Services Chain Of Custody Number: 16570 Samples Received: 1/24/2014 2:38:00PM Job Number: 99083-0001 Work Order: P401077 Project Name/Location: Enterprise SJ 30-6 #18A

Date: 1/27/14

Entire Report Reviewed By:

Tim Cain, Laboratory Manager

The results in this report apply to the samples submitted to Envirotech's Analytical Laboratory and were analyzed in accordance with the chain of custody document supplied by you, the client, and as such are for your exclusive use only. The results in this report are based on the sample as received unless otherwise noted. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc. If you have any questions regarding this analytical report, please don't hesitate to contact Envirotech's Laboratory Staff.

Three Springs - 65 Mercado Street, Suite 115, Durango, CO 81301

Ph (505) 632-0615 Fx (505) 632-1865 Ph (970) 259-0615 Fr (800) 362-1879



Page 1 of 10



Animas Environmental Services	Project Name:	Enterprise SJ 30-6 #18A	
624 E. Comanche St.	Project Number:	99083-0001	Reported:
Farmington NM, 87401-6815	Project Manager:	Heather Woods	27-Jan-14 08:04

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SC-1	P401077-01A	Soil	01/24/14	01/24/14	Glass Jar, 4 oz.
SC-2	P401077-02A	Soil	01/24/14	01/24/14	Glass Jar, 4 oz.
SC-3	P401077-03A	Soil	01/24/14	01/24/14	Glass Jar, 4 oz.

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Animas Environmental Services 624 E. Comanche St. Farmington NM, 87401-6815	Project Project Project	Name: Number: Manager:	Enter 9908 Heatl	rprise SJ 30- 3-0001 her Woods	6 #18 A			Reported: 27-Jan-14 08	:04
		P4010	77-01 (So	olid)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
p,m-Xylene	ND	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
Total Xylenes	ND	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
Total BTEX	ND	0.05	mg/kg	1 .	1404027	01/24/14	01/24/14	EPA 8021B	
Surrogate: Bromochlorobenzene		111%	80-	-120	1404027	01/24/14	01/24/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		106 %	80-	-120	1404027	01/24/14	01/24/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	8.14	5.00	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1	1404026	01/24/14	01/24/14	EPA 8015D	

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Animas Environmental Services 624 E. Comanche St. Farmington NM, 87401-6815	Projec Projec Projec	et Name: et Number: et Manager:	Enter 9908 Heat	rprise SJ 30- 3-0001 her Woods	6 #18A			Reported: 27-Jan-14 08	:04
		P4010	SC-2 77-02 (So	ofid)					
Arabas		Reporting	, Unite	Dilution	Datab	Drawned	Analyzad	Mathod	Neter
Analyte	Result		Units	Dilution	Batch	Prepared	Analyzeu	Method	inoles
Volatile Organics by EPA 8021									
Benzene	ND	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
Toluene	ND	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
Ethylbenzene	ND	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
p,m-Xylene	0.94	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
o-Xylene	ND	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
Total Xylenes	0.94	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
Total BTEX	0.94	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B	
Surrogate: Bromochlorobenzene	<u> </u>	116 %	80	-120	1404027	01/24/14	01/24/14	EPA 8021B	
Surrogate: 1,3-Dichlorobenzene		115 %	80	-120	1404027	01/24/14	01/24/14	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	21.5	4.99	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	29.9	mg/kg	1	1404026	01/24/14	01/24/14	EPA 8015D	

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Animas Environmental Services	Projec	et Name:	Enter	prise SJ 30-	5 #18A					
624 E. Comanche St.	Projec	t Number:	9908	99083-0001				Reported:		
Farmington NM, 87401-6815	Projec	et Manager:	Heat	her Woods				27-Jan-14 08:	.04	
			SC-3							
		P4010	77-03 (Se	olid)						
		Reporting								
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
Volatile Organics by EPA 8021										
Benzene	0.56	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B		
Toluene	13.5	0.05	mg/kg	L	1404027	01/24/14	01/24/14	EPA 8021B		
Ethylbenzene	3.66	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B		
p,m-Xylene	53.3	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B		
o-Xylene	8.73	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B		
Total Xylenes	62.0	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B		
Total BTEX	79.7	0.05	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8021B		
Surrogate: 1,3-Dichlorobenzene		179 %	80	-120	1404027	01/24/14	01/24/14	EPA 8021B	Surrl	
Surrogate: Bromochlorobenzene		136 %	80	-120	1404027	01/24/14	01/24/14	EPA 8021B	Surrl	
Nonhalogenated Organics by 8015										
Gasoline Range Organics (C6-C10)	455	5.00	mg/kg	1	1404027	01/24/14	01/24/14	EPA 8015D		
Diesel Range Organics (C10-C28)	246	29.9	mg/kg	1	1404026	01/24/14	01/24/14	EPA 8015D		

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Animas Environmental Services	Project Name:	Enterprise SJ 30-6 #18A	
624 E. Comanche St.	Project Number:	99083-0001	Reported:
Farmington NM, 87401-6815	Project Manager:	Heather Woods	27-Jan-14 08:04

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	D14	Reporting	[]	Spike	Source	0/050	%REC	DDD	RPD	NT
лнаную	Result	Limit	Units	Level	Result	76KEC	Limits	KPD	Limit	inotes
Batch 1404027 - Purge and Trap EPA	A 5030A									
Blank (1404027-BLK1)				Prepared: 2	23-Jan-14 A	Analyzed: 2	.4-Jan-14			
Benzene	ND	0.05	mg/kg							
Toluene	ND	0.05	"							
Ethylbenzene	ND	0.05	n							
p,m-Xylene	ND	0.05	n							
o-Xylene	ND	0.05								
Total Xylenes	ND	0.05	"							
Total BTEX	ND	0.05	"							
Surrogate: 1,3-Dichlorobenzene	52.6		ug/L	50.0		105	80-120			
Surrogate: Bromochlorobenzene	54.5		"	50.0		109	80-120			
Duplicate (1404027-DUP1)	Sou	arce: P401066-	-01	Prepared: 2	23-Jan-14 A	Analyzed: 2	4-Jan-14			
Benzene	4.84	0.05	mg/kg		4.19			14.5	30	
Toluene	12.4	0.05	n		12.7			2.09	30	
Ethylbenzene	0.81	0.05	"		0.78			3.59	30	
p,m-Xylene	7.34	0.05	n		7.47			1.79	30	
o-Xylene	1.11	0.05			1.11			0.436	30	
Surrogate: 1,3-Dichlorobenzene	202		ug/L	50.0		404	80-120			S-02
Surrogate: Bromochlorobenzene	68.3		"	50.0		137	80-120			S-02
Matrix Spike (1404027-MS1)	Soi	urce: P401066-	-01	Prepared: 2	23-Jan-14	Analyzed: 2	24-Jan-14			
Benzene	7.68	0.05	mg/kg	2.50	4.19	140	39-150			
Toluene	16.3	0.05	"	2.50	12.7	144	46-148			
Ethylbenzene	3.49	0.05	"	2.50	0.78	108	32-160			
p,m-Xylene	13.0	0.05	"	5.00	7.47	111	46-148			
o-Xylene	3.91	0.05		2.50	1.11	112	46-148			
Surrogate: 1,3-Dichlorobenzene	221		ug/L	50.0		443	80-120			S-02
Surrogate: Bromochlorobenzene	72.1		н	50.0		144	80-120			S-02

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Animas Environmental Services	Project Name:	Enterprise SJ 30-6 #18A	
624 E. Comanche St.	Project Number:	99083-0001	Reported:
Farmington NM, 87401-6815	Project Manager:	Heather Woods	27-Jan-14 08:04

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory										
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1404026 - DRO Extraction EPA 3550C										
Blank (1404026-BLK1)				Prepared: 2	23-Jan-14 A	Analyzed: 2	4-Jan-14			
Diesel Range Organics (C10-C28)	ND	30.0	mg/kg							
Duplicate (1404026-DUP1)	Sou	irce: P401066-	01	Prepared: 2	23-Jan-14 A	Analyzed: 2	4-Jan-14			
Diesel Range Organics (C10-C28)	340	29.9	mg/kg		372			9.05	30	
Matrix Spike (1404026-MS1)	Sou	rce: P401066-	01	Prepared: 2	23-Jan-14 A	Analyzed: 2	4-Jan-14			
Diesel Range Organics (C10-C28)	605	31.6	mg/kg	263	372	88.5	75-125			

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Animas Environmental Services	Project Name:	Enterprise SJ 30-6 #18A	
624 E. Comanche St.	Project Number:	99083-0001	Reported:
Farmington NM, 87401-6815	Project Manager:	Heather Woods	27-Jan-14 08:04

Nonhalogenated Organics by 8015 - Quality Control

	Envirotech Analytical Laboratory											
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes		
Batch 1404027 - Purge and Trap EPA 5030A												
Blank (1404027-BLK1)				Prepared: 2	23-Jan-14	Analyzed: 2	4-Jan-14					
Gasoline Range Organics (C6-C10)	ND	4.99	mg/kg									
Duplicate (1404027-DUP1)	Sou	rce: P401066-	01	Prepared: 2	23-Jan-14	Analyzed: 2	4-Jan-14					
Gasoline Range Organics (C6-C10)	133	4.99	mg/kg		133			0.0246	30			
Matrix Spike (1404027-MS1)	Sou	rce: P401066-	01	Prepared: 2	23-Jan-14 /	Analyzed: 2	4-Jan-14					
Gasoline Range Organics (C6-C10)	159	5.00	mg/kg	22.5	133	118	75-125					

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Animas Environmental Services	Project Name:	Enterprise SJ 30-6 #18A	
624 E. Comanche St.	Project Number:	99083-0001	Reported:
Farmington NM, 87401-6815	Project Manager:	Heather Woods	27-Jan-14 08:04

Notes and Definitions

Surrl	Surrogate recovery was above acceptable limits.
S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
DET	Analyte DETECTED

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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CHAIN OF CUSTODY RECORD

16570

Client:			Project Nam	e / Locati	on:									A		sis		RAM	FTFF	s				
Animas Environmental	l Surviu	I	Enterprise	30 رح	·- lo #18	3A																		
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and tilong eprod. com	<u>nintas . C</u>	20rn	H. Woods					801	d 80 826		s	_		0	<u>-</u>									
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Heather M. Wa	ods				1/24/14	1438	\sim		$\sqrt{\sum}$	V	<u>``(</u>	\mathbf{X}	\sim		X	3°	<u> </u>				<u> </u> .)	4.4	141	38
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Soil 🕅 Solid 🗌 Sludge 🗌	Aqueous 🗌] Othe	r 🗆																					
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Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

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Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 3. St. Francis Di., Santa FC, INIVI 87505	Salita		
R	elease Notificati	on and Corrective Act	tion
		OPERATOR	🔲 Initial Report 🛛 Final Re
Address: 614 Reilly Ave Farmington		Telephone No. 505 500 2286	
Address: 014 Kenny Ave, Farmington, T	HI 0/401	Facility Type: Well Site	
Tachty Name. Scarma 550 Gas Com	<i>m</i> 1	Tacinty Type. Wen Site	
Surface Owner: Jicarilla Apache Tribo	e Mineral Owne	r: Jicarilla Apache Tribe	API No.
	LOCATI	ON OF RELEASE	
Unit LetterSectionTownshipRangH1124N5W	re Feet from the No 1826	the South Line Feet from the 1120	Cast West Line County Rio Arriba
La	titude <u>36.32840</u>	Longitude <u>-107.3</u>	<u>2595</u>
	NATUR	E OF RELEASE	
Type of Release: Natural Gas and Natural g	as liquids	Volume of Release: Unknowr Gas Release; 3-5 BBLs liquid release	Volume Recovered: Unknown
Source of Release: Accidental discharge duri	ng a meter tube blow dow	n Date and Hour of Occurrence: 3/4/2014:00 1:35 p.m.	Date and Hour of Discovery: 3/4/2014:00 1:35 p.m.
Was Immediate Notice Given?	🗌 No 🛄 Not Requir	If YES, To Whom? JAEPO – H ed Hammond, Jonathan Kelly - N	Hobson Sandoval, JAO&GA – Bryce MOCD
By Whom? Thomas Long		Date and Hour 3/4/2014 @ 5:0	7 p.m. by phone and email
Was a Watercourse Reached?		If YES, Volume Impacting the	Watercourse.
If a Watercourse was Impacted, Describe Ful Describe Cause of Problem and Remedial Ac surface area of approximately 32 feet long by	ly. tion Taken: During routi 10 feet wide was affected	ne maintenance activities a release of d. The meter tube taken out of the view	ccurred while blowing down the meter tube. DMG LDTO (Lock out tag out) was applied.
Yes If a Watercourse was Impacted, Describe Ful Describe Cause of Problem and Remedial Ac surface area of approximately 32 feet long by	ly. tion Taken: During routi 10 feet wide was affected	ne maintenance activities a release of I. The meter tube taken out of the form	ccurred while blowing down the meter tube. ONG LORO (Josk out tag out) was applied. IAY 27 2014
Yes If a Watercourse was Impacted, Describe Ful Describe Cause of Problem and Remedial Ac surface area of approximately 32 feet long by Describe Area Affected and Cleanup Action approximately thirty (30) feet by nineteen (19 cubic yards of hydrocarbon impacted soil wa corrective action report is included with this	ly. tion Taken: During routi 10 feet wide was affected Taken: Remediation activ 9) feet ranging from one (s excavated and transported "final" c-141.	ne maintenance activities a release of d. The meter tube taken out of the variant ities were completed on March 27, 2 l) to one and one half (1.5) feet belo ed to a NMOCD approved land farm	ccurred while blowing down the meter tube. DNG LOFFO (Josk out tag out) was applied. IAY 27 2014 014. The final excavation measured w ground surface. Approximately twenty (20) facility. A third party environmental contract
Yes <u>If a Watercourse was Impacted, Describe Ful</u> Describe Cause of Problem and Remedial Ac surface area of approximately 32 feet long by Describe Area Affected and Cleanup Action approximately thirty (30) feet by nineteen (19 cubic yards of hydrocarbon impacted soil wa corrective action report is included with this I hereby certify that the information given ab regulations all operators are required to repor public health or the environment. The accept should their operations have failed to adequat or the environment. In addition, NMOCD ac federal, state, or local laws and/or regulations	Iy. Iy. Ition Taken: During routi 10 feet wide was affected Taken: Remediation activ 9) feet ranging from one (s excavated and transporte "final" c-141. ove is true and complete t t and/or file certain releas rance of a C-141 report by tely investigate and remed ceptance of a C-141 reports	ne maintenance activities a release of d. The meter tube taken out of the form ities were completed on March 27, 2 l) to one and one half (1.5) feet belo ed to a NMOCD approved land farm o the best of my knowledge and und e notifications and perform correctiv the NMOCD marked as "Final Repo iate contamination that pose a threat t does not relieve the operator of res	ccurred while blowing down the meter tube. DNG, LOKO (JASK) at a out) was applied. IAY 27 2014 014. The final excavation measured w ground surface. Approximately twenty (20 facility. A third party environmental contrac erstand that pursuant to NMOCD rules and e actions for releases which may endanger ort" does not relieve the operator of liability to ground water, surface water, human health ponsibility for compliance with any other
Yes If a Watercourse was Impacted, Describe Ful Describe Cause of Problem and Remedial Ac surface area of approximately 32 feet long by Describe Area Affected and Cleanup Action approximately thirty (30) feet by nineteen (19 cubic yards of hydrocarbon impacted soil wa corrective action report is included with this I hereby certify that the information given ab regulations all operators are required to repor public health or the environment. The accept should their operations have failed to adequat or the environment. In addition, NMOCD ac federal, state, or local laws and/or regulations Signature:	ly. tion Taken: During routi 10 feet wide was affected Taken: Remediation activ 2) feet ranging from one (s excavated and transported "final" c-141. ove is true and complete t t and/or file certain releas ance of a C-141 report by tely investigate and remed ceptance of a C-141 report s.	ne maintenance activities a release of d. The meter tube taken out of the feature ities were completed on March 27, 2 l) to one and one half (1.5) feet belo ed to a NMOCD approved land farm o the best of my knowledge and und e notifications and perform correctiv the NMOCD marked as "Final Repo iate contamination that pose a threat t does not relieve the operator of res OIL CONSE	ccurred while blowing down the meter tube. DNG.LDFP (Jost, out tag out) was applied. IAY 27 2014 014. The final excavation measured w ground surface. Approximately twenty (20) facility. A third party environmental contract erstand that pursuant to NMOCD rules and e actions for releases which may endanger ort" does not relieve the operator of liability to ground water, surface water, human health ponsibility for compliance with any other ERVATION DIVISION
Yes If a Watercourse was Impacted, Describe Ful Describe Cause of Problem and Remedial Ac surface area of approximately 32 feet long by Describe Area Affected and Cleanup Action approximately thirty (30) feet by nineteen (19 cubic yards of hydrocarbon impacted soil wa corrective action report is included with this I hereby certify that the information given ab regulations all operators are required to repor public health or the environment. The accept should their operations have failed to adequat or the environment. In addition, NMOCD ac federal, state, or local laws and/or regulations Signature: Printed Name: Jon Fields	ly. tion Taken: During routi 10 feet wide was affected Taken: Remediation activ 0) feet ranging from one (s excavated and transported "final" c-141. ove is true and complete t t and/or file certain releas ance of a C-141 report by tely investigate and remed ceptance of a C-141 reports.	ne maintenance activities a release of d. The meter tube taken out of the form ities were completed on March 27, 2 l) to one and one half (1.5) feet below d to a NMOCD approved land farm o the best of my knowledge and und e notifications and perform corrective the NMOCD marked as "Final Report iate contamination that pose a threat t does not relieve the operator of ress <u>OIL CONSE</u> Approved by Environmental Spece	ccurred while blowing down the meter tube. A DNG I DEP (Josk out tag out) was applied. IAY 27 2014 014. The final excavation measured w ground surface. Approximately twenty (20) facility. A third party environmental contract erstand that pursuant to NMOCD rules and e actions for releases which may endanger ort" does not relieve the operator of liability to ground water, surface water, human health ponsibility for compliance with any other ERVATION DIVISION
Yes If a Watercourse was Impacted, Describe Ful Describe Cause of Problem and Remedial Ac surface area of approximately 32 feet long by Describe Area Affected and Cleanup Action approximately thirty (30) feet by nineteen (19 cubic yards of hydrocarbon impacted soil wa corrective action report is included with this I hereby certify that the information given ab regulations all operators are required to repor public health or the environment. The accept should their operations have failed to adequat or the environment. In addition, NMOCD ac federal, state, or local laws and/or regulations Signature: Printed Name: Jon Fields Title: Director, Environmental	Iv. Iv. Iv. Iv. Ition Taken: During roution 10 feet wide was affected Taken: Remediation active () feet ranging from one (s excavated and transported "final" c-141. The construction of the certain releases ance of a C-141 report by tely investigate and remed ceptance of a C-141 reports ()	ne maintenance activities a release of d. The meter tube taken out of the for- ities were completed on March 27, 2 l) to one and one half (1.5) feet belo id to a NMOCD approved land farm o the best of my knowledge and und e notifications and perform correctiv the NMOCD marked as "Final Repo- iate contamination that pose a threat t does not relieve the operator of res <u>OIL CONSE</u> Approved by Environmental Spec-	ccurred while blowing down the meter tube. DNG I DEP (Jack out tag out) was applied. IAY 27 2014 014. The final excavation measured w ground surface. Approximately twenty (20) facility. A third party environmental contract erstand that pursuant to NMOCD rules and e actions for releases which may endanger ort" does not relieve the operator of liability to ground water, surface water, human health ponsibility for compliance with any other ERVATION DIVISION Sialist: Expiration Date:
Yes If a Watercourse was Impacted, Describe Ful Describe Cause of Problem and Remedial Ac surface area of approximately 32 feet long by Describe Area Affected and Cleanup Action approximately thirty (30) feet by nineteen (19 cubic yards of hydrocarbon impacted soil wa corrective action report is included with this I hereby certify that the information given ab regulations all operators are required to repor public health or the environment. The accept should their operations have failed to adequal or the environment. In addition, NMOCD ac federal, state, or local laws and/or regulations Signature: Printed Name: Jon Fields Title: Director, Environmental E-mail Address: jefields@eprod.com	ly. tion Taken: During routi 10 feet wide was affected Taken: Remediation activ 2) feet ranging from one (s excavated and transported "final" c-141. ove is true and complete t t and/or file certain releas ance of a C-141 report by tely investigate and remed ceptance of a C-141 reports.	ne maintenance activities a release of d. The meter tube taken out of the form ities were completed on March 27, 2 l) to one and one half (1.5) feet below ed to a NMOCD approved land farm o the best of my knowledge and und e notifications and perform corrective the NMOCD marked as "Final Repo- iate contamination that pose a threat t does not relieve the operator of rest <u>OIL CONSE</u> Approved by Environmental Spect Approval Date: $5/23/14/2$ Conditions of Approval:	ccurred while blowing down the meter tube. A DNG I DEP (Jost out tag out) was applied. IAY 27 2014 014. The final excavation measured w ground surface. Approximately twenty (20) facility. A third party environmental contract erstand that pursuant to NMOCD rules and e actions for releases which may endanger ort" does not relieve the operator of liability to ground water, surface water, human health ponsibility for compliance with any other ERVATION DIVISION cialist:

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Animas Environmental Services, LLC

www.animasenvironmental.com

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

> Durango, Colorado 970-403-3084

April 24, 2014

Thomas Long Enterprise Field Services, LLC 614 Reilly Avenue Farmington, New Mexico 87401

Via electronic mail with delivery confirmation receipt to: tjlong@eprod.com

OIL CONS. DIV DIST. RE: **Initial Release Assessment and Final Excavation Report** Jicarilla 35B Gas Com #1 SE¼ NE¼, Section 11, T24N, R5W **Rio Arriba County, New Mexico**

Dear Mr. Long:

On March 11 and 27, 2014, Animas Environmental Services, LLC (AES) completed an initial release assessment and environmental clearance of the final excavation limits associated with a non-reportable release of less than 5 barrels (bbls) of pipeline liquids from the Enterprise Field Services, LLC (Enterprise) Jicarilla 35B Gas Com #1 meter run (Meter ID #75226). The release was occurred on March 4, 2014, from the meter run vent while a measurement technician was blowing down the meter run pipeline.

1.0 Site Information

1.1 Location

Location - SE¼ NE¼, Section 11, T24N, R5W, Rio Arriba County, New Mexico Well Head Monument Latitude/Longitude - N36.32785 and W107.32590, respectively Release Location Latitude/Longitude - N36.32840 and W107.32595, respectively Surface Owner – Jicarilla Apache Nation Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, March 2014

1.2 Risk Ranking

The Jicarilla 35B Gas Com #1 is located on Jicarilla Apache Nation lands, and soil remediation action levels are determined by the Jicarilla Apache Nation Oil and Gas Administration (JANOGA). JANOGA action levels for soils follow the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases (August 1993). Per JANOGA, all locations within Jicarilla Apache Nation lands receive a ranking score of 20:

- 100 ppm volatile organic compounds (VOCs); or 10 mg/kg benzene and 50 mg/kg total BTEX (benzene, toluene, ethylbenzene, and xylenes), and
- 100 mg/kg total petroleum hydrocarbons (TPH).

1.3 Assessment and Mitigation

On March 11, 2014, AES completed the initial release assessment field work. The assessment included collection and field screening of 16 soil samples from 8 soil borings in the area impacted by the release. Soil borings were terminated between 0.5 and 2.25 feet below ground surface (bgs). Based on field screening results, AES recommended excavation of the release area. Sample locations are shown on Figure 3.

On March 27, 2014, AES returned to the location to provide excavation guidance and collect confirmation soil samples of the excavation. The field screening activities included the collection of two confirmation soil samples from the base of the shallow excavation. The area of the final excavation measured approximately 30 feet by 19 feet by 1 to 1.5 feet in depth. The excavation was backfilled with clean, imported material, and the impacted soil was transported to the T-n-T Landfarm for proper disposal. Sample locations and final excavation extents are included on Figure 4. The T-n-T Landfarm Bill of Lading and a photograph log are included in the Appendix.

2.0 Soil Sampling

A total of 16 soil samples from eight soil borings (SB-1 through SB-8) were collected during initial assessment activities, and two composite soil samples (SC-1 and SC-2) were collected from the base of the final excavation. All soil samples were field screened for VOCs, and samples SC-1 and SC-2 were submitted for laboratory analysis.

2.1 Field Screening

2.1.1 Volatile Organic Compounds

Field screening for VOC vapors was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Before beginning field screening, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas.

2.2 Laboratory Analyses

Samples collected for laboratory analysis were placed into new, clean, laboratorysupplied containers, which were then labeled, placed on ice, and logged onto a sample chain of custody record. Samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall), in Albuquerque, New Mexico. Soil samples were laboratory analyzed for:

- BTEX per U.S. Environmental Protection Agency (USEPA) Method 8021B; and
- TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D.

2.3 Field Screening and Laboratory Analytical Results

On March 11, 2014, initial assessment field screening results for VOCs via OVM showed concentrations ranging from 0.3 ppm in SB-6 at 0.25 feet up to 57.9 ppm in SB-2 at 0.5 feet. On March 27, 2014, final excavation field screening results for VOCs via OVM showed concentrations of 4.2 ppm in SC-1 and 1.5 ppm in SC-2. Results are included in Table 1 and on Figures 3 and 4.

March 2014							
Sample ID	Date Sampled	Sample Depth (ft bgs)	VOCs via OVM (ppm)				
		0.75	100				
65.4	2/44/44	0.75	3.7				
SB-1	3/11/14	1.5	8.7				
		2.25	18.4				
50 3	2/11/14	0.5	57.9				
30-2	3/11/14	0.75	4.3				
SB-3	3/11/14	0.5	0.9				
SB-4	3/11/14	0.5	1.5				
	2/11/14	0.25	1.6				
20-2	5/11/14	1.25	0.8				
CD C	2/11/14	0.25	0.3				
30-0	5/11/14	1.25	0.6				
CD 7	2/11/1/	0.25	1.1				
30-1	5/11/14	1.25	0.4				
		0.5	12.8				
SB-8	3/11/14	1.0	1.6				
		1.25	3.2				
SC-1	3/27/14	1.0 to 1.5	4.2				

1

Table 1. Soil Field Screening VOC Results Jicarilla 35B Gas Com #1 Initial Release Assessment and Final Excavation March 2014

	Date	Sample	VOCs via OVM
Sample ID	Sampled	(ft bgs)	(ppm)
JANG	GA Action Leve	el*	100
SC-2	3/27/14	1.0 to 1.5	1.5

*Action level determined by JANOGA (Ref. NMOCD ranking score of 20 per NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (August 1993).

Laboratory analytical results showed that benzene and total BTEX concentrations were below laboratory detection limits for both samples. TPH (GRO) concentrations were also below laboratory detection limits, but TPH (DRO) was reported at 13 mg/kg in SC-1 and 16 mg/kg in SC-2. Laboratory analytical results are included in Table 2 and on Figure 4. The laboratory analytical report is attached.

Table 2.	Laboratory Analytical Results – Benzene, Total BTEX, and TPH
Jicarilla 35B Gas	Com #1 Initial Release Assessment and Final Excavation, March 2014

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH – GRO (mg/kg)	TPH – DRO (mg/kg)
JANOG	A Action Leve	! *	10	50	10	00
SC-1	3/27/14	1.0 to 1.5	<0.047	<0.234	<4.7	13
SC-2	3/27/14	1.0 to 1.5	<0.048	<0.239	<4.8	16

*Action level determined by JANOGA (Ref. NMOCD ranking score of 20 per *NMOCD* Guidelines for Remediation of Leaks, Spills, and Releases (August 1993).

3.0 Conclusions and Recommendations

On March 11, 2014, AES conducted an initial assessment of petroleum contaminated soils associated with a release of pipeline liquids from the meter run vent at the Jicarilla 35B Gas Com #1. Action levels for releases are determined by JANOGA, which refers to the *NMOCD Guidelines for Remediation of Leaks, Spills, and Releases* (August 1993) for a site ranking of 20. Initial assessment field screening results were below the NMOCD action level of 100 ppm VOCs, with the highest VOC concentration reported in SB-2 at 0.5 feet with 57.9 ppm.

On March 27, 2014, final clearance of the excavation area was completed. Field screening results of the excavation extents showed that VOC concentrations were below the JANOGA action level for the final excavation. Laboratory analytical results reported benzene, total BTEX, and TPH (GRO/DRO) below applicable JANOGA action levels in SC-1 and SC-2.

Based on field screening and laboratory results of the final excavation extents, benzene, total BTEX, and TPH (GRO/DRO) concentrations are below the applicable JANOGA action levels. No further work is recommended for the Jicarilla 35B Gas Com #1 Release.

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

Sincerely,

David g Rem

David J. Reese Environmental Scientist

Aleather M. Woods

Heather M. Woods, P.G. Project Manager

Elizabeth V Mendly

Elizabeth McNally, P.E.

Attachments:

Figure 1. Topographic Site Location Map Figure 2. Aerial Site Map, March 2014 Figure 3. Initial Assessment Sample Locations and Results, March 2014 Figure 4. Final Excavation Sample Locations and Results, March 2014 Bill of Lading (T-n-T C-138) Photograph Log Laboratory Analytical Report (Hall 1403C44)

R:\Animas 2000\Dropbox\0000 Animas Server Dropbox EM\2014 Projects\Enterprise\Jicarilla 35B Gas Com #1\Enterprise Jicarilla 35B Gas Com #1 Meter Run Release and Excavation Report 042214.docx







Field Screening Results						
Sample ID Date		Depth (ft)	OVM- PID (ppm)			
JANOG	A ACTION L	EVEL	100			
		0.75	3.7			
SB-1	3/11/14	1.5	8.7			
		2.25	18.4			
68.2	3/11/14	0.5	57.9			
3D-2	5/11/14	0.75	4.3			
SB-3	3/11/14	0.5	0.9			
SB-4	3/11/14	0.5	1.5			
CP.C	3/11/14	0.25	1.6			
30-3	5/11/14	1.25	0.8			
SB-6	3/11/1/	0.25	0.3			
30-0	5/11/14	1.25	0.6			
SB-7	3/11/14	0.25	1.1			
	5/11/14	1.25	0.4			
		0.5	12.8			
SB-8	3/11/14	1.0	1.6			
		1.25	3.2			

	DRAWN BY: S. Glasses	DATE DRAWN: April 16, 2014	FIGURE 3
	REVISIONS BY: C. Lameman	DATE REVISED: April 16, 2014	INITIAL ASSESSMENT SAMPLE LOCATIONS AND RESULTS
	CHECKED BY: H. Woods	DATE CHECKED: April 16, 2014	ENTERPRISE FIELD SERVICES LLC JICARILLA 35B GAS COM #1
Animas Environmental Services, LLC	APPROVED BY: E. McNally	DATE APPROVED: April 16, 2014	SE¼ NE¼, SECTION 11, T24N, R5W RIO ARRIBA COUNTY, NEW MEXICO N36.32785. W107.32590



Animas Environmental	Services,	LLC
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DRAWN BY:	DATE DRAWN:
S. Glasses	April 16, 2014
REVISIONS BY:	DATE REVISED:
C. Lameman	April 16, 2014
CHECKED BY:	DATE CHECKED:
H. Woods	April 16, 2014
APPROVED BY:	DATE APPROVED:
E. McNally	April 16, 2014

JICARILLA 35B GAS COM #1 SE¼ NE¼, SECTION 11, T24N, R5W **RIO ARRIBA COUNTY, NEW MEXICO** N36.32785, W107.32590

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

\sim	N .T		A .1.1
Lonorator	Nama	ana	Address
 OCHCIAIOI	Trame	anu	Auuress.

Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401 Payl

Paykey Code: GG11580

2.	Originating Site: Jicarilla 35B Gas Com #1 Well Site
3.	Location of Material (Street Address, City, State or ULSTR): Unit H, Section 11, T 25N, R 05W, Rio Arriba County, NM; 36.3283, -107.3256
4. Sou De Est	Source and Description of Waste: urce: Natural Gas Liquids (oil and condensate) from a meter run scription: Exempt petroleum affected soil from clean-up efforts at well site imated Volume10yd ³ bbls Known Volume (to be entered by the operator at the end of the haul) yd ³ / bbls
5.	GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
I, cer reg	Thomas Long, representative or authorized agent for Enterprise Field Services, LLC do hereby Generator Signature tify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 ulatory determination, the above described waste is: (Check the appropriate classification)
	RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. <u>Operator Use Only: Waste Acceptance Frequency</u> Monthly Weekly Per Load
	RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)
	MSDS Information 🔲 RCRA Hazardous Waste Analysis 🖾 Process Knowledge 🔲 Other (Provide description in Box 4)
	GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
I, Ø	There Joy 3-25-14, representative for Enterprise Field Services, LLC authorize T-N-T to complete Generator Signature required testing/sign the Generator Waste Testing Certification.
I, _	, representative for do hereby certify that
Repr nav of t 19.	epresentative/Agent Signature resentative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples e been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results he representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 15.36 NMAC.
;.	Transporter: IMI or an approved company on the NMOCD approved haulers list.
0	CD Permitted Surface Waste Management Facility
	Name and Facility Permit #: TNT Evap Pond/Landfarm, NM01-0008 Address of Facility: 70 CR 405, Lindrith NM
	Method of Treatment and/or Disposal:
W	aste Acceptance Status:
PF Sl	RINT NAME:

Photo #1	
Client:	A Company of the second s
Enterprise Field	
Services, LLC	
Project:	
Jicarilla 35B Gas	
Com #1	A STREET
Taken by:	四時時時時時時時時時時時時時時時時時時時時時時時時時時時時時時時時時時時時時
Heather Woods	THE THE PARTY OF
Date: March 11,	
2014	
AES Project No.	Description:
140304	View of impacted area prior to excavation looking north.



	A State
Photo #3	
Client:	
Enterprise Field	
Services, LLC	
Project:	
Jicarilla 35B Gas	
Com #1	
Taken by:	
Heather Woods	
Date: March 27,	
2014	
AES Project No.	Description:
140304	View of final excavation looking west.



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

April 07, 2014

Heather Woods Animas Environmental Services 624 East Comanche Farmington, NM 87401 TEL: (505) 716-2787 FAX

RE: Enterprise Jicarilla 35B Gas Com #1

OrderNo.: 1403C44

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/29/2014 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 <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

Lab Order **1403C44** Date Reported: **4/7/2014**

4/1/2014 4:34:08 PM

4/1/2014 4:34:08 PM

4/1/2014 4:34:08 PM

4/1/2014 4:34:08 PM

12458

12458

12458

12458

CLIENT: Animas Environmental Servi	ces	Client Sample ID: SC-1 Collection Date: 3/28/2014 11:22:00 AM					
Project: Enterprise Jicarilla 35B Gas	Com #1						
Lab ID: 1403C44-001	Matrix:	SOIL	Received l	Date: 3/2	29/2014 10:05:00 AM		
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 8015D: DIESEL RANG	E ORGANICS				Analys	t: BCN	
Diesel Range Organics (DRO)	13	9.9	mg/Kg	1	4/1/2014 4:44:29 PM	12452	
Surr: DNOP	80.6	66-131	%REC	1	4/1/2014 4:44:29 PM	12452	
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB	
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/1/2014 4:34:08 PM	12458	
Surr: BFB	88.4	74.5-129	%REC	1	4/1/2014 4:34:08 PM	12458	
EPA METHOD 8021B: VOLATILES					Analys	t: NSB	
Benzene	ND	0.047	mg/Kg	1	4/1/2014 4:34:08 PM	12458	

0.047

0.047

0.093

80-120

ND

ND

ND

104

mg/Kg

mg/Kg

mg/Kg

%REC

1

1

1

1

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Metho	od Blank	
	Е	Value above quantitation range	Н	Holding times for preparation or analysis exceeded		
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 1 of 5	
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	Tage 1015	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit		
	S	Spike Recovery outside accepted recovery limits				

Analytical Report

Hall Environmental Analysis Laboratory, Inc.

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

Lab Order 1403C44

4/1/2014 5:02:49 PM

4/1/2014 5:02:49 PM

4/1/2014 5:02:49 PM

12458

12458

12458

Date Reported: 4/7/2014

CLIENT: Animas Environmental Service	Client Sample ID: SC-2 Collection Date: 3/28/2014 11:24:00 AM					
Project: Enterprise Jicarilla 35B Gas (
Lab ID: 1403C44-002	Matrix:	SOIL	Received I	Date: 3/2	29/2014 10:05:00 AM	
Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE	ORGANICS				Analyst	BCN
Diesel Range Organics (DRO)	16	10	mg/Kg	1	4/1/2014 5:15:28 PM	12452
Surr: DNOP	80.0	66-131	%REC	1	4/1/2014 5:15:28 PM	12452
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/1/2014 5:02:49 PM	12458
Surr: BFB	89.5	74.5-129	%REC	1	4/1/2014 5:02:49 PM	12458
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.048	mg/Kg	1	4/1/2014 5:02:49 PM	12458
Toluene	ND	0.048	mg/Kg	1	4/1/2014 5:02:49 PM	12458

0.048

0.095

80-120

mg/Kg

mg/Kg

%REC

1

1

1

ND

ND

105

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level	В	Analyte detected in the associated Metho	od Blank	
Quantitorisi	E	Value above quantitation range	- H	Holding times for preparation or analysis exceeded		
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 2 of 5	
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	1 age 2 01 5	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit		
	S	Spike Recovery outside accepted recovery limits				

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

WO#:	14	103	C44
	0.7		

Client:	Animas Environmental Services
Project:	Enterprise Jicarilla 35B Gas Com #1

Sample ID MB-12452	SampT	/pe: ME	BLK	Tes	tCode: El	PA Method	8015D: Dies	el Range C	Organics	
Client ID: PBS	Batch	Batch ID: 12452 RunNo: 17675								
Prep Date: 3/31/2014	Analysis D	ate: 3/	31/2014	S	eqNo: 5	09001	Units: mg/H	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Sur: DNOP	8.4		10.00		84.0	66	131			
· · · · · · · · · · · · · · · · · · ·	SampType: LCS TestCode: EPA Method 8015D: Diesel Range Organics									
Sample ID LCS-12452	SampT	/pe: LC	S	Tes	tCode: El	PA Method	8015D: Dies	el Range C	Organics	
Sample ID LCS-12452 Client ID: LCSS	SampT <u>y</u> Batch	/pe: LC ID: 124	S 452	Tes F	tCode: El RunNo: 1	PA Method 7675	8015D: Dies	el Range C	Organics	
Sample ID LCS-12452 Client ID: LCSS Prep Date: 3/31/2014	SampTy Batch Analysis D	/pe: LC ID: 124 ate: 3/	S 452 31/2014	Tes F S	tCode: El RunNo: 1 SeqNo: 5	PA Method 7675 09002	8015D: Dies Units: mg/h	el Range ((g	Organics	
Sample ID LCS-12452 Client ID: LCSS Prep Date: 3/31/2014 Analyte	SampTy Batch Analysis D Result	/pe: LC ID: 124 ate: 3/ PQL	S 452 31/2014 SPK value	Tes F S SPK Ref Val	tCode: El RunNo: 1 SeqNo: 5 %REC	PA Method 7675 09002 LowLimit	8015D: Diese Units: mg/F HighLimit	el Range C Kg %RPD	Organics RPDLimit	Qual
Sample ID LCS-12452 Client ID: LCSS Prep Date: 3/31/2014 Analyte Diesel Range Organics (DRO)	SampTy Batch Analysis D Result 46	/pe: LC ID: 124 ate: 3/ PQL 10	S 452 31/2014 SPK value 50.00	Tes F S SPK Ref Val 0	tCode: El RunNo: 1 SeqNo: 5 %REC 92.5	PA Method 7675 09002 LowLimit 60.8	8015D: Diese Units: mg/k HighLimit 145	el Range C (g %RPD	Organics RPDLimit	Qual

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client: Anima Project: Entern	s Environmental ríse Jicarilla 35E	Services Gas Com #1							
Sample ID MB-12458	SampType	MBLK	Test	Code: EP	A Method	8015D: Gaso	oline Rang	je	
Client ID: PBS	Batch ID:	12458	R	unNo: 17	725				
Prep Date: 3/31/2014	Analysis Date:	4/1/2014	Se	eqNo: 51	0700	Units: mg/H	(g		
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0							
Surr: BFB	910	1000		90.7	74.5	129			
Sample ID LCS-12458	SampType	LCS	Test	Code: EP	A Method	8015D: Gasc	line Rang	le	
Client ID: LCSS	Batch ID:	12458	R	unNo: 17	725				

Prep Date: 3/31/2014	Analysis E	Date: 4/	1/2014	S	10701	Units: mg/h	Jnits: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	71.7	134			_		
Surr: BFB	960		1000		96.1	74.5	129					

Qualifiers:

- Value exceeds Maximum Contaminant Level. *
- Value above quantitation range Е
- Analyte detected below quantitation limits J
- RSD is greater than RSDlimit 0
- R RPD outside accepted recovery limits
- Spike Recovery outside accepted recovery limits S
- Analyte detected in the associated Method Blank В
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit ND
- Р Sample pH greater than 2.
- Reporting Detection Limit RL

QC SUMMARY REPORT

Hall Environmental	Analysis	Laboratory,	Inc.
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WO#:	1403C44

Client:	Animas Environmental Services
Project:	Enterprise Jicarilla 35B Gas Com #1

Sample ID MB-12458	SampType: MBLK TestCode: EPA Method 8021B: Volatiles													
Client ID: PBS	Batcl	h ID: 124	458	R	7725									
Prep Date: 3/31/2014	Analysis E	Date: 4/	1/2014	S	SeqNo: 510717 Units: n				g/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Benzene	ND	0.050												
Toluene	ND	0.050												
Ethylbenzene	ND	0.050												
Xylenes, Total	ND	0.10												
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120							
Sample ID LCS-12458	SampT	Type: LC	s	Test	tCode: El	PA Method	8021B: Volat	iles		<u>_</u>				
Sample ID LCS-12458 Client ID: LCSS	Samp1 Batcl	ype: LC	S 458	Tesi	tCode: El	PA Method 7725	8021B: Volat	iles		<u> </u>				
Sample ID LCS-12458 Client ID: LCSS Prep Date: 3/31/2014	Samp1 Batcl Analysis D	Type: LC h ID: 124 Date: 4/	S 458 1/2014	Tesi R S	tCode: El tunNo: 1 GeqNo: 5	PA Method 7725 10718	8021B: Volat Units: mg/K	iles G						
Sample ID LCS-12458 Client ID: LCSS Prep Date: 3/31/2014 Analyte	SampT Batcl Analysis D Result	5ype: LC h ID: 124 Date: 4/ PQL	S 458 1/2014 SPK value	Tes R S SPK Ref Val	Code: El RunNo: 1 SeqNo: 5 %REC	PA Method 7725 10718 LowLimit	8021B: Volat Units: mg/K HighLimit	iles Sg %RPD	RPDLimit	Qual				
Sample ID LCS-12458 Client ID: LCSS Prep Date: 3/31/2014 Analyte Benzene	SampT Batcl Analysis D Result 1.1	Type: LC h ID: 124 Date: 4/ PQL 0.050	S 458 1/2014 SPK value 1.000	Tesi F S SPK Ref Val 0	Code: El RunNo: 1 SeqNo: 5 %REC 112	PA Method 7725 10718 LowLimit 80	8021B: Volat Units: mg/K HighLimit 120	iles Sg %RPD	RPDLimit	Qual				
Sample ID LCS-12458 Client ID: LCSS Prep Date: 3/31/2014 Analyte Benzene Toluene	SampT Batcl Analysis E Result 1.1 1.1	Type: LC h ID: 124 Date: 4/ PQL 0.050 0.050	S 458 1/2014 SPK value 1.000 1.000	Tesi R SPK Ref Val 0 0	Code: El RunNo: 1 SeqNo: 5 %REC 112 105	PA Method 7725 10718 LowLimit 80 80	8021B: Volat Units: mg/K HighLimit 120 120	illes (g %RPD	RPDLimit	Qual				
Sample ID LCS-12458 Client ID: LCSS Prep Date: 3/31/2014 Analyte Benzene Toluene Ethylbenzene	Samp1 Batcl Analysis E Result 1.1 1.1 1.1	Type: LC h ID: 124 Date: 4/ PQL 0.050 0.050 0.050	S 458 1/2014 SPK value 1.000 1.000 1.000	Tesi F S SPK Ref Val 0 0 0 0	Code: El RunNo: 1 GeqNo: 5 <u>%REC</u> 112 105 106	PA Method 7725 10718 LowLimit 80 80 80	8021B: Volat Units: mg/K HighLimit 120 120 120	iles G %RPD	RPDLimit	Qual				
Sample ID LCS-12458 Client ID: LCSS Prep Date: 3/31/2014 Analyte Benzene Toluene Ethylbenzene Xylenes, Total	Samp1 Batcl Analysis E Result 1.1 1.1 1.1 3.2	Type: LC h ID: 124 Date: 4/ PQL 0.050 0.050 0.050 0.10	S 458 1/2014 SPK value 1.000 1.000 1.000 3.000	Tesi S SPK Ref Val 0 0 0 0 0	Code: El SunNo: 1 SeqNo: 5 %REC 112 105 106 105	PA Method 7725 10718 LowLimit 80 80 80 80 80	8021B: Volat Units: mg/K HighLimit 120 120 120 120	illes Sg %RPD	RPDLimit	Qual				

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2.
- RL Reporting Detection Limit

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

Sample Log-In Check List

Received by/date: AT 03/29/2014 Logged By: Ashley Gallegos 3/29/2014 10:05:00 AM Completed By: Ashley Gallegos 3/31/2014 12:35:05 PM Reviewed By: TO 03/31/2014 12:35:05 PM Chain of Custody 1 Custody seals intact on sample bottles? 03/31/2014 2. Is Chain of Custody complete? N 3. How was the sample delivered? Q 4. Was an attempt made to cool the samples? Y 5. Were all samples received at a temperature of >0° C to 6.0°C Y 6. Sample(c) in proper container(s)? Y	1 Yes Yes Courier Yes Yes Yes Yes	No No No No	Not Present ✔ Not Present	
Logged By: Ashley Gallegos 3/29/2014 10:05:00 AM Completed By: Ashley Gallegos 3/31/2014 12:35:05 PM Reviewed By: IO 3/31/2014 12:35:05 PM Chain of Custody IO 3/31/2014 12:35:05 PM Phain of Custody IO 3/31/2014 12:35:05 PM Chain of Custody IO 3/31/2014 12:35:05 PM Phain of Custody IO 3/31/2014 12:35:05 PM Chain of Custody IO 3/31/2014 12:35:05 PM Phain of Custody IO 3/31/2014 12:35:05 PM Chain of Custody IO IO 2. Is Chain of Custody complete? IO 3. How was the sample delivered? IO 4. Was an attempt made to cool the samples? IO 5. Were all samples received at a temperature of >0° C to 6.0°C Y 6. Sample/(c) in proper container(s)? IO	1 Yes Yes Courier Yes Yes	No No No	Not Present ✔ Not Present	
Sompleted By: Ashley Gallegos Ashley Gallegos 3/31/2014 12:35:05 PM Leviewed By: Image: Color of	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	No : : : No : : : No . : :	Not Present ✔ Not Present	
teviewed By: Image: Complete Provide ProvideProvide ProvideProvide ProvideProvide Provid	Yes Yes Courier Yes Yes Yes Yes Yes Yes	No :	Not Present ✔ Not Present	1
hain of Custody 1. Custody seals intact on sample bottles? 2. Is Chain of Custody complete? 3. How was the sample delivered? .og In 4. Was an attempt made to cool the samples? 5. Were all samples received at a temperature of >0° C to 6.0°C Y 6. Sample/s) in proper container(s)?	Yes Courter Yes Yes Yes	No	Not Present ✔ Not Present	
1. Custody seals intact on sample bottles? 2. Is Chain of Custody complete? 3. How was the sample delivered? 4. Was an attempt made to cool the samples? 5. Were all samples received at a temperature of >0° C to 6.0°C Y 6. Sample(e) in proper container(s)?	Yes Courier Yes Yes Yes	No	Not Present ✓ Not Present	
 Custody seals intact on sample bottles? Is Chain of Custody complete? How was the sample delivered? How was the sample delivered? Was an attempt made to cool the samples? Were all samples received at a temperature of >0° C to 6.0°C Sample(e) in proper container(s)? 	Yes in Arrow (Market Schemer Courter Yes I	No	Not Present	
 12. Is Chain of Custody complete? 3. How was the sample delivered? 4. Was an attempt made to cool the samples? 5. Were all samples received at a temperature of >0° C to 6.0°C 6. Sample(e) in proper container(s)? 	Yes V Courter Yes V	NO	Not Present	
 Bample(s) in proper container(s)? How was the sample delivered? Log In Was an attempt made to cool the samples? Were all samples received at a temperature of >0° C to 6.0°C Sample(s) in proper container(s)? 	<u>Courier</u> Yes 🗹	• No [] •	NA -	
 Log In 4. Was an attempt made to cool the samples? 5. Were all samples received at a temperature of >0° C to 6.0°C Y 6. Sample(s) in proper container(s)? 	Yes 🗹	No 🗍	NA-	
 4. Was an attempt made to cool the samples? 5. Were all samples received at a temperature of >0° C to 6.0°C Y 6. Sample(s) in proper container(s)? 	Yes 🗹	• No	NA-	
 5. Were all samples received at a temperature of >0° C to 6.0°C β. Sample(s) in proper container(s)? 				
6 Sample(s) in proper container(s)?	162	No []]	NA	
	Yes 🔽	No		
7 Sufficient sample volume for indicated test(s)?	Yes 🔽	No 🗍		
8. Are samples (except VOA and ONG) properly preserved?	Yes 🗹	No 🗍		
9. Was preservative added to bottles?	Yes 🗌	No 🗹	NA 🗌	
10.VOA vials have zero headspace?	Yes 🗌	No 🗌	No VOA Vials 🗹	
11. Were any sample containers received broken?	Yes	No 🗹	# of procented	
	, .		bottles checked	
12. Does paperwork match bottle labels?	Yes 🗹	No	• for pH: • (<2 c	x >12 unless noted)
(Note discrepancies on chain of custody)	Yes 🗸	No []	Adjusted?	
14. Is it clear what analyses were requested?	Yes 🔽	No L		
15. Were all holding times able to be met?	Yes 🗹	No []]	Checked by:	
(If no, notify customer for authorization.)			L /	
pecial Handling (if applicable)	·1			
6. Was client notified of all discrepancies with this order?	Yes L.I	No	NA ¥:	:
Person Notified: Date:				
By Whom: Via:	eMail 📋	Phone Fax	In Person	
Regarding:				
Client Instructions:	, .	· · · · · · · · · · · · · · · · · · ·		
17. Additional remarks:				
18. <u>Cooler Information</u>	ret_elarat	1. J20 M. Later -	I	
Cooler No Temp C Condition Seal Intact Seal No Sea	al Date	Signed By		
	nan lahan a tut keri tuta kai kabut kerin	j 1411 - 1414 - 1414 - 1474 - 1474 - 1474 - 1474 - 1474 - 1474 - 1474 - 1474 - 1474 - 1474 - 1474 - 1474 - 1474 - 1 1	1	
Page 1 of 1			ng la sulla construction	

Client: An	ddress:	s Envire	amostel Services	1											~~		ا مطالباً "		~~	•
	dress:			Project Name	□ Rush	l							ТС	R	Y					
Vailing Ad		624 6	E. Comanche	Enterpriso	Jicarilla	35B Gas Com #/		 49	— D1 Н	w awkin	ww.h s NE	ailen - Al	viron buqu	men erqu	tal.co ie, N	om M 87	109			
Farmin	ngtor	1, NN	1.87401	Project #:				Tel. 505-345-3975 Fax 505-345-4107												
² hone #:	<u>505</u>	-564-	-2281																	
email or Fa	ax#:			Project Mana	ger:		(1)	llo	A				04	S						
QA/QC Pac → Standar	ckage: Ird		Level 4 (Full Validation)	H. Woods				(Gas d	20 / 4		(SWIC		PO4,	PCB				Ì		
Accreditati	tion			Sampler: H.	Whate	<u></u>		ΡΗ	ā	,		Ś	Š	3082						F
	0	Othe	۲۲	On Ice:	Yes	🗆 No 🚺 🚺	🗗	⊢ +	ß	18	4 	5	l °	s / 8		(À				or
⊐ EDD (T	[ype)_			Sample Tem	perature:		5	BE	Ū	4 4		italia i	Ž	ide	F	>-				Z
Date T	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL NOT	втех + 🕰	BTEX + MT	TPH 8015B	TPH (Metho	EUB (Metho PAH's /831	RCRA 8 Me	Anions (F,C	8081 Pestic	8260B (VO	8270 (Semi				Air Bubbles
5C-1 11	122	Soil	SC-1	1-402		-001	Х		X											
3C-2 11	124	Soil	SC-2	1-402		-002	X		X											
		• • • • • • • • • • • • • • • • • • • •																_		
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	ne:	Relinquish	ed by:	Received by	In-	Dale Time 03/29/14		NO Pay	# 6 Ker	245 7 G	5.34 G II 1	580)							

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

State of New Mexico Energy Minerals and Natural Resources

> Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Form C-141 Revised August 8, 2011

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			Rel	ease Notifi	cation	and Co	orrective A	ctio	n				
		÷				OPERA	ΓOR		🛛 Initia	al Report		Final Report	
Name of C	ompany: E	nterprise	Field Servi	ces LLC		Contact: Th	iomas Long			······		---	
Address: 6	14 Reilly A	ve, Farm	ington, NM	1 87401		Telephone No. 505-599-2286							
Facility Na	me: Jicaril	la L#11	DK/GL			Facility Typ	e: Well Site						
Surface Ov	ner: Jicari	illa Apac	he Tribe	Mineral	Owner:	licarilla Ap	ache Tribe		API No).			
				LOC	ATION	NOF REI	LEASE						
Unit Letter	Section	Townshi	p Range	Feet from the	North	South Line	Feet from the	East	West Line	County			
В	3	24N	5W	1595			1682			Rio Arrib	a		
			Lati	tude <u> </u>	85	_ Longitud	le <u>-107.345</u>	<u>50</u>	-				
				NAT	FURE	OF REL	EASE						
Type of Rele	ase: Natura	d Gas and	Natural gas	liquids		Volume of	Release: 20 MC	CF;	Volume F	Recovered: I	Jnknov	wn	
	1		C		h	Estimated	2-3 BBLs releas	sed				F (1 2 /2 0 1 4	
Source of Re	elease: Accio	iental disc	narge from a	valve on the met	er tube.	Date and H 5/12/2014	our of Occurrent @12:21 p.m.	ce:	@ 12:45	Hour of Dis n.m .	covery	: 5/12/2014	
Was Immedi	ate Notice C	Jiven?				If YES, To	Whom? JAEPO	– Hobs	son Sandova	I; JAO&GA	– Bry	ce Hammond	
		<u>.</u>	Yes L	JNo ∐Not R	lequired								
By Whom?	Thomas Lor	ig bod2				Date and H	lour 5/12/2014 @	0 6:12 j	o.m. by pho	ne and ema	il		
was a water	course Reac		🗋 Yes 🛛	No		II 123, VC	sume impacting	ule wa	leicourse.				
If a Waterco	urse was Im	pacted, De	scribe Fully.	n Taken: A third	narty rer	orted a valve	leaking on the	meter au	hen Thewald	MOT Chee	d and t	he well	
remained in	service. Ren	nediation a	ctivities are	scheduled for Ma	y 21, 201	4.			NS. DIVIE	Ng# @sc	a ana t		
								M	NY 9.7 20)14			
								17(7	M I <i>B</i> ,	-			
						1			<u></u>		1.1		
Describe Are	emediation a	and Cleanu activities a	re scheduled	for May 21, 2014	ty reporte 4. A "fina	d a valve leal	be submitted up	r tube. on recei	int of the thi	as closed and rd party env	a the v ironme	ntal	
contractor co	rrective acti	on report.								1 9			
L hereby cert	ify that the i	nformation	given above	e is true and com	nlete to th	e hest of my	knowledge and a	indersta	and that ours	uant to NM	OCD n	iles and	
regulations a	Il operators	are require	d to report a	nd/or file certain	release no	tifications ar	nd perform correct	ctive ac	tions for rele	eases which	may er	ndanger	
public health	or the envir	onment. 7	The acceptant	ce of a C-141 rep	ort by the	NMOCD m	arked as "Final R	Report"	does not reli	eve the oper	ator of	liability	
or the enviro	nment. In a	ddition, N	MOCD accept	ptance of a C-141	report do	bes not reliev	e the operator of	respons	sibility for co	ompliance wa	ith any	v other	
federal, state	, or local lav	vs and/or r	egulations.					0000					
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Signature:		n z	ud .							X	1.		
Drinted Nam	e: Ion Fields					Approved by	Environmental S	specialis	st: / / /	ξ_{i}	-	n/	
r filled i vali		<u> </u>					Flar	140		\mathcal{I}			
Title: Directo	or, Environn	nental				Approval Dat	e: 5/21/	14	Expiration	Date:		·	
E-mail Addr	ess:iefields@	eprod.cor	n		· (Conditions of	Approval:						
							••			Attached			
Date:	691-1	014	Phone	: (713)381-6684			1						
Attach Addi	tional Shee	ets If Nec	essary			HANG	17.17 4.	÷ 、		_ I			
			-			HIVLS	111 47	5	1554				

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

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Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 8, 2011 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

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Saturative Prive									
Refease Notification and Corrective Action OPERATOR Initial Report Name of Company: Enterprise Field Services LLC Contact: Thomas Long Address: 614 Reilly Ave, Farmington, NM 87401 Telephone No. S05-599-2286 Facility Name: A New Dawn DK/GL Well Site Facility Type: Well Site Meter Run/Meter Tube Surface Owner: Jicarilla Apache Tribe Mineral Owner: BLM API No. LOCATION OF RELEASE Unit Letter Section Township Range Feet from the 1338 North Coult Dine Feet from the 541 East Vest Dine County Rio Arriba NATURE OF RELEASE Type of Release: Natural gas, condensate liquids, parafinioil Volume of Release: 18 mcf Volume Recovered: Unkne Source of Release: Natural gas, condensate liquids, parafinioil Volume of Release: 18 mcf Volume Recovered: Unkne Source of Release: Natural gas, condensate liquids, parafinioil Volume And Powell NMOCD; Bryce Hammond. Hobson Sandoval JAEPO Matercourse @ 2:30 p.m If YES, To Whom? Brandon Powell NMOCD; 17/17/2013 @ (1AO&G) Was a Watercourse Reached?									
OPERATOR ☐ Initial Report ☑ Name of Company: Enterprise Field Services LLC Contact: Thomas Long									
Name of Company: Enterprise Field Services LLC Contact: Thomas Long Address: 614 Reilly Ave, Farmington, NM 87401 Telephone No. 505-599-2286 Facility Name: A New Dawn DK/GL Well Site Facility Type: Well Site Meter Run/Meter Tube Surface Owner: Jicarilla Apache Tribe Mineral Owner: BLM API No. LocATION OF RELEASE Interview Control of the Control of Contr	Final Repo								
Address: 614 Reilly Ave, Farmington, NM 87401 Telephone No. 505-599-2286 Facility Name: A New Dawn DK/GL Well Site Facility Type: Well Site Meter Run/Meter Tube Surface Owner: Jicarilla Apache Tribe Mineral Owner:BLM API No. LOCATION OF RELEASE Integration of the state of the s									
Facility Name: A New Dawn DK/GL Well Site Facility Type: Well Site Meter Run/Meter Tube Surface Owner: Jicarilla Apache Tribe Mineral Owner:BLM API No. LOCATION OF RELEASE LOCATION OF RELEASE Unit Letter Section Township Range Feet from the Isas Feet from the Stat County Rio Arriba L 14 24N 5 Feet from the North/output Feet from the Stat County Rio Arriba Latitude 36.3082 Longitude -107.3380									
Surface Owner: Jicarilla Apache Tribe Mineral Owner: BLM API No. LocATION OF RELEASE LocATION OF RELEASE County Rio Arriba Unit Letter Section Township Range Feet from the I338 North Youth Jine Feet from the S41 East Vest Jine County Rio Arriba L 14 24N 5 Source of Release: Natural gas, condensate liquids, paraffin/oil Volume of Release: I8 mcf Volume Recovered: Unknot Source of Release: Natural gas meter tube/meter run Date and Hour of Occurrence: 12/16/2013 @ 2:30 p.m @ 2:30 p.m @ 2:30 p.m Was Immediate Notice Given? Yes No Not Required Hoxes and Hour 12/17/2013 @ 4:16 p.m. (NMOCD); Bryce Hammond By Whom? Thomas Long Date and Hour 12/17/2013 @ 4:16 p.m. (NMOCD); 17/17/2013 @ (IAO&G) If YES, Volume Impacting the Watercourse. If a Watercourse Reached? I yes I No If YES, Volume Impacting the Watercourse. MAY 1 9 2014 Describe Area Affected and Cleanup Action Taken.* MAY 1 9 2014 MAY 1 9 2014									
LOCATION OF RELEASE Unit Letter Section Township Range Feet from the North South Inie Feet from the East West Inie County Rio Arriba L 14 24N 5 1338 North South Inie Feet from the East West Inie County Rio Arriba Latitude 36.3082 Longitude107.3380	<u> </u>								
Unit Letter Section Township Range Feet from the 1338 North/outh line Feet from the 541 Eastwest line County Rio Arriba L 14 24N 5 6et from the 1338 North/outh line Feet from the 541 Eastwest line County Rio Arriba Latitude 36.3082 Longitude -107.3380	ΙΟΟΛΤΙΟΝΟΕ ΡΕΙ ΕΛΩΕ								
L 14 24N 5 1338 1338 1541 Rio Arriba Latitude 36.3082 Longitude -107.3380 NATURE OF RELEASE Natural gas, condensate liquids, paraffin/oil Volume of Release: 18 mcf Volume Recovered: Unknot Source of Release: Natural gas meter tube/meter run Date and Hour of Occurrence: Date and Hour of Discovery Was Immediate Notice Given? Yes No Not Required Hobon Sandoval JAEPO By Whom? Thomas Long Date and Hour 12/17/2013 @ 4:16 p.m. (NMOCD); 17/17/2013 (JAO&G) Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. If a Watercourse was Impacted, Describe Fully.*. Describe Cause of Problem and Remedial Action Taken.* Measurement Technician discovered a leaking flange on the A New Dawn DKGL to Technicians isolated the meter run and the well tie line to the dogleg. Lock out and tag out (LOTO) and a GMS. DIV DIST, 3 MAY 1 9 2014 Describe Area Affected and Cleanup Action Taken.* The final was excavation was approximately 17 feet long by 11 feet wide by 0.5 feet wide b									
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	et deep.								
Approximately 12 cubic yard of impacted soils were excavated and transported to an NMOCD approved landfarm. A third party environment corrective action report is included with this "final" c-141.	tal contactor								
Libereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD r	ules and								
regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may en	ndanger								
public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of	f liability								
should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, hu	Iman health								
or the environment. In addition, NMOUD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any federal state or local laws and/or regulations.	y otner								
OIL CONSERVATION DIVISION /									
	\leq								
Signature: /N Turks / ancy /									
Printed Name: Jon Fields Approved by Environmental Specialist:	Approved by Environmental Specialist:								
Title: Director, Environmental Approval Date: XQ/14 Expiration Date:									
E-mail Address: jefields@eprod.com Conditions of Approval:	•								
Date: 5-/3-2014 Phone::(713)381-6684									
Attach Additional Sheets If Necessary + MYS 141 419 22 061									



OIL CONS. DIV DIST. 3 MAY 19 2014

CORRECTIVE ACTION REPORT

Property:

A New Dawn Meter Release SW 1/4, S14 T24N R5W Jicarilla Apache Nation, Rio Arriba County, New Mexico

> April 10, 2014 Apex Project No. 7030413G020

> > Prepared for:

Enterprise Products Operating LLC 614 Reilly Avenue Farmington, NM 87401 Attn: Mr. Tom Long

Prepared by:

lyn -----

Kyle Summers, C.P.G. Branch Manager

B. Chris Mitchell, P.G.

Principal Geoscientist



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CORRECTIVE ACTION REPORT

A New Dawn Meter Release

SW 1/4, S14 T24N R5W Jicarilla Apache Nation, Rio Arriba County, New Mexico

Apex Project No. 7030413G020

1.0 INTRODUCTION

1.1 Site Description & Background

The "A New Dawn" meter release site is located within the Enterprise Products Operating LLC (Enterprise) pipeline right-of-way (ROW) in the southwest (SW) ¼ of Section 14 in Township 24 North and Range 5 West in the Jicarilla Apache Nation, Rio Arriba County, New Mexico, referred to hereinafter as the "Site" or "subject Site". The Site is on a production well pad, surrounded by native vegetation rangeland periodically interrupted with oil and gas gathering facilities, including one (1) Enterprise natural gas gathering pipeline and meter run which traverses the area from north to south.

On December 30th, 2014, Enterprise initiated corrective action excavation at the "A New Dawn" meter run following the repair of a leaking flange that resulted from a pipeline freeze earlier in the month, and a subsequent condensate/water release to the ground surface. An unknown volume of condensate/water mixture was released to the ground surface west of the meter house from the spraying action of the release. A fiberglass tub installed inside the meter house prevented significant soil impact and vertical migration of the condensate liquids directly beneath the meter house, and the frozen condition of the ground limited vertical migration of the sprayed fluids to the west of the meter run. Soil discoloration and shallow liquid pooling was visible at the ground surface.

A topographic map depicting the location of the Site is included as Figure 1, and a Site Vicinity Map is included as Figure 2 in Appendix A.

1.2 **Project Objective**

The primary objective of the corrective actions was to reduce the concentration of chemicals of concern (COCs) in the on-Site soils to below the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) *Remediation Action Levels (RALs)* using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.

1.3 Standard of Care

Apex TITAN's (Apex's) services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client.



1.4 Additional Limitations

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Apex cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

1.5 Reliance

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.

2.0 SITE RANKING

The Site is under the jurisdiction of the Jicarilla Apache Nation Environmental Protection Office (JANEPO). In the absence of published JANEPO regulatory guidance, Apex referenced the New Mexico ENMRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*. Apex utilized the general site characteristics obtained during the completion of corrective action activities to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the table below:

Rankin		Ranking Score	
	<50 feet	20	
Depth to Groundwater	50 to 99 feet	10	10*
[>100 feet	0	
Wellhead Protection Area • <1,000 feet from a water	Yes	20	0
source, or; <200 feet from private domestic water source.	No	0	
	<200 feet	20	
Distance to Surface Water Body	200 to 1,000 feet	10	10
	>1,000 feet	0	
Total Ran		20	

*Based on an anticipated groundwater depth of >50 feet below grade surface (bgs).

Based on Apex's evaluation of the scoring criteria, the Site would have a Total Ranking Score of "20". This ranking is based on the following:

• The nearest water well documented by the Office of the State Engineer website database is located over 2.5 miles west of the Site, with a recorded depth to water of 240 feet bgs. However, the proximity of the site to several small ephemeral washes and to Largo wash



approximately 1,600 feet to the north would indicate a potential depth to water of less than 50 feet bgs, resulting in a ranking of "10" for depth to groundwater.

- There are two un-named ephemeral washes located approximately 450 feet west and 500 feet east of the site which might be considered a "surface water body", resulting in a ranking of "10" for distance to surface water body. However, these washes appear to only convey water during significant rain events.
- No water sources were identified within the search radius.

3.0 **RESPONSE ACTIONS**

3.1 Soil Excavation Activities

On December 30th, 2014, Enterprise initiated corrective action excavation at the "A New Dawn" meter run following the repair of a leaking flange that resulted from a pipeline freeze earlier in the month, and a subsequent condensate/water release to the ground surface. An estimated five (5) to ten (10) barrels of condensate/water mixture was released to the ground surface west of the meter house from the spraying action of the release. A fiberglass tub installed inside the meter house prevented significant soil impact and vertical migration of the condensate liquids directly beneath the meter house, and the frozen condition of the ground limited vertical migration of the sprayed fluids to the west of the meter run. Soil discoloration and shallow liquid pooling was visible at the ground surface. During the corrective action activities, Industrial Mechanical Inc. provided heavy equipment and labor support, and Kyle Summers, an Apex environmental professional, provided environmental support.

Subsequent to the meter house repair activities, hydrocarbon affected soils were excavated at the Site. The total depth of the final excavation ranged from 0.5 feet bgs to approximately 1.5 feet bgs in the release footprint. The overall average surface expression of the excavation measured approximately 17 feet long by 11 feet wide.

Subsequent analytical results from soils remaining in place indicate no remaining hydrocarbon impact above the OCD RALs.

A total of approximately 12 cubic yards of hydrocarbon affected soils were transported to the TNT Inc., landfarm near Lindrith, NM for disposal/remediation. The executed C-138 form is provided in Appendix B. The excavation was backfilled with clean imported fill from a Jicarilla approved stock pile near road J-6, and contoured to surrounding grade.

During excavation activities, air in the breathing zone was monitored to ensure that the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) of 200 parts per million (ppm) Time Weighted Average (TWA) for an 8-hour work day was not exceeded. Additionally, Enterprise monitored the excavation for explosive atmosphere conditions and oxygen deficiency prior to any entries into the excavation.

The lithology encountered during the completion of corrective action activities consisted primarily of silty-sands.

Figure 3 is a site map that indicates the approximate location of the excavated area in relation to pertinent land features (Appendix A). Photographic documentation of the field activities is included in Appendix C.



3.2 Soil Sampling Program

Apex screened head-space samples of the impacted soils with a photoionziation detector (PID) fitted with a 10.6 eV lamp to estimate excavation limits.

Apex's soil sampling program included the collection of one (1) five-part composite confirmation sample (Comp-1) from the resulting excavation for laboratory analysis. The composite aliquot locations were evenly spaced around the excavation footprint.

Figure 3 depicts the approximate location of the excavated areas and shows the final confirmation sample locations in relation to the final excavation dimensions (Appendix A).

The confirmation soil sample was collected and placed in laboratory prepared glassware, labeled/sealed using the laboratory supplied label, and placed on ice in a cooler, which was secured with a custody seal. The sample cooler and completed chain-of-custody form were relinquished to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico for 24-hr rush analysis.

4.0 LABORATORY ANALYTICAL METHODS

The confirmation soil sample was analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA SW-846 Method #8021, and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (GRO) using EPA SW-846 Method #8015.

Laboratory results are summarized in Table 1, included in Appendix D. The executed chain-ofcustody form and laboratory data sheets are provided in Appendix E.

5.0 DATA EVALUATION

The Site is under the jurisdiction of the JANEPO. In the absence of published JANEPO regulatory guidance, Apex referenced New Mexico OCD *Guidelines for Remediation of Leaks, Spills and Releases* as guidance, in addition to the OCD rules, specifically NMAC 19.15.30 *Remediation.* These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

5.1 Confirmation Soil Samples

Apex compared the BTEX and TPH concentrations or reporting limits (RLs) associated with the one (1) composite confirmation sample collected from the excavated area to the OCD *Remediation Action Levels* for sites having a total ranking score of "20".

- The laboratory analysis of the confirmation sample collected from soils remaining in place do not indicate benzene concentrations above laboratory reporting limits, which are below the OCD *Remediation Action Level.*
- The laboratory analysis of the confirmation sample collected from soils remaining in place do not indicate total BTEX concentrations above laboratory reporting limits, which are below the OCD *Remediation Action Level*.
- The laboratory analyses of the confirmation sample collected from soils remaining in place do not indicate TPH GRO/DRO concentrations above laboratory reporting limits,



which are below the OCD *Remediation Action Level* of 100 mg/Kg for a Site ranking of "20".

Confirmation sample results are provided in Table 1 in Appendix D.

6.0 FINDINGS AND RECOMMENDATIONS

The "A New Dawn" meter release site is located within the Enterprise pipeline ROW in the SW ¼ of Section 14 in Township 24 North and Range 5 West in the Jicarilla Apache Nation, Rio Arriba County, New Mexico. The Site is on a well pad, surrounded by native vegetation rangeland periodically interrupted with oil and gas gathering facilities, including one (1) Enterprise natural gas gathering pipeline and meter run which traverses the area from north to south.

On December 30th, 2014, Enterprise initiated corrective action excavation at the "A New Dawn" meter run following the repair of a leaking flange that resulted from a pipeline freeze earlier in the month, and a subsequent condensate/water release to the ground surface. An unknown volume of condensate/water mixture was released to the ground surface west of the meter house from the spraying action of the release. A fiberglass tub installed inside the meter house prevented significant soil impact and vertical migration of the condensate liquids directly beneath the meter house, and the frozen condition of the ground limited vertical migration of the sprayed fluids to the west of the meter run. Soil discoloration and shallow liquid pooling was visible at the ground surface.

- The primary objective of the corrective actions was to reduce the concentration of COCs in the on-Site soils to below the New Mexico EMNRD OCD R using the New Mexico EMNRD OCD's Guidelines for Remediation of Leaks, Spills and Releases as guidance.
- The total depth of the final excavation ranged from 0.5 feet bgs to approximately 1.5 feet bgs in the release footprint. The overall average surface expression of the excavation measured approximately 17 feet long by 11 feet wide.
- Prior to backfilling the excavation, a five-part composite confirmation sample was collected from the resulting excavation for laboratory analysis. Based on analytical results, soils remaining in place do not exhibit COC concentrations above the OCD Remediation Action Levels for a Site ranking of "20".
- A total of approximately 12 cubic yards of hydrocarbon affected soils were transported to the TNT Inc., landfarm near Lindrith, NM for disposal/remediation. The excavation was backfilled with clean imported fill from a Jicarilla approved stockpile near road J-6, and contoured to surrounding grade.
- The lithology encountered during the completion of corrective action activities consisted primarily of silty-sands.

Based on the laboratory analytical results, no additional investigation or corrective action appears warranted at this time.



H:\Drafting\New Mexico 04\2013\0413G020\Figure 1.dwg 04/14/14



H:\Drafting\New Mexico 04\2013\0413G020\Figure 2.dwg 04/14/14



H:\Drafting\New Mexico 04\2013\0413G020\Figure 3.dwg 04/14/14
<u>District 1</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 1301 W. Grand Avenue, Artesia, NM 88210 District <u>III</u>	State of New M Energy Minerals and Natu Oil Conservation J	exico ural Resources Division *Sur	Form C-138 Revised 08/01/11 face Waste Management Facility Operator
1000 Rio Brazos Road, Aztec, NM 87410 District IV	1220 South St. Fra	ncis Dr. a docur	and Generator shall maintain and make this mentation available for Division inspection.
1220 S. St. Francis Dr., Santa Fe, NM 87505	FOD APPDOVAL TO	ACCEPT SOI	ID WASTE
1. Generator Name and Address:	FOR ALL ROVAL IC	ACCELLION	
Enterprise Field Services, LLC, 614 Reilly	Ave, Farmington NM 87401	Paykey Code: C	G11580
2. Originating Site: A New Dawn well site			
3. Location of Material (Street Address, Unit L, Sec14, T 24N, R 05W, Rio Ari	City, State or ULSTR): riba County, NM; 36.30842, -1	07.3368	
4. Source and Description of Waste: Source: Pipeline/Flange Release Description: Exempt petroleum affected so Estimated Volume _5_yd ³ / bbls Known	il from clean-up efforts at well s Volume (to be entered by the o	ite perator at the end of the	e haul) 12 yd bbls
5. GENERATO	OR CERTIFICATION STATE	MENT OF WASTES	STATUS
I, Thomas Long, representative of Generator Signature certify that according to the Resource Conset regulatory determination, the above describe	or authorized agent for Enterprise rvation and Recovery Act (RCR d waste is: (Check the appropria	e Field Services, LLC d A) and the US Environi te classification)	to hereby mental Protection Agency's July 1988
RCRA Exempt: Oil field wastes get exempt waste. Operator Use Only:	a were in tenere the appropriate acrated from oil and gas explora Waste Acceptance Frequency	tion and production ope	erations and are not mixed with non-
RCRA Non-Exempt: Oil field waste characteristics established in RCRA regu subpart D, as amended. The following d the appropriate items)	which is non-hazardous that do lations, 40 CFR 261.21-261.24, ocumentation is attached to dem	es not exceed the minin or listed hazardous was constrate the above-desc	mum standards for waste hazardous by ste as defined in 40 CFR, part 261, cribed waste is non-hazardous. (Check
MSDS Information 🖸 RCRA Hazardo	us Waste Analysis 🛛 🛛 Process	Knowledge 🛛 Othe	er (Provide description in Box 4)
GENERATOR 19.15.36.15 WA	STE TESTING CERTIFICAT	FION STATEMENT I	FOR LANDFARMS
Jum Lay, representative for Enterprise I Generator Signature	Field Services, LLC authorize T	-N-T to complete	
the required testing/sign the Generator Waste	Testing Certification.		
1, <u>Croig</u> , representative for <u>T-</u> Representative/Agent Signature	N-t Enviro-	do hereby ce	rtify that
representative samples of the oil field waste h have been found to conform to the specific red of the representative samples are attached to d 19.15.36 NMAC.	ave been subjected to the paint f quirements applicable to landfar lemonstrate the above-described	ilter test and tested for ins pursuant to Section waste conform to the r	chloride content and that the samples 15 of 19.15.36 NMAC. The results equirements of Section 15 of
5. Transporter: IMI, WestStates or unk	nown trucking company on O	CD approved haulers	list.
Name and Facility Permit #: TNT Evap Address of Facility: 70 CR 405, Lindrith	Pond/Landfarm, NM01-0008 NM		
Method of Treatment and/or Disposal:	on 🔲 Treating Plant 🖾 L	andfarm 🔲 Landfil	I 🗍 Other
Waste Acceptance Status:	APPROVED	DENIED (Must	Bc Maintained As Permanent Record)
PRINT NAME: SIGNATURE: SURTACE Waste Management Facilit	TITLE: TELEPHON	Dr. 5. IE NO.505-320-2737	DATE: <u>12-30-1</u> 3



SITE PHOTOGRAPHS

Name & Site Location/Address

Photograph 1

Condensate and water pooled outside of meter house, looking towards the east.



Photograph 2

Condensate and water pooled outside meter house, looking towards the southeast.



Photograph 3

Excavation activities removing hydrocarbon affected soil near A New Dawn meter house.





Name & Site Location/Address

Photograph 4

The meter house post repair and excavation activities, looking towards the south.



Photograph 5

The meter house post repair and excavation activities, looking towards the southeast.



Photograph 6

View of fiberglass tub under meter house.



<u>APEX</u>

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		-		A New I Sol A	TABLE 1 Davin - Meter MLYNCAL SU	PREEZO MMARY				
Sample I.D.	Date	Sample Type C- Composite G Grab	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Con	Entergy, Mineral & servation Division	Natural Resources	Department, Oil n Level	10	NE	NE	NE	50	1	00
				Co	onfirmation Sample	95				
Comp-1	12/30/2013	C	0.5 - 1.5	<0.048	<0.048	<0.048	<0.095	ND	<4.8	<9.9

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

NA = Not Analyzed

T_m

NE = Not Established

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 10, 2014

Kyle Summers Southwest Geoscience 606 S. Rio Grande Unit A Aztec, NM 87410 TEL: (903) 821-5603 FAX

OrderNo.: 1401055

RE: A New Dawn

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/2/2014 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 <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andig

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report

1/7/2014 3:33:13 PM

1/7/2014 3:33:13 PM

1/7/2014 3:33:13 PM

1

1

1

11087

11087

11087

Hall Environmental Analysis Laboratory, Inc.

=

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

Lab Order 1401055 Date Reported: 1/10/2014

CLIENT: Project: Lab ID:	Southwest Geoscience A New Dawn 1401055-001	Client Sample ID: Comp-1Collection Date: 12/30/2013 1:10:00 PMMatrix: SOILReceived Date: 1/2/2014 4:10:00 PM								
Analyses		Result	RL	Qual Units	DF	Date Analyzed	Batch			
EPA MET	HOD 8015D: DIESEL RANG					Analys	: BCN			
Diesel Ra	ange Organics (DRO)	ND	9.9	mg/Kg	1	1/8/2014 9:48:52 AM	11080			
Surr: D	NOP	77.5	66-131	%REC	1	1/8/2014 9:48:52 AM	11080			
EPA MET	HOD 8015D: GASOLINE RA	NGE				Analys	I: NSB			
Gasoline	Range Organics (GRO)	ND	4.8	mg/Kg	1	1/7/2014 3:33:13 PM	11087			
Surr: B	FB	86.9	74.5-129	%REC	1	1/7/2014 3:33:13 PM	11087			
EPA MET	HOD 8021B: VOLATILES					Analys	t: NSB			
Benzene		ND	0.048	mg/Kg	1	1/7/2014 3:33:13 PM	11087			
Toluene		ND	0.048	mg/Kg	1	1/7/2014 3:33:13 PM	11087			

0.048

0.095

80-120

mg/Kg

mg/Kg

%REC

ND

ND

96.1

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	Ε	Value above quantitation range	Н	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit Page 1 of 4
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

10-Jan-14

Client:	Southwes	t Geoscien	ce								
Project:	A New D	awn		<u>_</u>							
Sample ID	MB-11080	SampTy	/pe: MI	3LK	Tes	tCode: El	PA Method	8015D: Dies	el Range (Organics	
Client ID:	PBS	Batch	ID: 11	080	F	lunNo: 1	5891				
Prep Date:	1/6/2014	Analysis Da	ate: 1/	6/2014	s	eqNo: 4	58449	Units: mg/k	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	ND	10								
Surr: DNOP		8.3		10.00		82.9	66	131			
Sample ID	LCS-11080	SampTy	/pe: LC	s	Tes	tCode: El	PA Method	8015D: Dies	el Range (Drganics	
Client ID:	: LCSS Batch ID: 11080 RunNo: 15891										
Prep Date:	1/6/2014	Analysis Da	ate: 1/	6/2014	5	SeqNo: 4	58450	Units: mg/k	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	57	10	50.00	0	114	60.8	145			
Surr: DNOP) 	4.5		5.000		90.0	66	131			
Sample ID	1401055-001AMS	SampTy	/pe: M	S	Tes	tCode: El	PA Method	8015D: Dies	el Range (Organics	
Client ID:	Comp-1	Batch	ID: 11	080	F	RunNo: 15911					
Prep Date:	1/6/2014	Analysis Da	ate: 1/	7/2014	5	GeqNo: 4	58919	Units: mg/h	K g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	62	10	50.15	0	123	47.4	148			
Surr: DNOF		4.7		5.015		94.3	66	131			
Sample ID	1401055-001AMSI	D SampTy	/pe: M	SD	Tes	tCode: El	PA Method	8015D: Dies	el Range (Drganics	
Client ID:	Comp-1	Batch	ID: 11	080	F	RunNo: 1	5911				
Prep Date:	1/6/2014	Analysis Da	ate: 1/	7/2014	S	SeqNo: 4	58921	Units: mg/k	۲g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	61	10	49.75	0	123	47.4	148	1.08	22.7	
Surr: DNOP)	4.5		4.975		89.8	66	131	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.

Page 2 of 4

RL Reporting Detection Limit

WO#: 1401055

Southwest Geoscience

Client:

Page 3 of 4

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Project:	A New D	awn									
Sample ID	MB-11087	Samp	Type: Mi	BLK	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID:	PBS	Batc	h ID: 11	087	F	RunNo: 1	5923				
Prep Date:	1/6/2014	Analysis [Date: 1	/7/2014	S	GeqNo: 4	59260	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0								
Surr: BFB		840		1000		84.2	74.5	129			
Sample ID	LCS-11087	Samp	Type: LC	cs	Tes	tCode: E	PA Method	8015D: Gaso	line Rang	e	
Client ID:	LCSS	Batc	h ID: 11	087	F	RunNo: 1	5923				
Prep Date:	1/6/2014	Analysis [Date: 1	/7/2014	S	SeqNo: 4	59261	Units: mg/h	(g		
Analyte		Result	_PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	26	5.0	25.00	0	104	74.5	126			
Surr: BFB		980		1000		97.5	74.5	129			
Sample ID	1401055-001AMS	Samp	Гуре: М	s	Tes	tCode: E	PA Method	8015D: Gase	line Rang	e	
Client ID:	Comp-1	Batc	h ID: 11	087	F	RunNo: 1	5923				
Prep Date:	1/6/2014	Analysis [Date: 1	/7/2014	5	SeqNo: 4	59264	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	27	4.8	23.79	0	114	69.5	145			
Surr: BFB	····	920		951.5		96.2	74.5	129			
Sample ID	1401055-001AMS) Samp	- Гуре: М	SD	Tes	tCode: E	PA Method	8015D: Gase	line Rang	e	
Client ID:	Comp-1	Batc	h ID: 11	087	F	RunNo: 1	5923				
Prep Date:	1/6/2014	Analysis (Date: 1	/7/2014	5	SeqNo: 4	59265	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	27	4.8	23.83	0	113	69.5	145	1.18	20	
Surr: BFB		940		953.3		98.7	74.5	129	0	0	

1401055

WO#:

10-Jan-14

1.0

1.000

Southwest Geoscience

Project: A Ne	w Dawn								
Sample ID MB-11087	SampType: MBLK TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 110	Batch ID: 11087			5923				
Prep Date: 1/6/2014	Analysis Date: 1/7	//2014	S	eqNo: 4	59281	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND 0.050								
Toluene	ND 0.050								
Ethylbenzene	ND 0.050								
Xylenes, Total	ND 0.10								
Surr: 4-Bromofluorobenzene	0.93	1.000		93.3	80	120			
Sample ID LCS-11087	SampType: LC	s	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batch ID: 110	87	F	RunNo: 1	5923				
Prep Date: 1/6/2014	Analysis Date: 1/7	7/2014	S	BegNo: 4	59282	Units: mg/M	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Quai
Benzene	0.96 0.050	1.000	0	96.2	80	120			
Toluene	0.95 0.050	1.000	0	95.0	80	120			
Ethylbenzene	0.96 0.050	1.000	0	96.5	80	120			
Xylenes, Total	2.9 0.10	3.000	0	96.5	80	120			

102

80

120

Qualifiers:

Client:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range

Surr: 4-Bromofluorobenzene

- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Page 4 of 4

WO#: 1401055

10-Jan-14

MALL
 ENVIRONMENTAL
ANALYSIS
LABORATORY

Tau Environmeniai Anatysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name:	Southwest Geoscience A	Work Order Number:	1401055		RcptNo:	1
Received by/da	ate: <u>LIN O</u>	1102114				
Logged By:	Anne Thorne	1/2/2014 4:10:00 PM		anne Arm	-	
Completed By:	Anne Thorne	1/3/2014		an Im	~	
Reviewed By:	ma	01/03/14			-	
Chain of Cu	stody					
1. Custody se	als intact on sample bottles?		Yes 🗌	No 🗌	Not Present 🗹	
2. Is Chain of	Custody complete?		Yes 🗹	. No 🗌	Not Present	
3. How was th	ne sample delivered?		<u>Client</u>			
<u>Log In</u>						
4. Was an at	tempt made to cool the sampl	es?	Yes 🗹	No 🗌	NA 🗌	
5. Were all sa	amples received at a temperal	ture of >0° C to 6.0°C	Yes 🗹	No 🗌		
6. Sample(s)	in proper container(s)?		Yes 🗹	No 🗌		
7. Sufficient s	ample volume for indicated te	est(s)?	Yes 🔽	No 🗌		
8. Are sample	es (except VOA and ONG) pro	perly preserved?	Yes 🗹	No 🗆		
9 _. Was prese	rvative added to bottles?		Yes 🗌	No 🗹	NA 🗌	
10. VOA vials I	have zero headspace?		Yes 🗋	No 🗔	No VOA Vials 🗹	
11. Were any	sample containers received b	roken?	Yes 🗆	No 🗹 🛛		
					# of preserved bottles checked	
12. Does pape (Note discr	rwork match bottle labels? reparcies on chain of custody	•	Yes 🗹	No	tor pH:	or >12 unless noted)
13 Are matrice	es correctly identified on Chair	n of Custody?	Yes 🗹	No 🗆	Adjusted?	
14. Is it clear w	vhat analyses were requested	?	Yes 🗹	No 🗆	_	
15. Were all ho (If no, notif	olding times able to be met? y 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:	Date			
By Whom:	, Via:	🗌 eMail 🛛	Phone 🚺 Fax	In Person
Regarding:				
Client Instructions:				

17. Additional remarks:

18. Cooler Information

i Cooler Not	Temp °C	Condition a	Seal Intact.	Seal No ?	Seal Date	Signed By
1	5.8	Good	Yes			

CHAIN OF CUSTODY RECORD

Southwest Environmental & Hydrogeologic Consultants Office Location Aztec Project Manager Summers Sampler's Name Kyle Summers	Laboratory: Address:AB Contact:F Phone: PO/SO #: Sampler's/Signature	kall Q ee man 36020		ANALYSIS REQUESTE	P SIRE OVA			Lab use only Due Date: Temp. of coolers when received (C°): 5.5 1 2 3 4 5 Page of
0413G020 Project Name	Dawn	No/Type of Co	ontainers	LA				
Matrix Date Time C G m a Identifying M	larks of Sample(s)	VOA A/G	250 P/O	R.C.				Lab Sample ID (Lab Use Only)
5 12/30/13 1310 X COMP	7-1 1'	1'	1	XX			14	10/055-001
\sim								
R.	\sim							
						+ $+$ $+$		
			\rightarrow					
Turn around time ANormal 🖸 25% Rush	🗆 50% Rush 🛛 100%	Rush				<u> </u>		
Reinquisited by (Signature) Date:	Time: Received by:	(Signature)	Date	14 7:30	NOTES:			
Relinguished by (Signature) Date:	Time: Received by	(Signature)	Date]			
Relinguished by (Signature) Date:	Time: Received by	(Signature)	Date	e: Time:	1			
Relinquished by (Signature) Date:	Time: Received by:	(Signature)	Date	e: Time:				
Matrix WW - Waştewater W - Water Container VOA - 40 ml vial A/G - Amber /	S - Soil SD - Solid L Or Glass 1 Liter 2	- Liquid A - Air Bag 50 ml - Glass wide mou	g C uth P/0	- Charcoal tube O - Plastic or other	SL - sludge	O - Oil	_	

SOUTHWEST GEOSCIENCE • 2351 W. Northwest Hwy., Suite 3321 • Dallas, Texas 75220 • Office: 214-350-5469 • Fax 214-350-2914

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State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

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Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Flan		i re, inivi 87303) 	Sa	anta F	e, NM 875	05					
			Rele	ease Notifi	catio	n and Co	orrective A	ction	1			
						OPERA	ГOR		🛛 Initia	al Report		Final Report
Name of Co	mpany: E	nterprise Fie	eld Servic	ces LLC		Contact: Thomas Long						
Address: 6	14 Reilly A	ve, Farming	gton, NM	87401		Telephone N	No. 505-599-22	286				
Facility Nar	Facility Name: Jicarilla 35B Gas Com #1						e: Well Site					
Surface Ow	ner: Jicar	illa Apache	Tribe	Mineral (Owner:	Jicarilla Ap	ache Tribe		API No).		
	LOCATION OF RELEASE											
Unit Letter H	Section 11	Township 24N	Range 5W	Feet from the	North	/South Line	Feet from the	East/V	West Line	County Rio Arrib	a .	
			Lati	tude 36.328	3	Lo	ngitude -10	7.3256				
				NA1			ГАСТ ГАСТ					
Type of Rele	ase: Natura	Gas and Na	atural gas l	liquids	UKE	Volume of	Release: Unkno	wn	Volume F	Recovered: 1	Inkno	
Source of Re	lease: Accid	lental dischar	ge during	a meter tube blov	w down	Date and H	lour of Occurren	ce:	Date and	Hour of Disc	covery	· · · · · · · · · · · · · · · · · · ·
•		· · · · · · · · · · · · · · · · · · ·				3/4/2014:0	0 1:35 p.m.		3/4/2014:	00 1:35 p.n	<u>ı</u>	
Was Immedia	ate Notice C	Given?	Yes 🗌] No 🔲 Not R	equired	If YES, To Hammond	Whom? JAEPO , Jonathan Kelly	– Hobs - NMOC	on Sandova CD	l, JAO&GA	– Bryc	ce
By Whom?	Thomas Lor	ng				Date and H	Iour 3/4/2014 @	5:07 p.r	n. by phon	e and email		
Was a Water	course Reac	hed?				If YES, Vo	olume Impacting	the Wat	ercourse.			
			Yes 🗵	No								
If a Watercou	irse was Imi	nacted Descr	ibe Fully									
area of appro	ise of Proble ximately 32	em and Reme t feet long by	10 feet wi	n Taken: During de was affected.	The me	ter tube taken	activities a releas out of service	APR	Signation	owing down As Put3 was 4	the me applied	eter tube. An d.
Describe Are area of appro will be submi	a Affected a ximately 32 itted upon re	and Cleanup / feet long by eceipt of the t	Action Tak 10 feet wi hird party	cen.* During rou de was affected. environmental co	utine ma Remed ontracto	aintenance acti iation activitie r corrective ac	vities a release o s are scheduled f tion report.	ccurred or the w	while blow eek of Mare	ing down the ch 17, 2014.	: meter A "fin	tube. An nal" c-141
I hereby certi	fy that the i	nformation gi	iven above	e is true and com	plete to	the best of my	knowledge and	indersta	nd that purs	suant to NM	OCD ri	ules and
regulations al public health should their c or the environ federal, state.	or the environment. In a nor local law	are required t conment. The ave failed to ddition, NMC vs and/or regu	o report ar acceptance adequately OCD acceptance ulations.	nd/or file certain ce of a C-141 rep v investigate and otance of a C-141	release release remedia	notifications and ne NMOCD m te contaminati does not reliev	nd perform corre parked as "Final F ion that pose a th re the operator of	ctive act Report" c reat to g respons	ions for releases not releases not releases not releases in the second s	eases which ieve the oper r, surface wa ompliance w	may en ator of ter, hu rith any	ndanger `liability man health y other
		<i>\</i> ,	,				OIL CON	SERV	ATION	DIVISIC	N	\sim
Signature:	hai	tul	/						Λ		H	
015		- and				Approved by	Environmental S	Specialis	st: / are	e/	Vin	S
Printed Name	e: Jon Fields	S					_1_7	· ·		Z J U	M	1
Title: Sr. Dir	ector, Envir	onmental				Approval Da	te:5/15/1	4	Expiration	Date:		
E-mail Addre	ess: jefield	s@eprod.com	1			Conditions o	f Approval:			Attached		
Dote:	N	7 . 111	Phone	. (713)381_6684				*****				
Attach Addi	tional Shee	<u>- 2019</u> ets If Necess	sarv	. (715)561-0064	i	11.	<u> </u>					
Attaon Atta						#FNC	51412	50	2995	5		

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action												
						OPERA	FOR	🛛 Initi	al Report	Final Report		
Name of Co	mpany: E	Interprise Fie	eld Servi	ces LLC		Contact: Th	iomas Long	01	- CONS.	DIV DICT C		
Address: 6	4 Reilly A	Ave, Farming	gton, NM	87401		Telephone 1	No. 505-599-2286			0101.3		
Facility Nat	ne: Canyo	on Largo #8	5			Facility Typ	e: Well Site		JUN 2	- 2014		
Surface Ow	ner: BLM	[Mineral (Owner:	BLM		API No	API No.			
				LOC	ATIO	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North	SouthLine	Feet from the	East West Line	County			
G	13	24N	6W	1797			1064		Rio Arri	Da		
	L_•	Latit	ude 3	6.310455	<u>I. </u>	Longitud	e -107.414730	<u> </u>	L			
		13411		NAT					•	, ,		
Type of Rele	ase: Produ	ced Water, Co	ndensate	and Oil	UKE	Volume of	EASE Release: Estimated	I Volume I	Recovered:	Unknown		
- 7 F						15-25 bbls						
Source of Re	Source of Release: Valve Release						lour of Occurrence:	Date and	Hour of Di	scovery: 5/16/2014		
Was Immedi	ate Notice (Given?				If YES, To	Whom? Cory Smith	n - NMOCD, SI	ari Ketchu	m -BLM		
· · ·			Yes 🗌] No 🗍 Not R	equired							
By Whom? Thomas Long						Date and Hour 5/16/2014 @ 2:56 p.m. phone call and email						
Was a watercourse Reached?						If YES, Vo	olume Impacting the	Watercourse				
15-25 bbls of approximatel hundred (300 pad. The rele	condensate y one-hund) feet long case area wa	en and Renie e, water and o red- fifty (150 by three (3) fe as secured and	il were rel) feet long et wide w l remediat	as impacted alon ion activities beg	ase occu ell pad, - fifty (g the pip an May	the pipeline ri 50) feet wide beline ROW. 21, 2014.	gging operations at ght of way (ROW) a was impacted on the An area of approxim	nd land adjacen e well pad. An hately ¼ acre wa	t to the well area of appr s misted ad	pad. An area of oximately three- jacent to the well		
Describe Are was impacted area of appro c-141 will be	a Affected l on the wel ximately 1/4 submitted	and Cleanup A l pad. An are acre was mist upon receipt c	Action Tal a of appro ted adjace of the third	ken.* An area of a eximately three-he nt to the well pad party environme	approxinundred (I. The re ental cor	nately one-hu 300) feet long elease area wa htractor correc	ndred- fifty (150) fee by three (3) feet wind s secured and remed tive action report.	et long by one-h de was impacted iation activities	undred- fifi l along the began May	y (150) feet wide pipeline ROW. An 21, 2014. A "final"		
I hereby certi regulations a public health should their o or the enviro federal, state	fy that the ll operators or the envi operations h ment. In a or local la	information gi are required t ronment. The nave failed to addition, NMC ws and/or regu	ven above o report at acceptan adequately OCD accep ulations.	e is true and comp nd/or file certain ce of a C-141 rep v investigate and otance of a C-141	olete to t release t ort by th remedia report o	the best of my notifications a ne NMOCD m te contaminat does not reliev	knowledge and und nd perform correctiv arked as "Final Rep on that pose a threat e the operator of res	erstand that purs e actions for rel ort" does not rel to ground wate ponsibility for c	suant to NN eases which ieve the ope r, surface w ompliance	OCD rules and may endanger erator of liability ater, human health with any other		
	\geq						<u>OIL CONSI</u>	ERVATION	DIVISI			
Signature:	An	Tul										
Printed Nam	e: Jon Field	s				Approved by	Environmental Spe	cialist:	$\Delta \lambda$	nt		
Title: Directo	or, Environi	nental				Approval Da	te: 6/2/14	Expiration	Date:			
E-mail Addr	ess:jefields(@eprod.com				Conditions o	f Approval:		Attache	t []		
Date: 3	-29-7	014	Phone	: (713)381-6684								
⁴ Attach Addi	tional She	ets If Necess	ary		, ,	HNCS 14	115353 39	3				

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Fran	icis Dr., Sant	a Fe, INM 8750	5 	Sa	anta Fe,	NM 875	05					
			Rele	ease Notific	cation	and Co	rrective A	ction	-			
					(PERAT	OR		🗌 _Initia	al Report	\boxtimes	Final Report
Name of Co	ompany: E	Enterprise Fi	eld Servio	ces LLC	C	ontact: Th	omas Long					
Address: 6	14 Reilly A	Ave, Farming	gton, NM	87401		elephone N	0. 505-599-22	286				
	ne: Jicari			······	Γε		e: well Site					
Surface Ow	mer: Jicar	illa Apache	Tribe	Mineral (Owner: BL	<u>، M</u>	·		API No)		
				LOCA	ATION	OF REL	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North	outh Line	Feet from the	East	est Line	County		
D	35	251	1 5 W	/33	J	}	1583	· · · · · ·		RIO AFRID	a	
	Latitude 36.361853 Longitude -107.361710											
				NAT	TURE C	F RELE	EASE					
Type of Rele	ase: Natura	al Gas and N	atural gas	liquids		Volume of	Release: Unkno Case Estimated	wn	Volume I	Recovered:	Unkno	wn
						bbls fluids	Gas, Estimated	1-2				
Source of Re	elease: A ¹ / ₂	inch valve of	a meter tu	be		Date and H	our of Occurrent	ce:	Date and	Hour of Dis	covery:	2/20//2014
Was Immedi	ate Notice (Given?		<u> </u>		<u>2/20/2014:0</u> If YES, To	<u>J0 2:30 p.m.</u> Whom? JAEPO	– Hobso	a 2:30 p	. m. al, JAO&G -	Bryce	Hammond
		Y	ies 🗌 1	No 🔲 Not Requ	uired					,	,	-
By Whom? Thomas Long						Date and Hour 2/20/2014 @ 5:30 p.m. by phone and email; NMOCD –						
Was a Watercourse Reached?						Jonathan H	Kelly on 2/21/20 Jume Impacting	14 by en the Wate	nail			
,			Yes 🗵	No			in the surproving	ine mate				
If a Wateroo	urse wee Im	nacted Decor	ibo Fully					<u> </u>				
Describe Ca	use of Probl	em and Reme	dial Actio	n Taken.* A ½ in	ch valve o	f a meter tul	be was left open	releasing	condensa	te, oil and w	ater. A	n area on
the ground s	urface of ap	proximately t	en (10) fee	t by twenty (20)	was affecte	d. The mete	er tube blown do	wn, taker	n out of se	rvice and LC	DTO (lo	ck out tag
out) was app	hed. The re	pairs/remedia	tion activit	ties were complet	ed Februar	y 27, 2014.		OII	CONS		2	
								1948			. V	
Describe Are	a Affected	and Cleanup	Action Tal	cen.* A ½ inch va	alve of a m	eter tube wa	s left open relea	sing con	densate of	9 2014 I and Water	The fin	al
excavation w	as approxir	nately eightee	en (18) fee	t long by thirteen	(13) wide	ranging from	n 0.5 feet below	grounds	surface (b	gs) to two (2	l) feet b	gs. The
repairs/reme	diation activ	vities were con	mpleted Fe	ebruary 27, 2014.	A third pa	rty environr	nental contractor	r correcti	ve action r	report is incl	uded wi	th this
	·											
I hereby cert	ify that the	information g	iven above	e is true and comp	plete to the	best of my	knowledge and u	understan	id that purs	suant to NM	OCD ru	les and
public health	or the envi	ronment. The	e acceptan	ce of a C-141 rep	ort by the l	NMOCD ma	arked as "Final R	cuve acu Report" d	oes not rel	ieve the oper	rator of	liability
should their	operations h	nave failed to	adequately	investigate and i	remediate o	contaminatio	on that pose a the	reat to gr	ound wate	r, surface wa	iter, hui	nan health
or the enviro federal, state	nment. In a	we and/or ree	JCD accep utations.	otance of a C-141	report doe	s not relieve	e the operator of	responsi	bility for c	ompliance v	/ith any	otner
		1	11				OIL CON	SERV	ATION	DIVISIO)N/	
Signature:		17							1			
Signature.		14	•••		A	oproved by	Environmental S	Specialist	m	ent	/ <	
Printed Nam	e: Jon Field	<u>s</u>					- 1- 1- 1-		$ \subset ,$		n	\sim
Title: Direct	or, Environi	mental			A	oproval Dat	e: 6/10/14	1 Г	Expiration	Date:		
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E-mail Addr	ess: jeneids	weproa.com				JULICOUS OF	Approvar:			Attached		
1	3.2.1	N		(712)201 ((0)								
Date: \bullet	$- 3 - \omega$	T ets If Necess	Phone sarv	: (713)381-6684	i	+10	1. 11-11	4	<u></u>	_		
Attach Auu		0.5 11 140005	sur y		1	HNUS	41615111					

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CORRECTIVE ACTION REPORT

Property:

Jicarilla C #27E Meter Run Valve Release NE 1/4, S33 T25N R5W Rio Arriba County, New Mexico OIL CONS. DIV DIST. 3 JUN 0 9 2014

May 15, 2014 Apex Project No. 7030414G007

Prepared for:

Enterprise Products Operating LLC 614 Reilly Avenue Farmington, NM 87401 Attn: Mr. Tom Long

Prepared by:

Kyle Summers, C.P.G. Branch Manager

B. Chris Mitchell, P.G.

Principal Geoscientist

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Appendix D:	Tables
Appendix E:	Laboratory Analytical Reports & Chain of Custody Documentation

CORRECTIVE ACTION REPORT

Jicarilla C #27E Meter Run Valve Release

NE 1/4, S33 T25N R5W Rio Arriba County, New Mexico

Apex Project No. 7030414G007

1.0 INTRODUCTION

1.1 Site Description & Background

The Jicarilla C #27E meter run valve release site is located within the Enterprise Products Operating LLC (Enterprise) pipeline right-of-way (ROW) in the northeast (NE) ¼ of Section 33 in Township 25 North, Range 5 West in rural Rio Arriba County, New Mexico, referred to hereinafter as the "Site" or "subject Site". The Site is located at the edge of a well pad, surrounded by native vegetation rangeland periodically interrupted with oil and gas gathering facilities, including one (1) Enterprise natural gas gathering pipeline meter run, aligned east to west.

On February 27th, 2014, Enterprise initiated excavation activities at the Site to remove hydrocarbon affected soils which resulted from a partially open valve on the meter run. An unknown quantity of condensate/water mixture was potentially released from the valve, which sprayed onto the adjacent soils. Soils at the Site were frozen at the time of the release, and vertical migration of constituents of concern (COCs) was limited.

A topographic map depicting the location of the Site is included as Figure 1, and a Site Vicinity Map is included as Figure 2 in Appendix A.

1.2 Project Objective

The primary objective of the corrective actions was to reduce the concentration of COCs in the on-Site soils to below the New Mexico Energy, Minerals, and Natural Resources Department (EMNRD), Oil Conservation Division (OCD) *Remediation Action Levels* using the New Mexico EMNRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases* as guidance.

2.0 SITE RANKING

The Site is under the jurisdiction of the Jicarilla Apache Nation Environmental Protection Office (JANEPO). In the absence of published JANEPO regulatory guidance, Apex referenced the New Mexico ENMRD OCD's *Guidelines for Remediation of Leaks, Spills and Releases*. Apex utilized the general site characteristics obtained during the completion of corrective action activities to determine the appropriate "ranking" for the Site. The ranking criteria and associated scoring are provided in the following table:



Ranking	g Criteria		Ranking Score
	<50 feet	20	
Depth to Groundwater	50 to 99 feet	10	10*
	>100 feet	0	
Wellhead Protection Area • <1,000 feet from a water	Yes	20	ĥ
source, or; <200 feet from private domestic water source.	No	0	Ū
	<200 feet	20	
Distance to Surface Water Body	200 to 1,000 feet	10	10
	>1,000 feet	0	
Total Ran	king Score		20

*Based on anticipated groundwater depth of >50 feet below grade surface (bgs).

Based on Apex's evaluation of the scoring criteria, the Site would have a maximum Total Ranking Score of "20". This ranking is based on the following:

- The Site is approximately 400 feet north of the head of an un-named ephemeral wash which drains to the Cañada Larga approximately 3.5 miles southwest of the Site. This wash is barely discernible at this location and appears to only convey water during significant rain events, but might be considered a surface water body by some entities.
- No water wells were identified on the Office of the State Engineer website database within one mile of the Site. However, a livestock well was identified approximately 2,200 feet west of the Site. The depth to water at this well is unknown.
- The nearest surface water is a livestock tank located approximately 1,450 feet northeast of the Site.

3.0 **RESPONSE ACTIONS**

3.1 Soil Excavation Activities

On February 27th, 2014, Enterprise initiated excavation activities at the Site to remove hydrocarbon affected soils which resulted from a partially open valve on the meter run. An unknown quantity of condensate/water mixture was potentially released from the valve, which sprayed onto the adjacent soils. Soils at the Site were frozen at the time of the release, and vertical migration of COCs was limited. During the corrective action activities, Industrial Mechanical, Inc. (IMI) provided heavy equipment and labor support, and Kyle Summers, an Apex environmental professional, provided environmental support.

Soil staining was visible at the Site near the point of release. Affected soils were excavated utilizing backhoe and hand tools and loaded into a tandem-axle dump truck for transportation to the disposal/treatment facility.

The lithology encountered during the completion of corrective action activities consisted primarily of unconsolidated silty-sands.

The total depth of the final excavation ranged from 0.5 feet bgs to approximately 2 feet bgs in the release footprint. The surface expression of the release and subsequent excavation measured approximately 18 feet long east to west, with a maximum north to south width of approximately 13 feet near the eastern limit.



A total of approximately 12 cubic yards of hydrocarbon affected soils were transported to the TNT landfarm near Lindrith, NM for disposal/remediation. The executed C-138 form is provided in Appendix B. The excavation was backfilled with clean imported fill from a Jicarilla-approved stockpile and contoured to surrounding grade.

During excavation activities, air in the breathing zone was monitored to ensure that the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) of 200 parts per million (ppm) Time Weighted Average (TWA) for an 8-hour work day was not exceeded. Additionally, Enterprise monitored the excavation for explosive atmosphere conditions and oxygen deficiency prior to any entries into the excavation.

Figure 3 is a site map that indicates the approximate location of the excavated area in relation to pertinent land features (Appendix A). Photographic documentation of the field activities is included in Appendix C.

3.2 Soil Sampling Program

Apex screened head-space samples of Site soils with a photoionziation detector (PID) fitted with a 10.6 eV lamp to aid in determining the excavation limits.

Apex's soil sampling program included the collection of one (1) composite confirmation sample (C-1) from the resulting excavation for laboratory analysis. The sample consisted of six (6) discrete aliquots. Figure 3 depicts the approximate location of the excavated areas and shows the final confirmation sample aliquot locations in relation to the final excavation dimensions (Appendix A).

The confirmation soil sample was collected and placed in laboratory prepared glassware, labeled/sealed using the laboratory supplied labels, and placed on ice in a cooler, which was secured with a custody seal. The sample cooler and completed chain-of-custody form were relinquished to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico for 24-hr rush analysis.

3.3 LABORATORY ANALYTICAL METHODS

The confirmation soil sample was analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA SW-846 Method #8021, and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) and diesel range organics (DRO) using EPA SW-846 Method #8015.

Laboratory results are summarized in Table 1, included in Appendix D. The executed chain-ofcustody form and laboratory data sheets are provided in Appendix E.

4.0 DATA EVALUATION

The Site is under the jurisdiction of the JANEPO. In the absence of published JANEPO regulatory guidance, Apex referenced New Mexico OCD *Guideline for Remediation of Leaks, Spills, and Releases* as guidance, in addition to the OCD rules, specifically NMAC 19.15.30 *Remediation.* These guidance documents establish investigation and abatement action requirements for sites subject to reporting and/or corrective action.

4.1 Confirmation Soil Samples

Apex compared the BTEX and TPH concentrations or reporting limits (RLs) associated with the final confirmation sample collected from the excavated area to the OCD *Remediation Action Levels* for sites having a total ranking score of "20".

- The laboratory analysis of the confirmation sample collected from soils remaining in place does not indicate benzene concentrations above laboratory RLs, which are below the OCD *Remediation Action Level.*
- The laboratory analysis of the confirmation sample collected from soils remaining in place does not indicate total BTEX concentrations above laboratory RLs, which are below the OCD *Remediation Action Level*.
- The laboratory analyses of the confirmation sample collected from soils remaining in place do not indicate TPH GRO/DRO concentrations above laboratory RLs, which are below the OCD *Remediation Action Level*.

Confirmation sample results are provided in Table 1 in Appendix D.

5.0 FINDINGS AND RECOMMENDATIONS

The Jicarilla C #27E meter run valve release site is located within the Enterprise ROW in the NE ¼ of Section 33 in Township 25 North and Range 5 West in rural Rio Arriba County, New Mexico. The Site is located at the edge of a well pad, surrounded by native vegetation rangeland periodically interrupted with oil and gas gathering facilities, including one (1) Enterprise natural gas gathering pipeline meter run, aligned east to west.

On February 27th, 2014, Enterprise initiated excavation activities at the Site to remove hydrocarbon affected soils which resulted from a partially open valve on the meter run. An unknown quantity of condensate/water mixture was potentially released from the valve, which sprayed onto the adjacent soils. Soils at the Site were frozen at the time of the release, and vertical migration of COCs was limited. Soil staining was visible at the Site near the point of release.

- The primary objective of the corrective actions was to reduce the concentration of COCs in the on-Site soils to below the New Mexico EMNRD OCD Remediation Action Levels using the New Mexico EMNRD OCD's Guidelines for Remediation of Leaks, Spills and Releases as guidance.
- The total depth of the final excavation ranged from approximately 0.5 feet bgs to approximately 2 feet bgs in the release footprint. The maximum surface expression of the excavation measured approximately 18 feet long by 13 feet wide.
- Prior to backfilling, one (1) final confirmation sample was collected from the resulting excavation for laboratory analyses. Based on analytical results, soils remaining in place do not exhibit COC concentrations above laboratory RLs, which are below the OCD *Remediation Action Levels* for a Site ranking of "20".
- A total of approximately 12 cubic yards of hydrocarbon affected soils were transported to the TNT landfarm near Lindrith, NM for disposal/remediation. The excavation was



backfilled with clean imported fill from a Jicarilla-approved stockpile or pond and contoured to the surrounding grade.

Based on the laboratory analytical, no additional investigation or corrective action appears warranted at this time.

6.0 STANDARD OF CARE, LIMITATIONS, AND RELIANCE

Apex TITAN's (Apex's) services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Apex makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Apex does not warrant the work of third parties supplying information used in the report (e.g. laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client.

Findings, conclusions and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Apex cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Apex's findings and recommendations are based solely upon data available to Apex at the time of these services.

This report has been prepared for the exclusive use of Enterprise, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the expressed written authorization of Enterprise and Apex. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the proposal, the report, and Apex's Agreement. The limitation of liability defined in the agreement is the aggregate limit of Apex's liability to the client.





Z:\Houston South\Drafting\New Mexico 04\2014\7030414G007\Figure 1.dwg 05/12/14



Z:\Houston South\Drafting\New Mexico 04\2014\7030414G007\Figure 2.dwg 05/12/14



Z.\Houston South\Drafting\New Mexico 04\2014\7030414G007\Figure 3.dwg 05/12/14

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*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401 Paykey Code: GG11580
2. Originating Site: Jicarilla C #27E Well Site
3. Location of Material (Street Address, City, State or ULSTR): Unit B, Section 33, T 25N, R 05W, Rio Arriba County, NM; 36.361794, -107.362034
 Source and Description of Waste: Source: Natural Gas Liquids (oil and condensate) for Dryer Valve Release on an meter run Description: Exempt petroleum affected soil from clean-up efforts at well site Estimated Volume _5_yd³ / bbls Known Volume (to be entered by the operator at the end of the haul) (yd³) bbls
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS
Thomas Long, representative or authorized agent for Enterprise Field Services, LLC do hereby Generator Signature certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)
RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. <u>Operator Use Only: Waste Acceptance Frequency Monthly Weekly</u> <u>Per Load</u>
RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)
🗖 MSDS Information 🔲 RCRA Hazardous Waste Analysis 🖾 Process Knowledge 🔲 Other (Provide description in Box 4)
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS
Hore Lay I, 2-25-14, representative for Enterprise Field Services, LLC authorize T-N-T to complete Generator Signature the required testing/sign the Generator Waste Testing Certification.
1, 1. 1. 1. representative for T-N-T do hereby certify that
Representative/Agent Signature representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.
5. Transporter: IMI, WestStates or unknown trucking company on OCD approved haulers list.
Name and Facility Permit #: TNT Evap Pond/Landfarm, NM01-0008 Address of Facility: 70 CR 405, Lindrith NM
Method of Treatment and/or Disposal:
Waste Acceptance Status:
PRINT NAME: SIGNATURE: Surface Waste Management Facility Authorized Agent DATE: 2-27-14 TELEPHONE NO.505-320-2737

SITE PHOTOGRAPHS



Photograph 1

Release area prior to excavation facing northeast.



Photograph 2

General view of excavation area facing east.



Photograph 3

General view of excavation area facing south.





TABLE 1 Jigenfile C (227/3 Soil Analytical Summary

Sample I.D.	Date	Sample Depth (feet)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)
New Mexico Entr Department, Oil C	ergy, Mineral & conservation Di Action Level	Natural Resources vision, Remediation	10	NE	NE	NE	50	1	00
Final Confirmation Sample									
C-1	2/27/2014	0.5-2.0	< 0.040	<0.040	<0.040	< 0.079	ND	<4.0	<10.0

Note: Concentrations in **bold** and yellow exceed the applicable OCD Remediation Action Level

NE = Not Established

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

March 03, 2014

Kyle Summers Southwest Geoscience 606 S. Rio Grande Unit A Aztec, NM 87410 TEL: (903) 821-5603 FAX (214) 350-2914

RE: Jicarilla C 27 E

OrderNo.: 1402B15

Dear Kyle Summers:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/28/2014 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 <u>www.hallenvironmental.com</u> or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

andis

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1402B15 Date Reported: 3/3/2014

Hall Environmental Analysis Laboratory, Inc.

EPA MET	HOD 8015D: DIESEL RANG				Analyst	BCN
Analyses		Result	RL Qual	Units	DF Date Analyzed	Batch
Lab ID:	1402B15-001	Matrix:	MEOH (SOIL)	Receive	d Date: 2/28/2014 10:00:00 AM	
Project:	Jicarilla C 27 E			Collectio	n Date: 2/27/2014 11:00:00 AM	
CLIENT:	Southwest Geoscience		C	lient Sam	ple ID: C-1	

EPA METHOD 8015D: DIESEL RANGE ORG	GANICS		•		Analyst:	BCN
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	2/28/2014 1:50:16 PM	11948
Surr: DNOP	104	66-131	%REC	1	2/28/2014 1:50:16 PM	11 948
EPA METHOD 8015D: GASOLINE RANGE					Analyst:	JMP
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	2/28/2014 2:16:31 PM	R17027
Surr: BFB	83.5	74.5-129	%REC	1	2/28/2014 2:16:31 PM	R17027
EPA METHOD 8021B: VOLATILES					Analyst:	JMP
Benzene	ND	0.040	mg/Kg	1	2/28/2014 2:16:31 PM	R17027
Toluene	ND	0.040	mg/Kg	1	2/28/2014 2:16:31 PM	R17027
Ethylbenzene	ND	0.040	mg/Kg	1	2/28/2014 2:16:31 PM	R17027
Xylenes, Total	ND	0.079	mg/Kg	1	2/28/2014 2:16:31 PM	R17027
Surr: 4-Bromofluorobenzene	95.5	80-120	%REC	1	2/28/2014 2:16:31 PM	R17027

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank Holding times for preparation or analysis exceeded				
	Ε	Value above quantitation range	H !					
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	Page 1 of 4			
	0	RSD is greater than RSDlimit	Р	Sample pH greater than 2.	14601011			
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit				
	S	Spike Recovery outside accepted recovery limits						

WO#: 1402B15

03-Mar-14

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Client:	Southw	est Geoscienc	e											
Project:	Jicarilla	C 27 E	_											
Sample ID	MB-11934	SampTy	pe: ME	BLK	TestCode: EPA Method 8015D: Diesel Range Organics									
Client ID:	PBS	Batch I	D: 11	934	F	RunNo: 1	7024							
Prep Date:	2/27/2014	Analysis Dat	te: 2/	28/2014	5	SeqNo: 4	89838	Units: %RE	C					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: DNOP		9.1	<u>.</u>	10.00		91.1	66	131						
Sample ID	LCS-11934	SampTy	be: LC	:s	Tes	tCode: El	PA Method	8015D: Dies	el Range (Drganics				
Client ID:	LCSS	Batch I	D: 11	934	F	RunNo: 1	7024							
Prep Date:	2/27/2014	Analysis Dat	te: 2/	28/2014	5	SeqNo: 4	89866	Units: %RE	C					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Surr: DNOP		5.4		5.000	_	107	66	131						
Sample ID	MB-11948	SampTy	De: ME	3LK	 Tes	tCode: El	PA Method	8015D: Dies	el Range (Drganics				
Sample ID Client ID:	MB-11948 PBS	SampTyp Batch I	De: ME	3LK 948	Tes	tCode: El RunNo: 1	PA Method 7024	8015D: Dies	el Range (Drganics				
Sample ID Client ID: Prep Date:	MB-11948 PBS 2/28/2014	SampTy Batch I Analysis Dat	De: ME D: 11 te: 2/	3LK 948 /28/2014	Tes Fi S	tCode: El RunNo: 1 SeqNo: 4	PA Method 7024 89867	8015D: Dies Units: mg//	el Range ((g	Drganics				
Sample ID Client ID: Prep Date: Analyte	MB-11948 PBS 2/28/2014	SampTy Batch I Analysis Dat Result	De: ME D: 11 te: 2/ PQL	3LK 948 128/2014 SPK value	Tes F S SPK Ref Val	tCode: El RunNo: 1 SeqNo: 4 %REC	PA Method 7024 89867 LowLimit	8015D: Dies Units: mg/H HighLimit	el Range ((g %RPD	Drganics RPDLimit	Qual			
Sample ID Client ID: Prep Date: Analyte Diesel Range C	MB-11948 PBS 2/28/2014 Drganics (DRO)	SampTy, Batch I Analysis Dat Result ND	De: ME D: 11 te: 2/ PQL 10	3LK 948 28/2014 SPK value	Tes F SPK Ref Val	tCode: El RunNo: 1 SeqNo: 4 %REC	PA Method 7024 89867 LowLimit	8015D: Dies Units: mg// HighLimit	el Range ((g %RPD	Drganics RPDLimit	Qual			
Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP	MB-11948 PBS 2/28/2014 Drganics (DRO)	SampTyr Batch I Analysis Dat Result ND 9.5	De: ME D: 11 te: 2/ PQL 10	3LK 948 28/2014 SPK value 10.00	Tes F S SPK Ref Val	tCode: El RunNo: 1 SeqNo: 4 %REC 94.7	PA Method 7024 89867 LowLimit 66	8015D: Dies Units: mg/# HighLimit 131	el Range ((g %RPD	Drganics RPDLimit	Qual			
Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID	MB-11948 PBS 2/28/2014 Drganics (DRO) LCS-11948	SampTyr Batch I Analysis Dat Result ND 9.5 SampTyr	De: ME D: 11 te: 2/ PQL 10 De: LC	BLK 948 28/2014 SPK value 10.00	Tes F SPK Ref Val Tes	tCode: El RunNo: 1 SeqNo: 4 %REC 94.7 tCode: El	PA Method 7024 89867 LowLimit 66 PA Method	8015D: Dies Units: mg/k HighLimit 131 8015D: Dies	el Range ((g %RPD el Range (Drganics RPDLimit Drganics	Qual			
Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID Client ID:	MB-11948 PBS 2/28/2014 Drganics (DRO) LCS-11948 LCSS	SampTyr Batch I Analysis Dat Result ND 9.5 SampTyr Batch I	De: ME D: 11 te: 2/ PQL 10 De: LC	3LK 948 28/2014 SPK value 10.00 S 948	Tes F SPK Ref Val Tes	tCode: El RunNo: 1 SeqNo: 4 %REC 94.7 tCode: El RunNo: 1	PA Method 7024 89867 LowLimit 66 PA Method 7024	8015D: Dies Units: mg// HighLimit 131 8015D: Dies	el Range ((g %RPD el Range (Drganics RPDLimit Drganics	Qual			
Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID Client ID: Prep Date:	MB-11948 PBS 2/28/2014 Drganics (DRO) LCS-11948 LCSS 2/28/2014	SampTyr Batch I Analysis Dat Result ND 9.5 SampTyr Batch I Analysis Dat	De: ME D: 11 te: 2/ PQL 10 De: LC D: 11 te: 2/	3LK 948 28/2014 SPK value 10.00 S 948 28/2014	Tes SPK Ref Val Tes S	tCode: El RunNo: 1 SeqNo: 4 %REC 94.7 tCode: El RunNo: 1 SeqNo: 4	PA Method 7024 89867 LowLimit 66 PA Method 7024 89868	8015D: Dies Units: mg/l HighLimit 131 8015D: Dies Units: mg/l	el Range ((g %RPD el Range ((g	Drganics RPDLimit Drganics	Qual			
Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID Client ID: Prep Date: Analyte	MB-11948 PBS 2/28/2014 Drganics (DRO) LCS-11948 LCSS 2/28/2014	SampTyr Batch I Analysis Dat Result ND 9.5 SampTyr Batch I Analysis Dat Result	De: ME D: 11 te: 2/ PQL 10 De: LC D: 11 te: 2/ PQL	3LK 948 28/2014 SPK value 10.00 35 948 28/2014 SPK value	Tes F SPK Ref Val Tes SPK Ref Val	tCode: El RunNo: 1 SeqNo: 4 %REC 94.7 tCode: El RunNo: 1 SeqNo: 4 %REC	PA Method 7024 89867 LowLimit 66 PA Method 7024 89868 LowLimit	8015D: Dies Units: mg// HighLimit 131 8015D: Dies Units: mg// HighLimit	el Range ((g %RPD el Range ((g %RPD	Drganics RPDLimit Drganics	Qual			
Sample ID Client ID: Prep Date: Analyte Diesel Range C Surr: DNOP Sample ID Client ID: Prep Date: Analyte Diesel Range C	MB-11948 PBS 2/28/2014 Drganics (DRO) LCS-11948 LCSS 2/28/2014 Drganics (DRO)	SampTyr Batch I Analysis Dat Result ND 9.5 SampTyr Batch I Analysis Dat Result 56	De: ME D: 11 te: 2/ PQL 10 De: LC D: 11 te: 2/ PQL 10	3LK 948 28/2014 SPK value 10.00 :S 948 28/2014 SPK value 50.00	Tes SPK Ref Val Tes SPK Ref Val SPK Ref Val 0	tCode: El RunNo: 1 SeqNo: 4 %REC 94.7 tCode: El RunNo: 1 SeqNo: 4 %REC 112	PA Method 7024 89867 LowLimit 66 PA Method 7024 89868 LowLimit 60.8	8015D: Dies Units: mg/k HighLimit 131 8015D: Dies Units: mg/k HighLimit 145	el Range ((g %RPD el Range ((g %RPD	Drganics RPDLimit Drganics RPDLimit	Qual			

Qualifiers:

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Page 2 of 4

WO#: 1402B15

03-Mar-14

Client:	Southwe	st Geoscience													
Project:	Jicarilla	C 27 E						-							
Sample ID	MB-11937 MK	SampType	BLK	Tes	TestCode: EPA Method 8015D: Gasoline Range										
Client ID:	PBS	Batch ID	: R17027	F	RunNo: 170)27									
Prep Date:	2/27/2014	Analysis Date	2/28/2014	5	SeqNo: 490	048	Units: mg/K	g							
Analyte		Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Gasoline Rang	je Organics (GRO)	ND	5.0												
Surr: BFB		800	1000	·	80.1	74.5	129								
Sample ID	LCS-11937 MK	SampType	e: LCS	Tes	tCode: EPA	A Method	8015D: Gaso	line Rang	e						
Client ID:	LCSS	Batch ID	R17027	F	RunNo: 170	027									
Prep Date:	2/27/2014	Analysis Date	: 2/28/2014	5	SeqNo: 490	049	Units: mg/K	g							
Analyte		Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Gasoline Rang	je Organics (GRO)	25	5.0 25.00	0	102	71.7	134								
Surr: BFB		890	1000		89.5	74.5	129								
Sample ID	MB-11937	SampType	: MBLK	Tes	tCode: EP/	A Method	8015D: Gaso	line Rang	e						
Client ID:	PBS	Batch ID	: 11937	F	RunNo: 170)27									
Prep Date:	2/27/2014	Analysis Date	: 2/28/2014	5	6eqNo: 490	0053	Units: %RE								
Analyte		Result F	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Sun: BFB		800	1000		80.1	74.5	129								
Sample ID	LCS-11937	SampType	e: LCS	Tes	tCode: EP/	A Method	8015D: Gaso	line Rang	e						
Client ID:	LCSS	Batch ID	: 11937	F	RunNo: 170	027									
Prep Date:	2/27/2014	Analysis Date	: 2/28/2014	S	SeqNo: 490	054	Units: %RE	C							
Analyte		Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Surr: BFB		890	1000		89.5	74.5	129								

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Client:	Southwest Geoscience

Project: Jicarilla C 27 E

Sample ID MB-11937 MK	Samp	Type: ME	BLK	Tes						
Client ID: PBS	Batel	h ID P1	7027			7027				
Client ID. FB3	Date	110. KI	1021	r.	Marino, T	/ 02 /				
Prep Date:	Analysis D	Date: 2/	28/2014	5	SeqNo: 4	90069	Units: mg/M	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050		·						
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.92		1.000		92.3	80	120			
Sample ID LCS-11937 MK	SampT	Type: LC	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Sample ID LCS-11937 MK Client ID: LCSS	SampT Batcl	Гуре: LC h ID: R1	S 7027	Tes F	tCode: El RunNo: 1	PA Method 7027	8021B: Volat	tiles		
Sample ID LCS-11937 MK Client ID: LCSS Prep Date:	Samp1 Batcl Analysis E	Гуре: LC h ID: R1 Date: 2/	:S 7027 28/2014	Tes F S	tCode: Ei RunNo: 1 SeqNo: 4	PA Method 7027 90070	8021B: Volat Units: mg/K	tiles Kg		
Sample ID LCS-11937 MK Client ID: LCSS Prep Date: Analyte	SampT Batcl Analysis E Result	Type: LC h ID: R1 Date: 2/ PQL	S 7027 28/2014 SPK_value	Tes F SPK Ref Val	tCode: El RunNo: 1 SeqNo: 4 %REC	PA Method 7027 90070 LowLimit	8021B: Volat Units: mg/K HighLimit	tiles (g %RPD	RPDLimit	Quai
Sample ID LCS-11937 MK Client ID: LCSS Prep Date: Analyte Benzene	SampT Batcl Analysis E <u>Result</u> 1.1	Type: LC h ID: R1 Date: 2/ PQL 0.050	5 7027 28/2014 SPK value 1.000	Tes F SPK Ref Val 0	tCode: El RunNo: 1 SeqNo: 4 <u>%REC</u> 114	PA Method 7027 90070 LowLimit 80	8021B: Volat Units: mg/K HighLimit 120	tiles Sg %RPD	RPDLimit	Quai
Sample ID LCS-11937 MK Client ID: LCSS Prep Date: Analyte Benzene Toluene	SampT Batcl Analysis D <u>Result</u> 1.1 1.1	Type: LC h ID: R1 Date: 2/ PQL 0.050 0.050	S 7027 28/2014 <u>SPK value</u> 1.000 1.000	Tes F SPK Ref Val 0 0	tCode: El RunNo: 1 SeqNo: 4 <u>%REC</u> 114 114	PA Method 7027 90070 LowLimit 80 80	8021B: Volat Units: mg/K HighLimit 120 120	illes (g %RPD	RPDLimit	Qual
Sample ID LCS-11937 MK Client ID: LCSS Prep Date: Analyte Benzene Toluene Ethylbenzene	Samp1 Batcl Analysis E Result 1.1 1.1 1.2	Type: LC h ID: R1 Date: 2/ PQL 0.050 0.050 0.050	5 7027 28/2014 SPK value 1.000 1.000 1.000	Tes F SPK Ref Val 0 0 0	tCode: El RunNo: 1 SeqNo: 4 <u>%REC</u> 114 114 117	PA Method 7027 90070 LowLimit 80 80 80	8021B: Volat Units: mg/M HighLimit 120 120 120	kiles (g %RPD	RPDLimit	Quai
Sample ID LCS-11937 MK Client ID: LCSS Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	SampT Batcl Analysis E Result 1.1 1.1 1.2 3.5	Type: LC h ID: R1 Date: 2/ PQL 0.050 0.050 0.050 0.10	S 7027 28/2014 SPK value 1.000 1.000 1.000 3.000	Tes F SPK Ref Val 0 0 0 0 0	tCode: Ei RunNo: 1 SeqNo: 4 %REC 114 114 117 117	PA Method 7027 90070 LowLimit 80 80 80 80 80	8021B: Volat Units: mg/k HighLimit 120 120 120 120	illes Gg %RPD	RPDLimit	Qual

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- P Sample pH greater than 2.
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WO#: 1402B15

03-Mar-14

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmen A TEL: 505-345-39 Website: www.	tal Analysis Laboral 4901 Hawkins Ibuquergue, NM 87. 75 FAX: 505-345-4. hallenvironmental.c	ors NE 105 Sam 107 . com	ple Log-In C	heck List
Client Name: Southwest Geoscience	Nork Order Numb	er: 1402B15		RcptNo:	1
Received by/date: MG	alt				
Logged By: Lindsay Mangin 2/2	8/2014 10:00:00	AM	Juniy Harry D		
Completed By: Lindsay Mangin 2/2	8/2014 10:17:29	AM	Hugo	,	
Reviewed By: IO	วไวยไมวเฯ	•			
Chain of Custody	<i></i>				
1. Custody seals intact on sample bottles?		Yes 🗌	No 🗔	Not Present 🗹	
2. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present	
3. How was the sample delivered?		Courier			
Log In					
4. Was an attempt made to cool the samples?		Yes 🗹	No 🗆	NA 🗌	
· · ·					
5. Were all samples received at a temperature of	>0° C to 6.0°C	Yes 🗹	No 🗌		
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) property pr	reserved?	Yes 🗹	No 🗌		
9. Was preservative added to bottles?		Yes	No 🗹	na 🗆	
10.VOA vials have zero headspace?		Yes 🗌	No 🗌	No VOA Vials 🗹	
11. Were any sample containers received broken?		Yes	No 🗹 🛛		
12. Does paperwork match bottle labels?	·	Yes 🗹	No 🗆	# of preserved bottles checked for pH:	
(Note discrepancies on chain of custody)				(<2 c Adjusted?	or >12 unless noted)
13. Are matrices correctly identified on Chain of Cus	stody?	Yes ⊻ Von ⊠			· · · · · · · · · · · · · · · · · · ·
14, is it clear what analyses were requested?		Yes ☑ Yes		Checked by:	
(If no, notify customer for authorization.)					
Special Handling (if applicable)					
16. Was client notified of all discrepancies with this	order?	Yes	No 🗌		
Person Notified:	Date:	F		<u> </u>]
By Whom:	Via:	eMail 🗌 Pl	none 🔲 Fax	In Person	
Regarding;	and was and				
Client Instructions:		·	······································	1 2014 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	
17. Additional remarks:					
18. Cooler Information					
Cooler No Temp *C Condition Seal	ntact Seal No	Seal Date	Signed By		
1 1.0 Good Yes					

							_															CH	<u>IAIN</u>	OF	CU	STO	Y RE	<u>CORD</u>
C		Jth			est	Laborate	ory:	HAL		4BC	r		_	AN Re	ALYSI QUES	S	7,	$\left[\right]$	7	7		7				ab use o Due Date	only ::	
Environmental & Hydrogeologic Consultants								l	~.	g			$\left \right $		/ /	' /		Te W	emp. of c hen rece	oolers ived (C°):	1.0							
Office Location ACTEC, NM Contact: FEEMAN Phone:								ú			/ /	/ /					/	1 Pa	2 age	3 4 0f	5							
Proje	ct Manag	jer <u>KyL</u>	65	Sime	ners	PO/SO	#: 0	4/1	1G	007					.it	/�/			/	/		'	/ /					
Samp	er's Name Kyle	SUMME	<u>,</u> , , , , , , , , , , , , , , , , , ,			Sampler's	s Sigra	ture	,	>					5	Se				/ /								
Proj. N 04	10. 14900	57	Proje		ame ARILLA	6	27E			No/Ty	rpe of C くしえ	Contain	iers	R.K		1	/ /					$\left \right $	/					
Matrix	Date	Time	om p	r a b	Identifying I	Marks of Sam	ple(s)	Start Depth	End	VOA	A/G 1LL	250 ml	P/0	X			/		/ /				- -	Lab S	Samp	le ID (La	b Use On	ly)
3	2-27-14	1100	X		<u> </u>	-1							1	$ \mathcal{X} $	Ł_	_						1	40	EB	518	5-0	01	
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Turn a Beline	round time	Signature)	mal		25% Rush	50% Rus	ih 🗹 Begeive	100%	Rush (Signa	ture)			Date	. ,	Tim	<u>e</u> .	NOTE	s.										
	// 2		<u> </u>		427/14	1527	[In	rist	he	the	Jr.	2	21	14	152	7												
Relind	when by (Signature)	3-	ĉ	Date:	1728			(Signa	ture)	 	D		8/14	1000	e:												
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Relina	uished by	(Signature))		Date:	Time:	Receive	ed by:	(Signa	ture)			Date	:	Tim	e:												
Matrix Contai	wv ner VO	V - Wastewa A - 40 ml via	ater al		W - Water A/G - Amber	S - Soil S / Or Glass 1 L	SD - Soli .iter	d L 2	- Liqui 50 mi -	d A Glass v	- Air Ba vide mo	ag outh	C - P/0	Charc 0 • Pla	oal tube stic or o	e S ther	SL - slu	dge	0	- Oil								

SOUTHWEST GEOSCIENCE • 2351 W. Northwest Hwy., Suite 3321 • Dallas, Texas 75220 • Office: 214-350-5469 • Fax 214-350-2914