State of New Mexico Energy Minerals and Natural Resources

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

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

				Sa	illa r	$e$ , $inivi $ $\delta/3$	0.0					· · · · · · · · · · · · · · · · · · ·
			Rel	ease Notific	atio	n and Co	orrective A	ction				
					OPE	RATOR			nitia	l Report	$\boxtimes$	Final Report
		Merit Energy				Contact: D						
		9, Loco Hills	<u> </u>				No.: 505-677-2					
Facility Na	ne: West	B4 Battery	(WB 38	- nearest well si	te)	Facility Typ	e: Production I	Battery		·		
Surface Ow	ner: BLM	1		Mineral O	wner:	BLM	· · · · · · · · · · · · · · · · · · ·	Lea	se No	o.: LC-02	9426-	B
				LOCA	TIO	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North	South Line	Feet from the	East/West Li		County		
F	10	17-8	31-E	2085'	North	l	1980'	West		Eddy		
L	l	L	L	l			1	1				
		La	titude_ <u>3</u> 2	2.85053		_ Longitude	103.85944	<b>.</b>	-			
			<u></u>	NAT	URE	OF REL						<u></u>
Type of Rele						1	Release: 20 bbl			ecovered:		
Source of Re	lease: Prov	er loop on LA	ACT unit			Date and F	lour of Occurrenc			lour of Dis 9:30 pm	covery	:
Was Immedi	ate Notice (	Given?				If YES, To		101/15	100	<u>9.50 pm</u>		
in as minour			Yes 🗌	] No Not Req	uired		s (BLM) & Chris	Beadle (OCD)				
By Whom? C	Chris Flores					Date and H	Iour: 01/19/06 10	):30 am	· · ·			
Was a Water	course Read					If YES, Vo	lume Impacting t	the Watercours	e.			
		L	Yes 🗵	No								
If a Watercou	irse was Im	pacted, Descr	ibe Fully.	*								
N/A												
Describe Cau	se of Probl	em and Reme	dial Actio	n Taken.*							·	
				filling the sump. F	rover	loop was shut	in and the valve l	handles were re	emove	:d.		
Describe Are	a Affected	and Cleanup	Action Tal	ken *							·	
				is the road near the	West I	B #38 well sit	e, and continued t	to follow a dep	ressio	n parallel t	o the ro	bad leadint to
the West B #	59 well site	e. The area is	approxim	ately 3' by 600' ar	nd less	than 3" in dep	oth. A vacuum tru	ick recovered (	@15 t	obls. The a	ffected	area will be
treated with I	M-1000 and	I tilled until it	meets OC	D remediation leve	els.							
l hereby certi	fy that the	information g	iven abov	e is true and compl	ete to t	the best of my	knowledge and u	inderstand that	pursu	ant to NM	DCD n	ules and
regulations a	ll operators	are required t	o report a	nd/or file certain re	elease r	notifications a	nd perform correc	ctive actions fo	r relea	ases which	may er	ndanger
public health	or the envi	ronment. The	acceptan	ce of a C-141 repor	rt by th	ne NMOCD m	arked as "Final R	eport" does no	t relie	ve the oper	ator of	liability
should their o	operations h	ave failed to	adequately	y investigate and re	media	te contaminati	on that pose a thr	eat to ground v	vater,	surface wa	ter, hu	man health
		udition, NMC		ptance of a C-141 r	eport c	toes not reliev	e ine operator of	responsibility	OF CO	inpliance w	un any	other
iouciai, state.							OIL CON	SERVATIO	)N I		N	
	1	11 X /						• • • • • • • • •				
Signature: <	-+n [+c	K) e_		<i></i>				A	cce	pied for		ord
Deleted Marrie	1 1im 11-11	on				Approved by	District Supervis	or:		NMOCI	D	
Printed Nam	, Jul Holl	00	<u> </u>		ŀ	<del></del>			<u> </u>	· · · · · · · · · · · · · · · · · · ·	·	
Title: Consu	ltant					Approval Dat	te:	Expirat	ion D	ate:		
		IL Capaci			[	<b>O</b> . <b>P</b>						
E-mail Addre	ss: <u>Jim.Ho</u>	ollon@SBCGI	obal.net			Conditions of	Арргоуа:			Attached		
Date: 01/19	/07		1	Phone: 432-631-57	768							

\* Attach Additional Sheets If Necessary

# **Closure Compliance Report**

**Project:** 

West B # 38 UL-F, Section 10, T17S, R31E Eddy County, New Mexico

January 19, 2007

Prepared for:

Merit Energy Company P.O. Box 69 Loco Hills, New Mexico 88255

# **Jim Hollon Consulting**

14034 W. Co. Rd. 123, Odessa, Texas 79765 (432)631-5768 Fax (432)563-1166 Jim.Hollon@SBCGlobal.net

**Jim Hollon Consulting** 

14034 W. Co. Rd. 123, Odessa, Texas79765 (432)631-5768 Fax (432)563-01166 Jim.Hollon@sbcglobal.net

January 19, 2007

Merit Energy Company P.O. Box 69 Loco Hills, New Mexico 88255

Attn: Mr. Dwain Wall

Phone: (505) 677-2327 Fax: (505) 677-2162

Re: Closure Compliance Report West B # 38 site UL – F, Section 10, T17S, R31E, 2085 FNL, 1980 FWL Eddy County, New Mexico 5 miles east of Loco Hills, NM

Dear Mr. Wall:

Jim Hollon Consulting is pleased to submit four copies of the Closure Compliance Report for the above referenced site.

I appreciate the opportunity to participate in the site remediation project at the West B # 38 well site for Merit Energy Company. Please contact me at (432) 631-5768 if you have questions regarding the information provided in the report.

Sincerely

∮im Hollon

# TABLE OF CONTENTS

# Page No.

1.0		. 1
2.0	FIELD ACTIVITIES	. 3
3.0	DATA EVALUATION	.4
4.0	FINDINGS AND RECOMMENDATIONS	.4

# LIST OF APPENDICES

.

Appendix A:	Figure 1- Topographic Map Figure 2 – Aerial Photograph
Appendix C:	Analytical Summary Tables, Laboratory Data Sheets, Chain-of-Custody Photographs Regulatory Reports

## **Closure Compliance Report**

West B # 38 UL-F, Section 10, T17S, R31E Eddy County, New Mexico

### 1.0 INTRODUCTION

This site is located in Eddy County, New Mexico approximately five miles east of Loco Hills, New Mexico. The site is approximately three miles northeast of Merit Energy's field office and southeast of the West B # 38 well location (Figure 1). The surrounding area is native rangeland in a sand hill region and is overseen by the Bureau of Land Management.

The release consisted of approximately twenty barrels of crude oil from the prover loop at the LACT unit which overflowed the sump tank at the West B4 battery. The oil crossed the road near the battery and the West B # 38 well location then followed a sandy depression parallel to the road leading to the West B # 59 well location. The oil affected a long, narrow trail approximately three feet wide by 600 feet long with an average depth of less than three inches. During the initial response, approximately fifteen barrels of oil were recovered.

1.1	Site	Description	

Site Name	West B # 38
Site Location/GPS	Eddy County, New Mexico / 32.85053° N, 103.85944° W
General Site Description	The release occurred at the West B4 battery near the West B # 38 well site. The surrounding area is sandy rangeland with sparse vegetation.

A topographic map (Figure 1) and an aerial photograph (Figure 2) are included in Appendix A.

### 1.2 Scope of Services

The Scope of Services for Jim Hollon Consulting (JHC) as requested by Merit Energy (Merit) included:

- Work plan development and project oversight;
- Collection of confirmation soil samples in the area of concern; and

Merit Energy Company West B # 38 Site January 19, 2007

# **Jim Hollon Consulting**

 Submittal of a Closure Compliance Report detailing field activities, analytical results, site maps and photos.

### 1.3 Regulatory Framework

Crude oil facilities in New Mexico are generally regulated by the New Mexico Oil Conservation Division (NMOCD). Contamination of soil due to a surface release of crude oil is addressed within a NMOCD guideline titled *Guidelines for Remediation of Leaks, Spills and Releases.* Remediation standards for chloride contamination have not been published and are handled by the local district office on a case by case basis.

Soils which are impacted by petroleum constituents are scored according to the ranking criteria to determine their relative threat to public health, fresh water, and the environment. Such limits are defined by the depth to groundwater, wellhead protection area, and distance to surface water. Based on these ranking criteria, the remediation action level at this site is as follows:

Depth to Ground Water (As defined as vertical dista	>200 feet nce from lowermost contaminant	Ranking Score = 0 ts to seasonal high water level)
Wellhead Protection Area	>1000 feet to water source >200 feet to domestic well	Ranking Score = 0
Distance to Surface Water	>1000 feet	Ranking Score = 0
		Total Ranking Score = 0
Based on total ranking criter Benzene = 10 ppm BTEX = 50 ppm TPH = 5,000 ppm	ia of 0, the following remediation	n levels apply:

# 1.4 Standard of Care

Chlorides = Site Specific

Services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. JHC makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that JHC can not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report.

Merit Energy Company West B # 38 Site January 19, 2007

# **Jim Hollon Consulting**

#### 2.0 FIELD ACTIVITIES

#### 2.1 Site Remediation

Immediately upon discovery of the release a vacuum truck was summoned to begin recovery of the oil. A squeegee was utilized to collect all free oil and push it to the vacuum truck. A total of fifteen barrels of oil were recovered. The area was left to dry for three days, allowing the high end carbons to volatize. The soils were treated with M-1000, an oil degrading microbe, and roto-tilled.

On February 22, 2006, a composite sample was collected from four points along the affected area at a depth of 0-3 inches below ground surface (bgs). The samples were analyzed for total petroleum hydrocarbons (TPH) and benzene, ethyl-benzene, toluene and total xylenes (BTEX). The sample had a TPH concentration of 19,700 mg/kg and a BTEX concentration of 7.59 mg/kg. Following receipt of the analytical results, the soils were treated with M-1000 and roto-tilled on two separate occasions.

On August 10, 2006, four samples, labeled #1, #2, #3 and #4, were collected from four points along the affected area, starting near the point of release, at a depth of 0-3 inches bgs. The samples were analyzed for TPH. The samples had TPH concentrations of 10,500 mg/kg, 5,290 mg/kg, 5,440 mg/kg and 10,500 mg/kg, respectively. Following receipt of the analytical results, the soils were again treated with M-1000 and roto-tilled.

On November 11, 2006, a composite sample was collected from multiple points along the affected area at a depth of 0-3 inches bgs. The samples were analyzed for TPH and BTEX. The sample had a TPH concentration of 3,620 mg/kg and the BTEX concentration was below the reporting limits of 0.025 mg/kg.

#### 2.2 Soil Sampling

The soil sampling program included the collection of two composite soil samples and four grab soil samples from the impacted area on separate occasions. The soil samples were analyzed for TPH using EPA Method 8015M and BTEX using EPA Method 8021B. The soil samples were placed in laboratory prepared glassware, sealed with the identification label and placed on ice in a chest. The samples and completed chain-of-custody forms were relinquished to Environmental Lab of Texas in Odessa, Texas for analysis. The executed chain-of-custody forms and laboratory data sheets are provided in Appendix B.

Merit Energy Company West B # 38 Site January 19, 2007

# **Jim Hollon Consulting**

#### 3.0 DATA EVALUATION

The samples collected from the affected soils indicated declining TPH and BTEX concentrations. The laboratory results from the final composite soil sample indicated TPH and BTEX concentrations below NMOCD remediation levels, at 3,620 mg/kg and <0.025 mg/kg, respectively. The laboratory results are presented in Appendix B, Table 1.

#### 4.0 FINDINGS AND RECOMMENDATIONS

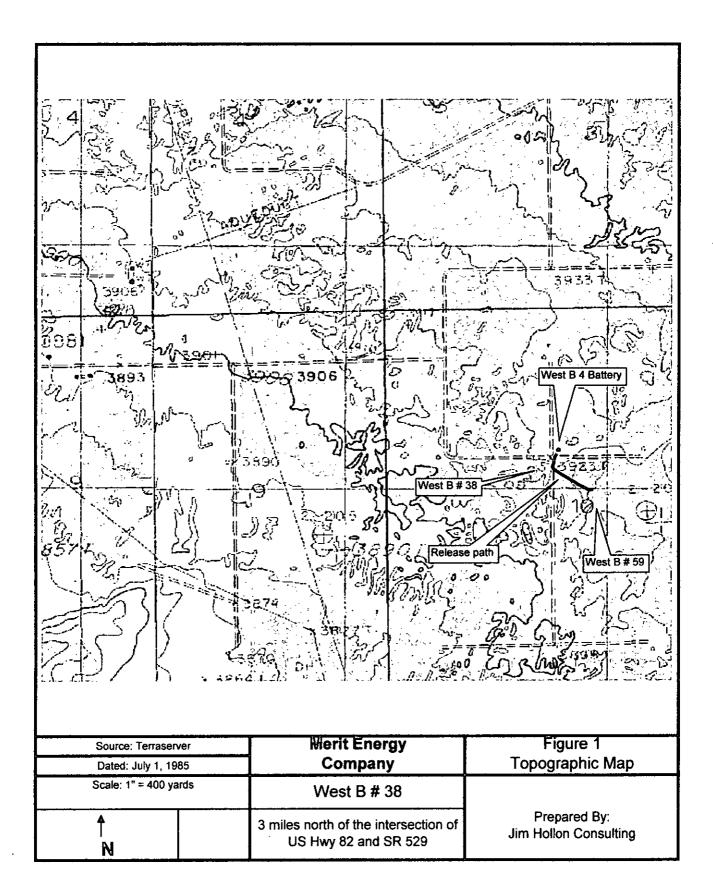
Jim Hollon Consulting submits this closure compliance report to Merit which documents the site closure activities. Based on results of the field activities and laboratory analysis, it is recommended Merit submit this report to the NMOCD as documentation that remediation was completed to NMOCD standards and recommends that Merit request a "no further action" letter for this site.

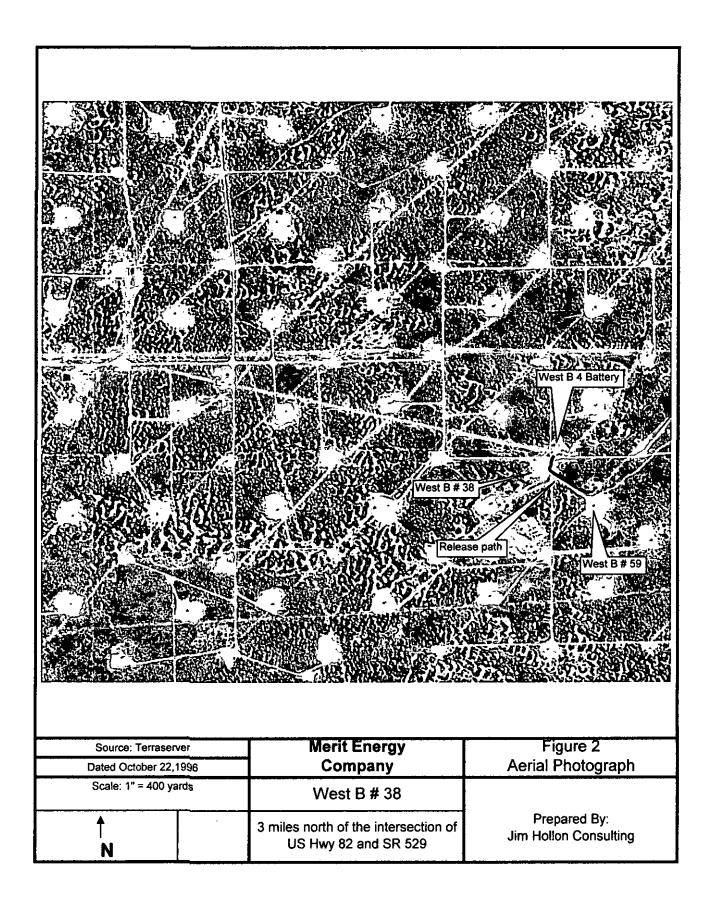
## DISTRIBUTION

- Copy 1: Mike Bratcher New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division, District 2 1301 W. Grand Artesia, NM 88210
- Copy 2: Jim Amos Bureau of Land Management 620 E. Greene Carlsbad, NM 88220
- Copy 3 & 4: Dwain Wall Merit Energy Company P.O. Box 69 Loco Hills, NM 88255
- Copy 5: Jim Hollon Jim Hollon Consulting 14034 W. Co. Rd. 123 Odessa, TX 79765

# APPENDIX A

Figure 1 – Topographic Map Figure 2 – Aerial Photograph





# APPENDIX B

Analytical Summary Tables Laboratory Data Sheets Laboratory Chain of Custody Documents

#### Table 1

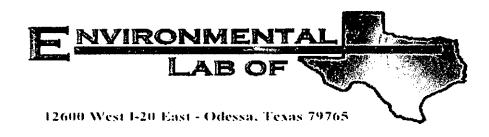
#### CONCENTRATIONS OF CHEMICALS OF CONCERN IN SOIL

#### Merit Energy West B # 38 (Batt) Site Loco Hills, Eddy County, New Mexico

· · · · · ·				EPA Met	hod 8015M			EPA Meth	od 8021B			
SAMPLE DATE	SAMPLE LOCATION	SAMPLE DEPTH	<b>TPH</b> C <sub>8</sub> -C <sub>12</sub>	TPH C <sub>12</sub> -C <sub>28</sub>	ТРН С <sub>28</sub> -С <sub>35</sub>	TPH C <sub>6</sub> -C <sub>35</sub>	BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES		
02/22/06	Comp	0-3"	1,160	14,700	3,820	19,700	<0.0250	0.511	2.110	4.970		
08/10/06	1	0-3"	271	9,270	981	10,500						
	2	0-3"	70.4	4,680	538	5,290	1					
	3	0-3"	J[29.7]	4,820	618	5,440	1					
	4	0-3"	238	9,370	923	10,500			1			
11/13/06	Comp	0-3"	J[23.2]	3,270	350	3,620	<0.0250	<0.0250	<0.0250	<0.0250		

All concentrations are in mg/kg

CONCENTRATIONS IN BOLD ARE ABOVE REGULATORY GUIDELINES J flag indicates the analyte was detected but below the Reporting Limit; therefore, the result is an estimated concentration.



# Analytical Report

# Prepared for:

Jim Hollon Terracon Consulting, Inc. 24 Smith Road, Ste. 261 Midland, TX 79705

Project: West B #38 Project Number: 94057472C Location: Loco Hills

Lab Order Number: 6B23020

Report Date: 03/03/06

Terracon Consulting, Inc.	Project: West B #38	Fax: (432) 684-9608
24 Smith Road, Ste. 261	Project Number: 94057472C	Reported:
Midland TX, 79705	Project Manager: Jim Hollon	03/03/06 08:45

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WB-38	6B23020-01	Soil	02/22/06 00:00	02/23/06 08:45

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

.

Terracon Consulting, Inc. 24 Smith Road, Ste. 261 Midland TX, 79705

#### Project: West B #38 Project Number: 94057472C Project Manager: Jim Hollon

Reported: 03/03/06 08:45

#### Organics by GC

#### **Environmental Lab of Texas**

	р:							
Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
· · · ·					·	• • •		
ND	0.0250	mg/kg dry	25	EB62305	02/23/06	02/23/06	EPA 8021B	
0.511	0.0250		-	•	м	•	-	
2.11	0.0250	-	*	-		*	*	
3.10	0.0250	*	-	-	,	•	"	
1.87	0.0250	-	-					
	80.2 %	80-1	20	"	n	н	11	
	118 %	80-1	20	"	"	"	"	
1160	100	mg/kg dry	10	EB62313	02/23/06	03/01/06	EPA 8015M	
14700	100	٩	n	•	•	•	۹	
3820	100	•	-	"	-	-	-	
19700	100		*			•	*	
	13.3 %	70-1	30	*	1	"		S-06
	10.8 %	70-1	30	"	M	-	19	S-06
	ND 0.511 2.11 3.10 1.87 1160 14700 3820	ND         0.0250           0.511         0.0250           2.11         0.0250           3.10         0.0250           1.87         0.0250           80.2 %         118 %           1160         100           14700         100           3820         100           19700         100	Result         Limit         Units           ND         0.0250         mg/kg dry           0.511         0.0250         "           2.11         0.0250         "           3.10         0.0250         "           1.87         0.0250         "           80.2 %         80-1.         118 %           1160         100         mg/kg dry           14700         100         "           19700         100         "	Result         Limit         Units         Dilution           ND         0.0250         mg/kg dry         25           0.511         0.0250         "         "           2.11         0.0250         "         "           3.10         0.0250         "         "           1.87         0.0250         "         "           80.2 %         80-120         118 %         80-120           1189         80-120         10         10           14700         100         "         "           3820         100         "         "           19700         100         "         "           13.3 %         70-130         "	Result         Limit         Units         Dilution         Batch           ND         0.0250         mg/kg dry         25         EB62305           0.511         0.0250         "         -         -           2.11         0.0250         "         -         -           3.10         0.0250         "         -         -           1.87         0.0250         "         -         -           80.2 %         80-120         "         -         -           118 %         80-120         "         -         -           1180         100         mg/kg dry         10         EB62313           14700         100         "         -         -           3820         100         "         -         -           19700         100         "         -         -	Result         Limit         Units         Dilution         Batch         Prepared           ND         0.0250         mg/kg dry         25         EB62305         02/23/06           0.511         0.0250         "         "         "         "           2.11         0.0250         "         "         "         "           3.10         0.0250         "         "         "         "           1.87         0.0250         "         "         "         "           80.2 %         80-120         "         "         "           1189%         80-120         "         "         "           1160         100         mg/kg dry         10         EB62313         02/23/06           14700         100         "         "         "         "         "           3820         100         "         "         "         "         "           19700         100         "         "         "         "         "	Result         Limit         Units         Dilution         Batch         Prepared         Analyzed           ND         0.0250         mg/kg dry         25         EB62305         02/23/06         02/23/06           0.511         0.0250         "         "         "         "         "           2.11         0.0250         "         "         "         "         "         "           3.10         0.0250         "         "         "         "         "         "           80.2 %         80-120         "         "         "         "         "         "           1160         100         mg/kg dry         10         EB62313         02/23/06         03/01/06           14700         0.0250         "         "         "         "         "           3820         100         mg/kg dry         10         EB62313         02/23/06         03/01/06           14700         100         "         "         "         "         "           3820         100         "         "         "         "         "           19700         100         "         "         "         <	Result         Limit         Units         Dilution         Batch         Prepared         Analyzed         Method           ND         0.0250         mg/kg dry         25         EB62305         02/23/06         02/23/06         EPA 8021B           0.511         0.0250         "         "         "         "         "         "           2.11         0.0250         "         "         "         "         "         "           3.10         0.0250         "         "         "         "         "         "           1.87         0.0250         "         "         "         "         "         "         "         "           1.87         0.0250         "

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 2 of 8

Reported:

03/03/06 08:45

#### **Organics by GC - Quality Control**

#### **Environmental Lab of Texas**

. Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB62305 - EPA 5030C (GC)					· · ·					
Matrix Spike Dup (EB62305-MSD1)	Sou		-01	Prepared &	Analyzed:	02/23/06		·	<u> </u>	
Benzene	1.15	0.0250	mg/kg dry	1.41	ND	81.6	80-120	1.86	20	
Foluene	1.30	0.0250	*	1.41	ND	92.2	80-120	8.83	20	
Ethylbenzene	1.52	0.0250	*	1.41	ND	108	80-120	1.87	20	
Xylene (p/m)	3.18	0.0250	۳	2.82	ND	113	80-120	5.45	20	
Kylene (o)	1.62	0.0250	٠	1.41	ND	115	80-120	7.21	20	
Surrogate: a,a,a-Trifluorotoluene	33.0		ug/kg	40.0		82.5	80-120	<b>_</b>		100-00
Surrogate: 4-Bromofluorobenzene	41.7		*	40.0		104	80-120			
Batch EB62313 - Solvent Extraction (GC)										
Blank (EB62313-BLK1)				Prepared: 0	02/23/06 A	nalyzed: 03	5/01/06			
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	NÐ	10.0	*							
Carbon Ranges C28-C35	ND	10.0	-							
Total Hydrocarbon C6-C35	ND	10.0	-							
Surrogate: 1-Chlorooctane	48.2		mg/kg	50.0		96.4	70-130			
Surrogate: 1-Chlorooctadecane	46.8		"	50.0		93.6	70-130			
LCS (EB62313-BS1)				Prepared: (	)2/23/06 A	nalyzed: 03	/01/06			
Carbon Ranges C6-C12	467	10.0	mg/kg wet	500		93.4	75-125			
Carbon Ranges C12-C28	433	10.0	*	500		86,6	75-125			
Fotal Hydrocarbon C6-C35	900	10,0	*	1000	·	90.0	75-125			
Surrogate: 1-Chlorooctane	60.6		mg/kg	50.0		121	70-130			· · ·
Surrogate: 1-Chlorooctadecane	59.7		**	50.0		119	70-130			
Calibration Check (EB62313-CCV1)				Prepared: 0	02/23/06 A	nalyzed: 03	/01/06			
Carbon Ranges C6-C12	241		mg/kg	250		96.4	80-120			
Carbon Ranges C12-C28	267		м	250		107	<b>80-</b> 120			
Fotal Hydrocarbon C6-C35	508		н	500		102	80-120			
Surrogate: 1-Chlorooctane	57.6		n	50.0		115	70-130			
urrogate: 1-Chlorooctadecane	56.9			50.0		114	70-130			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Reported: 03/03/06 08:45

#### **Organics by GC - Quality Control**

#### **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EB62313 - Solvent Extraction (GC	)		······································		····					
Matrix Spike (EB62313-MS1)	Sou	rce: 6B23021	-11	Prepared: (	2/23/06 A	nalyzed: 03	/01/06			
Carbon Ranges C6-C12	594	10.0	mg/kg dry	518	ND	115	75-125			
Carbon Ranges C12-C28	591	10.0		518	ND	114	75-125			
Total Hydrocarbon C6-C35	1190	10.0	•	1040	ND	114	75-125			
Surrogate: 1-Chlorooctane	63.0		mg/kg	50.0		126	70 <b>-</b> 130			
Surrogate: 1-Chlorooctadecane	57.4		"	50.0		115	70-130			
Matrix Spike Dup (EB62313-MSD1)	Sou	rce: 6B23021	-11	Prepared: (	2/23/06 A	nalyzed: 03	/01/06			
Carbon Ranges C6-C12	598	10.0	mg/kg dry	518	ND	115	75-125	0.671	20	
Carbon Ranges C12-C28	591	10.0	-	518	ND	114	75-125	0.00	20	
Total Hydrocarbon C6-C35	1190	10.0	н	1040	ND	114	75-125	0.00	20	
Surrogate: 1-Chlorooctane	63.4		mg/kg	50.0		127	70-130			
Surrogate: I-Chlorooctadecane	\$7.3		*	50.0		115	70-130			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Terracon Consulting, Inc. 24 Smith Road, Ste. 261 Midland TX, 79705		Proj Project Num Project Mana	ber: 94						Fax: (432) Repo 03/03/0	rted:
Genera	Chemistry Paran	neters by H Environme				ls - Quai	lity Cont	trol		
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EB62402 - General Preparatio	on (Prep)									
Blank (EB62402-BLK1)				Prepared: 0	2/23/06 A	nalyzed: 02	/24/06			
% Solids	100		%							
Duplicate (EB62402-DUP1)	Sourc	e: 6B22012-01		Prepared: C	2/23/06 A	nalyzed: 02	/24/06			
% Solids	98.0		%		98.2			0.204	20	
Duplicate (EB62402-DUP2)	Source	e: 6B23018-01		Prepared: 0	2/23/06 A	nalyzed: 02	/24/06			

%

99.0

99.1

Environmental Lab of Texas

% Solids

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 7 of 8

20

0.101

	Consulting, Inc. Road, Ste. 261		West B #38	Fax: (432) 684-9608
	TX, 79705	Project Number: Project Manager:		Reported: 03/03/06 08:45
		Notes and De	linitions	
S-06	The recovery of this surrogate is outs matrix interference's.	side control limits due to sample dil	ution required from high analyte	concentration and/or
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above th	e reporting limit		
NR	Not Reported			
dry	Sample results reported on a dry weight i	basis		
RPD	Relative Percent Difference			
LCS	Laboratory Control Spike			
MS	Matrix Spike			
Dup	Duplicate			

Report Approved By:

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director La Tasha Cornish, Chemist Sandra Sanchez, Lab Tech.

Date:

3/3/2006

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

Ciliz D. Kune

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

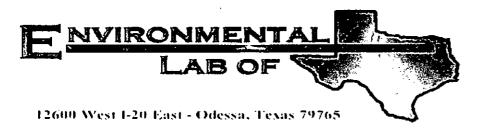
ستحيينه

Page 8 of 8

									TAT braining		-	<b> </b>			T					····-	]
									sentenceserg) TAT HEUS	<u> </u>					+				<u> </u>		ł
5										-					+		$\left  \cdot \right $		z		2
VES			ļ									$\square$			+					ŭ D	ljur sea
CHA	#38	-							(00) Cantres										، ۲	ñ	Ĵ
515	#	2	$\mathcal{X}$						TORN												3
ALY		2	-1				<u>ات</u>		4C3	<u> </u>	<b>İ</b>				-				동충.	:	
A.M.	٩ ا	ど	X				Analyza For	+	CEDENCEZOD XALE	×					4						3
AND	F	5	୍ବ				₹+	┿	Volation Service California	<b> </b>	<b> </b>		$\vdash$		+					ર	-5
8	Ŭ.	3	g				-+	-	Netals As Ag Ea CI CI Ph Ho	1					+	+-			Semple Containers Intact? Temperature Upon Receipt Laborature Comments.	ger bar	Label
20	3	5	2-				TOP		SNA 1 ESP / CEC		$\square$			-+	+				D upd	4	- T
OYA	a a	÷	ÿ	ŧ,			2		Anons (Cl. 504, COC, HCC3)						╈				Len L	4	1
chain of custody record and analysis request	Project Name: WEST B	Project # 9405-7472.C	Project Las: LOCO HILLS	R					Cestoria (Ca, Mg, Na, K)												T in
10		đ	Proj					9	TPHE FIGT BOTS TOTE TO	×											5 5
20 x	ä							Ĺ	(Anore (specify):	<b></b>										ļ	
HAIN								Mentry	196	1				_							2
Ŭ	i	ł	ĩ	ł	1	1		2	ernija Matok						+			_		1	3
	-				- {			Н	COME ( Specify)					-+-	+-					<b>[</b>	2/23/04
									anon											<u> </u>	
	1				~			θA1	ура, т					Ť	+						
					20			Preservativo	HOWN												
				ł	X			E.	אם												
	ļ				2				HAIDA						_					1	
					94			Ц	<del>6</del> 01	Ľ				_	+	_		_			
					1				Lo. of Containers						1						le C G
					FUT NO: 684.9608				balqmas antī												3
_			397	Ч						6					+						
Ltd.			5TE 26	79705					beigmat dif.(]	30-55-5										Racelived by:	Recontrad by ELOT
in Einin		Í	۲ ۲	n'		j			·-····	-					-	+				<u></u>	[]
Environmental Lab of Texas 12800 Weet Phone: 915-083-1800 Ddassa, Toxas 75793 Ddassa, Toxas 75793			Company Address: 24 S.M. 17 4 20.	X	ł															Time 545-	Tine
X	2		শ	4																8	
	기	্য	크												l					8	
D OF TEXAS Phone: 515-1800 Fex: 515-080-1713	Jun Hollow	3	넉	٩	0	3			30											2-23 0	5
	<u>ب</u> د	4	્ટ્ર	ž	99.	100			- 「 日 力 CODE											4	
- <del></del>	2	Å	~1	1	9				E E E E E E E E E E E E E E E E E E E											[	
Ľ	5	<b>N</b>	-	01	20	13				E 1											
ត្តិ		Η	ત	٤	68	V				3		ĺ	ĺ		ļ	1					
<u> </u>	÷1	2	4	i X		28		i		3					ĺ						
Ð	nage	Nac	dres		透見	urge				W B + 38				1							
Test T	t Mai	YUR	/ Adi	CINGEREZED: N. OL JND	plice	8ign					$\left  - \right $		-	-+	+	+-	┝╶╂		ų,	19	
20 H D	Project Manager:	COMPANY NAME TERRA CON	hurd	đ	Teleptions No: 684 - 9600	Sampler Signature:													rtion	1	
	<b>6</b>	0	Com		*	am;			٩ ٩		ŀĪ								atte	A CAR	
<u>کې چ</u>			U			Ψ				0				į				·		₩ 1 2 1	<b>F</b>
Environm 12800 West  - 20 East Odsesa, Toxes 75783									NCU30VO										Special Instructions:	Relinquished by	Relinquisted by
₩# ₩ Ö										L					1	لسل	L.L	l	न	12	<u>[æ]</u>

I

Environmental La	and the second secon			
Variance / Corrective Action 1	Report	- Ja		
lient: TCMLCM				
ete/Time: 2/23/010 9.00				
rder#: 4823020				
itials: ÜK				
Sample Receipt	Checkli	st		
emperature of container/cooler?	Yes	Nc	3,5	C
hipping containes/cooler in good condition?	63	No		
istody Seals intact on shipping container/cooler?	Yes	NG	CC: Crasent	
ustody Seals intact on sample bottles?	63	No	Not present	
hain of custody present?	825	No		<u> </u>
emple Instructions complete on Chain of Custody?		No   No	····	
hain of Custody signed when relinquished and received?		No No		I
hain ci custody agrees with sample labe!(s)	123	No 1		
ontainer labels legible and intact? ample Matrix and procerties same as on chain of custody?		No		
ample Matrix and procerdes same as on chain or custocy?	1 1/25	No I		· · · ·
amples procerly preserved?	1/25	No I		
ample bottles intact?	Yes I	Na		
reservations documented on Chain of Custody?	l Yes	No	· ·	<u>'</u>
entainers documented on Chain of Custody?	1 Vat	No	, <u>,,,,,,,</u> ,,,,,,,,,,,,,,,,,,,,,,,,	
ufficient sample amount for indicated test?	16	No		
All samples received within sufficient hold time?	1 12%	No		
/OC samples have zero headscace?	1 (3)	No	Nct Applicabl	el
			· · · · · · · · · · · · · · · · · · ·	······································
•				;
Variance Docu	mentatio	on:		,
Contact Person: Date/Time:			Contacted by	, Y:
Contact Person: Date/Time:			Contacted by	y:
Contact Person: Date/Time: Regarding:			Contacted by	y:
Contact Person: Date/Time: Regarding:			Contacted by	y:
Contact Person: Date/Time: Regarding:			Contacted by	y:
Contact Person: Date/Time: Regarding:			Contacted by	Y:
Contact Person: Date/Time: Regarding:			Contacted by	y:
Contact Person: Date/Time: Regarding:			Contacted by	y:
Contact Person: Date/Time: Regarding:			Contacted by	y:
Contact Person: Date/Time: Regarding:			Contacted by	y:
, .			Contacted by	Y:
Contact Person: Date/Time: Regarding:			Contacted by	У



# Analytical Report

# Prepared for:

Jim Hollon (for) Merit Energy Company P.O. Box 300 Whiteface, TX 79379

Project: West B-4 Battery Project Number: None Given Location: Loco Hills

Lab Order Number: 6H11003

Report Date: 08/14/06

Merit Energy Company P.O. Box 300 Whiteface TX, 79379

بهره في مدر

Project: West B-4 Battery Project Number: None Given Project Manager: Jim Hollon (for) ,

Fax: (806) 229-2583

## ANALYTICAL REPORT FOR SAMPLES

					-
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	~
B4 #1	6H11003-01	Soil	08/10/06 11:00	08-11-2006 08:20	,
B4 #2	6H11003-02	Soil	08/10/06 11:05	08-11-2006 08:20	
B4 #3	6H11003-03	Soil	08/10/06 11:10	08-11-2006 08:20	
B4 #4	6H11003-04	Soil	08/10/06 11:15	08-11-2006 08:20	

		O	rganics by	GC					
		Environ	mental La	b of Te	exas				
		Reporting		<u>.</u>					
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B4 #1 (6H11003-01) Soit									
Carbon Ranges C6-C12	271	50.0	mg/kg dry	5	EH61102	08/11/06	08/11/06	EPA 8015M	
Carbon Ranges C12-C28	9270	50.0	•	-	•	•	•	-	
Carbon Ranges C28-C35	981	50.0	•	•	-		•	-	
Total Hydrocarbons	10500	50.0	#			-		-	
Surrogate: 1-Chlorooctane		22.4 %	70-13	0	"	-	-	#	S-00
Surrogate: 1-Chlorooctadecane		50.4 %	70-13	0		n	ы	<b>15</b>	S-00
B4 #2 (6H11003-02) Soil									
Carbon Ranges C6-C12	70.4	50,0	mg/kg dry	5	EH61102	08/11/06	08/11/06	EPA 8015M	
Carbon Ranges C12-C28	4680	50.0	•	٠		•		-	
Carbon Ranges C28-C35	538	50.0	-	-	-		-	-	
Total Hydrocarbons	5290	50.0	•	•	•	+	•	-	
Surrogate: 1-Chlorooctane		18.4 %	70-13	0	-	π	*	"	S-00
Surrogate: 1-Chlorooctadecane		39.6 %	70-13	0	-	~	-	-	S-06
B4 #3 (6H11003-03) Soll									
Carbon Ranges C6-C12	J [29.7]	50.0	mg/kg dry	5	EH61102	08/11/06	08/11/06	EPA 8015M	
Carbon Ranges C12-C28	4820	50.0	-		-		-	•	
Carbon Ranges C28-C35	618	50.0	-	-	"	n		•	
Total Hydrocarbons	5440	50.0	R	"	•	н		M	
Surrogate: 1-Chlorooctane		19.5 %	70-13	0	"	n	"	#	S-06
Surrogate: 1-Chlorooctadecane		34.8 %	70-13	0	"	"	-	0	S-06
B4 #4 (6H11003-04) Soil									
Carbon Ranges C6-C12	238	50.0	mg/kg dry	5	EH61102	08/11/06	08/11/06	EPA 8015M	
Carbon Ranges C12-C28	9370	50.0	-	•	•	-	•	•	
Carbon Ranges C28-C35	923	50.0	•	-	•	-	•	-	
Total Hydrocarbons	10500	50.0	•	•		-	•		
Surrogate: 1-Chlorooctane		21.4 %	70-13	0	"	<b>"</b>	"	»	S-06
Surrogate: 1-Chlorooctadecane		58.0 %	70-13	)	*	π	"	*	S-06

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

: بر منف<del>ت م</del>

#### General Chemistry Parameters by EPA / Standard Methods

#### Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B4 #1 (6H11003-01) Soil				·····					
% Moisture	1.8	0.1	%	1	EH61107	08/11/06	08/11/06	% calculation	
B4 #2 (6H11003-02) Soil			<u>.</u>						
% Moisture	0.6	0.1	%	1	EH61107	08/11/06	08/11/06	% calculation	
B4 #3 (6H11003-03) Soil									
% Moisture	4.5	0.1	%	ı	EH61107	08/11/06	08/11/06	% calculation	
B4 #4 (6H11003-04) Soil									
% Moisture	t.1	0,1	%	I	EH61107	08/11/06	08/11/06	% calculation	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 3 of 7

#### Organics by GC - Quality Control

#### **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EH61102 - EPA 5030C (GC)						<u> </u>				
Blank (EH61102-BLK1)				Prepared &	Analyzed:	08/11/06				
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0								
Carbon Ranges C28-C35	ND	10.0	н							
Total Hydrocarbons	ND	10.0	-							
Surrogate: 1-Chlorooctane	62.4		mg/kg	50.0		125	70-130			
Surrogate: 1-Chlorooctadecane	60.7		"	50.0		121	70-130			
LCS (EH61102-BS1)				Prepared &	Analyzed:	08/11/06				
Carbon Ranges C6-C12	487	10.0	mg/kg wet	500		97.4	75-125			
Carbon Ranges C12-C28	489	10.0	*	500		97.8	75-125			
Carbon Ranges C28-C35	ND	10.0	*	0.00			75-125			
Total Hydrocarbons	976	10.0		1000		97.6	75-125			
Surrogate: 1-Chlorooctane	64.3		mg/kg	50,0		129	70-130			
Surrogate: 1-Chlorooctadecane	58.5		"	50.0		117	70-130			
Calibration Check (EH61102-CCV1)				Prepared &	Analyzed:	08/11/06				
Carbon Ranges C6-C12	210		mg/kg	250		84.0	80-120			
Carbon Ranges C12-C28	245		н	250		98,0	80-120			
Total Hydrocarbons	455			500		91.0	80-120			
Surrogate: 1-Chlorooctane	63.9		17	50.0		128	70-130			<u>‹</u>
Surrogate: 1-Chlorooctadecane	64.3		π	50.0		129	70-130			
Matrix Spike (EH61102-MS1)	Sou	irce: 6H11001	1-01	Prepared &	Analyzed:	08/11/06				
Carbon Ranges C6-C12	518	10.0	mg/kg dry	542	7.11	94.3	75-125			
Carbon Ranges C12-C28	524	10.0	н	542	37.8	89.7	75-125			
Carbon Ranges C28-C35	ND	10.0	r	0.00	ND		75-125			
Total Hydrocarbons	1040	10.0	"	1080	37. <b>8</b>	92.8	75-125			
Surrogate: 1-Chlorooctane	64.7		mg/kg	50.0		129	70-130			
Surrogate: 1-Chlorooctadecane	60.3		"	50.0		121	70-130			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

and the first

#### **Organics by GC - Quality Control**

#### **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EH61102 - EPA 5030C (GC)				<u></u>						
Matrix Spike Dup (EH61102-MSD1)	Source	ce: 6H11001	-01	Prepared &	2 Analyzed:	08/11/06				
Carbon Ranges C6-C12	608	10.0	mg/kg dry	542	7.11	111	75-125	16.0	20	
Carbon Ranges C12-C28	566	10.0	-	542	37.8	97.5	75-125	7.71	20	
Carbon Ranges C28-C35	ND	10.0	•	0.00	ND		75-125		20	
Total Hydrocarbons	1170	10.0	-	1080	37.8	105	75-125	11.8	20	
Surrogate: 1-Chlorooctane	81.8		mg/kg	100	·	81.8	70-130			
Surrogate: 1-Chlorooctadecane	74.4		"	100		74.4	70-130			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 5 of 7

#### General Chemistry Parameters by EPA / Standard Methods - Quality Control

#### **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EH61107 - General Preparation (Prep)										
Blank (EH61107-BLK1)				Prepared &	: Analyzed:	08/11/06				
% Solids	100		%							
Duplicate (EH61107-DUP1)	Sou	rce: 6H11001-	01	Prepared &	Analyzed:	08/11/06				
% Solids	92.0		%		92.2			0.217	20	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written appraval of Environmental Lab of Texas.

P.O. Box	rgy Company 300 2 TX, 79379	Project: Project Number: Project Manager:		Fax: (806) 229-2583
		Notes and De	finitions	
S-06	The recovery of this surrogate is o matrix interference's.	utside control limits due to sample dil	ution required from high analyte concen-	tration and/or
J	Detected but below the Reporting	Limit; therefore, result is an estimated	concentration (CLP J-Flag)	
DET	Analyte DETECTED			
ND	Analyte NOT DETECTED at or above	the reporting limit		
NR	Not Reported			
dry	Sample results reported on a dry weight	nt basis		
RPD	Relative Percent Difference			
LCS	Laboratory Control Spike			
MS	Matrix Spike			
Dup	Duplicate			

Report Approved By:

Raland K Jutits Date: 8/14/2006

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 7 of 7

	<u>6471.627</u>				NPDES		sni 27 ,s	<ul> <li>At (eluberb2-erc) TAT</li> <li>TAT by</li> </ul>	_	×			<u> </u>					3	: 
4L YS/S REQUEST Phone: 432-563-1800 Fax: 432-563-1713	B-4 &		57		] ткр	For,			N.O.F.N RCI								ainer(s) ar(s)	E.	
CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST t1-20 East 732-563-160 xxxx 73765 * 732-563-171	: WEST		LOCO HELS		K Standard	Analyze For.		። ሉቱ <mark>ላሻ ይ</mark> ም ርሻ ር፣ <u>ъ</u> ዖ <del>ነ-</del> በ <del>20</del> ይሁ ነ ርድር	3 \ PLA2 .25.00M .000000V Iovime2	×						Laboratory Comments: Sample Containers Intact? VOCs Free of Headsness?	Custody seals on container(s) Custody seals on cooler(s)	Surpresmant University 2 by Sampler/Client Rep 7 by Courter?	dec alues
RECORD AI	Project Name:	Project#:	Project Lec:	;≇ Od	Report Format:			(CT 204' CO3' HCO3) (CP' Mô' N9' K) 81 90139 1002 1002 1002	na: Hat EnoiseO	×			Ą			365		amir A (34)	. Fume
CUSTODY I					Rep Kensek		vinte I	Decity)	PHO-WAD	Ś							Date	Date	, Date
CHAIN OF 12600 West I-20 East Odesee, Texes 79765								5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	O <sup>4</sup> S <sup>4</sup> BN HO <sup>4</sup> N <sup>1</sup> OS <sup>4</sup> H							87/ Bu			
12600 Wes Odeses, Ti			1					- <b> </b>	HIC BB	X			<u>&gt;</u>			5800			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
				29	Fax No: <u>73.</u> e-mail: V <sub>141</sub> .	1		Sampled		11:00 1	11:05	11:10	11:15 W			Below			1
		2		793				peidmas	S eteCl	8-10-06			-3			7PH 15	Received by:	Received by:	Received by ELOT:
S		ENERGY		X				Depth	gnibn3							Ľ.			Time
жа	Z	くり	d M M	'	268			ujdag Buji	ពករព្នទទ										1
Environmental Lab of Texas	han Hould	MERIT	PO GOX	V	432 9631-5768				DE							RUN BTEK	Date	Date	Date
nmental	Project Manager:	Company Name	Company Address:	ţ	Telephone No: 4		1.4111003	)	FIELD CODE	#1	#2	<b>≰</b> 3	#4			Y-INO	6		
Enviror	Project	Compa	Compa	City/State/Zip:	Telephi Sampla		(lab use only) Concers *-		)#8VI	5 84	62 R4	05 84	<u> 24</u> 84		 	Special Instructions:	Relinquished by:	Refinalished by:	Relinquished by:

## Environmental Lab of Texas Variance/ Corrective Action Report- Sample Log-In

ht:	Menit Energy	
:/ Time:	8/11/de 8:38	
1D # :	6H11003	
als:	UZ	

#### Sample Receipt Checklist

			<b>O</b> 12
			Client initials
Temperature of container/ cooler?	Yes	No	5,0 °C
Shipping container in good condition?	(Tes	No	
Custody Seals intact on shipping container/ cooler?	Yes	No	NOT Present
Custody Seals intact on sample bottles/ container?	Yes	No	Not Present
Chain of Custody present?	¥ <b>D</b> S	No	
Sample instructions complete of Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished/ received?	Yes	No	
Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont. Etay
Container label(s) legible and intact?	Yes	No	Not'Applicable
Sample matrix/ properties agree with Chain of Custody?	Yes	No	
Containers supplied by ELOT?	<b>V</b>	No	
2 Samples in proper container/ bottle?	Xes	No	See Below
3 Samples properly preserved?	(es	No	See Below
Sample bottles intact?	Xes	No	
5 Preservations documented on Chain of Custody?	Ves,	No	
3 Containers documented on Chain of Custody?	Yes	No	
7 Sufficient sample amount for indicated test(s)?	7755	No	See Below
3 All samples received within sufficient hold time?	Yes	No	See Below
9 VOC samples have zero headspace?	<b>Ke</b> s	No	Not Applicable

#### Variance Documentation

\_\_\_\_\_

Date/ Time: .

\_\_\_\_\_

intact;

garding:

prrective Action Taken:

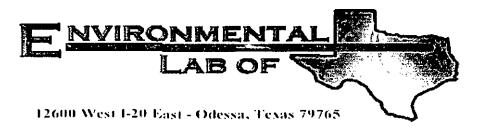
neck all that Apply:

 See attached e-mail/ fax

.

Contacted by:

Client understands and would like to proceed with analysis Cooling process had begun shortly after sampling event



# Analytical Report

Prepared for:

Jim Hollon (for) Merit Energy Company P.O. Box 300 Whiteface, TX 79379

Project: West B #38 (B-4 batt) Project Number: None Given Location: Loco Hills

Lab Order Number: 6K14007

Report Date: 11/16/06

Merit Energy Company P.O. Box 300 Whiteface TX, 79379 Project:West B #38 (B-4 batt)Project Number:None GivenProject Manager:Jim Hollon (for)

Fax: (806) 229-2583

#### ANALYTICAL REPORT FOR SAMPLES

			the second s		
Sample ID	Laboratory ID	Matrix	Date Sampled Date Receive	ed	
Composite 0-3"	6K14007-01	Soil	11/13/06 12:00 11-14-2006 13	3:40	

Page 1 of 8

#### Organics by GC

#### **Environmental Lab of Texas**

		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite 0-3" (6K14007-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK61505	11/15/06	11/16/06	EPA 8021B	
Toluene	ND	0.0250	H	•	•	*		71	
Ethylbenzene	ND	0.0250	*	•	•	*	*	7	
Xylene (p/m)	ND	0,0250	*	*	•	*	•	-	
Xylene (o)	ND	0.0250		м	-	*	*	-	
Surrogate: a,a,a-Trifluorotoluene		95.0 %	80-1	20	-	#	"	Ħ	
Surrogate: 4-Bromofluorobenzene		102 %	80-1	20	"	r	r	"	
Carbon Ranges C6-C12	J [23.2]	50.0	mg/kg dry	5	EK61417	11/14/06	11/15/06	EPA 8015M	1
Carbon Ranges C12-C28	3270	50,0	-	-		-	M	-	
Carbon Ranges C28-C35	350	50.0	-		-	-	7	-	
Total Hydrocarbons	3620	50,0	-	-	•	+	n	-	
Surrogate; 1-Chlorooctane		18.7 %	70-1	30	"	"	*	-	S-06
Surrogate: 1-Chlorooctadecane		30.2 %	70-1	30	-		۲	#	S-06

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Project: West B #38 (B-4 batt) Project Number: None Given Project Manager: Jim Hollon (for)

### General Chemistry Parameters by EPA / Standard Methods

#### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite 0-3" (6K14007-01) Soil									
% Moisture	ND	0.1	%	1	EK61503	11/14/06	11/15/06	% calculation	

Environmental Lab of Texas

بالم والمراجزة المراجع The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

. . .

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Project: West B #38 (B-4 batt) Project Number: None Given Project Manager: Jim Hollon (for)

## **Organics by GC - Quality Control**

### **Environmental Lab of Texas**

		Reporting	<b></b> .	Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EK61417 - Solvent Extraction (GC)										
Blank (EK61417-BLK1)				Prepared &	Analyzed:	11/14/06				
Carbon Ranges C6-C12	ND	10.0	mg/kg wet							
Carbon Ranges C12-C28	ND	10.0	-							
Carbon Ranges C28-C35	ND	10.0	-							
Total Hydrocarbons	ND	10.0								
Surrogate: 1-Chlorooctane	41.8		mg/kg	50.0		83.6	70-130	· · · ·		
Surrogate: 1-Chlorooctadecane	54.1		*	50.0		108	70-130			
LCS (EK61417-BS1)				Prepared &	Analyzed:	11/14/06				
Carbon Ranges C6-C12	460	10.0	mg/kg wet	500		92.0	75-125			
Carbon Ranges C12-C28	427	10.0	*	500		85.4	75-125			
Carbon Ranges C28-C35	ND	10.0	-	0.00			75-125			
Total Hydrocarbons	887	10.0	-	1000		88.7	75-125			
Surrogate: 1-Chlorooctane	48.9		mg/kg	50.0		97.8	70-130			
Surrogate: 1-Chlorooctadecane	54.5			50.0		109	70-130			
Calibration Check (EK61417-CCV1)				Prepared: 1	1/14/06 A	nalyzed: 1 i	/15/06			
Carbon Ranges C6-C12	208		mg/kg	250		83.2	80-120			
Carbon Ranges C12-C28	275			250		110	80-120			
Total Hydrocarbons	483		-	500		96.6	80-120			
Surrogate: 1-Chlorooctane	54.4		"	50.0		109	70-130	•		
Surrogate: 1-Chlorooctadecane	64.0			50.0		128	70-130			
Matrix Spike (EK61417-MS1)	Sou	irce: 6K1400:	5-01	Prepared: 1	1/14/06 A	nalyzed: 11	/15/06			
Carbon Ranges C6-C12	512	10.0	mg/kg dry	546	ND	93.8	75-125			
Carbon Ranges C12-C28	504	10.0		546	ND	92.3	75-125			
Carbon Ranges C28-C35	ND	10.0	-	0.00	ND		75-125			
Total Hydrocarbons	1020	10.0		1090	ND	93.6	75-125			
Surrogate: 1-Chlorooctane	60,6		mg/kg	50.0		121	70-130			
Surrogate: 1-Chlorooctadecane	64.5		"	50.0		129	70-130			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

nana 1996 s

12600 West 1-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

### **Organics by GC - Quality Control**

### **Environmental Lab of Texas**

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch EK61417 - Solvent Extraction (GC)										
		<					4 5 10 5			

Matrix Spike Dup (EK61417-MSD1)	Sourc	e: 6K14005	-01	Prepared: 1	1/14/06	Analyzed: 1	1/15/06			
Carbon Ranges C6-C12	532	10,0	mg/kg dry	546	ND	97,4	75-125	3.83	20	
Carbon Ranges C12-C28	525	10,0	*	546	ND	96.2	75-125	4.08	20	
Carbon Ranges C28-C35	ND	10.0	*	0.00	ND		75-125		20	
Total Hydrocarbons	1060	10.0	*	1090	ND	97.2	75-125	3.85	20	
Surrogate: 1-Chlorooctane	64.4		mg/kg	50.0		129	70-130		· · ·	
Surrogate: 1-Chlorooctadecane	64.7		"	50.0		129	70-130			

#### Batch EK61505 - EPA 5030C (GC)

Blank (EK61505-BLK1)				Prepared & Anal	lyzed: 11/15/06		
Benzene	ND	0.0250	mg/kg wet				
Toluene	ND	0,0250	N				
Ethylbenzene	ND	0.0250	н				
Xylene (p/m)	ND	0.0250	"				
Xylene (o)	ND	0.0250					
Surrogate: a,a,a-Trifluorotoluene	39.6		ug/kg	40.0	99.0	80-120	
Surrogate: 4-Bromofluorobenzene	35,8		"	40.0	89.5	80-120	
LCS (EK61505-BS1)				Prepared: 11/15/	06 Analyzed: 1	1/16/06	
Benzene	1.10	0.0250	mg/kg wet	1.25	88.0	80-120	
Toluene	1.06	0.0250	*	1.25	84.8	80-120	
Ethylbenzene	1.21	0.0250	*	1.25	96.8	80-120	
Xylene (p/m)	2.04	0.0250	-	2.50	81.6	80-120	
Xylene (o)	1.04	0.0250	-	1,25	83.2	80-120	
Surrogate: a,a,a-Trifluorotoluene	32.5		ug/kg	40.0	81.2	80-120	
Surrogate: 4-Bromofluorobenzene	45.0		*	40.0	112	80-120	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

### Organics by GC - Quality Control

### **Environmental Lab of Texas**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK61505 - EPA 5030C (GC)						······································				
Calibration Check (EK61505-CCV1)				Prepared &	Analyzed:	11/15/06				
Benzene	56.5		ug/kg	50.0		113	80-120			
Toluene	53.1		-	50.0		106	80-120			
Ethylbenzene	50.7			50.0		101	80-120			
Xylene (p/m)	93.2		-	100		93.2	80-120			
Xylene (o)	49.7		-	50.0		99.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	43.9		"	40.0	· · · · ·	110	80-120			
Surrogate: 4-Bromofluorobenzene	46.0		-	40.0		115	80-120			
Matrix Spike (EK61505-MS1)	Sou	rce: 6K14012	2-09	Prepared &	Analyzed:	11/15/06				
Benzene	1.44	0.0250	mg/kg dry	1.39	ND	104	80-120			
Totuene	1.44	0.0250	-	1.39	ND	104	80-120			
Ethylbenzene	1.24	0.0250	-	1.39	ND	89.2	80-120			
Xylene (p/m)	2.75	0.0250	-	2.77	ND	99.3	80-120			
Xylene (o)	1,39	0.0250		1,39	ND	100	80-120			
Surrogate: a,a,a-Trifluorotoluene	40.4		ug/kg	40.0		101	80-120			
Surrogate: 4-Bromofluorobenzene	46.4		*	<b>40</b> .0		116	80-120			
Matrix Spike Dup (EK61505-MSD1)	Sou	rce: 6K14012	2-09	Prepared &	: Analyzed:	11/15/06				
Benzene	1.21	0.0250	mg/kg dry	1.39	ND	87.1	80-120	17.7	20	
Toluene	1.16	0.0250	*	1,39	NÐ	83.5	80-120	21.9	20	
Ethylbenzene	1.31	0.0250	м	1,39	ND	94.2	80-120	5,45	20	
Xylene (p/m)	2.28	0.0250	-	2.77	ND	82.3	80-120	18.7	20	
Xylene (0)	1.18	0.0250	-	1.39	ND	84.9	80-120	16,3	20	
Surrogate: a,a,a-Triftuorotoluene	34.6		ug/kg	40.0		86.5	80-120			
Surrogate: 4-Bromofluorobenzene	39.8		-	40.0		99.5	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

### General Chemistry Parameters by EPA / Standard Methods - Quality Control

#### **Environmental Lab of Texas**

		Reporting	Spike	Source		%REC		RPD	
Analyte	Result	Limit Un	ts Leve	Result	%REC	Limits	RPD	Limit	Notes
Batch EK61503 - General Preparation	(Prep)								
Blank (EK61503-BLK1)			Prepare	l: 11/14/06 A	nalyzed: 11	/15/06			
% Solids	100	%							
Duplicate (EK61503-DUP1)	Sour	ce: 6K13015-01	Ргераге	l: 11/14/06 A	nalyzed: 11	/15/06			
% Solids	95.2	%		95.0			0.210	20	
Duplicate (EK61503-DUP2)	Source	ce: 6K14006-03	Prepare	11/14/06 A	nalyzed: 11	/15/06			
% Solids	92.5	%		92.8		-	0.324	20	
Duplicate (EK61503-DUP3)	Sour	e: 6K14012-10	Prepare	I: 11/14/06 A	nalyzed: 11	/15/06			
% Solids	97.1	%		97.6			0,514	20	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 7 of 8

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

#### **Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
R	The RPD exceeded the method control limit. The individual analyte QA/QC recoveries, however, were within acceptance limits.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
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
- LCS Laboratory Control Spike
- MS Matrix Spike
- Dup Duplicate

Report Approved By:

Raland K Junis

Date: 11/16/2006

Raland K. Tuttle, Lab Manager Celey D. Keene, Lab Director, Org. Tech Director Peggy Allen, QA Officer Jeanne Mc Murrey, Inorg. Tech Director LaTasha Cornish, Chemist Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Page 8 of 8

-----

12600 West 1-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Project Manager:	Jim Hollon						Ŭ	Odessa, Texes 79766	. 10 10	2 Sec	Odessa, Toxas 79766	ĺ	,	ejor <sup>q</sup>	2 17 17	>  볼	/est	5#30 #33	Fax: 432-563-1713 Project Name: <u>West B #38 (B-4 batt)</u>	Fax: 432-463-1713 B #38 (B-4 batt)	1713		F
Company Name	Ment Energy Company	Aunadi					Í	·							Project #:	۱ *							- F
Company Address: P.O. Box 300	P.O. Box 300							Í			1		I	Pro		Project Loc: 1000 Hills	8						
City/Stata/Zip:	Whiteface, Texas 79379	79379		ĺ							]		1		ā.	FO #	ļ		[				
<b>Telep</b> hone No:	432-631-5785					Fax No: 432-563-1166	132-56	3-110	ø	ł			ا ھ	Report Format:	smal		Standard	dard	0	and D			8
Sampler Signature:	- In Hal	R				e-mail: jim.holon@sboglobal.ne	in.ho	<b>Ö</b> uo		2.12	*			L				ł	Į				
		r					I	j	I					┉┻┯┻┯		TOTAL:		₹ –		ъ			
ORDER #: UN 40	NI						Ч	Pres	ervatio	0 <b>8</b> 0	Preservation & e of Containers	seri	Matrix	th		┝		┟─	05				
پې ((ایس جمع وبا) و ورې	FIELD CODE	, <u>1997</u> , 19977, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1997, 1	mgaO gnimiga8	under Guipus	belqma2 elsQ	belgmeS emH	No. of Containers	HAQ <sup>2</sup>	ЮН	HOPN POS <sup>2</sup> H	C/Sten	anov	Other ( Specify)	Table Speeds sides for the	Cationa (Ca. 140, Va. K) TPH: 418. (Ca. 140, Va. K)	EAR / ESP / CEC	Metale: As Ag Ba Cd Cr Pb Hg	Voldities	Semivolatios	BCI	Chlorides		
	Composite				11/13/2006	12:00	-	×		-		<b>†</b>			l×		+		+	-	<b> </b>		
																	-						
			╉		-					+	_	+	_	+	+								~
				+	$\left  \right $		┿	+	Ĺ	╉╼		+		+	┢		+	+		1	┨	+	<u> </u>
							╞╌┼╴	┝╌┼╴		┝─┝		┝╍┤╸			┝╌┠╸		┣──┼-	┝──├╴			$\left\{ + \right\}$		
			+	++			++	╶┼╌┼╴		╋╋	1-	╶╋╼╋╸		++	╶╂─┼╴	╉┯┾╴	+-+-				+		
										+					+		+				+	$\Box$	
Special instructions:	Please run BTEX only if TPH is	EX only i	I TPH IS		below 5000 mg/kg											Same VOC	rator la Co Free	e de la	Laboratory Comments: Sample Containers Intact? VOCa Free of Headsnece	្លេដុទ្ធ		98° 12	Die
Relinquished by			11ma 12 12 12		Received by:		]						Cats ats	Ē	1 Iuna		88- 66-	887 왕왕1	Custody seets on container(s) Custody seets on contain(s)	a) a) a)	~		
Retinquished by:	₹   	Date			Received by:								Cab	Ē	8411			「「「「「」」」	Sample Hend Delivered by Souther Client Rep. by Souther UPS	പ് പട്ടും	Ĥ	୧୭୫ୁ ଜୁନ୍ଦୁ	Lone Star
Reinquished by:		Date Date		1	Received by ELOT:	5	12		1				0ate 1114 N.A	1 27	and Cho	A-mail	D22 Beretu	<u></u>	FDZ CLASS Tempereture Upon Receipt		0 ئا	0	

# **Environmental Lab of Texas** Variance/ Corrective Action Report- Sample Log-in

<b>Dient:</b>	Mon't Encrav
Date/ Time:	11/14/06 13:40
.ab ID # :	(Ki4007
nitials:	CK-

## Sample Receipt Checklist

•				Client Initia
म	Temperature of container/ cooler?	Yes	No	5,0 °C
2	Shipping container in good condition?	Ces	No	
-3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present
4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present
5	Chain of Custody present?	() BS	No	
6	Sample instructions complete of Chain of Custody?	<b>CO</b> B	No	
:7	Chain of Custody signed when relinquished/ received?	<b>Te</b> s	No	
8	Chain of Custody agrees with sample label(s)?	(Tes	No	ID written on Cont./ Lid
9	Container label(s) legible and intact?	Ces	No	Not Applicable
10	Sample matrix/ properties agree with Chain of Custody?	Ares	No	
11	Containers supplied by ELOT?	Xes	No	
12	Samples in proper container/ bottle?	Yes	No	See Below
13	Samples properly preserved?	Yes	No	See Belaw
14	Sample bottles intact?	Yes	No	
15	Preservations documented on Chain of Custody?	Yes	No	
16	Containers documented on Chain of Custody?	(es	No	
17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below
18	All samples received within sufficient hold time?	tes	No	See Below
19	Subcontract of sample(s)?	Yes	No	Not Applicable
20	VOC samples have zero headspace?	Yes	No	Not Applicable

# Variance Documentation

ontact:		Contacted by:	Date/ Time:	
egarding:				
orrective Action Taker	1:			
heck all that Apply:		See attached e-mail/ fax Client understands and would like to Cooling process had begun shortly a		

**APPENDIX C** 

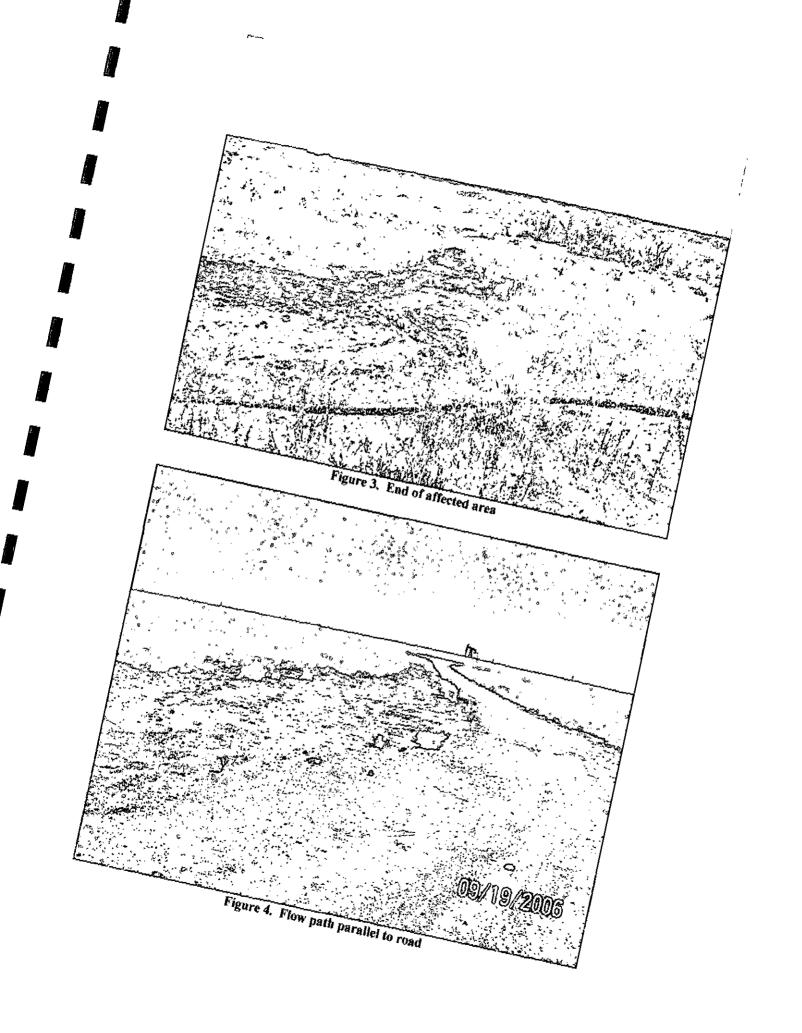
Photographs



Figure 1. Flow path parallel to road



Figure 2. End of affected area



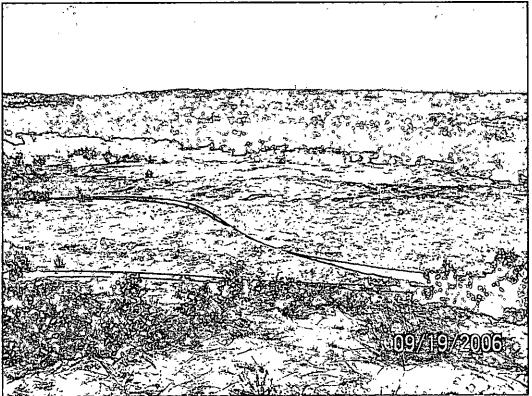


Figure 5. End of affected area

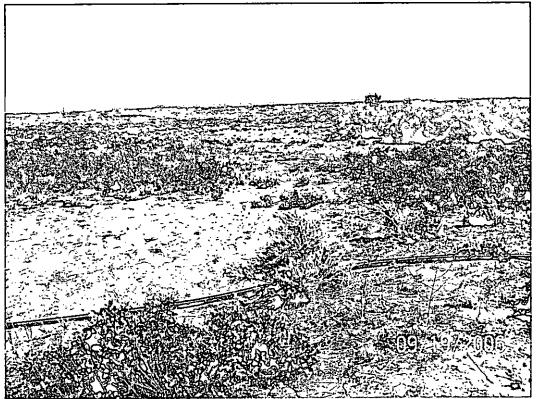


Figure 6. End of affected area

# APPENDIX D

# **Regulatory Reports**

.

.