District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

Month - Year
MAR 29 2007
OCD - ARTESIA, NM

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action

nMLB0719155473

OPERATOR

Initial Report ☒ Final Report

Name of Company: Merit Energy Company 14591	Contact: Dwain Wall
Address: P.O. Box 69, Loco Hills N.M., 88255	Telephone No.: 505-706-4758
Facility Name: Russell Turner Water Station	Facility Type: Water-flood station

Surface Owner: BLM	Mineral Owner: BLM	Lease No.:

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	20	17-S	31-E					Eddy

Latitude 32.82015 **Longitude** 103.89701

NATURE OF RELEASE

Type of Release: Crude oil	Volume of Release: 350 bbl	Volume Recovered: 280 bbl
Source of Release: tanks overfilled	Date and Hour of Occurrence: 08/15/06 1:00 am	Date and Hour of Discovery: 08/15/06 5:30 am
Was Immediate Notice Given? ☒ Yes ☐ No Not Required	If YES, To Whom? Paul Evans (BLM) & Mike Bratcher (OCD)	
By Whom? Mike Self	Date and Hour: 6:00 am	
Was a Watercourse Reached? ☒ Yes ☐ No	If YES, Volume Impacting the Watercourse. 70 bbls	

If a Watercourse was Impacted, Describe Fully.*
The overflow and sump tanks both overfilled. The secondary containment for each filled and overflowed allowing approximately 70 barrels to reach two arroyos. The occurrence followed a heavy rain event which had saturated the ground, causing the oil flow on top of the water and not penetrate very deep into the ground.

Describe Cause of Problem and Remedial Action Taken.*
An electrical failure caused injection pumps to shut down, the telephone line serving the alarm system was also down resulting in no alarm being sent to personnel. Electrical service was restored and pumps restarted, the telephone company made repairs to their line and restored service.

Describe Area Affected and Cleanup Action Taken.*
The majority of the spill was contained in the firewalls surrounding the tanks. The oil did breach the firewalls, reaching two arroyos labeled "A" and "B". Arroyo "A" started near the southern most tank, the oil crossed the dirt road and ended on flat ground approximately 300 yards from the point of origin. Arroyo "B" was affected by the northern most tank, the oil entered the arroyo following it under the dirt road and highway stopping approximately 500 yards from the point of origin. Please see attached sheet for cleanup action.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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 liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Jim Hollon	Approved by District Supervisor: TIM GUM by MB	
Title: Consultant	Approval Date: JUL 10 2007	Expiration Date:
E-mail Address: jim.hollon@sbcglobal.net	Conditions of Approval:	Attached ☐
Date: 03/26/07 Phone: 432-631-5768		

* Attach Additional Sheets If Necessary

CC: operator

E

Continuation of area affected and cleanup action taken.

Power was restored and the pumps were restarted. A backhoe was utilized to build dams in the arroyo to prevent the flow of oil should it begin to rain again and to aid in the recovery of the oil. The backhoe was used to scrape/squeegee the flat areas and stockpile the affected soils. Vacuum trucks were utilized to recover all free liquids. Fresh water was pumped by trucks down the arroyo to flush the oil to points where vacuum trucks could recover both the oil and water. The backhoe began to blend the affected soils in arroyo "A" up to the dirt road crossing and build berms around the end of the affected areas to prevent additional migration of the oil. A total of 280 barrels of oil was recovered from the secondary containments and arroyos. The stockpiled soils were taken to CRI in Hobbs New Mexico.

During the evening and night another heavy rain event occurred. This rain event flooded the arroyos and floated the remaining unrecovered oil out of the soils. The oil was floated approximately 300 yards to a flat area where it affected the bottom six inches of the tumbleweeds and broomweed. On August 24 and 25, 2006, the affected vegetation was treated with Micro-bac M-1000, a naturally occurring microbe that assists in the degradation of hydrocarbons. A spray rig with a hand wand was utilized to wash and treat the vegetation as well as all affected soils in the spill area.

Additional treatments will be conducted as necessary to remediate the affected areas. The average depth of the affected soils is ¼ of an inch and is very spotty throughout the affected areas.

Remediation activities are complete and analytical results are included with the attached report.

Closure Compliance Report

Project:

Russell Turner Water Station
Section 20, T17S, R31E
Eddy County, New Mexico

March 26, 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

March 26, 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
Russell Turner Water Station site
Section 20, T17S, R31E
Eddy County, New Mexico
5 miles east of Loco Hills, NM

Dear Mr. Wall:

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

I appreciate the opportunity to participate in the site remediation project at the Russell Turner Water Station site for Merit Energy Company. Please contact me at (432) 631-5768 if you have questions regarding the information provided in the report.

Sincerely,

Jim Hollon

TABLE OF CONTENTS

LIST OF APPENDICES

Closure Compliance Report

Russell Turner Water Station
Section 20, 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 adjacent to Merit Energy's field office. The surrounding area is native rangeland in a sand hill region and is overseen by the Bureau of Land Management.

The release occurred on August 15, 2006, following a thunderstorm during a power failure. The heavy rains during the storm saturated the ground and filled the secondary containments with rain water. The release consisted of approximately 350 barrels of crude oil overflowing two tanks, labeled north and south, at the water station. Both tanks filled with oil before overflowing and filling their secondary containment, which subsequently overflowed. The oil from the north tank flowed to an arroyo east of the tank, following the arroyo approximately 3,600 feet. The oil from the south tank followed a pipeline right of way for approximately 1,800 feet. The rain saturated soils limited the absorption of oil into the soil to approximately one quarter of an inch. Approximately 280 barrels of oil were recovered from the arroyo and containments before a second thunderstorm floated the remaining oil an additional 1,800 feet down the arroyo.

1.1 Site Description

Site Name	Russell Turner Water Station
Site Location/GPS	Eddy County, New Mexico / 32.82009° N, 103.89724° W
General Site Description	The release originated at two separate tanks at the water station. Both tanks had secondary containment. 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
- 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 distance from lowermost contaminants to seasonal high water level)	>200 feet	Ranking Score = 0
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 criteria of 0, the following remediation levels apply:
Benzene = 10 ppm
BTEX = 50 ppm
TPH = 5,000 ppm
Chlorides = Site Specific

1.4 Standard of Care

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.

2.0 FIELD ACTIVITIES

2.1 Site Remediation

Immediately upon discovery of the release, vacuum trucks were summoned to begin recovery of the oil. Additional trucks were utilized to flush fresh water down the arroyo, floating the oil to areas accessible to the vacuum trucks which recovered the oil and water. A crew was sent down the arroyo with squeegees to help push the oil down with every load of water. An estimated 280 barrels of oil was recovered from the arroyo and the secondary containments. The oil which followed the pipeline right of way was either blended with a backhoe or scraped and stockpiled. A total of approximately 24 cubic yards of soil was generated and delivered to Controlled Recovery Inc. (CRI) for disposal. Berms and dams were built in the arroyo in an attempt to control any additional migration of the oil.

During the evening a second heavy rain event occurred. The second rain event flooded the arroyo, floating the remaining oil from the soils. The oil was floated approximately 1,800 feet further down to a flat area where it affected the bottom six inches of some of the surrounding tumbleweeds and broomweed. On August 24 and 25, 2006 all free oil was absorbed using Peat-Sorb and the remaining affected soils and vegetation were treated with Micro-bac M-1000, a blend of naturally occurring microbes, which assist in the degradation of hydrocarbons.

The majority of the unrecovered oil affected mostly vegetation. The affected soils were very shallow and spotty, making soil sampling difficult and futile. As a result, photographs of the vegetation in the affected area are included in Appendix C to document the effectiveness of the remediation. One soil sample was collected from the south containment at one foot below ground surface; the sample was collected from the area that was most difficult to remediate.

2.2 Soil Sampling

The soil sampling program included the collection of one soil sample from the south containment. The soil sample was analyzed for TPH using EPA Method 8015M and BTEX using EPA Method 8021B. The soil sample was placed in laboratory prepared glassware, sealed with

the identification label and placed on ice in a chest. The sample 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.

3.0 DATA EVALUATION

The sample collected from the affected soils indicated TPH and BTEX concentrations below NMOCD remediation levels, at <10 mg/kg and 0.147 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: Dwain Wall
Merit Energy Company
P.O. Box 69
Loco Hills, NM 88255

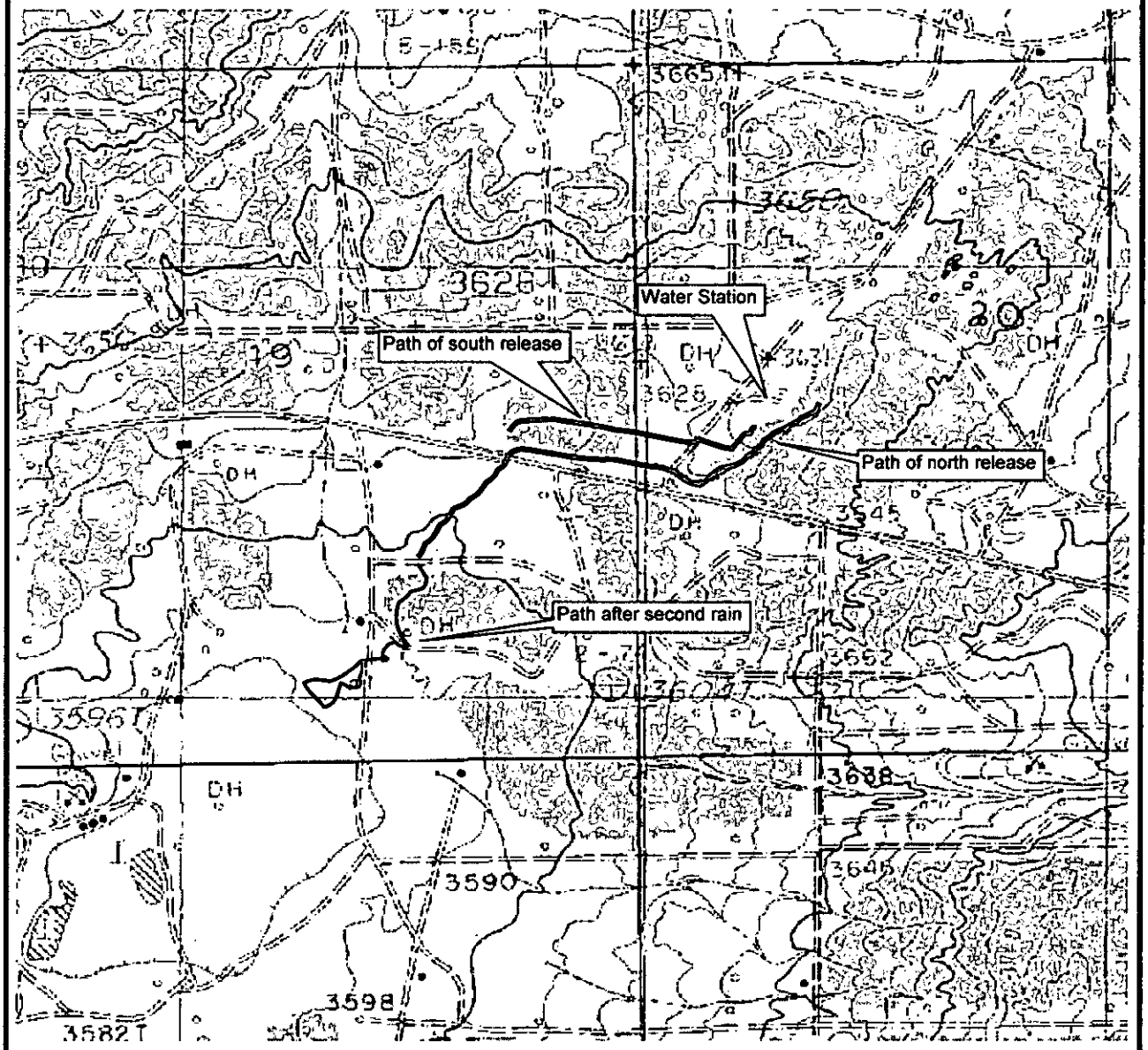
Copy 4: David Hertel
Merit Energy Company
P.O. Box 300
Whiteface, TX 79379

Copy 5: Justin Findley
Merit Energy Company
13727 Noel Rd. Ste 500
Dallas, TX 75240

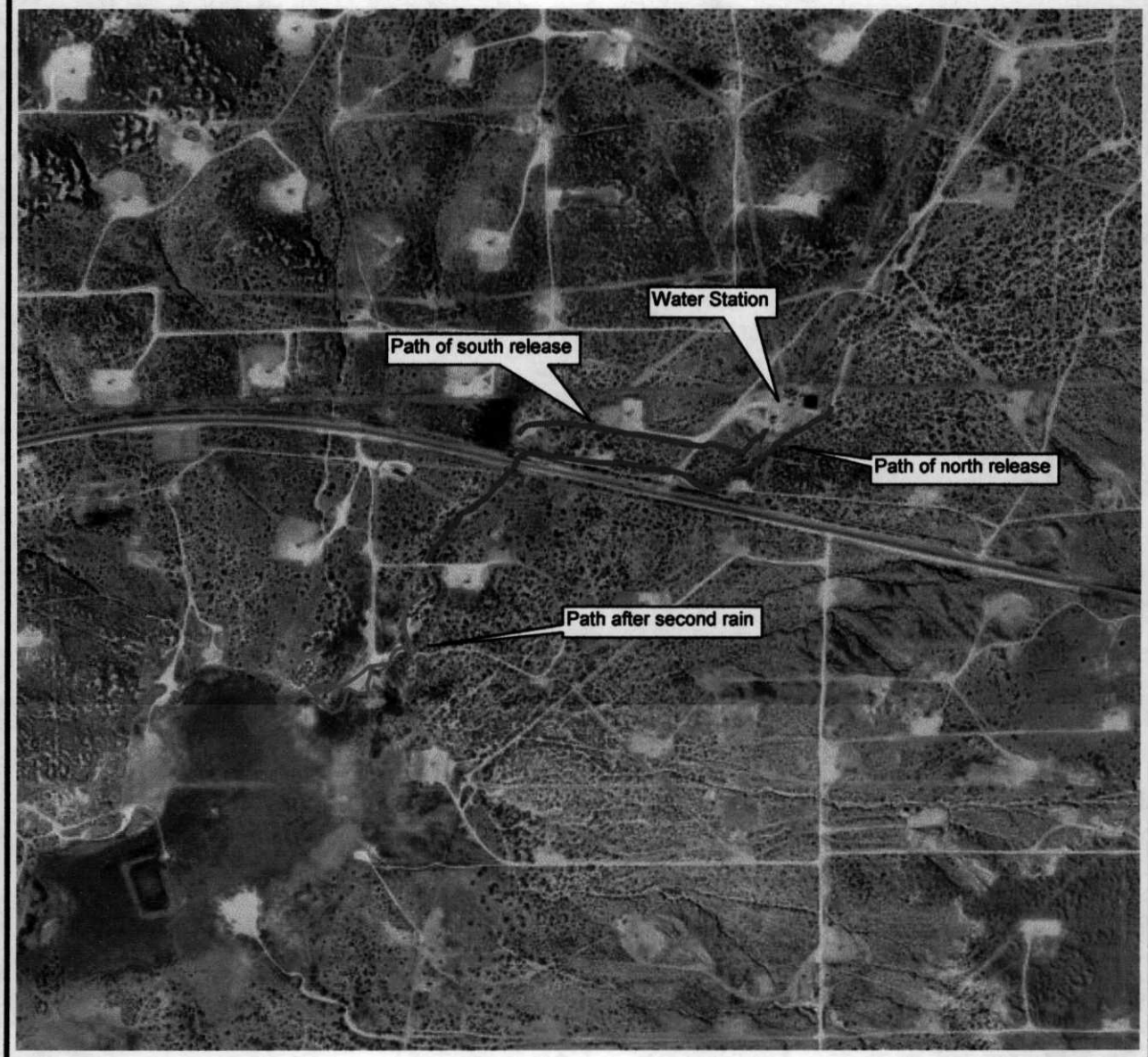
Copy 6: Jim Hollon
Jim Hollon Consulting
14034 W. Co. Rd. 123
Odessa, TX 79765

APPENDIX A

Figure 1 – Topographic Map
Figure 2 – Aerial Photograph



Source: Terraserver		**Merit Energy Company**	Figure 1 Topographic Map
Dated: July 1, 1985			
Scale: 1" = 400 yards		Russell Turner Water Station	
↑ N		Near mile marker 137 on US Hwy 82	Prepared By: Jim Hollon Consulting



Source: Terraserver	**Merit Energy Company**	Figure 2 Aerial Photograph
Dated October 22,1996		
Scale: 1" = 400 yards	Russell Turner Water Station	
N	Near mile marker 137 on US Hwy 82	Prepared By: Jim Hollon Consulting

APPENDIX B

Analytical Summary Tables
Laboratory Data Sheets
Laboratory Chain of Custody Documents

Table 1

CONCENTRATIONS OF CHEMICALS OF CONCERN IN SOIL

Merit Energy
Russell Turner Water Station
Loco Hills, Eddy County, New Mexico

All concentrations are in mg/kg

SAMPLE DATE	SAMPLE LOCATION	SAMPLE DEPTH	EPA Method 8015M				EPA Method 8021B			
			TPH C_6-C_{12}	TPH C_{12}-C_{28}	TPH C_{12}-C_{35}	TPH C_6-C_{35}	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
01/29/07	South Con.	0-12"	<10	<10	<10	<10	<0.025	0.019	0.025	0.103

CONCENTRATIONS IN BOLD ARE ABOVE REGULATORY GUIDELINES

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Jim Hollon (for)

Merit Energy Company

P.O. Box 300

Whiteface, TX 79379

Project: Various

Project Number: None Given

Location: New Mexico

Lab Order Number: 7B02005

Report Date: 03/27/07

Merit Energy Company	Project: Various	Fax: (806) 229-2583
P.O. Box 300	Project Number: None Given	
Whiteface TX, 79379	Project Manager: Jim Hollon (for)	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
RT Sta South Containment	7B02005-05	Soil	01/29/07 12:00	02-02-2007 11:40

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

Merit Energy Company	Project: Various	Fax: (806) 229-2583
P.O. Box 300	Project Number: None Given	
Whiteface TX, 79379	Project Manager: Jim Hollon (for)	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
RT Sta South Containment (7B02005-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EB70201	02/02/07	02/02/07	EPA 8021B	
Toluene	**J [0.0189]**	0.0250	"	"	"	"	"	"	J
Ethylbenzene	**J [0.0249]**	0.0250	"	"	"	"	"	"	J
Xylene (p/m)	**0.0597**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0435**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*105 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*118 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EB70213	02/02/07	02/06/07	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*92.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*95.2 %*	*70-130*		"	"	"	"	

Environmental Lab of Texas
A Xenco Laboratories Company
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 EB70201 - EPA 5030C (GC)										
Blank (EB70201-BLK1)				Prepared & Analyzed: 02/01/07						
Benzene	ND	0.0250	mg/kg wet							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
Xylene (p/m)	ND	0.0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate: a,a,a-Trifluorotoluene	*34.0*		*ug/kg*	*40.0*		*85.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*33.9*		"	*40.0*		*84.8*	*80-120*			
LCS (EB70201-BS1)				Prepared & Analyzed: 02/01/07						
Benzene	1.18	0.0250	mg/kg wet	1.25		94.4	80-120			
Toluene	1.24	0.0250	"	1.25		99.2	80-120			
Ethylbenzene	1.28	0.0250	"	1.25		102	80-120			
Xylene (p/m)	2.43	0.0250	"	2.50		97.2	80-120			
Xylene (o)	1.11	0.0250	"	1.25		88.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*38.4*		*ug/kg*	*40.0*		*96.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*43.2*		"	*40.0*		*108*	*80-120*			
Calibration Check (EB70201-CCV1)				Prepared: 02/02/07 Analyzed: 02/05/07						
Benzene	47.6		ug/kg	50.0		95.2	80-120			
Toluene	48.4		"	50.0		96.8	80-120			
Ethylbenzene	54.7		"	50.0		109	80-120			
Xylene (p/m)	93.0		"	100		93.0	80-120			
Xylene (o)	43.9		"	50.0		87.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*42.2*		"	*40.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*33.8*		"	*40.0*		*84.5*	*80-120*			
Matrix Spike (EB70201-MS1)	**Source: 7A31001-02**			Prepared: 02/02/07 Analyzed: 02/05/07						
Benzene	1.09	0.0250	mg/kg dry	1.36	ND	80.1	80-120			
Toluene	1.09	0.0250	"	1.36	ND	80.1	80-120			
Ethylbenzene	1.14	0.0250	"	1.36	ND	83.8	80-120			
Xylene (p/m)	2.35	0.0250	"	2.71	ND	86.7	80-120			
Xylene (o)	1.11	0.0250	"	1.36	ND	81.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*35.3*		*ug/kg*	*40.0*		*88.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*32.5*		"	*40.0*		*81.2*	*80-120*			

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

Project: Various
Project Number: None Given
Project Manager: Jim Hollon (for)

Fax: (806) 229-2583

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 EB70201 - EPA 5030C (GC)										
Matrix Spike Dup (EB70201-MSD1)	**Source: 7A31001-02**			Prepared: 02/02/07 Analyzed: 02/05/07						
Benzene	1.09	0.0250	mg/kg dry	1.36	ND	80.1	80-120	0.00	20	
Toluene	1.13	0.0250	"	1.36	ND	83.1	80-120	3.68	20	
Ethylbenzene	1.15	0.0250	"	1.36	ND	84.6	80-120	0.950	20	
Xylene (p/m)	2.28	0.0250	"	2.71	ND	84.1	80-120	3.04	20	
Xylene (o)	1.11	0.0250	"	1.36	ND	81.6	80-120	0.00	20	
Surrogate: a,a,a-Trifluorotoluene	*32.9*		*ug/kg*	*40.0*		*82.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*32.7*		*"*	*40.0*		*81.8*	*80-120*			
Batch EB70213 - Solvent Extraction (GC)										
Blank (EB70213-BLK1)				Prepared: 02/02/07 Analyzed: 02/06/07						
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	*51.1*		*mg/kg*	*50.0*		*102*	*70-130*			
Surrogate: 1-Chlorooctadecane	*51.9*		*"*	*50.0*		*104*	*70-130*			
LCS (EB70213-BS1)				Prepared: 02/02/07 Analyzed: 02/06/07						
Carbon Ranges C6-C12	536	10.0	mg/kg wet	500		107	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	1030	10.0	"	1000		103	75-125			
Surrogate: 1-Chlorooctane	*57.2*		*mg/kg*	*50.0*		*114*	*70-130*			
Surrogate: 1-Chlorooctadecane	*55.3*		*"*	*50.0*		*111*	*70-130*			
Calibration Check (EB70213-CCV1)				Prepared: 02/02/07 Analyzed: 02/06/07						
Carbon Ranges C6-C12	205		mg/kg	250		82.0	80-120			
Carbon Ranges C12-C28	249		"	250		99.6	80-120			
Total Hydrocarbons	454		"	500		90.8	80-120			
Surrogate: 1-Chlorooctane	*63.6*		*"*	*50.0*		*127*	*70-130*			
Surrogate: 1-Chlorooctadecane	*57.1*		*"*	*50.0*		*114*	*70-130*			

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

Project: Various
Project Number: None Given
Project Manager: Jim Hollon (for)

Fax: (806) 229-2583

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 EB70213 - Solvent Extraction (GC)										
Matrix Spike (EB70213-MS1)	**Source: 7B01015-01**			Prepared: 02/02/07	Analyzed: 02/06/07					
Carbon Ranges C6-C12	562	10.0	mg/kg dry	539	11.0	102	75-125			
Carbon Ranges C12-C28	531	10.0	"	539	64.7	86.5	75-125			
Carbon Ranges C28-C35	*ND*	*10.0*	"	*0.00*	*3.76*		*75-125*			
Total Hydrocarbons	1090	10.0	"	1080	68.2	94.6	75-125			
Surrogate: 1-Chlorooctane	*60.0*		*mg/kg*	*50.0*		*120*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.7*		"	*50.0*		*101*	*70-130*			
Matrix Spike Dup (EB70213-MSD1)	**Source: 7B01015-01**			Prepared: 02/02/07	Analyzed: 02/06/07					
Carbon Ranges C6-C12	575	10.0	mg/kg dry	539	11.0	105	75-125	2.90	20	
Carbon Ranges C12-C28	519	10.0	"	539	64.7	84.3	75-125	2.58	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	3.76		75-125		20	
Total Hydrocarbons	1090	10.0	"	1080	68.2	94.6	75-125	0.00	20	
Surrogate: 1-Chlorooctane	*49.1*		*mg/kg*	*50.0*		*98.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*49.8*		"	*50.0*		*99.6*	*70-130*			

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

Merit Energy Company	Project: Various	Fax: (806) 229-2583
P.O. Box 300	Project Number: None Given	
Whiteface TX, 79379	Project Manager: Jim Hollon (for)	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EB70301 - General Preparation (Prep)										
Blank (EB70301-BLK1)				Prepared: 02/02/07 Analyzed: 02/03/07						
% Solids	100		%							
Duplicate (EB70301-DUP1)		**Source: 7B02007-01**		Prepared: 02/02/07 Analyzed: 02/03/07						
% Solids	95.9		%		96.0			0.104	20	

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

Merit Energy Company	Project: Various	Fax: (806) 229-2583
P.O. Box 300	Project Number: None Given	
Whiteface TX, 79379	Project Manager: Jim Hollon (for)	

Notes and Definitions

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: Brent Barron Date: 3/27/2007

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Environmental Lab of Texas

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: Jim Hollon

Company Name: Merit Energy Company

Company Address: P.O. Box 300

City/State/Zip: Whiteface, Texas 79379

Telephone No: 432-83[illegible]5788 Fax No: 432-563-1166

Sampler Signature: Jim Hollon

e-mail: jim.hollon@abcglobal.net

Project Name: Various

Project #:

Project Loc: New Mexico

PO #:

Report Format: ☑ Standard ☐ TRRP ☐ NPDES

(lab use only)
ORDER #: 7B02005

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	No. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TCLP: TPH 418.1 (8015)	TCLP: 1005 1006	TCLP: Cations (Ca, Mg, Na, K)	TCLP: Anions (Cl, SO4, CO3, HCO3)	TCLP: SAR / ESP / CEC	TCLP: Metals As Ag Ba Cd Cr Pb Hg Se	TCLP: Volatiles	TCLP: Semivolatiles	TOTAL: BTEX (8021B/5030 or 8TEX 8260)	RCI	N.O.R.M.	TOTAL: Chlorides	RUSH TAT (Pre-Scheduled) 24, 48, 72 hrs	Standard TAT
01	MRU 35-9 west 2'			1/29/2007	16:00	1	X								S			X													X
02	MRU 35-9 west 4'			1/29/2007	16:00	1	X								S			X													X
03	MRU 35-9 east 2'			1/29/2007	16:00	1	X								S			X													X
04	MRU 35-9 east 4'			1/29/2007	16:00	1	X								S			X													X
05	RT Sta south containment			1/29/2007	12:00	1	X								S			X								X					X
06	TB 132 Backfill 4'			1/29/2007	11:00	1	X								S			X								X					X

Special Instructions:

Relinquished by:	Date	Time	Received by:	Date	Time
Jim Hollon	2-2-07	11:40			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT: Linn Kelly	2/2/07	11:40

Laboratory Comments:
Sample Containers intact? Y N
VOCs Free of Headspace? Y N
Custody seals on container(s) Y N
Custody seals on cooler(s) Y N
Sample Hand Delivered by Sampler/Client Rep. ? Y N
by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 2.0 °C

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Merit Energy

Date/ Time: 2/2/07 11:40

Lab ID # : 17802005

Initials: CK

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	2.0 °C	
#2	Shipping container in good condition?	Yes	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?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

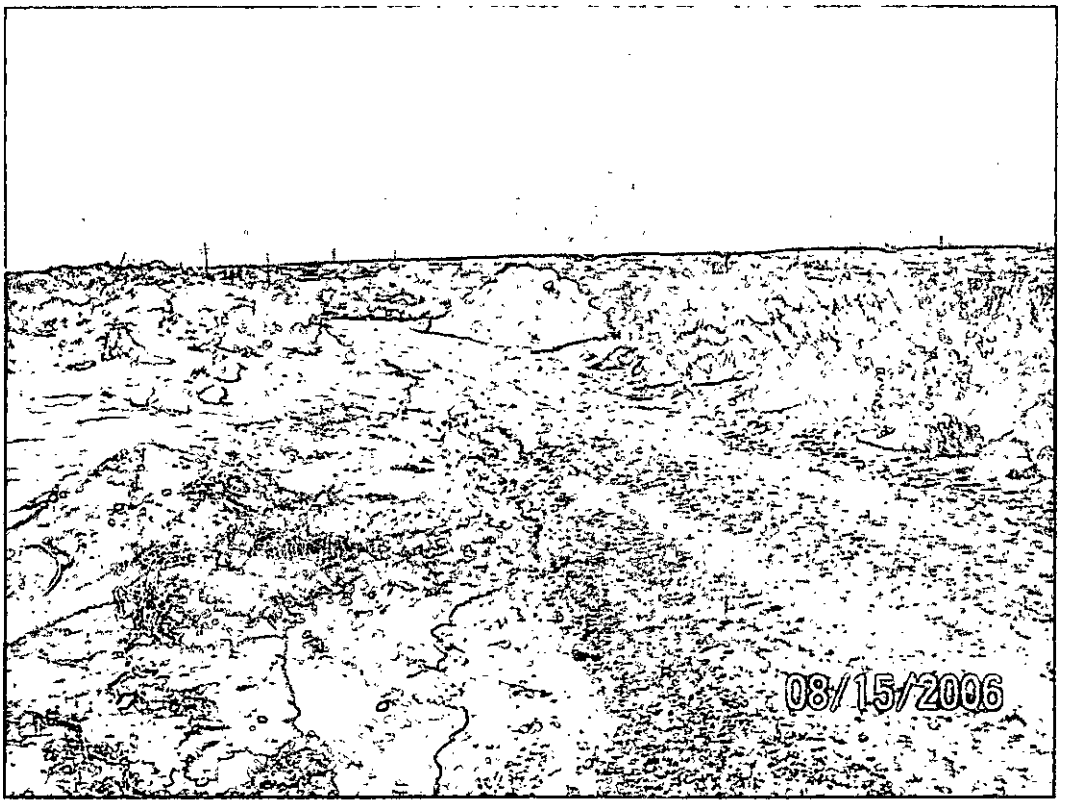
Corrective Action Taken: _____

Check all that Apply:

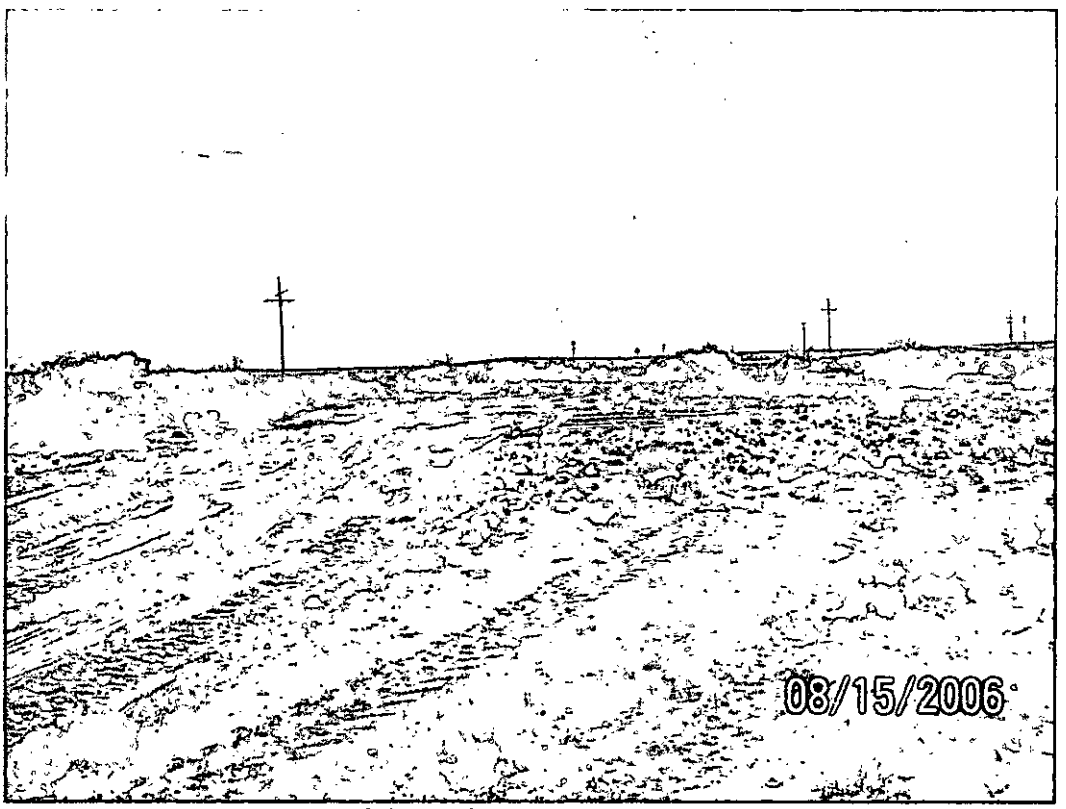
- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

APPENDIX C

Photographs

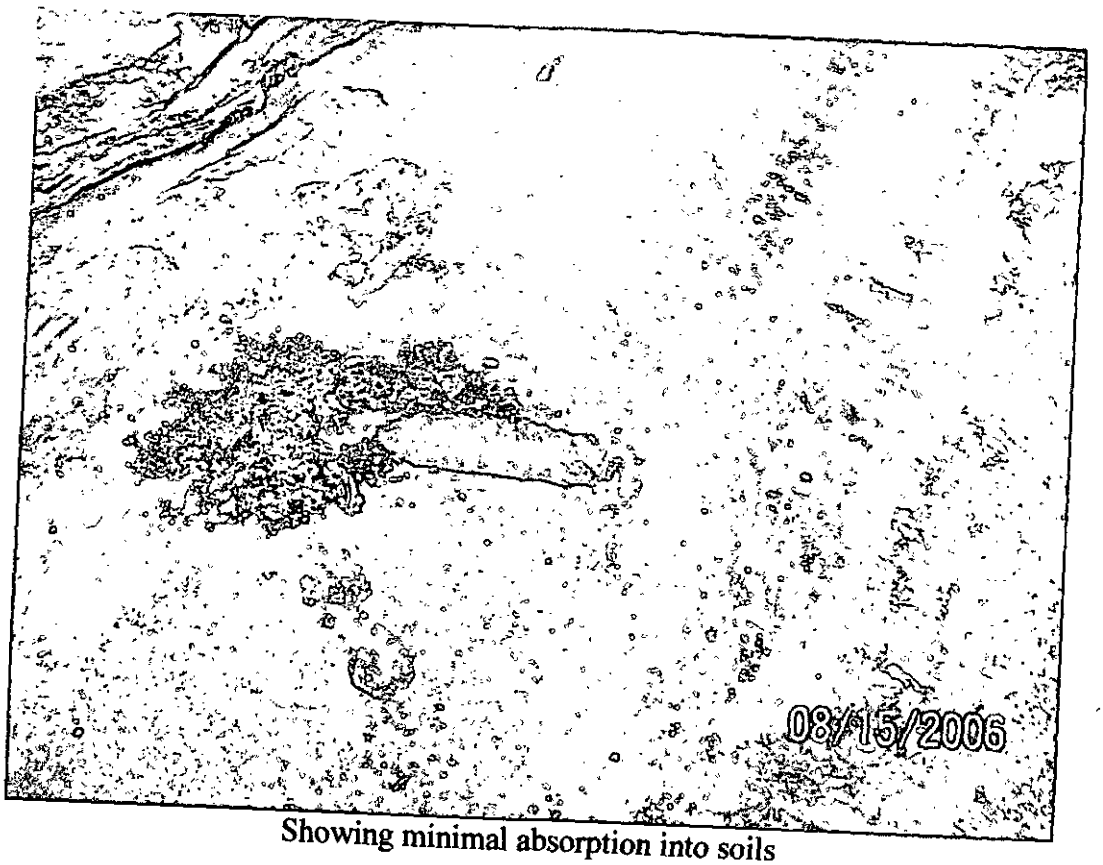


Pipeline Right of Way and stockpiled soils

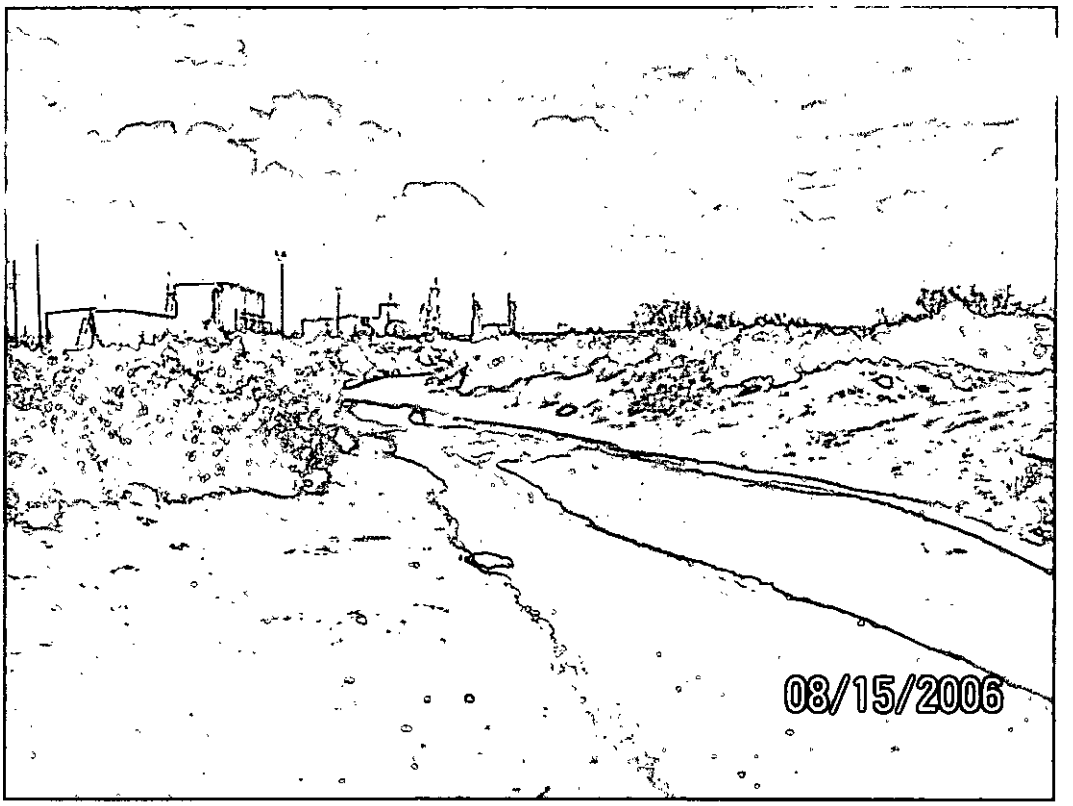


End of right of way area after scraping

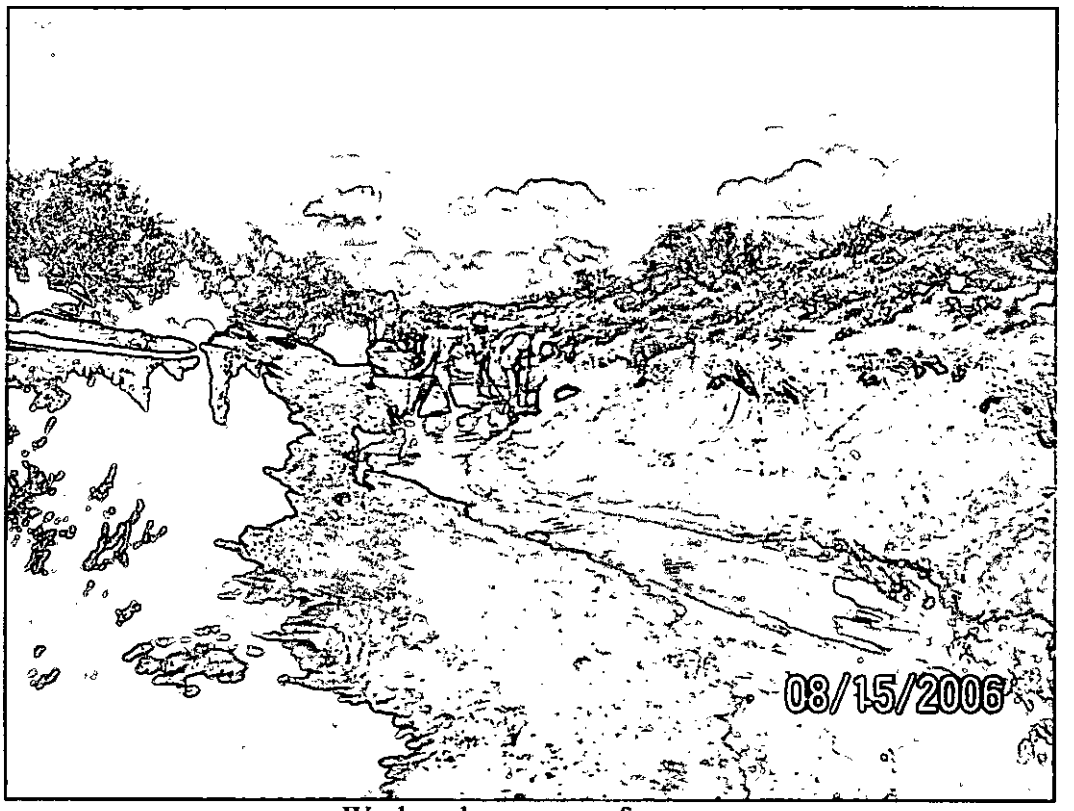
Blending of affected soils



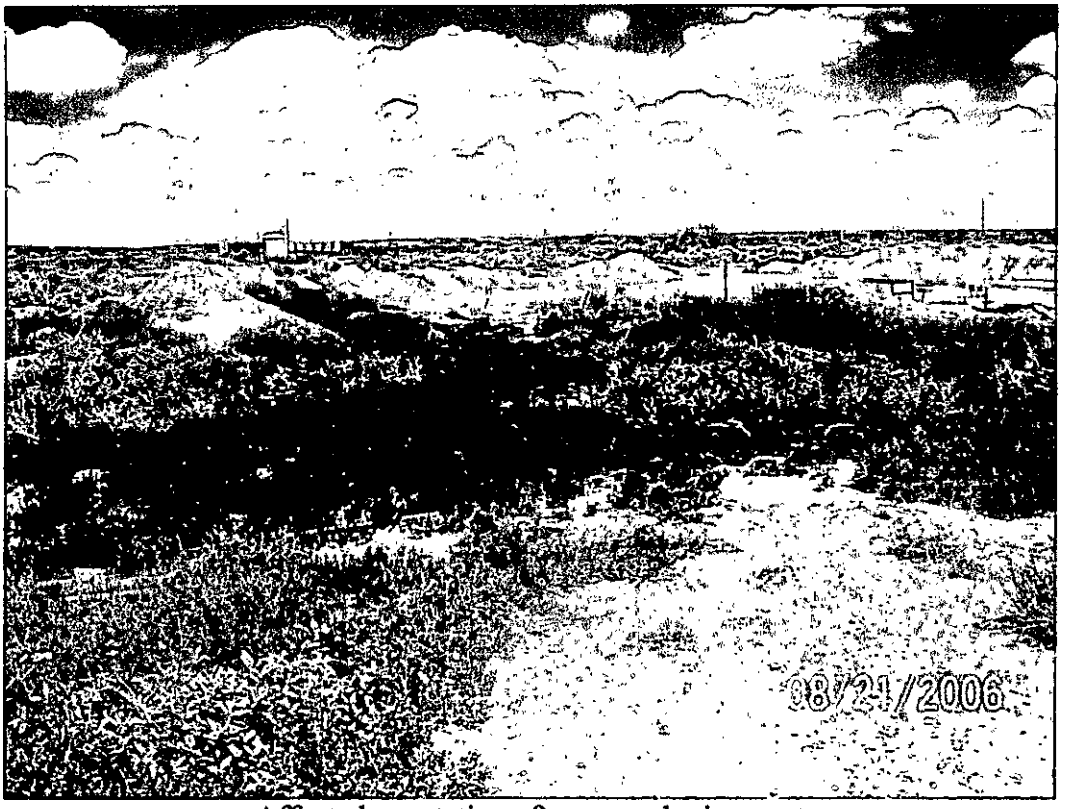
Showing minimal absorption into soils



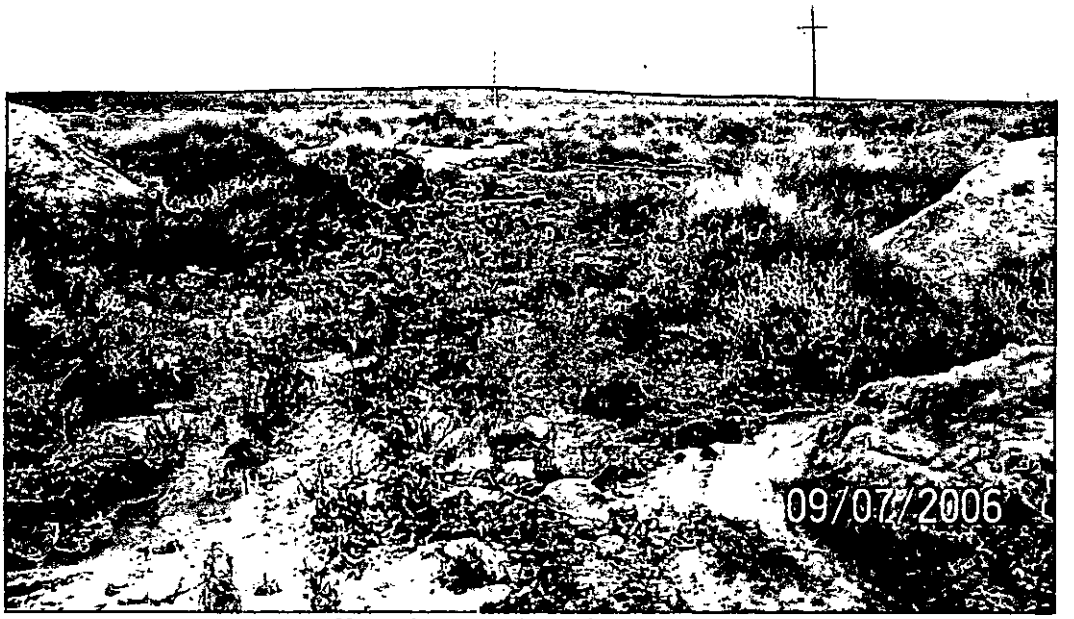
Typical view of the affected arroyo



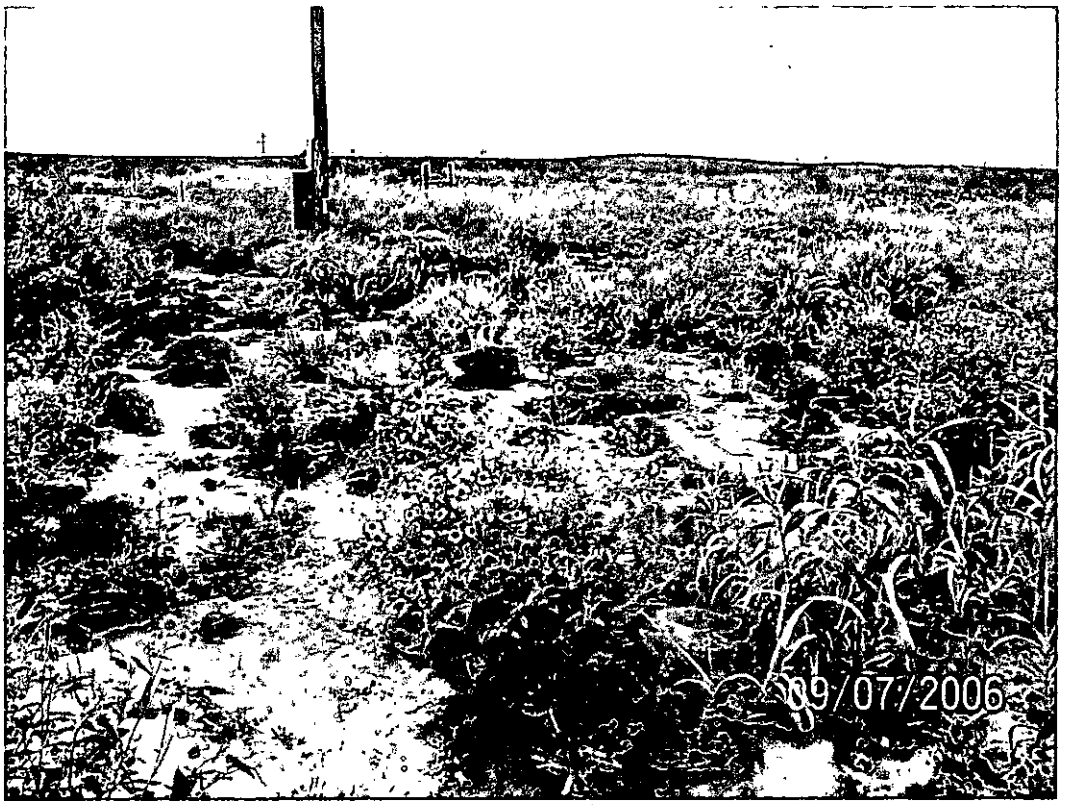
Wash and squeegee of arroyo



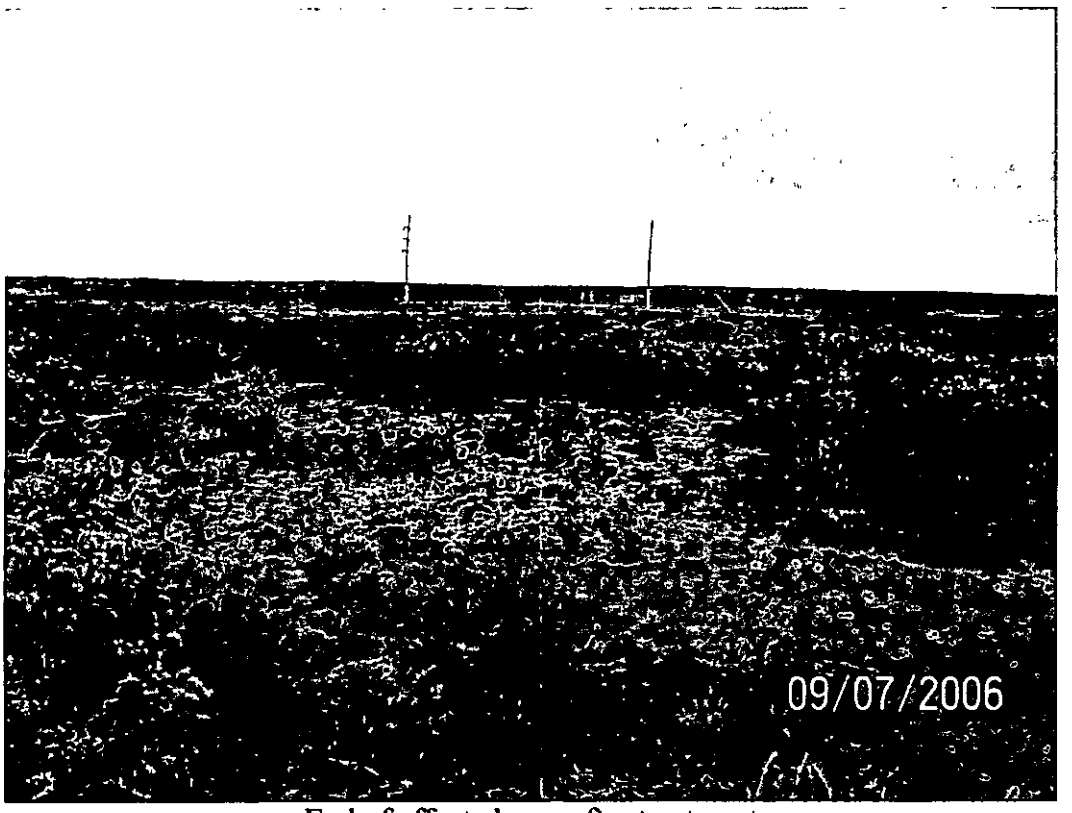
Affected vegetation after second rain event



Affected vegetation after treatment



Affected vegetation after treatment



End of affected area after treatment

APPENDIX D

Regulatory Reports

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

Initial Report ☒ Final Report

Name of Company: Merit Energy Company	Contact: Dwain Wall
Address: P.O. Box 69, Loco Hills N.M., 88255	Telephone No.: 505-706-4758
Facility Name: Russell Turner Water Station	Facility Type: Water-flood station

Surface Owner: BLM	Mineral Owner: BLM	Lease No.:

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
	20	17-S	31-E					Eddy

Latitude 32.82015 **Longitude** 103.89701

NATURE OF RELEASE

Type of Release: Crude oil	Volume of Release: 350 bbl	Volume Recovered: 280 bbl
Source of Release: tanks overfilled	Date and Hour of Occurrence: 08/15/06 1:00 am	Date and Hour of Discovery: 08/15/06 5:30 am
Was Immediate Notice Given? ☒ Yes ☐ No Not Required	If YES, To Whom? Paul Evans (BLM) & Mike Bratcher (OCD)	
By Whom? Mike Self	Date and Hour: 6:00 am	
Was a Watercourse Reached? ☒ Yes ☐ No	If YES, Volume Impacting the Watercourse. 70 bbls	

If a Watercourse was Impacted, Describe Fully.*
The overflow and sump tanks both overfilled. The secondary containment for each filled and overflowed allowing approximately 70 barrels to reach two arroyos. The occurrence followed a heavy rain event which had saturated the ground, causing the oil flow on top of the water and not penetrate very deep into the ground.

Describe Cause of Problem and Remedial Action Taken.*
An electrical failure caused injection pumps to shut down, the telephone line serving the alarm system was also down resulting in no alarm being sent to personnel. Electrical service was restored and pumps restarted, the telephone company made repairs to their line and restored service.

Describe Area Affected and Cleanup Action Taken.*
The majority of the spill was contained in the firewalls surrounding the tanks. The oil did breach the firewalls, reaching two arroyos labeled "A" and "B". Arroyo "A" started near the southern most tank, the oil crossed the dirt road and ended on flat ground approximately 300 yards from the point of origin. Arroyo "B" was affected by the northern most tank, the oil entered the arroyo following it under the dirt road and highway stopping approximately 500 yards from the point of origin. Please see attached sheet for cleanup action.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger 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 liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION	
Printed Name: Jim Hollon	Approved by District Supervisor:	
Title: Consultant	Approval Date:	Expiration Date:
E-mail Address: jim.hollon@sbcglobal.net	Conditions of Approval:	Attached ☐
Date: 03/26/07 Phone: 432-631-5768		

* Attach Additional Sheets If Necessary

Continuation of area affected and cleanup action taken.

Power was restored and the pumps were restarted. A backhoe was utilized to build dams in the arroyo to prevent the flow of oil should it begin to rain again and to aid in the recovery of the oil. The backhoe was used to scrape/squeegee the flat areas and stockpile the affected soils. Vacuum trucks were utilized to recover all free liquids. Fresh water was pumped by trucks down the arroyo to flush the oil to points where vacuum trucks could recover both the oil and water. The backhoe began to blend the affected soils in arroyo "A" up to the dirt road crossing and build berms around the end of the affected areas to prevent additional migration of the oil. A total of 280 barrels of oil was recovered from the secondary containments and arroyos. The stockpiled soils were taken to CRI in Hobbs New Mexico.

During the evening and night another heavy rain event occurred. This rain event flooded the arroyos and floated the remaining unrecovered oil out of the soils. The oil was floated approximately 300 yards to a flat area where it affected the bottom six inches of the tumbleweeds and broomweed. On August 24 and 25, 2006, the affected vegetation was treated with Micro-bac M-1000, a naturally occurring microbe that assists in the degradation of hydrocarbons. A spray rig with a hand wand was utilized to wash and treat the vegetation as well as all affected soils in the spill area.

Additional treatments will be conducted as necessary to remediate the affected areas. The average depth of the affected soils is ¼ of an inch and is very spotty throughout the affected areas.

Remediation activities are complete and analytical results are included with the attached report.

Bratcher, Mike, EMNRD

From: Paul_Evans@nm.blm.gov
Sent: Monday, August 21, 2006 9:06 AM
To: Bratcher, Mike, EMNRD
Subject: Merit Turner

Attachments: Untitled20.jpg; Untitled1.jpg; Untitled2.jpg; Untitled3.jpg; Untitled4.jpg; Untitled5.jpg; Untitled6.jpg; Untitled7.jpg; Untitled8.jpg; Untitled9.jpg; Untitled10.jpg; Untitled11.jpg; Untitled12.jpg; Untitled13.jpg; Untitled14.jpg; Untitled15.jpg; Untitled16.jpg; Untitled17.jpg; Untitled18.jpg; Untitled19.jpg


Untitled20.jpg (267 KB)

Untitled1.jpg (293 KB)

Untitled2.jpg (299 KB)

Untitled3.jpg (356 KB)

Untitled4.jpg (271 KB)

Untitled5.jpg (202 KB)

Untitled6.jpg (223 KB)

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Untitled9.jpg (258 KB)

Untitled10.jpg (243 KB)

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Untitled17.jpg (225 KB)

Untitled18.jpg (241 KB)

Untitled19.jpg (292 KB)

[attachment "Untitled10.jpg" deleted by Paul Evans/CFO/NM/BLM/DOI] (See attached file: Untitled20.jpg)(See attached file: Untitled1.jpg)(See attached file: Untitled2.jpg)(See attached file: Untitled3.jpg)(See attached file: Untitled4.jpg)(See attached file: Untitled5.jpg) (See attached file: Untitled6.jpg)(See attached file: Untitled7.jpg)(See attached file: Untitled8.jpg)(See attached file: Untitled9.jpg)(See attached file: Untitled10.jpg)(See attached file: Untitled11.jpg) (See attached file: Untitled12.jpg)(See attached file: Untitled13.jpg)(See attached file: Untitled14.jpg)(See attached file: Untitled15.jpg)(See attached file: Untitled16.jpg)(See attached file: Untitled17.jpg) (See attached file: Untitled18.jpg)(See attached file: Untitled19.jpg)

http://search.ebay.com/_W0QQfgtpZ1QQfrppZ25QQfsooZ1QQfsopZ2QQsassZoregonprime2000

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