

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

RECEIVED

2009 MAY 10 PM 2:38

Release Notification and Corrective Action

OPERATOR

☒ Initial Report

☐ Final Report

Name of Company: Elm Ridge Exploration	Contact: Amy Mackey
Address: PO Box 156, Bloomfield, NM 87413	Telephone No.: (505) 632-3476 Ext 201
Facility Name: Carson 10-332	Facility Type: Gas Well

Surface Owner: Federal	Mineral Owner:	Lease No.:
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LOCATION OF RELEASE

Unit Letter G	Section 10	Township 25N	Range 12W	Feet from the 1990	North/South Line FNL	Feet from the 1650	East/West Line FEL	County San Juan
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Latitude 36.417478 Longitude -108.095581

NATURE OF RELEASE

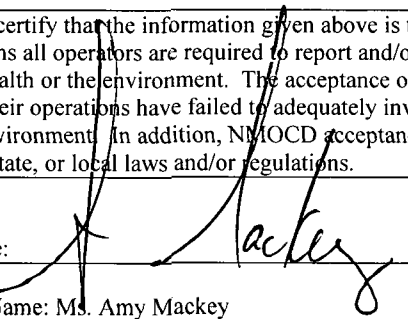
Type of Release: Produced Water	Volume of Release: NA	Volume Recovered: NA
Source of Release: Earth Pit	Date and Hour of Occurrence: NA	Date and Hour of Discovery: NA
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Produced Water from gas well at the mentioned location formerly discharged into an earthen pit on location. The well has been altered to no longer drain into an earthen pit, but instead into an Above Ground Storage Tank (AST).

Describe Area Affected and Cleanup Action Taken.*
Earthen pit was dry, and has not been discharged into since before June 16, 2008. Samples were collected and results attached to this document for reference. The sample was submitted to Envirotech's laboratory to be analyzed for benzene and total BTEX via USEPA Method 8021, for TPH via USEPA Method 418.1 and for total chlorides via USEPA Method 4500B. The sample returned results below 0.2 ppm benzene, 50 ppm BTEX and 100 ppm total petroleum hydrocarbons (TPH), but above the 250 ppm total chlorides standard, confirming that a release occurred at this site. At this time, the site was ranked pursuant to the NMOCD Guideline for Remediation of Leaks, Spills and Releases. The site was ranked a 10 due to groundwater being greater than 50 feet below ground surface, but less than 100 feet below ground surface. This set the closure standard to 1000 ppm TPH, 10 ppm benzene and 50 ppm total BTEX. There is no closure standard for total chlorides per the NMOCD Guidelines for Remediation of Leaks, Spills and Releases. All analytical results are below the closure standards determined for this site.

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: Ms. Amy Mackey	Approved by District Supervisor:	
Title: Administrative Manager	Approval Date:	Expiration Date:
E-mail Address: amackey1@elmridge.net	Conditions of Approval:	Attached <input type="checkbox"/>
Date:	Phone:	

* Attach Additional Sheets If Necessary

PAGE NO: <u>1</u> OF <u>1</u>	 envirotech (505) 632-0615 (800) 362-1879 5796 U.S. Hwy 64, Farmington, NM 87401	ENVIRONMENTAL SPECIALIST: <u>S Pott</u>
DATE STARTED: <u>10/31/08</u>		LAT: <u>36.417478</u>
DATE FINISHED: <u>10/31/08</u>		LONG: <u>-108.095581</u>

FIELD REPORT: BGT / PIT CLOSURE VERIFICATION

LOCATION: NAME: <u>Carson 10</u>	WELL #: <u>332</u>	TEMP PIT: <u>PERMANENT PIT: X</u>	BGT: <u></u>
LEGAL ADD: UNIT: <u>G</u>	SEC: <u>10</u>	TWP: <u>25N</u>	RNG: <u>12W</u> PM: <u>NIMPM</u>
QTR/FOOTAGE: <u>1990' ENL 1650' FEL</u>		CNTY: <u>San Juan</u>	ST: <u>New Mexico</u>

EXCAVATION APPROX: <u> </u> FT. X <u> </u> FT. X <u> </u> FT. DEEP	CUBIC YARDAGE: <u> </u>
DISPOSAL FACILITY: <u> </u>	REMEDATION METHOD: <u> </u>
LAND OWNER: <u>Federal</u>	API: <u>3004527667</u> BGT/PIT VOLUME: <u>16' x 16' x 3'</u>
CONSTRUCTION MATERIAL: <u>Earth</u>	DOUBLE-WALLED, WITH LEAK DETECTION: <u>N/A</u>

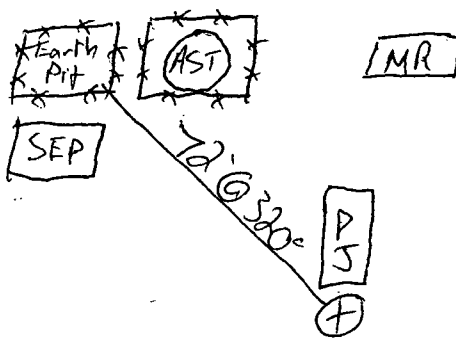
LOCATION APPROXIMATELY: <u>72' FT. 320</u>	FROM WELLHEAD
DEPTH TO GROUNDWATER: <u>50-100 ft</u>	

<u> </u> TEMPORARY PIT - GROUNDWATER 50-100 FEET DEEP
BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 500 mg/kg
<u> </u> TEMPORARY PIT - GROUNDWATER ≥100 FEET DEEP
BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 1000 mg/kg
<u>X</u> PERMANENT PIT OR BGT
BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, TPH (418.1) ≤ 100 mg/kg, CHLORIDES ≤ 250 mg/kg

FIELD 418.1 ANALYSIS

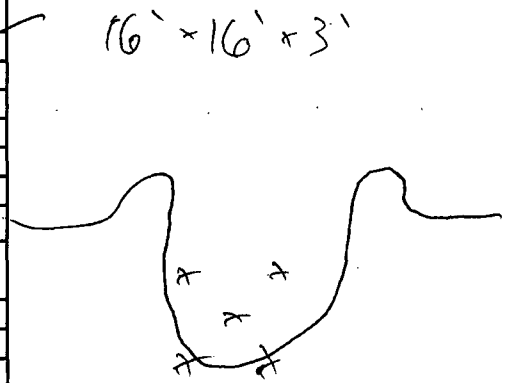
TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (mg/kg)
	200 STD						
		1					
		2					
		3					
		4					
		5					
		6					

PERIMETER
FIELD CHLORIDES RESULTS
PROFILE



SAMPLE ID	READING	CALC. (mg/kg)

16' x 16' x 3'



PID RESULTS		
SAMPLE ID	RESULTS (ppm)	
<u>Sept Comp</u>	<u>0-0</u>	

NOTES:

LAB SAMPLES			WORKORDER #	WHO ORDERED
SAMPLE ID	ANALYSIS	RESULTS		
	BENZENE	<u>See labs</u>		
	BTEX	<u>See labs</u>		
	GRO & DRO			
	CHLORIDES	<u>See labs</u>		



CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 30-Sep-08

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	187
	500	
	1000	

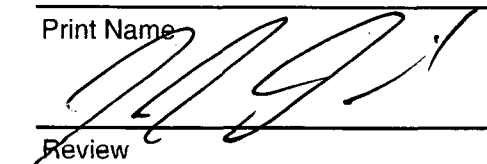
The accepted percent relative deviation (%RSD) of the calibration factor is less than 20% over the working range.


Analyst

May 7, 2009
Date

Scott Gonzales

Print Name


Review

2/10/09
Date

James McDaniel

Print Name



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	Elm Ridge Exploration	Project #:	03056-0182
Sample No.:	1	Date Reported:	2/10/2009
Sample ID:	5 Point Composite	Date Sampled:	9/30/2008
Sample Matrix:	Soil	Date Analyzed:	9/30/2008
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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Total Petroleum Hydrocarbons	40	5.0
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ND = Parameter not detected at the stated detection limit.

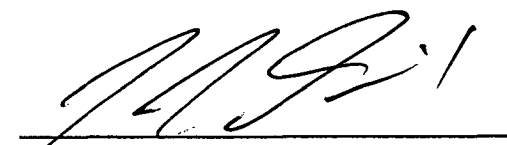
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Bisti Coal 6-2**

Instrument calibrated to 200 ppm standard. Zeroed before each sample


Analyst

Scott Gonzales
Printed


Reviewed

James McDaniel
Printed

Client:	Elm Ridge	Project #:	03056-0136
Sample ID:	Carson Unit 10 #332	Date Reported:	11-10-08
Laboratory Number:	47982	Date Sampled:	10-31-08
Chain of Custody No:	5676	Date Received:	10-31-08
Sample Matrix:	Soil	Date Extracted:	11-03-08
Preservative:	Cool	Date Analyzed:	11-03-08
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	73.9	5.0

ND = Parameter not detected at the stated detection limit.

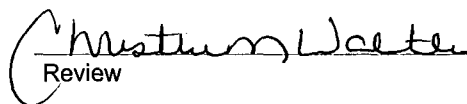
References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Earth Pit Samples 5 pt Composite.**

Analyst



Review



Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	11-07-08
Laboratory Number:	11-03-TPH.QA/QC 47944	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	11-03-08
Preservative:	N/A	Date Extracted:	11-03-08
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept Range
	11-03-08	11-03-08	1,420	1,540	8.5%	+/- 10%

Blank Conc. (mg/Kg)	Concentration	Detection Limit
TPH	ND	10.8

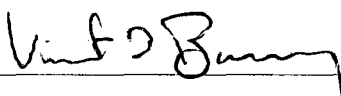
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
TPH	108	125	15.8%	+/- 30%

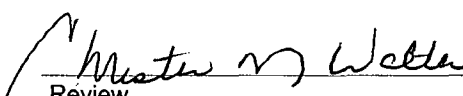
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	108	2,000	1,790	84.9%	80 - 120%

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: QA/QC for Samples 47944 - 47949 and 47982 - 47983.


 Analyst


 Review

Client:	Elm Ridge	Project #:	03056-0136
Sample ID:	Carson Unit 10 #332	Date Reported:	11-10-08
Laboratory Number:	47982	Date Sampled:	10-31-08
Chain of Custody:	5676	Date Received:	10-31-08
Sample Matrix:	Soil	Date Analyzed:	11-06-08
Preservative:	Cool	Date Extracted:	11-05-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	5.0	0.9
Toluene	7.7	1.0
Ethylbenzene	1.3	1.0
p,m-Xylene	2.1	1.2
o-Xylene	1.1	0.9
Total BTEX	17.2	

ND - Parameter not detected at the stated detection limit.

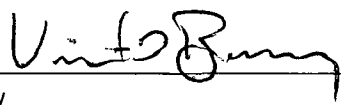
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Earth Pit Samples, 5pt. Composite


 Analyst


 Review

Client:	N/A	Project #:	N/A
Sample ID:	11-06-BT QA/QC	Date Reported:	11-10-08
Laboratory Number:	47948	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-06-08
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	%Diff	Blank Conc	Detect Limit
	Accept Range 0 - 15%				
Benzene	4.8445E+007	4.8542E+007	0.2%	ND	0.1
Toluene	3.7964E+007	3.8040E+007	0.2%	ND	0.1
Ethylbenzene	2.8695E+007	2.8752E+007	0.2%	ND	0.1
p,m-Xylene	6.1173E+007	6.1295E+007	0.2%	ND	0.1
o-Xylene	2.7903E+007	2.7959E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect Limit
Benzene	1.7	1.8	5.9%	0 - 30%	0.9
Toluene	7.1	6.9	2.8%	0 - 30%	1.0
Ethylbenzene	5.5	5.4	1.8%	0 - 30%	1.0
p,m-Xylene	12.7	13.4	5.5%	0 - 30%	1.2
o-Xylene	5.9	5.7	3.4%	0 - 30%	0.9

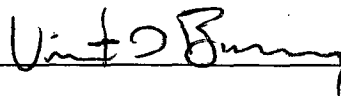
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	1.7	50.0	50.7	98.1%	39 - 150
Toluene	7.1	50.0	54.8	96.0%	46 - 148
Ethylbenzene	5.5	50.0	53.5	96.4%	32 - 160
p,m-Xylene	12.7	100	110	97.2%	46 - 148
o-Xylene	5.9	50.0	52.9	94.6%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 47948, 47949, 47956, 47977, 47978, 47982 - 47985, and 48004.

Analyst 

Review 

Client:	Elm Ridge	Project #:	03056-0193
Sample ID:	Earth Pit	Date Reported:	03-19-09
Lab ID#:	49346	Date Sampled:	03-17-09
Sample Matrix:	Soil	Date Received:	03-17-09
Preservative:	Cool	Date Analyzed:	03-18-09
Condition:	Intact	Chain of Custody:	6535

Parameter**Concentration (mg/Kg)****Total Chloride****470**

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: **Carson Unit 10 #332.**

Analyst

Review

CHAIN OF CUSTODY RECORD

6535

Client: ELMER DUE			Project Name / Location: CARSON UNIT 10 # 332				ANALYSIS / PARAMETERS																																															
Client Address:			Sampler Name: RBENNY				<table border="1"> <tr> <td>TPH (Method 8015)</td> <td>BTEX (Method 8021)</td> <td>VOC (Method 8260)</td> <td>RCRA 8 Metals</td> <td>Cation / Anion</td> <td>RCI</td> <td>TCLP with H/P</td> <td>PAH</td> <td>TPH (418.1)</td> <td>CHLORIDE</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Sample Cool</td> <td>Sample Intact</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>														TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE						Sample Cool	Sample Intact																	
TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P															PAH	TPH (418.1)	CHLORIDE						Sample Cool	Sample Intact																								
Client Phone No.:			Client No.: 03056-0193																																																			
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl ₂ HCl											Sample Cool	Sample Intact																																				
Earth Dirt	3/17/09	2:15 pm	49346	Soil Solid	1 4 oz																																																	
				Soil Solid	Sludge Aqueous																																																	
				Soil Solid	Sludge Aqueous																																																	
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Relinquished by: (Signature)						Received by: (Signature)																																																
Relinquished by: (Signature)						Received by: (Signature)																																																

ENVIROTECH INC.

5796 U.S. Highway 64 • Farmington, NM 87401 • Tel 505-632-0615