

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

2009 MAY 18 PM 2:39
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: West Bisti Coal 25-1	Facility Type: Gas Well

Surface Owner: Federal	Mineral Owner:	Lease No.: NM-61273
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LOCATION OF RELEASE

Unit Letter B	Section 25	Township 25N	Range 13W	Feet from the 1200	North/South Line FNL	Feet from the 1850	East/West Line FEL	County San Juan
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Latitude 36.376132 Longitude -108.167920

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered: Unknown
Source of Release: Earth Pit	Date and Hour of Occurrence: Historical	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.*

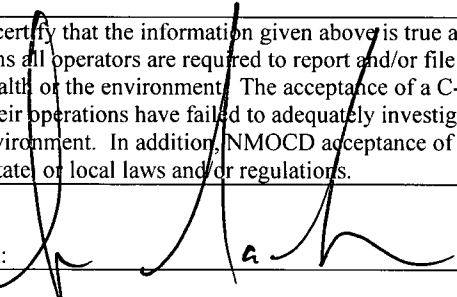
Describe Cause of Problem and Remedial Action Taken.*

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 in use on 11/4/08, and has not been discharged into since November 2008. A sample was collected from the earthen pit and the sample results are attached to this document for reference. The sample was analyzed for in the field for Total Petroleum Hydrocarbons (TPH) via USEPA Method 418.1 and in Envirotech's laboratory for benzene and total BTEX via USEPA Method 8021 and for total chlorides via USEPA Method 4500B. The sample returned results that were below the 0.2 ppm benzene standard, the 50 ppm BTEX standard and the 100 ppm TPH standard, but above the 250 ppm total chloride standard, confirming that a release had occurred at this site. The site was then ranked pursuant to the NMOCD Guidelines for the 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. This set the closure standards 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 the Remediation of Leaks, Spills and Releases. All analytical results were 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:	
Date: Phone: 505-632-3476 Ext 201		Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

PAGE NO: <u>1</u> OF <u>1</u> DATE STARTED: <u>11/4/08</u> DATE FINISHED: <u>11/4/08</u>	ENVIROTECH INC ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 - 3014 FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615	ENVIRONMENTAL SPECIALIST: <u>R. BENALLY</u> LAT: <u>36.376132</u> LONG: <u>-108.167420</u>
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FIELD REPORT: BGT / PIT CLOSURE VERIFICATION

LOCATION:	NAME: <u>West Bisti Canal 25</u>	WELL #: <u>1</u>	TEMP PIT: <u>PERMANENT</u>	PIT: <u>X</u>	BGT: <u> </u>
LEGAL ADD:	UNIT: <u>B</u>	SEC: <u>25</u>	TWP: <u>25N</u>	RNG: <u>13W</u>	PM: <u> </u>
QTR/FOOTAGE:	<u>1200' FNL x 1850' FEL</u>		CNTY: <u>SAN JUAN</u>	ST: <u>NM</u>	

EXCAVATION APPROX:	—	FT.	X	—	FT.	X	—	FT. DEEP	CUBIC YARDAGE:	—
DISPOSAL FACILITY:	REMEDICATION METHOD: <u> </u>									
LAND OWNER:	API: <u>3004528559</u>				BGT / PIT VOLUME: <u> </u>					
CONSTRUCTION MATERIAL:	<u>EARTH</u> DOUBLE-WALLED, WITH LEAK DETECTION: <u> </u>									

LOCATION APPROXIMATELY:	<u>92'</u>	FT.	<u>160°</u>	FROM WELLHEAD
DEPTH TO GROUNDWATER:	<u>< 100</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	
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	
<input checked="" type="checkbox"/> 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						
<u>200pm</u>	<u>SPT Comp</u>	<u>1</u>	<u>5</u>	<u>20</u>	<u>4</u>	<u>200</u>	<u>12</u>
		<u>2</u>					
		<u>3</u>					
		<u>4</u>					
		<u>5</u>					
		<u>6</u>					

PERIMETER

FIELD CHLORIDES RESULTS

PROFILE

	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>READING</th> <th>CALC. (mg/kg)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	SAMPLE ID	READING	CALC. (mg/kg)																															<p><u>34' x 34' x 3' DEPTH</u></p>
SAMPLE ID	READING	CALC. (mg/kg)																																	

LAB SAMPLES <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>RESULTS</th> </tr> </thead> <tbody> <tr><td> </td><td>BENZENE</td><td> </td></tr> <tr><td> </td><td>BTEX</td><td> </td></tr> <tr><td> </td><td>GRO & DRO</td><td> </td></tr> <tr><td> </td><td>CHLORIDES</td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	SAMPLE ID	ANALYSIS	RESULTS		BENZENE			BTEX			GRO & DRO			CHLORIDES								NOTES: <div style="height: 40px; border: 1px solid black;"></div>
SAMPLE ID	ANALYSIS	RESULTS																				
	BENZENE																					
	BTEX																					
	GRO & DRO																					
	CHLORIDES																					
WORKORDER #	WHO ORDERED																					



**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS**

Client:	Elm Ridge Exploration	Project #:	03056-0218
Sample No.:	1	Date Reported:	2/24/2009
Sample ID:	5 Point Composite	Date Sampled:	11/4/2008
Sample Matrix:	Soil	Date Analyzed:	11/4/2008
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
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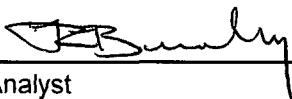
Total Petroleum Hydrocarbons	12	5.0
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ND = Parameter not detected at the stated detection limit.

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

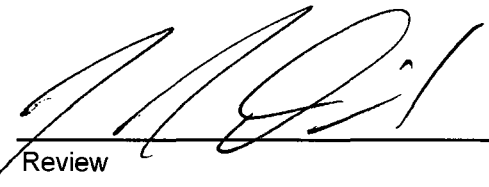
Comments: **West Bisti Coal 25-1 Earthen Pit**

Instrument calibrated to 200 ppm standard. Zeroed before each sample



Analyst

Roynell Benally
Printed



Review

James McDaniel
Printed



CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 4-Nov-08

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

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

RB Benally
Analyst

2/24/09
Date

Roynell Benally
Print Name

[Signature]
Review

2/24/09
Date

James McDaniel
Print Name

Client:	Elmridge	Project #:	03056-0136
Sample ID:	West Bisti Coal 25 Well #1	Date Reported:	11-11-08
Laboratory Number:	48047	Date Sampled:	11-04-08
Chain of Custody:	5706	Date Received:	11-04-08
Sample Matrix:	Soil	Date Analyzed:	11-10-08
Preservative:	Cool	Date Extracted:	11-07-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	ND	1.0
Ethylbenzene	ND	1.0
p,m-Xylene	ND	1.2
o-Xylene	ND	0.9
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

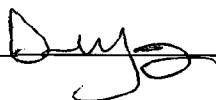
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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

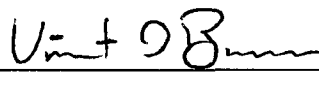
Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Earth Pit, 5pt Composite

Analyst



Review



Client:	N/A	Project #:	N/A
Sample ID:	11-10-BT QA/QC	Date Reported:	11-11-08
Laboratory Number:	48081	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-10-08
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	4.5273E+007	4.5364E+007	0.2%	ND	0.1
Toluene	3.2430E+007	3.2495E+007	0.2%	ND	0.1
Ethylbenzene	2.4894E+007	2.4944E+007	0.2%	ND	0.1
p,m-Xylene	5.4942E+007	5.5052E+007	0.2%	ND	0.1
o-Xylene	2.4877E+007	2.4927E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect Limit
Benzene	6.2	6.4	3.2%	0 - 30%	0.9
Toluene	93.0	92.5	0.5%	0 - 30%	1.0
Ethylbenzene	11.3	11.2	0.9%	0 - 30%	1.0
p,m-Xylene	50.2	50.9	1.4%	0 - 30%	1.2
o-Xylene	113	112	0.4%	0 - 30%	0.9

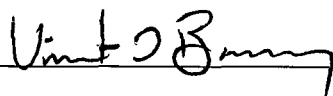
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	6.2	50.0	55.2	98.2%	39 - 150
Toluene	93.0	50.0	141	98.3%	46 - 148
Ethylbenzene	11.3	50.0	59.3	96.7%	32 - 160
p,m-Xylene	50.2	100	147	97.9%	46 - 148
o-Xylene	113	50.0	160	98.0%	46 - 148

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 48043 - 48047, 48070 - 48072, 48081, and 48082.

Analyst 

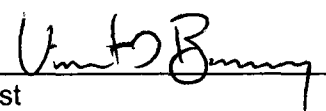
Review 

Client:	Elm Ridge	Project #:	03056-0136
Sample ID:	West Bisti Coal 25 Well #1	Date Reported:	11-11-08
Lab ID#:	48047	Date Sampled:	11-04-08
Sample Matrix:	Soil	Date Received:	11-04-08
Preservative:	Cool	Date Analyzed:	11-11-08
Condition:	Intact	Chain of Custody:	5706

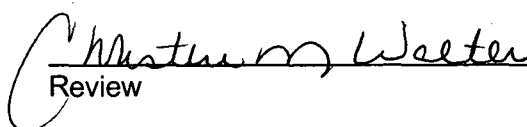
Parameter**Concentration (mg/Kg)****Total Chloride****410**

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: **Earth Pit / 5 pt Composite.**



Analyst



Review

CHAIN OF CUSTODY RECORD

5706

Client: ELMIDGE			Project Name / Location: EARTH PIT / 5PT Composite			ANALYSIS / PARAMETERS														
Client Address:			Sampler Name: 23000000			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 - 0136																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl ₂ HCl														
WEST BISTI COAL 25 WELL # 24	11/4/08	3:44 pm	48043	Soil Sludge Aqueous	1/4.2										X					✓
BISTI COAL 20 WELL # 1		12:00 am	48044	Soil Sludge Aqueous											X					✓
BISTI COAL 29 WELL # 2		1:28 pm	48045	Soil Sludge Aqueous											X					✓
BISTI COAL 20 WELL # 2		10:30 am	48046	Soil Sludge Aqueous											X					✓
WEST BISTI COAL 25 WELL # 1		2:45 pm	48047	Soil Sludge Aqueous											X					✓
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															

Relinquished by: (Signature) 23000000	Date 11/4/08	Time 5:45 pm	Received by: (Signature) 23000000	Date 11/4/08	Time 5:45 pm
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