

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

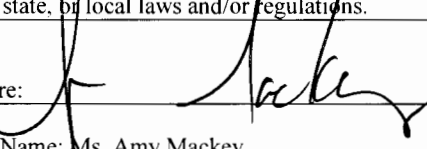
Name of Company: Elm Ridge Exploration	Contact: Amy Mackey	
Address: PO Box 156, Bloomfield, NM 87413	Telephone No.: (505) 632-3476 Ext 201	
Facility Name: Bisti Coal 9 COM 2	Facility Type: Gas Well	
Surface Owner: Tribal	Mineral Owner:	Lease No.: 14-20-603-326

**LOCATION OF RELEASE**

Unit Letter L	Section 9	Township 25N	Range 12W	Feet from the 1625	North/South Line FSL	Feet from the 940	East/West Line FWL	County San Juan
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Latitude 36.412901 Longitude -108.122617

**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 prior to June 16, 2008. A sample was collected from the earthen pit and the sample results are attached to this document for reference. The sample was analyzed 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, the 100 ppm TPH standard, and the 250 ppm total chloride standard, confirming that a release had not occurred.		
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: 		<b>OIL CONSERVATION DIVISION</b>
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> DATE STARTED: <u>10-1-08</u> DATE FINISHED: <u>10-1-08</u>	<b>ENVIROTECH INC</b> ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 - 3014 FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615	ENVIRONMENTAL SPECIALIST: <u>Shawn</u> LAT: <u>36.412901</u> LONG: <u>-108.12617</u>
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**14-20-603-326 FIELD REPORT: BGT / PIT CLOSURE VERIFICATION**

LOCATION: NAME: <u>Bist. Coal 9</u>	WELL #: <u>2</u>	TEMP PIT: <u>  </u>	PERMANENT PIT: <input checked="" type="checkbox"/> BGT: <u>  </u>
LEGAL ADD: UNIT: <u>L</u>	SEC: <u>9</u>	TWP: <u>25 N</u>	RNG: <u>12 W</u> PM: <u>NW PM</u>
QTR/FOOTAGE: <u>1625' FSL X 940' FSL</u>		CNTY: <u>San Juan</u>	ST: <u>NM</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>  </u>	API: <u>3004528199</u> BGT / PIT VOLUME: <u>18' X 17' X 5 1/2'</u>
CONSTRUCTION MATERIAL: <u>Earth</u>	DOUBLE-WALLED, WITH LEAK DETECTION: <u>  </u>

LOCATION APPROXIMATELY: <u>25</u> FT. <u>10°</u> FROM WELLHEAD
DEPTH TO GROUNDWATER: <u>&lt; 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>209</u>	
<u>11.33</u>	<u>Spot Comp</u>	<u>1</u>	<u>5</u>	<u>20</u>	<u>4</u>	<u>89</u>	<u>36</u>
		<u>2</u>					
		<u>3</u>					
		<u>4</u>					
		<u>5</u>					
		<u>6</u>					

<p>PERIMETER</p>	<p>FIELD CHLORIDES RESULTS</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>SAMPLE ID</th><th>READING</th><th>CALC. (mg/kg)</th></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> </table>	SAMPLE ID	READING	CALC. (mg/kg)																												<p>PROFILE</p>
SAMPLE ID	READING	CALC. (mg/kg)																														
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<p>LAB SAMPLES</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>SAMPLE ID</th><th>ANALYSIS</th><th>RESULTS</th></tr> <tr><td> </td><td>BENZENE</td><td> </td></tr> <tr><td> </td><td>BTEX</td><td> </td></tr> <tr><td> </td><td>GRO &amp; 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> </table>	SAMPLE ID	ANALYSIS	RESULTS		BENZENE			BTEX			GRO & DRO			CHLORIDES								<p>NOTES:</p> <p>WORKORDER # <u>  </u> WHO ORDERED <u>  </u></p>
SAMPLE ID	ANALYSIS	RESULTS																				
	BENZENE																					
	BTEX																					
	GRO & DRO																					
	CHLORIDES																					



CONTINUOUS CALIBRATION  
EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Cal. Date: 1-Oct-08

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	209
	200	
	500	
	1000	

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

Toni McKnight for Sharon Putt  
Analyst

2-10-09  
Date

Sharon Putt  
Print Name

[Signature]  
Review

2/10/09  
Date

James McDaniel  
Print Name



EPA METHOD 418.1  
TOTAL PETROLEUM  
HYDROCARBONS

Client:	Elm Ridge Exploration	Project #:	03056-0188
Sample No.:	1	Date Reported:	2/10/2009
Sample ID:	5 Point Composite	Date Sampled:	10/1/2008
Sample Matrix:	Soil	Date Analyzed:	10/1/2008
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	36	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 9 COM 2**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

*Toni McKnight for Sharon Putt*  
Analyst

Sharon Putt  
Printed

*James McDaniel*  
Reviewed

James McDaniel  
Printed

Client:	ElmRidge Res	Project #:	03056-0136
Sample ID:	Bisti Coal 9 #2	Date Reported:	11-06-08
Laboratory Number:	47937	Date Sampled:	10-29-08
Chain of Custody:	5655	Date Received:	10-29-08
Sample Matrix:	Soil	Date Analyzed:	11-04-08
Preservative:	Cool	Date Extracted:	11-03-08
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	29.0	0.9
Toluene	22.4	1.0
Ethylbenzene	1.2	1.0
p,m-Xylene	5.7	1.2
o-Xylene	3.8	0.9
Total BTEX	62.1	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.0 %
	1,4-difluorobenzene	96.0 %
	Bromochlorobenzene	96.0 %

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

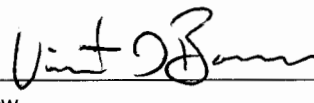
Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

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

Analyst



Review



Client:	N/A	Project #:	N/A
Sample ID:	11-04-BT QA/QC	Date Reported:	11-06-08
Laboratory Number:	47935	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-04-08
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	4.8429E+007	4.8526E+007	0.2%	ND	0.1
Toluene	3.7314E+007	3.7388E+007	0.2%	ND	0.1
Ethylbenzene	2.8263E+007	2.8320E+007	0.2%	ND	0.1
p,m-Xylene	6.0642E+007	6.0764E+007	0.2%	ND	0.1
o-Xylene	2.7882E+007	2.7938E+007	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	8.1	8.2	1.2%	0 - 30%	1.0
Ethylbenzene	1.6	1.5	6.3%	0 - 30%	1.0
p,m-Xylene	15.9	17.9	12.6%	0 - 30%	1.2
o-Xylene	5.9	5.7	3.4%	0 - 30%	0.9

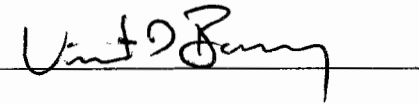
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.0	98.0%	39 - 150
Toluene	8.1	50.0	55.8	96.0%	46 - 148
Ethylbenzene	1.6	50.0	49.6	96.1%	32 - 160
p,m-Xylene	15.9	100	113	97.3%	46 - 148
o-Xylene	5.9	50.0	52.9	94.6%	46 - 148

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 47935 - 47937, 47939, 47944 - 47947, 47965, and 48000.

Analyst 

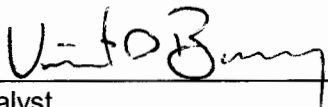
Review 

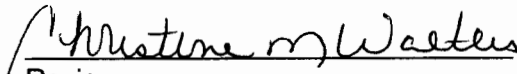
Client:	Elm Ridge Res	Project #:	03056-0136
Sample ID:	Bisti Coal 9 #2	Date Reported:	11-07-08
Lab ID#:	47937	Date Sampled:	10-29-08
Sample Matrix:	Soil	Date Received:	10-29-08
Preservative:	Cool	Date Analyzed:	11-05-08
Condition:	Intact	Chain of Custody:	5655

**Parameter****Concentration (mg/Kg)****Total Chloride****175**

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 Samples.**

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review

# CHAIN OF CUSTODY RECORD

Client: <u>Elm Ridge Res</u>				Project Name / Location: <u>Santa Rita Samples</u>										ANALYSIS / PARAMETERS													
Client Address:				Sampler Name: <u>SPutt</u>																							
Client Phone No.:				Client No.: <u>03056-0136</u>																							
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HCl	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								
Jeter Com #2	10/29	14:30	47934	Soil Solid	1 402	X	X											X	X								
Bish. Coal 1B-1	10/29	16:00	47935	Soil Solid	1 402	X	X									X		X	X								
Sam Jackson #1	10/29	13:00	47936	Soil Solid	1 402	X	X									X		X	X								
Bish. Coal 19 #2	10/29	11:58	47937	Soil Solid	1 402	X	X									X		X	X								
Carson Unit 200	10/29	11:00	47938	Soil Solid	1 402	X	X									X		X	X								
Pete Morrow	10/29	9:45	47939	Soil Solid	1 402	X	X									X		X	X								
				Soil Solid																							
				Soil Solid																							
				Soil Solid																							
				Soil Solid																							
				Soil Solid																							
Relinquished by: (Signature) <u>Sharon P. Putt</u>				Date: <u>10/29/08 17:40</u>				Time: <u>17:40</u>				Received by: (Signature) <u>B</u>				Date: <u>10/29/08 17:40</u>				Time: <u>17:40</u>							
Relinquished by: (Signature)												Received by: (Signature)															
Relinquished by: (Signature)												Received by: (Signature)															

**ENVIROTECH INC.**