30-045-28808

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

RECEIVED OCD
2009 OCT 16 A 9:53

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: Elm Ridge Exploration	Contact: Amy Mackey
Address: PO Box 156, Bloomfield, NM 87413	Telephone No.: (505) 632-3476 Ext 201
Facility Name: Bisti Coal 31-1	Facility Type: Gas Well

Surface Owner: Federal	Mineral Owner:	Lease No.: 36585

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	31	25N	12W	1850	FNL	1850	FEL	San Juan

Latitude 36.35983 **Longitude** -108.15000

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? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ 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 a 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 will instead into an Above Ground Storage Tank (AST).

Describe Area Affected and Cleanup Action Taken.*
Blow sand was removed from the earthen pit, and approximately 346 cubic yards of 'production sludge' was removed from the earthen pit. A five (5)-point composite sample was collected from approximately ten (10) feet below ground surface once it was removed, and one (1) sample was collected from each of the four (4) walls of the excavation. The samples were analyzed in the field for total petroleum hydrocarbons (TPH) via USEPA Method 418.1, and in Envirotech's laboratory for benzene and BTEX via USEPA Method 8021 and for total chlorides via USEPA Method 4500B. The samples returned results below the 'Pit Rule' standards of 100 mg/kg TPH, 0.2 mg/kg benzene, 50 mg/kg BTEX, and 250 mg/kg total chlorides above background, confirming that a release had not occurred. Analytical results are attached for your reference.

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 ☐
Date: Phone: 505-632-3476 Ext 201		

* Attach Additional Sheets If Necessary

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State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☒ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

Operator: Elm Ridge Exploration OGRID #: 149052

Address: P.O. Box 156; Bloomfield, NM 87413

Facility or well name: Bisti Coal 31-1

API Number: 3004528808 OCD Permit Number:

U/L or Qtr/Qtr G Section 31 Township 25N Range 12W County: San Juan

Center of Proposed Design: Latitude 36.35983 Longitude -108.15000 NAD: ☐1927 ☒ 1983

Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC

Temporary: ☐ Drilling ☐ Workover

☒ Permanent ☐ Emergency ☐ Cavitation ☐ P&A

☐ Lined ☒ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____

☐ String-Reinforced

Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L 10' x W 10' x D 2'

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC

Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)

☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____

☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____

Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC

Volume: _____bbl Type of fluid:

Tank Construction material:

☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off

☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other

Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☐ Other _____

5.
☐ **Alternative Method:**

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☐ Alternate. Please specify_____

7.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).0. - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* (	☐ Yes ☐ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.	☐ Yes ☐ No
Within 500 feet of a wetland.	☐ Yes ☐ No
Within the area overlying a subsurface mine.	
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No
	☐ Yes ☐ No
	☐ Yes ☐ No

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System ☐ Alternative

Proposed Closure Method:
- ☐ Waste Excavation and Removal
- ☐ Waste Removal (Closed-loop systems only)
- ☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
  - ☐ In-place Burial ☐ On-site Trench Burial
- ☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:
☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

18.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

E-mail address: _____ Telephone: _____

20.
OCD Approval: ☐ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: _____ **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

21.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ **Closure Completion Date: 8/19/09**

22.
Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

23.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: Envirotech Landfarm #2 Disposal Facility Permit Number: NM-01-0011

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:
☒ Site Reclamation (Photo Documentation)
☒ Soil Backfilling and Cover Installation
☒ Re-vegetation Application Rates and Seeding Technique

24.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

☒ Proof of Closure Notice (surface owner and division) **See Attached**
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☒ Confirmation Sampling Analytical Results (if applicable) **See Attached**
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☒ Disposal Facility Name and Permit Number **Envirotech Landfarm #2 NM-01-0011**
☒ Soil Backfilling and Cover Installation **See Attached**
☒ Re-vegetation Application Rates and Seeding Technique **pursuant to the BLM MOU**
☒ Site Reclamation (Photo Documentation) **See Attached**
On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐1927 ☐ 1983

25.
Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Ms. Amy Mackey Title: Administrative Manager

Signature: _____ Date: _____

E-mail address: amackey1@elmridge.net Telephone: (505) 632-3476 Ext. 201

Elm Ridge Exploration
Bisti Coal 31-1
Earth Pit Closure
Project No. 03056-0176
Closure Date: 8/19/09

Earthen Pit Closure Checklist

1) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close all former earthen pits prior to the closure date agreed upon by the New Mexico Oil Conservation Division of December 31, 2009.
Closure date for the earth pit located at Bisti Coal 31-1 well site is August 19, 2009.

2) In accordance with of Subsection A of 19.15.17.13 NMAC, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close any earthen pits at a date the division requires because of imminent danger to fresh water, public health or the environment.
None of the earthen pits to be closed by Elm Ridge Exploration are deemed an imminent risk to the environment, public health, or to fresh or public water.

3) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close earthen pits first which seem to pose a greater risk to fresh water, public health, or the environment. This will be determined by the locations proximity to surface water sources and distance to groundwater.
None of the earthen pits to be closed by Elm Ridge Exploration are deemed an imminent risk to the environment, public health, or to fresh or public water.

4) No less than 60 days prior to any earthen pit closure activities, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the Santa Fe NMOCD office as well as a schedule of on-site activities, as in accordance with 19.15.17.13 Subsection J Paragraph (3) NMAC.
Notification was provided to Mr. Brad Jones of the NMOCD Santa Fe Office on August 4, 2009, along with a schedule of on-site activities; see attached *Notification Letter*.

5) No less than 24 hours and no greater than one (1) week prior to earthen pit removal, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the appropriate surface owner as well as a schedule of on-site activities, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will notify the surface owner by certified mail, return receipt requested, that the operator plans to close an earthen pit. The return receipt will be used to ensure that the surface owner has received written notification no less than 24 hours and no greater than one (1) week prior to the beginning of the earthen pit closure activities. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement. Closure activities that will take place on tribal land will have notifications sent by certified mail, return receipt requested, to the appropriate tribal office. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will notify the Bureau of Land Management (BLM) of closure activities for wells located on federal land per a Sundry Notice, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. All notices will be sent in such a way that the surface owner will receive notice at least 24 hours prior to the beginning of closure activities.
Notification was provided to the Bureau of Land Management on August 13, 2009; see attached *Sundry Notice* and *Return Receipt*.

6) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all liquids and/or sludge, to visual extents, prior to closure sampling. Material will be disposed of at Envirotech's Landfarm #2, Permit # NM-01-0011, TNT Environmental Inc. Landfarm, Permit # NM-01-0008, Industrial Ecosystems Inc. (IEI) Landfarm, Permit # NM-01-0010B, or Basin Disposal, Permit # NM-01-0005, depending on the consistency of the material removed, as in accordance with 19.15.17.13 Subsection C Paragraph (1) NMAC .
From August 17, 2009, to August 19, 2009, approximately 346 cubic yards of production sludge was removed from the earthen pit and disposed of at Envirotech's NMOCD permitted soil remediation facility, Landfarm #2, Permit # NM-01-0011; see attached *Bill of Lading*.

7) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all on-site equipment associated with this earthen pit unless it is required for some other purpose, as in accordance with 19.15.17.13 Subsection C Paragraph (2) NMAC. The equipment that meets the requirements of 19.15.9.712 Subsection A NMAC and 19.15.9.712 Subsection D Paragraph (1) will be disposed of at San Juan County Regional Landfill. Waste that is classified by 19.15.9.712 Subsection D Paragraph (2) will be sampled accordingly to determine acceptance of this material at the San Juan County Regional Landfill. Waste that is unable to be accepted at the San Juan County Regional Landfill will be submitted to the OCD on a case-by-case basis in accordance with Paragraph (3) of Subsection D of 19.15.9.712.
All on-site equipment will be used for the continued operation of the Bisti Coal 31-1 well site; see attached *Field Sheet* and *Site Photos*.

8) Once the earthen pit is removed to visual extents of contamination, a five (5)-point composite sample will be collected from directly below the liner(s) or at native soil. Additional discrete samples will be collected from any area that is wet, discolored or shows other evidence of a release. All samples being collected will be analyzed for benzene, and total BTEX via USEPA Method 8021B, TPH via USEPA Method 418.1, and chlorides via USEPA 300.1, as in accordance with 19.15.17.13 Subsection C Paragraph (3) NMAC.
Composite samples were collected from each of the four (4) walls and the bottom of the extents of the excavation and analyzed in the field for total petroleum hydrocarbons (TPH) via USEPA Method 418.1, and analyzed in the laboratory for benzene and BTEX via USEPA Method 8021B, and for total chlorides via USEPA Method 4500B. The sample returned results below the 100 mg/kg TPH standard, the 0.2 mg/kg benzene standard, the 50 mg/kg BTEX standard and the 250 mg/kg above background total chloride standard, confirming that a release did NOT occur.

NAME	Benzene	BTEX	Chlorides	TPH
Pit Rule Standard	**0.2 mg/kg**	**50 mg/kg**	**250 mg/kg**	**100 mg/kg**
Background	NS	NS	140 mg/kg	NS
North Wall	< 0.0009 mg/kg	< 0.005 mg/kg	270 mg/kg	< 5 mg/kg
West Wall 2	< 0.0009 mg/kg	< 0.005 mg/kg	310 mg/kg	< 5 mg/kg
South Wall 2	< 0.0009 mg/kg	< 0.005 mg/kg	310 mg/kg	< 5 mg/kg
10' Bottom	< 0.0009 mg/kg	< 0.005 mg/kg	280 mg/kg	< 5 mg/kg
East Wall	0.0246 mg/kg	0.0334 mg/kg	230 mg/kg	< 5 mg/kg

9) Depending on soil sample results the area will be either backfilled or the area will be excavated.
    1) If soil samples do not exceed the regulatory standards of 0.2 mg/kg benzene, 50 mg/kg BTEX, 100 mg/kg TPH, and 250 mg/kg or background concentration of chlorides, as in accordance with 19.15.17.13 Subsection C Paragraph (3) NMAC.

        i. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, shall submit a Form C-141 with the laboratory results so that the division may review the results to determine if additional delineation is required in accordance with Paragraph (4) of Subsection C of 19.15.17.13 NMAC.
        Completed Form C-141 is attached for your review.

        ii. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will backfill the excavation or impacted area with non-waste containing, earthen material, in accordance with 19.15.17.13 Subsection E Paragraph (6) NMAC. A soil cover shall be installed for all backfilled excavations consisting of the background thickness of topsoil or one (1) foot of suitable material to establish vegetation at the site, whichever is greater in accordance with Subsections H of 19.15.17.13 NMAC. The operator shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.
        Elm Ridge Exploration has backfilled the excavated area with non-waste containing earthen material, and installed a soil cover of at least one (1) foot thick of suitable material to establish vegetation at this site. The soil cover has been graded in such a way that it conforms to the grade of the natural surroundings, and will prevent ponding of water and erosion of the cover material; see attached *Site Photos*.

        iii. All areas of the well site that are no longer utilized on a day to day basis for the production of oil and/or gas, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will substantially restore, recontour and re-vegetate the areas, in accordance with 19.15.17.13 Subsections G and I NMAC. The operator shall notify the division when it has been re-seeded and when it has achieved successful re-vegetation.
        Elm Ridge Exploration has restored, recontoured and re-seeded the excavated area in accordance with BLM standards as outlined in the Memorandum of Understanding (MOU).

    2) If soil samples exceed the regulatory standards stated above:
        i. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, shall submit a Form C-141 with the laboratory results so that the division may review the results to determine if additional delineation is required in accordance with Paragraph (4) of Subsection C of 19.15.17.13 NMAC.
        The five (5)-point composite samples of native soil beneath the earthen pit returned results below the 100 mg/kg TPH standard, the 0.2 mg/kg benzene standard, the 50 mg/kg BTEX standard and the 250 mg/kg total chloride standard, confirming that a release did NOT occur.

10) Elm Ridge Exploration will submit a closure report within 60 days following the earthen pit closure. The closure report will consist of a form C-144 with all supporting data and a form C-141 with all supporting data. The supporting data will include proof of closure notice to the surface owner and the OCD, confirmation sampling analytical results, a site diagram, soil backfilling and cover installation, re-vegetation rates, re-seeding techniques, and site reclamation photo documentation if applicable, along with all other information related to the onsite activities.
See attached C-144 Closure Form and attached Form C-141 Release Notification Form. Closure report has been submitted prior to October 19, 2009.

UNITED STATES POSTAL SERVICE.

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Sent To: Mr. Mark Kelly
Street, Apt. No.; or PO Box No.: Bureau of Land Management
City, State, ZIP+4: 1235 La Plata Hwy, Ste. A
Farmington, NM 87401

PS Form 3800, August 2006 See Reverse for Instructions

7007 1490 0000 5398 9305

Kendra
03056-0241
Postmark Here
8.12.09
-slm

Bisti Coal 5 Com 1
03056-0179

Bisti Coal 4-1
03056-0177

Bisti Coal 16-2
03056-0160

Bisti Coal 31-1
03056-0176

Bisti Coal 29-2
03056-0174

Bisti Coal 25-1
03056-0173

Bisti Coal 30 Com 1
03056-0175

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Mark Kelly
Bureau of Land Management
1235 La Plata Hwy, Ste. A
Farmington, NM 87401

COMPLETE THIS SECTION ON DELIVERY

A. Signature: X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery 081309

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

RECEIVED
AUG 14 2009

3. Service Type Ret. Receipt
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7007 1490 0000 5398 9305

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

envirotech

August 12, 2009 Project No. 03056-0176

Mr. Mark Kelly
Bureau of Land Management
1235 La Plata Highway, Suite A
Farmington, New Mexico 87401 Phone: (505) 599-8900

RE: BISTI COAL 31-1 EARTH PIT CLOSURE NOTIFICATION

Dear Mr. Kelly,

Please accept this letter and attached Sundry Notice as the necessary surface owner notification for earth pit closure activities at the Bisti Coal 31-1 well site, owned and operated by Elm Ridge Exploration. The Bisti Coal 31-1 well site is located in Unit G, Section 31, Township 25N, Range 12W, San Juan County, New Mexico. Closure activities are scheduled to begin on August 17, 2009 and continue through August 21, 2009.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully Submitted,
ENVIROTECH, INC.

James McDaniel
Project Scientist
jmcdaniel@envirotech-inc.com

Enclosure: Sundry Notice

Cc: Client File No. 03056

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

***SUBMIT IN TRIPLICATE** – Other instructions on page 2.*

5. Lease Serial No.
NM-36585

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☑ Gas Well ☐ Other

8. Well Name and No.
Bistl Coal 31-1

2. Name of Operator
Elm Ridge Exploration

9. API Well No.
30-045-28808

3a. Address
PO Box 156
Bloomfield, NM 87413

3b. Phone No. *(include area code)*
(505) 632-3476

10. Field and Pool or Exploratory Area

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
1850 FNL 1850 FEL, G-31-25N-12W, Lat. 36.359837 long. -108.150000

11. Country or Parish, State
San Juan County, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Closure of an Earth Pit
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Elm Ridge Exploration plans to begin closure activities for an earthen pit located at the above mentioned site. All formal notifications have been made. Closure activities are scheduled to being on Monday, August 17, 2009 and last through August 21, 2009.

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
Ms. Amy Mackey

Title Administrative Manager

Signature

Date 08/12/2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment.

NOTICES

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and grantingapproval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

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FedEx Tracking Number **8693 8147 6355**

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0215

Sender's Copy

1 From *Please print and press hard.*

Date 8/04/09 Sender's FedEx Account Number 1519-6147-9

Sender's Name James McDaniel Phone (505)632-0615

Company ENVIROTECH

Address 5796 HIGHWAY 64 Dept/Floor/Suite/Room

City FARMINGTON State NM ZIP 87401

2 Your Internal Billing Reference First 24 characters will appear on invoice. 03056-0241 ORIGINAL

3 To

Recipient's Name Brad Jones Phone (505)476-3487

Company N. M. Oil Conservation Division

Recipient's Address

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room

Address 1220 S. St Francis Drive

To request a package be held at a specific FedEx location, print FedEx address here.

City Santa Fe State NM ZIP 87505

0401655191

4a Express Package Service *Packages up to 150 lbs.*

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- ☒ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

FedEx Envelope rate not available. Minimum charge: One-pound rate.

*To most locations.

4b Express Freight Service *Packages over 150 lbs.*

- ☐ FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation: ** To most locations.

5 Packaging

☒ FedEx Envelope* ☐ FedEx Pak* Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak. ☐ FedEx Box ☐ FedEx Tube ☐ Other

*Declared value limit $500.

6 Special Handling Include FedEx address in Section 3.

- ☐ SATURDAY Delivery NOT Available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- ☐ HOLD Weekday at FedEx Location NOT Available for FedEx First Overnight.
- ☐ HOLD Saturday at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging. ☐ Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

☒ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

FedEx Acct. No. / Credit Card No. Exp. Date

Total Packages	Total Weight	Total Declared Value†
1	1.0	$ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

8 Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- ☐ No Signature Required — Package may be left without obtaining a signature for delivery.
- ☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
- ☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. *Fee applies.*

519

PULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE. NO POUCH NEEDED.

envirotech

August 4, 2009 Project No. 03056-0241

Mr. Brad Jones
New Mexico Oil Conservation Division
1220 South St. Francis Street
Santa Fe, New Mexico 87505

Phone (505) 476-3487

RE: EARTH PIT CLOSURE NOTIFICATIONS AND PROPOSED CLOSURE SCHEDULE

Dear Mr. Jones,

Envirotech, Inc., on the behalf of Elm Ridge Exploration, would like to submit this notification to begin closure activities at the below mentioned locations. Attached to this document is a proposed closure schedule for the months of August and September of 2009. Should this schedule be approved by your office, closure activities will begin as scheduled, with surface owner notifications being made at a minimum of 24 hours prior to the beginning of closure activities and a maximum of one (1) week prior to closure activities. Additional closure notifications and schedules will be made prior to beginning any closure activities. This letter will act as the closure notification for the following sites:

Bisti Coal 20-2	Bisti Coal 6-1	Bisti Coal 6-2	Bisti Coal 7-1
Bisti Coal 7 COM 2	Bisti Coal 8 COM 1	Bisti Coal 8L COM 2	Bisti Coal 9-1
Bisti Coal 9 COM 2	Bisti Coal 21-1	Bisti Coal 21 COM 2	Bisti Coal 22-2
Bisti Coal 28-1	Bisti Coal 29-1	Bisti Coal 29-2	Bisti Coal 30 COM 1
Bisti Coal 31-1	Bisti Coal 4-1	Bisti Coal 4 COM 2	Bisti Coal 5 COM 1
Bisti Coal 5K COM 2	Carson 10-332	Buena Suerte 3 G COM 1	Buena Suerte 3 L COM 1
Buena Suerte 32 G COM 1	East Bisti Coal 6-1	Buena Suerte 4 L COM 1	Carson Unit 15 COM 323
Carson Unit 206	Carson Unit 313	Pete Morrow 1	Pete Morrow 2
North Bisti Coal 32M COM 2	North Bisti Coal 31-1	Sam Jackson State COM 1	Jeter COM 2
West Bisti Coal 11 F COM 1	West Bisti Coal 12-1	West Bisti Coal 13-1	West Bisti Coal 11-2
West Bisti Coal 10-2	West Bisti Coal 15-1	West Bisti Coal 14 COM 1	West Bisti Coal 15-2
West Bisti Coal 22-2	West Bisti Coal 23-1	West Bisti Coal 22 COM 1	West Bisti Coal 24-1
West Bisti Coal 24 COM 2	West Bisti Coal 25-1	West Bisti Coal 25 2Y	Jicarilla Apache I-11
Sheila Hixon 1	Bisti Coal 16-2		

Elm Ridge Exploration is proposing to close the earthen pits at the above listed well locations based on the attached closure schedule.

We appreciate the opportunity to be of service. Should you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully Submitted,

ENVIROTECH, INC.

James McDaniel
Project Scientist
jmcdaniel@envirotech-inc.com

ELM RIDGE EXPLORATION

Amy Mackey
Administrative Manager
amackey1@elmridge.net

Attachments: Closure Schedule

August 2009

Sunday	Monday	Tuesday	Wed	Thurs	Friday	Sat
						1
2	3	4	5	6	7	8
9	10 Bisti Coal 20-2 Bisti Coal 21-1 Bisti Coal 21 COM 2 Bisti Coal 22-2 Bisti Coal 28-1	11 Bisti Coal 20-2 Bisti Coal 21-1 Bisti Coal 21 COM 2 Bisti Coal 22-2 Bisti Coal 28-1	12 Bisti Coal 20-2 Bisti Coal 21-1 Bisti Coal 21 COM 2 Bisti Coal 22-2 Bisti Coal 28-1	13 Bisti Coal 20-2 Bisti Coal 21-1 Bisti Coal 21 COM 2 Bisti Coal 22-2 Bisti Coal 28-1	14 Bisti Coal 20-2 Bisti Coal 21-1 Bisti Coal 21 COM 2 Bisti Coal 22-2 Bisti Coal 28-1	15
16	17 Bisti Coal 29-1 Bisti Coal 29-2 Bisti Coal 30 COM 1 Bisti Coal 31-1 Bisti Coal 4-1 Bisti Coal 4 COM 2 Bisti Coal 5 COM 1 Bisti Coal 5K COM 2 Bisti Coal 16-2	18 Bisti Coal 29-1 Bisti Coal 29-2 Bisti Coal 30 COM 1 Bisti Coal 31-1 Bisti Coal 4-1 Bisti Coal 4 COM 2 Bisti Coal 5 COM 1 Bisti Coal 5K COM 2 Bisti Coal 16-2	19 Bisti Coal 29-1 Bisti Coal 29-2 Bisti Coal 30 COM 1 Bisti Coal 31-1 Bisti Coal 4-1 Bisti Coal 4 COM 2 Bisti Coal 5 COM 1 Bisti Coal 5K COM 2 Bisti Coal 16-2	20 Bisti Coal 29-1 Bisti Coal 29-2 Bisti Coal 30 COM 1 Bisti Coal 31-1 Bisti Coal 4-1 Bisti Coal 4 COM 2 Bisti Coal 5 COM 1 Bisti Coal 5K COM 2 Bisti Coal 16-2	21 Bisti Coal 29-1 Bisti Coal 29-2 Bisti Coal 30 COM 1 Bisti Coal 31-1 Bisti Coal 4-1 Bisti Coal 4 COM 2 Bisti Coal 5 COM 1 Bisti Coal 5K COM 2 Bisti Coal 16-2	22
23	24 Bisti Coal 6-1 Bisti Coal 6-2 Bisti Coal 7-1 Bisti Coal 7 COM 2 Bisti Coal 8 COM 1 Bisti Coal 8L COM 2 Bisti Coal 9-1 Bisti Coal 9 COM 2	25 Bisti Coal 6-1 Bisti Coal 6-2 Bisti Coal 7-1 Bisti Coal 7 COM 2 Bisti Coal 8 COM 1 Bisti Coal 8L COM 2 Bisti Coal 9-1 Bisti Coal 9 COM 2	26 Bisti Coal 6-1 Bisti Coal 6-2 Bisti Coal 7-1 Bisti Coal 7 COM 2 Bisti Coal 8 COM 1 Bisti Coal 8L COM 2 Bisti Coal 9-1 Bisti Coal 9 COM 2	27 Bisti Coal 6-1 Bisti Coal 6-2 Bisti Coal 7-1 Bisti Coal 7 COM 2 Bisti Coal 8 COM 1 Bisti Coal 8L COM 2 Bisti Coal 9-1 Bisti Coal 9 COM 2	28 Bisti Coal 6-1 Bisti Coal 6-2 Bisti Coal 7-1 Bisti Coal 7 COM 2 Bisti Coal 8 COM 1 Bisti Coal 8L COM 2 Bisti Coal 9-1 Bisti Coal 9 COM 2	29
30	31 Carson 10-332 Buena Suerte 3 G COM 1 Buena Suerte 3 L COM 1 Buena Suerte 32 G COM 1 Buena Suerte 4 L COM 1 East Bisti Coal 6-1 Carson Unit 15 COM 323 Carson Unit 206					

September 2009

Sun	Monday	Tuesday	Wed	Thurs	Friday	Sat
		1 Carson 10-332 Buena Suerte 3 G COM 1 Buena Suerte 3 L COM 1 Buena Suerte 32 G COM 1 Buena Suerte 4 L COM 1 East Bisti Coal 6-1 Carson Unit 15 COM 323 Carson Unit 206	2 Carson 10-332 Buena Suerte 3 G COM 1 Buena Suerte 3 L COM 1 Buena Suerte 32 G COM 1 Buena Suerte 4 L COM 1 East Bisti Coal 6-1 Carson Unit 15 COM 323 Carson Unit 206	3 Carson 10-332 Buena Suerte 3 G COM 1 Buena Suerte 3 L COM 1 Buena Suerte 32 G COM 1 Buena Suerte 4 L COM 1 East Bisti Coal 6-1 Carson Unit 15 COM 323 Carson Unit 206	4 Carson 10-332 Buena Suerte 3 G COM 1 Buena Suerte 3 L COM 1 Buena Suerte 32 G COM 1 Buena Suerte 4 L COM 1 East Bisti Coal 6-1 Carson Unit 15 COM 323 Carson Unit 206	5
6	7 Carson Unit 313 Pete Morrow 1 Pete Morrow 2 North Bisti Coal 32M COM 2 Sam Jackson State COM 1 North Bisti Coal 31-1 West Bisti Coal 11 F COM 1 Jeter COM 2	8 Carson Unit 313 Pete Morrow 1 Pete Morrow 2 North Bisti Coal 32M COM 2 Sam Jackson State COM 1 North Bisti Coal 31-1 West Bisti Coal 11 F COM 1 Jeter COM 2	9 Carson Unit 313 Pete Morrow 1 Pete Morrow 2 North Bisti Coal 32M COM 2 Sam Jackson State COM 1 North Bisti Coal 31-1 West Bisti Coal 11 F COM 1 Jeter COM 2	10 Carson Unit 313 Pete Morrow 1 Pete Morrow 2 North Bisti Coal 32M COM 2 Sam Jackson State COM 1 North Bisti Coal 31-1 West Bisti Coal 11 F COM 1 Jeter COM 2	11 Carson Unit 313 Pete Morrow 1 Pete Morrow 2 North Bisti Coal 32M COM 2 Sam Jackson State COM 1 North Bisti Coal 31-1 West Bisti Coal 11 F COM 1 Jeter COM 2	12
13	14 West Bisti Coal 12-1 West Bisti Coal 13-1 West Bisti Coal 11-2 West Bisti Coal 10-2 West Bisti Coal 14 COM 1 West Bisti Coal 15-1 West Bisti Coal 15-2 West Bisti Coal 22-2	15 West Bisti Coal 12-1 West Bisti Coal 13-1 West Bisti Coal 11-2 West Bisti Coal 10-2 West Bisti Coal 14 COM 1 West Bisti Coal 15-1 West Bisti Coal 15-2 West Bisti Coal 22-2	16 West Bisti Coal 12-1 West Bisti Coal 13-1 West Bisti Coal 11-2 West Bisti Coal 10-2 West Bisti Coal 14 COM 1 West Bisti Coal 15-1 West Bisti Coal 15-2 West Bisti Coal 22-2	17 West Bisti Coal 12-1 West Bisti Coal 13-1 West Bisti Coal 11-2 West Bisti Coal 10-2 West Bisti Coal 14 COM 1 West Bisti Coal 15-1 West Bisti Coal 15-2 West Bisti Coal 22-2	18 West Bisti Coal 12-1 West Bisti Coal 13-1 West Bisti Coal 11-2 West Bisti Coal 10-2 West Bisti Coal 14 COM 1 West Bisti Coal 15-1 West Bisti Coal 15-2 West Bisti Coal 22-2	19
20	21 West Bisti Coal 22 COM 1 West Bisti Coal 23-1 West Bisti Coal 24-1 West Bisti Coal 24 COM 2 West Bisti Coal 25-1 West Bisti Coal 25 2Y Jicarilla Apache I-11 Sheila Hixon 1	22 West Bisti Coal 22 COM 1 West Bisti Coal 23-1 West Bisti Coal 24-1 West Bisti Coal 24 COM 2 West Bisti Coal 25-1 West Bisti Coal 25 2Y Jicarilla Apache I-11 Sheila Hixon 1	23 West Bisti Coal 22 COM 1 West Bisti Coal 23-1 West Bisti Coal 24-1 West Bisti Coal 24 COM 2 West Bisti Coal 25-1 West Bisti Coal 25 2Y Jicarilla Apache I-11 Sheila Hixon 1	24 West Bisti Coal 22 COM 1 West Bisti Coal 23-1 West Bisti Coal 24-1 West Bisti Coal 24 COM 2 West Bisti Coal 25-1 West Bisti Coal 25 2Y Jicarilla Apache I-11 Sheila Hixon 1	25 West Bisti Coal 22 COM 1 West Bisti Coal 23-1 West Bisti Coal 24-1 West Bisti Coal 24 COM 2 West Bisti Coal 25-1 West Bisti Coal 25 2Y Jicarilla Apache I-11 Sheila Hixon 1	26
27	28	29	30			

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City, State, ZIP+4: 1235 La Plata Hwy., Ste. A Farmington, NM 87401

PS Form 3800, August 2006 See Reverse for Instructions

West Bisti Coal 23-1
03056-0216
West Bisti Coal
24 Com 2
03056-0217
West Bisti Coal
25-1
03056-0218
West Bisti Coal
25-24
03056-0219
West Bisti Coal
24-1
03056-0220

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- Attach this card to the back of the mailpiece, or on the front if space permits.

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Mr. Mark Kelly
Bureau of Land Management
1235 La Plata Hwy., Ste. A
Farmington, NM 87401

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ELM RIDGE EXPLORATION
BISTI COAL 31-1
SEC. 31, TWN 25N, RGE 12W
PROJECT NO. 03056-0176

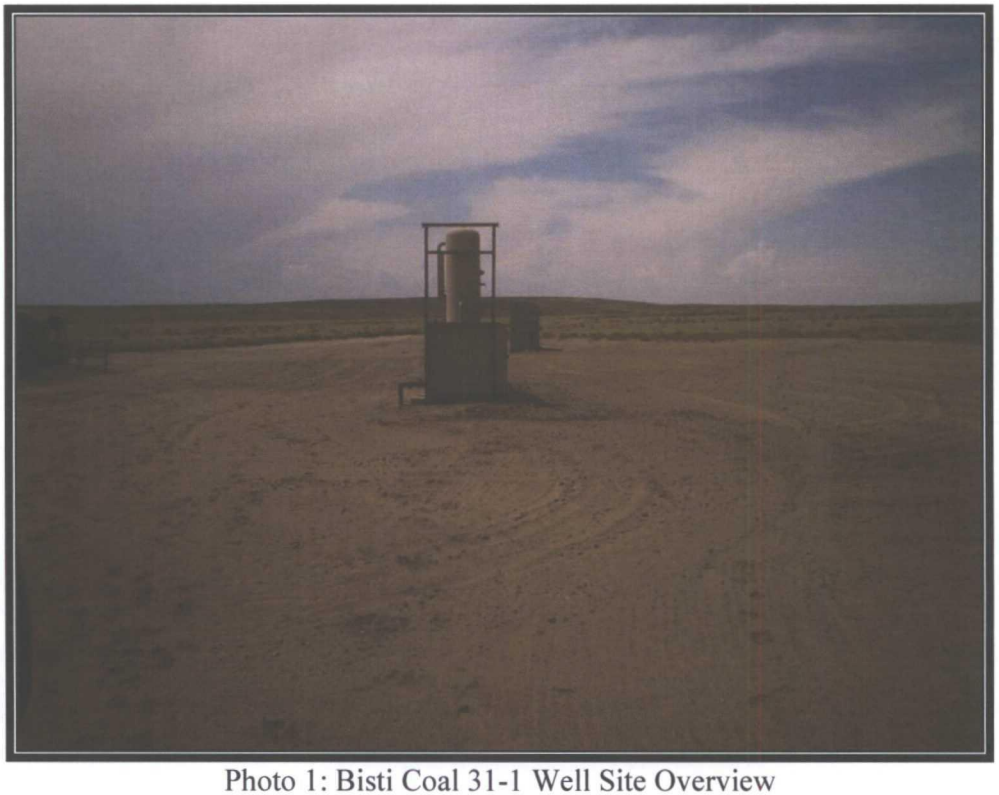

Photo 1: Bisti Coal 31-1 Well Site Overview

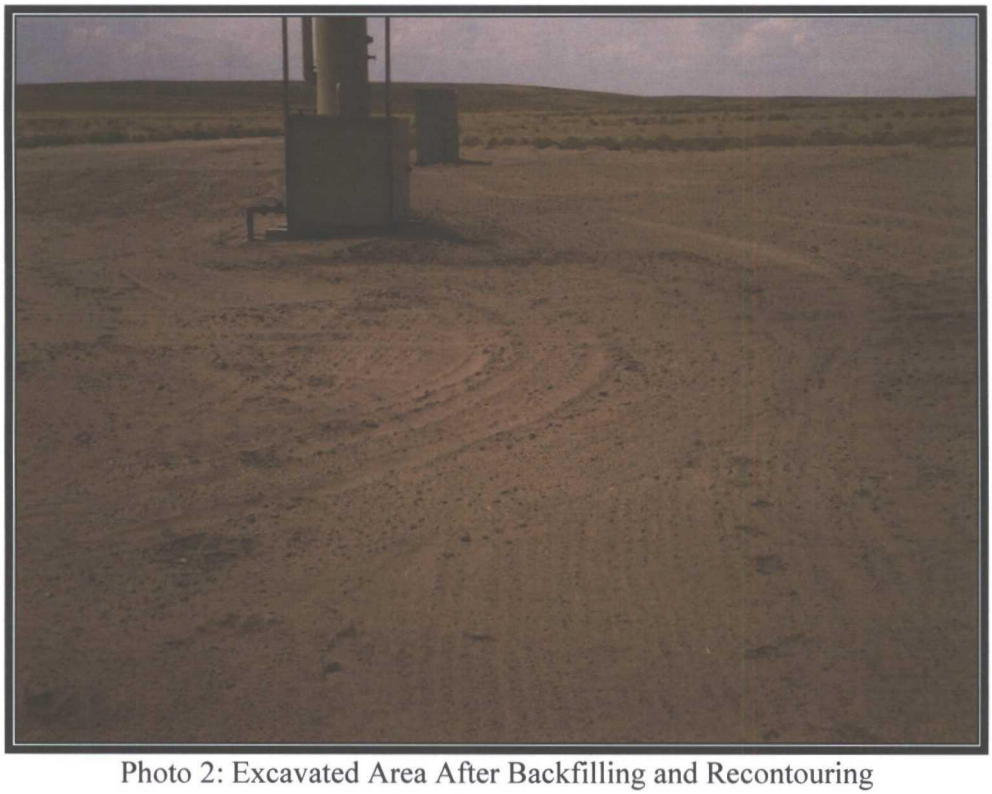

Photo 2: Excavated Area After Backfilling and Recontouring

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Exploration	Project #:	03056-0176
Sample No.:	1	Date Reported:	9/4/2009
Sample ID:	North Wall	Date Sampled:	8/18/2009
Sample Matrix:	Soil	Date Analyzed:	8/18/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**ND**	**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: **Bisti Coal 31-1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

James McDaniel
Printed

Greg Crabtree
Printed

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EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Exploration	Project #:	03056-0176
Sample No.:	2	Date Reported:	9/4/2009
Sample ID:	West Wall 2	Date Sampled:	8/18/2009
Sample Matrix:	Soil	Date Analyzed:	8/18/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**ND**	**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: **Bisti Coal 31-1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Exploration	Project #:	03056-0176
Sample No.:	3	Date Reported:	9/4/2009
Sample ID:	South Wall 2	Date Sampled:	8/18/2009
Sample Matrix:	Soil	Date Analyzed:	8/18/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**ND**	**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: **Bisti Coal 31-1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

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Greg Crabtree
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CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 18-Aug-09

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	212
	500	
	1000	

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

Analyst — Date: 9/4/09

James McDaniel
Print Name

Review — Date: 9/4/09

Greg Crabtree
Print Name

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Exploration	Project #:	03056-0176
Sample No.:	1	Date Reported:	9/4/2009
Sample ID:	East Wall	Date Sampled:	8/19/2009
Sample Matrix:	Soil	Date Analyzed:	8/19/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**ND**	**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: **Bisti Coal 31-1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

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Printed

Greg Crabtree
Printed

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EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Exploration	Project #:	03056-0176
Sample No.:	1	Date Reported:	9/4/2009
Sample ID:	10' Bottom	Date Sampled:	8/19/2009
Sample Matrix:	Soil	Date Analyzed:	8/19/2009
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**ND**	**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: **Bisti Coal 31-1**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

James McDaniel
Printed

Greg Crabtree
Printed

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CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 19-Aug-09

Parameter	Standard Concentration mg/L	Concentration Reading mg/L
TPH	100	
	200	210
	500	
	1000	

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

Analyst

9/4/09
Date

James McDaniel
Print Name

Review

9/4/09
Date

Greg Crabtree
Print Name

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ElmRidge	Project #:	03056-0176
Sample ID:	10' Bottom	Date Reported:	08-25-09
Laboratory Number:	51353	Date Sampled:	08-19-09
Chain of Custody:	7782	Date Received:	08-19-09
Sample Matrix:	Soil	Date Analyzed:	08-24-09
Preservative:	Cool	Date Extracted:	08-21-09
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	**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: **Bisti Coal 31-1**

Analyst

Review

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ElmRidge	Project #:	03056-0176
Sample ID:	East Wall	Date Reported:	08-25-09
Laboratory Number:	51354	Date Sampled:	08-19-09
Chain of Custody:	7782	Date Received:	08-19-09
Sample Matrix:	Soil	Date Analyzed:	08-24-09
Preservative:	Cool	Date Extracted:	08-21-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**24.6**	**0.9**
Toluene	**3.0**	**1.0**
Ethylbenzene	**1.2**	**1.0**
p,m-Xylene	**2.6**	**1.2**
o-Xylene	**2.0**	**0.9**
Total BTEX	**33.4**	

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: **Bisti Coal 31-1**

Analyst

Review

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	08-24-BT QA/QC	Date Reported:	08-25-09
Laboratory Number:	51252	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-24-09
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	4.1794E+006	4.1878E+006	**0.2%**	**ND**	**0.1**
Toluene	3.8929E+006	3.9007E+006	**0.2%**	**ND**	**0.1**
Ethylbenzene	3.4950E+006	3.5020E+006	**0.2%**	**ND**	**0.1**
p,m-Xylene	9.0451E+006	9.0632E+006	**0.2%**	**ND**	**0.1**
o-Xylene	3.3639E+006	3.3706E+006	**0.2%**	**ND**	**0.1**

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	**6.2**	**5.9**	**4.8%**	**0 - 30%**	**0.9**
Toluene	**14.9**	**15.2**	**2.0%**	**0 - 30%**	**1.0**
Ethylbenzene	**8.8**	**8.2**	**6.8%**	**0 - 30%**	**1.0**
p,m-Xylene	**28.9**	**28.4**	**1.7%**	**0 - 30%**	**1.2**
o-Xylene	**13.7**	**12.9**	**5.8%**	**0 - 30%**	**0.9**

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	**6.2**	**50.0**	**55.4**	**98.6%**	**39 - 150**
Toluene	**14.9**	**50.0**	**64.4**	**99.2%**	**46 - 148**
Ethylbenzene	**8.8**	**50.0**	**57.3**	**97.4%**	**32 - 160**
p,m-Xylene	**28.9**	**100**	**120**	**92.9%**	**46 - 148**
o-Xylene	**13.7**	**50.0**	**62.0**	**97.3%**	**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 51252 - 51253, 51352 - 51354, 51356, and 51362 - 51365.**

Analyst

Review

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Chloride

Client:	Elm Ridge	Project #:	03056-0176
Sample ID:	10' Bottom	Date Reported:	08-25-09
Lab ID#:	51353	Date Sampled:	08-19-09
Sample Matrix:	Soil	Date Received:	08-19-09
Preservative:	Cool	Date Analyzed:	08-25-09
Condition:	Intact	Chain of Custody:	7782

Parameter	Concentration (mg/Kg)
Total Chloride	**280**

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: **Bisti Coal 31-1.**

Analyst

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Chloride

Client:	Elm Ridge	Project #:	03056-0176
Sample ID:	East Wall	Date Reported:	08-25-09
Lab ID#:	51354	Date Sampled:	08-19-09
Sample Matrix:	Soil	Date Received:	08-19-09
Preservative:	Cool	Date Analyzed:	08-25-09
Condition:	Intact	Chain of Custody:	7782

Parameter	Concentration (mg/Kg)
Total Chloride	**230**

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: **Bisti Coal 31-1.**

Analyst

Review

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CHAIN OF CUSTODY RECORD

7782

Client:	Project Name / Location:
Elm Ridge Exp.	Bisti Coal 31-1
Client Address:	Sampler Name: J McDaniel
Client Phone No.:	Client No.: 03056-0176

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl₂	Preservative HCl	Preservative	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
10' Bottom	8/19/09	1200	51353	(Soil) Solid Sludge Aqueous	1/4oz			X		X								X				✓	✓
East wall	↓	1150	51354	(Soil) Solid Sludge Aqueous	1/4oz			X		X								X				✓	✓
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
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				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	8/19/09	1627	[signature]	8/19/09	1627
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ElmRidge	Project #:	03056-0176
Sample ID:	North Wall	Date Reported:	08-21-09
Laboratory Number:	51341	Date Sampled:	08-18-09
Chain of Custody:	7774	Date Received:	08-18-09
Sample Matrix:	Soil	Date Analyzed:	08-20-09
Preservative:	Cool	Date Extracted:	08-19-09
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	**99.0 %**
	1,4-difluorobenzene	**99.0 %**
	Bromochlorobenzene	**99.0 %**

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: **Bisti Coal 31-1**

Analyst

Review

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ElmRidge	Project #:	03056-0176
Sample ID:	West Wall 2	Date Reported:	08-21-09
Laboratory Number:	51340	Date Sampled:	08-18-09
Chain of Custody:	7774	Date Received:	08-18-09
Sample Matrix:	Soil	Date Analyzed:	08-20-09
Preservative:	Cool	Date Extracted:	08-19-09
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	**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: **Bisti Coal 31-1**

Analyst

Review

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EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	ElmRidge	Project #:	03056-0176
Sample ID:	South Wall 2	Date Reported:	08-21-09
Laboratory Number:	51339	Date Sampled:	08-18-09
Chain of Custody:	7774	Date Received:	08-18-09
Sample Matrix:	Soil	Date Analyzed:	08-20-09
Preservative:	Cool	Date Extracted:	08-19-09
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	**99.0 %**
	1,4-difluorobenzene	**99.0 %**
	Bromochlorobenzene	**99.0 %**

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: **Bisti Coal 31-1**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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Analytical Laboratory

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	08-20-BT QA/QC	Date Reported:	08-21-09
Laboratory Number:	51305	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-20-09
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	3.8868E+006	3.8946E+006	**0.2%**	**ND**	**0.1**
Toluene	3.6159E+006	3.6231E+006	**0.2%**	**ND**	**0.1**
Ethylbenzene	3.2174E+006	3.2239E+006	**0.2%**	**ND**	**0.1**
p,m-Xylene	8.2854E+006	8.3020E+006	**0.2%**	**ND**	**0.1**
o-Xylene	3.0687E+006	3.0748E+006	**0.2%**	**ND**	**0.1**

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	**4.3**	**4.0**	**7.0%**	**0 - 30%**	**0.9**
Toluene	**9.0**	**9.4**	**4.4%**	**0 - 30%**	**1.0**
Ethylbenzene	**8.0**	**7.4**	**7.5%**	**0 - 30%**	**1.0**
p,m-Xylene	**18.2**	**17.7**	**2.7%**	**0 - 30%**	**1.2**
o-Xylene	**11.3**	**10.5**	**7.1%**	**0 - 30%**	**0.9**

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	**4.3**	**50.0**	**53.5**	**98.5%**	**39 - 150**
Toluene	**9.0**	**50.0**	**58.5**	**99.2%**	**46 - 148**
Ethylbenzene	**8.0**	**50.0**	**56.5**	**97.4%**	**32 - 160**
p,m-Xylene	**18.2**	**100**	**109**	**92.4%**	**46 - 148**
o-Xylene	**11.3**	**50.0**	**59.6**	**97.2%**	**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 51305, 51322, 51323, 51325, 51326, 51328, 51337, and 51339 - 51341.**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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Chloride

Client:	Elm Ridge	Project #:	03056-0176
Sample ID:	Background	Date Reported:	08-24-09
Lab ID#:	51342	Date Sampled:	08-18-09
Sample Matrix:	Soil	Date Received:	08-18-09
Preservative:	Cool	Date Analyzed:	08-19-09
Condition:	Intact	Chain of Custody:	7774

Parameter	Concentration (mg/Kg)
Total Chloride	**140**

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: **Bisti Coal 31-1..**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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Chloride

Client:	Elm Ridge	Project #:	03056-0176
Sample ID:	North Wall	Date Reported:	08-24-09
Lab ID#:	51341	Date Sampled:	08-18-09
Sample Matrix:	Soil	Date Received:	08-18-09
Preservative:	Cool	Date Analyzed:	08-19-09
Condition:	Intact	Chain of Custody:	7774

Parameter	Concentration (mg/Kg)
Total Chloride	**270**

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: **Bisti Coal 31-1..**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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Chloride

Client:	Elm Ridge	Project #:	03056-0176
Sample ID:	West Wall 2	Date Reported:	08-24-09
Lab ID#:	51340	Date Sampled:	08-18-09
Sample Matrix:	Soil	Date Received:	08-18-09
Preservative:	Cool	Date Analyzed:	08-19-09
Condition:	Intact	Chain of Custody:	7774

Parameter	Concentration (mg/Kg)
Total Chloride	**310**

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: **Bisti Coal 31-1..**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

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Chloride

Client:	Elm Ridge	Project #:	03056-0176
Sample ID:	South Wall 2	Date Reported:	08-24-09
Lab ID#:	51339	Date Sampled:	08-18-09
Sample Matrix:	Soil	Date Received:	08-18-09
Preservative:	Cool	Date Analyzed:	08-19-09
Condition:	Intact	Chain of Custody:	7774

Parameter	Concentration (mg/Kg)
Total Chloride	**310**

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: **Bisti Coal 31-1..**

Analyst

Review

5796 US Highway 64, Farmington, NM 87401 | Ph (505)632-0615 Fr (800)362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com

CHAIN OF CUSTODY RECORD

7774

RUSH

Client:	Project Name / Location:
Elm Ridge	Bisti Coal 31-1
Client Address:	**Sampler Name:** JPM / R Garcia
Client Phone No.:	**Client No.:** 03056-0176

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative: $HgCl_2$	HCl	Cool	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
									ANALYSIS / PARAMETERS														
Background	8/18/09	1500	51342	Soil Solid Sludge Aqueous	1/4oz			X		X								X				X	X
North Wall		1510	51341	Soil Solid Sludge Aqueous				X		X								X				X	X
West Wall 2		1530	51340	Soil Solid Sludge Aqueous				X		X								X				X	X
South Wall 2		1553	51339	Soil Solid Sludge Aqueous				X		X								X				X	X
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			
				Soil Solid Sludge Aqueous																			

	Date	Time		Date	Time
Relinquished by: (Signature)	8/18/09	1650	Received by: (Signature) Carla Thompson	8/18/09	16:50
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

RUSH

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PAGE NO: 1 OF 2	envirotech (505) 632-0615 (800) 362-1879 5796 U.S. Hwy 64, Farmington, NM 87401	ENVIRONMENTAL SPECIALIST:
DATE STARTED: 8/17/09		LAT:
DATE FINISHED:		LONG:

FIELD REPORT: BGT / PIT CLOSURE VERIFICATION

LOCATION: NAME: Bisti Coal 31 WELL #: 1 TEMP PIT: PERMANENT PIT: X BGT:
LEGAL ADD: UNIT: SEC: 31 TWP: 25N RNG: 12W PM: NMPM
QTR/FOOTAGE: 1850' FNL 1850' FEL CNTY: San Juan ST: NM

EXCAVATION APPROX: FT. X FT. X FT. DEEP CUBIC YARDAGE:
DISPOSAL FACILITY: Envirotech Landfarm #2 REMEDIATION METHOD: Landfarm
LAND OWNER: Federal NM 3656 API: BGT / PIT VOLUME:
CONSTRUCTION MATERIAL: Earth DOUBLE-WALLED, WITH LEAK DETECTION:

LOCATION APPROXIMATELY: FT. FROM WELLHEAD
DEPTH TO GROUNDWATER:

___ 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

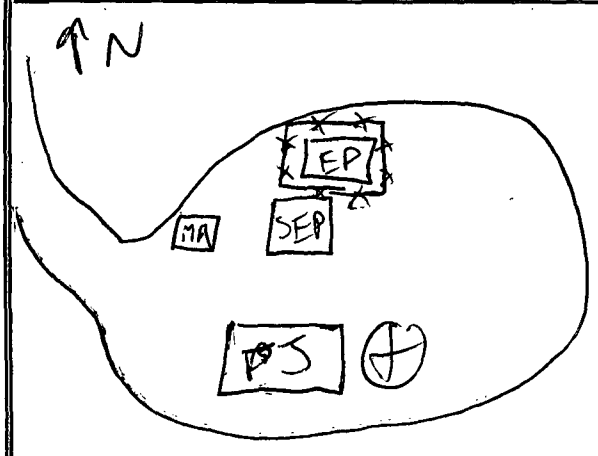
___ TEMPORARY PIT - GROUNDWATER ≥100 FEET DEEP
BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 1000 mg/kg

X 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)
8/17/09	—	200 STD		-	-		20E	—
8/17/09	1450	EP Comp 1	1	5.0	20		30E	~~1232~~
8/18/09		200 STD	2	—	—	—	212	—
8/18/09			3					
			4					
			5					
			6					

PERIMETER



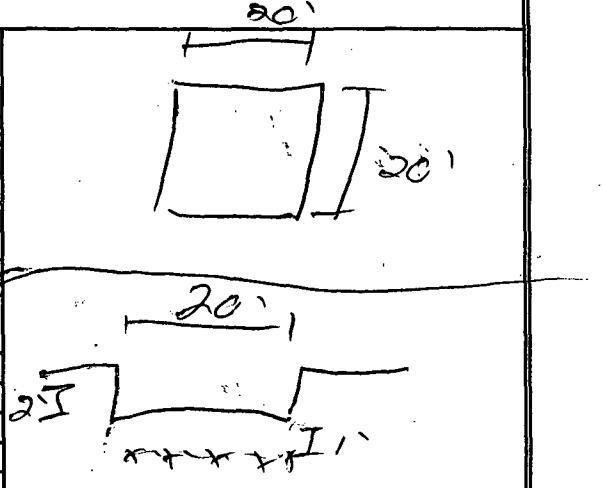
FIELD CHLORIDES RESULTS

SAMPLE ID	READING	CALC. (mg/kg)

PID RESULTS

SAMPLE ID	RESULTS (ppm)

PROFILE



LAB SAMPLES

SAMPLE ID	ANALYSIS	RESULTS
	BENZENE	
	BTEX	
	GRO & DRO	
	CHLORIDES	

NOTES:

WORKORDER # WHO ORDERED

PAGE NO: 2 OF 2

DATE STARTED: 8/17/09

DATE FINISHED:

envirotech
(505) 632-0615 (800) 362-1879
5796 U.S. Hwy 64, Farmington, NM 87401

ENVIRONMENTAL SPECIALIST: SPM

LAT:

LONG:

FIELD REPORT: BGT / PIT CLOSURE VERIFICATION

LOCATION: NAME: Bisti Coal 31 WELL #: 1 TEMP PIT: PERMANENT PIT: X BGT:

LEGAL ADD: UNIT: SEC: 31 TWP: 25N RNG: 12W PM: NMPM

QTR/FOOTAGE: 1850' FNL 1850' FEL CNTY: SJ ST: NM

EXCAVATION APPROX: FT. X FT. X FT. DEEP CUBIC YARDAGE:

DISPOSAL FACILITY: Envirotech LF #2 REMEDIATION METHOD: Landfarm

LAND OWNER: Fed ~~Envirotech LF #2~~ API: BGT / PIT VOLUME: Unknown

CONSTRUCTION MATERIAL: Earth DOUBLE-WALLED, WITH LEAK DETECTION: NA

LOCATION APPROXIMATELY: FT. FROM WELLHEAD

DEPTH TO GROUNDWATER:

___ 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

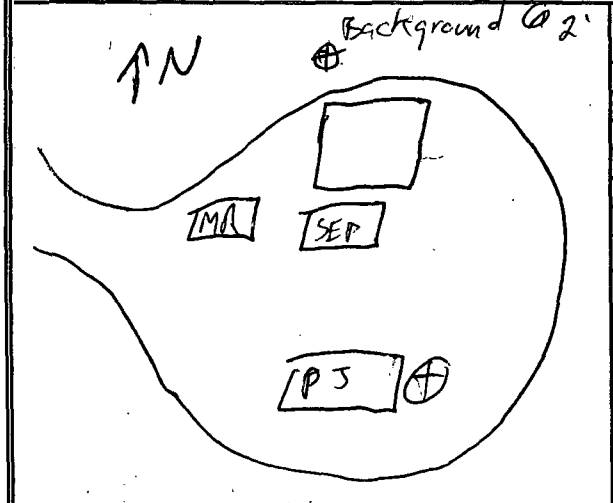
X PERMANENT PIT OR BGT

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		–	–	–	212	–
1050	9' Bottom	1	5.0	20	4	ND	ND
1115	W Wall	2	5.0	20	4	18	72
1118	N Wall	3	5.0	20	4	ND	ND
1120	S Wall	4	5.0	20	4	ND	ND
		5					
		6					

PERIMETER



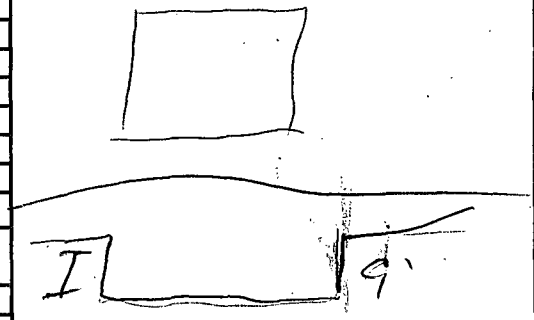
FIELD CHLORIDES RESULTS

SAMPLE ID	READING	CALC. (mg/kg)
9' Bottom	6.0	351
W Wall	6.4	407
N Wall	7.0	510
S Wall	7.2	550
Background	3.4	128

PID RESULTS

SAMPLE ID	RESULTS (ppm)
9' Bottom	0.0
W Wall	0.0
N Wall	0.0
S Wall	0.0

PROFILE



LAB SAMPLES

SAMPLE ID	ANALYSIS	RESULTS
	BENZENE	
	BTEX	
	GRO & DRO	
	CHLORIDES	

NOTES:

WORKORDER #

WHO ORDERED

ENVIROTECH INC.

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Method 418.1 Analysis Log

Total Petroleum Hydrocarbons

Date 8/18/09 - 8/19/09 Analyst JPM / R

Location Bisti Coal 31-1 Instrument Infracal

Job No. 03056-0176

Sample No.	Sample Description	Weight (g)	mL. Freon	Dilution	Reading	Calc. TPH (ppm)	OVM (ppm)	chlorides
5	S Wall							SOC
6	W Wall						0.0	407
~~4~~	~~Wall~~						~~0.0~~	~~3500~~
~~7~~	N Wall	5.0	20	4	ND	ND	0.0	251
8	West Wall 2	5.0	20	4	ND	ND	0.0	243
9	S Wall 2	5.0	20	4	ND	ND	0.0	303
	8/19/09							
1	E Wall	5.0	20	4	ND	ND	0.0	243
2	10' Bottom	5.0	20	4	11	4	0.0	326

Infrared Spectrophotometer Calibration

New Freon _____

Date Standards Prepared 7/9/09

Standard Concentration (ppm)

100 _____ 500 _____

200 212 / 210 1000 _____

8/18/09 8/19/09

I-Cal RF: _____ C-Cal RF: _____

RSD: _____ % Difference: _____

QA/QC Acceptance Criteria: I-Cal RSD +/- 20% C-Cal Difference +/- 10%

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Bill of Lading

MANIFEST # 34056

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 8-18-09 JOB# 03056-0176

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Elm Ridge Bisti Coal	LF II	Con't soil	A19	20	—	4 4	+75	958	[signature]
2	31 well 1 " "	"	"	A 19	12	—	"	74	958	[signature]
3	" "	"	"	A20	20	—	"	+24	1025	[signature]
4	" "	"	"	A 20	12	—	"	74	1210	[signature]
5	" "	"	"	A20	20	—	"	75	1212	[signature]
6	" "	"	"	A20	20	—	"	+24	1248	[signature]
7	" "	"	"	A 21	20	—	"	74	1420	[signature]
8	" "	"	"	A 21	12	—	"	75	1420	[signature]
9	" "	"	"	A 21	20	—	"	+24	1504	[signature]
	Void this line only void		VOID ~~7~~		~~12~~	~~—~~	~~"~~	~~21~~	~~1526~~	~~[signature]~~
					156					

RESULTS: 298 (8)

CHLORIDE TEST	9	LANDFARM EMPLOYEE: Gary Robinson
PAINT FILTER TEST	9	

NOTES:

ENTERED AUG 2 1 2009

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

NAME Carlos Romo COMPANY four Four INC SIGNATURE [signature]

COMPANY CONTACT Mack Humphrey PHONE (505) 632-0615 DATE 8-18-09

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Bill of Lading

MANIFEST # 34057

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 8-18-09 JOB# 03056-0176

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	ENVIROTECH LF II	Elm Ridge Bisti Coal	Clean Fill Soil	—	20	—	4-4	75	958	Carlos Romo
2	"	"	"	—	12	—	4-4	74	958	John Bentley
3	"	"	"	—	20	—	4-4	24	1025	Jon Fong
4	"	"	"	—	12	—	4-4	74	1210	Carlos Romo
5	"	"	"	—	20	—	4-4	75	1212	John Bentley
6	"	"	"	—	20	—	4-4	24	1248	Jon Fong
7	"	"	"	—	20	—	"	74	1420	Carlos Romo
8	"	"	"	—	12	—	"	75	1420	John Bentley
9	"	"	"	—	20	—	"	24	1504	Jon Fong
					156					

RESULTS:

CHLORIDE TEST	
PAINT FILTER TEST	

LANDFARM EMPLOYEE: Gary Rob (agt)

NOTES:

ENTERED AUG 21 2009

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

NAME CARLOS ROMO COMPANY Four Four INC SIGNATURE Carlos Romo

COMPANY CONTACT Mack Humbrey PHONE (505) 632-0615 DATE 8-18-09

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Bill of Lading

MANIFEST # 34067

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 8-19-09 JOB# 03256-0176

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Elmridge Bisti Coal 31	LF II	Pont Soil	A21	12	—	4-4	75	835	Jack Bartista
2	well 1 " "	" "	" "	A21	20	—	4-4	24	898	Jones Larry
3	" "	" "	" "	A22	12	—	4-4	75	1020	Jack Bartista
4	" "	" "	" "	A22	20	—	4-4	24	1053	Jones Larry
5	" "	" "	" "	B18	20	—	4-4	74	1146	Carl Mace
6	" "	" "	" "	B18	12	—	4-4	75	1210	Jack Bartista
7	" "	" "	" "	B18	20	—	4-4	24	1255	Jones Larry
8	" "	" "	" "	B19	20	—	4-4	75	1413	Jack Bartista
9	" "	" "	" "	B-19	20	—	4-4	24	15:20	Jones Larry
10	" "	" "	" "	B-19	10	—	4-4	75	16:01	Jack Bartista
					166					

RESULTS:

<298	CHLORIDE TEST	10
	PAINT FILTER TEST	10

LANDFARM EMPLOYEE: Gary Robinson

NOTES: ENTERED AUG 21 2009

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

NAME Jack Bartista COMPANY Four & Four Inc. SIGNATURE Jack Bartista

COMPANY CONTACT Mack PHONE DATE 8-19-09

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Bill of Lading

MANIFEST # 34068

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 8-19-09 JOB# 03056-0176

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Envirotech LF II	Elm Ridge Bisti Coal	Clean Fill Soil	-	12	-	44	75	835	Jack Bautista
2	"	31 well	"	-	20	-	"	24	848	Jon Jay
3	"	"	"	-	12	-	"	75	1020	Jack Bautista
4	"	"	"	-	20	-	"	24	1053	Jon Jay
5	"	"	"	-	20	-	"	74	1146	Jack Bautista
6	"	"	"	-	12	-	4-4	75	1210	Jack Bautista
7	"	"	"	-	20	-	4-4	24	1255	Jon Jay
8	"	"	"	-	12	-	4-4	75	1413	Jack Bautista
9	" "	" "	" "	-	20	-	4-4	25	1530	Jon Jay
	VOID this Line							75	1641	Jack Bautista
					148					

RESULTS:

CHLORIDE TEST	
PAINT FILTER TEST	

LANDFARM EMPLOYEE: Gary Robinson

NOTES: ENTERED AUG 21 2009

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

NAME Jack Bautista COMPANY Four R Four Inc. SIGNATURE Jack Bautista

COMPANY CONTACT Mark PHONE DATE 8-19-09

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envirotech

Bill of Lading

MANIFEST # 34090

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 8.20.09 JOB# 03056-0176

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Envirotech LF II	Elm Ridge Bisti coal	Clean Fill soil	—	12	—	4-4	75	817	Jonn Lang
2	" "	31 well "	"	—	12	—	4-4	75	1030	Jonn Lang
					24					

RESULTS:

/	CHLORIDE TEST	
/	PAINT FILTER TEST	

LANDFARM EMPLOYEE: Gary Robinson

NOTES: ENTERED AUG 21 2009

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

NAME Jonn Lang COMPANY Four & Four SIGNATURE

COMPANY CONTACT Mac PHONE 505-327-2211 DATE 8.20.09

envirotech

Bill of Lading

MANIFEST # 34091

PHONE: (505) 632-0615 • 5796 U.S. HIGHWAY 64 • FARMINGTON, NEW MEXICO 87401

DATE 8.20.09 JOB# 03056-0176

LOAD NO.	COMPLETE DESCRIPTION OF SHIPMENT						TRANSPORTING COMPANY			
	POINT OF ORIGIN	DESTINATION	MATERIAL	GRID	YDS	BBLS	COMPANY	TRK#	TIME	DRIVER SIGNATURE
1	Elm Ridge Bistricoal 31well	LFII	Cont Soil	B19	12	—	4-4	75	817	
2	" "	"	"	B19	12	—	4-4	75	1030	
					24					

RESULTS:

<298	CHLORIDE TEST	2
	PAINT FILTER TEST	2

LANDFARM EMPLOYEE: Cory Robinson

NOTES: ENTERED AUG 21 2009

"I certify the material hauled from the above location has not been added to or mixed with, and is the same material received from the above mentioned Generator, and that no additional materials have been added."

NAME _____ COMPANY Four & Four SIGNATURE _____

COMPANY CONTACT _____ PHONE 327-2711 DATE 8-20-09

ACCENT Printing • Form 28-1212

envirotech

March 8, 2010 Project No. 03056-0176

Mr. Brad Jones
New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505 Phone (505) 476-3487

RE: C-141 RELEASE NOTIFICATION FORM FOR THE BISTI COAL 31-1 WELL SITE

Dear Mr. Jones,

Please find enclosed the modified C-141 Release Notification Form and additional supporting closure documentation for the Bisti Coal 31-1 well site owned and operated by Elm Ridge Exploration. All closure activities from this point forward will comply with Rule 29 with the district office of the OCD.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully Submitted,
ENVIROTECH, INC.

James McDaniel
Project Scientist
jmcdaniel@envirotech-inc.com

Enclosure: Modified C-141 Release Notification Form
Modified Closure Checklist

Cc: Client File No. 03056

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: Elm Ridge Exploration	Contact: Amy Mackey
Address: PO Box 156, Bloomfield, NM 87413	Telephone No.: (505) 632-3476 Ext 201
Facility Name: Bisti Coal 31-1	Facility Type: Gas Well

Surface Owner: Federal	Mineral Owner:	Lease No.: 36585

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	31	25N	12W	1850	FNL	1850	FEL	San Juan

Latitude 36.35983 **Longitude** -108.15000

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? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ 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 a 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 will instead into an Above Ground Storage Tank (AST).

Describe Area Affected and Cleanup Action Taken.*
Blow sand was removed from the earthen pit, and approximately 346 cubic yards of 'production sludge' was removed from the earthen pit. A five (5)-point composite sample was collected from approximately ten (10) feet below ground surface once it was removed, and one (1) sample was collected from each of the four (4) walls of the excavation. The samples were analyzed in the field for total petroleum hydrocarbons (TPH) via USEPA Method 418.1, and in Envirotech's laboratory for benzene and BTEX via USEPA Method 8021 and for total chlorides via USEPA Method 4500B. The samples returned results below the 'Pit Rule' standards of 100 mg/kg TPH, 0.2 mg/kg benzene and 50 mg/kg BTEX, but above the 250 mg/kg total chloride standard, confirming that a release had occurred. Elm Ridge Exploration will comply with Rule 29 from this point forward with the local division of the OCD.

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 ☐
Date: 6-15-10 Phone: 505-632-3476 Ext 201		

* Attach Additional Sheets If Necessary

Elm Ridge Exploration
Bisti Coal 31-1
Earth Pit Closure
Project No. 03056-0176
Closure Date: 8/19/09

Earthen Pit Closure Checklist

1) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close all former earthen pits prior to the closure date agreed upon by the New Mexico Oil Conservation Division of December 31, 2009.
Closure date for the earth pit located at Bisti Coal 31-1 well site is August 19, 2009.

2) In accordance with of Subsection A of 19.15.17.13 NMAC, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close any earthen pits at a date the division requires because of imminent danger to fresh water, public health or the environment.
None of the earthen pits to be closed by Elm Ridge Exploration are deemed an imminent risk to the environment, public health, or to fresh or public water.

3) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close earthen pits first which seem to pose a greater risk to fresh water, public health, or the environment. This will be determined by the locations proximity to surface water sources and distance to groundwater.
None of the earthen pits to be closed by Elm Ridge Exploration are deemed an imminent risk to the environment, public health, or to fresh or public water.

4) No less than 60 days prior to any earthen pit closure activities, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the Santa Fe NMOCD office as well as a schedule of on-site activities, as in accordance with 19.15.17.13 Subsection J Paragraph (3) NMAC.
Notification was provided to Mr. Brad Jones of the NMOCD Santa Fe Office on August 4, 2009, along with a schedule of on-site activities; see attached *Notification Letter*.

5) No less than 24 hours and no greater than one (1) week prior to earthen pit removal, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the appropriate surface owner as well as a schedule of on-site activities, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will notify the surface owner by certified mail, return receipt requested, that the operator plans to close an earthen pit. The return receipt will be used to ensure that the surface owner has received written notification no less than 24 hours and no greater than one (1) week prior to the beginning of the earthen pit closure activities. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement. Closure activities that will take place on tribal land will have notifications sent by certified mail, return receipt requested, to the appropriate tribal office. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will notify the Bureau of Land Management (BLM) of closure activities for wells located on federal land per a Sundry Notice, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. All notices will be sent in such a way that the surface owner will receive notice at least 24 hours prior to the beginning of closure activities.
Notification was provided to the Bureau of Land Management on August 13, 2009; see attached *Sundry Notice* and *Return Receipt*.

6) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all liquids and/or sludge, to visual extents, prior to closure sampling. Material will be disposed of at Envirotech's Landfarm #2, Permit # NM-01-0011, TNT Environmental Inc. Landfarm, Permit # NM-01-0008, Industrial Ecosystems Inc. (IEI) Landfarm, Permit # NM-01-0010B, or Basin Disposal, Permit # NM-01-0005, depending on the consistency of the material removed, as in accordance with 19.15.17.13 Subsection C Paragraph (1) NMAC .
From August 17, 2009, to August 19, 2009, approximately 346 cubic yards of production sludge was removed from the earthen pit and disposed of at Envirotech's NMOCD permitted soil remediation facility, Landfarm #2, Permit # NM-01-0011; see attached *Bill of Lading*.

7) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all on-site equipment associated with this earthen pit unless it is required for some other purpose, as in accordance with 19.15.17.13 Subsection C Paragraph (2) NMAC. The equipment that meets the requirements of 19.15.9.712 Subsection A NMAC and 19.15.9.712 Subsection D Paragraph (1) will be disposed of at San Juan County Regional Landfill. Waste that is classified by 19.15.9.712 Subsection D Paragraph (2) will be sampled accordingly to determine acceptance of this material at the San Juan County Regional Landfill. Waste that is unable to be accepted at the San Juan County Regional Landfill will be submitted to the OCD on a case-by-case basis in accordance with Paragraph (3) of Subsection D of 19.15.9.712.
All on-site equipment will be used for the continued operation of the Bisti Coal 31-1 well site; see attached *Field Sheet* and *Site Photos*.

8) Once the earthen pit is removed to visual extents of contamination, a five (5)-point composite sample will be collected from directly below the liner(s) or at native soil. Additional discrete samples will be collected from any area that is wet, discolored or shows other evidence of a release. All samples being collected will be analyzed for benzene, and total BTEX via USEPA Method 8021B, TPH via USEPA Method 418.1, and chlorides via USEPA 300.1, as in accordance with 19.15.17.13 Subsection C Paragraph (3) NMAC.
Composite samples were collected from each of the four (4) walls and the bottom of the extents of the excavation and analyzed in the field for total petroleum hydrocarbons (TPH) via USEPA Method 418.1, and analyzed in the laboratory for benzene and BTEX via USEPA Method 8021B, and for total chlorides via USEPA Method 4500B. The sample returned results below the 100 mg/kg TPH standard, the 0.2 mg/kg benzene standard and the 50 mg/kg BTEX standard, but above the 250 mg/kg above background total chloride standard, confirming that a release did occur. Elm Ridge Exploration will comply with Rule 29 from this point forward with the local division of the OCD.

NAME	Benzene	BTEX	Chlorides	TPH
Pit Rule Standard	**0.2 mg/kg**	**50 mg/kg**	**250 mg/kg**	**100 mg/kg**
Background	NS	NS	140 mg/kg	NS
North Wall	< 0.0009 mg/kg	< 0.005 mg/kg	270 mg/kg	< 5 mg/kg
West Wall 2	< 0.0009 mg/kg	< 0.005 mg/kg	310 mg/kg	< 5 mg/kg
South Wall 2	< 0.0009 mg/kg	< 0.005 mg/kg	310 mg/kg	< 5 mg/kg
10' Bottom	< 0.0009 mg/kg	< 0.005 mg/kg	280 mg/kg	< 5 mg/kg
East Wall	0.0246 mg/kg	0.0334 mg/kg	230 mg/kg	< 5 mg/kg

9) Depending on soil sample results the area will be either backfilled or the area will be excavated.
   1) If soil samples do not exceed the regulatory standards of 0.2 mg/kg benzene, 50 mg/kg BTEX, 100 mg/kg TPH, and 250 mg/kg or background concentration of chlorides, as in accordance with 19.15.17.13 Subsection C Paragraph (3) NMAC.

      i. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, shall submit a Form C-141 with the laboratory results so that the division may review the results to determine if additional delineation is required in accordance with Paragraph (4) of Subsection C of 19.15.17.13 NMAC.
      Completed Form C-141 is attached for your review.

      ii. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will backfill the excavation or impacted area with non-waste containing, earthen material, in accordance with 19.15.17.13 Subsection E Paragraph (6) NMAC. A soil cover shall be installed for all backfilled excavations consisting of the background thickness of topsoil or one (1) foot of suitable material to establish vegetation at the site, whichever is greater in accordance with Subsections H of 19.15.17.13 NMAC. The operator shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.
      Elm Ridge Exploration has backfilled the excavated area with non-waste containing earthen material, and installed a soil cover of at least one (1) foot thick of suitable material to establish vegetation at this site. The soil cover has been graded in such a way that it conforms to the grade of the natural surroundings, and will prevent ponding of water and erosion of the cover material; see attached *Site Photos*.

      iii. All areas of the well site that are no longer utilized on a day to day basis for the production of oil and/or gas, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will substantially restore, recontour and re-vegetate the areas, in accordance with 19.15.17.13 Subsections G and I NMAC. The operator shall notify the division when it has been re-seeded and when it has achieved successful re-vegetation.
      Elm Ridge Exploration has restored, recontoured and re-seeded the excavated area in accordance with BLM standards as outlined in the Memorandum of Understanding (MOU).

   2) If soil samples exceed the regulatory standards stated above:
      i. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, shall submit a Form C-141 with the laboratory results so that the division may review the results to determine if additional delineation is required in accordance with Paragraph (4) of Subsection C of 19.15.17.13 NMAC.
      The five (5)-point composite samples of native soil beneath the earthen pit returned results below the 100 mg/kg TPH standard, the 0.2 mg/kg benzene standard and the 50 mg/kg BTEX standard, but above the 250 mg/kg total chloride standard, confirming that a release did occur. Elm Ridge Exploration will comply with Rule 29 from this point forward with the local division of the OCD.

10) Elm Ridge Exploration will submit a closure report within 60 days following the earthen pit closure. The closure report will consist of a form C-144 with all supporting data and a form C-141 with all supporting data. The supporting data will include proof of closure notice to the surface owner and the OCD, confirmation sampling analytical results, a site diagram, soil backfilling and cover installation, re-vegetation rates, re-seeding techniques, and site reclamation photo documentation if applicable, along with all other information related to the onsite activities.
Elm Ridge Exploration will submit all of the above mentioned closure documents to the local division of the OCD.

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

RECEIVED
2009 MAY 18 PM 2 39

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: Elm Ridge Exploration	Contact: Amy Mackey
Address: PO Box 156, Bloomfield, NM 87413	Telephone No.: (505) 632-3476 Ext 201
Facility Name: North Bisti Coal 31-1	Facility Type: Gas Well

Surface Owner: Federal	Mineral Owner:	Lease No.: NM-83518

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	31	26N	12W	800	FSL	800	FWL	San Juan

Latitude 36.439653 **Longitude** -108.158870

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? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ 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 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, TPH via USEPA Method 8015, and for total chlorides via USEPA Method 4500B. The sample returned results that were below the 0.2 ppm benzene and the 50 ppm BTEX standards and the 250 ppm total chloride standard, but above the 100 ppm TPH standard via USEPA Method 418.1, confirming that a release had occurred at this site. The TPH sample was diluted in the field, and ran a second time. The diluted results are more accurate, so those are the results being referenced in this report. 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. TPH was below the 1000 ppm closure standard via USEPA Method 8015.

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 ☐
Date: Phone: 505-632-3476 Ext 201		

* Attach Additional Sheets If Necessary

PAGE NO: 1 OF 1

DATE STARTED: 9/29/08
DATE FINISHED: 9/29/08

ENVIROTECH INC

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64 - 3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

ENVIRONMENTAL SPECIALIST: Sharon
LAT: 36.439653
LONG: -108.15887

FIELD REPORT: BGT / PIT CLOSURE VERIFICATION

LOCATION: NAME: N. Bisti Coal 31 WELL #: 1 TEMP PIT: PERMANENT PIT: ✓ BGT:
LEGAL ADD: UNIT: M SEC: 31 TWP: 26N RNG: 12W PM: NMPM
QTR/FOOTAGE: 800 FSL 800 FWL CNTY: San Juan ST: NM

EXCAVATION APPROX: — FT. X — FT. X — FT. DEEP CUBIC YARDAGE: —
DISPOSAL FACILITY: —
REMEDIATION METHOD: —
LAND OWNER: Navajo Indian API: 3004528482 BGT / PIT VOLUME: 16' X 13' X 3'
CONSTRUCTION MATERIAL: EARTH DOUBLE-WALLED, WITH LEAK DETECTION: —

LOCATION APPROXIMATELY: 85' FT. 270° FROM WELLHEAD
DEPTH TO GROUNDWATER: 50' - 100'

___ 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

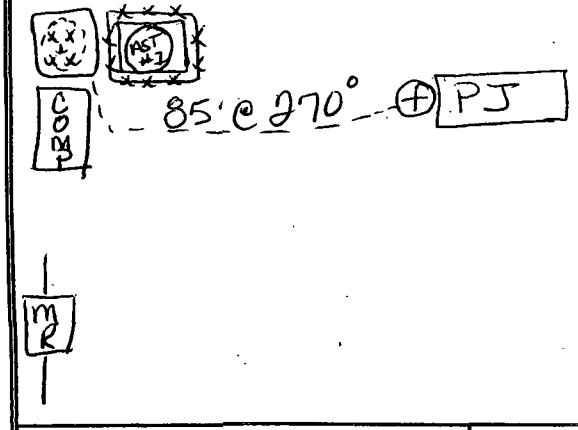
___ TEMPORARY PIT - GROUNDWATER ≥100 FEET DEEP
BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 1000 mg/kg

✓ 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		-	-	-		200
	5pt Comp	1	5	20	4	545	~~1200~~ 2180
	5pt Comp	2			40	30	1200
		3					
		4					
		5					
		6					

PERIMETER



FIELD CHLORIDES RESULTS

SAMPLE ID	READING	CALC. (mg/kg)

PID RESULTS

SAMPLE ID	RESULTS (mg/kg)
5pt Comp	1.0

PROFILE

LAB SAMPLES

SAMPLE ID	ANALYSIS	RESULTS
	BENZENE	
	BTEX	
	GRO & DRO	
	CHLORIDES	

NOTES:

WORKORDER # WHO ORDERED

Client: Elm Ridge

ENVIROTECH INC

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64 - 3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615

Location No: N. Bisti Coal 31-1
C.O.C. No:

FIELD REPORT: SPILL CLOSURE VERIFICATION

PAGE NO: 1 OF 1
DATE STARTED: 9-29-08
DATE FINISHED: 9-29-08
ENVIRONMENTAL SPECIALIST: SLP

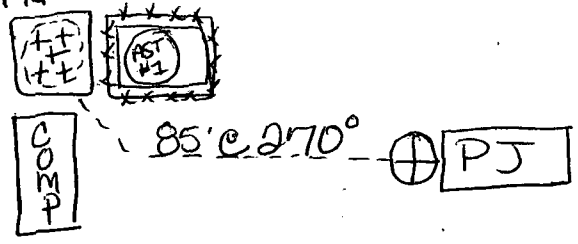
LOCATION: NAME: N. Bisti Coal 31 WELL #: 1
QUAD/UNIT: M SEC: 31 TWP: 26N RNG: 12W PM: NMPM CNTY: SJ ST: NM
QTR/FOOTAGE: 800 FSL 800 FWL CONTRACTOR:

EXCAVATION APPROX: — FT. X — FT. X — FT. DEEP CUBIC YARDAGE: —
DISPOSAL FACILITY: — REMEDIATION METHOD: —
LAND USE: Range LEASE: 078056 LAND OWNER: Navajo Indian
CAUSE OF RELEASE: Earth Pit METERAIL RELEASED: Produced Water

SPILL LOCATED APPROXIMATELY: 85' FT. 270° FROM Wellhead
DEPTH TO GROUNDWATER: 50'-100' NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000
NMOCD RANKING SCORE: 10 NMOCD TPH CLOSURE STD: 1000 PPM
SOIL AND EXCAVATION DESCRIPTION:

TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. ppm
	5pt Comp	1	5	20	4	545	2180
	5pt Comp	2	5	20	40	30	1200

SPILL PERIMETER



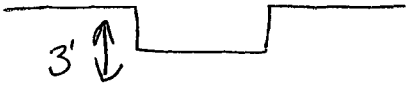
OVM RESULTS

SAMPLE ID	FIELD HEADSPACE PID (ppm)

LAB SAMPLES

SAMPLE ID	ANALYSIS	TIME
5pt	8015	
5pt	8021	
5pt	Chloride	

SPILL PROFILE



TRAVEL NOTES: CALLED OUT: ONSITE:

envirotech

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Elm Ridge Exploration	Project #:	03056-0200
Sample No.:	1	Date Reported:	2/23/2009
Sample ID:	5 Point Composite	Date Sampled:	9/29/2008
Sample Matrix:	Soil	Date Analyzed:	9/29/2008
Preservative:	Cool	Analysis Needed:	TPH-418.1
Condition:	Cool and Intact		

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**1,200**	**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: **North Bisti Coal 31-1 Earthen Pit**

Instrument calibrated to 200 ppm standard. Zeroed before each sample

For

Analyst

Review

Sharon Putt
Printed

Greg Crabtree
Printed

5796 US Highway 64, Farmington, NM 87401 | Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 info@envirotech-inc.com envirotech-inc.com

envirotech

CONTINUOUS CALIBRATION
EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS

Cal. Date: 29-Sep-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.

For

Analyst

2/23/09

Date

Sharon Putt

Print Name

Review

2/23/09

Date

Greg Crabtree

Print Name

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Elm Ridge	Project #:	03056-0136
Sample ID:	5 pt. Composite	Date Reported:	10-03-08
Laboratory Number:	47518	Date Sampled:	09-29-08
Chain of Custody No:	5414	Date Received:	09-29-08
Sample Matrix:	Soil	Date Extracted:	10-01-08
Preservative:	Cool	Date Analyzed:	10-02-08
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**ND**	**0.2**
Diesel Range (C10 - C28)	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **N. Bisti Coal 31-1.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	10-02-08 QA/QC	Date Reported:	10-03-08
Laboratory Number:	47498	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-02-08
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	1.0007E+003	1.0011E+003	**0.04%**	**0 - 15%**
Diesel Range C10 - C28	05-07-07	1.0129E+003	1.0133E+003	**0.04%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	***0.2***

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**0.4**	**0.5**	**25.0%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**0.4**	**250**	**247**	**98.8%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**245**	**98.0%**	**75 - 125%**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for Samples 47498, 47518, 47533, and 47565 - 47570.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Elm Ridge	Project #:	03056-0136
Sample ID:	5 pt. Composite	Date Reported:	10-03-08
Laboratory Number:	47518	Date Sampled:	09-29-08
Chain of Custody:	5414	Date Received:	09-29-08
Sample Matrix:	Soil	Date Analyzed:	10-02-08
Preservative:	Cool	Date Extracted:	10-01-08
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	**99.0 %**
	1,4-difluorobenzene	**99.0 %**
	Bromochlorobenzene	**99.0 %**

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: **N. Bisti Coal 31-1.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	10-02-BT QA/QC	Date Reported:	10-03-08
Laboratory Number:	47498	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	10-02-08
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	5.9361E+007	5.9480E+007	**0.2%**	**ND**	**0.1**
Toluene	5.3585E+007	5.3692E+007	**0.2%**	**ND**	**0.1**
Ethylbenzene	4.3411E+007	4.3498E+007	**0.2%**	**ND**	**0.1**
p,m-Xylene	9.0756E+007	9.0938E+007	**0.2%**	**ND**	**0.1**
o-Xylene	4.3512E+007	4.3599E+007	**0.2%**	**ND**	**0.1**

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	**1.8**	**1.9**	**5.6%**	**0 - 30%**	**0.9**
Toluene	**12.0**	**11.0**	**8.3%**	**0 - 30%**	**1.0**
Ethylbenzene	**8.9**	**8.6**	**3.4%**	**0 - 30%**	**1.0**
p,m-Xylene	**198**	**195**	**1.7%**	**0 - 30%**	**1.2**
o-Xylene	**50.5**	**49.4**	**2.2%**	**0 - 30%**	**0.9**

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	**1.8**	**50.0**	**50.8**	**98.1%**	**39 - 150**
Toluene	**12.0**	**50.0**	**56.8**	**91.6%**	**46 - 148**
Ethylbenzene	**8.9**	**50.0**	**61.0**	**104%**	**32 - 160**
p,m-Xylene	**198**	**100**	**290**	**97.2%**	**46 - 148**
o-Xylene	**50.5**	**50.0**	**95.4**	**94.9%**	**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 47498, 47510 - 47515, 47517, 47518, and 47553.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Chloride

Client:	Elm Ridge Resources	Project #:	03056-0136
Sample ID:	5 pt.Composite	Date Reported:	10-03-08
Lab ID#:	47518	Date Sampled:	09-29-08
Sample Matrix:	Soil	Date Received:	09-29-08
Preservative:	Cool	Date Analyzed:	10-02-08
Condition:	Intact	Chain of Custody:	5414

Parameter	Concentration (mg/Kg)
Total Chloride	**230**

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: **N Bisti Coal 31-1.**

Analyst

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CHAIN OF CUSTODY RECORD

5414

Client: Elm Ridge	Project Name / Location: N. Bisti Coal 31-1
Client Address:	Sampler Name: Torie Thompson
Client Phone No.:	Client No.: 03056 - 0136

ANALYSIS / PARAMETERS

Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative $HgCl_2$	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
5 pt. Composite	9/29/08	13:08	47518	(Soil) Sludge Solid Aqueous	1-4oz			X	X								X				✓	✓
				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		
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				Soil Sludge Solid Aqueous																		
				Soil Sludge Solid Aqueous																		

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	9/29/08	15:57	[signature]	9/29/08	15:57
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

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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

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State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☒ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

Operator: Elm Ridge Exploration OGRID #: 149052
Address: P.O. Box 156; Bloomfield, NM 87413
Facility or well name: Bisti Coal 31-1
API Number: 3004528808 OCD Permit Number:
U/L or Qtr/Qtr G Section 31 Township 25N Range 12W County: San Juan
Center of Proposed Design: Latitude 36.359770 Longitude -108.150319 NAD: ☐1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC **Ceased emptying into prior to June 16, 2008**
Temporary: ☐ Drilling ☐ Workover
☒ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☐ Lined ☒ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L 10' x W 10 x D 1'

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other _____
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____

4.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: _____bbl Type of fluid:
Tank Construction material:
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness _____mil ☐ HDPE ☐ PVC ☐ Other _____

5.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☒ Alternate. Please specify 4' tall hogwire fencing with pipe railing

7.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☒ Netting ☐ Other

☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).0. - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* (	☐ Yes ☐ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No ☐ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.	☐ Yes ☐ No
Within 500 feet of a wetland. Within the area overlying a subsurface mine.	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No
	☐ Yes ☐ No
	☐ Yes ☐ No

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☒ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System ☐ Alternative

Proposed Closure Method: ☒ Waste Excavation and Removal
- ☐ Waste Removal (Closed-loop systems only)
- ☐ On-site Closure Method (Only for temporary pits and closed-loop systems)
  - ☐ In-place Burial ☐ On-site Trench Burial
- ☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☒ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☐ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☐ No

18.

On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC

☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Ms. Amy Mackey Title: Administrative Manager

Signature: Amy Mackey Date: 2-4-09

E-mail address: amackey1@elmridge.net Telephone: (505)632-3476 Ext. 201

20.
OCD Approval: ☐ Permit Application (including closure plan) ☑ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: Carl J. Chavez **Approval Date:** 2/18/2009

Title: Environmental Engineer **OCD Permit Number:**

21.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ **Closure Completion Date:**

22.
Closure Method:

☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

23.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: Disposal Facility Permit Number:

Disposal Facility Name: Disposal Facility Permit Number:

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☐ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☐ Disposal Facility Name and Permit Number
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique
☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude Longitude NAD: ☐1927 ☐ 1983

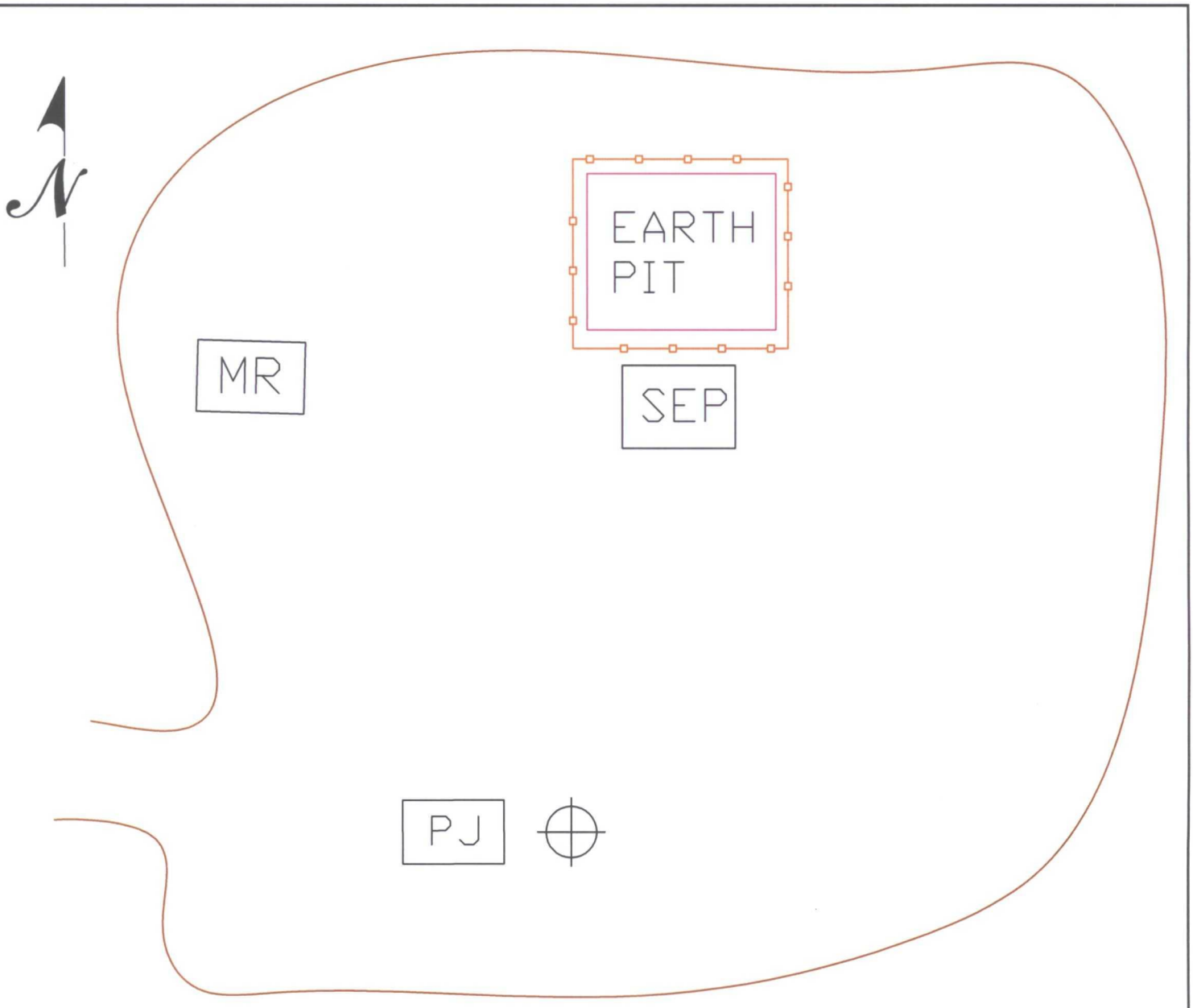
25.
Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): Title:

Signature: Date:

E-mail address: Telephone:



LEGEND

4' Tall Hogwire Fencing

Berm

Well Head

SITE MAP
ELM RIDGE EXPLORATION
BISTI COAL 31-1
SEC 31 TWN 25N RGE 12W
SAN JUAN COUNTY, NEW MEXICO

SCALE: NTS	FIGURE NO. A	REV
PROJECT N003056-0136		

REVISIONS

NO.	DATE	BY	DESCRIPTION

MAP DRWN	MDD	11/17/08	BASE DRWN		

ENVIRONMENTAL SCIENTISTS & ENGINEERS
ENVIROTECH
5796 U.S. HIGHWAY 64, FARMINGTON, NM 87410 505-632-0615

EARTHEN PIT CLOSURE PLAN

SITE NAME:

BISTI COAL 31-1
UNIT LETTER G, SECTION 31, TOWNSHIP 25N, RANGE 12W
SAN JUAN COUNTY, NEW MEXICO
LATITUDE 36.359770 LONGITUDE -108.150319

SUBMITTED TO:

MR. WAYNE PRICE
NEW MEXICO OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DRIVE
SANTA FE, NEW MEXICO 87505
(505) 476-3490

SUBMITTED BY:

MS. AMY MACKEY
ELM RIDGE EXPLORATION
P.O. BOX 156
BLOOMFIELD, NEW MEXICO 87413
(505) 632-3476 EXT. 201

JANUARY 2009

EARTHEN PIT CLOSURE PLAN
ELM RIDGE EXPLORATION
BISTI COAL 31-1
SAN JUAN COUNTY, NEW MEXICO

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INTRODUCTION

Elm Ridge Exploration would like to submit a closure plan for the earthen pit at the Bisti Coal 31-1 well site located in the SW ¼ NE ¼ of Section 31, Township 25N, Range 12W, San Juan County, New Mexico. This closure plan has been prepared in conformance with the closure requirements of 19.15.17.13 NMAC.

SCOPE OF CLOSURE ACTIVITIES

The purpose of this closure plan is to provide the details of activities involved in the closure of the permanent unlined pit at the Bisti Coal 31-1 well site. The following scope of closure activities has been designed to meet this objective:

1) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close all former earthen pits prior to the closure date agreed upon by the New Mexico Oil Conservation Division of December 31, 2009.

2) In accordance with of Subsection A of 19.15.17.13 NMAC, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close any earthen pits at a date the division requires because of imminent danger to fresh water, public health, or the environment.

3) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close earthen pits first which seem to pose a greater risk to fresh water, public health, or the environment. This will be determined by the locations proximity to surface water sources and distance to groundwater.

4) No less than 60 days prior to any earthen pit closure activities, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the Santa Fe NMOCD office as well as a schedule of on-site activities, as in accordance with 19.15.17.13 Subsection J Paragraph (3) NMAC.

5) No less than 24 hours and no greater than one (1) week prior to earthen pit removal Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the appropriate surface owner as well as a schedule of on-site activities, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will notify the surface owner by certified mail, return receipt requested, that the operator plans to close an earthen pit. The return receipt will be used to ensure that the surface owner has received written notification no less than 24 hours and no greater than one (1) week prior to the beginning of BGT closure activities. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement. Closure activities that will take place on tribal land will have notifications sent by certified mail, return receipt requested, to the appropriate tribal office. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will notify the Bureau of Land Management (BLM) of closure activities for wells located on federal land per a Sundry Notice, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. All notices will be sent in such a way that the surface owner received notice at least 24 hours prior to the beginning of

closure activities.

6) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all liquids, and/or sludge, to visual extents, prior to closure sampling. Material will be disposed of at Envirotech's Landfarm #2, Permit # NM-01-0011, TNT Environmental Inc. Landfarm, Permit # NM-01-0008, Industrial Ecosystems Inc. (IEI) Landfarm, Permit # NM-01-0010B or Basin Disposal, Permit # NM-01-0005, depending on the consistence of the material removed, as in accordance with 19.15.17.13 Subsection C Paragraph (1) NMAC .

7) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all on-site equipment associated with this earthen pit unless it is required for some other purpose, as in accordance with 19.15.17.13 Subsection C Paragraph (2) NMAC. The equipment that meets the requirements of 19.15.9.712 Subsection A NMAC and 19.15.9.712 Subsection D Paragraph (1) will be disposed of at San Juan County Regional Landfill. Waste that is classified by 19.15.9.712 Subsection D Paragraph (2) will be sampled accordingly to determine acceptance of this material at the San Juan County Regional Landfill. Waste that is unable to be accepted at the San Juan County Regional Landfill will be submitted to the OCD on a case-by-case basis in accordance with Paragraph (3) of Subsection D of 19.15.9.712.

8) Once the earthen pit is removed to visual extents of contamination, a five (5)-point composite sample will be collected from directly below the liner(s) or at native soil. Additional discrete samples will be collected from any area that is wet, discolored, or show other evidence of a release. All samples being collected will be analyzed for benzene, and total BTEX via USEPA Method 8021B, TPH via USEPA Method 418.1, and chlorides via USEPA 300.1, as in accordance with 19.15.17.13 Subsection C Paragraph (3) NMAC.

9) Depending on soil sample results the area will be either backfilled or the area will be excavated.
    a. If soil samples do not exceed the regulatory standards of 0.2 mg/kg benzene, 50 mg/kg BTEX, 100 mg/kg TPH, and 250 mg/kg or background concentration of chlorides, as in accordance with 19.15.17.13 Subsection C Paragraph (3) NMAC.
        i. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, shall submit a Form C-141 with the laboratory results so that the division may review the results to determine if additional delineation is required in accordance with Paragraph (4) of Subsection C of 19.15.17.13 NMAC.
        ii. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will backfill the excavation or impacted area with non-waste containing, earthen material, in accordance with 19.15.17.13 Subsection E Paragraph (6) NMAC. A soil cover shall be installed for all backfilled excavations consisting of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater in accordance with Subsections H of 19.15.17.13 NMAC. The operator shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.
        iii. All areas of the well site that are no longer utilized on a day to day basis for the production of oil and/or gas, Elm Ridge Exploration, or a

contractor acting on behalf of Elm Ridge Exploration, will substantially restore, re-contour and re-vegetate the areas, in accordance with 19.15.17.13 Subsections G and I NMAC. The operator shall notify the division when it has been re-seeded and when it has achieved successful re-vegetation. For re-vegetation methods, please see attached re-vegetation plan.

b. If soil samples exceed the regulatory standards stated above.
   i. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, shall submit a Form C-141 with the laboratory results so that the division may review the results to determine if additional delineation is required in accordance with Paragraph (4) of Subsection C of 19.15.17.13 NMAC.
   ii. Activities beyond this point will be in accordance with 19.15.3.116 NMAC and 19.15.11.19 NMAC.

REPORTING

Elm Ridge Exploration will submit a closure report within 60 days following the earthen pit closure. The closure report will consist of a form C-144 with all supporting data and a form C-141 with all supporting data. The supporting data will include proof of closure notice to the surface owner and the OCD, confirmation sampling analytical results, a site diagram, soil backfilling and cover installation, re-vegetation rates, re-seeding techniques and site reclamation photo documentation if applicable, along with all other information related to the onsite activities.

We appreciate the opportunity to be of service. If you have any questions or require further information, please do not hesitate to contact our office at (505) 632-3476 Ext. 201.

Respectfully Submitted,
Elm Ridge Exploration

Amy Mackey
Elm Ridge Exploration

Elm Ridge Exploration

Re-Seeding Techniques and Seed Mixture Ratios

These applied practices by Elm Ridge Exploration will at a minimum comply with the New Mexico Oil Conservation Divisions rule 19.15.17.13, Subsection I NMAC Elm Ridge Exploration has adopted these re-seeding application techniques, ratios and mixtures as their standard operating procedures.

1. The first growing season after closure of a below grade tank or pit, all areas of the well site not utilized for the production of oil and/or gas on a daily basis will be re-seeded with the specified seed mixture.

2. The seed mixture used will be certified with no primary or secondary noxious weeds in seed mixtures. The seed labels from each bag shall be available for inspection while seed is being sown.

3. The operator shall accomplish seeding by drilling on the contour whenever practical or by other division-approved methods. The operator shall obtain vegetative cover that equals 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.

4. Hand seeding with hydro-mulch, excelsior netting or mulch with netting is required on the cut/fill slopes. Mulch will be spread at a rate of 2,000-3,000 pounds per acre.

5. Compacted areas determined by visual inspection will be ripped to a depth of twelve (12) inches below ground surface and disked to a depth of six (6) inches before seeding. Seeding shall be done with a disk type drill with two (2) boxes for various seed sizes. The drill rows shall be eight (8) to ten (10) inches apart. Seed shall be planted at no less than one-half (1/2) inch deep or more than one (1) inch deep. The seeder shall be followed with a drag, packer, or roller to ensure uniform coverage of the seed and adequate compaction. Drilling shall be done on the contour where possible, but not up and down the slope.

6. Where slopes are too steep for contour drilling a hand seeder shall be used. Seed shall be covered to the depth stated above by whatever means is practical. If the seed is unable to be covered by the means listed above, the prescribed seed mixture amount will be doubled.

7. Elm Ridge Exploration shall repeat seeding or planting until it successfully achieves the required vegetative cover of 70% of the native perennial vegetation cover.

8. Upon abandonment of a well site, if the retention of the access road is not considered necessary for the management and multiple uses of the natural resources, or by the surface owner, it will be ripped a minimum of twelve (12) inches in depth. After ripping, water bars will be installed. All ripped surfaces are to be protected from vehicular travel by construction of a dead end ditch and earthen barricade at the entrance to these ripped areas. Re-seeding of areas affected by the ditch and barriers will be re-seeded if necessary.

9. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will inform the division once successful re-vegetation has occurred.