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

* Attach Additional Sheets If Necessary

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

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

Release Notification and Corrective Action

			Ken	ease mount	auoi		Frective A	CHOI	l			
						OPERA'	ГOR		Initia	al Report		Final Repor
Name of Company: Elm Ridge Exploration				Contact: Amy Mackey								
Address: PO Box 156, Bloomfield, NM 87413						No.: (505) 632-3	476 Ex	t 201	-			
Facility Name: Bisti Coal 2-1					Facility Typ	e: Gas Well						
Surface Ow	ner: State			Mineral C)wner:		- 110		Lease N	No.: E-663	3-2	
				LOCA	TIO	N OF REI	LEASE		•			
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the	East/W	Vest Line	County		
Н	2	25N	12W	1850	1	FNL	790		EL	San Juan		
	Latitude 36.432325 Longitude -108.074659 NATURE OF RELEASE											
Type of Rele	ase: Produc	red Water		NAI	UKE		Release: Unknow	,n T	Volume F	Recovered:	Linknos	ı/n
Source of Re							lour of Occurrence			Hour of Dis		
						Historical						
Was Immedia	ate Notice (Yes 🗀	No 🛭 Not Re	quired	If YES, To	Whom?			2010	RE(
By Whom?						Date and H	lour			Angles of the second	Ξ	
Was a Watero	course Reac											
			Yes 🛚	No						_5		
If a Watercou	rse was Im	pacted, Descri	be Fully.*							>	\bigcirc	
	ter from gas	s well at the m	entioned				rthen pit on locati	on. The	e well has t	peen altered	to no lo	onger drain
composite sar petroleum hyd chlorides via	as removed nple was co drocarbons USEPA Me	from the eart ellected from a (TPH) via US thod 4500B.	hen pit, an approxima EPA Meth The sampl	d approximately of tely one (1) foot b and 418.1, and in le te returned results	elow the Envirote below t	e earthen pit o ech's laborato he 'Pit Rule'	action sludge' was once it was removery for benzene an standards of 100 ssults are attached	ed. The d BTEX mg/kg T	sample w Via USEP PH, 0.2 m	as analyzed A Method 8 g/kg benzer	in the f 3021 and	field for total d for total
regulations all public health should their o	operators or the envir perations had ment. In ad	are required to onment. The ave failed to a ddition, NMO	report and acceptance dequately CD accept	d/or file certain re e of a C-141 repor investigate and re	lease no it by the mediate	tifications an NMOCD ma contamination	knowledge and und perform correct irked as "Final Re on that pose a thre the operator of re	ive action port" donated at to gro	ons for rele ses not relie ound water,	ases which eve the oper , surface wa	may end ator of ter, hun	danger liability nan health
Signature:	OIL CONSERVATION DIVISION											
Printed Name	Ms. Amy	Mackey			A	Approved by I	District Superviso	r:				
Title: Adminis	strative Ma	nager			A	pproval Date		E	xpiration [Date:		
E-mail Addres	ss: amackey	1@elmridge.i	net		c	Conditions of Approval:						
Date:		1	Phone: 50:	5-632-3476 Ext 20	01							

District I 1625 N. French Dr., Hobbs, NM 88240 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

Alternative Method:

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

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
of action: Permit of a pit closed-loop system, below-grade tank, or proposed alternative n

Pit, Closed-Loop System, Below-	Grade Tank, or
Proposed Alternative Method Permit or C	losure Plan Application
Type of action: Permit of a pit, closed-loop system, below-gra Closure of a pit, closed-loop system, below-gra Modification to an existing permit Closure plan only submitted for an existing permit	
below-grade tank, or proposed alternative method	
Instructions: Please submit one application (Form C-144) per individual pit, close	d-loop system, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operate environment. Nor does approval relieve the operator of its responsibility to comply with any other a	
Operator: Elm Ridge Exploration	OGRID #: 149052
Address: P.O. Box 156; Bloomfield, NM 87413	
Facility or well name: Bisti Coal 2-1	
API Number: 3004527573 OCD Permit Numb	er:
U/L or Qtr/Qtr H Section 2 Township 25N Range 12W	County: San Juan
Center of Proposed Design: Latitude 36.432325 Longitude -108.074659	NAD: □1927 🖾 1983
Surface Owner: Federal State Private Tribal Trust or Indian Allotment	
≥.✓ Pit: Subsection F or G of 19.15.17.11 NMAC	
Temporary: Drilling Workover	
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A	
☐ Lined ☑ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ F	VC Other
String-Reinforced	
Liner Seams: Welded Factory Other Volume:	bbl Dimensions: L_6' x W_6' 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 ac intent)	tivities which require prior approval of a permit or notice of
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other	
Lined Unlined Liner type: Thicknessmil LLDPE HDPE	PVC Other
Liner Seams:	
4. Below-grade tank: Subsection 1 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 au	itomatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other	
Liner type: Thickness mil HDPE PVC Other	

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

•	
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, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify	, hospital,
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)	
 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 	
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 consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
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 acceptant material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	opriate district approval.
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

	Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC of the application. Please indicate, by a check mark in the box, that the documents are
Hydrogeologic Report (Below-grade Tanks) - based upon	of 19.15.17.11 NMAC
	pplicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC
Previously Approved Design (attach copy of design) AP	PI Number: or Permit Number:
Closed-loop Systems Permit Application Attachment Check Instructions: Each of the following items must be attached to attached.	klist: Subsection B of 19.15.17.9 NMAC of the application. Please indicate, by a check mark in the box, that the documents are
☐ Geologic and Hydrogeologic Data (only for on-site closu ☐ Siting Criteria Compliance Demonstrations (only for on- ☐ Design Plan - based upon the appropriate requirements of	
☐ Operating and Maintenance Plan - based upon the approp ☐ Closure Plan (Please complete Boxes 14 through 18, if and 19.15.17.13 NMAC	applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC
Previously Approved Design (attach copy of design)	API Number:
☐ Previously Approved Operating and Maintenance Plan A	API Number: (Applies only to closed-loop system that use
above ground steel tanks or haul-off bins and propose to implem	ment waste removal for closure)
attached. ☐ Hydrogeologic Report - based upon the requirements of F ☐ Siting Criteria Compliance Demonstrations - based upon ☐ Climatological Factors Assessment ☐ Certified Engineering Design Plans - based upon the appr ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requi ☐ Leak Detection Design - based upon the appropriate requi ☐ Liner Specifications and Compatibility Assessment - based ☐ Quality Control/Quality Assurance Construction and Instaction ☐ Operating and Maintenance Plan - based upon the approp ☐ Freeboard and Overtopping Prevention Plan - based upon ☐ Nuisance or Hazardous Odors, including H₂S, Prevention ☐ Emergency Response Plan ☐ Oil Field Waste Stream Characterization ☐ Monitoring and Inspection Plan ☐ Erosion Control Plan ☐ Closure Plan - based upon the appropriate requirements of	Paragraph (1) of Subsection B of 19.15.17.9 NMAC In the appropriate requirements of 19.15.17.10 NMAC Propriate requirements of 19.15.17.11 NMAC Propriate requirements of 19.15.17.12 NMAC Propriate requirements of 19.15.17.11 NMAC
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 t	through 18, in regards to the proposed closure plan.
☐ Alternative Proposed Closure Method: ☐ Waste Excavation and Removal ☐ Waste Removal (Closed-loop symmetry) ☐ On-site Closure Method (Only for ☐ In-place Burial ☐	systems only) for temporary pits and closed-loop systems)
Waste Excavation and Removal Closure Plan Checklist: (19. closure plan. Please indicate, by a check mark in the box, that ☐ Protocols and Procedures - based upon the appropriate req ☐ Confirmation Sampling Plan (if applicable) - based upon t ☐ Disposal Facility Name and Permit Number (for liquids, d	9.15.17.13 NMAC) Instructions: Each of the following items must be attached to the the documents are attached. quirements of 19.15.17.13 NMAC the appropriate requirements of Subsection F of 19.15.17.13 NMAC drilling fluids and drill cuttings) on the appropriate requirements of Subsection H of 19.15.17.13 NMAC ments of Subsection I of 19.15.17.13 NMAC

C 144

16. Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.1)	
Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attack facilities are required.	hment if more than two
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 to Yes (If yes, please provide the information below) \(\sum \) No	uture service and operations
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. 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	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 accept provided below. Requests regarding changes to certain siting criteria may require administrative approval from the approp considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	riate district office or may be
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
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
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
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	r playa 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	n. Yes No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or st 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	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinadopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	nance Yes No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed s	ite 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 Geologi Society; Topographic map 	ical Yes No
Within a 100-year floodplain FEMA map	☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure wark 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 NMA Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirement 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 or in case on-site closure standar 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 G of 19.15.17.13 NMAC	.C ts of 19.15.17.11 NMAC MAC

Form C 144 Oil Concernation Division Page 4 of 5

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:
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: 8/3/09
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
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 see attached □ Site Reclamation (Photo Documentation) see attached □ On-site Closure Location: Latitude
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: Administrative Manager
Signature: Date:
e-mail address: amackey1@elmridge.net Telephone:

mr C 144 Oil Concernation Division Book 5

Elm Ridge Exploration
Bisti Coal 2-1
Earth Pit Closure
03056-0165
Closure Date: 8/3/09

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 (NMOCD) of December 31, 2009.

 Closure date for the earth pit located at Bisti Coal 2-1 well site is August 3, 2009.
- 2) In accordance with 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 proximately to surface water sources and distance to groundwater.

 None of the earthen pits to be closed by Elm Ridge Exploration are deemed an
 - 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 July 15, 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 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 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.

Notification was provided to the New Mexico State Land Office on July 29, 2009; see attached *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 consistence of the material removed, as in accordance with 19.15.17.13 Subsection C Paragraph (1) NMAC.

On August 3, 2009, approximately one (1) cubic yard 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 2-1 well site; see *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 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.

A five (5)-point composite sample was collected of native soil beneath the earthen pit 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 total chloride standard, confirming that a release did NOT occur.

NAME	Benzene	BTEX	Chlorides	ТРН
Pit Rule	0.2 mg/kg	50 mg/kg	250 mg/kg	100 mg/kg
Standard				
Earth Pit Comp 1'	< 0.0009 mg/kg	0.0211 mg/kg	25 mg/kg	52 mg/kg
Deep				

- 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,

Elm Ridge Exploration
Bisti Coal 2-1
Earth Pit Closure
03056-0165
Closure Date: 8/3/09

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 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 re-seed 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 sample 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.

Elm Ridge Exploration
Bisti Coal 2-1
Earth Pit Closure
03056-0165
Closure Date: 8/3/09

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, revegetation 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 3, 2009.



July 8, 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 DOCUMENTATION

Dear Mr. Jones,

Envirotech, Inc, on the behalf of Elm Ridge Exploration, would like to submit this notification to disregard the C-141 Forms concerning the Earthen Pit Release Notifications previously submitted to your office in May of 2009. These C-141 documents were submitted with contamination assessment sampling results, and do not reflect any closure activities occurring on site. To date, closure activities have not begun on any earthen pit owned by Elm Ridge Exploration. A list of the earthen pit C-141 soil assessment documents submitted to your office are as follows:

BISTI COAL 12 001	BISTI COAL 4 001 PIT 1	JETER COM 002
BISTI COAL 16 001	BISTI COAL 4 001 PIT 2	JICARILLA APACHE I 011
BISTI COAL 16 002	BISTI COAL 4 COM 002	NORTH BISTI COAL 31 001
BISTI COAL 17 COM 001	BISTI COAL 5 COM 001	NORTH BISTI COAL 32M COM 002
BISTI COAL 18 001		PETE MORROW 001
	BISTI COAL 5K COM 002	
BISTI COAL 18 002	BISTI COAL 6 001	PETE MORROW 002
BISTI COAL 19 001	BISTI COAL 6 002	SAM JACKSON STATE COM 001
BISTI COAL 2 001	BISTI COAL 7 001	SHEILA HIXON 001
BISTI COAL 2 002	BISTI COAL 7 COM 002	WEST BISTI COAL 10 002
BISTI COAL 20 001	BISTI COAL 8 COM 001	WEST BISTI COAL 11 002
BISTI COAL 20 002	BISTI COAL 8L COM 002	WEST BISTI COAL 11 COM F 001
BISTI COAL 21 001	BISTI COAL 9 001	WEST BISTI COAL 12 001
BISTI COAL 21 COM 002	BISTI COAL 9 COM 002	WEST BISTI COAL 13 001
BISTI COAL 22 002	BUENA SUERTE 3 G COM 001	WEST BISTI COAL 14 COM 001
BISTI COAL 28 001	BUENA SUERTE 3 L COM 001	WEST BISTI COAL 15 001
BISTI COAL 29 001	BUENA SUERTE 32 G COM 001	WEST BISTI COAL 15 002
BISTI COAL 29 002	BUENA SUERTE 4 L COM 001	WEST BISTI COAL 22 002
BISTI COAL 30 COM 001	CARSON 10 332	WEST BISTI COAL 22 COM 001
BISTI COAL 31 001	CARSON UNIT 15 COM 323	WEST BISTI COAL 23 001
WEST BISTI COAL 25 001	CARSON UNIT 206	WEST BISTI COAL 24 001
WEST BISTI COAL 25 002Y	EAST BISTI COAL 6 001	WEST BISTI COAL 24 COM 002
CARSON UNIT 313		

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

ELM RIDGE EXPLORATION

James McDaniel
Project Scientist

imedaniel@envirosch-inc.com

Amy Mackey

Administrative Manager amackey (@elmridge.net



Home | Help | Sign In

Track & Confirm

FAQs

Track & Confirm

Search Results

Label/Receipt Number: 7007 1490 0000 5398 9251

Service(s): Certified Mail™

Status: Delivered

Track & Confirm

Enter Label/Receipt Number.

Your item was delivered at 12:42 PM on July 29, 2009 in SANTA FE, NM

rticle Number

ransfer from service label)

Go >

Detailed Results:

	Dotanoo Mosano.					
	 Delivered, July 29, Arrival at Unit, July 	2009, 12:42 pm 29, 2009, 7:52	, SANTA FE, NM 87 am, SANTA FE, NM	504 87501		
	Notification Options		in any total and in the contract of the contra		and the second s	·
	Track & Confirm by e	mail .	U.S. Postal S		CEIT	
•	Get current event infor				Coverage Provided)	
		ក ភ	For delivery information	ation visit our websit	and the second	
innigen	and the control of th	······································	OFF	ICIA	JSE	Name of the second
Site Map	Customer Service F	oms Go M	Postage	\$,44	Kendra	mer Gateway
Copyrig	ht© 2009 USPS. All Rights Re	_	Certified Fee	2.80	Postmark	
		00	Return Receipt Fee (Endorsement Required)	2.30	Here	
	20.00	7010	Restricted Delivery Fee (Endorsement Required)	-	7 27 00	
1306b -	OILES BISHI 2- OILLE BISHI C		Total Postage & Fees	\$ 5,54	7.27.09 sem	_
	2-		Sent To	Mr. Thadde	eus Kostrubala	1.
305Va -	Olldo BisAi C	ad 6	Suber, Apr. 140.,		Land Office	1
JOUR		0-2 2		310 Old Sc Santa Fe, N	anta fe Trail IM 87504	
			PS Form 3800. August 2	The state of the s	See Reverse for Instruction	s
NDER: GOMPLE	THE THIS SECTION	COMPLE	TE THIS SECTION ON	DELIVERY		•
ะ อนที่อได้เคลื่องการกระ	::013) Also complete	A Signa	tire /			
min yeur name al	Delivery is desired: address on the reverse	X \		☐ Agent ☐ Addres	see	
Attacks this card to	in the card to you. The back of the mailpiece,	B. Receiv	ved by Pringte Wham a	C. Date of Deliv	ery)	
r on the romalis	pace permits.	4 44 44	ree address different fro	m¥tem 12 \□ Yes		
viticle Aeld essed to:			Septer delivery address	below: D No		
Mr. Thodo	leus Kostrubalo		JUL 29 21	109		
N.W. State	Land Office Santa Fe Trail		30-	11		
	NM 87504	To Make S			Sec. 2	
	je tyvanik i 1770 t − 1770 i 1770 i 1785 i 1785 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	☐ Rec	tified Mail Express jistered D.Beturn	s Meil Receipt for Merchand	ise	
			red Mail	1 7		
Shell had been been		Tr. mosuic	war monter & LEXIIA LOC	9) ☐ Yes		

7007 1490 0000 5398 9251

parting to you to 3056-024

03056-0166 Biz Cue 2-2 03056-0165 Biz Cue 2-1

ENVIROTECH INC

5796 U.S. Highway 64 Farmington, NM 87401





ADDRESS CORRECTION REQUESTED

Mr. Thaddeus Kostrubala N.M. State Land Office 310 Old Santa Fe Trail Santa Fe, NM 87504



July 27, 2009

Project No. 03056-0165

Mr. Thaddeus Kostrubala New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe, New Mexico 87504

Phone: (505) 827-5760

RE: BISTI COAL 2-1 EARTH PIT CLOSURE NOTIFICATION

Dear Mr. Kostrubala,

Please accept this letter as the necessary surface owner notification for earth pit closure activities at the Bisti Coal 2-1 well site, owned and operated by Elm Ridge Exploration. The Bisti Coal 2-1 well site is located in Unit H, Section 2, Township 25N, Range 12W, San Juan County, New Mexico, Lease # E-6633-2. Closure activities are scheduled to begin on August 3, 2009 and continue through August 7, 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

imcdaniel@envirotech-inc.com

Cc:

Client File No. 03056

Elm Ridge Exploration Bisti Coal 2-1 Sec 2, Twn 25N, Rge 12W Project No. 03056-0165

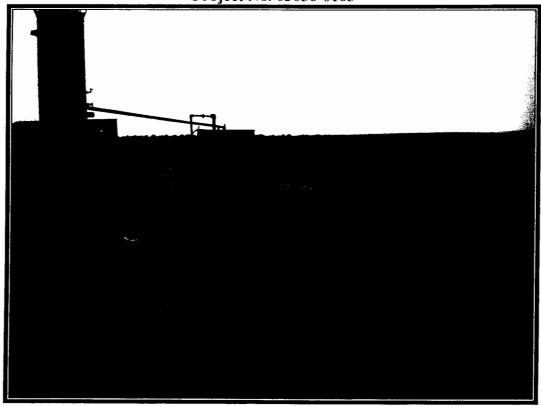


Photo 1: Bisti Coal 2-1 Well Site Overview

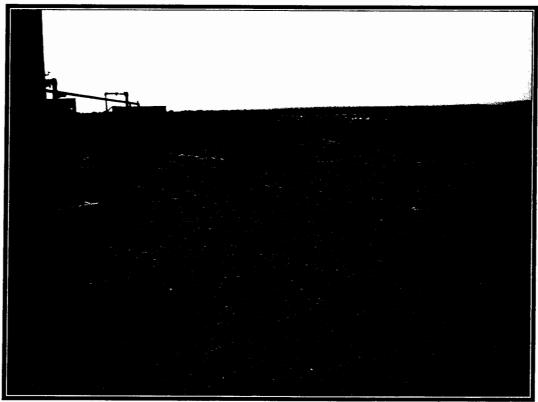


Photo 2: Excavated Area After Backfilling and Recontouring



EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

Elm Ridge Exploration

Project #:

03056-0165

Sample No.:

1

Date Reported:

8/24/2009

Sample ID:

Floor

Date Sampled:

8/3/2009

Sample Matrix:

Soil

Date Analyzed:

8/3/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

Total Petroleum Hydrocarbons

52

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 2-1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

JUMU DUMON FOR

Analyst

Joshua Kirchner

Printed

James McDaniel

Printed



CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Cal. Date:

3-Aug-09

Parameter	Standard Concentration mg/L	Concentration Reading mg/L	
ТРН	100		
	200	201	
	500		
	1000		

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

8/25/09

Joshua Kirchner

Print Name

James McDaniel

Print Name



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Elmridge	Project #:	03056-0165
Sample ID:	Floor	Date Reported:	08-07-09
Laboratory Number:	51092	Date Sampled:	08-03-09
Chain of Custody:	7599	Date Received:	08-05-09
Sample Matrix:	Soil	Date Analyzed:	08-06-09
Preservative:	Cool	Date Extracted:	08-05-09
Condition:	Intact	Analysis Requested:	BTEX

	Concentration	Det. Limit	
Parameter	(ug/Kg)	(ug/Kg)	
Benzene	ND	0.9	
Toluene	3.7	1.0	
Ethylbenzene	8.0	1.0	
p,m-Xylene	5.6	1.2	
o-Xylene	3.8	0.9	
Total BTEX	21.1		

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 2-1

Analyst

Muster Mulaetere Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

N/A		Project #:		N/A
08-08-BT QA/QC		Date Reported:		08-07-09
51068		Date Sampled:		N/A
Soil		Date Received:		N/A
N/A		Date Analyzed:		08-06-09
Condition: N/A				BTEX
4 1514E+006	4 1507F±006	0.2%	ND	0.1
				0.1
3.3197E+006	3.3264E+006	0.2%	ND	0.1
	0.57005.000	0.2%	ND	0.1
8.5594E+006	8.5766E+006	0.276	ND	0.1
	08-08-BT QA/QC 51068 Soil N/A N/A 4.1514E+006 3.8098E+006	08-08-BT QA/QC 51068 Soil N/A N/A 4.1514E+006 4.1597E+006 3.8098E+006 3.8174E+006	08-08-BT QA/QC Date Reported: 51068 Date Sampled: Soil Date Received: N/A Date Analyzed: N/A Analysis: 4.1514E+006 4.1597E+006 0.2% 3.8098E+006 3.8174E+006 0.2% 3.3197E+006 3.3264E+006 0.2%	08-08-BT QA/QC Date Reported: 51068 Date Sampled: Soil Date Received: N/A Date Analyzed: N/A Analysis: 4.1514E+006 4.1597E+006 0.2% ND 3.8098E+006 3.8174E+006 0.2% ND 3.3197E+006 3.3264E+006 0.2% ND

						ì
Benzene	10.1	10.3	2.0%	0 - 30%	0.9	
Toluene	24.1	25.2	4.6%	0 - 30%	1.0	
Ethylbenzene	30.6	31.2	2.0%	0 - 30%	1.0	
p,m-Xylene	62.3	63.2	1.4%	0 - 30%	1.2	
o-Xylene	135	141	4.2%	0 - 30%	0.9	

Benzene	10.1	50.0	59.0	98.2%	39 - 150
Toluene	24.1	50.0	72.9	98.4%	46 - 148
Ethylbenzene	30.6	50.0	77.3	95.9%	32 - 160
p,m-Xylene	62.3	100	159	98.0%	46 - 148
o-Xylene	135	50.0	183	98.5%	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 51068 - 51070, 51080, 51081, and 51090 - 51094.

Analyst



Chloride

Client: Elmridge Sample ID: Floor Lab ID#: Sample Matrix: Preservative:

51092 Soil Cool Intact

Project #: Date Reported: Date Sampled: Date Received:

Date Analyzed:

Chain of Custody:

08-03-09 08-05-09 08-06-09 7599

03056-0165 08-07-09

Parameter

Concentration (mg/Kg)

Total Chloride

25

Reference:

Condition:

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 2-1.

Musthen Walles
Review

CHAIN OF CUSTODY RECORD

	Project Name / Location: Str. CAAC 2-1	Sampler Name: Sampler Name:	Clight No.: (Method Brothed B	Sample Sample Lab No. Matrix Containers Hot. Hot. Hot. Hot. Hot. Hot. Hot. Hot.	534 igo 51092 Solidge 42 5 X	Soil Sludge C Solid Aqueous	Soil Sludge Solid Aqueous	Soil Sludge Solid Aqueous	Soil Sludge Solid Aqueous	Date Time Received by: (Signature)		by: (olginature)	by: (Signature) Received by: (Signature)	envirotech Analytical Laboratory				
The state of the s	Client: をならか。	Client Address:	Client Phone No.:	Sample No./ Samp										Relinquished by: (Signature)	Post charge by: (Signature)	remiquished by: (Signature)	Relinquished by: (Signature)	

{			•					
AGE NO: OF	(otec 5 (800) 362-11		ENVIRON	NMENTAL SPECIALIS
ATE STARTED: 4.54			Date of the second		5 (800) 362-10 Farmington, NM			6.43 23
ATE FINISHED: 8.3.4							LONG:	-108,0747
	FIELD I	REPORT	: BGT / I	PIT CLO	SURE VE	RIFICA	TION	
OCATION: NAME: (Sisti	COAL	WELL #:	2-1	TEMP PIT:		NENT PIT:	BGT:
EGAL ADD: UNIT: H		SEC: 2		المستحدين أكراء البار القاسب برياضان	25v		W	PM:
rr/footage:			CNTY: 4	San Juan	<u> </u>	ST: Ne.	w m	exico
(CAVATION APPROX:	6	FT. X	6	FT. X	1	FT. DEEP	CUBIC YA	ARDAGE:
SPOSAL FACILITY:	ENVIOR	an			ATION METH			
ND OWNER:	IAT. C. c. ccl	·		0-045-2		BGT / PIT	and the second second	
ONSTRUCTION MATERI					WITH LEAK		v:	
CATION APPROXIMATE PTH TO GROUNDWAT		96	FT.	15	FROM WELL	LHEAD		·
TEMPORARY PIT - G		TER 50-100 F	EET DEEP	···	/			
BENZENE ≤ 0.2 mg/kg,				ON (8015) ≤ 5	00 mg/kg, TPH	(418.1) ≤ 2500	mg/kg, CHL	ORIDES ≤ 500 mg/kg
TEMPORARY PIT - G BENZENE ≤ 0.2 mg/kg, E				NI (9015) < 5(M ma/ka TPH (418 1) < 2500	malka CHI (ORIDES < 1000 mg/kg
		kg, OKO & DI	COPICACIO	14 (6015) 2 50	o ing kg, i i i (410.1 <i>)</i> 3 2300	mg/kg, CIID	OKIDES 2 1000 mg kg
PERMANENT PIT OR BENZENE ≤ 0.2 mg/kg, 1		kg, TPH (418.	1) ≤ 100 mg/k	g, CHLORID	ES ≤ 250 mg/kg			
		I a v my m v m	I range	1,000	D 418.1 ANAL		DEADBIG	CALC (modes)
	TIME	200 STD	D. LAB NO.	WEIGHT (g	mL FREON	DILUTION	READING 201	CALC. (mg/kg)
			1	5	20	ч	13	<i>5</i> a
			$\frac{2}{3}$	-	·			
			4					
			5					
			6	L	<u> </u>	L		
PERIM	ETER		FIELD C	CHLORIDE	S RESULTS		PRO	OFILE
			SAMPLE	READING	CALC.			
	الم ا	1	ID /	/ \	(mg/kg) く ココ	}		
	4	1						
		(A ST)						
		0						
					má			
	}	(PIT)		PID RESU	RESULTS			
	{			PLE ID	(ppm)			
	157	••	100	580				
	ا كا	sep			00			
LAB SAMPLE	S	NOTES:	<u> </u>			<u> </u>		
AMPLE ID ANALYSIS	RESULTS	[8	XCAVATIBE	v by	four For	^		
BENZENE BTEX	-	4						
GRO & DRO		1						
CHI OBIDE		1						

WHO ORDERED

WORKORDER#

Menvirotech

Bill of Lading

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

DATE 8-4-09 JOB# 02056-0165 33967 MANIFEST #_

LETE DESCE	DESCRI	COMPLETE DESCRIPTION OF SHIP DESTINATION MATERIAL	PMENT	YDS	BBLS	TRA	TRANSPORTING COMPANY TRK# TIME DRIVE	TING CO	MPANY DRIVER SIGNATURE
TE IT	1	More t	H - 14	<i>\frac{1}{2}</i>	1			120	I \ X
				/					
	-			/					
LANDFARM EMPLOYEE:		Course			(NOTES:		AUG	ENTERED AUG 0 7 2009
		_			3)				
I certify the material hauled from the above location has rehat no additional materials have been added."	ระ	not been added	l to or mixed	l with, and i	s the sam	ıe material received	from the	above	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 hat no additional materials have been added."
motioney		COMPANY	Y Harry	The fall	/	SIG	SIGNATURE		Ship and

SIGNATURE

PHONE 327-2211

COMPANY CONTACT

JAME TAKE

COMPANY 🖊

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
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

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
lease 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 nvironment. 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 2-1 API Number: 3004527573 OCD Permit Number: U/L or Qtr/Qtr H Section 2 Township 25N Range 12W County: San Juan Center of Proposed Design: Latitude 36.432325 Longitude -108.074659 NAD: 1927 1983 Surface Owner: Federal State Private Tribal Trust or Indian Allotment
U/L or Qtr/Qtr H Section 2 Township 25N Range 12W County: San Juan
Center of Proposed Design: Latitude <u>36.432325</u> Longitude <u>-108.074659</u> 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:
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
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: Thicknessmil
s. Alternative Method:

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

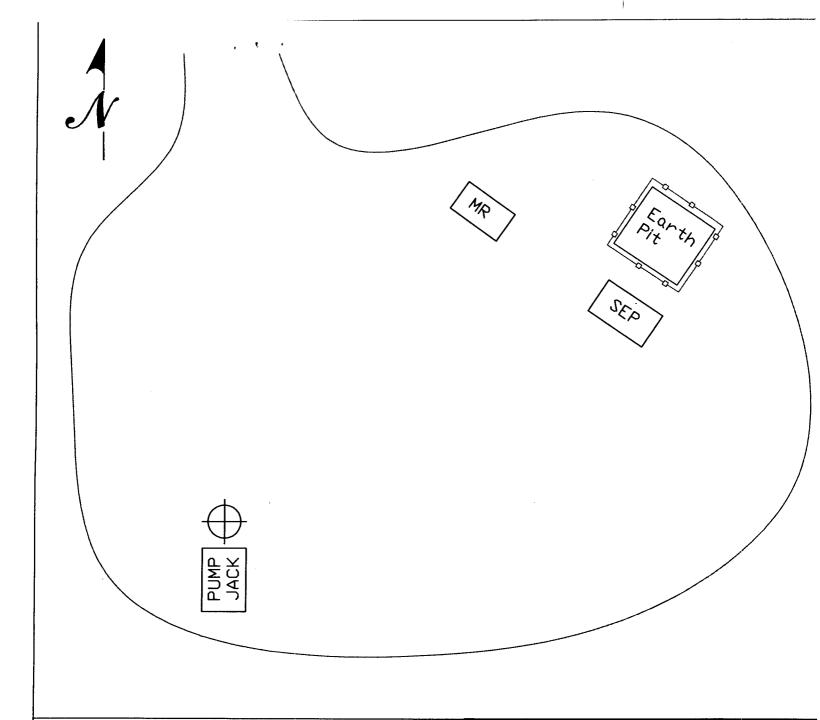
Fencing: Subsection D of 19.15.17.11 NMAC (Apriles to permanent pits, temporary pits, and below-grame tanks)	
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school is the strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school is the strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school is the strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school is the strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school is the strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school is the strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school is the strands of barbed wire at top (Required if located within 1000 feet of a permanent residence).	ol, 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 Bure	au office for
consideration of approval. Consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
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 ac material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the applice or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dabove-grade tanks associated with a closed-loop system.	propriate district of approval.
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	☐ Yes ☐ No
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	□ 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

Temporary Pits, Emergency Pits, and Below-gi. Tanks Permit Application Attachment Checklis. 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 19.15.17.12 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.13 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
Previously Approved Design (attach copy of design) API Number: or Permit Number:
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 19.15.17.12 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:
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 ₂ S, 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)
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 G of 19.15.17.13 NMAC ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Waste Removal Closure For Closed-loop Syste. That Utilize Above Ground Steel Tan Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling flat facilities are required.	iks or Haul Bins Only: (19.15.17.13.I uids and drill cuttings. Use attachment if n	NMAC) nore than two				
•	Facility Permit Number:					
	Facility Permit Number:					
Will any of the proposed closed-loop system operations and associated activities occur on or Yes (If yes, please provide the information below) No	in areas that will not be used for future serv	rice and operations?				
Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications based upon the appropriate requirem Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15 Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15	.17.13 NMAC	C				
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 pl provided below. Requests regarding changes to certain siting criteria may require adminis considered an exception which must be submitted to the Santa Fe Environmental Bureau of demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidan	trative approval from the appropriate distr office for consideration of approval. Justi	rict office or may be				
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 walke (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	atercourse or lakebed, sinkhole, or playa	Yes No				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existen - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	ce at the time of initial application.	☐ Yes ☐ No				
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in e NM Office of the State Engineer - iWATERS database; Visual inspection (certification)	xistence at the time of initial application.	☐ Yes ☐ No				
Within incorporated municipal boundaries or within a defined municipal fresh water well fiel adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality, Written approval obtained	-	☐ Yes ☐ No				
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection	on (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 Mine	ral Division	☐ Yes ☐ No				
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Miner Society; Topographic map 	al Resources; USGS; NM Geological	☐ Yes ☐ No				
Within a 100-year floodplain FEMA map		☐ Yes ☐ No				
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 I of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC						

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:					
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: Approval Date: 2/10/10					
Title: Frommerfal Figure OCD Permit Number:	_				
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:					
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. <u>Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:</u> Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more that two facilities were utilized.	ın				
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					
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:					

Page 5 of 5



I FGFND





Well Head

SITE MAP ELM RIDGE EXPLORATION BISTI COAL 2-1 SEC 2 TWN 25N RGE 12W SAN JUAN COUNTY, NEW MEXICO

SCALE: NTS
PROJECT N003056-0136
FIGURE NO. A

REVISIONS								
		-						
NO.	DATE	BY			DES	CRIPTIC	N	
MAP	DRWN	JPM		11/17/08	BASE	DRWN		

ENVIROTECH

5796 U.S. HIGHWAY 64, FARMINGTON, NM 87410 505-632-0615

EARTHEN PIT CLOSURE PLAN

SITE NAME:

BISTI COAL 2-1 UNIT LETTER H, SECTION 2, TOWNSHIP 25N, RANGE 12W SAN JUAN COUNTY, NEW MEXICO LATITUDE 36.432325 LONGITUDE -108.074659

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 2-1 SAN JUAN COUNTY, NEW MEXICO

TABLE OF CONTENTS

<u>INTRODUCTION</u>	1
SCOPE OF CLOSURE ACTIVITIES	1
REPORTING	3

INTRODUCTION

Elm Ridge Exploration would like to submit a closure plan for the earthen pit at the Bisti Coal 2-1 well site located in the SE ¼ NE ¼ of Section 2, 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 2-1well 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 proximately 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 a 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 Closure activities that will take place on tribal land will have requirement. 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, 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 re-seed 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.

- 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.
- 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 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 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.

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

Revised October 10, 2003

Form C-141

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

Release Notification and Corrective Action

					OPERATOR			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 2-1				1	Facility Type: Gas Well							
Surface Own	ner: State			Mineral O	wner:				Lease N	lo.: E-6633	-2	
				LOCA	TION	OF RE	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/V	Vest Line	County		
Н	2	25N	12W	1850		FNL	790	I	FEL	San Juan		
			I	Latitude 36.43	2325	Longiti	ıde <u>-108.07465</u>	9		<u> </u>		
						OF REL		<u></u>				
Type of Relea	ase: Produc	ced Water		INAL			Release: Unknov	vn	Volume F	Recovered: I	Jnknov	vrı
Source of Re							lour of Occurrenc			Hour of Disc		
Was Immedia	te Notice (iven?				If YES, To	Whom?					
			Yes [No 🛛 Not Rec	quired		··· nom·		to the company			
By Whom?						Date and I						
Was a Watero	course Reac		Yes 🗵	No		If YES, Volume Impacting the Watercourse.						
If a Watercou	rse was Im	pacted, Descr	ibe Fully.							130	F	
Describe Cau									\		Annual Special Control	
				location formerly			arthen pit on locat	ion. Th	e well has	been altered	ta no f	onger drain
into an eartne	n pit, but in	istead into an	Above Gr	ound Storage Tank	(AS1)					U		
Describe Area	a Affected	and Cleanup A	Action Tak	cen.*						<u>.:</u>	75	
Blow sand w	as removed	from the ear	then pit, a	nd approximately of	one (1)	yard of 'prod	uction sludge' wa	s remov	ed from the	e earthen pit	(A 5-r	ooint
				ately one (1) foot b								
				hod 418.1, and in I ble returned results								
and 250 mg/k	g total chlo	rides, confirn	ning that a	release had not oc	curred.	Analytical r	esults are attached	d for you	ur reference	2.	0, 50 11	
I hereby certi	fy that the i	nformation gi	iven above	e is true and comple	ete to th	ne best of my	knowledge and u	nderstar	nd that purs	suant to NM	OCD rı	iles and
regulations al	l operators	are required t	o report ar	nd/or file certain re	lease no	otifications a	nd perform correct	tive acti	ions for rele	eases which	may en	danger
				ce of a C-141 report investigate and re								
or the enviror	ment. In a	ddition. NMC	OCD accer	tance of a C-141 re	median enort de	es not reliev	e the operator of	eat to gr responsi	bility for c	r, surrace wa ompliance w	ith any	other
federal, state,					-port a		o mo operator or	· •opens	.01111) 101 0	omphanee w		
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					OIL CONSERVATION DIVISION						
Signature:			~									
Printed Name: Ms. Amy Mackey					Approved by District Supervisor:							
Title: Administrative Manager					Approval Date: Expiration Date:							
E-mail Addre	ss: amacke	yl@elmridge	.net		(Conditions of	Approval:			Attached		
Date:			Phone: 50	05-632-3476 Ext 2	01_							

^{*} Attach Additional Sheets If Necessary

District I 1625 N. French Dr., Hobbs, NM 88240 District II 130I 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

☐ Alternative Method:

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

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
Propo	sed Alternative Method Permit or Closure Plan Application
f action:	Permit of a pit, closed-loop system, below-grade tank, or proposed alternative m

nethod Type o 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. OGRID#: 149052 Operator: Elm Ridge Exploration Address: P.O. Box 156; Bloomfield, NM 87413 Facility or well name: Bisti Coal 2-1 API Number: 3004527573 OCD Permit Number: U/L or Qtr/Qtr H Section 2 Township 25N Range 12W County: San Juan Center of Proposed Design: Latitude 36.432325 Longitude -108.074659 NAD: □1927 🛛 1983 Surface Owner: ☐ Federal ☑ State ☐ Private ☐ Tribal Trust or Indian Allotment ☑ 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_6'__ x W_6'__ x D_1'__ 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 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

mil HDPE PVC Other

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

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, he institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate. Please specify	nospital,
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)	
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	
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 of consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
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 accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying above-grade tanks associated with a closed-loop system.	priate district pproval.
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
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

Form C 144

Oil Conservation Division

Page 2 of 5

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 19.15.17.12 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:
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. Permant 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 Quality Control/Quality 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 Preeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Nuisance or Hazardous Odors, including H ₂ S, 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
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)
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 G of 19.15.17.13 NMAC

Form C-144 Oil Conservation Division

Page 3 of 5

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Statements Instructions: Please indentify the facility or facilities for the disposal of liquids, a					
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 oc ☐ Yes (If yes, please provide the information below) ☐ No	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 operation Soil Backfill and Cover Design Specifications based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	requirements of Subsection H of 19.15.17.13 NMAC l of 19.15.17.13 NMAC	2			
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the provided below. Requests regarding changes to certain siting criteria may require considered an exception which must be submitted to the Santa Fe Environmental demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for	e administrative approval from the appropriate distr Bureau office for consideration of approval. Justij	ict office or may be			
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 sign lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	nificant watercourse or lakebed, sinkhole, or playa	Yes No			
Within 300 feet from a permanent residence, school, hospital, institution, or church - Visual inspection (certification) of the proposed site; Aerial photo; Satellite		☐ Yes ☐ No			
Within 500 horizontal feet of a private, domestic fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less watering purposes, or within 1000 horizontal feet of any other fresh water well or spring that less water well o	oring, in existence at the time of initial application.	☐ Yes ☐ No			
Within incorporated municipal boundaries or within a defined municipal fresh wate adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approve	•	Yes No			
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visua	l 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 Society; Topographic map	& Mineral Resources; USGS; NM Geological	☐ Yes ☐ No			
Within a 100-year floodplain FEMA map		☐ Yes ☐ No			
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Construction/Design Plan of Burial Trench (if applicable) based upon the ap Construction/Design Plan of Temporary Pit (for in-place burial of a drying pa Protocols and Procedures - based upon the appropriate requirements of 19.15 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Disposal Facility Name and Permit Number (for liquids, drilling fluids and di Soil Cover Design - based upon the appropriate requirements of Subsection Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	direments of 19.15.17.10 NMAC Subsection F of 19.15.17.13 NMAC propriate requirements of 19.15.17.11 NMAC ad) - based upon the appropriate requirements of 19.15.17.13 NMAC direments of Subsection F of 19.15.17.13 NMAC Subsection F of 19.15.17.13 NMAC rill cuttings or in case on-site closure standards cannot of 19.15.17.13 NMAC of 19.15.17.13 NMAC	15.17.11 NMAC			

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:
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: 8/3/09
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.
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 <i>will not</i> be used for future service and operations? Yes (If yes, please demonstrate compliance to the items below) \sum 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
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 see attached 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:

Elm Ridge Exploration Bisti Coal 2-1 Earth Pit Closure 03056-0165 Closure Date: 8/3/09

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 (NMOCD) of December 31, 2009.

 Closure date for the earth pit located at Bisti Coal 2-1 well site is August 3, 2009.
- 2) In accordance with 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 proximately 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 July 15, 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 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 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.

Notification was provided to the New Mexico State Land Office on July 29, 2009; see attached 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 consistence of the material removed, as in accordance with 19.15.17.13 Subsection C Paragraph (1) NMAC.
 - On August 3, 2009, approximately one (1) cubic yard 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 2-1 well site; see *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 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.
 - A five (5)-point composite sample was collected of native soil beneath the earthen pit 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 total chloride standard, confirming that a release did NOT occur.

NAME	Benzene	BTEX	Chlorides	ТРН
Pit Rule	0.2 mg/kg	50 mg/kg	250 mg/kg	100 mg/kg
Standard				
Earth Pit Comp 1'	< 0.0009 mg/kg	0.0211 mg/kg	25 mg/kg	52 mg/kg
Deep				

- 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,

Elm Ridge Exploration Bisti Coal 2-1 Earth Pit Closure 03056-0165 Closure Date: 8/3/09

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 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 re-seed 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 sample 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.

Elm Ridge Exploration Bisti Coal 2-1 Earth Pit Closure 03056-0165 Closure Date: 8/3/09

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, revegetation 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 3, 2009.



July 8, 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 DOCUMENTATION

Dear Mr. Jones,

Envirotech, Inc, on the behalf of Elm Ridge Exploration, would like to submit this notification to disregard the C-141 Forms concerning the Earthen Pit Release Notifications previously submitted to your office in May of 2009. These C-141 documents were submitted with contamination assessment sampling results, and do not reflect any closure activities occurring on site. To date, closure activities have not begun on any earthen pit owned by Elm Ridge Exploration. A list of the earthen pit C-141 soil assessment documents submitted to your office are as follows:

BISTI COAL 12 001	DISTLOCAL ADDIT 1	JETER COM 002
	BISTI COAL 4 001 PIT 1	
BISTI COAL 16 001	BISTI COAL 4 001 PIT 2	JICARILLA APACHE I 011
BISTI COAL 16 002	BISTI COAL 4 COM 002	NORTH BISTI COAL 31 001
BISTI COAL 17 COM 001	BISTI COAL 5 COM 001	NORTH BISTI COAL 32M COM 002
BISTI COAL 18 001	BISTI COAL 5K COM 002	PETE MORROW 001
BISTI COAL 18 002	BISTI COAL 6 001	PETE MORROW 002
BISTI COAL 19 001	BISTI COAL 6 002	SAM JACKSON STATE COM 001
BISTI COAL 2 001	BISTI COAL 7 001	SHEILA HIXON 001
BISTI COAL 2 002	BISTI COAL 7 COM 002	WEST BISTI COAL 10 002
BISTI COAL 20 001	BISTI COAL 8 COM 001	WEST BISTI COAL 11 002
BISTI COAL 20 002	BISTI COAL 8L COM 002	WEST BISTI COAL 11 COM F 001
BISTI COAL 21 001	BISTI COAL 9 001	WEST BISTI COAL 12 001
BISTI COAL 21 COM 002	BISTI COAL 9 COM 002	WEST BISTI COAL 13 001
BISTI COAL 22 002	BUENA SUERTE 3 G COM 001	WEST BISTI COAL 14 COM 001
BISTI COAL 28 001	BUENA SUERTE 3 L COM 001	WEST BISTI COAL 15 001
BISTI COAL 29 001	BUENA SUERTE 32 G COM 001	WEST BISTI COAL 15 002
BISTI COAL 29 002	BUENA SUERTE 4 L COM 001	WEST BISTI COAL 22 002
BISTI COAL 30 COM 001	CARSON 10 332	WEST BISTI COAL 22 COM 001
BISTI COAL 31 001	CARSON UNIT 15 COM 323	WEST BISTI COAL 23 001
WEST BISTI COAL 25 001	CARSON UNIT 206	WEST BISTI COAL 24 001
WEST BISTI COAL 25 002Y	EAST BISTI COAL 6 001	WEST BISTI COAL 24 COM 002
CARSON UNIT 313		

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.

ELM RIDGE EXPLORATION

James McDaniel

Project Scientist

imedaniel@enviroteck-inc.com

Amy Mackey Administrative Manager anasckey! (debnridge age) TO THE THE TANK TO SERVE

Home | Help Sign In

Track & Confirm

FAQs

 $G_{\theta} >$

mer Gateway

Track & Confirm

Search Results

Label/Receipt Number: 7007 1490 0000 5398 9251

Service(s): Certified Mail

Status: Delivered

Track & Confirm

Enter Label/Receipt Number.

Your item was delivered at 12:42 PM on July 29, 2009 in SANTA FE, NM

O

Detailed Results:

* Delivered, July 29, 2009, 12:42 pm, SANTA FE, NM 87504

* Arrival at Unit, July 29, 2009, 7:52 am, SANTA FE, NM 87501

Notification Options

Track & Confirm by email

Get current event information or up

Site Map Customer Service <u>Forms</u> S

Copyright@ 2009 USPS. All Rights Reserved.

U.S. Postal Service

Postage Certified Fee 80 Postmark.

Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required)

2.30

CERTIFIED MAIL RECEIPT

(Domestic Mail Only; No Insurance Coverage Provided)

Here 7-27-09

Sent To Street, Apt. No.; or PO Box No. City, State, ZIP+4

Total Postage & Fees

Mr. Thaddeus Kostrubala N.M. State Land Office 310 Old Santa fe Trail Santa Fe, NM 87504

PS Form 3800, August 2006

See Reverse for Instructions

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. Thaddeus Kostrubala N.M. State Land Office 310 Old Santa Fe Trail Santa Fe, NM 87504

COMPLETE THIS SECTION ON DELIVERY

A. Signature X

□ Agent □ Addressee

B. Received by (Printed Name)

C. Date of Delivery

If YES, enter delivery address below:

☐ Yes

3. Service Type Certified Mail

☐ Express Mail

Registered Return Receipt for Merchandise Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

2. Article Number (Transfer from service label)

7007 1490 0000 5398 9251

pertage to got to soon

03056-0166 Birt Call 2-2 03056-0165 Birt Call 2-1

ENVIROTECH INC.

5796 U.S. Highway 64 Farmington, NM 87401





ADDRESS CORRECTION REQUESTED

Mr. Thaddeus Kostrubala N.M. State Land Office 310 Old Santa fe Trail Santa fe, NM 87504



July 27, 2009

Project No. 03056-0165

Mr. Thaddeus Kostrubala New Mexico State Land Office 310 Old Santa Fe Trail Santa Fe, New Mexico 87504

Phone: (505) 827-5760

RE: BISTI COAL 2-1 EARTH PIT CLOSURE NOTIFICATION

Dear Mr. Kostrubala,

Please accept this letter as the necessary surface owner notification for earth pit closure activities at the Bisti Coal 2-1 well site, owned and operated by Elm Ridge Exploration. The Bisti Coal 2-1 well site is located in Unit H, Section 2, Township 25N, Range 12W, San Juan County, New Mexico, Lease # E-6633-2. Closure activities are scheduled to begin on August 3, 2009 and continue through August 7, 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

imcdaniel@envirotech-inc.com

Cc:

Client File No. 03056

Elm Ridge Exploration Bisti Coal 2-1 Sec 2, Twn 25N, Rge 12W Project No. 03056-0165



Photo 1: Bisti Coal 2-1 Well Site Overview



Photo 2: Excavated Area After Backfilling and Recontouring



EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

Elm Ridge Exploration

Project #:

03056-0165

Sample No.:

1

Date Reported:

8/24/2009

Sample ID: Sample Matrix: Floor Soil Date Sampled: 8/3/2009

Preservative:

Cool

Date Analyzed:
Analysis Needed:

8/3/2009 TPH-418.1

Condition:

Cool and Intact

		Det.
	Concentration	Limit
Parameter	(mg/kg)	(mg/kg)

Total Petroleum Hydrocarbons

52

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 2-1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Joshua Kirchner

Printed

James McDaniel

Printed

Printed



CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Cal. Date:

3-Aug-09

Parameter	Standard Concentration mg/L	Concentration Reading mg/L	
TPH	100		
	200	201	
	500		
	1000		

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

Analyst

8/25/09 Date

Joshua Kirchner

Print Name

Review

E/25/09

Date

James McDaniel

Print Name



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Elmridge	Project #:	03056-0165
Sample ID:	Floor	Date Reported:	08-07-09
Laboratory Number:	51092	Date Sampled:	08-03-09
Chain of Custody:	7599	Date Received:	08-05-09
Sample Matrix:	Soil	Date Analyzed:	08-06-09
Preservative:	Cool	Date Extracted:	08-05-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	20	
Toluene	ND	0.9	
	3.7	1.0	
Ethylbenzene	8.0	1.0	
p,m-Xylene	5.6	1.2	
o-Xylene	3.8	0.9	
Total BTEX	21.1		

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 2-1

Analyst

Moster Mudoeters
Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	08-08-BT QA/QC	Date Reported:	08-07-09
Laboratory Number:	51068	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-06-09
Condition:	N/A	Analysis:	BTEX

Benzene	4.1514E+006	4.1597E+006	0.2%	ND	0.1
l'oluene	3.8098E+006	3.8174E+006	0.2%	ND	0.1
Ethylbenzene	3.3197E+006	3.3264E+006	0.2%	ND	0.1
o,m-Xylene	8.5594E+006	8.5766E+006	0.2%	ND	0.1
o-Xvlene	3.1771E+006	3.1835E+006	0.2%	ND	0.1

		estatura de la cina de como de			CESES LINE	
Benzene	10.1	10.3	2.0%	0 - 30%	0.9	
Toluene	24.1	25.2	4.6%	0 - 30%	1.0	
Ethylbenzene	30.6	31.2	2.0%	0 - 30%	1.0	
p,m-Xylene	62.3	63.2	1.4%	0 - 30%	1.2	
o-Xylene	135	141	4.2%	0 - 30%	0.9	

					Accept Range
Benzene	10.1	50.0	59.0	98.2%	39 - 150
Toluene	24.1	50.0	72.9	98.4%	46 - 148
Ethylbenzene	30.6	50.0	77.3	95.9%	32 - 160
p,m-Xylene	62.3	100	159	98.0%	46 - 148
o-Xylene	135	50.0	183	98.5%	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 51068 - 51070, 51080, 51081, and 51090 - 51094.

Analyst



Chloride

Client: Elmridge Project #: 03056-0165 Date Reported: 08-07-09 Sample ID: Floor Lab ID#: 51092 Date Sampled: 08-03-09 Date Received: 08-05-09 Sample Matrix: Soil 08-06-09 Preservative: Cool Date Analyzed: Chain of Custody: 7599 Condition: Intact

Parameter

Concentration (mg/Kg)

Total Chloride

25

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 2-1.

Analyst

Misther Woodles
Review

CHAIN OF CUSTODY RECORD

',		e Intact	Sampl	1										Time &				7000 00 mm. T
		l00O 9	Sampl	7														
														Date /5/09				
														- 18			-	
ERS		RIDE	СНГО	+														
ANALYSIS / PARAMETERS		(1.814													h			
/ PAR			НАЧ												V			
TASIS														\ \				\
ANA		HOWY /	BCI											M				c.com
		8 Metal noinA \																tech-in
		bortheW												X rate	ture	ture)	atory	@enviro
	(12081	oodteM)	ХЭТ8	ス										(Signa	(Signa	(Signa	P So	5 • lab
	(2108	hodie			1									ed by:	ed by:	ed by:	+ 3	32-061
			@	Jog										Received by: (Signature	Received by: (Signature	Received by: (Signature)	nvirotech Analytical Laboratory	5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com
		\2	No./Volume Preserv of HgQ ₂ HG														Anal	187401
		2165	No./Vol of Contair	4,5										Time			<u> </u>	ton, NN
2.1				Sludge Aqueous	Sludge	Sludge Aqueous	Sludge Aqueous	Sludge Aqueous	Sludge	Sludge Aqueous	Sludge Aqueous	Sludge Aqueous	Sludge Aqueous	Date			m	Farming
			Sample Matrix	Slu	Slu	Slu	Slu	Slu	Slu	Slu	Slu	Sluc	Sluc	Date \$5.1				ay 64 •
/ Location	ζ.	9		Solid	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil					Highw
Project Name / Location:	npler Name:	950	Š	4														3796 US
roject Nam	Sampler Name:	Client No.:	Lab No.	51092														
P. T.	Sar	30	Sample Time											(
				3										\				
			Sample Date	488										ure)	ure)	ure)		
4	<i>)</i>													Signat	Signat	Signat		
ent: CLMA, A.	ress:	Client Phone No.:	Sample No./ Identification		,									Relinquished by: (Signature)	Refinquished by: (Signature)	Relinquished by: (Signature)		
int:	Client Address:	int Pho	Samp Identif	Hand										nquishe	duish	nquish€		
Olient:	Clie	Clie		1,1										Relii	H.	Relii		

	•									
PAGE NO:	/ OF (and the same of th	envirotech (505) 632-0615 (800) 362-1679						ENVIRONMENTAL SPECIALIST:	
DATE START	ED: 8-3-9		(505) 632-9615 (500) 962-1675 6796 U.S. Mayy CA, Farmington, MM 67494						1,43 23	
DATE FINISH	ED: 8-3-4								108,0747	
		FIELD R	EPORT:	BGT / P	IT CLOS	SURE VE	RIFICAT	MOIT		
LOCATION:	NAME: B	15ri (UAL-	WELL #:	1 -1	TEMP PIT:	PERMAN	ENT PIT:	BGT:	
LEGAL ADD:	UNIT: H		SEC: 2		A CONTRACTOR OF THE PARTY OF TH		RNG: 12	W	PM:	
QTR/FOOTAG	E:			CNTY: 5	in Juan	/	ST: Neu	v me	exico	
EXCAVATION	N APPROX:	6	FT. X	6	FT. X	1	FT. DEEP	CUBIC YA	RDAGE:	
DISPOSAL FA		ENV1/616	the state of the second			TION METHO				
LAND OWNER		T (1-045-21		BGT / PIT V			
CONSTRUCTI						VITH LEAK D				
LOCATION A			96	FT. 4	5	FROM WELL	HEAD			
DEPTH TO GR	ARY PIT - GR		ED 50 100 EE	ET DEED						
					N (8015) ≤ 50	0 mg/kg, TPH (418.1) ≤ 2500	mg/kg, CHL	ORIDES ≤ 500 mg/kg	
l	ARY PIT - GR				()	8-8/	,	5 6		
			_		J (8015) < 50) mg/kg. TPH (4	118.1) ≤ 2500 :	mg/kg, CHL(ORIDES ≤ 1000 mg/kg	
./		_	g, and w Ditt	7110101101	(0015) 2 50	, mg, ng, 1111 (.10.1) = 2200	mg ng, circ	on book a root mg ng	
	VENT PIT OR I		ra TDU (410-1)	100 //	CIII ODIDI	25 × 250 ma/ka				
BENZEN	$E \le 0.2 \text{ mg/kg, B}'$	1 E X ≤ 50 mg/	kg, 1PH (418.1)) ≤ 100 mg/kg						
		TIME	SAMPLE I.D.	LADNO		mL FREON	YSIS DILUTION	DEADING	CALC. (mg/kg)	
		TIME	200 STD	LAB NO.	WEIGHT (g	IIIL FREUN	- DILUTION	201	CALC. (IIIg/kg)	
				1	5	20	Ч	13	<i>S</i> a	
				3						
			<u> </u>	4						
				5						
		L		6	l					
	PERIME	ETER		FIELD C	HLORIDE	S RESULTS		PRO	OFILE	
				SAMPLE	READING	CALC.				
			1	ID	41	(mg/kg) くコフ				
		4					1			
			(A ⁵)						,	
		}	(PIT) {		PID RESU					
		{		SAMI	PLE ID	RESULTS (ppm)				
		\sim		100	Grp.	(рриг)	j			
		0	SCP		<u> </u>	68				
							1			
							<u> </u>			
	1D 0 11 000	~	hromes.				<u></u>			
SAMPLE ID	AB SAMPLES		NOTES: C	XCAVATION	64	four Fa	\sim			
SAMPLE ID	ANALYSIS BENZENE	KESULIS	1	21-11-111	٦ (
	BTEX]							
	GRO & DRO	1 To	4							
	CHLORIDES	3	-							
			WORKORDE	ER#		WHO ORDER	ED			

envirotech

Bill of Lading

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

33967

MANIFEST #

DATE 8-4-09 JOB# 03056-0165 DRIVER SIGNATURE ENTERED AUG 0 7 2009 TRANSPORTING COMPANY TRK# TIME 17877 COMPANY 4-4 NOTES BBLS 3 YDS GRID * . # **COMPLETE DESCRIPTION OF SHIPMENT** MATERIAL 100° + DESTINATION LANDFARM EMPLOYEE: THJ7 一大で POINT OF ORIGIN CHLORIDE TEST PAINT FILTER TEST RESULTS: LOAD NO.

"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."

COMPANY CONTACT__

NAME

PHONE 327-2711 COMPANY

SIGNATURE

13-B

ACCENT Printing • Form 28-1212