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/frincis Dr. Sang Fe, Nan 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					
Type of action:  Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method  Modification to an existing permit  Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method					
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank, or alternative request					
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water, or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations, or ordinances.					
Operator: Elm Ridge Exploration OGRID #: 149052					
Address: P.O. Box 156; Bloomfield, NM 87413					
Facility or well name: Sam Jackson State COM 1					
API Number: 3004524323 OCD Permit Number:					
U/L or Qtr/Qtr K Section 32 Township 26N Range 12W County: San Juan					
Center of Proposed Design: Latitude <u>36.442530</u> Longitude <u>-108.137468</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:  Drilling  Workover					
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A					
☐ Lined ☑ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other					
☐ String-Reinforced					
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L_8'_x W_8'_x D_1'					
3.  Closed-loop System: Subsection H of 19.15.17.11 NMAC					
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)					
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other					
☐ Lined ☐ Unlined Liner type: Thicknessmil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other					
Liner Seams:  Welded Factory Other					
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 automatic overflow shut-off					
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other					

Alternative Method:

Form C-144

Liner type: Thickness \_

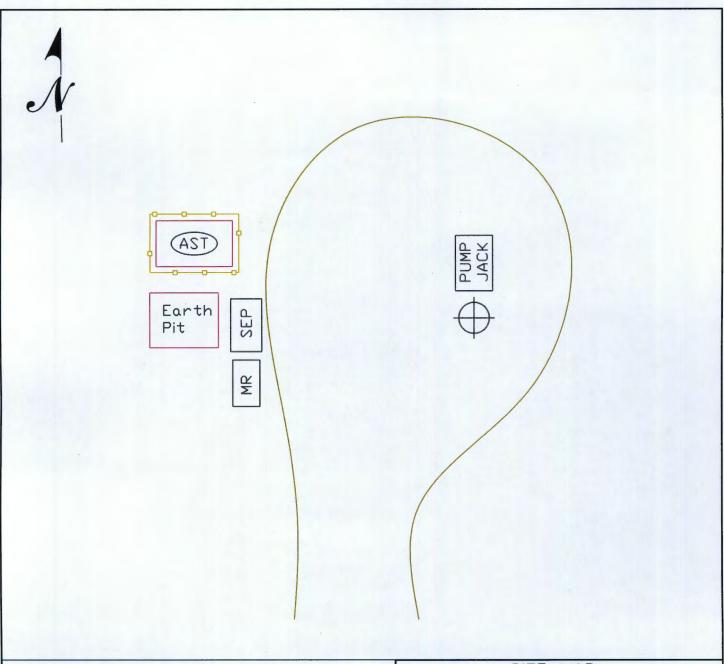
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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,		
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			
Z signed in compilation with 17.13.5103 Marke			
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 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 dryitabove-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).  - 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.			
<ul> <li>(Applies to permanent pits)</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	☐ Yes ☐ No ☐ NA		
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			
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		
, ,	Yes No		
Within an unctable area	<ul><li>☐ Yes ☐ No</li><li>☐ Yes ☐ No</li></ul>		
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map			

Temporary Pits, Emergency Pits, and Below-grade Tanks Instructions: Each of the following items must be attached		
attached.	to the application. Flease in	alcule, by a check mark in the box, that the abcuments are
<ul> <li>☐ Hydrogeologic Report (Below-grade Tanks) - based up</li> <li>☐ Hydrogeologic Data (Temporary and Emergency Pits)</li> <li>☐ Siting Criteria Compliance Demonstrations - based upo</li> <li>☐ Design Plan - based upon the appropriate requirements</li> <li>☐ Operating and Maintenance Plan - based upon the appropriate</li> </ul>	- based upon the requirements on the appropriate requirement s of 19.15.17.11 NMAC copriate requirements of 19.15	s of Paragraph (2) of Subsection B of 19.15.17.9 NMAC is of 19.15.17.10 NMAC
and 19.15.17.13 NMAC		
Previously Approved Design (attach copy of design)	API Number:	or Permit Number:
12. Closed-loop Systems Permit Application Attachment Che Instructions: Each of the following items must be attached attached.		
☐ Geologic and Hydrogeologic Data (only for on-site closed Siting Criteria Compliance Demonstrations (only for one Design Plan - based upon the appropriate requirements ☐ Operating and Maintenance Plan - based upon the app	on-site closure) - based upon the s of 19.15.17.11 NMAC ropriate requirements of 19.15	ne appropriate requirements of 19.15.17.10 NMAC
Closure Plan (Please complete Boxes 14 through 18, if and 19.15.17.13 NMAC	f 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	API Number:	(Applies only to closed-loop system that use
above ground steel tanks or haul-off bins and propose to imp	element waste removal for clos	ure)
Permanent Pits Permit Application Checklist: Subsection Instructions: Each of the following items must be attached attached.  Hydrogeologic Report - based upon the requirements of Siting Criteria Compliance Demonstrations - based upon the all Climatological Factors Assessment  Certified Engineering Design Plans - based upon the all Dike Protection and Structural Integrity Design - based Leak Detection Design - based upon the appropriate reduced Liner Specifications and Compatibility Assessment - because Quality Control/Quality Assurance Construction and I Operating and Maintenance Plan - based upon the appropriate of Preeboard and Overtopping Prevention Plan - based upon the appropriate of Hazardous Odors, including H2S, Prevent Emergency Response Plan  Oil Field Waste Stream Characterization  Monitoring and Inspection Plan  Erosion Control Plan  Closure Plan - based upon the appropriate requirement	of Paragraph (1) of Subsection on the appropriate requirements of 19 d upon the appropriate requirements of 19.15.17.11 No pased upon the appropriate requirements of 19.15.17.12 No pased upon the appropriate requirements of 19.15.17.13 No pased upon the appropriate requirements of 19.15 pon the appropriate requirements of	B of 19.15.17.9 NMAC its of 19.15.17.10 NMAC .15.17.11 NMAC ments of 19.15.17.11 NMAC MAC uirements of 19.15.17.11 NMAC .17.12 NMAC ints of 19.15.17.11 NMAC
<u>Proposed Closure</u> : 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes		
☐ In-place Burial	oval op systems only) ally for temporary pits and close On-site Trench Burial	
Waste Excavation and Removal Closure Plan Checklist:  closure plan. Please indicate, by a check mark in the box, t  Protocols and Procedures - based upon the appropriate  Confirmation Sampling Plan (if applicable) - based up  Disposal Facility Name and Permit Number (for liquid  Soil Backfill and Cover Design Specifications - based  Re-vegetation Plan - based upon the appropriate requit  Site Reclamation Plan - based upon the appropriate received.	that the documents are attach e requirements of 19.15.17.13 con the appropriate requirement ds, drilling fluids and drill cutt upon the appropriate requirements of Subsection 1 of 19.	ed. NMAC tts of Subsection F of 19.15.17.13 NMAC ings) nents of Subsection H of 19.15.17.13 NMAC 15.17.13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids, 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 of ☐ Yes (If yes, please provide the information below) ☐ No		vice and operations?
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	e requirements of Subsection H of 19.15.17.13 NMA I of 19.15.17.13 NMAC	С
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 Environmenta demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC.	e administrative approval from the appropriate dist. I Bureau 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; Dat	a 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; Dat	a 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; Database search;	a obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other sig 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 les watering purposes, or within 1000 horizontal feet of any other fresh water well or s  - NM Office of the State Engineer - iWATERS database; Visual inspection (	pring, in existence at the time of initial application.	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water 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	al 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 Geolog Society; Topographic map	y & 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 appropriate requirements of Construction/Design Plan of Temporary Pit (for in-place burial of a drying 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 confirmation Sampling Plan - 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	uirements of 19.15.17.10 NMAC Subsection F of 19.15.17.13 NMAC oppropriate requirements of 19.15.17.11 NMAC ad) - based upon the appropriate requirements of 19. 5.17.13 NMAC uirements of Subsection F of 19.15.17.13 NMAC Subsection F of 19.15.17.13 NMAC lrill cuttings or in case on-site closure standards cann H of 19.15.17.13 NMAC I 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): Ms. Amy Mackey	Title: Administrative Manager
Signature:	Date: 1-28-09
E-mail address: amackey1@elmridge.net	Telephone: <u>505-632-3476 Ext. 201</u>
OCD Approval: Permit Application (including closure plan)	Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: Chaves	Approval Date: 2/19/2009
OCD Representative Signature: Und J. Chaves  Title: Environmental Engineer	OCD Permit Number:
	lan prior to implementing any closure activities and submitting the closure report.  0 days of the completion of the closure activities. Please do not complete this and the closure activities have been completed.
	Closure Completion Date:
22.  Closure Method:  Waste Excavation and Removal On-Site Closure Method  If different from approved plan, please explain.	☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
	p Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: quids, drilling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	Disposal Facility Permit Number:
	med on or in areas that will not be used for future service and operations?
Required for impacted areas which will not be used for future service a  Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique	nd operations:
24.	
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  Disposal Facility Name and Permit Number  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique  Site Reclamation (Photo Documentation)	
On-site Closure Location: Latitude	Longitude NAD: ☐1927 ☐ 1983
25.	
Operator Closure Certification:	s closure report is true, accurate and complete to the best of my knowledge and requirements and conditions specified in the approved closure plan.
Operator Closure Certification:  I hereby certify that the information and attachments submitted with thi	
Operator Closure Certification:  I hereby certify that the information and attachments submitted with thi belief. I also certify that the closure complies with all applicable closure.	re requirements and conditions specified in the approved closure plan.



## LEGEND



] 4' Tall Hogwire ] Fencing



Berm



Well Head

# SITE MAP ELM RIDGE EXPLORATION SAM JACKSON STATE COM 1 SEC 32 TWN 26N RGE 12W SAN JUAN COUNTY, NEW MEXICO

SCALE: NTS FIGURE NO. A REVISIONS

NO. DATE BY DESCRIPTION

MAP DRWN JPM 12/24/08 BASE DRWN

ENVIROTECH

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

#### **EARTHEN PIT CLOSURE PLAN**

#### **SITE NAME:**

# SAM JACKSON STATE COM 1 UNIT LETTER K, SECTION 32, TOWNSHIP 26N, RANGE 12W SAN JUAN COUNTY, NEW MEXICO LATITUDE 36.442530 LONGITUDE -108.137468

#### **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 SAM JACKSON STATE COM 1 SAN JUAN COUNTY, NEW MEXICO

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#### **Introduction**

Elm Ridge Exploration would like to submit a closure plan for the earthen pit at the Sam Jackson State COM 1 well site located in the NE ¼ SW ¼ of Section 32, Township 26N, 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 Sam Jackson State COM 1 well site. The following scope of closure activities has been designed to meet this objective:

- 1) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close all former earthen pits prior to the closure date agreed upon by the New Mexico Oil Conservation Division of December 31, 2009.
- 2) In accordance with of Subsection A of 19.15.17.13 NMAC, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close any earthen pits at a date the division requires because of imminent danger to fresh water, public health, or the environment.
- 3) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will close earthen pits first which seem to pose a greater risk to fresh water, public health, or the environment. This will be determined by the locations proximity to surface water sources and distance to groundwater.
- 4) No less than 60 days prior to any earthen pit closure activities, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the Santa Fe NMOCD office as well as a schedule of on-site activities, as in accordance with 19.15.17.13 Subsection J Paragraph (3) NMAC.
- 5) No less than 24 hours and no greater than one (1) week prior to earthen pit removal Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the appropriate surface owner as well as a schedule of on-site activities, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will notify the surface owner by certified mail, return receipt requested, that the operator plans to close an earthen pit. The return receipt will be used to ensure that the surface owner has received written notification no less than 24 hours and no greater than one (1) week prior to the beginning of BGT closure activities. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this 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.

- 6) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all liquids, and/or sludge, to visual extents, prior to closure sampling. Material will be disposed of at Envirotech's Landfarm #2, Permit # NM-01-0011, TNT Environmental Inc. Landfarm, Permit # NM-01-0008, Industrial Ecosystems Inc. (IEI) Landfarm, Permit # NM-01-0010B or Basin Disposal, Permit # NM-01-0005, depending on the consistence of the material removed, as in accordance with 19.15.17.13 Subsection C Paragraph (1) NMAC.
- 7) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all on-site equipment associated with this earthen pit unless it is required for some other purpose, as in accordance with 19.15.17.13 Subsection C Paragraph (2) NMAC. The equipment that meets the requirements of 19.15.9.712 Subsection A NMAC and 19.15.9.712 Subsection D Paragraph (1) will be disposed of at San Juan County Regional Landfill. Waste that is classified by 19.15.9.712 Subsection D Paragraph (2) will be sampled accordingly to determine acceptance of this material at the San Juan County Regional Landfill. Waste that is unable to be accepted at the San Juan County Regional Landfill will be submitted to the OCD on a case-by-case basis in accordance with Paragraph (3) of Subsection D of 19.15.9.712.
- 8) Once the earthen pit is removed to visual extents of contamination, a five (5)-point composite sample will be collected from directly below the liner(s) or at native soil. Additional discrete samples will be collected from any area that is wet, discolored, or show other evidence of a release. All samples being collected will be analyzed for benzene, and total BTEX via USEPA Method 8021B, TPH via USEPA Method 418.1, and chlorides via USEPA 300.1, as in accordance with 19.15.17.13 Subsection C Paragraph (3) NMAC.
- 9) Depending on soil sample results the area will be either backfilled or the area will be excavated.
  - a. If soil samples do not exceed the regulatory standards of 0.2 mg/kg benzene, 50 mg/kg BTEX, 100 mg/kg TPH, and 250 mg/kg or background concentration of chlorides, as in accordance with 19.15.17.13 Subsection C Paragraph (3) NMAC.
    - i. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, shall submit a Form C-141 with the laboratory results so that the division may review the results to determine if additional delineation is required in accordance with Paragraph (4) of Subsection C of 19.15.17.13 NMAC.
    - ii. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will backfill the excavation or impacted area with non-waste containing, earthen material, in accordance with 19.15.17.13 Subsection E Paragraph (6) NMAC. A soil cover shall be installed for all backfilled excavations consisting of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater in accordance with Subsections H of 19.15.17.13 NMAC. The operator shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.
    - iii. All areas of the well site that are no longer utilized on a day to day basis for the production of oil and/or gas, Elm Ridge Exploration, or a

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

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

#### REPORTING

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

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

Respectfully Submitted:

Elm Ridge Exploration

Amy Mackey

Elm Kidge Exploration

#### **Elm Ridge Exploration**

#### **Re-Seeding Techniques and Seed Mixture Ratios**

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

- 1. The first growing season after closure of a below grade tank or pit, all areas of the well site not utilized for the production of oil and/or gas on a daily basis will be re-seeded with the specified seed mixture.
- 2. The seed mixture used will be certified with no primary or secondary noxious weeds in seed mixtures. The seed labels from each bag shall be available for inspection while seed is being sown.
- 3. The operator shall accomplish seeding by drilling on the contour whenever practical or by other division-approved methods. The operator shall obtain vegetative cover that equals 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.
- 4. Hand seeding with hydro-mulch, excelsior netting, or mulch with netting is required on the cut/fill slopes. Mulch will be spread at a rate of 2,000-3,000 pounds per acre.
- 5. Compacted areas determined by visual inspection will be ripped to a depth of 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 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 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													
OPERATOR   Initial Report   Fin							Final Rep	ort					
					Contact: An								
		Bloomfield ckson State		113			No.: (505) 632-3	476 Ext 2	01				
Facility Nai	ne: Sam Ja	ickson State	COM I		1	acility Typ	e: Gas Well						-
Surface Ow	ner: Feder	al		Mineral C	Owner:			I	Lease N	lo.: LG-20	62		
				LOCA	ATION	OF RE	LEASE						
Unit Letter K	Section 32	Township 26N	Range 12W	Feet from the 1850		South Line FSL	Feet from the 1850	East/Wes FWI		County San Juan			
				Latitude 36.44		Longitud	le <u>-108.137445</u>						
Type of Rele	ase: Produc	ed Water		NAI	UKL		Release: Unknov	vn V	olume R	ecovered:	Unkno	wn	
Source of Re						Date and I	lour of Occurrence			Hour of Dis			
Was Immedi	oto Matica C	7:0				Historical	W/I 9						
was immedi	ate Notice C		Yes	No 🛛 Not Ro	equired	If YES, To	wnom?			$\sim$	******	Mayor lange	
By Whom?						Date and F	lour				1	1	
Was a Water	course Reac						olume Impacting t	he Waterco	ourse.	( )		5	
			Yes 🗵	] No						-==	11	]	
If a Waterco	urse was Im	pacted, Descr	ibe Fully.							S	I	]	
Produced Wainto an earther Describe Are From Septem	Describe Cause of Problem and Remedial Action Taken.*  Produced Water from a gas well at the mentioned location formerly discharged into an earthen pit on location. The well has been altered to no longer drain into an earthen pit, but instead into an Above Ground Storage Tank (AST).  Describe Area Affected and Cleanup Action Taken.*  From September 9, 2009 through September 10, 2009, 'Production Sludge' was removed from the earthen pit to extents of approximately 17' x 22' x 1'												
collected; see each of the for benzene and well site equ via USEPA I	below the bottom of the pit, where sandstone was encountered. Sludge was removed to visual extents of contamination, where confirmation samples were collected; see attached <i>Analytical Results</i> . A sample was collected at the bottom at five (5) feet below ground surface, and a sample was collected from each of the four (4) walls at 17' x 22'. The samples were analyzed in the field for TPH via USEPA Method 418.1, and in Envirotech's laboratory for benzene and BTEX via USEPA Method 8021 and for total chlorides via USEPA Method 4500B. Excavation could not continue beyond 17' x 22' due to well site equipment and the edge of the well pad. The sample collected from the bottom of the excavation on sandstone returned results of 688 mg/kg TPH via USEPA Method 418.1, and the sample collected from the east wall returned results of 275 mg/kg above background for chlorides, confirming that a release occurred. Please reference the attached Sam Jackson State COM 1 Closure Plan for Elm Ridge Exploration's proposed course of action concerning this release.												
regulations a public health should their or the enviro	I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.												
Signature:	$\lambda$						OIL CON	SERVA'	TION	DIVISIO	<u>N</u>		
Printed Nam	Ms. Amy	Mackey			1	Approved by	District Supervis	or:					
Title: Admin	istrative Ma	nager			1	Approval Da	te:	Exp	oiration l	Date:			
Date:	E-mail Address: amackey I @elmridge.net  Date: Phone: 505-632-3476 Ext 201  Attached    Attached												

#### RELEASE CLOSURE PLAN

#### **SITE NAME:**

SAM JACKSON STATE COM 1
UNIT LETTER K, SECTION 32, TOWNSHIP 26N, RANGE 12W
SAN JUAN COUNTY, NEW MEXICO
LATITUDE 36.442529 LONGITUDE -108.137445

#### **SUBMITTED TO:**

MR. BRAD JONES
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

PROJECT No. 03056-0204

**SEPTEMBER 2009** 

Release Closure Plan Elm Ridge Exploration Sam Jackson State COM 1 Project No. 03056-0204 Page 1

#### Introduction

The purpose of this release closure plan is to provide the details of activities involved in the closure of the confirmed release from the former earthen pit located at the Sam Jackson State COM 1 well site located in Unit K, Section 32, Township 26N, Range 12W, San Juan County, New Mexico. From September 9, 2009 through September 10, 2009, 'production sludge' was removed from the former earthen pit located at the Sam Jackson State COM 1 well site. The 'production sludge' was removed to visual extents of approximately 17' x 22' x 5' below the ground surface, where sandstone was encountered. The walls of the earthen pit were excavated to extents of 17' x 22' where excavation could no longer continue due to stability issues from the onsite well equipment used for oil and gas operations. A sample was collected at these extents of excavation from each of the four (4) walls, and one (1) sample was collected from the bottom at sandstone. All five (5) earthen pit samples were analyzed in the field for TPH via USEPA Method 418.1 with each of the wall samples returning results below the 100 mg/kg standard required by the 'Pit Rule'. All five (5) samples were then collected into four (4)-ounce glass jars, capped headspace free, and transported with ice under chain of custody to Envirotech's laboratory to be analyzed for benzene and BTEX via USEPA Method 8021 and for total chlorides via USEPA Method 4500B. All four (4) wall samples were below the 100 mg/kg TPH standard, the 0.2 mg/kg benzene standard and the 50 mg/kg BTEX standard. Only the sample collected from the east wall returned results above the 250 mg/kg above background standard for total chlorides at 275 mg/kg above background (10 mg/kg). The sample collected from the sandstone bottom of the excavation returned results below the 0.2 mg/kg benzene standard, the 50 mg/kg BTEX standard and the 250 mg/kg above background total chloride standards. A background sample was collected at this location at approximately two (2) feet below ground surface and analyzed in Envirotech's laboratory for total chlorides via USEPA Method 4500B. The background sample returned results of 10 mg/kg total chlorides. The sample collected from the east wall was above the 250 mg/kg above background standard for total chlorides, and the sample collected from the sandstone bottom returned results above the 100 mg/kg TPH standard via USEPA Method 418.1, confirming that a release has occurred at this site.

#### **Closure Plan**

Elm Ridge Exploration is proposing to close the remainder of the earthen pit in place citing precedence set forth in the New Mexico Oil Conservation Department (NMOCD) 'Pit Rule'.

- The composite sample collected from the walls was dry, and did not contain groundwater.
- No water wells or cathodic well data exists in the area within 3 miles, therefore the groundwater elevation can be referenced from the Gallegos Canyon Wash, located approximately 1,665 feet to the north-east of the Sam Jackson State COM 1 well site. The Gallegos Canyon Wash is at an elevation of approximately 6,043 feet. This places the groundwater in this area at approximately 77 feet below the Sam Jackson State COM 1 well site; see *Topographic Map*.
- The nearest surface water is approximately 655 feet to the north-east of the Sam Jackson State COM 1 well site; see *Topographic Map*.

Release Closure Plan Elm Ridge Exploration Sam Jackson State COM 1 Project No. 03056-0204 Page 2

- According to an iWATERS database search, no water wells exist within 1,000 feet of the Sam Jackson State COM 1 well site; see iWATERS Database Search.
- The Sam Jackson State COM 1 well site is not located within an area overlying a subsurface mine; see attached *Mine Map*.
- The Sam Jackson State COM 1 well site is not within 300 feet of a permanent residence, school, hospital, institution or church; see attached *Aerial Photograph*.
- The Sam Jackson State COM 1 well site is not within incorporated municipal boundaries; see attached *Topographic Map*.
- The Sam Jackson State COM 1 well site is not located within 500 feet of a wetland; see attached *Wetlands Map*.
- The Sam Jackson State COM 1 well site is not located within an unstable area. This data
  was obtained from frequent site visits during closure activities by Envirotech, Inc.
  personnel.
- The Sam Jackson State COM 1 well site is not within a 100 year flood plain; see attached FEMA Map.

Currently, the NMOCD allows on-site burial of drill pits that meet these criteria, outlined in 19.15.17.10 Subpart A NMAC. The chloride levels and TPH levels found in the earthen pit at the Sam Jackson State COM 1 well site are well below the 500 mg/kg chloride standard and the 2,500 mg/kg TPH standard allowed for on-site burial at well sites with groundwater depths greater than 50 feet from the bottom of the drill pit based on rule 19.15.17.10 Subpart C. Elm Ridge Exploration is proposing to bury the remainder of the chloride and TPH found at this site based on the analytical results found and the siting criteria determined for this site, which indicate that the chloride and TPH levels found at this site "do not pose a threat to present or foreseeable beneficial use of fresh waters, public health and the environment".

#### REPORTING

Elm Ridge Exploration will submit a closure report within 60 days following the earthen pit final closure. The closure report will consist of a form C-144 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.

Release Closure Plan Elm Ridge Exploration Sam Jackson State COM 1 Project No. 03056-0204 Page 3

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

Elm Ridge Exploration



Client:

Elm Ridge Exploration

Project #:

03056-0204

Sample No.:

Date Reported:

9/24/2009

Sample ID:

Bottom Comp @ 1' Below Pit Date Sampled:

9/9/2009

Sample Matrix:

Soil

Date Analyzed:

9/9/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

688

20.0

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:

Sam Jackson State COM 1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Toni McKnight

Printed

James McDaniel



# CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Cal. Date:

9-Sep-09

Parameter	Standard Concentration mg/L	Concentration Reading mg/L	
ТРН	100		
	200	181	
	500		
	1000		

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

Joni Milaniant
Analyst

9/29/

Date

Toni McKnight

**Print Name** 

**B**éview

9/24/09

James McDaniel

Print Name



Client:

Elm Ridge Exploration

Project #:

03056-0204

Sample No.:

1

Date Reported:

0/04/0000

Sample ID:

West Wall

Date Sampled:

9/24/2009 9/10/2009

Sample Matrix:

Soil

Date Analyzed:

9/10/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

ND

20.0

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:

Sam Jackson State COM 1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Toni McKnight

Printed

James McDaniel



Client:

Elm Ridge Exploration

Project #: 03

03056-0204

Sample No.:

2

Date Reported:

9/24/2009

Sample ID:

South Wall

9/24/200

Sample Matrix:

Soil

Date Sampled:
Date Analyzed:

9/10/2009 9/10/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

ND

20.0

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:

Sam Jackson State COM 1

Kingi

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Toni McKnight

Printed

James McDaniel



Client:

Elm Ridge Exploration

Project #:

03056-0204

Sample No.:

3

Date Reported:

9/24/2009

Sample ID:

West Wall

Date Sampled:

9/10/2009

Sample Matrix:

Soil

Date Analyzed:

9/10/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

8

20.0

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:

Sam Jackson State COM 1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analýst

Toni McKnight

Printed

James McDaniel



Client:

Elm Ridge Exploration

03056-0204

Sample No.:

4

Sample ID:

West Wall

9/24/2009

Sample Matrix:

Soil

Date Sampled:

9/10/2009 9/10/2009

Preservative:

Cool

Date Analyzed: Analysis Needed:

Date Reported:

Project #:

TPH-418.1

Condition:

Cool and Intact

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

#### **Total Petroleum Hydrocarbons**

4

20.0

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:

Sam Jackson State COM 1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Toni McKnight

**Printed** 

James McDaniel



# CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Cal. Date:

10-Sep-09

Parameter	Standard Concentration mg/L	Concentration Reading mg/L	
TPH	100		
	200	183	
	500		
	1000		

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

Analyst Manalyst

9/24/09

Toni McKnight

Print Name

Review

9/24/09

James McDaniel

**Print Name** 



Client:	ElmRidge	Project #:	03056-0204
Sample ID:	North Wall	Date Reported:	09-16-09
Laboratory Number:	51587	Date Sampled:	09-10-09
Chain of Custody:	7933	Date Received:	09-10-09
Sample Matrix:	Soil	Date Analyzed:	09-15-09
Preservative:	Cool	Date Extracted:	09-14-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	4.7	1.0
Ethylbenzene	3.4	1.0
p,m-Xylene	6.4	1.2
o-Xylene	5.0	0.9
Total BTEX	19.5	

ND - Parameter not detected at the stated detection limit.

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

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

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

USEPA, December 1996.

Comments:

Earth Pit Closure / Sam Jackson State Com #1

Analyst

Mustum Walter Review



Client:	ElmRidge	Project #:	03056-0204
Sample ID:	East Wall	Date Reported:	09-16-09
Laboratory Number:	51589	Date Sampled:	09-10-09
Chain of Custody:	7933	Date Received:	09-10-09
Sample Matrix:	Soil	Date Analyzed:	09-15-09
Preservative:	Cool	Date Extracted:	09-14-09
Condition:	Intact	Analysis Requested:	BTEX

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

ND - Parameter not detected at the stated detection limit.

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

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

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

USEPA, December 1996.

Comments:

Earth Pit Closure / Sam Jackson State Com #1

Analyst

Moth mucetes
Review



Client:	ElmRidge	Project #:	03056-0204
Sample ID:	West Wall	Date Reported:	09-16-09
Laboratory Number:	51590	Date Sampled:	09-10-09
Chain of Custody:	7933	Date Received:	09-10-09
Sample Matrix:	Soil	Date Analyzed:	09-15-09
Preservative:	Cool	Date Extracted:	09-14-09
Condition:	Intact	Analysis Requested:	BTEX

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

ND - Parameter not detected at the stated detection limit.

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

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

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

USEPA, December 1996.

Comments:

Earth Pit Closure / Sam Jackson State Com #1

Analyst

hristu m Walter Review



Client:	ElmRidge	Project #:	03056-0204
Sample ID:	South Wall	Date Reported:	09-16-09
Laboratory Number:	51591	Date Sampled:	09-10-09
Chain of Custody:	7933	Date Received:	09-10-09
Sample Matrix:	Soil	Date Analyzed:	09-15-09
Preservative:	Cool	Date Extracted:	09-14-09
Condition:	Intact	Analysis Requested:	BTEX

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

ND - Parameter not detected at the stated detection limit.

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

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

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

USEPA, December 1996.

Comments:

Earth Pit Closure / Sam Jackson State Com #1

Analyst



Client:	N/A	Project #:	N/A
Sample ID:	09-15-BT QA/QC	Date Reported:	09-16-09
Laboratory Number:	51577	Date Sampled:	N/A
Sample Matrix: Preservative:	Soil	Date Received:	N/A
	N/A	Date Analyzed:	09-15-09
Condition:	N/A	Analysis:	BTEX

				Blenk Conc	Detect, Limit
Benzene	1.6415E+006	1.6448E+006	0.2%	ND	0.1
Toluene	1.5752E+006	1.5783E+006	0.2%	ND	0.1
Ethylbenzene	1.4428E+006	1.4457E+006	0.2%	ND	0.1
p,m-Xylene	3.7057E+006	3.7132E+006	0.2%	ND	0.1
o-Xylene	1.3847E+006	1.3874E+006	0.2%	ND	0.1

		into 127 fina	KOJE.	Assert Range	Detect Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	3.0	2.8	6.7%	0 - 30%	1.0
Ethylbenzene	6.2	6.0	3.2%	0 - 30%	1.0
p,m-Xylene	1.4	1.3	7.1%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9

	Suggistation Ave	ert Soleat Sol	rec Sample	% Recovery	Actept Range
Benzene	ND	50.0	47.4	94.8%	39 - 150
Toluene	3.0	50.0	50.7	95.7%	46 - 148
Ethylbenzene	6.2	50.0	52.5	93.4%	32 - 160
p,m-Xylene	1.4	100	97.6	96.3%	46 - 148
o-Xylene	ND	50.0	46.8	93.6%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

QA/QC for Samples 51577, 51587, 51589 - 51592, 51594, 51596, 51607, and 51608.

Analyst

· Mustlu ~ Review

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



Client: Elm Ridge Project #: 03056-0204 Sample ID: North Wall Date Reported: 09-16-09 Lab ID#: 51587 Date Sampled: 09-10-09 Sample Matrix: Soil Date Received: 09-10-09 Preservative: Cool Date Analyzed: 09-14-09 Condition: Intact Chain of Custody: 7933

Parameter Concentration (mg/Kg)

Total Chloride 225

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Earth Pit Closure / Sam Jackson State Com #1.

Analyst Review



Project #: 03056-0204 Client: Elm Ridge Sample ID: Background Date Reported: 09-16-09 Lab ID#: 51588 Date Sampled: 09-10-09 Sample Matrix: Soil Date Received: 09-10-09 Preservative: Cool Date Analyzed: 09-14-09 Condition: Intact Chain of Custody: 7933

Parameter Concentration (mg/Kg)

Total Chloride 10

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Earth Pit Closure / Sam Jackson State Com #1.

nalyst Review (Review



Client: Project #: 03056-0204 Elm Ridge 09-16-09 Sample ID: East Wall Date Reported: Lab ID#: 51589 Date Sampled: 09-10-09 Date Received: 09-10-09 Sample Matrix: Soil Preservative: Cool Date Analyzed: 09-14-09 Chain of Custody: 7933 Condition: Intact

Parameter Concentration (mg/Kg)

Total Chloride 285

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Earth Pit Closure / Sam Jackson State Com #1.

Analyst

/ Mustle Meles



Client:	Elm Ridge	Project #:	03056-0204
Sample ID:	West Wall	Date Reported:	09-16-09
Lab ID#:	51590	Date Sampled:	09-10-09
Sample Matrix:	Soil	Date Received:	09-10-09
Preservative:	Cool	Date Analyzed:	09-14-09
Condition:	Intact	Chain of Custody:	7933

Concentration (mg/Kg) **Parameter** 

**Total Chloride** 115

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Reference:

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Earth Pit Closure / Sam Jackson State Com #1. Comments:

Analyst



Client: Elm Ridge Project #: 03056-0204 Sample ID: South Wall Date Reported: 09-16-09 Lab ID#: 51591 Date Sampled: 09-10-09 Date Received: Sample Matrix: Soil 09-10-09 Preservative: Cool Date Analyzed: 09-14-09 Condition: Intact Chain of Custody: 7933

Parameter Concentration (mg/Kg)

Total Chloride 140

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Earth Pit Closure / Sam Jackson State Com #1.

alvst Review (Mother Wood

# CHAIN OF CUSTODY RECORD

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	ANALYSIS / PARAMETERS		(418.1)		7	7	7	7	/										A
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			Method												gnature	gnatur	ignatur	<b>tec</b>	• lab@e
-		8012) 4 8021)	bodieM 				7	.3	7						0	by: (S	by: (S		2-0615
	7±1				1	2	>	7	<i>\</i>						Received by:	Received by: (Signature)	Received by: (Signature)	IVirotech Analytical Laboratory	101 • 505-63
	Sathsol Com #1			No./Volume Preservative of HgC <sub>2</sub> HG Containers		407	20//	1467	201/						Time // // // 5 5	7		envi	gton, NM 874
5	SEE SEE	Knigh	4000	Sample Matrix	Sludge Aqueous	Siudge Aqueous	Sludge Aqueous	Sludge Aqueous	Sludge Aqueous	Sludge	Sludge Aqueous	Sludge Aqueous	Sludge Aqueous	Sludge Aqueous	Date 9/0/09			m	5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com
	Location:	M.K.	20-2	ॐ ≥			Soild	ullet	Solid	Soil	Soil	Soil	Soil	Soil					US Highwa
5	Project Name / Location:	Sampler Name:	Client No.:	Lab No.	51987	21588	51589	9/0/8 9:12 51590	16515										5796
	T II	S.	<del> </del>	Sample	10-	9:55	9/1/9950	C/1.6	8.6						798				
				Sample Date	60/01/5	J.///2	3/3/6	6/4/b	1/6/69						nature	jnature)	jnature)		•
	Client: Fidge	Client Address:	Client Phone No.:	Sample No./ Identification	North Coal	Buchground Myog 9:55	Estival	westral	6.7 90/1/2 Wall 9/1/29						Relinquished by: (Signature)	Relinquished by: (Signature)	Relinquished by: (Signature)		



Client:	ElmRidge	Project #:	03056-0204
Sample ID:	Sandstone	Date Reported:	09-14-09
Laboratory Number:	51578	Date Sampled:	09-09-09
Chain of Custody:	7925	Date Received:	09-09-09
Sample Matrix:	Soil	Date Analyzed:	09-14-09
Preservative:	Cool	Date Extracted:	09-11-09
Condition:	Intact	Analysis Requested:	BTEX

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

ND - Parameter not detected at the stated detection limit.

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

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

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

USEPA, December 1996.

Comments:

Earth Pit Closures / Sam Jackson State Com #1

Analyst

Mister Multers
Review



Client:	N/A	Project #: Date Reported:	N/A
Sample ID:	09-14-BT QA/QC		09-14-09
Laboratory Number:	51544	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	09-14-09
Condition:	N/A	Analysis:	BTEX

		CONTRACTOR ADDRESS AND ADDRESS	30H 17434	Blank Conc	Detect Limit
Benzene	1.8236E+006	1.8273E+006	0.2%	ND	0.1
Toluene	1.7351E+006	1.7386E+006	0.2%	ND	0.1
Ethylbenzene	4.0868E+006	4.0949E+006	0.2%	ND	0.1
p,m-Xylene	4.0868E+006	4.0949E+006	0.2%	ND	0.1
o-Xylene	1.5085E+006	1.5115E+006	0.2%	ND	0.1

Property Construction will	SECTION OF THE SECTIO	McSale.	. <b>7/Diff</b>	Accept Range	- Detect/Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	3.5	3.3	5.7%	0 - 30%	1.0
Ethylbenzene	1.5	1.4	6.7%	0 - 30%	1.0
p,m-Xylene	4.9	4.6	6.1%	0 - 30%	1.2
o-Xylene	2.0	1.9	5.0%	0 - 30%	0.9

Spike Conc. (ug/kg)	- <b>Califolis</b> - Amó	um Spikes - Spil	ec Sample	% Recovery	"Accept Range
Benzene	ND	50.0	47.4	94.8%	39 - 150
Toluene	3.5	50.0	51.2	95.7%	46 - 148
Ethylbenzene	1.5	50.0	47.8	92.8%	32 - 160
p,m-Xylene	4.9	100	101	96.4%	46 - 148
o-Xylene	2.0	50.0	48.8	93.8%	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,

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 51544, 51545, 51578, 51579, 51583, 51598, 51599, 51601, 51602, and 51604.



03056-0204 Client: Elm Ridge Project #: 09-14-09 Date Reported: Sample ID: Sandstone 09-09-09 Lab ID#: 51578 Date Sampled: 09-09-09 Date Received: Soil Sample Matrix: 09-11-09 Preservative: Cool Date Analyzed: Chain of Custody: 7925 Condition: Intact

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

260

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

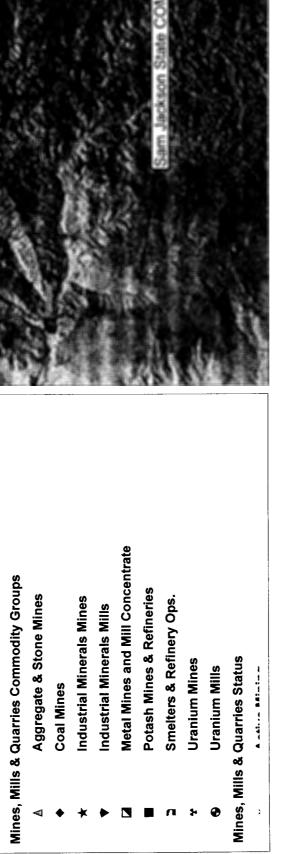
Comments:

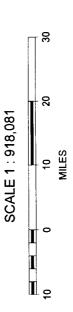
Earth Pit Closures / Sam Jackson State Com #1.

Analyst

Review

# **MMQonline Public Version**







### New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

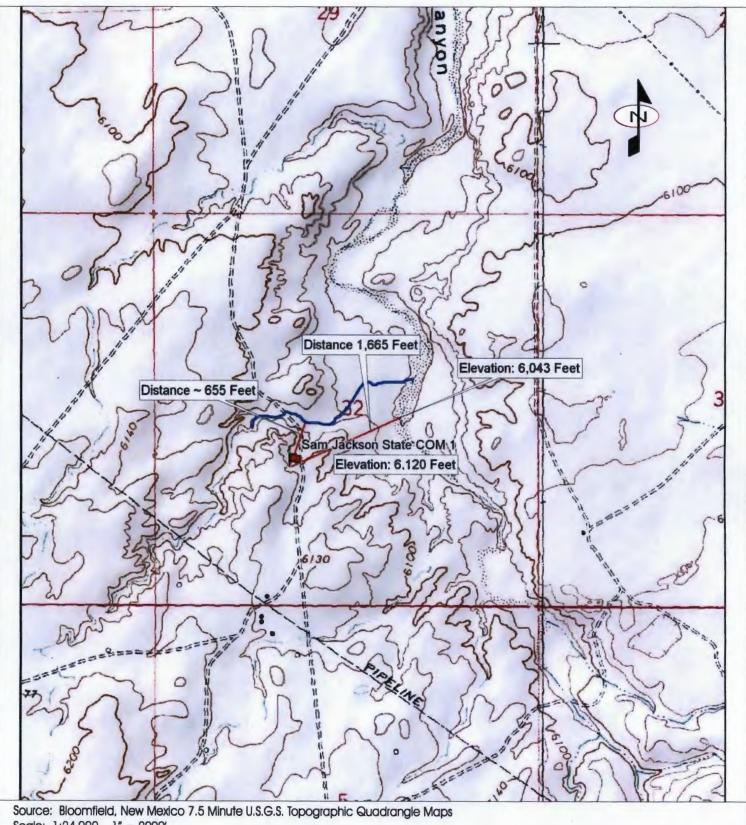
PLSS Search:

Section(s): 32, 31, 33, 30, Township: 26N Range: 12W

29, 28

# CHAIN OF CUSTODY RECORD

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	300			ime Pres	ln										25			And	A 8740
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	es/	12	40		ge	Sludge Aqueous	Sludge Aqueous	Sludge	Sludge	Sludge	Sludge	Sludge	Sludge Aqueous	Sludge Aqueous	Date   9/9			$m_{i}$	5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com
	ion: USU	hn, de	1060-	Sample Matrix										-	61	<del>\</del>			hway 6
	$\mathcal{L}_{\mathcal{C}}$	1 Si	10		Solid	Soil	Soil	Soil	Soil	Soil	Solid	Soil	Soil	Soil					US Hig
	Project Name / Location:	Sampler Name	×	Lab No.	13:37 51578														9629
	E 113	Sar	Ö	Sample	13.37														
				Sample Date	1/4/19										ature)	exture)	ature)		
	Client:	Client Address;/	Client Phone No.:	Sample No./ Identification	0.1										Relinquished by: (Signature)	ed by:	Relinquished by: (Signature)		



Scale: 1:24,000 1" = 2000"

Elm Ridge Exploration Sam Jackson State #1 Section 32, Township 26N, Range 12W San Juan County, New Mexico

Project# 03056-0204 | Date Drawn: 11/3/09

### **ENVIROTECH INC**

**ENVIRONMENTAL SCIENTISTS & ENGINEERS** 5796 U.S. HIGHWAY 64 FARMINGTON, NEW MEXICO 87401

PHONE (505) 632-0615

Vicinity Map

Figure 1

Drawn By: James McDaniel

Project Manager: Greg Crabtree

# **MMQonline Public Version**

Mines, Mills & Quarries Commodity Groups

Aggregate & Stone Mines

Coal Mines

Industrial Minerals Mines

Industrial Minerals Mills

Metal Mines and Mill Concentrate

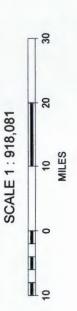
Potash Mines & Refineries

Smelters & Refinery Ops.

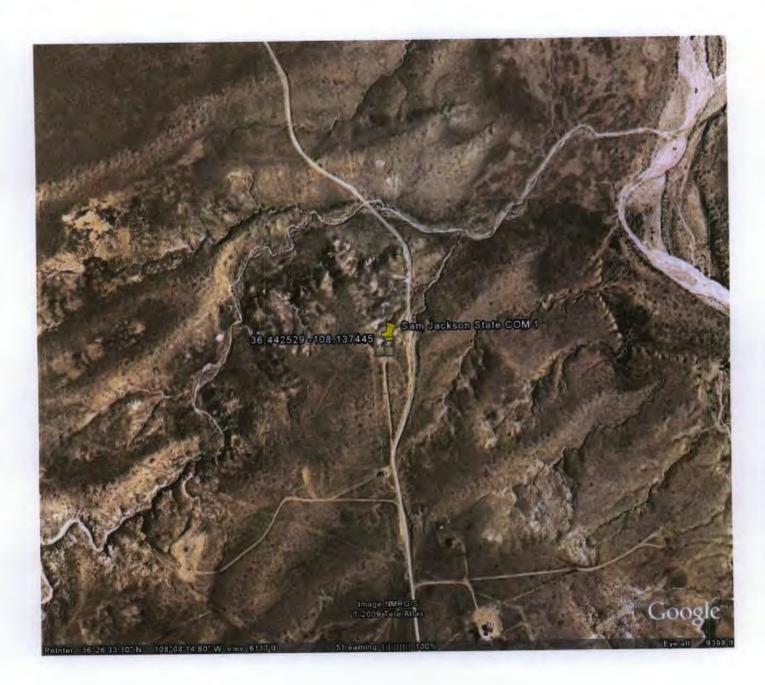
Uranium Mills

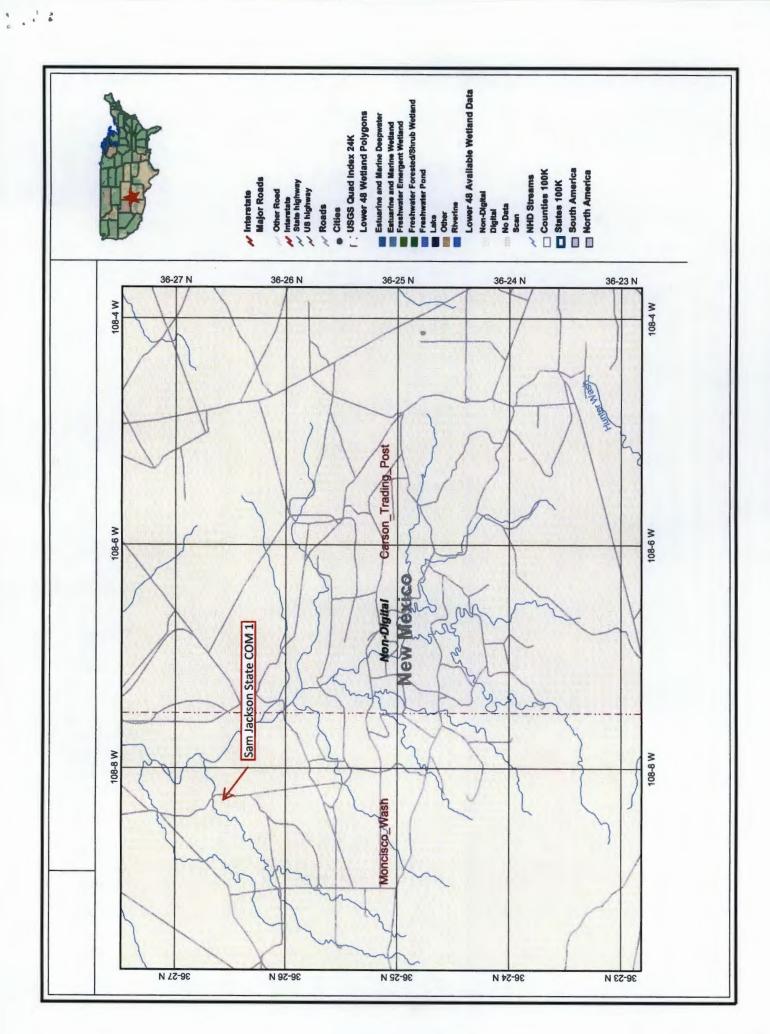
Mines, Mills & Quarries Status

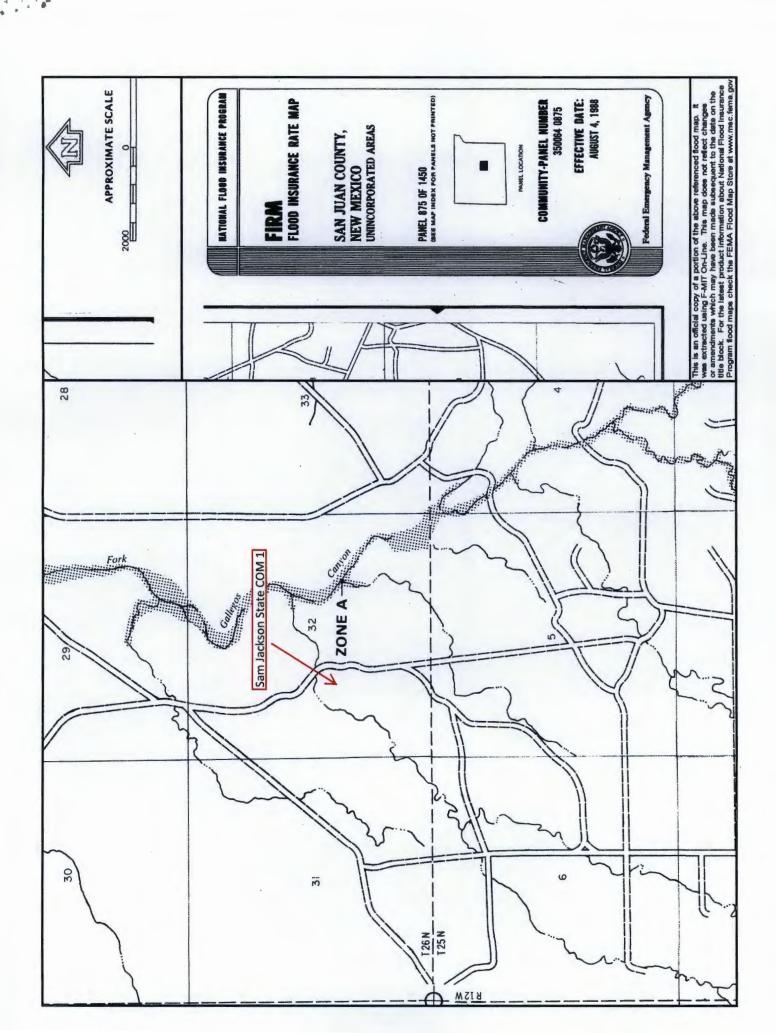














February 9, 2010

Project No. 03056-0204

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

Phone (505) 476-3487

C-141 RELEASE NOTIFICATION FORM FOR THE SAM JACKSON STATE COM 1 RE: WELL SITE

Dear Mr. Jones,

Please find enclosed a C-141 Release Notification Form and additional supporting closure documentation for the Sam Jackson State COM 1 well site owned and operated by Elm Ridge Exploration.

The previous additional 'Closure Plan' submitted by Envirotech, Inc. for Elm Ridge Exploration was a remediation plan, and was not intended to be an alternative closure plan. All closure activities from this point forward will comply with Rule 29 with the district office of the OCD.

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

Respectfully Submitted,

ENVIROTECH, INC.

James McDaniel Project Scientist

jmcdaniel@envirotech-inc.com

Enclosure: C-141 Release Notification Form

> **Analytical Results** Bills of Lading Proof of Notification

Cc: Client File No. 03056

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

Surface Owner: Federal

### State of New Mexico Energy Minerals and Natural Resources

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

Form C-141 Revised October 10, 2003

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

### **Release Notification and Corrective Action OPERATOR** 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: Sam Jackson State COM 1 Facility Type: Gas Well Mineral Owner: Lease No.: LG-2062

### LOCATION OF RELEASE North/South Line Feet from the East/West Line Unit Letter Section Township Range Feet from the County 32 26N 12W 1850 **FSL** 1850 **FWL** San Juan K

Latitude 36.442529 Longitude -108.137445							
NATURE OF RELEASE							
Type of Release: Produced Water	Volume of Release: Unknown	Volume Recovered:	Unknown				
Source of Release: Earth Pit	Date and Hour of Occurrence:	Date and Hour of Di	iscovery: NA				
	Historical						
Was Immediate Notice Given?	If YES, To Whom?						
☐ Yes ☐ No ☒ Not Required		· · · · · · · · · · · · · · · · · · ·					
By Whom?	Date and Hour	,					
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.					
☐ Yes ⊠ No							
If a Watercourse was Impacted, Describe Fully.*							
Describe Cause of Problem and Remedial Action Taken.*							
Produced Water from a gas well at the mentioned location formerly disch	arged into an earthen pit on location.	The well has been alter	red to no longer drain				
into an earthen pit, but instead into an Above Ground Storage Tank (AST	).						
Describe Area Affected and Cleanup Action Taken.*		10 4					
From September 9, 2009 through September 10, 2009, approximately 35							
approximately 17' x 22' x 1' below the bottom of the pit, where sandston- remediation facility, Landfarm #2. Sludge was removed to visual extents							
Analytical Results. A sample was collected at the bottom at five (5) feet							
at 17' x 22'. The samples were analyzed in the field for TPH via USEPA							
USEPA Method 802I and for total chlorides via USEPA Method 4500B.							
the edge of the well pad. The sample collected from the bottom of the ex-	cavation on sandstone returned results	of 688 mg/kg TPH via	a USEPA Method				
418.1, and the sample collected from the east wall returned results of 285		a release occurred. Eln	n Ridge Exploration				
will comply with Rule 29 from this point forward with the district office of	of the OCD.						
I hereby certify that the information given above is true and complete to t	he hest of my knowledge and underst	and that pursuant to NA	AOCD rules and				
regulations all operators are required to report and/or file certain release n							
public health or the environment. The acceptance of a C-141 report by th							
should their operations have failed to adequately investigate and remediat							
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of respon	sibility for compliance	with any other				
federal, state, or local laws and/of regulations.							
λ /Ι	OIL CONSER'	VATION DIVISI	<u>ON</u>				
Signature:							
	11 12 12 13 13						
Printed Name: Ms. Amy Mackey  Approved by District Supervisor:							
		· · · · · · · · · · · · · · · · · · ·					
Title: Administrative Manager	Approval Date:	Expiration Date:					
			-				
E-mail Address: amackey l@elmridge.net	Conditions of Approval:	Attache	d $\square$				
Date: 6-15-10 Phone: 505-632-3476 Ext 201							
Attach Additional Sheets If Necessary							



Client:

Eim Ridge Exploration

Project #:

03056-0204

Sample No.:

4

Date Reported:

9/24/2009

Sample ID:

Bottom Comp @ 1' Below Pit

Date Sampled:

9/9/2009

Sample Matrix:

Soil

Date Analyzed:

9/9/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

688

20.0

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:

Sam Jackson State COM 1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Toni McKnight

Printed

James McDaniel



### CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Cal. Date:

9-Sep-09

Parameter	Standard Concentration mg/L	Concentration Reading mg/L	·
TPH	100		
	200	181	
	500		
	1000		

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

Toni Meliniant	9/24/09
Analyst	Date
Toni McKnight	
Print Name	
110/21	9/24/09
Réview /	Date <sup>'</sup>
James McDaniel	

**Print Name** 



Client:

Elm Ridge Exploration

Project #:

03056-0204

Sample No.:

Date Reported:

9/24/2009

Sample ID:

West Wali

Date Sampled:

9/10/2009

Sample Matrix:

Soil

Date Analyzed:

9/10/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

ND

20.0

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:

Sam Jackson State COM 1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Toni McKnight

Printed

James McDaniel



Client:

Elm Ridge Exploration

03056-0204

Sample No.:

2

03056-0

Sample ID:

South Wall

9/24/2009

Sample Matrix:

Soil

9/10/2009

Preservative:

Cool

Date Analyzed:
Analysis Needed:

Date Reported:

Date Sampled:

Project #:

9/10/2009 TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

ND

20.0

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:

Sam Jackson State COM 1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Toni McKnight

Printed

James McDaniel



Client:

Elm Ridge Exploration

03056-0204

Sample No.:

3

Sample ID:

West Wall

9/24/2009

Sample Matrix:

Soil

Date Sampled: 9/10/2009 Date Analyzed:

Project #:

Date Reported:

Analysis Needed:

Preservative:

Cool

9/10/2009 TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

8

20.0

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:

Sam Jackson State COM 1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Toni McKnight

**Printed** 

James McDaniel



Client:

Elm Ridge Exploration

Project #:

03056-0204

Sample No.:

4

Date Reported:

9/24/2009

Sample ID:

West Wall

Date Sampled:

9/10/2009

Sample Matrix:

Soil

Date Analyzed:

9/10/2009

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

4

20.0

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:

Sam Jackson State COM 1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Toni McKnight

**Printed** 

James McDaniel



### CONTINUOUS CALIBRATION EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Cal. Date:

10-Sep-09

Parameter	Standard Concentration mg/L	Concentration Reading mg/L	
ТРН	100		
	200	183	
	500		
	1000		

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

1001 Marignt	9/24/09 Date
Toni McKnight	
Print Name	9/24/09
Review	Date '
James McDaniel	

**Print Name** 



Client:	ElmRidge	Project #:	03056-0204
Sample ID:	North Walf	Date Reported:	09-16-09
Laboratory Number:	51587	Date Sampled:	09-10-09
Chain of Custody:	7933	Date Received:	0 <del>9</del> -10- <b>0</b> 9
Sample Matrix:	Soil	Date Analyzed:	09-15-09
Preservative:	Cool	Date Extracted:	09-14-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
•		••
Benzene	ND	0.9
Toluene	4.7	1.0
Ethylbenzene	3.4	1.0
p,m-Xylene	6.4	1.2
o-Xylene	5.0	0.9
Total BTEX	19.5	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery	
	Fluorobenzene	96.0 %	
	1,4-difluorobenzene	<b>96.0</b> %	
	Bromochlorobenzene	96.0 %	

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

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

USEPA, December 1996.

Comments:

Earth Pit Closure / Sam Jackson State Com #1

Analyst

Review



Client:	EimRidge	Project #:	03056-0204
Sample ID:	East Wall	Date Reported:	09-16-09
Laboratory Number:	51589	Date Sampled:	<b>09</b> -10 <b>-</b> 09
Chain of Custody:	7933	Date Received:	09-10-09
Sample Matrix:	Soil	Date Analyzed:	09-15-09
Preservative:	Cool	Date Extracted:	09-14-09
Condition:	Intact	Analysis Requested:	BTEX

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

ND - Parameter not detected at the stated detection limit.

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

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

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

USEPA, December 1996.

Comments:

Earth Pit Closure / Sam Jackson State Com #1



Client:	ElmRidge	Project #:	03056-0204
Sample ID:	West Wall	Date Reported:	09-16-09
Laboratory Number:	51590	Date Sampled:	09-10-09
Chain of Custody:	7933	Date Received:	09-10-09
Sample Matrix:	Soil	Date Analyzed:	09-15-09
Preservative:	Cool	Date Extracted:	09-14-09
Condition:	Intact	Analysis Requested:	BTEX

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

ND - Parameter not detected at the stated detection limit.

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

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

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

USEPA, December 1996.

Comments:

Earth Pit Closure / Sam Jackson State Com #1

Analyst



Client:	ElmRidge	Project #:	03056-0204
Sample ID:	South Wall	Date Reported:	09-16-09
Laboratory Number:	51 <b>59</b> 1	Date Sampled:	09-10-09
Chain of Custody:	7933	Date Received:	09-10-09
Sample Matrix:	Soil	Date Analyzed:	09-15-09
Preservative:	Cool	Date Extracted:	09-14-09
Condition:	Intact	Analysis Requested:	BTEX

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

ND - Parameter not detected at the stated detection limit.

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

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

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

USEPA, December 1996.

Comments:

Earth Pit Closure / Sam Jackson State Com #1

Analyst



Client:	N/A	Project #:	N/A
Sample ID:	09-15-BT QA/QC	Date Reported:	09-16-09
Laboratory Number:	51577	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	09-15-09
Condition:	N/A	Analysis:	BTEX

	***- <u>-</u>	हिन्दुर्ग स्टब्स्ट स्ट्रेस्ट्रिस्ट स्ट्राइड्स्ट्रिस				Section of the second
Benzene	1.6415E+006	1.6448E+006	0.2%	ND	0.1	
Toluene	1.5752E+006	1.5783E+006	0.2%	ND	0.1	
Ethylbenzene	1.4428E+006	1.4457E+006	0.2%	ND	0.1	
p,m-Xylene	3.7057E+006	3.7132E+006	0.2%	ND	0.1	
o-Xylene	1.3847E+006	1.3874E+006	0.2%	ND	0.1	

		73 KF		70 (Sept. 4 sept. 6 sep	
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	3.0	2.8	6.7%	0 - 30%	1.0
Ethylbenzene	6.2	6.0	3.2%	0 - 30%	1.0
p,m-Xylene	1.4	1.3	7.1%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9

	TALANA TALAN			ATENON!	A Accept Renge
Benzene	ND	50.0	47.4	94.8%	39 - 150
Toluene	3.0	50.0	50.7	95.7%	46 - 148
Ethylbenzene	6.2	50.0	52.5	93.4%	32 - 160
p,m-Xylene	1.4	100	97.6	96.3%	46 - 148
o-Xylene	ND	50.0	46.8	93.6%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

QA/QC for Samples 51577, 51587, 51589 - 51592, 51594, 51596, 51607, and 51608.

Analyst

Review



Elm Ridge Project #: 03056-0204 Client: 09-16-09 Sample ID: North Wall Date Reported: Lab ID#: 51587 Date Sampled: 09-10-09 Sample Matrix: Soil Date Received: 09-10-09 Preservative: Cool Date Analyzed: 09-14-09 Condition: Intact Chain of Custody: 7933

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

225

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Earth Pit Closure / Sam Jackson State Com #1.

Analyst

Mustum Walters
Review



Client: Elm Ridge Project #: 03056-0204 Sample ID: Background Date Reported: 09-16-09 Lab ID#: 51588 Date Sampled: 09-10-09 Sample Matrix: Soil Date Received: 09-10-09 Preservative: Cool Date Analyzed: 09-14-09 Condition: Intact Chain of Custody: 7933

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

10

Reference:

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

Comments:

Earth Pit Closure / Sam Jackson State Com #1.



Project #: 03056-0204 Client: Elm Ridge East Wall Date Reported: 09-16-09 Sample ID: 09-10-09 51589 Date Sampled: Lab ID#: Date Received: 09-10-09 Sample Matrix: Soil 09-14-09 Preservative: Cool Date Analyzed: Condition: Intact Chain of Custody: 7933

Parameter Concentration (mg/Kg)

Total Chloride 285

Reference: U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Earth Pit Closure / Sam Jackson State Com #1.

Analyst Review



Client: Elm Ridge Project #: 03056-0204 West Wall Date Reported: 09-16-09 Sample ID: 51590 09-10-09 Lab ID#: Date Sampled: Sample Matrix: Soil Date Received: 09-10-09 Date Analyzed: 09-14-09 Preservative: Cool 7933 Condition: Intact Chain of Custody:

**Parameter** 

Concentration (mg/Kg)

**Total Chloride** 

115

Reference:

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

Comments:

Earth Pit Closure / Sam Jackson State Com #1.

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



Parameter		Concentration (mg	/Kg)
Condition:	Intact	Chain of Custody:	7933
Preservative:	Cool	Date Analyzed:	09-14 <b>-</b> 09
Sample Matrix:	Soil	Date Received:	09-10 <b>-</b> 09
Lab ID#:	51591	Date Sampled:	09-10-09
Sample ID:	South Wall	Date Reported:	09-16-09
Client:	Elm Ridge	Project #:	03056-0204

**Total Chloride** 

140

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Earth Pit Closure / Sam Jackson State Com #1.

## CHAIN OF CUSTODY RECORD

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Project Name / Location: Earth Pit Chane	Sampler Name:	Client No.:	Lab No.	51987	2/388		۵											5796 US
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Client.	Client Address:	Client Phone No.:	Sample No./	Northcial	Fackground 3/1/9 7:55	Eastival	Westrall	G. 7 99/1/20 1/209 9:30						Relinquished by: (Signature)	Relinquished by: (Signature)	Relinquished by: (Signature)		



Client:	ElmRidge	Project #:	03056-0204
Sample ID:	Sandstone	Date Reported:	09-14-09
Laboratory Number:	51578	Date Sampled:	09-09-09
Chain of Custody:	7925	Date Received:	09-09-09
Sample Matrix:	Soil	Date Analyzed:	09-14-09
Preservative:	Cool	Date Extracted:	09-11-09
Condition:	Intact	Analysis Requested:	BTEX

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

ND - Parameter not detected at the stated detection limit.

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

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

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

USEPA, December 1996.

**Comments:** 

Earth Plt Closures / Sam Jackson State Com #1

Analyst

Review



Client: Sample ID: Laboratory Number: Sample Matrix: Preservative:	N/A 09-14-BT QA/QC 51544 Soil N/A	Project #: Date Reported: Date Sampled: Date Received: Date Analyzed:	N/A 09-14-09 N/A N/A 09-14-09
Condition:	N/A	Analysis:	BTEX

		7 (1975) 1980 - 1994 (1986)		and the control of th	
Benzene	1.8236E+006	1.8273E+006	0.2%	ND	0.1
Toluene	1.7351E+006	1.7386E+006	0.2%	ND	0.1
Ethylbenzene	4.0868E+006	4.0949E+006	0.2%	ND	0.1
p,m-Xylene	4.0868E+006	4.0949E+006	0.2%	ND	0.1
o-Xylene	1.5085E+006	1.5115E+006	0.2%	ND	0.1

Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	3.5	3.3	5.7%	0 - 30%	1.0
Ethylbenzene	1.5	1.4	6.7%	0 - 30%	1.0
p,m-Xylene	4.9	4.6	6.1%	0 - 30%	1.2
o-Xylene	2.0	1,9	5.0%	0 - 30%	0.9

જાર્ભા લાભ્યાના માના કરવા છે.					and Accept Range
Benzene	ND	50.0	47.4	94.8%	39 - 150
Toluene	3.5	50.0	51.2	95.7%	46 - 148
Ethylbenzene	1.5	50.0	47.8	92.8%	32 - 160
p,m-Xylene	4.9	100	101	96.4%	46 - 148
o-Xylene	2.0	50.0	48.8	93.8%	<del>46</del> - 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 51544, 51545, 51578, 51579, 51583, 51598, 51599, 51601, 51602, and 51604.

Analyst

Mustum Weeten

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



Project #: 03056-0204 Client: Elm Ridge 09-14-09 Sample ID: Sandstone Date Reported: 09-09-09 Lab ID#: 51578 Date Sampled: 09-09-09 Date Received: Sample Matrix: Soil Preservative: Cool Date Analyzed: 09-11-09 Condition: Intact Chain of Custody: 7925

**Parameter** Concentration (mg/Kg)

**Total Chloride** 

260

Reference:

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

Comments:

Earth Pit Closures / Sam Jackson State Com #1.

Musth m Weelen Review

## CHAIN OF CUSTODY RECORD

Client	Project Name / Location	sation:	5	N N	Cesyon													
n Kidhe	Earth P.t Clusus	Josu	es	Sarates	Syle #					AN	ANALYSIS / PARAMETERS	/ PAR	MET	ERS				
\	Sampler Name:	An'a	170			(3108	(FS08 b											
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### envirotech

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

### Bill of Lading

MANIFEST #

DATE 9-10-09 JOB# 0305

TRK# | TIME | DRIVER SIGNATURE TRANSPORTING COMPANY Q. 75. 18/0/20 R COMPANY 1 NOTES: 士 BBLS ļ YDS 7 F-21 GRID A アジ( COMPLETE DESCRIPTION OF SHIPMENT Cent Soil MATERIAL DESTINATION H-17 LANDFARM EMPLOYEE: ELM Ridge state POINT OF ORIGIN CHLORIDE TEST PAINT FILTER TEST Ç RESULTS LOAD ġ

"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."

14.5 17.19.61	COMPANY ZIMBAGE	PHONE 327-2711
	13.7	mark

DATE 7-10-02 SIGNATURE CA

### envirotech

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

### Bill of Lading

MANIFEST #

... JOBO #80F. DATE 9.9-0-8

"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 TRK# TIME DRIVER SIGNATURE 1517 GAMP 18 1:30 SHAPE TRANSPORTING COMPANY 28/ COMPANY プーな ア・カ NOTES: BBLS YDS ス J GRID F.21 FZI COMPLETE DESCRIPTION OF SHIPMENT Con t MATERIAL DESTINATION LANDFARM EMPLOYEE: LF-II ELMROSE POINT OF ORIGIN CHLORIDE TEST PAINT FILTER TEST RESULTS LOAD Š.

that no additional materials have been added." NAME JOHN MSK. WILL

COMPANY CONTACT MACK

PHONE -827-2111

COMPANY EMPRISES

SIGNATURE CHANGE DATE 9-9-09



com FI

0305b - VBO8

Home | Help | Sign in

Track & Confirm

**FAQs** 

### **Track & Confirm**

### **Search Results**

Label/Receipt Number: 7007 1490 0000 5398 9381

Service(s): Certified Mail™ Status: Delivered

Your item was delivered at 10:20 AM on September 2, 2009 in FARMINGTON, NM 87401.

Track & Confirm

Enter Label/Receipt Number.

Bo>

Notification Options		U.S. Posta	I Service ED MAIL RECEIPT
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Jeter com a.	Γ~	CAV Store ZiP+4	235 LaPlata Highway, Sulte A armington, NM 87401
03056-0198	SENDER: COMPLETE THIS SEC	PR Ferra 3500 dec	
North Bisti Coal	Complete items 1, 2, and 3, Also co	mplete	A. Signature Agent
31-00)	item 4 if Restricted Delivery is desir Print your name and address on the	reverse []	B. Received V. (Printed Name) C Date of Delivery
•	so that we can return the card to you.  Attach this card to the back of the	maitpiece,	William .
03056-0300	or on the front if space permits.		D_ is delivery address different from 1cm 1? Yes If YES, anter delivery address beliew:   No
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3am com a	Mr. Mark Kelly		
03056 -0201	Bureau of Land Manage 1235 LaPlata Highway, 1	_ [1	20 A D. H
	Formington, NM 87401	Jule 11	3. Service Type Ret Kept . Certified Mail D Express Mail
Sam Jadeson			☐ Registered ☐ Return Receipt for Merchandiso ☐ Insured Mail ☐ C.O.D.
State Com 1			4. Restricted Delivery? (Extra Fee) Yes
03056-0204	Article Number (Trensfer from service tabel)	7007 3	490 0000 5398 9381
West Bisti Con 111	PS Form 3811, February 2004	Domestic Ret	um Receipt 102595-02-M-1540

DON FI

Pete Morrow 1 03056 - 0202

Pete Morrow 2 03056 - 0203

http://trkcnfrm1.smi.usps.com/PTSInternetWeb/InterLabelInquiry.do



August 31, 2009

Project No. 03056-0204

Mr. Mark Kelly Bureau of Land Management 1235 La Plata Highway, Suite A Farmington, New Mexico 87401

Phone: (505) 599-8900

SAM JACKSON STATE COM 1 EARTH PIT CLOSURE NOTIFICATION RE:

Dear Mr. Kelly,

Please accept this letter and attached Sundry Notice as the necessary surface owner notification for earth pit closure activities at the Sam Jackson State COM 1 well site, owned and operated by Elm Ridge Exploration. The Sam Jackson State COM 1 well site is located in Unit K, Section 32, Township 26N, Range 12W, San Juan County, New Mexico. Closure activities are scheduled to begin on September 7, 2009 and continue through September 11, 2009.

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

Respectfully Submitted,

ENVIROTECH, INC

James McDaniel Project Scientist

jmcdaniel@envirotech-inc.com

Enclosure:

**Sundry Notice** 

Cc:

Client File No. 03056

Form 3160-5 (August 2007)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPRO	VED
OMB No. 1004-	0137
Everice: July 31	2010

SUNDRY NOTICES AND REPORTS ON WELLS

6 If Indian Allottee or Tribe Name

5. Lease Serial No.

		to drill or to re-enter a NPD) for such proposa		o. II aldian, Another of	Time radius
SUBM	IT IN TRIPLICATE – Other	r instructions on page 2.		7. If Unit of CA/Agree	ment, Name and/or No.
1. Type of Well  Gas V	Well Other		***	8. Well Name and No. Sam Jackson State	
2. Name of Operator Elm Ridge Exploration				9. API Well No. 30-045-24323	
3a. Address PO Box 156 Bloomfield, NM 87413		3b. Phone No. (include area co	ode)	10. Field and Pool or F	Exploratory Area
4. Location of Well (Footage, Sec., T 1850FSL 1850FWL, K-32-26N-12W, Lat. 36.4	R.,M., or Survey Description 4252943 long108.1374449	ווי		11. Country or Parish, San Juan County, N	
12. CHE	CK THE APPROPRIATE BO	OX(ES) TO INDICATE NATUR	E OF NOT	ICE, REPORT OR OTHE	ER DATA
TYPE OF SUBMISSION		T	YPE OF AC	TION	
Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat		duction (Start/Resume)	Water Shut-Off Well Integrity
Subsequent Report	Casing Repair Change Plans	New Construction Plug and Abandon	Recomplete Other Closure of a		
Final Abandonment Notice	Convert to Injection	Plug Back	☐ Wa	ter Disposal	
the proposal is to deepen direction Attach the Bond under which the	nally or recomplete horizonta work will be performed or pr lyed operations. If the operat I Abandonment Notices must	ally, give subsurface locations and rovide the Bond No. on file with tion results in a multiple complet	d measured : BLM/BIA. ion or recom	and true vertical depths o Required subsequent repupletion in a new interval	k and approximate duration thereof. If if all pertinent markers and zones, norts must be filed within 30 days a Form 3160-4 must be filed once a completed and the operator has

Elm Ridge Exploration plans to begin closure activities for an earthen pit located at the above mentioned site. All formal notifications have been made. Closure activities are scheduled to being on Monday, September 7, 2009 and last through September 11, 2009.

14. I hereby certify that the foregoing is true and correct. Name (Printed Typed) Ms. Arny Mackey	Title Administrative Manage	r	
Signature	Date 08/31/2009		
THIS SPACE FOR F	EDERAL OR STATE OFFIC	E USE	
Approved by			
	Title	Date	
Conditions of approval, if any, are attached. Approval of this notice does not warra that the applicant holds legal or equitable title to those rights in the subject lease when title the applicant to conduct operations thereon.			
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for fictitious or fraudulent statements or representations as to any matter within its juri	* * · · · · · · · · · · · · · · · · · ·	ke to any department or agency of the Uni	ted States any false

### **GENERAL INSTRUCTIONS**

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

### SPECIFIC INSTRUCTIONS

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

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

### NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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