

District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S St Francis Dr, Santa Fe, NM 87505

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

Form C-144
July 21, 2008

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

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

3630

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.

1.
Operator: ELM RIDGE EXPLORATION COMPANY, LLC OGRID #: 149052
Address: P. O. BOX 156, BLOOMFIELD, NM 87413
Facility or well name: SOUTH BISTI 21 H #2
API Number: 30-045-34131 OCD Permit Number: _____
U/L or Qtr/Qtr G Section 21 Township 25 N Range 12 W County: SAN JUAN
Center of Proposed Design: Latitude 36.38855° N Longitude 108.11442° W NAD: ☐ 1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

RCVD JUL 23 '09
OIL CONS. DIV.

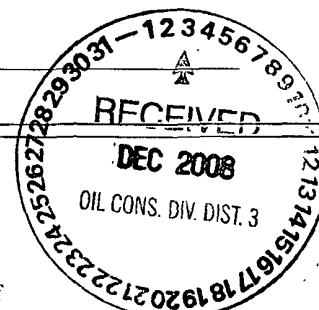
DIST. 3

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☒ String-Reinforced
Liner Seams: ☒ Welded ☒ Factory ☐ Other _____ Volume: 9,939 bbl Dimensions: L 160' x W 40' x D 10'

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

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

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



6.

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

- ☐ Chain link, six feet in height, two strands of barbed wire at top (*Required if located within 1000 feet of a permanent residence, school, hospital, institution or church*)
- ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
- ☒ Alternate. Please specify minimum 36" hog wire topped with at least 1 strand of barbed wire = at least 48" high fence

7.

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

- ☐ Screen ☐ Netting ☐ Other _____
- ☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

- ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☒ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

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

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

- ☒ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval. *See request for alternate marking on Page 2 of attachment*
- ☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval

10

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> 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) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

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

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

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

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
- ☐ Previously Approved Design (attach copy of design) API Number: _____
- ☐ Previously Approved Operating and Maintenance Plan API Number: _____ (Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)

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

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H₂S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

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

- Type: ☒ Drilling ☒ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☐ Below-grade Tank ☐ Closed-loop System
☐ Alternative
- Proposed Closure Method: ☐ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☒ On-site Closure Method (Only for temporary pits and closed-loop systems)
☒ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

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

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

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

Disposal Facility Name: _____ Disposal Facility Permit Number: _____
Disposal Facility Name: _____ Disposal Facility Permit Number: _____

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

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

☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

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

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

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

☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☒ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC See 10. on APD Page 9 (Exhibit K)
☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
☒ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☒ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
☒ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief

Name (Print): BRIAN WOOD Title: CONSULTANT

Signature: *Brian Wood* Date: 11-29-08

e-mail address: brian@permitswest.com Telephone: (505) 466-8120

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

OCD Representative Signature: *Brandon Bell* Approval Date: 12-11-08

Title: Enviro/spec OCD Permit Number: _____

21.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC
Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☒ Closure Completion Date: 5/14/09

22.
Closure Method:
☐ Waste Excavation and Removal ☒ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

23.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

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

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

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

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

On-site Closure Location: Latitude 36.388492 Longitude -108.114419 NAD: ☐ 1927 ☒ 1983

25.
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): James McDaniel Title: Consultant, Envirotech

Signature: *James McDaniel* Date: 7/22/09

e-mail address: jmcDaniel@envirotech-inc.com Telephone: 505-419-0915

OK Brandon Bell NMOC 7-28-09

Drill Pit Closure Checklist

- 1) An alternative interim marking system will be used to allow for safer and more efficient operations. A minimum 4" O.D. steel pipe will be set at least 36" deep at the center of the pit. A threaded collar will be on the top of the pipe. A minimum 12" x 12" steel plate will be welded atop the threaded collar. The top of the plate will be flush with ground level. The standard location information listed will be welded onto the plate, plus a notation that it marks an on-site buried, temporary pit. Upon plugging the well, the plate will be removed, and the pit will be marked as described in 19.15.17.13.F(1)(d).
See attached photo for on-site temporary ground-level marker. In ground marker will be replaced by a division approved four (4) foot riser upon P&A of this well location. Information welded onto the marker will include: Elm Ridge Exploration, Lease #NMSF-078065, South Bisti 21 H #2, UL G, Sec. 21, Twn. 25N, Rge 12W, on-site burial and the date.
- 2) Elm Ridge Exploration will close the pit in accordance with OCD rules 19.15.17.12 & 13. Post closure documents will be submitted within 60 days of pit closure and will include forms C-105 and C-144, cover details, pit diagram, inspection report and closure sampling results.
See attached C-105, C-144, pit diagrams, closure sampling results. Cover was installed in accordance with 19.15.17.12 & 13.
- 3) All free standing liquids will be removed before backfilling the pit and disposed of at an Elm Ridge Disposal Well or at Basin Disposal's evaporation pond.
Liquid was removed and disposed of at Carson WDW 242 during the week of August 30th, 2008.
- 4) Due to the land being located on federal land, a deed notice was not applicable.
- 5) Due to confusion associated with the transition period pertaining to 19.15.17, the new 'Pit Rule', a drill pit inspection log was not maintained on this drill pit. Elm Ridge Exploration will comply with the rule and perform drill pit inspections as standard operating procedure as of 7/31/09, and will perform all necessary drill pit inspections after this date.
- 6) The preferred method of closure will be on-site, in place burial, assuming all criteria outlined in 19.15.17.13 (B) are met.
All criteria were met, and the drill pit was buried in-place on 5/14/09.
- 7) The surface owner has been notified.
The Bureau of Land Management was notified on April 8, 2009. See attached BLM notification.
- 8) After approval of this application, Elm Ridge Exploration will notify the OCD verbally, or by other means, at least 72 hours, but not more than one week, prior to any closure operations. The notice shall include the operator's name and the location to be closed by unit letter, section, township and range, well name and number and API number.
The Oil Conservation Division, Aztec Office, was notified on April 8, 2009. See attached OCD notification.
- 9) All liner above the mud level will be cut and removed after stabilization. Removed liner will be disposed of in a licensed disposal facility.
Liner was cut, removed, and disposed after stabilization of the drill pit contents at San Juan

County Regional Landfill, Solid Waste Facility Permit SW 05-30 (P).

- 10) Elm Ridge Exploration will stabilize or solidify the contents to a bearing capacity sufficient to support the temporary pit's final cover. Elm Ridge Exploration will not mix the contents with soil or other material at a mixing ratio of no greater than 3-1, soil or other material: to drill pit contents.

Contents of drill pit were mixed at a 3:1 ratio of soil to contents of drill pit.

- 11) A 5 Point Composite sample will be taken of the pit, and all samples will be tested per Subsection B of 19.15.17.13(B)(1)(b). If the criteria are not met, then all contents will be handled per subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13. (i.e. dig and haul). If a dig and haul is required, then the disposal facility will be Envirotech's Landfarm (NM01-0011).

Initial sampling on 3/26/09 returned results that were above the 500 ppm DRO/GRO standard via USEPA Method 8015, and above the 1000 ppm total chloride standard. After mixing the contents at a 3:1 ratio of soil: drill pit contents, the pit was resampled for DRO/GRO via USEPA Method 8015 and for total chlorides on 5/14/09. The sample returned results that were below the 500 ppm DRO/GRO standard and the 1000 ppm total chloride standard; see attached *Laboratory Results*.

Sample	Chloride	Benzene (8021)	BTEX (8021)	TPH (418.1)	DRO/GRO (8015)
NMOC Regulatory Standards	1,000 mg/kg	0.2 mg/kg	50.0 mg/kg	2,500 mg/kg	500 mg/kg
Contents Pre-Mix	1,900 mg/kg	<0.0009 mg/kg	0.0222 mg/kg	1,230 mg/kg	530 mg/kg
Contents Post 3-1 Mix	205 mg/kg	NS	NS	NS	23.4 mg/kg

- 12) After completing solidification and testing, the pit area will be backfilled with compacted, waste free, earthen material. At least four (4) feet of cover will be achieved. The cover will include one (1) foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

Site was backfilled using one (1) foot of topsoil and approximately four (4) feet of non-waste containing earthen material used for cover.

- 13) Recontouring of the location will match the fit, shape, line, form, and texture of the surrounding area. Re-shaping will control drainage and prevent ponds and erosion. Natural drainages will be unimpeded. Water bars and/or silt traps will be placed where needed to prevent erosion on a large scale. Final recontour will have a uniform appearance with smooth surface, fitting the natural landscape.

The site was recontoured to match the fit, shape, line and form of the surrounding area. It was re-shaped to prevent ponding and erosion, and in such a way that natural drainage was unimpeded. Water bars or silt traps were not needed to prevent erosion. The final recontour has a uniform appearance and a smooth surface, and fits the natural landscape. See attached photos of site recontouring.

- 14) Notice will be sent to the OCD when the reclaimed area is seeded.

Elm Ridge Exploration will comply with the BLM's re-seeding requirements in this area in

Elm Ridge Exploration
South Bisti 21 H #2
Closure Date: May 15, 2009
Job No. 03056-0221

accordance with the federal rules and regulations as allowed by the BLM/OCD Memorandum of Understanding. Re-seeding was scheduled to being on July 7, 2009 per the BLM.

PAGE NO: <u>1</u> OF <u>1</u> DATE STARTED: <u>3/24/09</u> DATE FINISHED: <u>3/26/09</u>	ENVIROTECH INC ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 - 3014 FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615	ENVIRONMENTAL SPECIALIST: <u>R. Nielsen</u> LAT: <u>36 38849274</u> LONG: <u>-108.1144185</u>
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FIELD REPORT: BGT / PIT CLOSURE VERIFICATION (Drill Pit)

LOCATION:	NAME: <u>South Bisti 2/H</u>	WELL #: <u>2</u>	TEMP PIT:	PERMANENT PIT:	BGT:
LEGAL ADD:	UNIT:	SEC: <u>21</u>	TWP: <u>25N</u>	RNG: <u>12W</u>	PM:
QTR/FOOTAGE:	CNTY: <u>San Juan</u>		ST: <u>NM</u>		

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

LOCATION APPROXIMATELY:	FT.	FROM WELLHEAD
DEPTH TO GROUNDWATER:		

<input type="checkbox"/> TEMPORARY PIT - GROUNDWATER 50-100 FEET DEEP BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 500 mg/kg	<input checked="" type="checkbox"/> TEMPORARY PIT - GROUNDWATER ≥ 100 FEET DEEP BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, GRO & DRO FRACTION (8015) ≤ 500 mg/kg, TPH (418.1) ≤ 2500 mg/kg, CHLORIDES ≤ 1000 mg/kg
<input type="checkbox"/> PERMANENT PIT OR BGT BENZENE ≤ 0.2 mg/kg, BTEX ≤ 50 mg/kg, TPH (418.1) ≤ 100 mg/kg, CHLORIDES ≤ 250 mg/kg	

FIELD 418.1 ANALYSIS

TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (mg/kg)
	200 STD		-	-	-		
		1					
		2					
		3					
		4					
		5					
		6					

PERIMETER	FIELD CHLORIDES RESULTS	PROFILE																																																							
	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>READING</th> <th>CALC. (mg/kg)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">PID RESULTS</th> </tr> <tr> <th>SAMPLE ID</th> <th>RESULTS (ppm)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	SAMPLE ID	READING	CALC. (mg/kg)																															PID RESULTS		SAMPLE ID	RESULTS (ppm)																			
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LAB SAMPLES <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE ID</th> <th>ANALYSIS</th> <th>RESULTS</th> </tr> </thead> <tbody> <tr><td> </td><td>BENZENE</td><td> </td></tr> <tr><td> </td><td>BTEX</td><td> </td></tr> <tr><td> </td><td>GRO & DRO</td><td> </td></tr> <tr><td> </td><td>CHLORIDES</td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	SAMPLE ID	ANALYSIS	RESULTS		BENZENE			BTEX			GRO & DRO			CHLORIDES								NOTES: <u>Take samples @ 11:30</u> <div style="display: flex; justify-content: space-between;"> WORKORDER # WHO ORDERED </div>
SAMPLE ID	ANALYSIS	RESULTS																				
	BENZENE																					
	BTEX																					
	GRO & DRO																					
	CHLORIDES																					

Submit To Appropriate District Office Two Copies District I 1625 N French Dr., Hobbs, NM 88240 District II 1301 W Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., 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-105 July 17, 2008		
		1. WELL API NO. 30-045-34131					
		2 Type of Lease <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> FED/INDIAN					
		3 State Oil & Gas Lease No NMSF-078065					
WELL COMPLETION OR RECOMPLETION REPORT AND LOG							
4 Reason for filing: <input type="checkbox"/> COMPLETION REPORT (Fill in boxes #1 through #31 for State and Fee wells only) <input checked="" type="checkbox"/> C-144 CLOSURE ATTACHMENT (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19 15 17 13.K NMAC)				5 Lease Name or Unit Agreement Name South Bisti 21 H 6. Well Number 2			
7. Type of Completion: <input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER							
8 Name of Operator Elm Ridge Exploration				9. OGRID 149052			
10 Address of Operator PO Box 156, Bloomfield, New Mexico, 87413				11. Pool name or Wildcat			
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	
Surface:							
BH:							
13 Date Spudded	14 Date T D Reached	15. Date Rig Released August 15, 2008		16 Date Completed (Ready to Produce)		17 Elevations (DF and RKB, RT, GR, etc)	
18. Total Measured Depth of Well		19. Plug Back Measured Depth		20 Was Directional Survey Made?		21 Type Electric and Other Logs Run	
22. Producing Interval(s), of this completion - Top, Bottom, Name							
23 CASING RECORD (Report all strings set in well)							
CASING SIZE	WEIGHT LB./FT	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED		
24. LINER RECORD				25 TUBING RECORD			
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	
26 Perforation record (interval, size, and number)				27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.			
				DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED			
28 PRODUCTION							
Date First Production		Production Method (<i>Flowing, gas lift, pumping - Size and type pump</i>)			Well Status (<i>Prod. or Shut-in</i>)		
Date of Test	Hours Tested	Choke Size	Prod'n For Test Period	Oil - Bbl	Gas - MCF	Water - Bbl	
Flow Tubing Press	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl	Oil Gravity - API - (<i>Corr</i>)	
29. Disposition of Gas (<i>Sold, used for fuel, vented, etc.</i>)					30 Test Witnessed By		
31. List Attachments							
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit Attached							
33. If an on-site burial was used at the well, report the exact location of the on-site burial:							
Latitude . 36.38855			Longitude -108.11442		NAD 1927 1983		
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief							
Signature			Printed				
Date			Name Ms. Amy Mackey Title Administrative Manager				
E-mail Address amackey1@elmridge.net							

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico		Northwestern New Mexico	
T. Anhy	T. Canyon	T. Ojo Alamo	T. Penn A "
T. Salt	T. Strawn	T. Kirtland	T. Penn. "B"
B. Salt	T. Atoka	T. Fruitland	T. Penn. "C"
T. Yates	T. Miss	T. Pictured Cliffs	T. Penn. "D"
T. 7 Rivers	T. Devonian	T. Cliff House	T. Leadville
T. Queen	T. Silurian	T. Menefee	T. Madison
T. Grayburg	T. Montoya	T. Point Lookout	T. Elbert
T. San Andres	T. Simpson	T. Mancos	T. McCracken
T. Glorieta	T. McKee	T. Gallup	T. Ignacio Otzte
T. Paddock	T. Ellenburger	Base Greenhorn	T.Granite
T. Blinebry	T. Gr. Wash	T. Dakota	
T.Tubb	T. Delaware Sand	T. Morrison	
T. Drinkard	T. Bone Springs	T.Todilto	
T. Abo	T.	T. Entrada	
T. Wolfcamp	T.	T. Wingate	
T. Penn	T.	T. Chinle	
T. Cisco (Bough C)	T.	T. Permian	

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....

No. 2, from.....to.....

No. 3, from.....to.....

No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology

From	To	Thickness In Feet	Lithology

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
611 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DEC 27 AM 8:44

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

RCVD JAN 21 07

OIL CONSERV. DIV.

DIST. I

*API Number 30-045-34131		*Pool Code 5890	*Pool Name BISTI-LOWER-GALLUP
*Property Code 27288	*Property Name SOUTH BISTI 21H 21H		*Well Number 2
*OGRD No. 149052	*Operator Name ELM RIDGE EXPLORATION, LLC		*Elevation 6288'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	21	25N	12W		1980'	NORTH	1920'	EAST	SAN JUAN

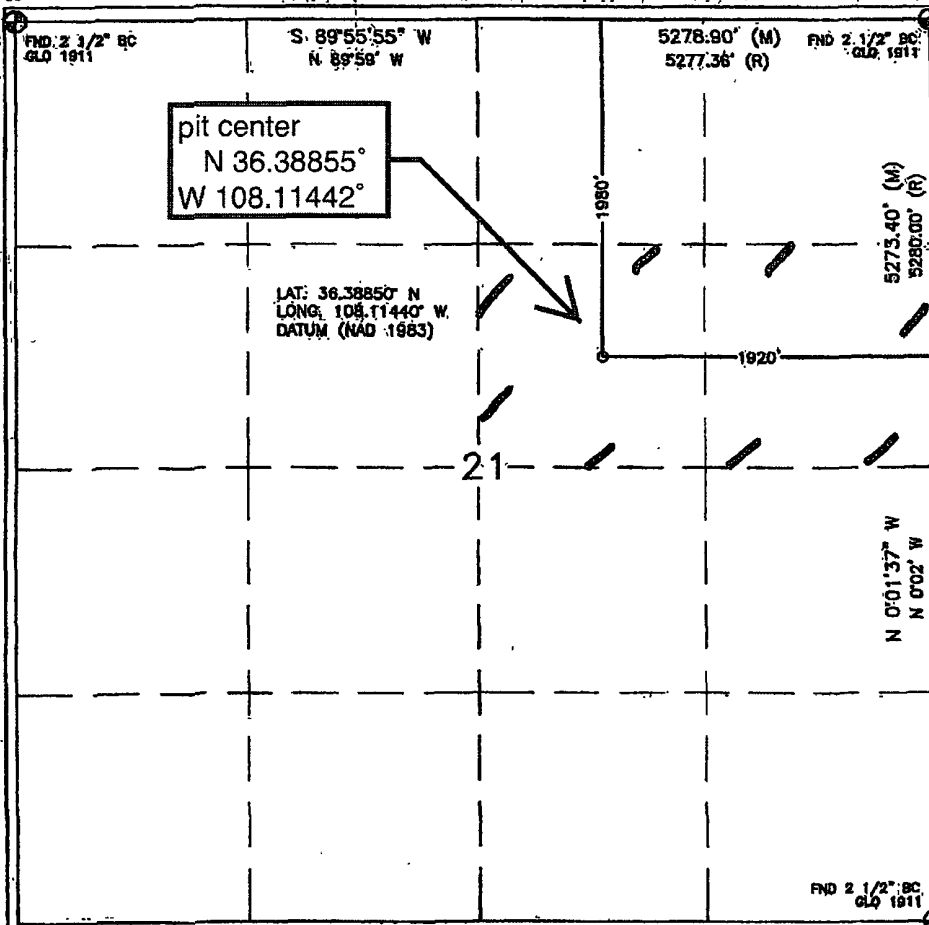
¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 80	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature **Brian Wood**
Printed Name **CONSULTANT**
Title **DEC. 21, 2006**
Date

¹⁸ SURVEYOR CERTIFICATION

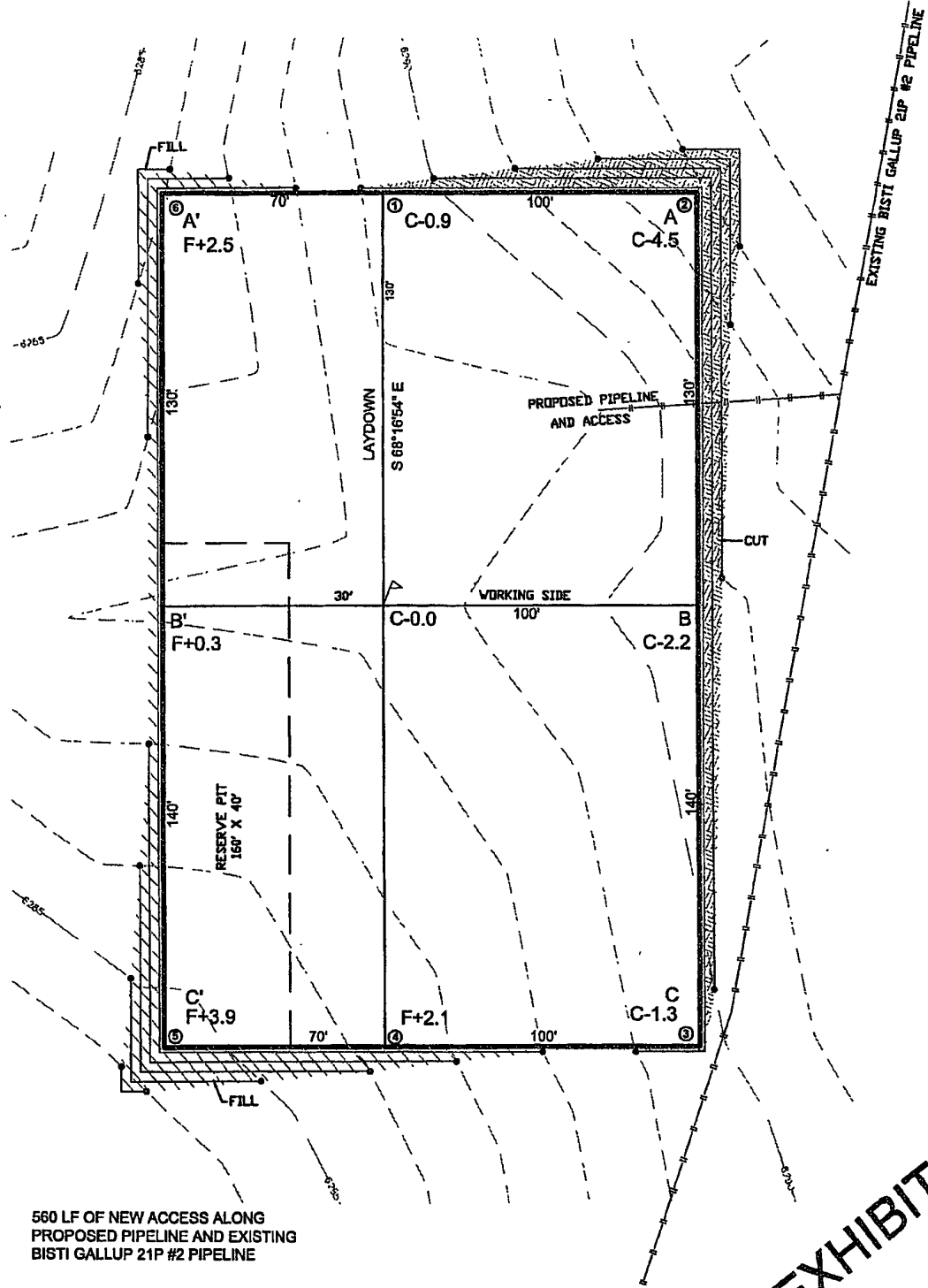
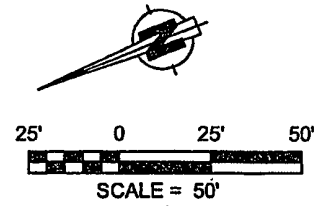
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

OCTOBER 10, 2006
Date of Survey
Signature and Seal of Registered Surveyor
DAVID RUSSELL
Certificate Number **10201**

EXHIBIT H

LATITUDE: 36.38850°N
LONGITUDE: 108.11440°W
DATUM: NAD 83

ELM RIDGE EXPLORATION, LLC
SOUTH BISTI GALLUP 21H #2
1980' FNL & 1920' FEL
LOCATED IN THE SW/4 NE/4 OF
SECTION 21, T25N, R12W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6288', NAVD 88
FINISHED PAD ELEVATION: 6288.4', NAVD 88



1 FOOT CONTOUR INTERVAL SHOWN
SCALE: 1" = 50'
JOB No.: ERE004
DATE: 11/14/06; REV1

EXHIBIT F
Russell Surveying
1409 W. Aztec Blvd. #5
Aztec, New Mexico 87410
(505) 334-8637

FROM: JAMES MCDANIEL
SENT: WEDNESDAY, APRIL 08, 2009 8:18 AM
TO: 'BRANDON.POWELL@STATE.NM.US'
SUBJECT: SOUTH BISTI 21 H #2 NOTIFICATIONS

Mr. Powell,

Please accept this email as a formal notification to close the Drill Pit at the South Bisti 21 H #2 well site owned and operated by Elm Ridge Exploration. Closure activities are scheduled to begin on Monday, April 13th, 2009. The South Bisti 21 H #2 well site is located in Unit G, Section 21, Township 25N, Range 12W, San Juan County, New Mexico. Lat 36.38849, Long -108. 1144188, API # 3004534131. Closure samples have been collected, and meet the 3-1 mixing requirements for a temporary pit that has a depth to groundwater of over 100 feet. Thank you for your time in regards to this project. If you require any additional assistance in regards to this project, please feel free to contact me.

James P McDaniel
Project Scientist
Envirotech, Inc

505-793-5392

FROM: JAMES MCDANIEL
SENT: WEDNESDAY, APRIL 08, 2009 8:29 AM
TO: 'MARK KELLY (MARK_KELLY@NM.BLM.GOV)'
SUBJECT: SOUTH BISTI 21 H #2 CLOSURE NOTIFICATION
ATTACHMENTS: SUNDRY NOTICE EDITABLE.PDF

Mr. Kelly,

Please accept this email as a formal notification to close the Drill Pit at the South Bisti 21 H #2 well site owned and operated by Elm Ridge Exploration. Closure activities are scheduled to begin on Monday, April 13th, 2009. The South Bisti 21 H #2 well site is located in Unit G, Section 21, Township 25N, Range 12W, San Juan County, New Mexico. Lat 36.38849, Long -108. 1144188, API # 3004534131. Closure samples have been collected, and meet the 3-1 mixing requirements for a temporary pit that has a depth to groundwater of over 100 feet. Thank you for your time in regards to this project. If you require any additional assistance in regards to this project, please feel free to contact me.

James P McDaniel
Project Scientist
Envirotech, Inc

505-793-5392

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS
**Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.**

5 Lease Serial No
NMSF-078065

6 If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

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

1 Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

8 Well Name and No
South Bisti 21 H #2

2 Name of Operator
Elm Ridge Exploration

9 API Well No
30-045-34131

3a Address
PO Box 156
Bloomfield, NM 87413

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

10 Field and Pool or Exploratory Area

4 Location of Well (Footage, Sec., T., R., M., or Survey Description)
1980 FNL 1920 FEL, G-21-25N-12W, Lat 36 38849 long -108 11441

11 Country or Parish, State
San Juan County, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Closure of a Drill Pit
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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

Elm Ridge Exploration plans to begin closure activities for a drill pit located at the above mentioned site. All formal notifications have been made. Closure activities are scheduled to begin on Monday, April 13, 2009.

14 I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
Mr. Mack Humprey

Title Administrative Manager

Signature

Date 04/08/2009

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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

Office

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

(Instructions on page 2)

Elm Ridge Exploration
South Bisti 21 H #2
Site Restoration Photography
Job Number: 03056-0221
Photos Taken: May 14, 2009

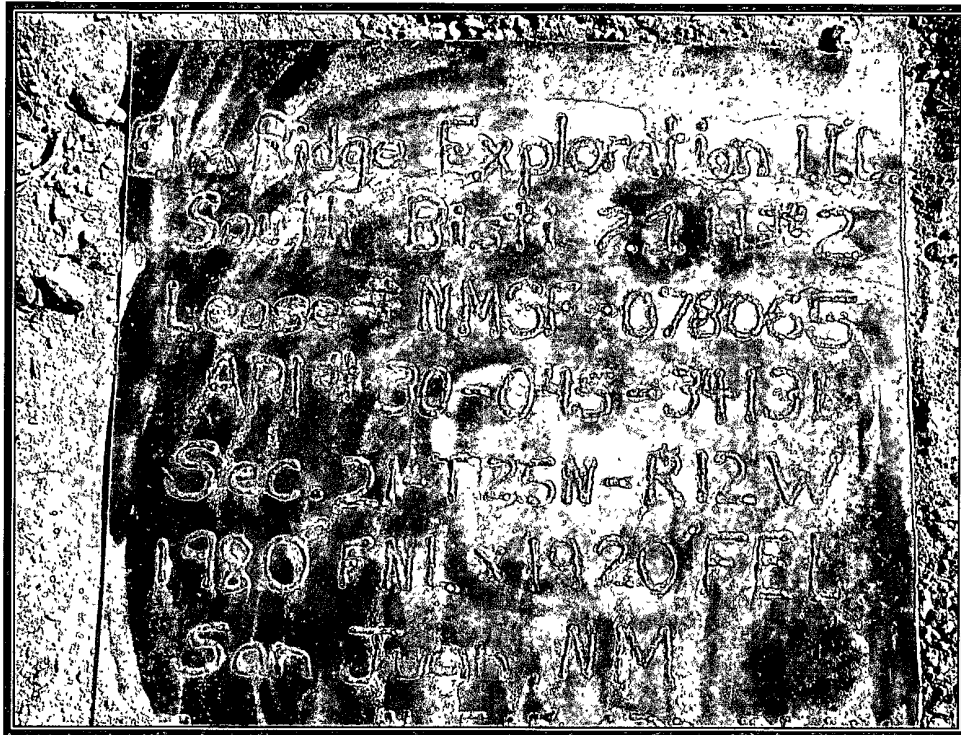


Photo 1: Steel Marker Plate

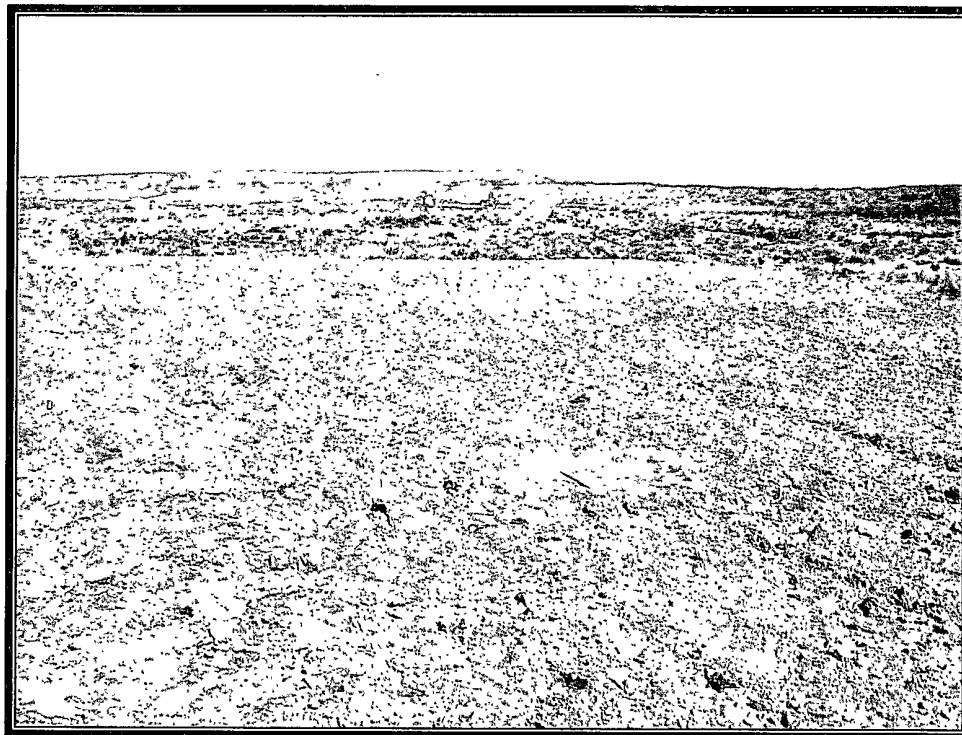


Photo 2: Recontoured Site with Steel Marker Plate

**Elm Ridge Exploration
South Bisti 21 H #2
Site Restoration Photography
Job Number: 03056-0221
Photos Taken: May 14, 2009**

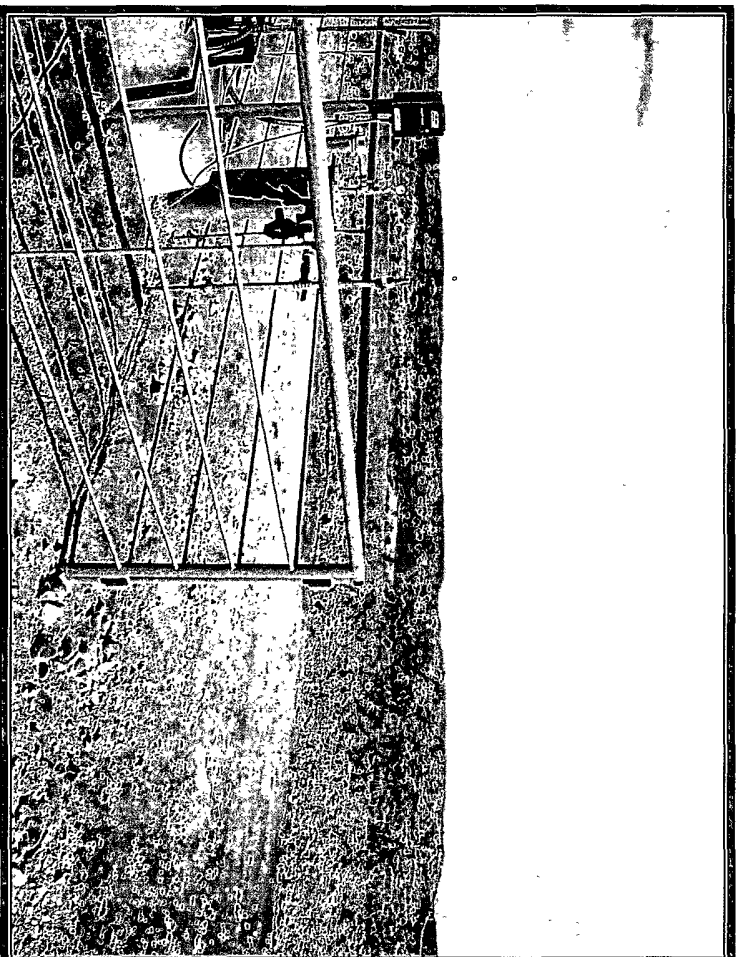


Photo 3: Overview of Site with Recontoured Area before Seeding

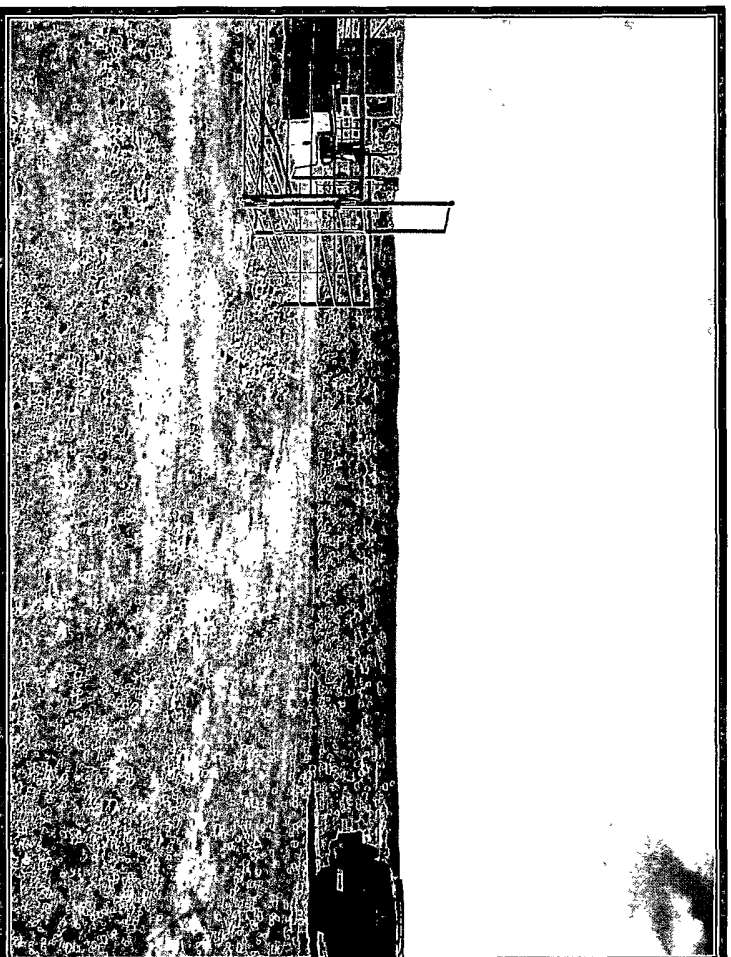


Photo 4: Site Overview Showing Recontoured Area Level with Natural Surroundings



envirotech
Analytical Laboratory

**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

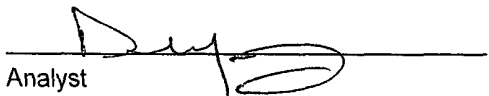
Client:	Elmridge Resources	Project #:	03056-0221
Sample ID:	Drill Pit	Date Reported:	04-07-09
Laboratory Number:	49488	Date Sampled:	03-26-09
Chain of Custody No:	6565	Date Received:	03-26-09
Sample Matrix:	Soil	Date Extracted:	04-03-09
Preservative:	Cool	Date Analyzed:	04-05-09
Condition:	Intact	Analysis Requested:	8015 TPH

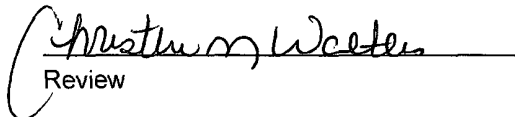
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	33.3	0.2
Diesel Range (C10 - C28)	497	0.1
Total Petroleum Hydrocarbons	530	0.2

ND - Parameter not detected at the stated detection limit.

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

Comments: **South Bisti 21 H #2.**


Analyst


Review

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-05-09 QA/QC	Date Reported:	04-07-09
Laboratory Number:	49465	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-05-09
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%

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

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	7.8	7.4	5.1%	0 - 30%
Diesel Range C10 - C28	3.6	3.4	5.6%	0 - 30%

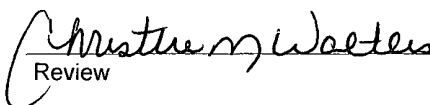
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	7.8	250	256	99.2%	75 - 125%
Diesel Range C10 - C28	3.6	250	248	97.6%	75 - 125%

ND - Parameter not detected at the stated detection limit.

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

Comments: QA/QC for Samples 49465, 49469, 49470, 49485, 49487, 49488, 49495, 49500, 49506, and 49507.

Analyst 

Review 

Client:	Elmridge Resources	Project #:	03056-0221
Sample ID:	Drill Pit	Date Reported:	04-07-09
Laboratory Number:	49488	Date Sampled:	03-26-09
Chain of Custody:	6565	Date Received:	03-26-09
Sample Matrix:	Soil	Date Analyzed:	04-05-09
Preservative:	Cool	Date Extracted:	04-03-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.9
Toluene	5.4	1.0
Ethylbenzene	3.8	1.0
p,m-Xylene	8.2	1.2
o-Xylene	4.8	0.9
Total BTEX	22.2	

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: South Bisti 21 H #2.

Analyst

Review

Client:	N/A	Project #	N/A
Sample ID	04-05-BT QA/QC	Date Reported	04-07-09
Laboratory Number:	49465	Date Sampled	N/A
Sample Matrix	Soil	Date Received	N/A
Preservative:	N/A	Date Analyzed	04-05-09
Condition:	N/A	Analysis	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	%Diff	Blank Conc	Detect. Limit
		Accept Range	0 - 15%		
Benzene	7.2698E+006	7.2844E+006	0.2%	ND	0.1
Toluene	6.6597E+006	6.6730E+006	0.2%	ND	0.1
Ethylbenzene	5.7486E+006	5.7601E+006	0.2%	ND	0.1
p,m-Xylene	1.4586E+007	1.4616E+007	0.2%	ND	0.1
o-Xylene	5.4860E+006	5.4970E+006	0.2%	ND	0.1

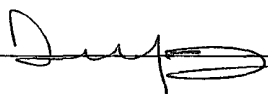
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect. Limit
Benzene	1.1	1.0	9.1%	0 - 30%	0.9
Toluene	3.8	3.6	5.3%	0 - 30%	1.0
Ethylbenzene	5.9	5.8	1.7%	0 - 30%	1.0
p,m-Xylene	21.1	20.7	1.9%	0 - 30%	1.2
o-Xylene	3.9	3.8	2.6%	0 - 30%	0.9

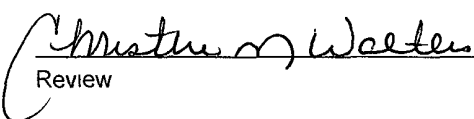
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	1.1	50.0	50.6	99.0%	39 - 150
Toluene	3.8	50.0	51.8	96.3%	46 - 148
Ethylbenzene	5.9	50.0	53.9	96.4%	32 - 160
p,m-Xylene	21.1	100	116	95.9%	46 - 148
o-Xylene	3.9	50.0	49.9	92.6%	46 - 148

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 49465, 49469, 49485 - 49488, 49495, 49500, 49506, and 49507.

Analyst 

Review 



Client:	Elmridge Resources	Project #:	03056-0221
Sample ID:	Drill Pit	Date Reported:	04-03-09
Laboratory Number:	49488	Date Sampled:	03-26-09
Chain of Custody No:	6565	Date Received:	03-26-09
Sample Matrix:	Soil	Date Extracted:	03-30-09
Preservative:	Cool	Date Analyzed:	03-30-09
Condition:	Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	1,230	6.4

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: **South Bisit 21 H #2.**

Analyst

Review



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**EPA METHOD 418.1
TOTAL PETROLEUM
HYDROCARBONS
QUALITY ASSURANCE REPORT**

Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	04-03-09
Laboratory Number:	03-30-TPH.QA/QC 49465	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	03-30-09
Preservative:	N/A	Date Extracted:	03-30-09
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
	03-23-09	03-30-09	1,340	1,450	8.2%	+/- 10%

Blank Conc. (mg/Kg)	Concentration	Detection Limit
TPH	ND	6.4

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
TPH	20.3	21.4	5.4%	+/- 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	20.3	2,000	1,660	82.2%	80 - 120%

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: QA/QC for Samples 49465 - 49469, 49485 - 49488 and 49495.

Analyst

Review



Client:	Elmridge Resources	Project #:	03056-0221
Sample ID:	Drill Pit	Date Reported:	04-03-09
Lab ID#:	49488	Date Sampled:	03-26-09
Sample Matrix:	Soil	Date Received:	03-26-09
Preservative:	Cool	Date Analyzed:	03-31-09
Condition:	Intact	Chain of Custody:	6565

Parameter

Concentration (mg/Kg)

Total Chloride

1,900

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: **South Bisit 21 H #2.**

Analyst

Review

CHAIN OF CUSTODY RECORD

6565

Client: <i>Elmridge Resources</i>			Project Name / Location: <i>South Bisti 21 H #2</i>				ANALYSIS / PARAMETERS													
Client Address:			Sampler Name: <i>R. Nielsen</i>				TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE			Sample Cool	Sample Intact
Client Phone No.:			Client No.: <i>03056-0221</i>																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative <small>HgCl₂ HCl 10%</small>														
<i>Drill Pit</i>	<i>3/24/09</i>	<i>11:30</i>	<i>49488</i>	<i>Soil</i> Solid	<i>Sludge</i> Aqueous	<i>1-403</i>														
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
				Soil Solid	Sludge Aqueous															
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				Soil Solid	Sludge Aqueous															
Relinquished by: (Signature) <i>Rachel Nielsen</i>						Date <i>3/24/09</i>	Time <i>13:15</i>		Received by: (Signature) <i>[Signature]</i>						Date <i>3/24/09</i>		Time <i>13:15</i>			
Relinquished by: (Signature)									Received by: (Signature)											
Relinquished by: (Signature)									Received by: (Signature)											

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**EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**

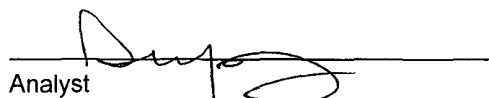
Client:	ElmRidge Resources	Project #:	03056-0221
Sample ID:	Drill Pit	Date Reported:	05-19-09
Laboratory Number:	50086	Date Sampled:	05-14-09
Chain of Custody No:	7068	Date Received:	05-14-09
Sample Matrix:	Soil	Date Extracted:	05-15-09
Preservative:	Cool	Date Analyzed:	05-18-09
Condition:	Intact	Analysis Requested:	8015 TPH

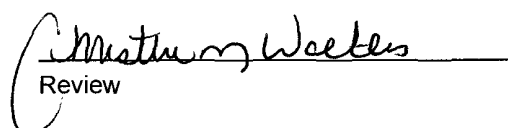
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.4
Diesel Range (C10 - C28)	23.4	0.2
Total Petroleum Hydrocarbons	23.4	0.4

ND - Parameter not detected at the stated detection limit.

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

Comments: **South Bisti 21 #2**


Analyst


Review



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EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	05-18-09 QA/QC	Date Reported:	05-19-09
Laboratory Number:	50080	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	05-18-09
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	9.6970E+002	9.7009E+002	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	1.0372E+003	1.0376E+003	0.04%	0 - 15%

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

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	23.8	23.5	1.3%	0 - 30%
Diesel Range C10 - C28	150	154	2.5%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	23.8	250	270	98.5%	75 - 125%
Diesel Range C10 - C28	150	250	397	99.2%	75 - 125%

ND - Parameter not detected at the stated detection limit.

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

Comments: QA/QC for Samples 50080 - 50088 and 50098.

Analyst

Review



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Chloride

Client:	ElmRidge	Project #:	03056-0221
Sample ID:	Drill Pit	Date Reported:	05-20-09
Lab ID#:	50086	Date Sampled:	05-14-09
Sample Matrix:	Soil	Date Received:	05-14-09
Preservative:	Cool	Date Analyzed:	05-19-09
Condition:	Intact	Chain of Custody:	7068

Parameter

Concentration (mg/Kg)

Total Chloride

205

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: South Bisti 21 #2.

Analyst

Review

CHAIN OF CUSTODY RECORD

7068

Client: EMPIRE			Project Name / Location: SOUTH BIST 21 # 2				ANALYSIS / PARAMETERS																																													
Client Address:			Sampler Name: ALBENARY				<table border="1"> <tr> <th>TPH (Method 8015)</th> <th>BTEX (Method 8021)</th> <th>VOC (Method 8260)</th> <th>RCRA 8 Metals</th> <th>Cation / Anion</th> <th>RCI</th> <th>TCLP with H/P</th> <th>PAH</th> <th>TPH (418.1)</th> <th>CHLORIDE</th> <th></th> <th></th> <th></th> <th></th> <th>Sample Cool</th> <th>Sample Intact</th> </tr> <tr> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td>✓</td> <td>✓</td> </tr> </table>														TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P	PAH	TPH (418.1)	CHLORIDE					Sample Cool	Sample Intact	X									X					✓	✓
TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion	RCI	TCLP with H/P															PAH	TPH (418.1)	CHLORIDE					Sample Cool	Sample Intact																							
X									X					✓	✓																																					
Client Phone No.:			Client No.: 03056-0221																																																	
Sample No./ Identification	Sample Date	Sample Time	Lab No.	Sample Matrix	No./Volume of Containers	Preservative HgCl ₂ HCl																																														
Dam P.r	5/14/09	10:20am	50086	Soil Solid	(1) 4oz			CAC																																												
				Soil Solid	Sludge Aqueous																																															
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Relinquished by: (Signature) ALBENARY				Date 5/14/09	Time 12:20pm	Received by: (Signature) Kendall Augustus				Date 5/14/09	Time 12:20																																									
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