| District I                                 |   |     |
|--|---|-----|
| 1625 N. French Dr., Hobbs, NM 88240        |   | 4   |
| 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 |   |     |
| 2003 JAN 27 PM                             | 1 | 26  |
|  | - | C U |

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 |

| Tit, Closed-Doop System, Delow-Grade Talik, 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  |
| <ul><li>☐ Modification to an existing permit</li><li>☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system,</li></ul>  |
| 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: Schmitz Federal 34-3   |
| API Number: 3003924331 OCD Permit Number:   |
| U/L or Qtr/Qtr J Section 34 Township 24N Range 1W County: Rio Arriba  |
| Center of Proposed Design: Latitude <u>36.265092</u> Longitude <u>-106.927071</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  |
| 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 x W x D   |
| 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 I of 19.15.17.11 NMAC  |
| Volume: 95 bbl Type of fluid: Produced water  |
| Tank Construction material: Steel tank  |
| Secondary containment with leak detection Usible sidewalls, liner, 6-inch lift and automatic overflow shut-off  |
| ☐ Visible sidewalls and liner ☒ Visible sidewalls only ☒ Other <u>Single-walled tank</u>  |
| Liner type: Thicknessmil  |
|   |

Alternative Method:

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

| Fencing: Subsection D of 19.15.17.11 NMAC (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)  | hospital,                   |
| Four foot height, four strands of barbed wire evenly spaced between one and four feet   |                             |
| ☐ Alternate. Please specify 4' tall hogwire fencing with pipe railing   |                             |
| 7.  Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  |                             |
| Screen □ Netting □ Other  |                             |
| Monthly inspections (If netting or screening is not physically feasible)  |                             |
| 8.  |                             |
| Signs: Subsection C of 19.15.17.11 NMAC  ⊠ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers  |                             |
| Signed in compliance with 19.15.3.103 NMAC  |                             |
|   |                             |
| Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.   |                             |
| Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau  | office for                  |
| consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.   | o                           |
| 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 acceptant material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system. | priate district<br>pproval. |
| Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  - The attached C-144 report completed by Envirotech was approved by the OCD in June of 2008 indicates that the NMOCD accepted a depth to groundwater as less than 50 feet at this site.   | ⊠ 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).  The nearest watercourse is greater than 200 ft. to the southwest per attached topographic map. These findings are reflected by the attached visual inspection sheet.   | ☐ Yes ⊠ No                  |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - The attached aerial photograph and visual inspection sheet indicate that none of the above locations are within 1000 feet of the well site.  | ☐ Yes ⊠ No<br>☐ 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)  | ☐ 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.  The attached iWATERS database search and visual inspection sheet indicate no wells are within 1000 feet of the site.   | ☐ Yes ⊠ No                  |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - The site is not within incorporated municipal boundaries per the attached topographical map and visual inspection sheet.  | ☐ Yes ⊠ No                  |
| Within 500 feet of a wetland.  - The USFWS data file, WetlandsData.kmz, dated July 2, 2008 was opened using Google Earth. Electronic data was not available; however, no wetland vegetation was noted during the site visit.  | ☐ Yes ☒ No                  |
| Within the area overlying a subsurface mine.  - The NM EMNRD web map indicates that the well site is not within an area overlying a subsurface mine.  | ☐ Yes ⊠ No                  |
| Within an unstable area.  The attached topographical map and visual inspection sheet indicate that the well site is not within an unstable area.  | ☐ Yes ⊠ No                  |
| Within a 100-year floodplain.  - There is no flood map coverage for this area; however, the site is 7 ft, higher and 550 ft, from the nearest wash.   | ☐ Yes ⊠ No                  |

| W F   |
|---|
| Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC   |
| and 19.15.17.13 NMAC  |
| Previously Approved Design (attach copy of design) API Number: or Permit Number:  |
| Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC  |
| Previously Approved Design (attach copy of design)  API Number:   |
| Previously Approved Operating and Maintenance Plan API Number: (Applies only to closed-loop system that use   |
| above ground steel tanks or haul-off bins and propose to implement waste removal for closure)   |
| 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   Quality Control/Quality Assurance Construction and Installation Plan   Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC   Preeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC   Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan   Cilman   Cilman |
| 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)  |
| Is.  Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  □ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC □ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC □ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) □ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC □ Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC   |

| · ·   |                       |
|---|-----------------------|
| 16. Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13. Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if 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 <i>will not</i> be used for future ser<br>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 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   | C                     |
| 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 sou provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate dist considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Just demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.   | rict office or may be |
| Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | Yes No                |
| Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | ☐ Yes ☐ No<br>☐ NA    |
| Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  | Yes No                |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site  | ☐ Yes ☐ No            |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | ☐ Yes ☐ No            |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site   | ☐ Yes ☐ No            |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality   | ☐ Yes ☐ No            |
| Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site   | ☐ Yes ☐ No            |
| Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division   | Yes No                |
| <ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>   | ☐ Yes ☐ No            |
| Within a 100-year floodplain FEMA map   | ☐ Yes ☐ No            |
| On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 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 cann Soil Cover Design - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection G 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 a   | and complete to the best of my knowledge and belief.   |
| Name (Print): Ms. Amy Mackey  | Title: Administrative Manager  |
| Signature: Macle  | Date: 1-23-09  |
| E-mail address: amackey1@elmridge.net   | Telephone: 505-632-3476 ext. 201   |
| OCD Approval: Permit Application (including closure plan) Closure Plan (  |  |
| OCD Representative Signature:   | Approval Date: 26 JUN 17   |
|   | CD Permit Number:  |
| Closure Report (required within 60 days of closure completion): Subsection K o Instructions: Operators are required to obtain an approved closure plan prior to im The closure report is required to be submitted to the division within 60 days of the c section of the form until an approved closure plan has been obtained and the closure  | plementing any closure activities and submitting the closure report.<br>ompletion of the closure activities. Please do not complete this<br>re activities have been completed. |
|   | Closure Completion Date:   |
| Closure Method:  Waste Excavation and Removal On-Site Closure Method Alternative If different from approved plan, please explain.   | Closure Method  Waste Removal (Closed-loop systems only)   |
| 23.  Closure Report Regarding Waste Removal Closure For Closed-loop Systems The Instructions: Please indentify the facility or facilities for where the liquids, drilling two facilities were utilized.   |  |
| Disposal Facility Name: D   | isposal Facility Permit Number:  |
|   | isposal Facility Permit Number:  |
| Were the closed-loop system operations and associated activities performed on or in a  Yes (If yes, please demonstrate compliance to the items below) No  | areas that will not be used for future service and operations?   |
| 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 mark in the box, that the documents are attached.   | must be attached to the closure report. Please indicate, by a check  |
| Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closure) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) |  |
| On-site Closure Location: Latitude Longitude  | NAD: □1927 □ 1983  |
| Operator Closure Certification:  I hereby certify that the information and attachments submitted with this closure report belief. I also certify that the closure complies with all applicable closure requirements   | rt is true, accurate and complete to the best of my knowledge and  |
| Name (Print):   | Title:   |
| Signature:  | Date:  |
| E-mail address:   | Telephone:   |

District I \* 10.5 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 Fc, NM 87505

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

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

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe

Form C-144

June 1, 2004

office

## Pit or Below-Grade Tank Registration or Closure Is pit or below-grade tank covered by a "general plan"? Yes 🖾 No 🗌 Type of action. Registration of a pit or below-grade tank 🔲 Closure of a pit or below-grade tank 🖾

| Operator: Elm Ridge Resources Telephone: (505) 632-347   | e-mail address: amackeyl@elmrid  | ge.net  |
|--|--|---|
| Address P.O Box 156, Bloomfield, New Mexico, 87413   |  |   |
| Facility or well name. Schmitz Federal #34-3 API #:  | 3003924331 U/L or Qtr/QtrJS  | See 34 T 24N R IW   |
| County: Rio Arriba Latitude 36.265   | 071 Longitude -106,926964  |   |
| Surface Owner Federal ☐ State ☐ Private ☒ Indian ☐   |  | RCVD APR 30 '08   |
| Pit  | Below-grade tank   | OIL CONS. DIV.  |
| Type: Drilling Production Disposal   | Volume: 15 bbl Type of fluid:  | DIST. 3   |
| Workover ☐ Emergency ☐   | Construction maternal: Steel   |   |
| Lined Unlined  | Double-walled, with leak detection? Yes  If not  | , explain why not   |
| Linei type. Synthetic Thicknessmil Clay [  | No Tank in place pnor to Rule 50   |   |
| Pit Volumehhl  |  |   |
| Depth to ground water (vertical distance from bottom of pit to seasonal  | Less than 50 feet  | (20 points)   |
| high water elevation of ground water.)   | 50 feet or more, but less than 100 feet  | (10 points)   |
|  | 100 feet or more   | ( 0 points) 20  |
| Wellhead protection area: (Less than 200 feet from a private domestic  | Ycs  | (20 points)   |
| water source, or less than 1000 feet from all other water sources.)  | No   | ( 0 points) 0   |
| water states, or less than 1000 feet formal differ water sources.)   | Less than 200 feet   | (20 marts)  |
| Distance to surface water (horizontal distance to all wetlands, playas,  | 200 feet or more, but less than 1000 feet  | (20 points)   |
| irrigation canals, ditches, and perennial and ephemeral watercourses)  | 1000 feet or more  | (10 points) (0 points) (10  |
|  | 1000 feet of more  |   |
|  | Ranking Score (Total Points)   | 30  |
| If this is a pit closure: (1) Attach a diagram of the facility showing the pit's   | s relationship to other equipment and tanks. (2) Indica  | te disposal location: (check the onsite box if you  |
| are burying in place) onsite  offsite  If offsite, name of facility  | (3) Attach a general description of remedial ac  | tion taken including remediation start date and   |
| end date. (4) Groundwater encountered: No 🗵 Yes 🗌 If yes, show depth   | below ground surface ft. and attach sar  | mple results  |
| (5) Attach soil sample results and a diagram of sample locations and excaval   | tions.   |   |
| Additional Comments:   |  |   |
| Soil passed the standard of 100 ppm TPH via the USEPA method 418.1 an  | d passed the 100 ppm OVM standard  |   |
| No excavation was required   |  |   |
|  |  |   |
|  |  |   |
|  |  |   |
|  |  |   |
| I hereby certify that the information above is true and complete to the best has been/will be constructed or closed according to NMOCD guideline                   | of my knowledge and belief. I further certify that the   | ie above-described pit or below-grade tank  |
|  | s , a general per unt , u an (attacheu) aller unt  |   |
| Date: 4/28/08  |  |   |
| Printed Name/Title Ms Amy Mackey, Production Technician  | Signature / Call   | 1   |
| Your certification and NMOCD approval of this application/closure does not otherwise endanger public health or the environment. Nor does it relieve to regulations | not relieve the operator of hability should the contents the operator of its responsibility for compliance with an | of the pit or tank contaminate ground water or<br>ny other federal, state, or local laws and/or |
| Annroyal Annroyal Annroyal Septitive Oil & GAS INSPECTOR, DIST. 43.  Printed Name/Title Signature  | Date. JUN 0 2 201  | 18  |

### New Mexico Office of the State Engineer **POD Reports and Downloads**

Township: 24N

Range: 01W

Sections: 34

NAD27 X:

Y:

Zone:

Search Radius:

County:

Basin:

Number:

Suffix:

Owner Name: (First)

(Last)

Non-Domestic

Domestic • All

Clear Form

iWATERS Menu Help

AVERAGE DEPTH OF WATER REPORT 10/27/2008

Bsn Tws Rng Sec Zone

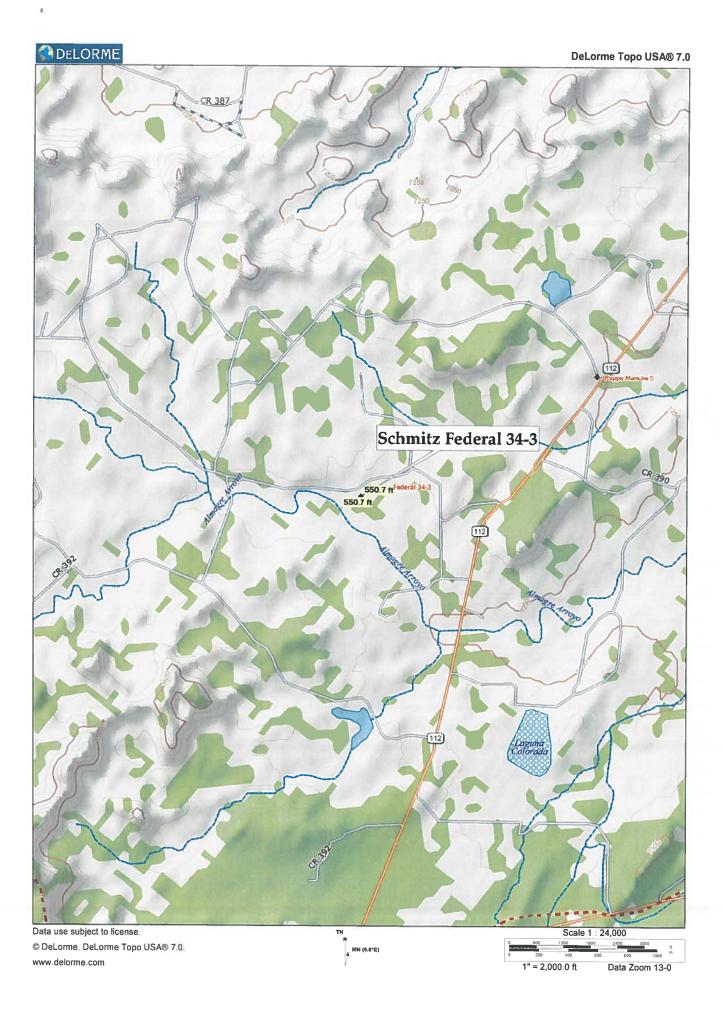
Y Wells

Min

(Depth Water in Feet) Max

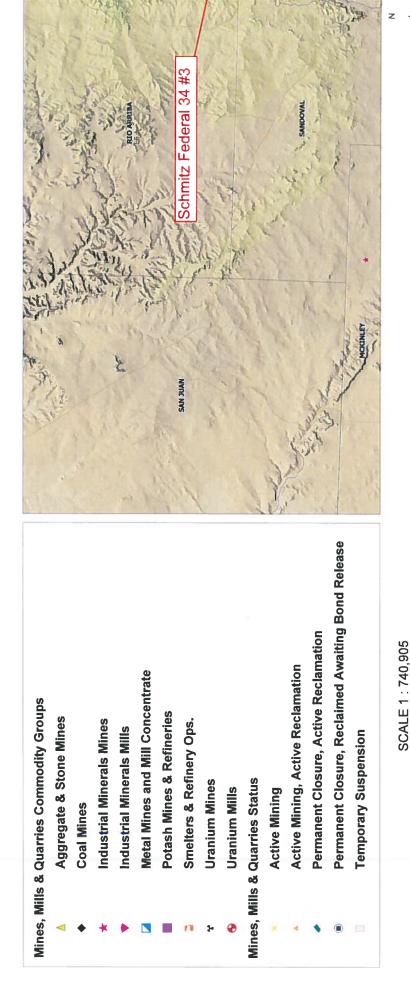
Avg

No Records found, try again



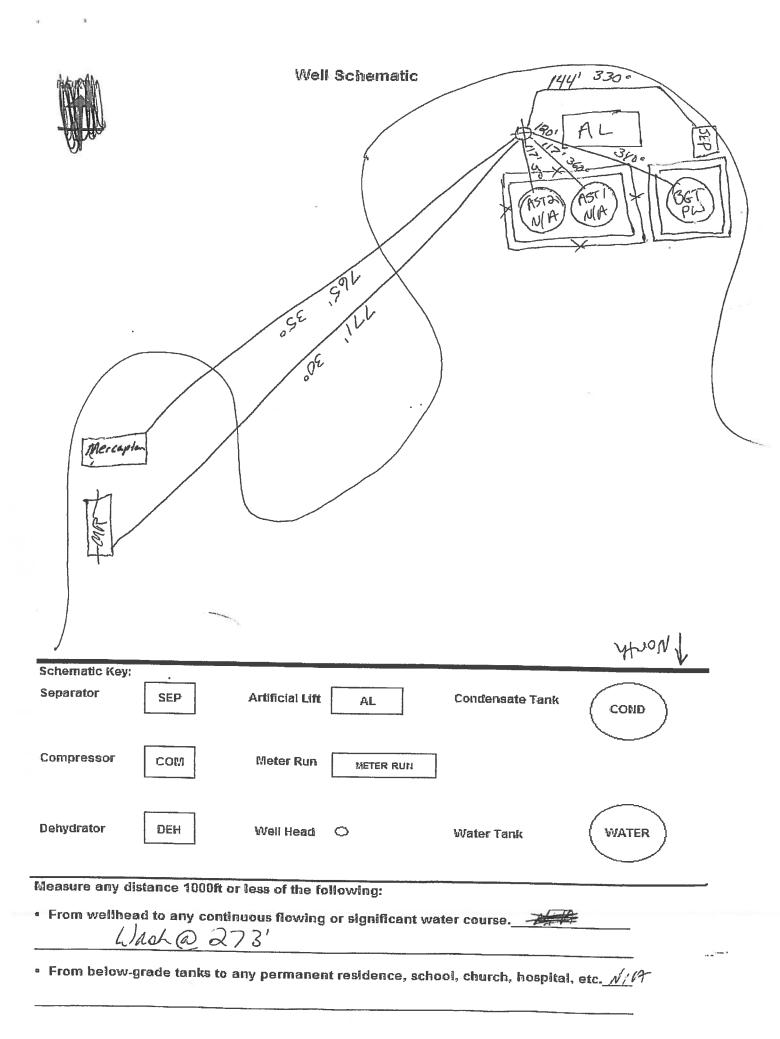


# Elm Ridge Exploration Mine Map





|    | Elm Ridge Site Inventory Sheet 1 0 2   |
|----|--|
| ۰  | Time: Started: 11 4 & Ended: (1.1)   |
| 0  | Well Name & Number: Schmitz Federal 34 003   |
| 0  | API#: 30039 2433\ .  |
| 0  | Lease #: 34 丁  |
| 0  | Quarter/Quarter: 5 Section: 34 Township: 24N Range: 1W   |
| Ġ  | Lat: 36, 265092° Long: 106.927071° GPS Point ID: 5F34-3  |
|    | Pit Tank #1: Manufacturer: Rocky Min, Tank   |
| •  | Serial #: 7-1225 DOM: 3-20-08 Size 95 bbl  |
|    | 171  |
| 0  |  |
| •  | Material: Steel X Galvanized Fiberglass Fiberglass Tank Configuration: Double Wall Single Wall (Buried or Exposed X)   |
| •  | Visible Walls: Y X N Leak Detection: V X N   |
|    | Visible Walls: Y_X N Leak Detection: Y_X N  Contents: Produced Water X Condensate Recycled Oil   |
| •  | Tank Top Covering: Solid/Cone-top Netting (Solid Fiber )   |
| •  | Secondary Containment: Yes No  |
| •  | Fencing around berm: Yes X No  |
|    | Fence Type: Cattle Panel Field Fence Barbwire  |
|    |  |
| 97 | Dia Tanak 100 Mar at a   |
|    | Pit Tank #2: Manufacturer:   |
|    | Serial #: DOM: Sizebbl   |
| `  | Serial #: DOM: Size  |
| `  | Serial #: DOM: Size bbl  o If N/A - Dimensions: Diameter Height  Material: Steel Galvanized Fiberglass   |
| `  | Serial #: DOM: Size bbi  o If N/A – Dimensions: Diameter Height  Material: Steel Galvanized Fiberglass  Tank Configuration: Double Wall Single Wall (Buried or Exposed)  |
| `  | Serial #: DOM: Size  |
| •  | Serial #:  |
| •  | Serial #:  |
| •  | Serial #: DOM: Size bbi  o   |
|    | Serial #:  |
|    | Serial #:  |
|    | Serial #:  |
|    | Serial #: DOM: Size DODI  o If N/A - Dimensions: Diameter Height  Material: Steel Galvanized Piberglass  Tank Configuration: Double Wall Single Wall (Buried or Exposed)  Visible Walls: Y N Leak-Retection: Y N Contents: Produced Water Condensate Recycled Oil  Tank Top Covering: Solid/Cone-top Netting (Solid Fiber)  Secondary Centainment: Yes No Secondary Centainment: Yes No Barbwire  Above-Ground Tank #1: Manufacturer: AMCTICAM TANK + Steel Corp.  Serial #: 1373 DOM: 8-57 Size 511 bbl |
|    | Serial #:  |
|    | Serial #:  |
|    | Serial #:  |



### **AST Attachment**

Above-Ground Tank #2. Manufacturer: AMECICAN Tank & Steel Corp. Serial #: 1374 DOM: 8-57 Size <u>5 / </u> o If N/A – Dimensions: Diameter\_/5,5 F Height 16 Material: Steel\_\_\_X\_\_\_ Galvanized\_\_\_\_ Fiberglass\_ Contents: Produced Water MA Condensate N/A (State #GI-7025/) Recycled Oil N/A Secondary Containment: Yes\_X No Above-Ground Tank #1: Manufacturer: Serial #:\_\_\_\_\_ DOM:\_\_\_\_ Size\_\_\_ Height / Material: Steel\_\_\_\_ Galvanized\_\_\_\_ Fiberglass Contents: Produced Water\_\_\_\_\_ Condensate\_\_\_\_ (State #\_\_\_\_ Recycled Oil Secondary Containment: Yes\_\_\_\_ No\_ • Above-Ground Tank #1: Manufacturer:\_ Serial #:\_\_\_\_ DOM: \_\_\_\_\_ Size bbl o If N/A - Dimensions: Diameter Height\_\_\_\_ Material: Steel\_\_\_\_ Galvanized\_\_\_\_ Fiberglass\_\_\_\_ Contents: Produced Water \_\_\_\_\_(State #\_\_\_\_\_) Recycled Oil\_\_\_\_ Secondary Containment: Yes No\_\_ Above-Grøund Tank #1: Manufacturer: Serial #: DOM:\_\_\_\_ Size\_\_\_\_bbl / If N/A – Dimensions: Diameter\_\_\_\_\_ Height\_\_\_\_ Material: Steel\_\_\_\_ Galvanized\_\_\_ Fiberglass\_\_\_\_ Contents: Produced Water\_\_\_\_ Condensate\_\_\_\_ (State #\_ Recycled Oil\_\_\_\_ Secondary Containment: Yes\_\_\_\_ No\_\_\_\_

# BELOW GRADE TANK (BGT) CLOSURE PLAN

### **SITE NAME:**

SCHMITZ FEDERAL 34 #3
UNIT LETTER J, SECTION 34, TOWNSHIP 24N, RANGE 1W
RIO ARRIBA COUNTY, NEW MEXICO
LATITUDE 36.265092 LONGITUDE -106.927071

### **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** 

# BELOW GRADE TANK (BGT) CLOSURE PLAN ELM RIDGE EXPLORATION SCHMITZ FEDERAL 34 #3 RIO ARRIBA COUNTY, NEW MEXICO

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### Introduction

Elm Ridge Exploration would like to submit a closure plan for the below grade tank (BGT) at the Schmitz Federal 34 #3 well site located in the NW ¼ SE ¼ of Section 34, Township 24N, Range 1W, Rio Arriba 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 BGT at the Schmitz Federal 34 #3 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 of the BGTs currently in service within the five (5) years allotted. Elm Ridge Exploration does not operate any BGTs which would qualify to be upgraded or retrofitted; as such they will be closing all their current BGTs and replacing them with above ground storage tanks.
- 2) Elm Ridge Exploration will close BGTs deemed to be an imminent danger to fresh water, public health, or the environment by an earlier date that the division requires as specified in Subsection A of 19.15.17.13 NMAC.
- 3) Elm Ridge Exploration will close any BGT which demonstrates a compromise of integrity before the five (5) years allotted by the division per Paragraph (6) of Subsection I of 19.15.17.11 NMAC.
- 4) Elm Ridge Exploration will close any BGT within 60 days of cessation of the BGTs operation per Subsection A of 19.15.17.13 NMAC.
- 5) No less than 72 hours and no greater than one (1) week prior to BGT removal Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the appropriate division district office as well as a schedule of on-site activities, as in accordance with 19.15.17.13 Subsection J Paragraph (2) NMAC. Written notification will include the name of the well operator, the well's API number, the well's name and number, and the well's unit letter, section, township, and range.
- 6) No less than 24 hours and no greater than one (1) week prior to beginning BGT closure activities Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide written notification to the appropriate surface owner, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will notify the surface owner by certified mail, return receipt requested, that the operator plans to close a below-grade tank. The return receipt will be used to ensure that the surface owner has received written notification no less than 24 hours and no greater than one (1) week prior to the beginning of BGT closure activities. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement. Closure activities that will take place on tribal land will have notifications sent by certified mail, return

receipt requested, to the appropriate tribal office. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will notify the Bureau of Land Management (BLM) of closure activities for wells located on federal land per a Sundry Notice, as in accordance with 19.15.17.13 Subsection J Paragraph (1) NMAC. All notices will be sent in such a way that the surface owner received notice at least 24 hours prior to the beginning of closure activities.

- 7) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all liquids, and/or sludge, if applicable, prior to closure. 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 E Paragraph (1) NMAC.
- 8) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will remove all on-site equipment associated with this BGT that is no longer required for some other purpose, as in accordance with 19.15.17.13 Subsection E Paragraphs (3) NMAC.
- 9) If applicable, any liners or leak detection systems removed from a BGT closure will be cleaned off and disposed of at San Juan County Regional Landfill in accordance with Subparagraph (m) of Paragraph (1) of Subsection D of 19.15.9.712 NMAC.
- 10) Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will obtain prior approval from the OCD to dispose, recycle, reuse, or reclaim the BGT. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will provide the OCD with documentation concerning the final disposition of the BGT with the closure report.
- 11) Once the BGT is removed a five (5)-point composite sample will be collected from directly below the tank or below the leak detection system if present. Grab samples will be collected from any area that are wet, discolored, or showing 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 E Paragraph (4) NMAC.
- 12) 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 E Paragraph (4) 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 (5) of Subsection E 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 will submit a Release Notification by Form C-141 with the appropriate analytical laboratory results to the appropriate division district office, in accordance with 19.15.17.13 Subsection E Paragraph (4) NMAC.
  - ii. In accordance with Paragraph (5) of Subsection E of 19.15.17.13 NMAC, once the operator or the OCD has determined that a release has occurred, Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will comply with rule 19.15.3.116 NMAC and 19.15.1.19 NMAC as appropriate.

### REPORTING

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

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

Respectfully Submitted:

Elm Ridge Exploration

Amy Mackey

Elm Ridge Exploration

### Elm Ridge Exploration

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

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

- 1. The first growing season after closure of a below grade tank or pit, all areas of the well site not utilized for the production of oil and/or gas on a daily basis will be re-seeded with the specified seed mixture.
- 2. The seed mixture used will be certified with no primary or secondary noxious weeds in seed mixtures. The seed labels from each bag shall be available for inspection while seed is being sown.
- 3. The operator shall accomplish seeding by drilling on the contour whenever practical or by other division-approved methods. The operator shall obtain vegetative cover that equals 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.
- 4. Hand seeding with hydro-mulch, excelsior netting, or mulch with netting is required on the cut/fill slopes. Mulch will be spread at a rate of 2,000-3,000 pounds per acre.
- 5. Compacted areas determined by visual inspection will be ripped to a depth of 12 inches below ground surface and disked to a depth of six (6) inches before seeding. Seeding shall be done with a disk type drill with two (2) boxes for various seed sizes. The drill rows shall be eight (8) to ten (10) inches apart. Seed shall be planted at no less than one-half (1/2) inch deep or more than one (1) inch deep. The seeder shall be followed with a drag, packer, or roller to ensure uniform coverage of the seed and adequate compaction. Drilling shall be done on the contour where possible, but not up and down the slope.
- 6. Where slopes are too steep for contour drilling a hand seeder shall be used. Seed shall be covered to the depth stated above by whatever means is practical. If the seed is unable to be covered by the means listed above, the prescribed seed mixture amount will be doubled.

- 7. Elm Ridge Exploration shall repeat seeding or planting until it successfully achieves the required vegetative cover of 70% of the native perennial vegetation cover.
- 8. Upon abandonment of a well site, if the retention of the access road is not considered necessary for the management and multiple uses of the natural resources, or by the surface owner, it will be ripped a minimum of 12 inches in depth. After ripping, water bars will be installed. All ripped surfaces are to be protected from vehicular travel by construction of a dead end ditch and earthen barricade at the entrance to these ripped areas. Re-seeding of areas affected by the ditch and barriers will be re-seeded if necessary.
- 9. Elm Ridge Exploration, or a contractor acting on behalf of Elm Ridge Exploration, will inform the division once successful re-vegetation has occurred.

### Elm Ridge Exploration

### San Juan Basin

### Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19.15.17 the following information describes the operation and maintenance of a Below Grade Tank (BGT) on Elm Ridge Exploration locations. This particular location does not meet the siting criteria to operate a BGT, and thus will be closing the BGT within five (5) years, or upon failure of integrity, and replacing it with an above ground storage tank.

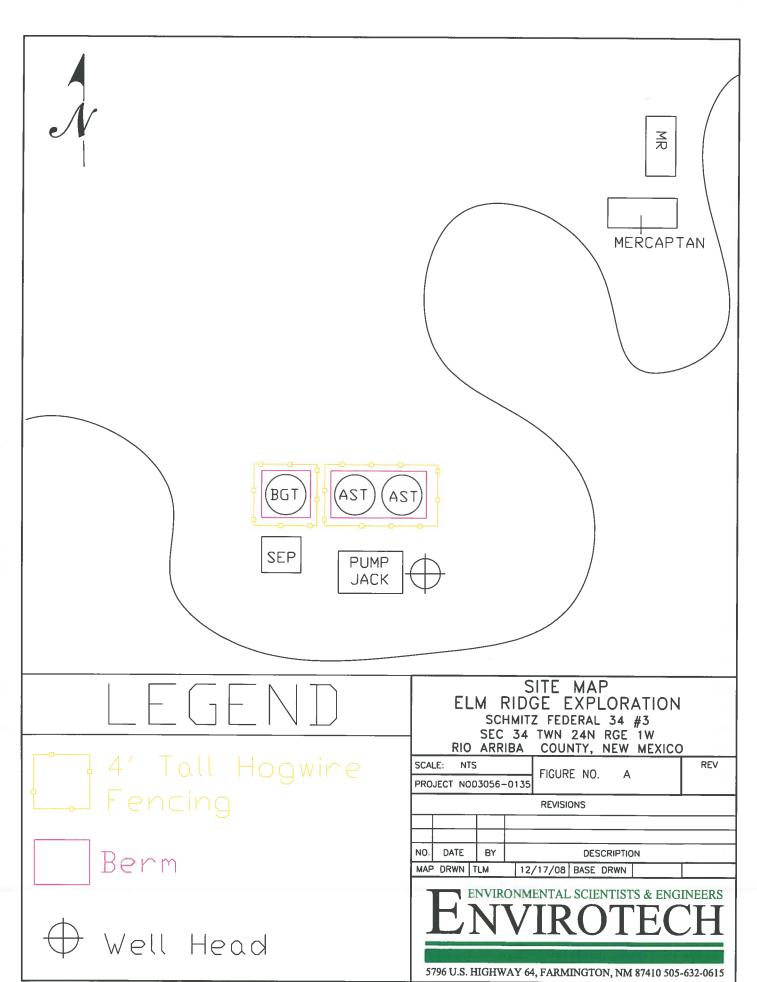
### **GENERAL PLAN:**

- 1. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, will operate and maintain a BGT to contain liquids and solids to prevent contamination of fresh water and to protect public health and environment. This will be accomplished by performing monthly inspections of the BGT, any liners or leak detection if applicable, netting, secondary containment, fencing, and maintaining adequate freeboard.
- 2. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall not allow a BGT to overflow or allow surface water run-on to enter the BGT. This will be accomplished by a secondary containment consisting of a soil berm around the BGT that will be monitored by monthly inspections. Overflowing will be prevented by maintaining an adequate freeboard of eight (8) inches, maintained by monthly inspections. This process will be performed on the current BGT located at this well site.
- 3. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall continuously remove any visible or measurable layer of oil from the fluid surface of a BGT in an effort to prevent the accumulation of oil over time.
- 4. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall inspect the BGT at least once monthly and maintain a written record of each inspection for at least five (5) years. The monthly inspection form to be used by Elm Ridge Exploration is attached to this document.
- 5. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall maintain adequate freeboard to prevent overtopping of the BGT. The standard freeboard to be maintained by Elm Ridge Exploration is eight (8) inches.
- 6. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall maintain an expanded metal covering on the BGT.

- 7. Elm Ridge Exploration will not discharge into or store any hazardous wastes in the BGT.
- 8. If Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, determines that a BGT has developed a leak below the liquid's surface, then Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, will notify the appropriate division office within 48 hours of discovering the leak. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, shall remove all liquids above the damage or leak line within 48 hours in accordance with Subsection A of 19.15.17.12 NMAC. The damaged tank will then be removed and closure activities will begin in accordance with the submitted closure plan.
- 9. Elm Ridge Exploration will close any BGT within 60 days of cessation of the BGTs operation per Subsection A of 19.15.17.13 NMAC.
- 10. Elm Ridge Exploration, or a contractor representing Elm Ridge Exploration, will close the BGT within the NMOCD allotted five (5) years, within 60 days of cessation of operation of the BGT or upon failure of integrity, and put into service an above ground storage tank to meet the needs previously fulfilled by the BGT.

Figure A, Site Map

Attachment 1, Monthly BGT Inspection Form



# **Elm Ridge Exploration, LLC**

### **Monthly Below Grade Tank Inspection Form**

| Inspec              | tion Performed I   | sy:             | -               | Date: _    |             | _ |
|---------------------|--------------------|-----------------|-----------------|------------|-------------|---|
|                     | Well Site          | Name:           |                 |            | <u> </u>    |   |
| Unit:               | Section:           | Township:       | Range:          |            | County:     |   |
|                     | Quarter            | Footage:        |                 |            |             |   |
|                     | Latitude:          |                 | Longitude:      |            | -           |   |
| Below Grade         | Tank               |                 |                 |            |             |   |
| Construction Mat    | erial of BGT (cir  | cle one): Steel | Fiberglass Galv | anized Oth | er:         | _ |
| Tank Capacity (B    | BLS):              |                 |                 | _          |             |   |
| Status of Tank (ci  | rcle one):         | NA poor         | fair good       | excellent  |             |   |
| Leaks Detected (c   | circle one):       | Yes No          | Unknown         |            |             |   |
| Liquid level in tar | nk from the top:   |                 |                 |            |             |   |
| Recent overflow     | detected (circle o | ne): Yes        | No Unknov       | vn         |             |   |
| BGT Cover prese     | nt: Yes            | No NA           |                 |            |             |   |
| Cover Type (circl   | e one): wire       | e mesh steel    | mesh fibrous    | netting    | other:      |   |
| Berm Present (cir   | cle one):          | Yes N           | o               |            |             |   |
| Secondary Co        | ntainment          |                 |                 |            |             |   |
| Type of secondary   | y containment: _   |                 |                 |            |             |   |
| Status of secondar  | ry containment (   | circle one):    | NA poor         | fair goo   | d excellent |   |
| <b>Fencing</b>      |                    |                 |                 |            |             |   |
| Fencing Present (   | circle one):       | Yes No          |                 |            |             |   |
| Describe Fencing    |                    |                 | <u> </u>        |            |             |   |
| Status of Fencing   | (circle one):      | NA poor         | fair good       | excelle    | nt          |   |

<sup>\*</sup>Maintain this document on record for a minimum of five (5) years from the date performed.