

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

RCVD JUL 22 '08

OIL CONS. DIV.

DIST. 3

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

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: <b>Burlington Resources Oil &amp; Gas Company, LP</b>	OGRID#: <b>14538</b>
Address: <b>PO Box 4289, Farmington, NM 87499</b>	
Facility or well name: <b>Canyon Largo Unit Com #318E</b>	
API Number: <b>30-039-30434</b>	OCD Permit Number: _____
U/L or Qtr/Qtr: <b>N(SSEW)</b> Section: <b>13</b> Township: <b>24N</b> Range: <b>6W</b> County: <b>Rio Arriba</b>	
Center of Proposed Design: Latitude: <b>36.308471° N</b> Longitude: <b>107.423287° W</b> NAD: <input type="checkbox"/> 1927 <input checked="" type="checkbox"/> 1983	
Surface Owner: <input checked="" type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Tribal Trust or Indian Allotment	

<input checked="" type="checkbox"/> <b>Pit:</b> Subsection F or G of 19.15.17.11 NMAC Temporary: <input checked="" type="checkbox"/> Drilling <input type="checkbox"/> Workover <input type="checkbox"/> Permanent <input type="checkbox"/> Emergency <input checked="" type="checkbox"/> Cavitation <input checked="" type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: Thickness <b>20</b> mil <input checked="" type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other <input checked="" type="checkbox"/> String-Reinforced Seams: <input checked="" type="checkbox"/> Welded <input checked="" type="checkbox"/> Factory <input type="checkbox"/> Other _____ Volume: <b>7000</b> bbl Dimensions: L <b>120'</b> x W <b>55'</b> x D <b>12'</b>	<input type="checkbox"/> <b>Closed-loop Systems:</b> Subsection H of 19.15.17.11 NMAC <input type="checkbox"/> Drying Pad <input type="checkbox"/> Tanks <input type="checkbox"/> Haul-off Bins <input type="checkbox"/> Other: _____ <input type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: Thickness _____ mil <input type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other: _____ Seams: <input type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other: _____ Volume: _____ bbl _____ yd <sup>3</sup> Dimensions: Length _____ x Width _____
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<input checked="" type="checkbox"/> <b>Below-grade tank:</b> Subsection I of 19.15.17.11 NMAC Volume: <b>120</b> bbl Type of fluid: <b>Produced Water</b> Tank Construction Material: <b>Metal</b> <input type="checkbox"/> Secondary containment with leak detection <input checked="" type="checkbox"/> Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off <input type="checkbox"/> Visible sidewalls and liner <input type="checkbox"/> Visible sidewalls only <input type="checkbox"/> Other: _____ Liner type: Thickness: <b>60</b> mil <input checked="" type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other: _____	<b>Fencing:</b> Subsection D of 19.15.17.11 NMAC <input type="checkbox"/> Chain link, six feet in height, two strands of barbed wire at top <input type="checkbox"/> Four foot height, four strands of barbed wire evenly spaced between one and four feet <b>Netting:</b> Subsection E of 19.15.17.11 <input checked="" type="checkbox"/> Screen <input type="checkbox"/> Netting <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> Monthly inspections <b>Signs:</b> Subsection C of 19.15.17.11 NMAC <input type="checkbox"/> 12"x 24", 2" lettering, provided Operator's name, site location, and emergency telephone numbers <input checked="" type="checkbox"/> Signed in compliance with 19.15.3.103 NMAC
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<input type="checkbox"/> <b>Alternative Method:</b> Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	<b>Administrative Approvals and Exceptions:</b> Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. <b>Please check a box if one or more of the following is requested, if not leave blank:</b> <input checked="" type="checkbox"/> Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval. ( <b>Fencing in Design Plan</b> ) <input type="checkbox"/> Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.
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**Siting Criteria (regarding permitting):** 19.15.17.10 NMAC

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

**Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.**

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No

**Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, 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.**

☐ Yes ☒ No

*(Applies to temporary, emergency, or cavitation pits and below-grade tanks)*

☐ NA

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

**Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.**

☐ Yes ☐ No

*(Applied to permanent pits)*

☒ NA

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

**Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.**

☐ Yes ☒ No

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.

**Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended**

☐ Yes ☒ No

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

**Within 500 feet of a wetland.**

☐ Yes ☒ No

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

**Within the area overlying a subsurface mine.**

☐ Yes ☒ No

- Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division

**Within an unstable area.**

☐ Yes ☒ No

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

**Within a 100-year floodplain**

☐ Yes ☒ No

- FEMA map

**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 - 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 API Number: \_\_\_\_\_ or Permit \_\_\_\_\_)

**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 (required for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (required 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 - 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 API Number: \_\_\_\_\_)

**Permanent Pits Permit Application Checklist:** Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (I) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design: based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

**Proposed Closure:** 19.15.17.13 NMAC

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

Proposed Closure ☒ Waste Excavation and Removal **(Below-grade Tank)**  
☒ On-site Closure Method (only for temporary pits and closed-loop)  
☒ In-place ☐ On-site Trench

☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for

**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. Justification and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No  
☐ NA

Ground water is between 50 and 100 feet below the bottom of the buried waste

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☒ Yes ☐ No  
☐ NA

Ground water is more than 100 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☒ No  
☐ NA

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, 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

- 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.  
proposed site

☐ Yes ☒ No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division

☐ Yes ☒ No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes ☒ No

Within a 100-year floodplain

- FEMA map

☐ Yes ☒ No

**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

**Waste Removal Closure for Closed-loop Systems That Utilize 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.*

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

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

- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☒ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Construction and Design of Burial Trench (if applicable) 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
- ☒ 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

**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): Crystal Tafoya Title: Regulatory Technician  
Signature: *Crystal Tafoya* Date: 7/22/2008  
e-mail address: crystal.tafoya@conocophillips.com Telephone: 505-326-9837

**OCD Approval:** ☒ Permit Application (including closure plan) ☐ Closure Plan (only)

OCD Representative Signature: *Brendan Bell* Approval Date: 7-31-08  
Title: Enviro Spec OCD Permit Number: \_\_\_\_\_

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

☐ Closure Completion Date: \_\_\_\_\_

**Closure Method:**

- ☐ Waste Excavation and Removal ☐ On-Site Closure ☐ Alternative Closure
- ☐ If different from approved plan, please explain \_\_\_\_\_

**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
- ☐ Proof of Deed Notice (if applicable)
- ☐ Plot Plan
- ☐ Confirmation Sampling Analytical Results
- ☐ Waste Material Sampling Analytical Results
- ☐ 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 Latitude: \_\_\_\_\_ Longitude: \_\_\_\_\_ NAD: ☐ 1927 ☐ 1983

**Operator Closure Certification:**

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

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

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

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Township: 24N Range: 06W Sections: |

NAD27 X: | Y: | Zone: ☐ Search Radius: |County: ☐ Basin: ☐ Number: | Suffix:Owner Name: (First) (Last) | ☐ Non-Domestic ☐ Domestic  
☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

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**WATER COLUMN REPORT 07/10/2008**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column
SJ 00681 14	24N	06W	24	4	3					127		

Record Count: 1

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

Township: 24N Range: 05W Sections: 7,18,19

NAD27 X: Y: Zone: ☒ Search Radius: |

County: ☒ Basin: ☒ Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic  
☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

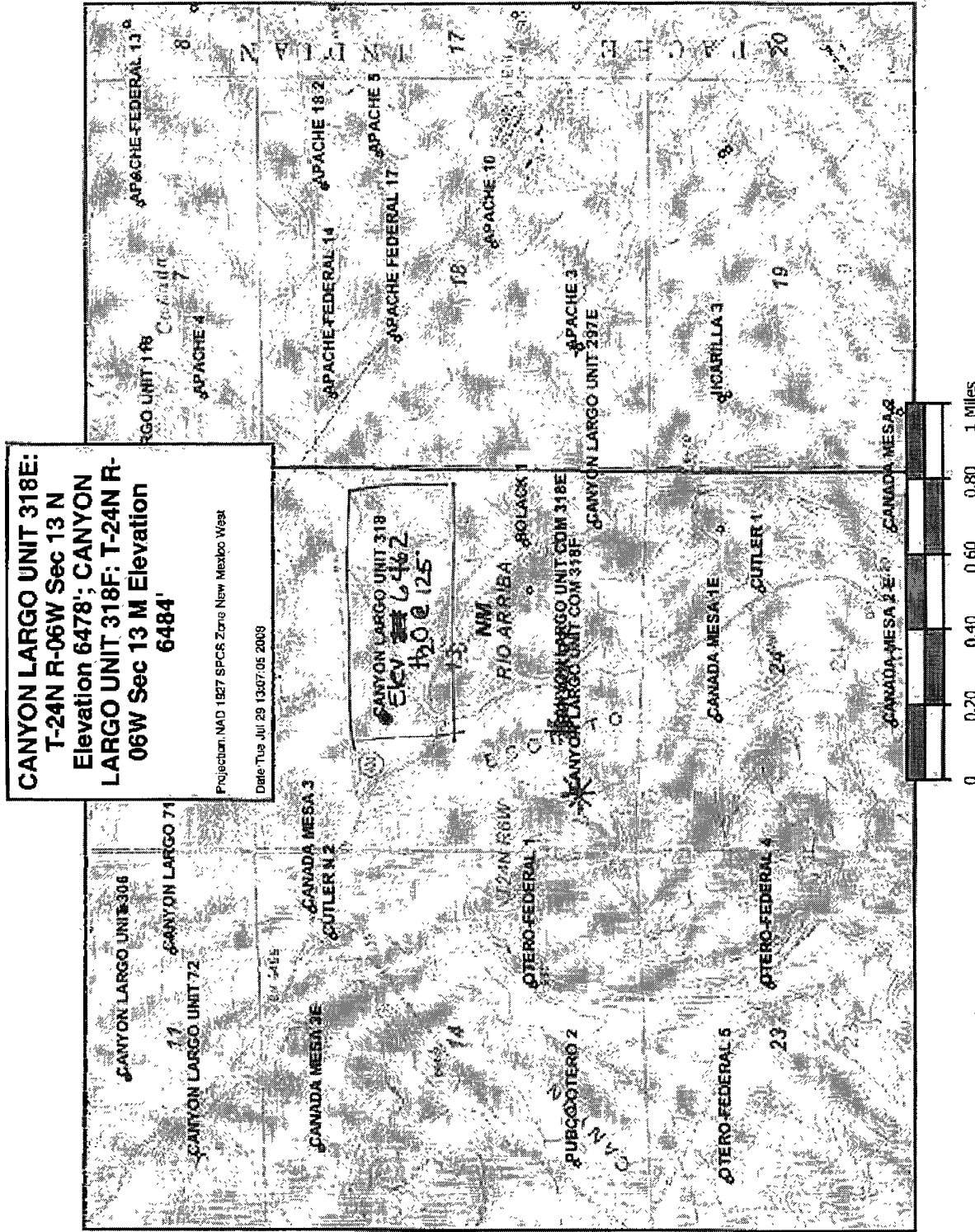
Help

**WATER COLUMN REPORT 07/10/2008**

(quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column
<input checked="" type="checkbox"/> SJ 00074	24N	05W	18	3	3	2				1004	216	78
SJ 00068	24N	05W	18	4	2	1				789	223	56
SJ 00069	24N	05W	18	4	2	1				795	350	44
SJ 00211	24N	05W	18	4	4	4				800	240	56

Record Count: 4



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE\*

(See other in-  
structions on  
reverse side)Form approved,  
Budget Bureau No. 42-R355.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other <input type="checkbox"/>		2. NAME OF OPERATOR Bolack Minerals Company		3. ADDRESS OF OPERATOR P.O. Box 255, Farmington, N.M. 87401		4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1730' fN1, 1850' fw1 At top prod. interval reported below same At total depth same		5. LEASE DESIGNATION AND SERIAL NO. SF-080594-A		6. IF INDIAN, ALLOTTEE OR TRIBE NAME None		7. UNIT AGREEMENT NAME Canyon Largo Unit		8. FARM OR LEASE NAME Canyon Largo Unit Com.		9. WELL NO. 318		10. FIELD AND POOL, OR WILDCAT Basin Dakota		11. SEC., T., R., M. OR BLOCK AND SURVEY OR AREA S13, T24N-R6W, NMPM		12. COUNTY OR PARISH Rio Arriba		13. STATE N.M.	
15. DATE SPUDDED 9/1/83		16. DATE T.D. REACHED 9/12/83		17. DATE COMPL. (Ready to prod.) 10/27/83		18. ELEVATIONS (DP, RKB, ET, OR, ETC.)* 6462' RKB		19. ELEV. CASINGHEAD 6450'		20. TOTAL DEPTH, MD & TVD 6670'		21. PLUG, BACK T.D., MD & TVD 6621'		22. IF MULTIPLE COMPL., HOW MANY? Single		23. INTERVALS DRILLED BY 0-6670'		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 6372' to 6548' - Dakota fm.		25. WAS DIRECTIONAL SURVEY MADE Yes		26. TYPE ELECTRIC AND OTHER LOGS RUN Induction-Electrical, Formation Density, Comp. Neutron, G.R.,		27. WAS WELL CORED No	
28. CEMENTING RECORD (Report all strings set in well) Calip., CDL																									
CASING SIZE 8 5/8"		WEIGHT, LB./FT. 24		DEPTH SET (MD) 214'		HOLE SIZE 12 1/2"		CEMENTING RECORD 295 cu. ft., 3% CaCl <sub>2</sub>		AMOUNT PULLED None															
4 1/2"		11.6		6670'		7 7/8"		1st stg.: 840 cu. ft., Class H 50/50 Po:																	
								mix w/2% gel, 10% salt; 2nd stage: 2,238 cu. ft., Class B 65/35																	
								Pozmix, 12% gel, 1/4#/sk. celloph. flakes, Circ. to surf.																	
29. LINER RECORD																									
SIZE None		TOP (MD)		BOTTOM (MD)		SACK CEMENT*		SCREEN (MD)		30. TUBING RECORD															
										SIZE 2 3/8" EUE		DEPTH SET (MD) 6468'		PACKER SET (MD) None											
												(seat nipple @ 6434')													
31. PERFORATION RECORD (Interval, size and number) Twelve (12) 0.35" jet shots at: 6372, 6377, 6382; 6482, 6488, 6494, 6507, 6514, 6521, 6528, 6535, 6548'.																									
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.																									
DEPTH INTERVAL (MD) 6372' to 6548'		AMOUNT AND KIND OF MATERIAL USED 2,400 gal. 15% HCl acid 88,000 gal. gel in 1% KCl water w/1 gal./1000 gal. surfactant & 2% diesel oil & 126,500 lb.																							
33. PRODUCTION 20/40 sand																									
DATE FIRST PRODUCTION 10/7/83		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing		WELL STATUS (Producing or shut-in) Shut in																					
DATE OF TEST 11/3/83		HOURS TESTED 3 hrs.		CHOKE SIZE 3/4"		PROD'N. FOR TEST PERIOD →		OIL—BSL. 2		GAS—MCF. 294		WATER—BSL. Tr.		GAS-OIL RATIO ---											
FLOW, TUBING PRESS. 166 psi		CASING PRESSURE 653 psi		CALCULATED 24-HOUR RATE →		OIL—BSL. 16		GAS—MCF. 2,352		WATER—BSL. Tr.		OIL GRAVITY-API (CORR.) 44°													
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold																									
35. LIST OF ATTACHMENTS None																									
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records																									
SIGNED J. R. Speer		TITLE Agent		NOV 10 9 11 AM '83																					

\*See Instructions and Spaces for Additional Data on Reverse Side

NMC

BY

JRM



3644

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS  
NORTHWESTERN NEW MEXICO

30-039-23263

Operator Meridian Oil Inc. Location: Unit F Sec. 13 Twp 24 Rng 06

Name of Well/Walls or Pipeline Serviced \_\_\_\_\_

CANYON LAT90 UNIT #318

Elevation \_\_\_\_\_ Completion Date 8/12/93 Total Depth 394' Land Type F

Casing Strings, Sizes, Types & Depths 6/8 SET 120' OF 8" PVC CASING.

NO GAS, WATER, OR BOULDERS WERE ENCOUNTERED DURING CASING.

If Casing Strings are cemented, show amounts & types used Cemented

WITH 31 SACKS.

If Cement or Bentonite Plugs have been placed, show depths & amounts used

NONE

Depths & thickness of water zones with description of water: Fresh, Clear,

Salty, Sulphur, Etc. HIT A WATER SEEP AT 125' AND MORE FRESH

WATER AT 204'. A WATER SAMPLE WAS TAKEN.

Depths gas encountered: NONE

Ground bed depth with type & amount of coke breeze used: 394' DEPTH.

USED 107 SACKS OF ASBURY 218R. (5350#)

Depths anodes placed: 375, 365, 345, 330, 315, 295, 270, 260, 250, 235, 185, 175, 145, 155, + 140

Depths vent pipes placed: SURFACE TO 394'.

Vent pipe perforations: BOTTOM 270'.

Remarks: \_\_\_\_\_

RECEIVED

JAN 31 1994

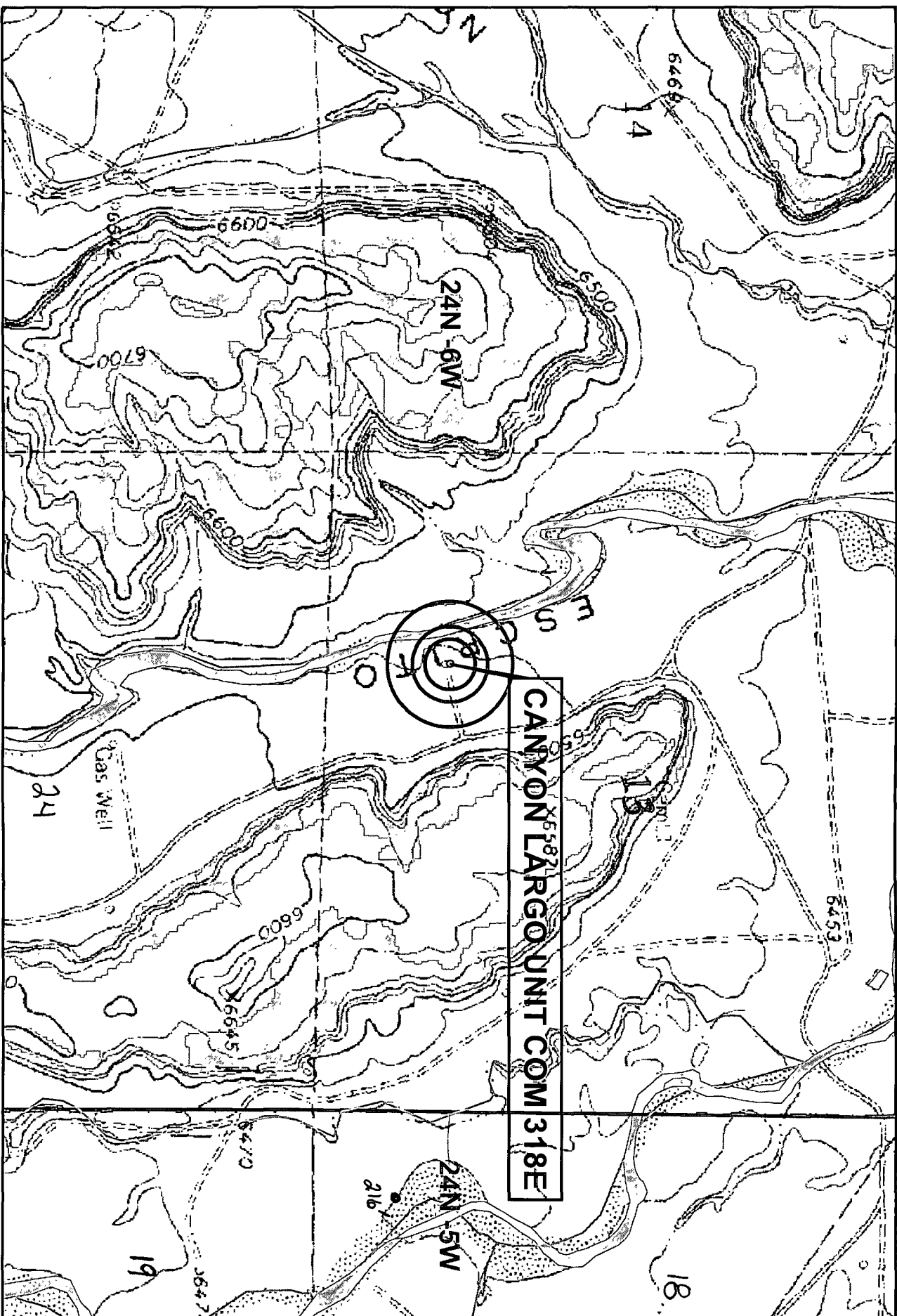
OIL CON. DIVJ

DIST. 3

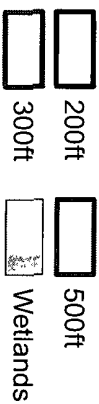
If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

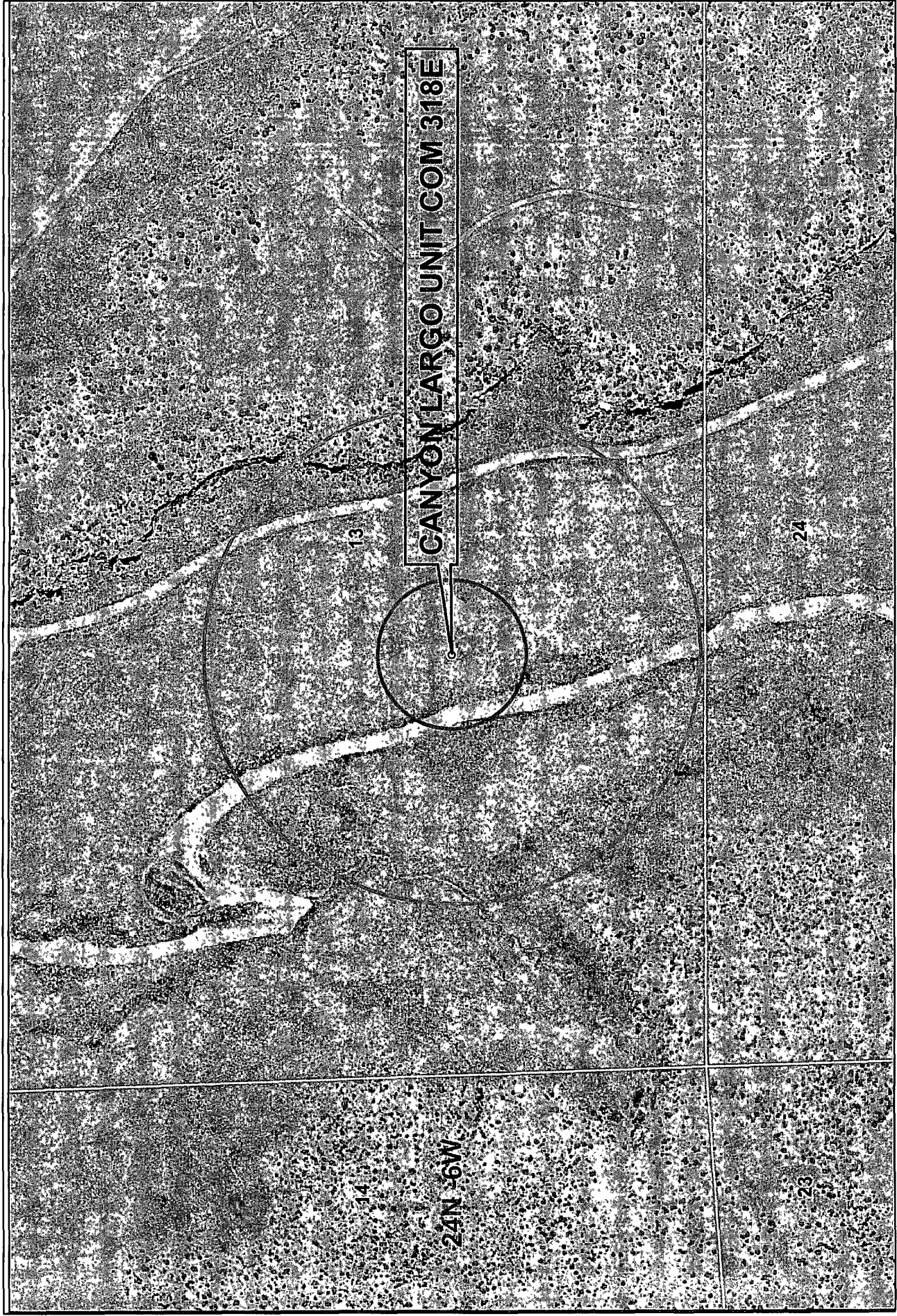
Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.

If Federal or Indian, add Lease Number.



Wetlands data acquired from U.S. Fish  
and Wildlife  
<http://wetlands.wms.er.usgs.gov>

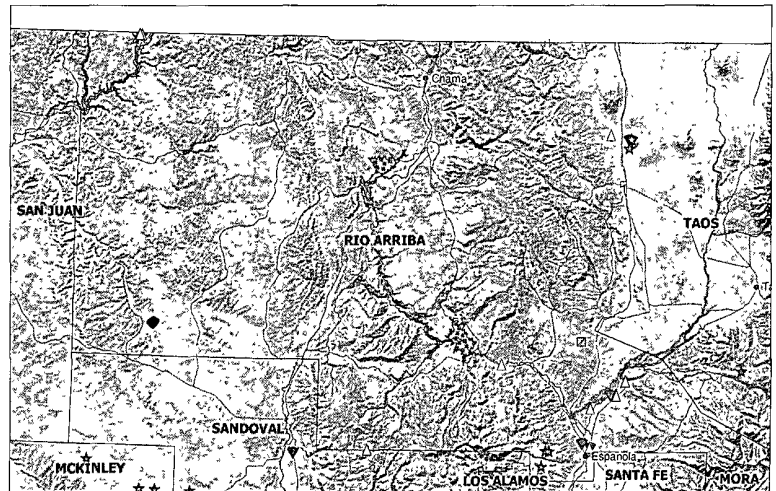




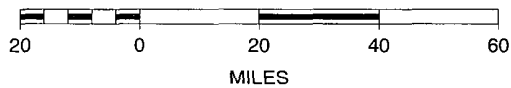
# Canyon Largo Unit Com #318E Mines, Mills and Quarries Web Map

## Mines, Mills & Quarries Commodity Groups

-  **Aggregate & Stone Mines**
-  **Coal Mines**
-  **Industrial Minerals Mines**
-  **Industrial Minerals Mills**
-  **Metal Mines and Mill Concentrate**
-  **Potash Mines & Refineries**
-  **Smelters & Refinery Ops.**
-  **Uranium Mines**
-  **Uranium Mills**



SCALE 1 : 1,976,356



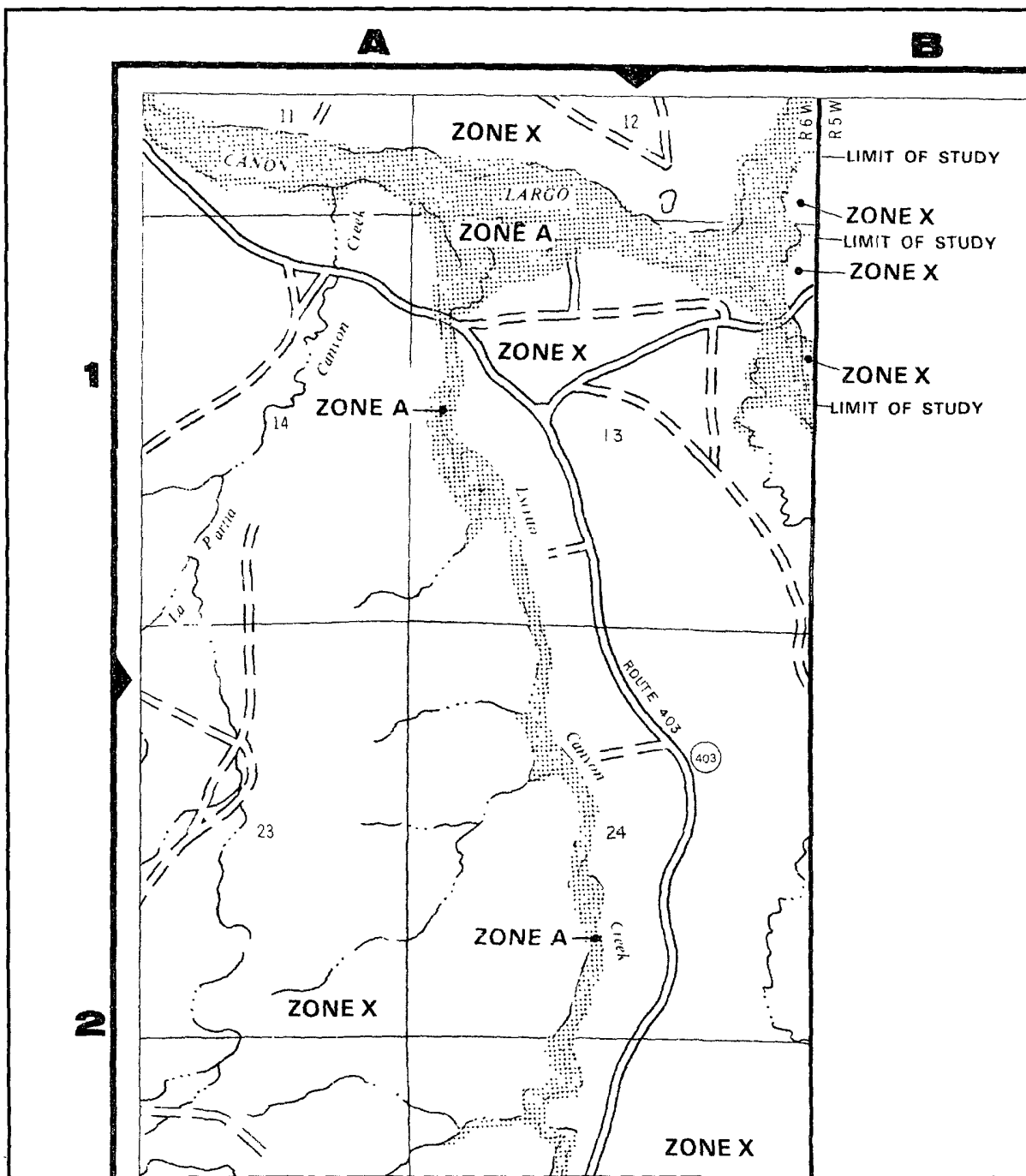
## Wetland Requirements

The **Canyon Largo Unit Com #318E** is located near a possible wetland as indicated on the topographic map provided with information from the USGS. Due to this a field inspection was performed on **July 7<sup>th</sup>, 2008** and it was determined the subject well does not meet the criteria of a wetland as defined by the Oil Conservation Division.

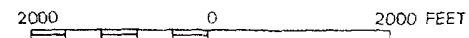
I hereby certify the above statement is true and accurate to the best of my ability.

*Crystal Tafaya*  
Regulatory Technician

*7/21/08*  
Date



APPROXIMATE SCALE

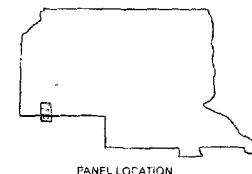


NATIONAL FLOOD INSURANCE PROGRAM

# **FIRM** FLOOD INSURANCE RATE MAP

**RIO ARriba COUNTY,  
NEW MEXICO  
UNINCORPORATED AREAS**

PANEL 925 OF 1325  
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

**COMMUNITY-PANEL NUMBER**

350049 0925 B

**EFFECTIVE DATE:**

JANUARY 5, 1989



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

### **Siting Criteria Compliance Demonstrations**

The Canyon Largo Unit Com 318E is not located in an unstable area. The location is not over a mine and is not on the side of a hill. The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other watercourse.

## ***Hydrogeological report for Canyon Largo Unit Com #318E***

### **Regional Hydrogeological context:**

The San Jose Formation of Eocene age occurs in New Mexico and Colorado, and its outcrop forms the land surface over much of the eastern half of the central basin. It overlies the Nacimiento Formation in the area generally south of the Colorado-New Mexico State line and overlies the Animas Formation in the area generally north of the State line.


The San Jose Formation was deposited in various fluvial-type environments. In general, the unit consists of an interbedded sequence of sandstone, siltstone, and variegated shale. Thickness of the San Jose Formation generally increases from west to east (200 feet in the west and south to almost 2,700 feet in the center of the structural basin).

Ground water is associated with alluvial and fluvial sandstone aquifers. Thus, the occurrence of ground water is mainly controlled by the distribution of sandstone in the formation. The distribution of such sandstone is the result of original depositional extent plus any post-depositional modifications, namely erosion and structural deformation. Transmissivity data for San Jose Formation are minimal. Values of 40 and 120 feet squared per day were determined from two aquifer tests (Stone et al, 1983, table 5). The reported or measured discharge from 46 water wells completed in San Jose Formation ranges from 0.15 to 61 gallons per minute and the median is 5 gallons per minute. Most of the wells provide water for livestock and domestic use.

The San Jose Formation is a very suitable unit for recharge from precipitation because soils that form on the unit are sandy and highly permeable and therefore readily adsorb precipitation. However, low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the San Jose Formation by the San Juan River and its tributaries all tend to reduce the effective recharge to the unit.

Stone et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico: Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p.



<div style="border: 1px solid black; width: 100%; height: 100%; position: relative;"> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black;"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(45deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(-45deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(90deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(-90deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(180deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(-180deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(270deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(-270deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(360deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(-360deg);"></div> </div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(45deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(-45deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(90deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(-90deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(180deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(-180deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(270deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(-270deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(360deg);"></div> <div style="position: absolute; top: 10%; left: 10%; width: 80%; height: 80%; border: 1px solid black; transform: rotate(-360deg);"></div>	<div style="border: 1px solid black; padding: 5px;"> <b>16</b>  W/2 DEDICATED ACREAGE  USA SF-080594  SECTION 13  T-24-N, R-6-W </div> <div style="border: 1px solid black; padding: 5px; margin-top: 20px;"> WELL FLAG  NAD 83  LAT: 38.368471° N  LONG: 107.423287° W  NAD 27  LAT: 38°18.507483° N  LONG: 107°25.361075° W </div> <div style="border: 1px solid black; padding: 5px; margin-top: 20px;"> <b>17 OPERATOR CERTIFICATION</b>  I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  Signature: <u>Sasha Spangler</u>  Printed Name: <u>Sasha Spangler</u>  Regulatory Tech.  Title and E-mail Address: <u>9-18-07</u>  Date: </div> <div style="border: 1px solid black; padding: 5px; margin-top: 20px;"> <b>18 SURVEYOR CERTIFICATION</b>  I hereby certify that the well location shown on this plot 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.  Date of Survey: <u>8/28/07</u>  Signature and Seal of Professional Surveyor:    Certificate Number: <u>NM 11393</u> </div>
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CONSTRUCTION SITES SHALL ONE (1) OR LOCATION OF ANY MINES OR UNMINED DOMES  
PIPLINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION

P O BOX 328  
BLOOMFIELD,NM, 87413  
PHONE. (505) 325-7707

# BURLINGTON RESOURCES OIL AND GAS COMPANY LP

CANYON LARGO UNIT COM #318E

1040' FSL, 1700' FWL

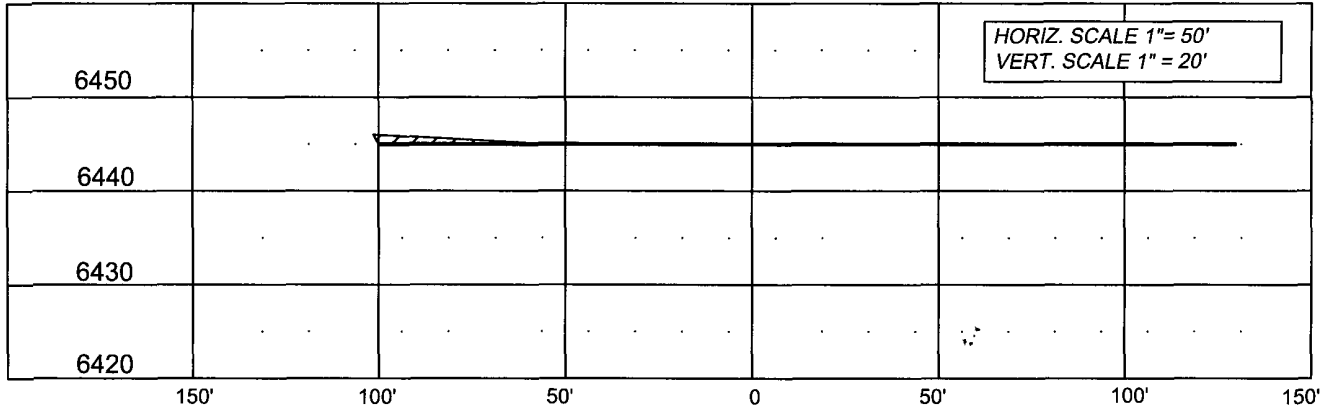
SECTION 13, T-24-N, R-6-W, N.M.P.M.,

RIO ARRIBA COUNTY, NEW MEXICO

ELEV.: 6445 NAVD88

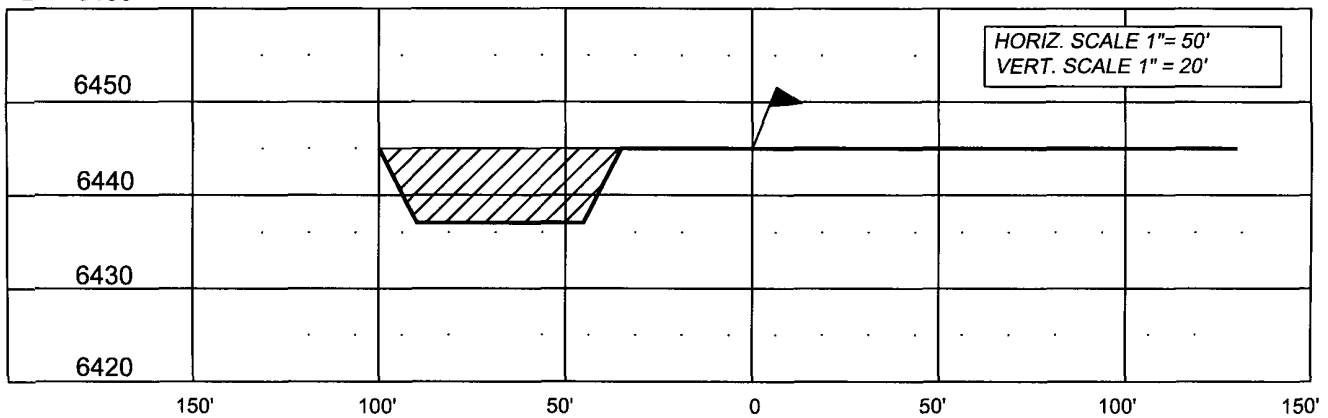
A - A' 6460

C/L



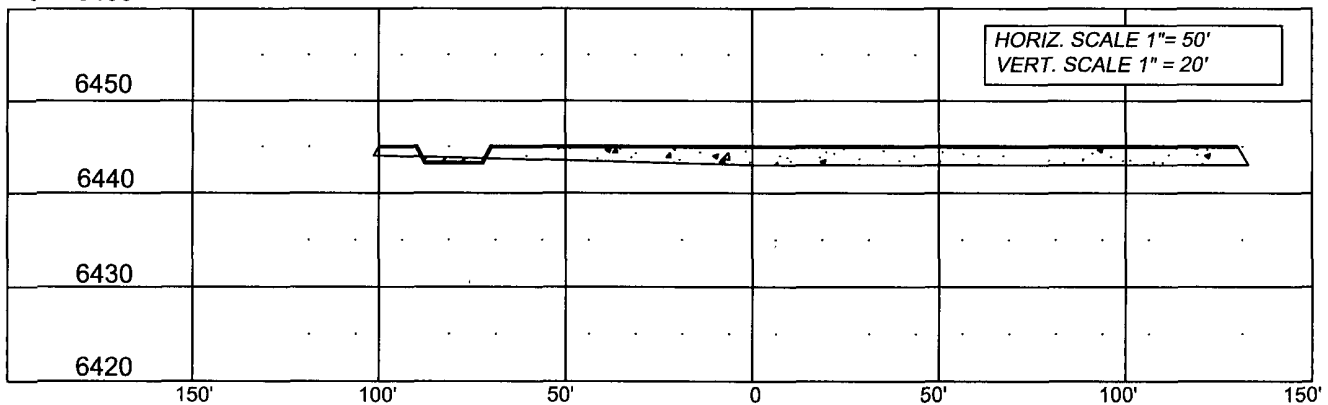
B - B' 6460

C/L



C - C' 6460

C/L



NOTE: CCI IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES

CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD PRIOR TO CONSTRUCTION

## REVISIONS

NO	DESCRIPTION	REVISED BY	DATE
1	ISSUED FOR REVIEW	TJR	8/29/07

**CCI**

P.O. BOX 328  
BLOOMFIELD, NM, 87413  
PHONE (505) 325-7707

**CHENAULT CONSULTING INC.**

**Burlington Resources Oil & Gas Company, LP**  
**San Juan Basin**  
**Pit Design and Construction Plan**

In accordance with Rule 19.15.17 the following information describes the design and construction of temporary pits on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

**General Plan:**

1. BR will design and construct a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
2. Prior to constructing the pit, topsoil will be stockpiled in the construction zone for later use in restoration.
3. BR will post a well sign, not less than 12" by 24", on the well site prior to construction of the temporary pit. The sign will list the operator on record as the operator; the location of the well site by unit letter, section, township range; and emergency telephone numbers.
4. BR shall construct all new fences utilizing 48" steel mesh field-fence (hogwire) on the bottom with a single strand of barbed wire on top. T-posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T-post. Temporary pits will be fenced at all times excluding drilling or workover operations, when the front side of the fence will be temporarily removed for operational purposes.
5. BR shall construct the temporary pit so that the foundation and interior slopes are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure.
6. BR shall construct the pit so that the slopes are no steeper than two horizontal feet to 1 vertical foot.
7. Pit walls will be walked down by a crawler type tractor following construction
8. All temporary pits will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
9. Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
10. All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep.
11. BR will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used whenever possible. BR will ensure all field seams are welded by qualified personnel. Field seams will be overlapped four to six inches and will be oriented parallel to the line of maximum slope. BR will minimize the number of field seams in corners and irregularly shaped areas.
12. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
13. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
14. The volume of the pit shall not exceed 10 acre-feet, including freeboard.
15. Temporary blow pits will be constructed to allow gravity flow to discharge into lined drill pit.
16. The lower half of the blow pit (nearest lined pit) will be lined with the same 20 mil liner. The upper half of the blow pit will remain unlined as allowed in Rule 19.15.17.11 F.11.
17. BR will not allow freestanding liquids to remain on the unlined portion of a temporary blow pit.

**Burlington Resources Oil & Gas Company, LP**  
**San Juan Basin**  
**Maintenance and Operating Plan**

In accordance with Rule 19.15.17 the following information describes the operation and maintenance of temporary pits on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

**General Plan:**

1. BR will operate and maintain a temporary pit to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
2. BR will conserve drilling fluids by transferring liquids to pits ahead of the rigs whenever possible. All other drilling fluids will be disposed at Basin Disposal Inc., permit # NM-01-005.
3. BR will not discharge or store any hazardous waste in any temporary pit.
4. If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then BR shall notify the Aztec Division office by phone or email within 48 hours of the discovery and repair the damage or replace the liner.
5. If a leak develops below the liquid's level, BR shall remove all liquids above the damaged liner within 48 hours and repair the damage or replace the liner. BR shall notify the Aztec Division office by phone or email within 48 hours of the discovery for leaks less than 25 barrels BR shall notify the Aztec Division office as required pursuant to Subsection B of 19.15.3.116 NMAC shall be reported within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition, immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of 19.15.3.116 NMAC shall be reported to the division's Environmental Bureau Chief.
6. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
7. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
8. BR shall immediately remove any visible layer of oil from the surface of the temporary pit after cessation of a drilling or workover operation. Oil absorbent booms will be utilized to contain and remove oil from the pit's surface. An oil absorbent boom will stored on-site until closure of pit.
9. Only fluids generated during the drilling or workover process may be discharged into a temporary pit.
10. BR will maintain the temporary pit free of miscellaneous solid waste or debris.
11. During drilling or workover operations, BR will inspect the temporary pit at least once daily to ensure compliance with this plan. Inspections will be logged in the IADC reports. BR will file this log with the Aztec Division office upon closure of the pit.
12. After drilling or workover operations, BR will inspect the temporary pit weekly so long as liquids remain in the temporary pit. A log of the inspections will be stored at BR's office electronically and will be filed with the Aztec Division office upon closure of the pit.
13. BR shall maintain at least two feet of freeboard for a temporary pit.
14. BR shall remove all free liquids from a temporary pit within 30 days from the date the operator releases the drilling rig.
15. BR shall remove all free liquids from a cavitation pit within 48 hours after completing cavitation. BR may request additional time to remove liquids from the Aztec Division office if it is not feasible to remove liquids within 48 hours.

# **Burlington Resources Oil & Gas Company, LP**

## **San Juan Basin**

### **Closure Plan**

In accordance with Rule 19.15.17.12 NMAC the following information describes the closure requirements of temporary pits on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of pit closure. Closure report will be filed on C-144 and incorporate the following:

- Details on Capping and Covering, where applicable.
- Plot Plan (Pit Diagram)
- Inspection Reports
- Sampling Results
- C-105
- Copy of Deed Notice will be filed with County Clerk

#### **General Plan:**

1. All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division-approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves.
2. The preferred method of closure for all temporary pits will be on-site burial, assuming that all the criteria listed in sub-section (B) of 19.15.17.13 are met.
3. The surface owner shall be notified of BR's closing of the temporary pit as per the approved closure plan using certified mail, return receipt requested.
4. Within 6 months of the Rig Off status occurring BR will ensure that temporary pits are closed, re-contoured, and reseeded.
5. Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure via email, or verbally. The notification of closure will include the following:
  - i. Operator's name
  - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.
6. Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "All" of the liner i.e., edges of liner entrenched or buried. All excessive liner will be disposed of at a licensed disposal facility.
7. Pit contents shall be mixed with non-waste containing, earthen material in order to achieve the solidification process. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed a safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and haul.

Components	Tests Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	1000/500

9. A five point composite sample will be taken from the cavitation pit pursuant to 19.15.17.13(B)(1)(b)(i) in order to assure there has not been any type of release.

Components	Tests Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	500

10. Upon completion of solidification and testing standards being passed, the pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. If standard testing fails BR will dig and haul all contents pursuant to 19.15.17.13.i.a. After doing such, confirmation sampling will be conducted to ensure a release has not occurred.
11. During the stabilization process if the liner is ripped by equipment the Aztec OCD office will be notified within 48 hours and the liner will be repaired if possible. If the liner can not be repaired then all contents will be excavated and removed.
12. Dig and Haul Material will be transported to the Envirotech Land Farm located 16 miles south of Bloomfield on Angel Peak Road, CR 7175. Permit # NM010011
13. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
14. Notification will be sent to OCD when the reclaimed area is seeded.
15. BR shall seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) 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. Repeat seeding or planting will be continued until successful vegetative growth occurs.

Type	Variety or Cultivator	PLS/A
Western wheatgrass	Arriba	3.0
Indian ricegrass	Paloma or Rimrock	3.0
Slender wheatgrass	San Luis	2.0
Crested wheatgrass	Hy-crest	3.0
Bottlebrush Squirreltail	Unknown	2.0
Four-wing Saltbrush	Delar	.25

**Species shall be planted in pounds of pure live seed per acre:**

**Present Pure Live Seed (PLS) = Purity X Germination/100**

**Two lots of seed can be compared on the basis of PLS as follows:**

Source No. One (poor quality)

Purity 50 percent

Germination 40 percent

Percent PLS 20 percent

**5 lb. bulk seed required to make  
1 lb. PLS**

Source No. two (better quality)

Purity 80 percent

Germination 63 percent

Percent PLS 50 percent

**2 lb. bulk seed required to make  
1 lb. PLS**

16. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time of all wells on the pad are abandoned. The operator's information will include the following: Operator Name, Lease Name, Well Name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.



**Burlington Resources Oil & Gas Company, LP**  
**San Juan Basin**  
**Below Grade Tank Design and Construction**

In accordance with NMAC 19.15.17 the following information describes the design and construction of below grade tanks on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for all below grade tanks (BGT). A separate plan will be submitted for any BGT which does not conform to this plan.

General Plan:

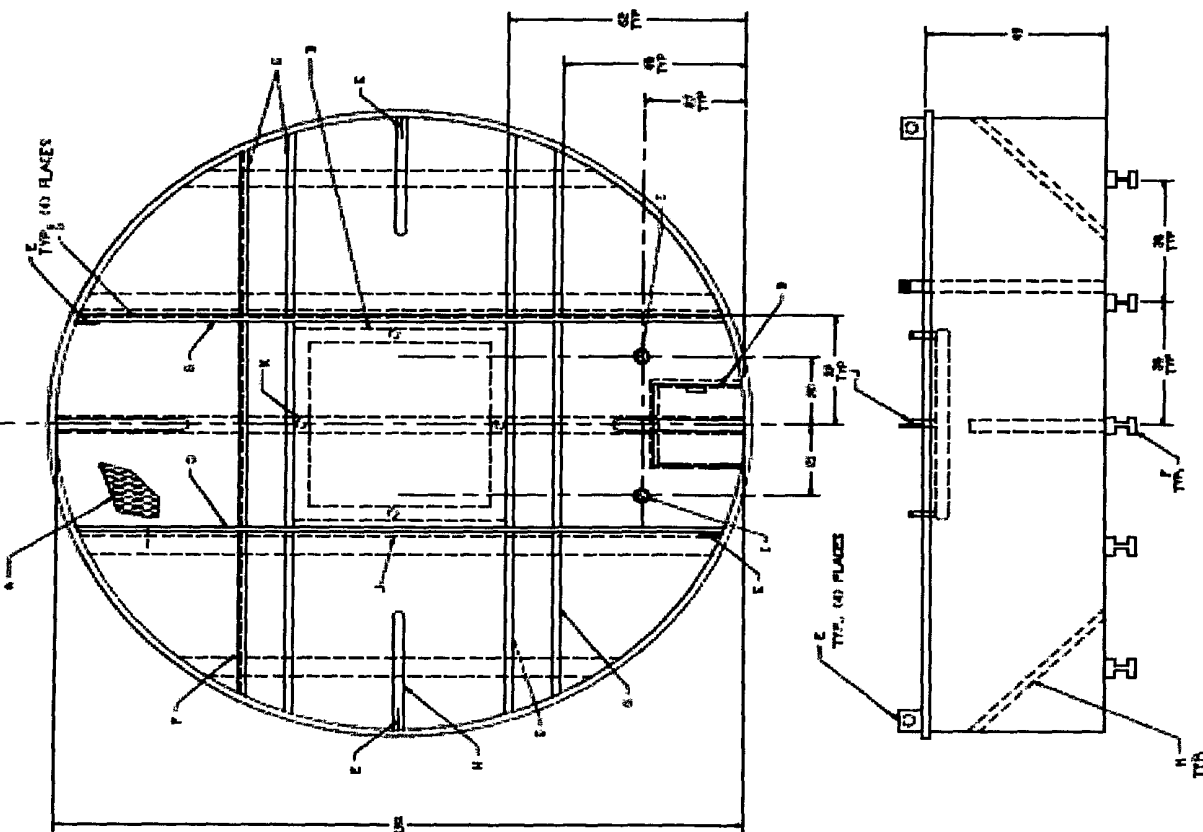
1. BR will design and construct a BGT to contain liquids and to prevent contamination of fresh water and protect public health and environment.
2. BR will use the general location sign posted on location. If no general sign is posted a separate sign at the location of the BGT will be provided.
3. BR shall construct fencing around the BGT using 4 foot hog wire fencing topped with two strands of barbed wire, or with a pipe top rail. A six foot chain link fence topped with three strands of barbed wire will be use if the well location is within 1000 feet of permanent residence, school, hospital, institution or church.
4. BR will construct a expanded metal covering on the top of the BGT
5. BR shall ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight.
6. The BR below-grade tank system shall have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom.
7. BR shall construct a below-grade tank to prevent overflow and the collection of surface water run-on.
8. BR will construct and use a below-grade tank that does not have double walls. The below-grade tank's side walls will be open for visual inspection for leaks, the below-grade tank's bottom is elevated a minimum of six inches above the underlying ground surface and the below-grade tank is underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected.
9. BR shall equip below-grade tanks designed in this manner with a properly operating automatic high-level shut-off control device and manual controls to prevent overflows.
10. The geomembrane liner shall consist of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material that the appropriate division district office approves. The geomembrane liner shall have a hydraulic conductivity no greater than  $1 \times 10^{-9}$  cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner material shall be resistant to

ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A.

11. The general specification for design and construction are attached in the BR document.

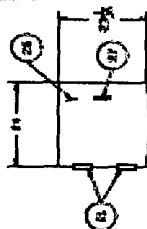
120 BBL PIT TANKS

ALTOGO SPRING - ELEMENTS



DATE	DESCRIPTION	DEBIT	CREDIT	BALANCE
1934	1/1 Balance			10.42
2	1/2 Balance			10.42
3	1/3 Balance			10.42
4	1/4 Balance			10.42
5	1/5 Balance			10.42
6	1/6 Balance			10.42
7	1/7 Balance			10.42
8	1/8 Balance			10.42
9	1/9 Balance			10.42
10	1/10 Balance			10.42
11	1/11 Balance			10.42
12	1/12 Balance			10.42
13	1/13 Balance			10.42
14	1/14 Balance			10.42
15	1/15 Balance			10.42
16	1/16 Balance			10.42
17	1/17 Balance			10.42
18	1/18 Balance			10.42
19	1/19 Balance			10.42
20	1/20 Balance			10.42
21	1/21 Balance			10.42
22	1/22 Balance			10.42
23	1/23 Balance			10.42
24	1/24 Balance			10.42
25	1/25 Balance			10.42
26	1/26 Balance			10.42
27	1/27 Balance			10.42
28	1/28 Balance			10.42
29	1/29 Balance			10.42
30	1/30 Balance			10.42
31	1/31 Balance			10.42
32	1/32 Balance			10.42
33	1/33 Balance			10.42
34	1/34 Balance			10.42
35	1/35 Balance			10.42
36	1/36 Balance			10.42
37	1/37 Balance			10.42
38	1/38 Balance			10.42
39	1/39 Balance			10.42
40	1/40 Balance			10.42
41	1/41 Balance			10.42
42	1/42 Balance			10.42
43	1/43 Balance			10.42
44	1/44 Balance			10.42
45	1/45 Balance			10.42
46	1/46 Balance			10.42
47	1/47 Balance			10.42
48	1/48 Balance			10.42
49	1/49 Balance			10.42
50	1/50 Balance			10.42
51	1/51 Balance			10.42
52	1/52 Balance			10.42
53	1/53 Balance			10.42
54	1/54 Balance			10.42
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57	1/57 Balance			10.42
58	1/58 Balance			10.42
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62	1/62 Balance			10.42
63	1/63 Balance			10.42
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66	1/66 Balance			10.42
67	1/67 Balance			10.42
68	1/68 Balance			10.42
69	1/69 Balance			10.42
70	1/70 Balance			10.42
71	1/71 Balance			10.42
72	1/72 Balance			10.42
73	1/73 Balance			10.42
74	1/74 Balance			10.42
75	1/75 Balance			10.42
76	1/76 Balance			10.42
77	1/77 Balance			10.42
78	1/78 Balance			10.42
79	1/79 Balance			10.42
80	1/80 Balance			10.42
81	1/81 Balance			10.42
82	1/82 Balance			10.42
83	1/83 Balance			10.42
84	1/84 Balance			10.42
85	1/85 Balance			10.42
86	1/86 Balance			10.42
87	1/87 Balance			10.42
88	1/88 Balance			10.42
89	1/89 Balance			10.42
90	1/90 Balance			10.42
91	1/91 Balance			10.42
92	1/92 Balance			10.42
93	1/93 Balance			10.42
94	1/94 Balance			10.42
95	1/95 Balance			10.42
96	1/96 Balance			10.42
97	1/97 Balance			10.42
98	1/98 Balance			10.42
99	1/99 Balance			10.42
100	1/100 Balance			10.42

NOZZLE SCHEDULE		
INCH	MM	DESCRIPTION
2	1	LOW LIFT CONCRETE
1	5	STANDARD LIFT CONCRETE
1	4	NON-SPRAYER CONCRETE
1	3	MASONRY CONCRETE

[illegible]

**Burlington Resources Oil & Gas Company, LP**  
**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 Below Grade Pit (BGT) on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for all BGT. A separate plan will be submitted for any BGT which does not conform to this plan.

**General Plan:**

1. BR will operate and maintain a BGT to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
2. BR shall not allow a below-grade tank to overflow or allow surface water run-on to enter the below-grade tank.
3. BR shall continuously remove any visible or measurable layer of oil from the fluid surface of a below-grade tank in an effort to prevent significant accumulation of oil overtime.
4. BR shall inspect the below-grade tank at least monthly and maintain a written record of each inspection for five years.
5. BR shall maintain adequate freeboard to prevent overtopping of the below-grade tank.

**Burlington Resources Oil & Gas Company, LP**  
**San Juan Basin**  
**Below Grade Tank Closure Plan**

In accordance with Rule 19.15.17.12 NMAC the following information describes the closure requirements of Below Grade Tanks (BGTs) on Burlington Resources Oil & Gas Company, LP locations hereinafter known as BR locations. This is BR's standard procedure for all BGTs. A separate plan will be submitted for any BGT which does not conform to this plan.

General Requirements:

1. BR shall close a below-grade tank within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.
2. BR shall close an existing below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
3. BR shall close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on C-144
4. BR shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility.
5. BR shall remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.
6. If there is any on-site equipment associated with a below-grade tank, then BR shall remove the equipment, unless the equipment is required for some other purpose.
7. BR shall test the soils beneath the below-grade tank to determine whether a release has occurred. BR shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2 mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100

mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. BR shall notify the division of its results on form C-141.

8. If BR or the division determines that a release has occurred, then BR shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.
9. If contamination is confirmed by field sampling. BR will follow the Guidelines For Remediation Of Leaks, Spills, and Releases NMOCD August 1993 when remediating contaminants identified
10. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then BR shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.
11. Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure via email, or verbally. The notification of closure will include the following:
  - i. Operator's name
  - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.
12. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on C-144 and incorporate the following:
  - Details on Capping and Covering, where applicable.
  - Inspection Reports
  - Sampling Results
13. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
14. BR shall seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) 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. Repeat seeding or planting will be continued until successful vegetative growth occurs.

15. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
16. The surface owner shall be notified of BR's closing of the below-grade tank as per the approved closure plan using certified mail, return receipt requested.