

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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

Type of action: ☒ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method

**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>	<b>RCVD JUL 10 '08</b> <b>OIL CONS. DIV.</b>
Facility or well name: <b>San Juan 27-4 Unit 143B</b>	<b>DIST. 3</b>
API Number: <b>30-039-30327</b>	OCD Permit Number: _____
U/L or Qtr/Qtr: <b>A (NENE)</b> Section: <b>22</b> Township: <b>27N</b> Range: <b>4W</b> County: <b>Rio Arriba</b>	
Center of Proposed Design: Latitude: <b>36.563802778' N</b> Longitude: <b>107.232775000' 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 _____ yd3 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.**

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

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

☐ Yes ☒ No

☐ NA

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

*(Applied to permanent pits)*

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

☐ 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.**

☐ 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 Tanks)

☒ 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 consideration)

**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.  
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.

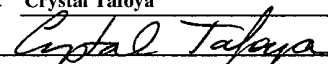
Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

**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:  Date: 7/9/2008  
e-mail address: crystal.tafoya@conocophillips.com Telephone: 505-326-9837

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

OCD Representative Signature:  Approval Date: 7/17/08  
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**

Township: 27N Range: 04W 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

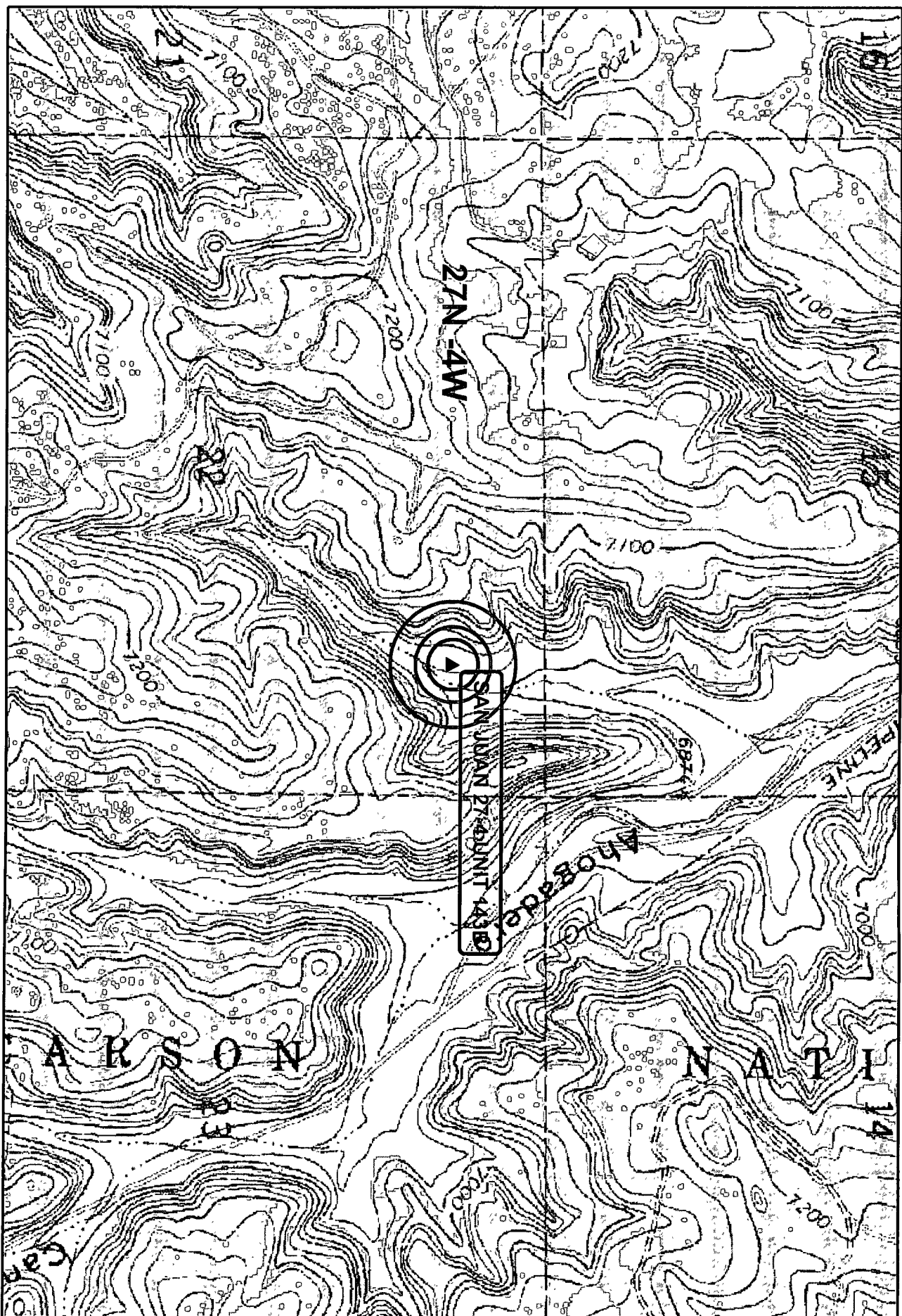
Help

**WATER COLUMN REPORT 07/08/2008**

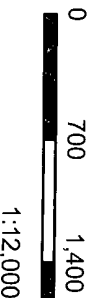
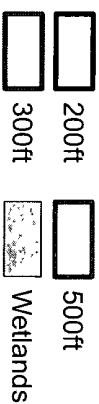
(quarters are 1=NW 2=NE 3=SW 4=SE)  
 (quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column
<u>SJ 00048</u>	27N	04W	01							143		
<u>SJ 01049</u>	27N	04W	18	4	2	2				15		
<u>SJ 01205</u>	27N	04W	34	4	4	4				3054	750	230

Record Count: 3

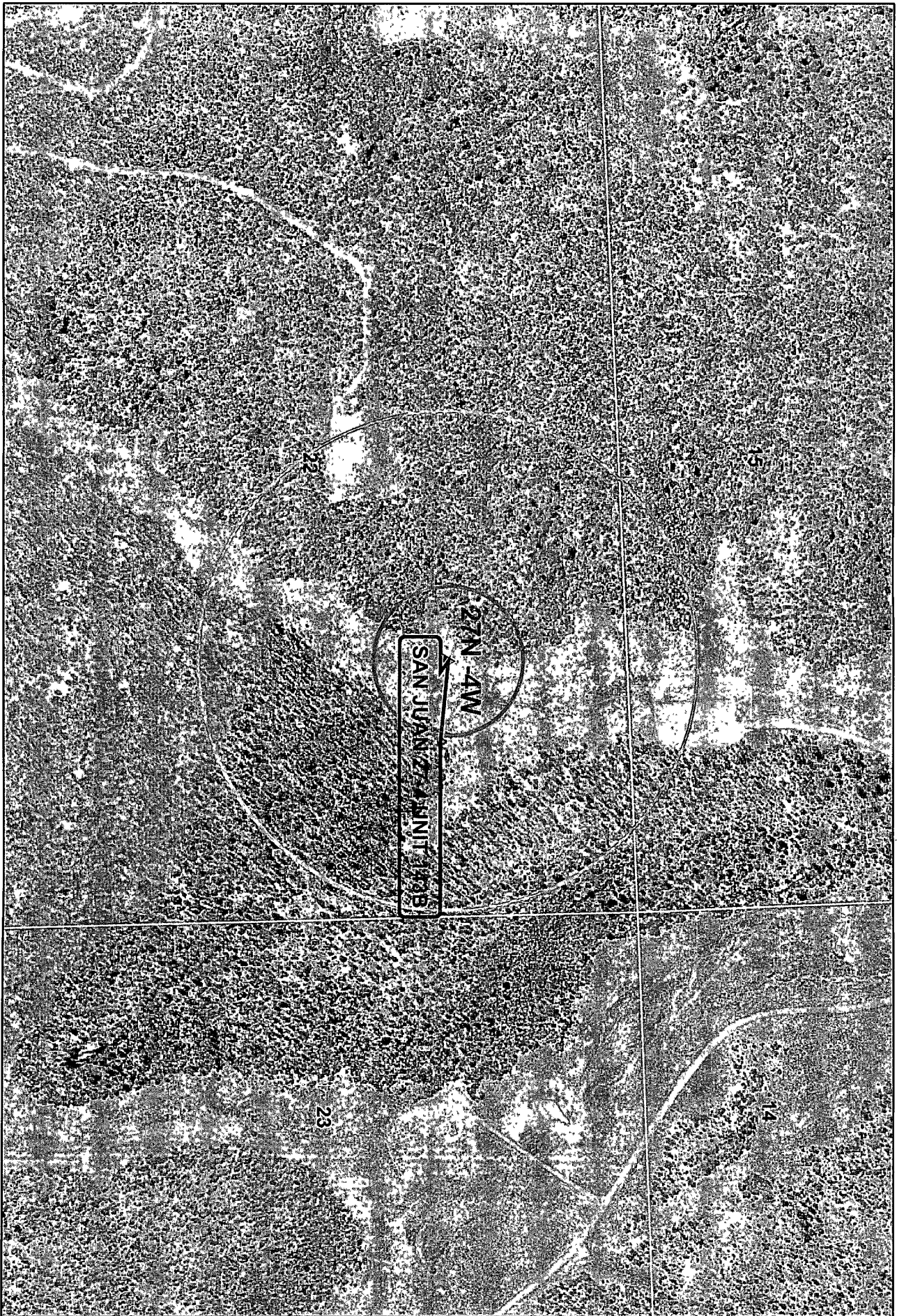


Wetlands data acquired from U.S. Fish  
and Wildlife  
<http://wetlandsfws.er.usgs.gov>



1:12,000  
NAD\_1983\_StatePlane\_FeetNWest\_FIPS\_3003  
7/08





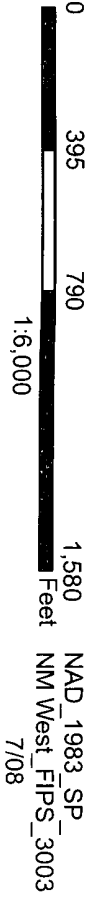
Data Source  
Aerial flown locally Sedgewick in 2005.



1000ft



300ft



# SJ 27-4 #143B Mines, Mills & 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 : 1,942,550





**FEMA Map – 100 year floodplain**

The FEMA Map for the San Juan 27-4 Unit 143B is unavailable due to its location being in the forest. FEMA does not provide floodplain information for Forest Service land.

This well is not located near a wash or watercourse and is not in 100 year floodplain as visible on the topographic map.

**Siting Criteria Compliance Demonstrations**

The San Juan 27-4 Unit 143B 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 San Juan 27-4 #143B***

### **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.

### **Site specific information:**

#### **Surface hydrology:**

The site is located on top of Cereza Mesa drained by a number of small intermittent drainages.

#### **1<sup>st</sup> water-bearing formation:**

San Jose, tertiary

#### **Formation thickness:**

700 feet

#### **Underlying formation:**

Nacimiento, tertiary

#### **Depth to groundwater:**

A number of nearby water wells in the valley bottom draw water from about 30–200-foot depth.

## Tafoya, Crystal

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**From:** Tafoya, Crystal  
**Sent:** Monday, July 07, 2008 2:02 PM  
**To:** 'jreidinger@fs.fed.us'  
**Subject:** OCD Pit Closure Notification

The following wells will be closed on-site -

San Juan 27-4 Unit 143B

San Juan 27-4 Unit 54N

San Juan 28-4 Unit 17M

The new OCD Pit Rule 17 requires that the surface owner be notified of the on-site closure of the temporary pit. Please feel free to contact me at any time if you have any questions.

Thank you,

Crystal L. Tafoya  
Regulatory Technician  
**ConocoPhillips Company**  
San Juan Business Unit  
Phone: (505) 326-9837  
Email: Crystal.Tafoya@conocophillips.com

# BURLINGTON RESOURCES OIL AND GAS COMPANY

SAN JUAN 27-4 UNIT 143B

785' FNL, 900' FEL

SECTION 22, T27N, R04W, N.M.P.M.,

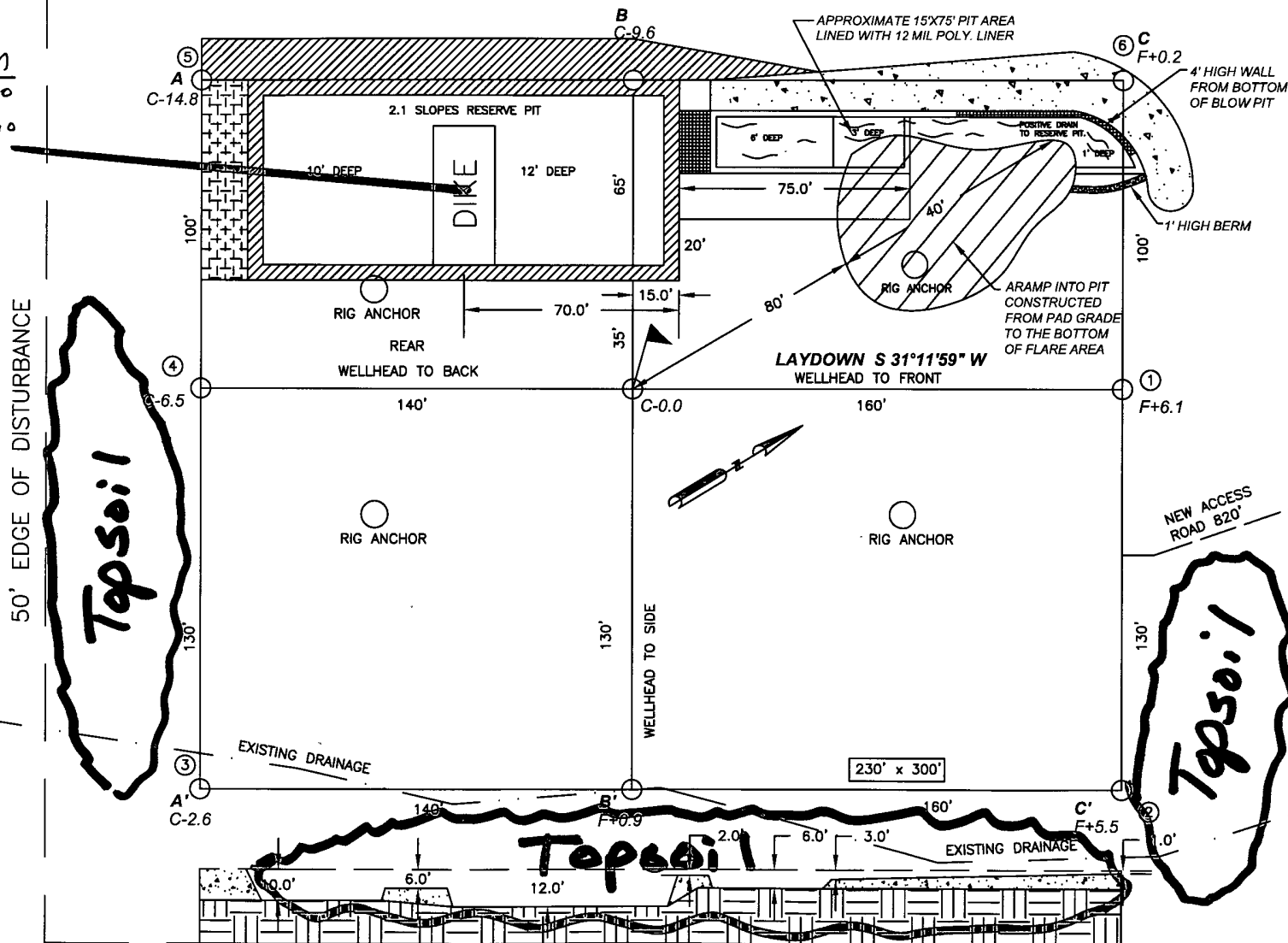
RIO ARriba COUNTY, NEW MEXICO

GROUND ELEV.: 6924' NAVD88

DATE: OCTOBER 24, 2006

NEW ACCESS ROAD 820'

Pit Location  
Lat. 36.56377°  
Long. 107.27381°  
NAD 1983



PIT CROSS SECTION

NAD 83 LAT.: 36.563802778°N / LONG.: 107.232775000°W

330' x 400' = 3.03 ACRES

CCI

CHENAULT CONSULTING INC.  
1300 W. BROADWAY  
BLOOMFIELD, NM, 87413  
PHONE: (505)632-7777

NOTES:

1. RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW-3' WIDE AND 1' ABOVE SHALLOW SIDE).

2. C.C.I. SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.

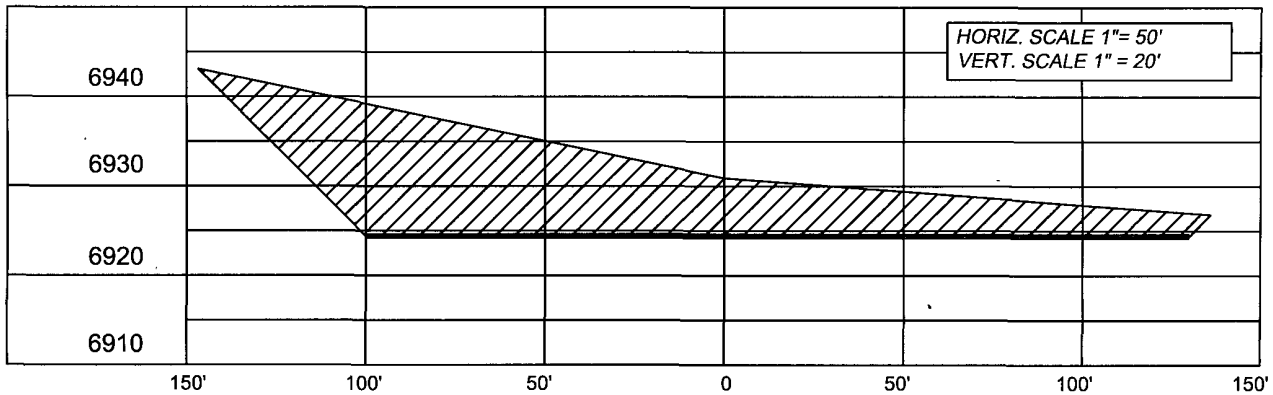
CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED  
PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

# BURLINGTON RESOURCES OIL AND GAS COMPANY

SAN JUAN 27-4 UNIT 143B  
 785' FNL, 900' FEL  
 SECTION 22, T27, R04W, N.M.P.M.,  
 RIO ARriba COUNTY, NEW MEXICO  
 ELEV.: 6924' NAVD88

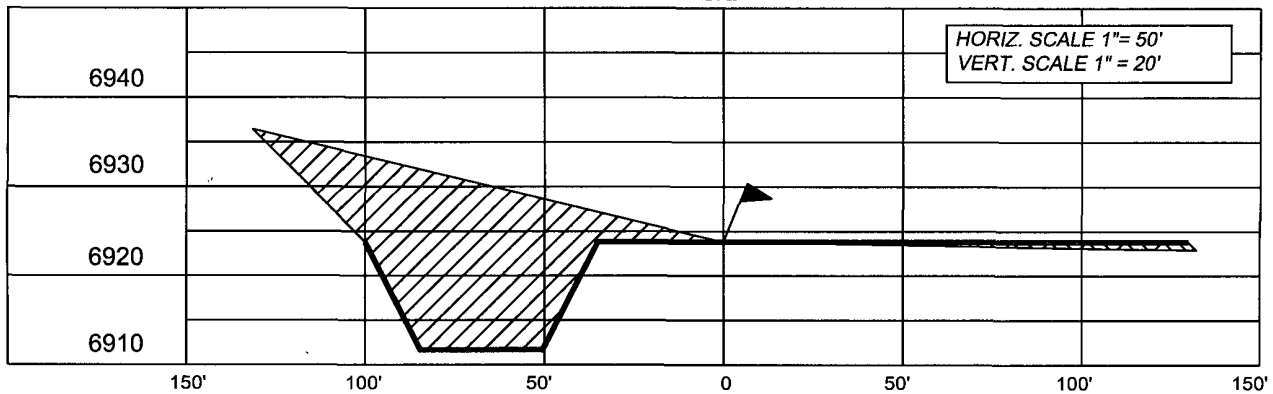
A - A'

C/L



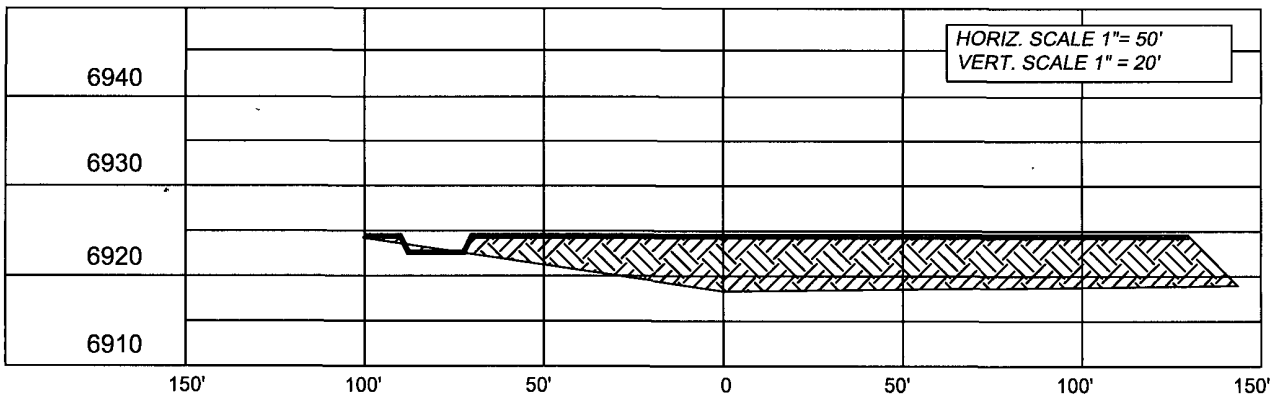
B - B'

C/L



C - C'

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

**CCI**

1300 W BROADWAY  
 BLOOMFIELD, NM, 87413  
 PHONE (505)632-7777

**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.

Forest Service Seed Mix	Variety	Pounds/Acre
Indian ricegrass	Paloma	1.0
Western wheatgrass	Arriba	2.0
Blue Gramma	Hacheta or Alma	1.0
Antelope Bitterbrush	Unknown	.10
Four-wing saltbush	Unknown	.25
Pubescent wheatgrass	Luna	2.0
Intermediate wheatgrass	Oahe	2.0
Small burnet	Delar	1.0

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:

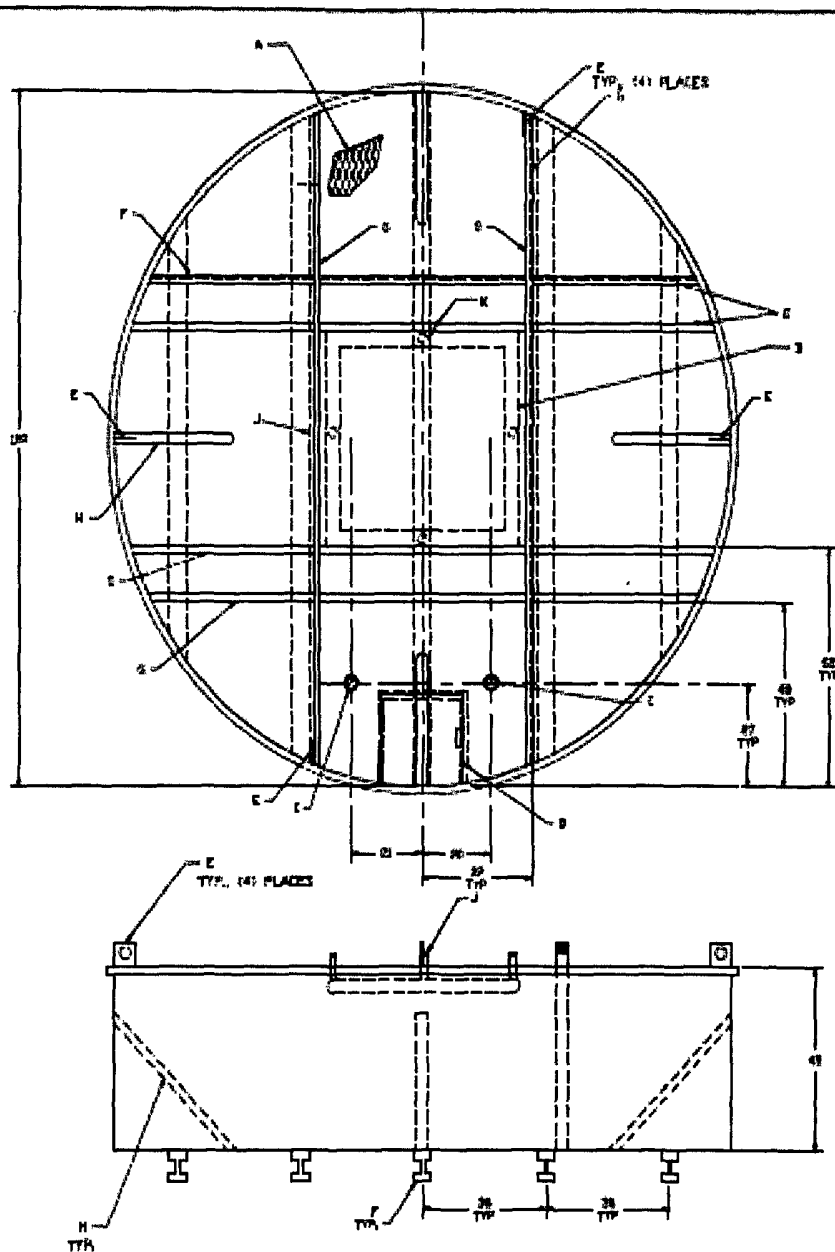
1. BR will design and construct a BGT to contain liquids and to prevent contamination of fresh water and protect public health and environment.
2. BR will use the general location sign posted on location. If no general sign is posted a separate sign at the location of the BGT will be provided.
3. BR 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.

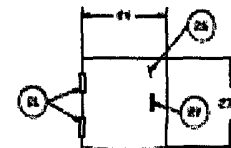
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## AUTOCAD DRAWING - ELEMENTS



Expenditure Account	Expenditure	Spent Money 7/2/59
A	Overhead 20% of expenditure except salary	35.42
B	Depreciation	425.00
C	Land for house 2% to fund on 22 months	44
D	M.P. of electricity 40 paise	63
E	Land for house	9
F	Water charges house 20 paise on 20 paise	7
G	House building 20% of 20 paise on 20 paise	425.00
H	House building 20% of 20 paise on 20 paise	425.00
I	House building 20% of 20 paise on 20 paise	425.00
J	House building 20% of 20 paise on 20 paise	425.00
K	House building 20% of 20 paise on 20 paise	425.00
L	House building 20% of 20 paise on 20 paise	425.00
M	House building 20% of 20 paise on 20 paise	425.00

NOZZLE SCHEDULE		
ITEM	SIZE	DESCRIPTION
2	2"	HEAD LIFT CONNECTION
1	2"	REARWARD LEAK CONNECTION
2	2"	NON-SUPPLY CONNECTION
8	2"	BATTERY CONNECTION

[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

7/8/2008

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.

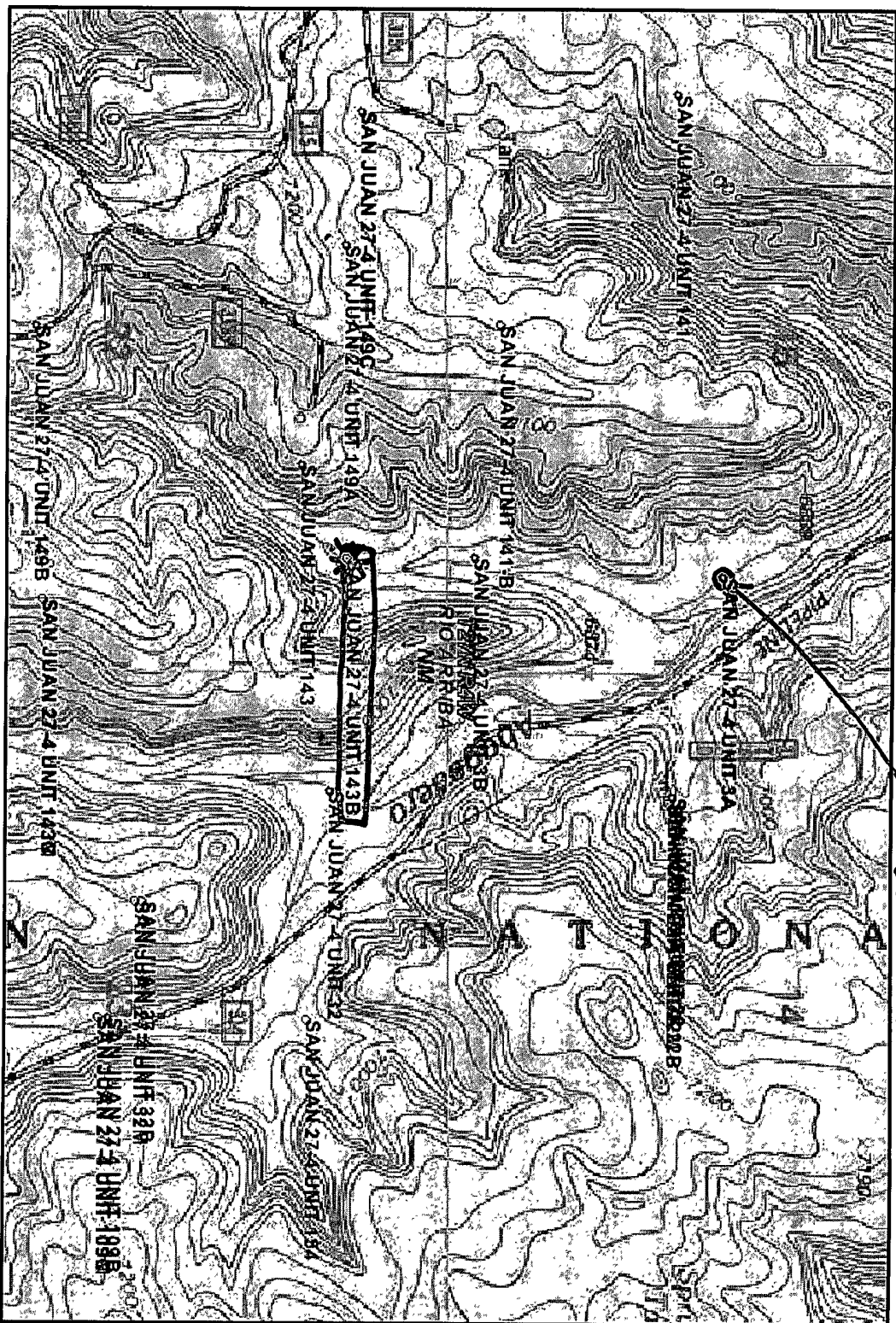
7/8/2008

# SAN JUAN 27-4 UNIT 143B

(T-027N R-004W Sec. 22 A) ELEV. 6924'

SAN JUAN 27-4 UNIT 3A - 90  
ELEV. 6864'

Page 1 of 2  
RCUD JUL 14 08  
OIL CONS. DIV.  
DIST. 2



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DI

(See  
instructions on  
reverse side)

FOR APPROVED

OMB NO 1004-0137

Expires December 31 1991

BLM SF-080674

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other <input type="checkbox"/>			6 IF INDIAN, ALLOTTEE OR TRIBE NAME San Juan 27-4 Unit		
b TYPE OF COMPLETION NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR <input type="checkbox"/> Other <input type="checkbox"/>			7 UNIT AGREEMENT NAME San Juan 27-4 Unit		
2 NAME OF OPERATOR BURLINGTON RESOURCES OIL & GAS COMPANY			9 API WELL NO 30-039-25915		
3 ADDRESS AND TELEPHONE NO. PO BOX 4289, Farmington, NM 87499 (505) 326-9700			10. FIELD AND POOL, OR WLOCAT Blanco MV/Basin DK		
4 LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 2145°FSL, 630°FEL  At top prod. interval reported below  At total depth NSL-4076, DHC-2114			11 SEC. T, R, M, OR BLOCK AND SURVEY OR AREA  Sec. 15, T-27-N, R-4-W		
14. PERMIT NO.			DATE ISSUED		
15 DATE SPUNDED 9-27-98			16 DATE T.D. REACHED 10-6-98		
17 DATE COMPL. (Ready to prod) 11-6-98			18. ELEVATIONS (DF, RKB, RT, BR, ETC.)* 6864 GR, 6880 KB		
20 TOTAL DEPTH, MD & TVD 8265			21. PLUG, BACK T.D., MD & TVD 8217		
22. IF MULTIPLE COMPL. HOW MANY* 2			23. INTERVALS DRILLED BY 0-8265		
24. PRODUCTION INTERVAL (S) OF THIS COMPLETION-TOP, BOTTOM, NAME (MD AND TVD)* 5453-6121 Mesaverde Commingled w/Dakota			25. WAS DIRECTIONAL SURVEY MADE		
26. TYPE ELECTRIC AND OTHER LOGS RUN AIT-CDL, CNL-GR, CBL			27. WAS WELL CORED No		

28 CASING RECORD (Report all strings set in well)					
CASING SIZE/GRADE	WEIGHT, LB /FT	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
9 5/8	32.3#	517	12 1/4	472 cu.ft.	
7	20#	4096	8 3/4	1227 cu.ft.	
4 1/2	10.5#	8262	6 1/4	755 cu.ft.	

29 LINER RECORD				30 TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	8083	

31 PERFORATION RECORD (Interval, size and number)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
5453, 5461, 5503, 5509, 5517, 5530, 5537, 5541, 5545, 5552, 5559, 5565, 5570, 5572, 5627, 5630, 5639, 5641, 5647, 5652, 5665, 5675, 5682, 5741, 5747, 5753, 5755, 5808, 5810, 5814, 5889, 5893, 5901, 5905, 5913, 5924, 5932, 5939, 5945, 5951, 5956, 5974, 5979, 5997, 6004.				DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
				5453-5814	2548 bbl slk wtr, 100,000# 20/40 Arizona sd
				5887-6121	12,500 gal slk wtr, 100,000# 20/40 Arizona sd
				Perforations cont'd on back	

33 PRODUCTION DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing				WELL STATUS (Producing or shut-in) SI	
DATE OF TEST 11-6-98	HOURS TESTED	CHOKE SIZE	PROD'N FOR TEST PERIOD	OIL-BBL	GAS-MCF	WATER-BBL	GAS-OIL RATIO
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL	GAS-MCF	WATER-BBL	OIL GRAVITY-API (CORR)	
SI 590	SI 1120	2684 Pitot Gauge					

34 DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold	TEST WITNESSED BY
---	-------------------

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 [Signature] TITLE Regulatory Administrator DATE 11-23-98

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

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

OPERATOR

FARMINGTON DISTRICT OFFICE

DEC 07 1998

ACCEPTED FOR RECORD



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN D.

(See instructions on reverse side)

FOR APPROVED

OMB NO. 1004-0137

Expires: December 31, 1991

RECEIVED

5. BASE DESIGNATION AND SERIAL NO  
SF-080674

6. INDIAN ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
San Juan 27-4 Unit

8. FARM OR LEASE NAME, WELL NO

San Juan 27-4 Unit #3A

9. API WELL NO.

30-039-25915

10. FIELD AND POOL, OR WILDCAT

Blanco MV/Basin DK

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 15, T-27-N, R-4-W

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL. OIL WELL ☐ GAS WELL ☒ DRY ☐ Other ☐

b. TYPE OF COMPLETION.

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF RESVR ☐ Other ☐

2. NAME OF OPERATOR

BURLINGTON RESOURCES OIL & GAS COMPANY

3. ADDRESS AND TELEPHONE NO.

PO BOX 4289, Farmington, NM 87499 (505) 326-9700

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 2145'FSL, 630'FEL

At top prod. interval reported below

At total depth

NSL-4076, DHC-2114

14. PERMIT NO.

DATE ISSUED

12. COUNTY OR PARISH

Rio Arriba

13. STATE

New Mexico

15. DATE SPUDDED

9-27-98

16. DATE T.D. REACHED

10-6-98

17. DATE COMPL (Ready to prod)

11-6-98

18. ELEVATIONS (OF, RKB, RT BR, ETC.)\*

6864 GR, 6880 KB

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD

8265

21. PLUG, BACK T.D., MD & TVD

8217

22. IF MULTIPLE COMPL. HOW MANY\*

2

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

0-8265

24. PRODUCTION INTERVAL (S) OF THIS COMPLETION-TOP, BOTTOM, NAME (MD AND TVD)\*

7980-8101 Dakota

Commingled w/Mesaverde

25. WAS DIRECTIONAL SURVEY MADE

26. TYPE ELECTRIC AND OTHER LOGS RUN

AIT-CDL, CNL-GR, CBL

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
9 5/8	32.3#	517	12 1/4	472 cu.ft.	
7	20#	4096	8 3/4	1227 cu.ft.	
4 1/2	10.5#	8262	6 1/4	755 cu.ft.	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	8083	

30. TUBING RECORD

31. PERFORATION RECORD (Interval, size and number)

7980, 7983, 7986, 8054, 8059, 8066, 8083, 8086, 8089, 8096, 8099, 8101

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)

AMOUNT AND KIND OF MATERIAL USED

7980-8101

25# x-link gel, 90,000# 20/40 tempered LC sd

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
		Flowing				SI	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N FOR TEST PERIOD	OIL-BBL	GAS-MCF	WATER-BBL	GAS-OIL RATIO
11-6-98			<div>→</div>		404 Pitot Gauge		
FLOW TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL	GAS-MCF	WATER-BBL	OIL GRAVITY-API (CORR.)	
SI 590	SI 1120	<div>→</div>					

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

To be sold

TEST WITNESSED BY

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 Regulatory Administrator TITLE

DATE ACCEPTED FOR RECORD

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

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

OPERATOR

FARMINGTON DISTRICT OFFICE

**DRILLING LOG**

COMPANY: BURLINGTON  
 LOCATION: SJ 27-4 #3A  
 STATE: NM  
 BIT SIZE: 6 1/2"  
 LBS COKE BACKFILL: 1500#  
 ANODE TYPE: ANOTEC 2"X60"

CONTRACT #:  
 LEGALS: 15-27-4  
 DRILLER: MERCER  
 CASING SIZE/TYPE: 20' OF 8" PVC  
 VENT PIPE: 320'  
 ANODE AMOUNT: 10

DATE: 5/7/99  
 COUNTY: RIO ARRIBA  
 DEPTH: 320'  
 COKE TYPE: LORESCO SW  
 PERF PIPE: BOTTOM 100'  
 BOULDER DRILLING:

DEPTH	DRILLER'S LOG	AMPS	DEPTH	DRILLER'S LOG	AMPS
20	SANDSTONE		310	↓	2.1
25			315		2.0
30			320	TD	TD
35			325		
40			330		
45			335		
50			340		
55			345		
60			350		
65			355		
70			360		
75			365		
80			370		
85			375		
90			380		
95			385		
100		.6	390		
105		.9	395		
110		1.0	400		
115		.5	405		
120		.4	410		
125		.7	415		
130		.6	420		
135		1.0	425		
140		.9	430		
145		.8	435		
150		.2	440		
155		.3	445		
160		.1	450		
165		.2	455		
170		.1	460		
175		.1	465		
180		.2	470		
185		.2	475		
190		.1	480		
195		.1	485		
200		.0	490		
205		.6	495		
210	SHALE	.7	500		
215		1.3	505		
220		.9	510		
225		.4	515		
230	SANDSTONE	.5	520		
235		.5	525		
240		.4	530		
245		.6	535		
250		.8	540		
255		.5	545		
260	SHALE	1.1	550		
265		2.1	555		
270		2.1	560		
275		1.4	565		
280		2.2	570		
285		1.2	575		
290		2.0	580		
295		.5	585		
300		.5	590		
305		1.6	595		

ANODE #	DEPTH	NO COKE	COKE
1	310	2.0	3.6
2	304	1.2	3.3
3	290	1.2	4.1
4	282	2.0	5.3
5	276	1.6	5.3
6	270	2.1	5.5
7	264	2.0	5.2
8	258	1.0	2.5
9	220	.9	2.9
10	214	1.3	2.9
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WATER DEPTH: 90'  
 ISOLATION PLUGS:  
 LOGGING VOLTS: 11.9  
 VOLT SOURCE: AUTO BATTERY  
 TOTAL AMPS: 11.1  
 TOTAL GB RESISTANCE: 1.072  
 REMARKS: