

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144

July 21, 2008

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

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

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

- Type of action: ☐ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☒ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

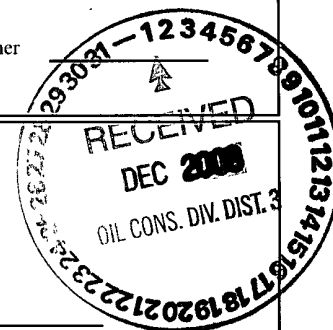
1
Operator: Burlington Resources Oil & Gas Company, LP OGRID#: 14538
Address: PO Box 4289, Farmington, NM 87499
Facility or well name: San Juan 27-4 Unit 140B
API Number: 30-039-30487 OCD Permit Number: _____
U/L or Qtr/Qtr: H(ENE) Section: 10 Township: 27N Range: 4W County: Rio Arriba
Center of Proposed Design: Latitude: 36.590006' N Longitude: 107.2244388' W NAD: ☐ 1927 ☒ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☒ String-Reinforced
Liner Seams: ☒ Welded ☒ Factory ☐ Other _____ Volume: 4400 bbl Dimensions L 65' x W 45' x D 10'

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

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

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



6
Fencing: Subsection D of 19.15.17.11 NMAC (*Applies to permanent pit, temporary pits, and below-grade tanks*)
☐ Chain link, six feet in height, two strands of barbed wire at top (*Required if located within 1000 feet of a permanent residence, school, hospital, institution or church*)
☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
☐ Alternate Please specify 4' hogwire fence with a single strand of barbed wire on top.

7
Netting: Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)
☐ Screen ☐ Netting ☐ Other _____
☐ Monthly inspections (*If netting or screening is not physically feasible*)

8
Signs: Subsection C of 19.15.17.11 NMAC
☐ 12" X 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
☒ Signed in compliance with 19.15.3 103 NMAC

9
Administrative Approvals and Exceptions:
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance
Please check a box if one or more of the following is requested, if not leave blank:
☐ Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for consideration of approval
☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10	<p>Siting Criteria (regarding permitting): 19.15.17.10 NMAC <i>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.</i></p> <p>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</p> <p>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</p> <p>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applies to temporary, emergency, or cavitation pits and below-grade tanks</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p> <p>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (<i>Applied to permanent pits</i>) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</p> <p>Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.</p> <p>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</p> <p>Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</p> <p>Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division</p> <p>Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map</p> <p>Within a 100-year floodplain - FEMA map</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> NA</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>
----	---	---

11

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

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

☐ Previously Approved Design (attach copy of design) API _____ or Permit _____

12

Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC

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

- ☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
- ☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API _____

☐ Previously Approved Operating and Maintenance Plan API _____

13

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

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

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (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 H₂S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14

Proposed Closure: 19.15.17.13 NMAC

Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

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

Proposed Closure Method: ☐ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☒ On-site Closure Method (only for temporary pits and closed-loop systems)
☒ In-place Burial ☐ On-site Trench
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15

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

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

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)

Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required

Disposal Facility Name: _____ Disposal Facility Permit #: _____

Disposal Facility Name: _____ Disposal Facility Permit #: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information) ☐ No

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

☐ Soil Backfill and Cover Design Specification - 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

Siting Criteria (Regarding on-site closure methods only): 19.15.17.10 NMAC

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

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

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

☐ Yes ☒ No

☐ N/A

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

☐ N/A

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

☐ N/A

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☒ No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.

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

☐ Yes ☒ No

☐ 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 the initial application

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

☐ Yes ☒ No

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

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

☐ Yes ☒ No

Within 500 feet of a wetland

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

☐ Yes ☒ No

Within the area overlying a subsurface mine.

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

☐ Yes ☒ No

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

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/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Construction/Design Plan of Temporary Pit (for in place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC

☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC

☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☒ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

☒ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19

Operator Application Certification:

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

Name (Print): Crystal Tafoya Title: Regulatory Technician
 Signature: *Crystal Tafoya* Date: 11/26/08
 e-mail address: crystal.tafoya@conocophillips.com Telephone: 505-326-9837

20

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

OCD Representative Signature: *En Jiro Lopez* Approval Date: 12/3/08

Title: En Jiro Lopez OCD Permit Number: _____

21

Closure Report (required within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC

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

☐ Closure Completion Date: _____

22

Closure Method:

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

23

Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that will *not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

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

☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24

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

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

On-site Closure Location Latitude: _____ Longitude: _____ NAD ☐ 1927 ☐ 1983

25

Operator Closure Certification:

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: Range: 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

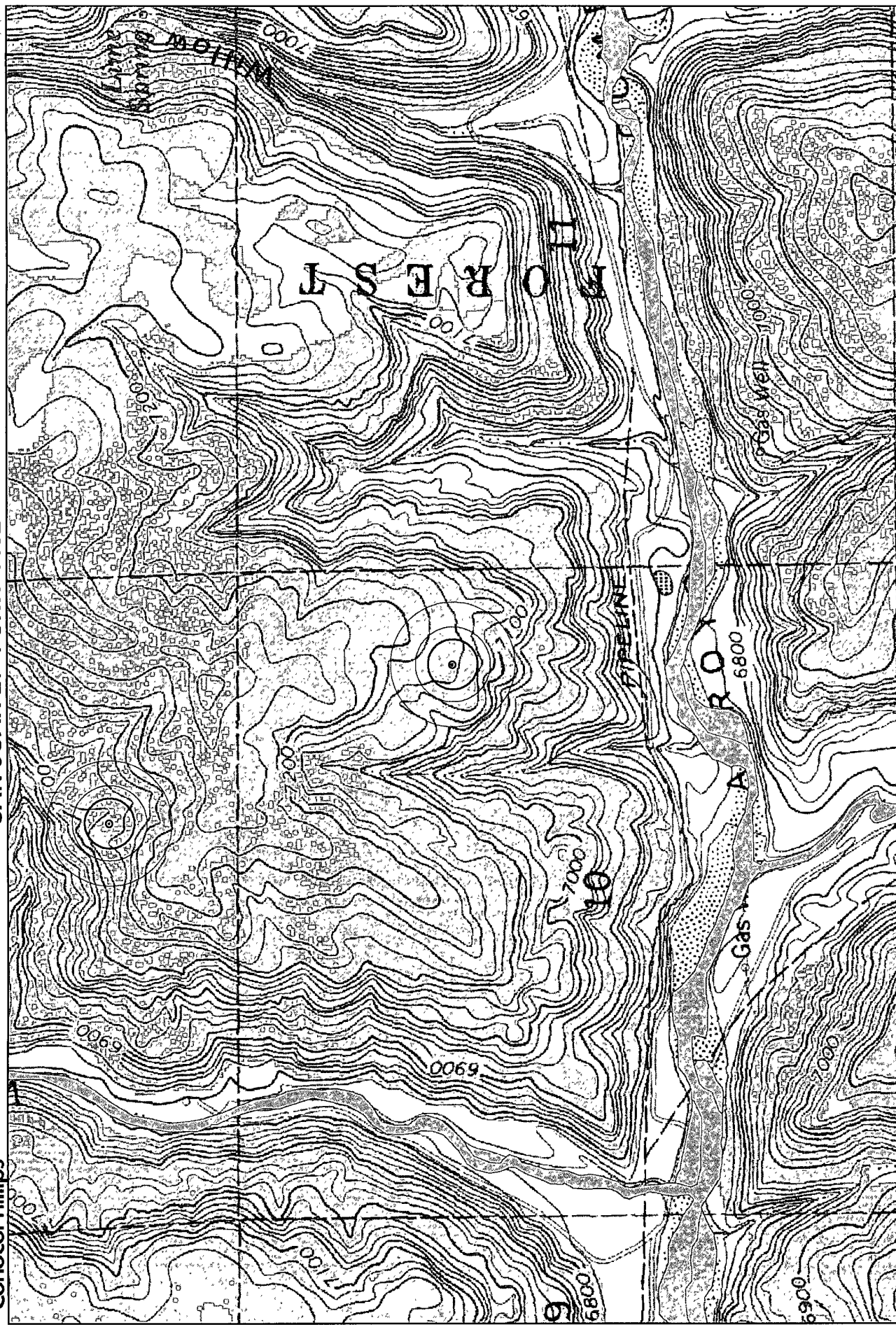
WATER COLUMN REPORT 11/18/2008

(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 (in feet) 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	2304

Record Count: 3



Data Source

Aerial flown locally Sedgewick in 2005.

Wetlands Data Acquired from U S Fish and Wildlife [Http://wetlandswms.er.usgs.gov](http://wetlandswms.er.usgs.gov)

USGS Topo

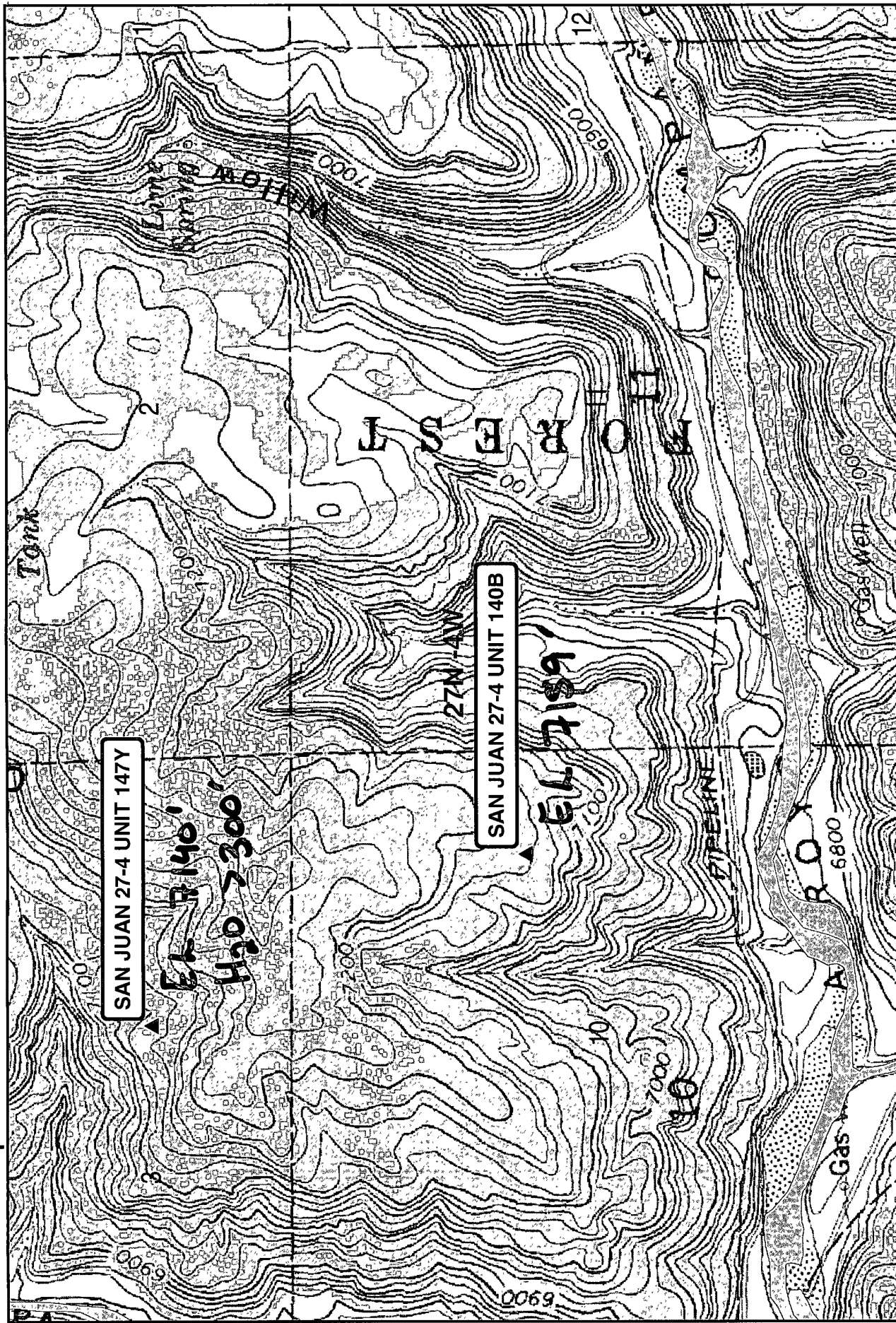
Legend

	Wetlands
	COPCathodic
	iWaters
	City Limits

Scale

1:12,000

NAD_1983_SP
NM West_FIPS_3003
Sep 22, 2008



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

Ground Water
 + iWaters
 + COP

Buffers
 200ft 500ft
 300ft Wetlands

0 500 1,000 Feet
 1:11,083

NAD_1983_StatePlane_ NMWest_FIPS_3003
 8/08

TIERRA CORROSION CONTROL, INC.
DRILLING LOG

COMPANY: Conoco Phillips
LOCATION: San Juan 27-4 #147Y
STATE: NM
BIT SIZE: 7 7/8"
LBS COKE BACKFILL: 2,600#
ANODE TYPE: 3" X 60" Duriron

DATE: August 25, 2008
LEGALS: Sec3 T27N R4W
DRILLER: Gilbert Peck
CASING SIZE/TYPE: 8" X 20' PVC
VENT PIPE: 300'
ANODE AMOUNT: 10

COUNTY: Rio Arriba
DEPTH: 300'
COKE TYPE: Asbury
PERF PIPE: 140'
BOULDER DRILLING: None

DEPTH	DRILLER'S LOG	AMPS	DEPTH	DRILLER'S LOG	AMPS
20	Casing		310		
25	Sandstone		315		
30			320		
35		.2	325		
40		.2	330		
45		.2	335		
50		.2	340		
55		.4	345		
60	▼	.7	350		
65	Gray Shale	1.0	355		
70		1.3	360		
75		1.4	365		
80		2.4	370		
85		2.9	375		
90		2.1	380		
95		2.4	385		
100		2.6	390		
105		2.7	395		
110		2.6	400		
115	▼	2.5	405		
120	Sandstone	.9	410		
125		.9	415		
130	Gray Shale	1.6	420		
135		2.4	425		
140		2.6	430		
145		2.9	435		
150		2.8	440		
155		2.8	445		
160		2.1	450		
165		1.7	455		
170		1.6	460		
175		1.9	465		
180		2.8	470		
185		2.9	475		
190		3.1	480		
195		2.9	485		
200		3.1	490		
205		2.9	495		
210		2.4	500		
215		2.6			
220		3.1			
225		2.9			
230		2.9			
235		2.9			
240		2.9			
245		2.8			
250		2.3			
255		2.0			
260		1.7			
265		1.7			
270		1.6			
275		1.7			
280		2.0			
285	▼	1.9			
290		1.0			
295	Sandstone	.9			
300		td			
305					

ANODE #	DEPTH	NO COKE	COKE
1	290	1.0	2.9
2	280	2.0	3.9
3	270	1.6	5.2
4	260	1.7	5.5
5	250	2.3	5.4
6	240	2.9	8.1
7	230	2.9	8.2
8	220	3.1	7.9
9	210	2.4	6.6
10	200	3.1	7.1
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

WATER DEPTH: None
ISOLATION PLUGS:
LOGGING VOLTS: 12.47
VOLT SOURCE: AUTO BATTERY
TOTAL AMPS: 17.8
TOTAL GB RESISTANCE: .70
REMARKS:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
JUL 22 2008
SUBMIT IN DUPLICATE*
(See instructions on reverse side)

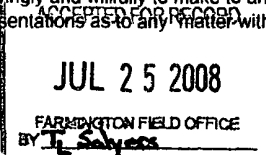
FOR APPROVED
OMB NO 1004-0137
Expires December 31, 1991

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

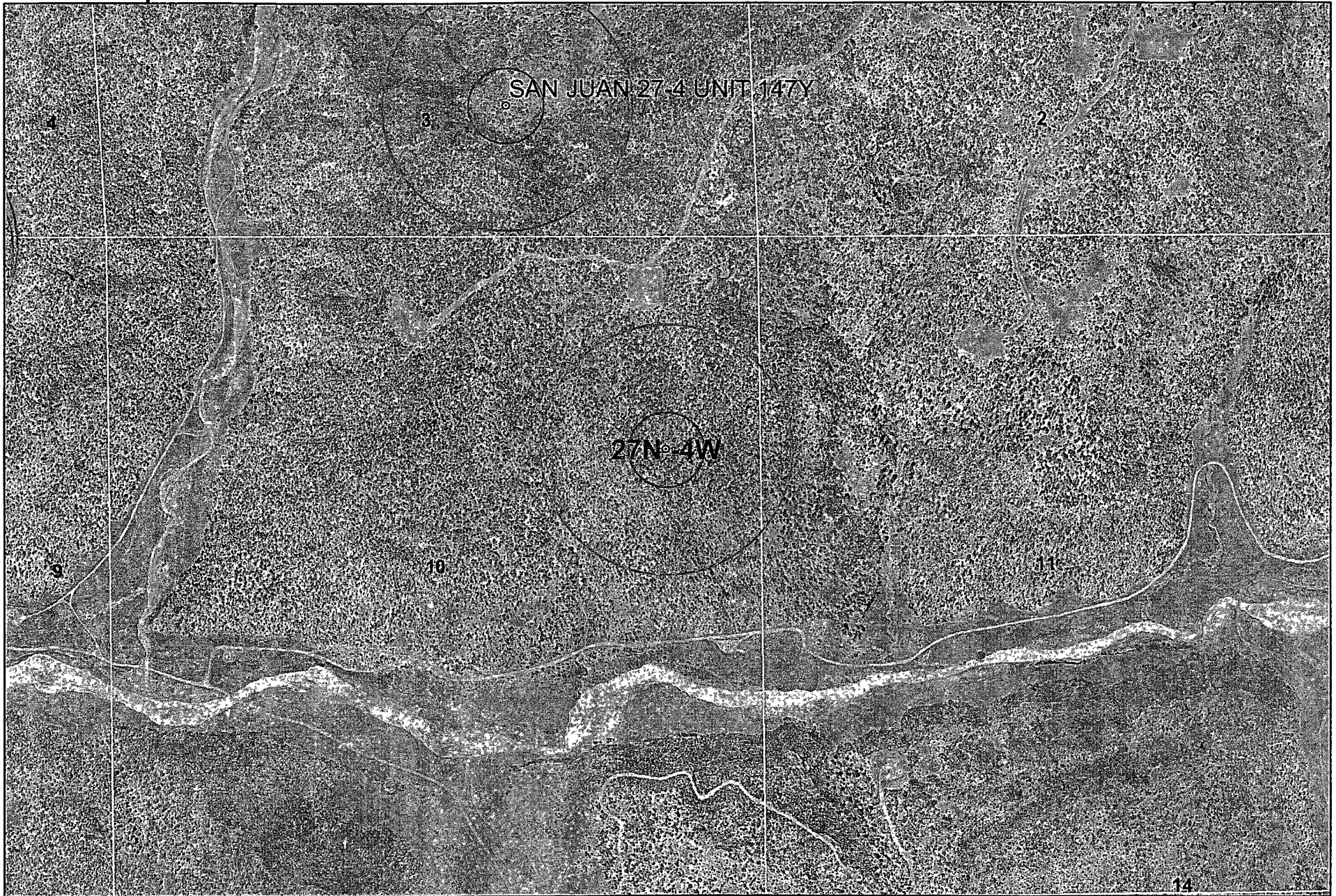
1a TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other <input type="checkbox"/>		5 LEASE DESIGNATION AND SERIAL NO USA SF - 080668																									
b TYPE OF COMPLETION NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF RESVR <input type="checkbox"/> Other <input type="checkbox"/>		6 IF INDIAN, ALLOTTEE OR TRIBE NAME NMMA-78408A-MV																									
2 NAME OF OPERATOR BURLINGTON RESOURCES OIL & GAS COMPANY		7 UNIT AGREEMENT NAME San Juan 27-4 Unit																									
3 ADDRESS AND TELEPHONE NO PO BOX 4289, Farmington, NM 87499 (505) 326-9700		8 FARM OR LEASE NAME, WELL NO. San Juan 27-4 Unit 147Y																									
4 LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface Unit O (SWSE) 910' FSL & 1910' FEL At top prod. interval reported below Same As Above At total depth Same As Above		9 API WELL NO 30-039-30343-0001																									
14. PERMIT NO. DATE ISSUED		10 FIELD AND POOL, OR WILDCAT Blanco Mesaverde																									
15 DATE SPUDDED 5/1/08		11 SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec.3, T27N, R04W, NMPM																									
16 DATE T.D. REACHED 5/21/08		12 COUNTY OR PARISH Rio Arriba																									
17. DATE COMPL. (Ready to prod.) 7/17/08		13 STATE New Mexico																									
18. ELEVATIONS (DF, RKB, RT, BR, ETC)* GL 7140' KB 7156'		19 ELEV CASINGHEAD																									
20. TOTAL DEPTH, MD & TVD 6623'		21 PLUG, BACK T.D., MD & TVD 6619'																									
22 IF MULTIPLE COMPL. HOW MANY*		23 INTERVALS DRILLED BY yes																									
24 PRODUCTION INTERVAL (S) OF THIS COMPLETION-TOP, BOTTOM, NAME (MD AND TVD)* Blanco Mesaverde 5624' - 6476';		25 WAS DIRECTIONAL SURVEY MADE No																									
26 TYPE ELECTRIC AND OTHER LOGS RUN GR, CBL, CCL		27 WAS WELL CORED No																									
28 CASING RECORD (Report all strings set in well.)																											
<table border="1"><thead><tr><th>CASING SIZE/GRADE</th><th>WEIGHT, LB/FT</th><th>DEPTH SET (MD)</th><th>HOLE SIZE</th><th>TOP OF CEMENT, CEMENTING RECORD</th><th>AMOUNT PULLED</th></tr></thead><tbody><tr><td>9 5/8" H-40</td><td>32.3#</td><td>229'</td><td>12 1/4"</td><td>surface; 76 sx (122 cf)</td><td>1/4 bbls</td></tr><tr><td>7" J-55</td><td>20/23#</td><td>4249'</td><td>8 3/4"</td><td>surface; 401sx (952 cf)</td><td>10 bbls</td></tr><tr><td>4 1/2" J-55</td><td>10.5#</td><td>6621'</td><td>6 1/4"</td><td>TOC 3380' 247sx (358 cf)</td><td></td></tr></tbody></table>				CASING SIZE/GRADE	WEIGHT, LB/FT	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED	9 5/8" H-40	32.3#	229'	12 1/4"	surface; 76 sx (122 cf)	1/4 bbls	7" J-55	20/23#	4249'	8 3/4"	surface; 401sx (952 cf)	10 bbls	4 1/2" J-55	10.5#	6621'	6 1/4"	TOC 3380' 247sx (358 cf)	
CASING SIZE/GRADE	WEIGHT, LB/FT	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED																						
9 5/8" H-40	32.3#	229'	12 1/4"	surface; 76 sx (122 cf)	1/4 bbls																						
7" J-55	20/23#	4249'	8 3/4"	surface; 401sx (952 cf)	10 bbls																						
4 1/2" J-55	10.5#	6621'	6 1/4"	TOC 3380' 247sx (358 cf)																							
29. LINER RECORD																											
<table border="1"><thead><tr><th>SIZE</th><th>TOP (MD)</th><th>BOTTOM (MD)</th><th>SACKS CEMENT*</th><th>SCREEN (MD)</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>				SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)																			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)																							
30. TUBING RECORD																											
<table border="1"><thead><tr><th>SIZE</th><th>DEPTH SET (MD)</th><th>PACKER SET (MD)</th></tr></thead><tbody><tr><td>2-3/8", 4.7#, J-55</td><td>6268'</td><td></td></tr></tbody></table>				SIZE	DEPTH SET (MD)	PACKER SET (MD)	2-3/8", 4.7#, J-55	6268'																			
SIZE	DEPTH SET (MD)	PACKER SET (MD)																									
2-3/8", 4.7#, J-55	6268'																										
31 PERFORATION RECORD (Interval, size and number) .34" @ 1 SPF PLO/LMF 6155' - 6476' = 30 holes UMF/CH 5624' - 6078' = 30 holes Total holes = 60																											
32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. <table border="1"><tbody><tr><td>6155' - 6476'</td><td>A/10 bbls 15% HCL. Frac w/111,090 gals 60Q N2</td></tr><tr><td></td><td>slck/foam, w/99,472# 20/40 Brady Sand. N2 = 1267.2 SCF</td></tr><tr><td>5624' - 6078'</td><td>A/10 bbls 15% HCL. Frac w/116,187 gals 60Q N2</td></tr><tr><td></td><td>slck/foam, w/98,139# 20/40 Brady Sand. N2 = 1267.4 SCF</td></tr></tbody></table>				6155' - 6476'	A/10 bbls 15% HCL. Frac w/111,090 gals 60Q N2		slck/foam, w/99,472# 20/40 Brady Sand. N2 = 1267.2 SCF	5624' - 6078'	A/10 bbls 15% HCL. Frac w/116,187 gals 60Q N2		slck/foam, w/98,139# 20/40 Brady Sand. N2 = 1267.4 SCF																
6155' - 6476'	A/10 bbls 15% HCL. Frac w/111,090 gals 60Q N2																										
	slck/foam, w/99,472# 20/40 Brady Sand. N2 = 1267.2 SCF																										
5624' - 6078'	A/10 bbls 15% HCL. Frac w/116,187 gals 60Q N2																										
	slck/foam, w/98,139# 20/40 Brady Sand. N2 = 1267.4 SCF																										
33 PRODUCTION																											
DATE FIRST PRODUCTION SI W/O Facilities		PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump) Flowing																									
DATE OF TEST 7/17/08		WELL STATUS (Producing or shut-in) SI																									
HOURS TESTED 1	CHOKE SIZE 1/2"	PROD FOR TEST PERIOD 0	GAS-MCF 99 mcf																								
WATER-BBL trace	GAS-OIL RATIO																										
FLOW TUBING PRESS SI-888#	CASING PRESSURE SI-886#	CALCULATED 24-HOUR RATE 0	GAS-MCF 2379 mcf/d																								
WATER-BBL 2 bwpd		OIL GRAVITY-API (CORR.)																									
34 DISPOSITION OF GAS (Solid, used for fuel, vented, etc.) To be sold. W/O facilities to be set before first production.																											
35. LIST OF ATTACHMENTS This is a standalone MV well.																											
36 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records																											
SIGNED <i>[Signature]</i>		TITLE Regulatory Technician																									
DATE 7/22/08																											

*(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.



NMOCD
[Signature]



Data Source
Aerial flown locally Sedgewick in 2005
Wetlands Data Aquired from U S. Fish
and Wildlife [Http://wetlandswms er usgs.gov](http://wetlandswms.er.usgs.gov)
USGS Topo

300
1000

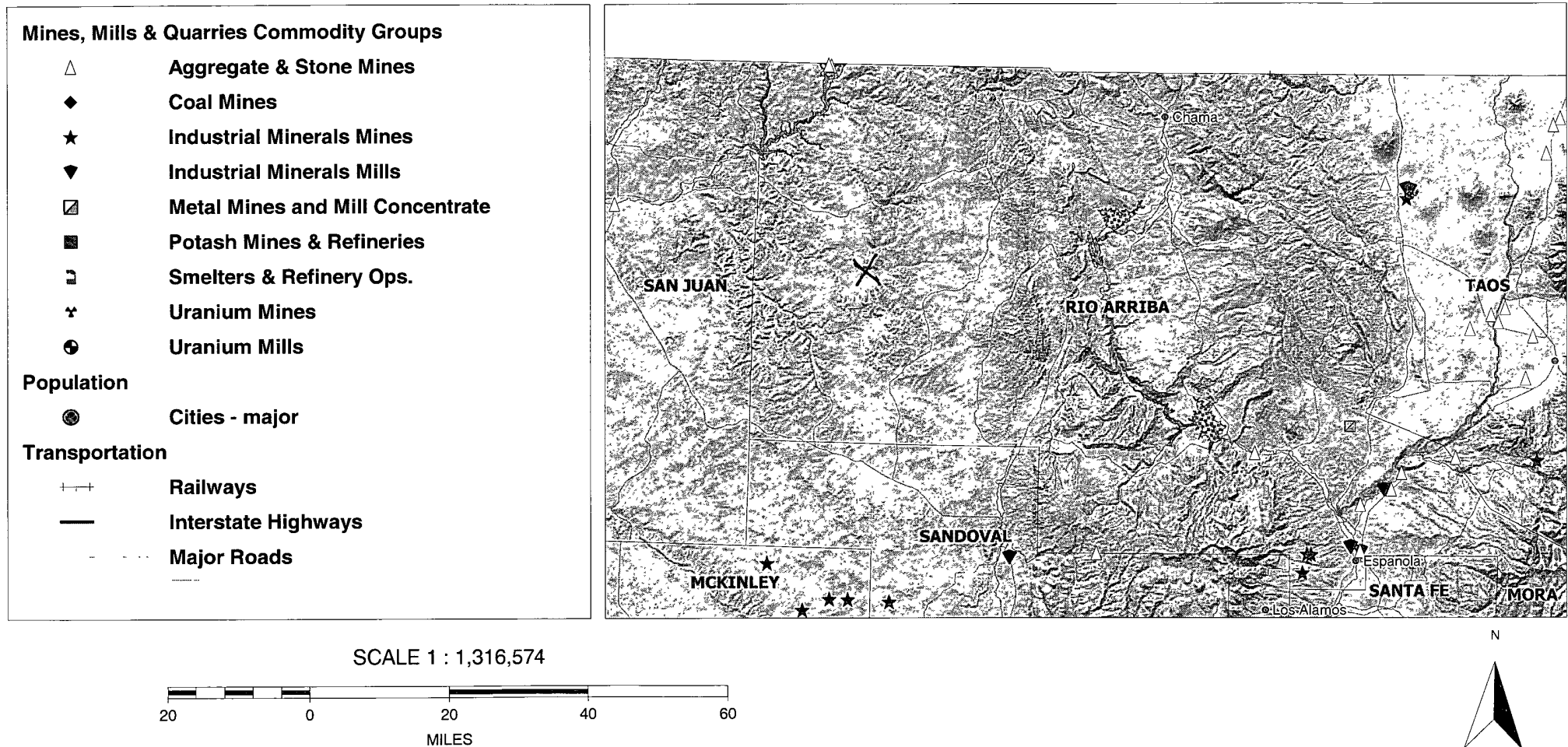
Wetlands
City Limits

0 275 550 1,100 1,650 2,200 Feet

1:12,000

NAD_1983_SP_
NM West_FIPS_
3003
Sep 23, 2008

San Juan 27-4 Unit 140B Mines, Mills and Quarries Web Map



Hydrogeological report for San Juan 27-4 Unit 140B

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.

Siting Criteria Compliance Demonstration & Hydro Geologic Analysis

The San Juan 27-4 Unit 140B is not located in an unstable area. The location is not over a mine and is not on the side of a hill as indicated on the Mines, Mills and Quarries Map and Topographic Map. The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other watercourse as indicated on the Topographic Map. The FEMA Map for the subject well 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. The Cathodic well data from the San Juan 27-4 Unit 147Y has an elevation of 7140' and groundwater depth of greater than 300'. The subject well has an elevation of 7159' which is 19' greater than the San Juan 27-4 Unit 147Y, therefore the groundwater depth is greater than 300'. There are no iWATERS data points located in the area as indicated on the TOPO Map. The hydro geologic analysis indicates the groundwater depth and the San Jose formation will create a stable area for this new location.

Tafoya, Crystal

From: Tafoya, Crystal
Sent: Thursday, July 10, 2008 8:16 AM
To: 'mark_kelly@nm.blm.gov'
Subject: OCD Pit Closure Notification

The following temporary pits will be closed on-site. The new OCD Pit Rule 17 requires the surface owner be notified. Please feel free to contact me at any time if you have any questions. Thank you!

Allison Unit 2B
Allison Unit 40N
Angel Peak B 27E
Ballard 11F
Cain 725S
Canyon Largo Unit 250N
Canyon Largo Unit 279E
Canyon Largo Unit 288E
Canyon largo Unit 297E
Canyon Largo Unit 465E
Carson SRC 4E
Day B 4P
Day B 5A
East 17S
EPNG A 1B
EPNG B 1M
Federal A 1E
Filan 5M
Filan 5N
Fogelson 4 100
Fogelson 4 100S
Grambling C 202S
Hagood 19
Hamner 9S
Hardie 4P
Hare 295
Heaton Com 100
Helms Federal 1G
Howell 12
Huerfanito Unit 103F
Huerfanito Unit 29S
Huerfanito Unit 39S
Huerfanito Unit 47S
Huerfanito Unit 50E
Huerfanito Unit 75E
Huerfanito Unit 83E
Huerfanito Unit 87E
Huerfanito Unit 90E
Huerfanito Unit 90M
Huerfanito Unit 98S
Huerfano Unit 108F
Huerfano Unit 282E
Huerfano unit 305
Huerfano unit 307
Huerfano Unit 554
Johnston Federal 24S

King 3
Lackey A Com 100S
Lambe 1C
Lambe 7S
Lively 8M
Lloyd A 100
Lloyd A 100S
Martin 100
McCord B 1F
McDurmitt Com 100S
McManus 13R
Mitchell 1S
Morris A 14
Newberry B 1N
Newsom B 503
Newsom B 8N
Pierce A 210S
Roelofs 1N
San Juan 27-4 Unit 132G
San Juan 27-4 Unit 132M
San Juan 27-4 Unit 139N
San Juan 27-4 Unit 140B
San Juan 27-4 Unit 141M
San Juan 27-4 Unit 147Y
San Juan 27-4 Unit 153B
San Juan 27-4 Unit 22M
San Juan 27-4 Unit 38P
San Juan 27-4 Unit 41N
San Juan 27-4 Unit 42N
San Juan 27-4 Unit 569N
San Juan 27-4 Unit 59N
San Juan 27-4 Unit 60M
San Juan 27-5 Unit 113F
San Juan 27-5 Unit 59N
San Juan 27-5 Unit 84N
San Juan 27-5 unit 901
San Juan 27-5 Unit 902
San Juan 27-5 Unit 903
San Juan 27-5 Unit 904
San Juan 27-5 Unit 905
San Juan 27-5 Unit 906
San Juan 27-5 Unit 907
San Juan 27-5 Unit 908
San Juan 27-5 Unit 909
San Juan 27-5 Unit 910
San Juan 27-5 Unit 912
San Juan 27-5 Unit 913
San Juan 27-5 Unit 914
San Juan 27-5 Unit 915
San Juan 27-5 Unit POW 916
San Juan 28-4 Unit 27M
San Juan 28-5 Unit 54F
San Juan 28-5 Unit 62E
San Juan 28-5 Unit 63M
San Juan 28-5 Unit 76N
San Juan 28-5 Unit 77N
San Juan 28-6 Unit 113N

Certificate Number: NM-11393

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. The facilities to be used will be Basin Disposal (Permit #NM-01-005) and Envirotech Land Farm (Permit #NM-01-011).
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 prior to closure as per the approved closure plan via 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 prior to closure to the Aztec Division office between 72 hours and one week 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 the San Juan County Landfill located on CR 3100.
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. 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.
10. 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.
11. 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
12. 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.
13. Notification will be sent to OCD when the reclaimed area is seeded.
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. 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

15. 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.