1625 N French Dr., Hobbs, NM 88240

District II

1301 W Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

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

July 21, 2008 For temporary pits, closed-loop sytems, and below-grade

Form C-144

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 X 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 hability 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 70P
API Number: 30-039-30352 OCD Permit Number:
U/L or Qtr/Qtr: K(NE/SW) Section: 4 Township: 27N Range: 4W County: Rio Arriba
Center of Proposed Design: Latitude: 36.598889 °N Longitude: 107.261111 °W NAD: 1927 X 1983
Surface Owner: X Federal State Private Tribal Trust or Indian Allotment
Temporary: X Drilling Workover Permanent Emergency Cavitation P&A X Lined Unlined Liner type: Thickness 12 mil X LLDPE HDPE PVC Other X String-Reinforced Liner Seams: X Welded X Factory Other Volume: 4400 bbl Dimensions L 65' x W 45' x D 10'
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
Below-grade tank: Subsection I of 19.15 17.11 NMAC AUG 2009

Alternative Method:

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

Fencing: Subsection D of 19 15.17.11 NMAC (Applies to permanent pit, temporary pits, and below-grade tanks) Chain link six feet in height, two strands of barbed wire at top (Required it located within 1000 feet of a permanent residence, school, hospital, institution or church)				
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				
X 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 X Signed in compliance with 19.15.3.103 NMAC				
Signed in computance with 19,13.5.103 NWAC				
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 (Fencing/BGT Liner)	eration of appr	roval.		
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.				
10				
Siting Criteria (regarding permitting) 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above grade-tanks associated with a closed-loop system.				
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - 1WATERS database search; USGS; Data obtained from nearby wells	Yes	□No		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes	□No		
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	□No		
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	□NA			
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image		!		
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.				
(Applied to permanent pits) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image				
Within 500 horizonal 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.		;		
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				
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division				
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	Yes	No		
Society; Topographic map Within a 100-year floodplain - FEMA map				

Form C-144 Oil Conservation Division Page 2 of 5

Temporary Pits, Emergency Pits and Below-grade Tanks Permit Application Attachment ChecklistSubsection 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					
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					
Situng 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					
Situng 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: X 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)					
X On-site Closure Method (only for temporary pits and closed-loop systems)					
X 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					
Protocols and Procedures - based upon the appropriate requirements of 19 13.17.13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC					
Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.13.17.13 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					

Form C-144 Oil Conservation Division Page 3 of 5

16	G 10, 17, 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Instructions Please identify the facility or facilities for the disposal of i	ve Ground Steel Tanks or Haul-off Bins Only:(19.15.17.13 D NMAC) inquids, drilling fluids and drill cuttings—Use attachment if more than two	,		
facilities are required	Description of the Property H.			
Disposal Facility Name:				
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 nbe used for future service and				
Yes (If yes, please provide the information No		e service and		
Required for impacted areas which will not be used for future service a	and operations. On the appropriate requirements of Subsection H of 19.15.17.13 N	JMAC		
Re-vegetation Plan - based upon the appropriate requirement	** * *	MAC		
Site Reclamation Plan - based upon the appropriate requir				
17 Siting Criteria (Regarding on-site closure methods only: 19.1	5.17 10 NMAC			
1 , ,	closure plan Recommendations of acceptable source material are provided below			
certain siting criteria may require administrative approval from the appropriate office for consideration of approval Justifications and/or demonstrations of equ	district office or may be considered an exception which must be submitted to the savener are required. Please refer to 1915.17 10 NMAC for guidance	sania r'e Environmentat bureau		
Ground water is less than 50 feet below the bottom of the burie	d waste.	Yes X No		
- NM Office of the State Engineer - iWATERS database search; U		│		
Ground water is between 50 and 100 feet below the bottom of t	ha huriad wasta	Yes X No		
- NM Office of the State Engineer - IWATERS database search, U		∏N/A		
	·			
Ground water is more than 100 feet below the bottom of the bu		X Yes No		
- NM Office of the State Engineer - iWATERS database search, U	SGS, Data obtained from hearby wells	∐N/A		
Within 300 feet of a continuously flowing watercourse, or 200 feet of a	my other significant watercourse or lakebed, sinkhole, or playa lake	Yes X No		
(measured from the ordinary high-water mark). - Topographic map, Visual inspection (certification) of the proposi	ed site			
Within 300 feet from a permanent residence, school, hospital, institution		Yes X No		
- Visual inspection (certification) of the proposed site, Aerial photo	· · · · · · · · · · · · · · · · · · ·			
		Yes X No		
Within 500 horizontal feet of a private, domestic fresh water well or spr				
purposes, or within 1000 horizontal fee of any other fresh water well of - NM Office of the State Engineer - iWATERS database; Visual in	• -			
Within incorporated municipal boundaries or within a defined municipal		Yes X No		
pursuant to NMSA 1978, Section 3-27-3, as amended				
Written confirmation or verification from the municipality; Writt Within 500 feet of a wetland	en approval obtained from the municipality	Yes X No		
- US Fish and Wildlife Wetland Identification map; Topographic r	nap; Visual inspection (certification) of the proposed site	1103 1110		
Within the area overlying a subsurface mine.		Yes X No		
- Written confiramtion or verification or map from the NM EMNR.	D-Mining and Mineral Division			
Within an unstable area.		Yes X No		
Engineering measures incorporated into the design, NM Bureau of Topographic map	of Geology & Mineral Resources, USGS; NM Geological Society;			
Within a 100-year floodplain.		Yes X No		
- FEMA map				
18				
On-Site Closure Plan Checklist: (19.15.17 13 NMAC) Instruby a check mark in the box, that the documents are attached.	actions: Each of the following items must bee attached to the cl	osure plan. Please indicate,		
X Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC				
X 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				
X 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)				
X Soil Cover Design - based upon the appropriate requirements of Subsection H of 19 15.17.13 NMAC				
X Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC				
X 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): Marie E. Jaramillo Title: Staff Regulatory/Technician						
Signature. Date: Date:						
e-mail address. make e jaramylo@colocophillips.com Telephone: 505-326-0865						
20						
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)						
OCD Representative Signature: 8-14-09						
Title: Ensiro (spec OCD Permit Number:						
21 Closure Report (required within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC						
Instructions Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an						
approved closure plan has been obtained and the closure activities have been completed						
Closure Completion Date:						
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 compliane to the items below)						
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 ture, 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 Water Column/Average Depth to Water

No records found.

PLSS Search:

Section(s): 03, 04, 05, 08, Township: 27N Range: 04W

09, 10



New Mexico Office of the State Engineer Water Column/Average Depth to Water

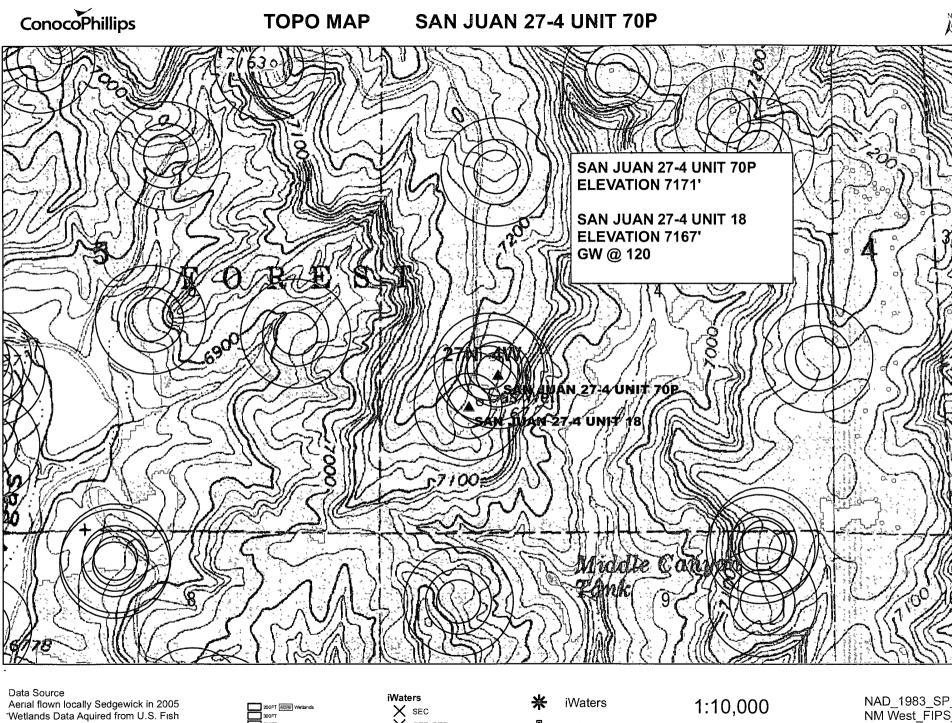
No records found.

PLSS Search:

Section(s): 34, 33, 32

Township: 28N

Range: 04W



and Wildlife Http://wetlandswms.er.usgs.gov USGS Topo



X SEC X QTR-QTR X QTR-QTR-QTR



0 250 500 1,000 Mr. otnik Id ☐ Feet

NAD_1983_SP_ NM West FIPS 3003

June 23, 2009

#18=30-039-01171 #70=30-039-20119

DATE: 4-2-96

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

^
Operator Meridian Oil Location: Unit M Sec. 4 Twp Z7Rng 4
Name of Well/Wells or Pipeline Serviced San Juan 27-4 4/8 4
San Juan 77-4#70
Elevation Completion Date 42-96 Total Depth 423 Land Type
Casing Strings, Sizes, Types & Depths 4-1-96 - Set 60 OF 8"PVC Casing
If Casing Strings are cemented, show amounts & types used 465 /2 Sacks
<u> </u>
If Cement or Bentonite Plugs have been placed, show depths & amounts used
Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. Damp at 120 + 210. Did not make enough
Vaterigive a description DECEIVED
Depths gas encountered: None FEB 1 9 1997

Scound bed depth with type & amount of quantity question que
Depths anodes placed (D 372, 325, 266, 259, 252, 245, 238, 231, 224, 217, 210, 203, 190, 180, 165
Depths vent pipes placed: Surface to 423
Vent pipe perforations: From 103' to 423'
Remarks: No gas or boulders encountered during drilling of hole

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

Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

المنتوا عاويت ر

UNITED STATES DEPARTMENT OF THE INTERIOR **GEOLOGICAL SURVEY**

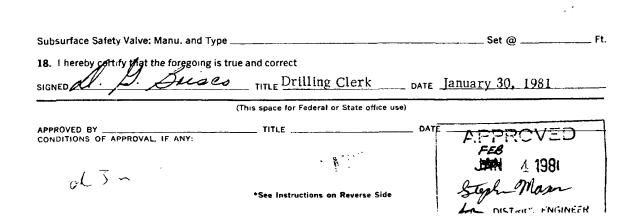
PULL OR ALTER CASING MULTIPLE COMPLETE CHANGE ZONES ABANDON* (other)

Form 9–331 Dec. 1973	Form Approved. Budget Bureau No. 42–R1424
UNITED STATES DEPARTMENT OF THE INTERIOR	5. LEASE SF 080668
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different	7. UNIT AGREEMENT NAME San Juan 27-4 Unit
1. oil gas well other	8. FARM OR LEASE NAME San Juan 27-4 Unit 9. WELL NO.
2. NAME OF OPERATOR El Paso Natural Gas Company	18 10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR lox 289, Farmington, New Mexico 87401	Blanco Mesa Verde 11. SEC., T., R., M., OR BLK. AND SURVEY OR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) AT SURFACE: 1096'S, 860'W AT TOP PROD. INTERVAL:	AREA Sec. 4, T-27-N, R-4-W N. M. P. M. 12. COUNTY OR PARISH Rio Arriba New Mexico
AT TOTAL DEPTH: 16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	14. API NO. 15. ELEVATIONS (SHOW DF, KDB, AND WD)
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF: TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE SHOOT OF ACIDIZE	7167' GL
REPAIR WELL PULL OR ALTER CASING	(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

To repair an existing casing leak in this well it is intended to:

Pull 2 3/8" tubing and Baker loc-set packer. Set 5 1/2" top drillable bridge plug at 6000'. Run 7 5/8" packer 500' above casing leak and squeeze cement. Drill cement, pressure test casing to 1000 psi. Clean out, re-run tubing and return well to production.







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



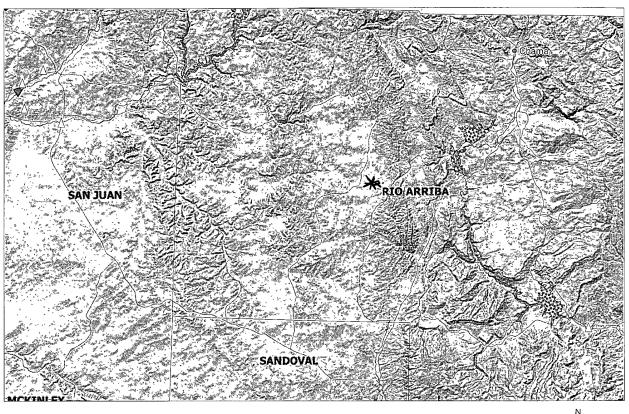
1:10,000

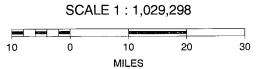
0 250 500 1,000 Feet NAD_1983_SP_ NM West_FIPS_ 3003

June 23, 2009

SAN JUAN 27-4 UNIT 70P MINES MILLS & QUARRIES

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 Population** Cities - major **Transportation** Railways **Interstate Highways Major Roads**







Siting Criteria Compliance Demonstration & Hydro Geologic Analysis

The San Juan 27-4 Unit 70P 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 18 has an elevation of 7167' and groundwater depth of 120'. The subject well has an elevation of 7171' which is greater than the San Juan 27-4 Unit 18, therefore the groundwater depth is greater than 120'. 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.

Hydrogeological report for San Juan 27-4 Unit 70P

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.

Jaramillo, Marie E

From:

Jaramillo, Marie E

Sent:

Thursday, July 30, 2009 1:33 PM

To:

'jimmy_dickerson@nm.blm.gov'; 'jreidinger@fs.fed.us'; 'mark_kelly@nm.blm.gov' OCD Pit Closure Notification 07/30/09

Subject:

Importance:

High

Mark,

The temporary pit at the well name will be closed on-site. The new OCD pit rule 17 requires the surface owner to be notified. Please let me know if you have any questions. Thanks

San Juan 27-4 Unit 70P

Marie Jaramillo Staff Regulatory Tech. ConocoPhillips *Office # (505) 326-9865* Fax # (505) 599-4062 mailto:marie.e.jaramillo@conocophillips.com District I
1625 N. French Dr., Hobbs, NM 88240
<u>District II</u>
1301 W. Grand Avenue, Artesia, NM 88210
<u>District III</u>

1000 Rio Brazos Rd., Aziec, NM 87410 <u>Diagnot IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505

Joint or Infill

Dedicated Acres

319.2

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fc, NM 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

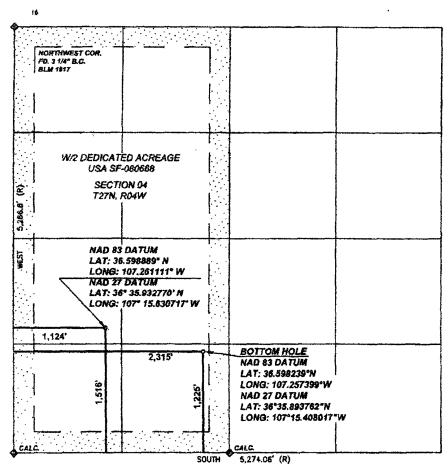
AMMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Number		2 Pool Cade			3 Pool Name MESAVERDE / DAKOTA			
⁴ Property C	ode			****	⁵ Property SAN JUAN				⁶ Well Number 70P
⁷ OGRID	OGRID No. BURLINGTON RESOURCES OIL AND GAS COMPANY LP						⁹ Elevation 7171		
					10 SURFACE I	OCATION			
UL ar lot no.	Section 04	Towaship 27-N	Range 04-W	Lot Idn	Feet from the	North/South line SOUTH	Feet from the	East/West line	County
<u> </u>	1 4	2/44		Rottom H		f Different Fro		WEST	RIO ARRIBA
UL or lot no.	Section	Township	Range	Lot Ide	Feet from the	North/South Ime	Feet from the	East/West line	County
N	04	27-N	04-W		1225	SOUTH	2315	WEST	RIO ARRIBA

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

Order No.



14 Consolidation Code

OPERATOR CERTIFICATION I hereby certify that the information contained herein it true and complete to the best of my browledge and belief, and that this organization either nown a working informat or unleased mineral interest in the land including the proposed bottom hole location interest to drill this well at this location personal to a compact with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature Printed Name Title and E-mail Address Date 18 SURVEYOR CERTIFICATION I hereby certify that the well location vivoum on this plan was planted from field notes of actual surveys made by me are under my supervision, and that the name is true and correct to the best of my belief. Date of Survey: 11/03/06 Signature and Seed of Professional Surveyor:

NOTES

RESERVE PIT DIKE:

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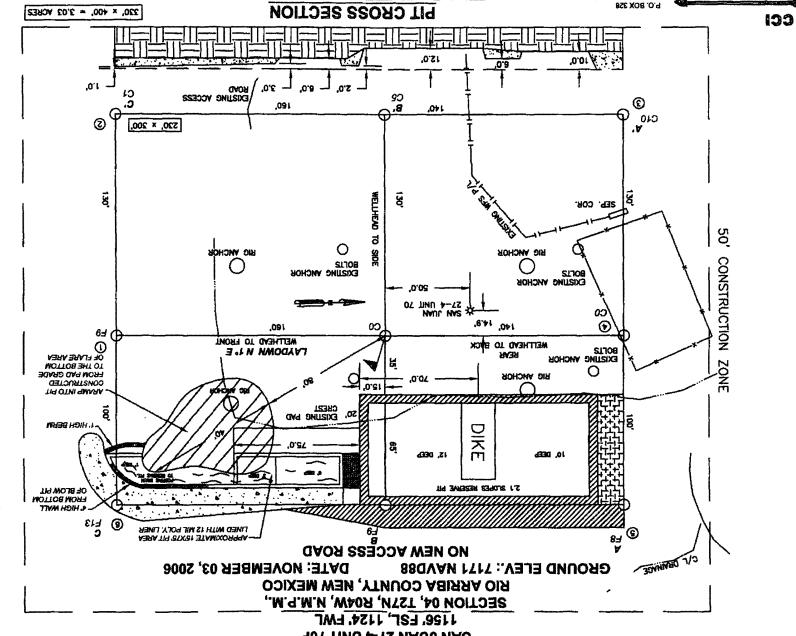
ABOVE DEEP SIDE (OVERFLOW-3' WIDE AND 1'

ABOVE SHALLOW

SIDE).

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BURLINGTON RESOURCES OIL & GAS COMPANY LP SAN JUAN 274 UNIT 70P



WAD 83 LAT .: 36.5988888889° N LONG.: 107.261111111° W

BLOOMFIELD, NM, 87413 PHONE: (605)325-7707

CHENAULT CONSULTING INC.

BURLINGTON RESOURCES OIL & GAS COMPANY LP

SAN JUAN 27-4 UNIT 70P 1516' FSL, 1124' FWL SECTION 04, T27N, ,R04W, N.M.P.M., RIO ARRIBA COUNTY, NEW MEXICO ELEV.: 7171 NAVD88

NO NEW ACCESS ROAD A - A' C/L HORIZ. SCALE 1"= 50" VERT. SCALE 1" = 20" 7180 7170 7160 7150 150 100' 50 100 150 B - B' C/L HORIZ. SCALE 1"= 50" VERT. SCALE 1" = 20' 7180 7170 7160 7150 150' 100 50' 0 100' 1501 C - C' C/L HORIZ. SCALE 1"= 50" **VERT. SCALE 1" = 20"** 7180 7170 7160 7150 150 150 100 50' 0 50 100

NOTE: CCI IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.

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

REVISIONS						
NO.	DESCRIPTION	REVISED BY	DATE			
1	ISSUE FOR REVIEW	L.H.	11/3/08			

CCI

P.O. BOX 328 BLOOMFIELD,NM, 67413 PHONE: (505)325-7707

CHENAULT CONSULTING INC.

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:

- 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
 - 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. Reshaping 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.