

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2005 JUL 14 PM 3:23

1a. Type of Work DEEPEN	5. Lease Number NMSF-078423 Unit Reporting Number	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 29-7 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 9. Well Number 550S	
4. Location of Well Unit I (NESE), 2332' FSL, 1109' FEL Latitude 36° 44.36'N Longitude 107° 32.07'W	10. Field, Pool, Wildcat Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 11, T29N, R7W API # 30-039-29202	
14. Distance in Miles from Nearest Town 22 miles from Blanco	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1109'	17. Acres Assigned to Well DK - 320 E/2	
16. Acres in Lease		
18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease 1167'		
19. Proposed Depth 7671'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 3789' 6329	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached	CONDITIONS OF APPROVAL Adhere to previously issued stipulations.	
24. Authorized by: <u><i>Patsy Chishti</i></u> Sr. Regulatory Specialist	<u>7/14/05</u> Date	

PERMIT NO.

APPROVED BY

APPROVAL DATE

TITLE

DATE

Archaeological Report attached

Threatened and Endangered Species Report attached

NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

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 presentations as to any matter within its jurisdiction.

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

NMSF

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-29202	² Pool Code 71599	³ Pool Name Basin Dakota
⁴ Property Code 7465	⁵ Property Name SAN JUAN 29-7 UNIT	⁶ Well Number 550S
⁷ OGRID No. 14538	⁸ Operator Name BURLINGTON RESOURCES OIL & GAS, INC.	⁹ Elevation 6329'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	11	29-N	7-W		2332'	SOUTH	1109'	EAST	RIO ARriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres DK 320 E/2			¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.		

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

16 RECEIVED JUL 4 2005 Bureau of Land Management Farmington Field Office		USA SF-078423	
		PREHN, KARL M. ET UX	SAN JUAN 29-7 UNIT #550 WELL HEAD
		SOENS, ADOLPH ET UX	FD 2 1/2" G.L.O. BC 1913
LAT. 36°44.3624' N LONG. 107°32.0679' W		1109'	1109'
FD 2 1/2" G.L.O. BC 1913		2332'	FD 2 1/2" G.L.O. BC 1913
S 89-58-29 W 5274.60' (M)			

17 OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: Patsy Clugston
Printed Name: Patsy Clugston
Title: Sr. Regulatory Specialist
Date: 7/14/05

18 SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: 7/14/05
Signature and Seal of Professional Surveyor: [Signature]
Certificate Number: 14827

OPERATIONS PLAN FOR SAN JUAN 29-7 UNIT #550S

Well: San Juan 29-7 Unit #550S

Location: T-29-N, R-7-W, Sect. 11, Unit I; 2332' FSL, 1109' FEL

Rio Arriba County, NM

Latitude '36 degrees, 44.36 minutes Longitude '107 degrees, 32.06 minutes

Formation: Basin Dakota

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose		----
Ojo Alamo	2322'	2406'	aquifer
Kirtland	2406'	2952'	gas
Fruitland	2952'	3196'	gas
Pictured Cliffs	3196'	3400'	gas
Lewis	3400'	3886'	gas
Huerfanito Bentonite	3886'	4141'	gas
Chacra	4141'	4916'	gas
Massive Cliff House	4916'	5026'	gas
Menefee	5026'	5353'	gas
Massive Point Lookout	5353'	5776'	gas
Mancos	5776'	6614'	gas
Gallup	6614'	7353'	gas
Greenhorn	7353'	7410'	gas
Graneros	7410'	7460'	gas
Two Wells	7460'	7549'	gas
Cubero	7549'	7577'	gas
Lower Cubero	7577'	7671'	gas
Encinal	7671'		gas
Total Depth	7671'		

Logging program:

Cased hole - CBL-GR

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
2898' - 7671'	Air Mist/Mud	8.0-9.0	33-35	6-8 cc/30 min

Casing Program:

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
6-1/4"	Surface - 7671'	4-1/2"	10.5#/11.6#	J-55

Tubing Program:

<u>Tbg.Size</u>	<u>Wt.</u>	<u>Grade</u>
2-3/8"	4.7#	J-55

Operations:

It is intended to deepen the subject well to the Dakota formation by the following procedure:

1. MIRU.
2. Set retrievable bridge plug at +/- 2700'.
3. Pressure test casing to 1000 psi for 15 minutes. TOOH with bridge plug.
4. Drill Dakota formation to approximately 7671' with mud logger to call final total depth. TOOH.
5. TIH with 4-1/2" production casing and set at total depth.
6. Cement with 330 sxs Prem Lite HS FM + 0.25pps Cello-Flake, 0.3% CD-32, 6.25pps LCM-1, 1% FL-52 cement (1.98 yield, 12.5 ppg, 30% excess).
7. Stimulate the Dakota formation.

8. Flowback and clean out to PBTD.
9. Land 2-3/8" IJ tubing.
10. RDMO rig. First deliver well as a ~~completing rig~~/DK producer.

BOP Specifications, Wellhead and Tests:

Surface to Total Depth:

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

Completion Operations:

7 1/16" 2000 psi double gate BOP stack (Reference Figure #4). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 2000 psi for 15 minutes.

Wellhead:

9 5/8" x 7" x 4 1/2" x 2 1/16" x 2000 psi tree assembly.

General Information:

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- All BOP tests and drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with hand wheels.

Cementing:

4-1/2" Production Liner

Cement to cover minimum of 100' above the bottom of the 7" casing. Minimum TOC @ 2798'. Cement with 330 sxs Prem Lite HS FM + 0.25pps Cello-Flake, 0.3% CD-32, 6.25pps LCM-1, 1% FL-52 cement (1.98 yield, 12.5 ppg, 30% excess). WOC a minimum of 18 hrs prior to completing.

Special Drilling Operations (Gas/Mist Drilling):

The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the wellhead.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water-cooled exhaust.
- Deduster equipment will be utilized.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

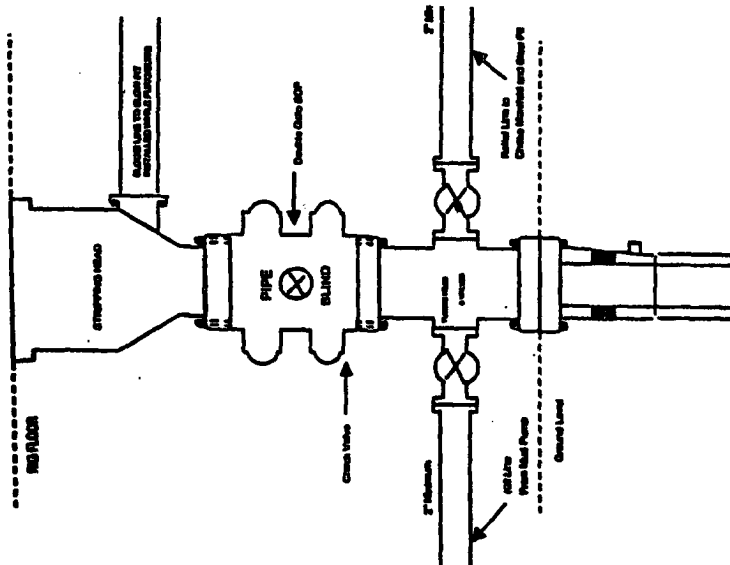
Additional Information:

- The Dakota formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal	400 psi
Pictured Cliffs	850 psi
Mesa Verde	650 psi
Dakota	2000 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.

BURLINGTON RESOURCES

Completion/Workover Rig
BOP Configuration
2,000 psi System

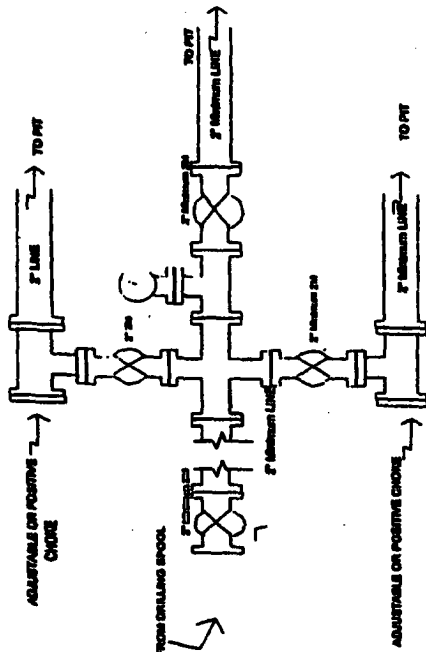


Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi stripping head.

Figure #2

BURLINGTON RESOURCES

Drilling Rig
Choke Manifold Configuration
2000 psi System

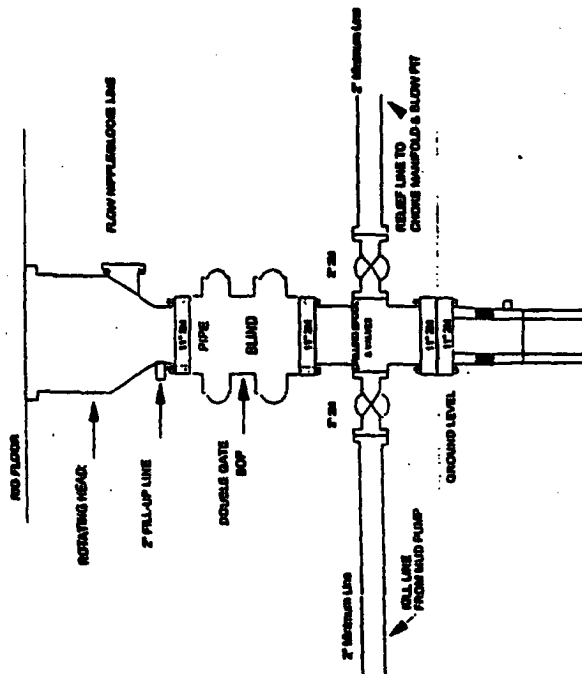


Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

Burlington Resources

Drilling Rig
2000 psi System



BOP Installation from Surface Casing Point to Total Depth. 11" Bore 10" Nominal, 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A 500 psi ramming head on top of ram preventer. All BOP equipment is 2,000 psi working pressure.

Figure #1