

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2004 MAY 13 PM 2:49

1a. Type of Work DRILL	5. Lease Number NMSF-078741 Unit Reporting Number	
1b. Type of Well GAS	6. If Indian, All. or Tribe	
2. Operator <b>BURLINGTON</b> RESOURCES Oil & Gas Company	7. Unit Agreement Name San Juan 30-6 Unit	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499  (505) 326-9700	8. Farm or Lease Name San Juan 30-6 Unit 9. Well Number #491S	
4. Location of Well 1805' FNL, 1945' FWL  Latitude 36° 47.1533'N, Longitude 107° 24.9595'W	10. Field, Pool, Wildcat Basin Fruitland Coal 11. Sec., Twn, Rge, Mer. (NMPM) Sec. 25, T30N, R06W API # 30-039- 27739	
14. Distance in Miles from Nearest Town 11 miles to Gobernador	12. County Rio Arriba	13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1805'		
16. Acres in Lease	17. Acres Assigned to Well 320 W/2	
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 500'		
19. Proposed Depth 3649'	20. Rotary or Cable Tools Rotary	
21. Elevations (DF, FT, GR, Etc.) 6697' GR	22. Approx. Date Work will Start	
23. Proposed Casing and Cementing Program See Operations Plan attached		
24. Authorized by: <u>Nancy Oltmanns</u> Regulatory Specialist	<u>1-12-04</u> Date	

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY DJ Mantikwa TITLE AFM DATE 6-3-04

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.

NO HPA NOTIFICATION REQUIRED UNDER ORDER R-8768F.

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

NMOCD

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

District I  
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

District II  
PO Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-27739		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 7469	*Property Name SAN JUAN 30-6 UNIT		*Well Number 491S
*OGRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY, LP		*Elevation 6697'

10 Surface Location

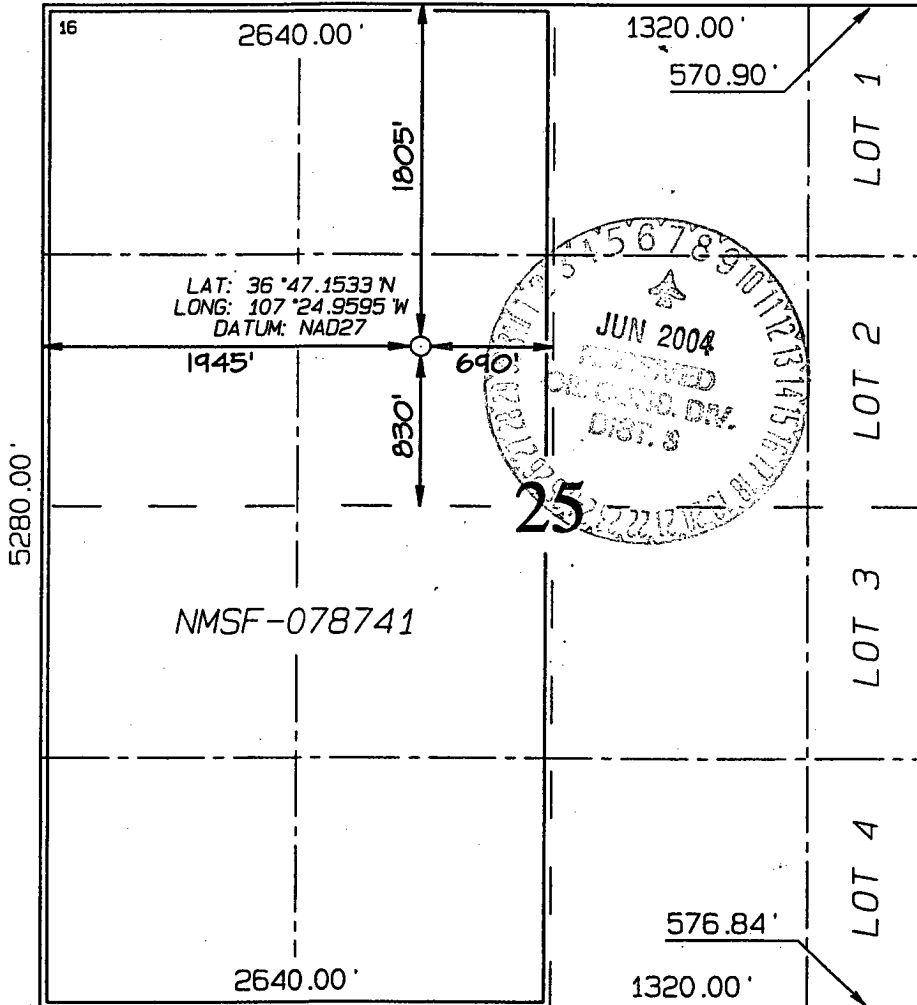
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	25	30N	6W		1805	NORTH	1945	WEST	RIO ARRIBA

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 FTC W/320	13 Joint or Infill	14 Consolidation Code	15 Order No.
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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



17 OPERATOR CERTIFICATION

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

*Nancy Oltmanns*  
Signature

Nancy Oltmanns  
Printed Name  
Senior Staff Specialist  
Title

1-12-04  
Date

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.

Survey Date: OCTOBER 10, 2003

Signature and Seal of Professional Surveyor



JASON C. EDWARDS  
Certificate Number 15269

OPERATIONS PLAN

Well Name: San Juan 30-6 Unit # 491S  
Location: 1805' FNL, 1945' FWL Section 25, T-30-N, R-06-W  
Latitude 36° 47.1533'N, Longitude 107° 24.9595'W  
Rio Arriba, NM  
Formation: Basin Fruitland Coal  
Elevation: 6697' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	2800'	
Ojo Alamo	2800'	2898'	aquifer
Kirtland	2898'	3161'	
Fruitland	3161'	3389'	
Intermediate TD	3339'		
Fruitland Coal	3389'	3629'	gas
B/Basal Coal	3629'	3639'	gas
Pictured Cliffs	3639'		
Total Depth	3649'		

Logging Program: GR/Density 7" to 3649'

Mudlog: from 7" to 3649'

Coring Program: none

**Mud Program:**

Interval	Type	Weight	Vis.	Fluid Loss
0- 120'	Spud Mud/Air/Air Mist	8.4-9.0	40-50	no control
120-3339'	Non-dispersed	8.4-9.0	30-60	no control
3339-3649'	Air/Mist			

**Casing Program (as listed, the equivalent, or better):**

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
12 1/4"	0' - 120'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3339'	7"	20.0#	J-55
6 1/4"	3339' - 3649'	open hole		

**Alternate Casing Program (as listed, the equivalent, or better):**

Hole Size	Depth Interval	Csg. Size	Wt.	Grade
12 1/4"	0' - 120'	9 5/8"	32.3#	H-40
8 3/4"	0' - 3339'	7"	20.0#	J-55
6 1/4"	3299' - 3649'	5 1/2"	15.5#	J-55

**Tubing Program:**

0' - 3649'      2 3/8"      4.7#      J-55

**Float Equipment:** 9 5/8" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing - guide shoe and self-fill float collar. Standard centralizers run every other joint above shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 2898'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

**Wellhead Equipment:** 9 5/8" x 7" x 2 3/8" x 11" 2000 psi xmas tree assembly.

**Cementing:**

9 5/8" surface casing -  
Pre-Set Drilled Cement with 23 sx Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. (37 cu ft of slurry, bring cement to surface) Wait on cement for 24 hours for pre-set holes before pressure testing or drilling out from under surface.

Conventionally Drilled  
Cement with 88 sx Type III cement with 0.25 pps Celloflake, 3% CaCl. (113 cu ft of slurry, 200% excess, bring cement to surface) Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface.

**WOC until cement establishes 250 psi compressive strength prior to NU of BOPE.**

7" intermediate casing - lead w/295 sacks Premium Lite with 3% calcium chloride, 5 pps LCM-1, and 1/4#/sack flocele, 0.4% FL-52, & 0.4% SMS. Tail with 90 sacks Type III cmt with 1% calcium chloride, 1/4#/sack flocele and 0.2% FL-52 (753 cu.ft., 50% excess to circulate to surface).

5 1/2" liner - will not be cemented if run.

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

**BOP and tests:**

Surface to intermediate TD - 11" 2000 psi (minimum) double gate BOP stack (Reference Figure #1). Prior to drilling out surface casing, test BOPE to 600 psi for 30 min.

Intermediate TD to Total Depth - 7 1/6" 2000 psi (minimum) completion BOP stack (Reference Figure #2) <sup>H</sup>. Prior to drilling out intermediate casing, test BOPE and casing to 1500 psi for 30 minutes.

From surface to 7" TD - a choke manifold will be installed in accordance with Onshore Order No. 2 (Reference Figure #3). When the cavitation completion rig drills the production hole, the completion rig configuration will be used (Reference Figure #4).

Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valve to fit each drill string will be maintained and available on the rig floor.

**Additional information:**

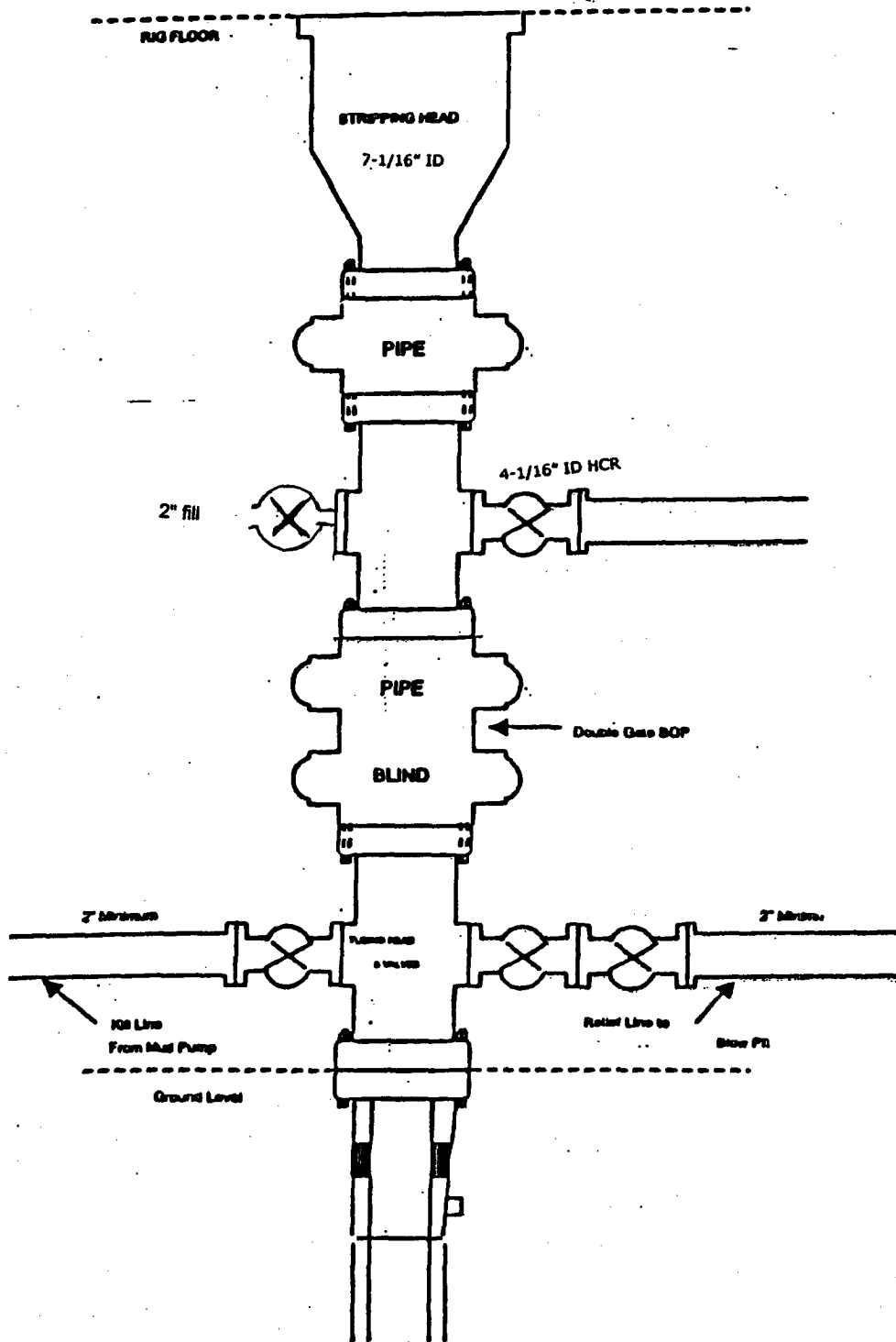
- \* The Fruitland Coal formation will be completed.
- \* Anticipated pore pressure for the Fruitland is less than 500 psi.
- \* This gas is dedicated.
- \* The west half of Section 25 is dedicated to the Fruitland Coal.

Date: 4-21-04Drilling Engineer: Jennifer McCauley

# BURLINGTON RESOURCES

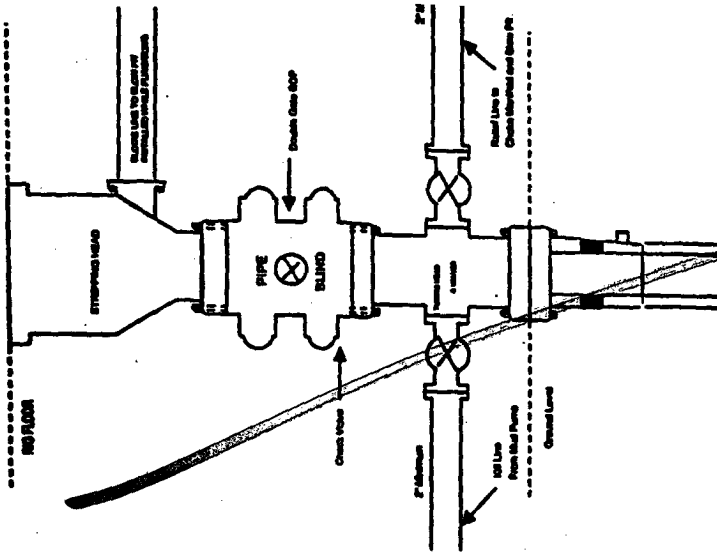
FIGURE #4

## Cavitation Rig BOP Configuration 2,000 psi Minimum System



**BURLINGTON RESOURCES**

**Completion/Workover Rig  
BOP Configuration  
2,000 psi System**

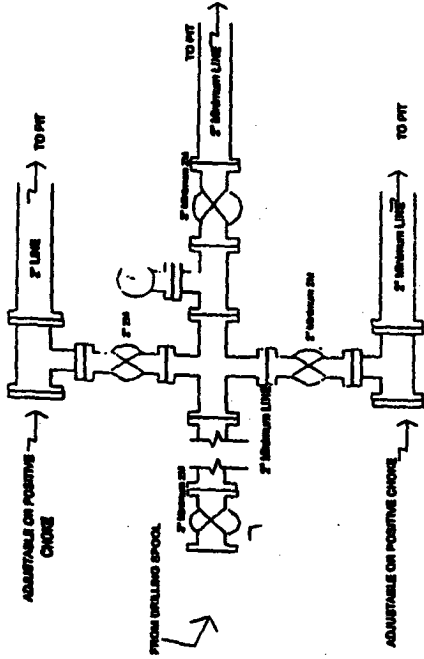


Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 500 psi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

Figure #2

**BURLINGTON RESOURCES**

**Drilling Rig  
Choke Manifold Configuration  
2000 psi System**

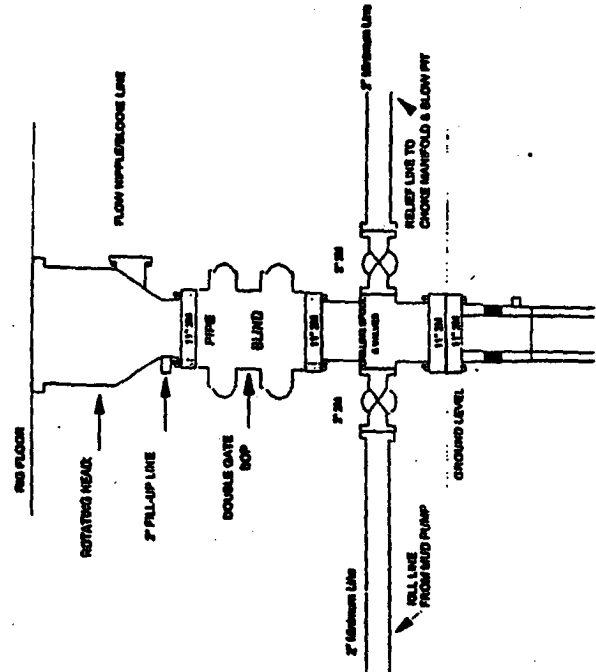


Choke manifold installation from Surface Casing Point to Total Depth. 2,000psi working pressure equipment with two chokes.

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 ratcheting head on top of ram preventers. All BOP equipment is 2,000 psi working pressure.

Figure #1

Submit 3 Copies To Appropriate District Office  
 District I  
 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

Form C-103  
 March 4, 2004

OIL CONSERVATION DIVISION  
 1220 South St. Francis Dr.  
 Santa Fe, NM 87505

WELL API NO. 30-039-
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name San Juan 30-6 Unit
8. Well Number 491S
9. OGRID Number 14538
10. Pool name or Wildcat Basin Fruitland Coal

SUNDRY NOTICES AND REPORTS ON WELLS  
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:  
 Oil Well  Gas Well  Other

2. Name of Operator  
 Burlington Resources Oil & Gas Company LP

3. Address of Operator  
 3401 E. 30<sup>th</sup> Street, Farmington, NM 87402

4. Well Location  
 Unit Letter F : 1805 feet from the North line and 1945 feet from the West line  
 Section 25 Township 30N Range 6W NMPM Rio Arriba County, NM

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL F Sect 25 Twp 30N Rng 6W Pit type New Depth to Groundwater >100' Distance from nearest fresh water well >1000' Distance from nearest surface water >1000' Below-grade Tank Location UL      Sect      Twp      Rng      ;  
     feet from the      line and      feet from the      line

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

- PERFORM REMEDIAL WORK  PLUG AND ABANDON
- TEMPORARILY ABANDON  CHANGE PLANS
- PULL OR ALTER CASING  MULTIPLE COMPLETION
- OTHER: New Drill Pit

SUBSEQUENT REPORT OF:

- REMEDIAL WORK  ALTERING CASING
- COMMENCE DRILLING OPNS.  PLUG AND ABANDONMENT
- CASING TEST AND CEMENT JOB
- OTHER:

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Burlington Resources proposes to construct a new drill pit. The new drill pit will be an unlined pit as detailed in Burlington's general pit construction plan dated April 26, 2004 on file at the NMOCD office.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit  or an (attached) alternative OCD-approved plan .

SIGNATURE Cassady Harraden TITLE Regulatory Specialist DATE 5/6/04

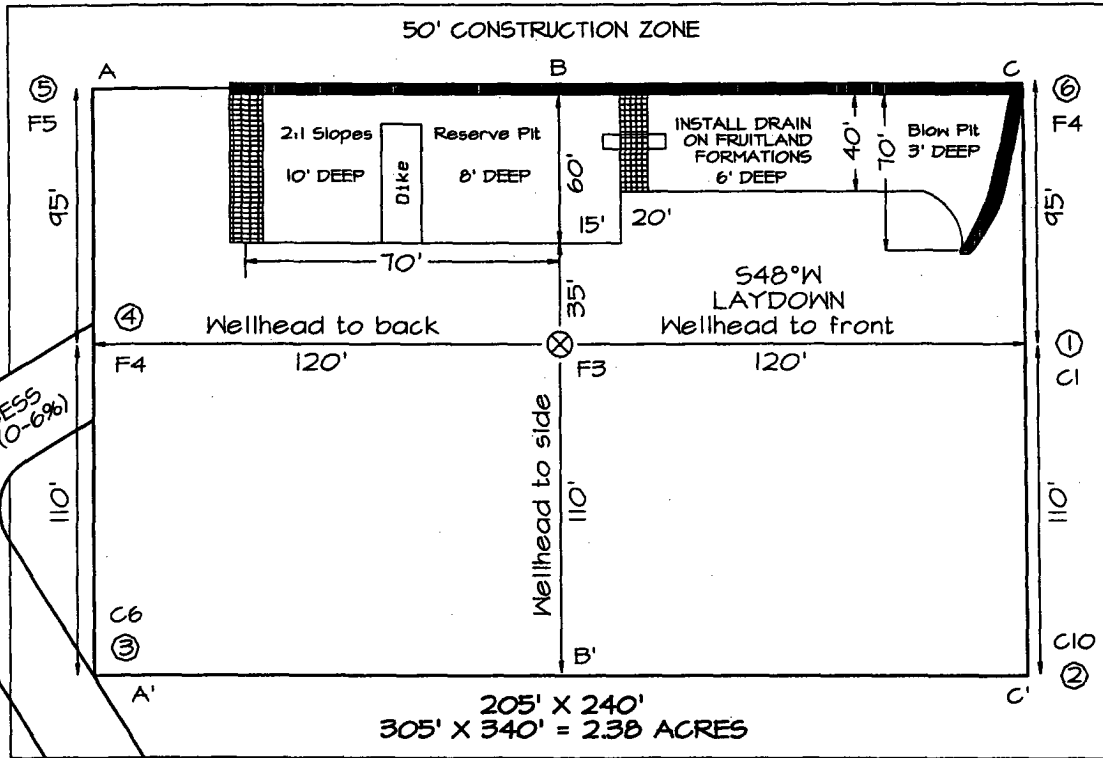
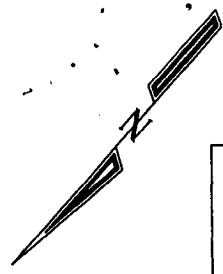
Type or print name Cassady Harraden E-mail address: charraden@br-inc.com Telephone No. 326-9700

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APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

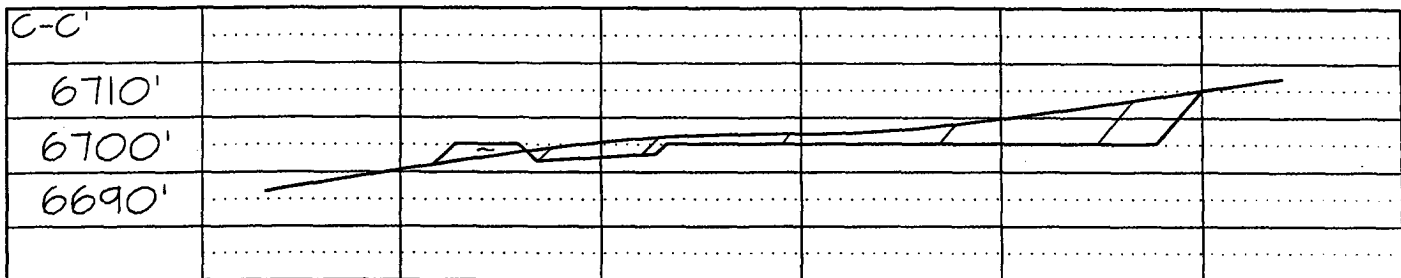
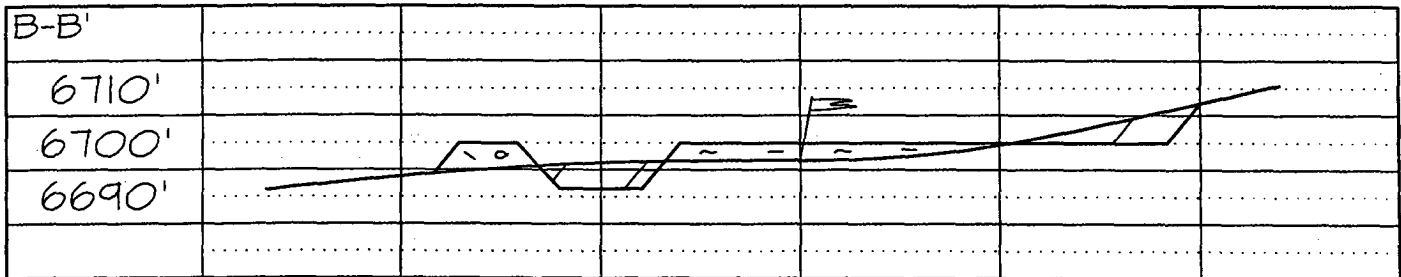
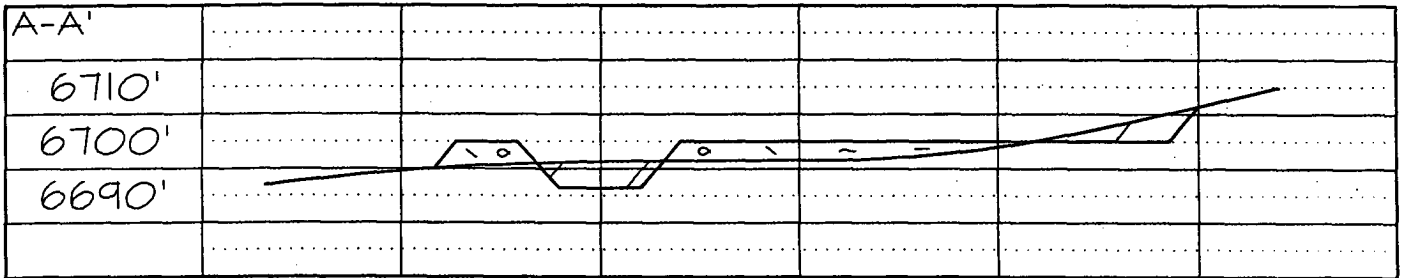
Conditions of approval, if any:

BURLINGTON RESOURCES OIL & GAS COMPANY  
**SAN JUAN 30-6 UNIT #491S, 1805' FNL & 1945' FWL**  
**SECTION 25, T30N, R6W, NMPM, RIO ARriba COUNTY, NM**  
**GROUND ELEVATION: 6697' DATE: OCTOBER 10, 2003**



LATITUDE: 36°47'09"  
 LONGITUDE: 107°24'58"  
 DATUM: NAD1927

Reserve Pit Dike: to be 8' above Deep side (overflow - 3' wide and 1' above shallow side).  
 Blow Pit: overflow pipe halfway between top and bottom and to extend over plastic liner and into blow pit.



Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction