

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2004 JAN 13 PM 2:38

1a. Type of Work  
DRILL

5. Lease Number  
NMSF - 078580

Unit Reporting Number  
070 Farmington, NM

1b. Type of Well  
GAS

6. If Indian, All. or Tribe

2. Operator  
**BURLINGTON**  
RESOURCES Oil & Gas Company

Unit Agreement Name

3. Address & Phone No. of Operator  
PO Box 4289, Farmington, NM 87499  
(505) 326-9700

8. Farm or Lease Name

Howell A

9. Well Number

#301S

4. Location of Well  
1515' FNL, 1560' FWL

10. Field, Pool, Wildcat  
Basin Fruitland Coal

Latitude 36° 50.5816'N, Longitude 107° 41.0245'W

11. Sec., Twn, Rge, Mer. (NMPM)  
F Sec. 4, T30N, R08W

API # 30-045- 32128

14. Distance in Miles from Nearest Town  
9.4 miles to Navajo Dam Post Office

12. County  
San Juan ✓

13. State  
NM

15. Distance from Proposed Location to Nearest Property or Lease Line  
1515'

16. Acres in Lease

17. Acres Assigned to Well  
320.5 W/2

18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease  
22'

19. Proposed Depth  
3165'

20. Rotary or Cable Tools  
Rotary

21. Elevations (DF, FT, GR, Etc.)  
6253' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program  
See Operations Plan attached

24. Authorized by: Joni Clark  
Regulatory/Compliance Specialist

12/10/03  
Date

PERMIT NO.

APPROVAL DATE

APPROVED BY J. Mantecón

TITLE

AFM

DATE

11/1/04

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.

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

OPERATOR

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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 15, 2000

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

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

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87506

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-32128		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code 7119	*Property Name HOWELL A		*Well Number 301S
*OGRD No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY LP		*Elevation 6253'

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	4	30-N	8-W		1515	NORTH	1560	WEST	SAN JUAN

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
*Dedicated Acres W/320.5			*Joint or Infill		*Consolidation Code		*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

FD 3 1/2" BLM BC. 1953	S 89-57-24 W 2616.0' (M)	FD 3 1/2" BLM BC. 1953	
LOT 4	LOT 3	LOT 2	LOT 1
1560'	1515'		
LAT. 36°50.5816' N. (NAD 27) LONG. 107°41.0245' W.			
SF-078580			
4			
NOV 2004			
070 Farmington, NM			
2004 JAN 13 PM 2:38			
RECEIVED			
FD 3 1/2" BLM BC. 1956			

17 OPERATOR CERTIFICATION

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

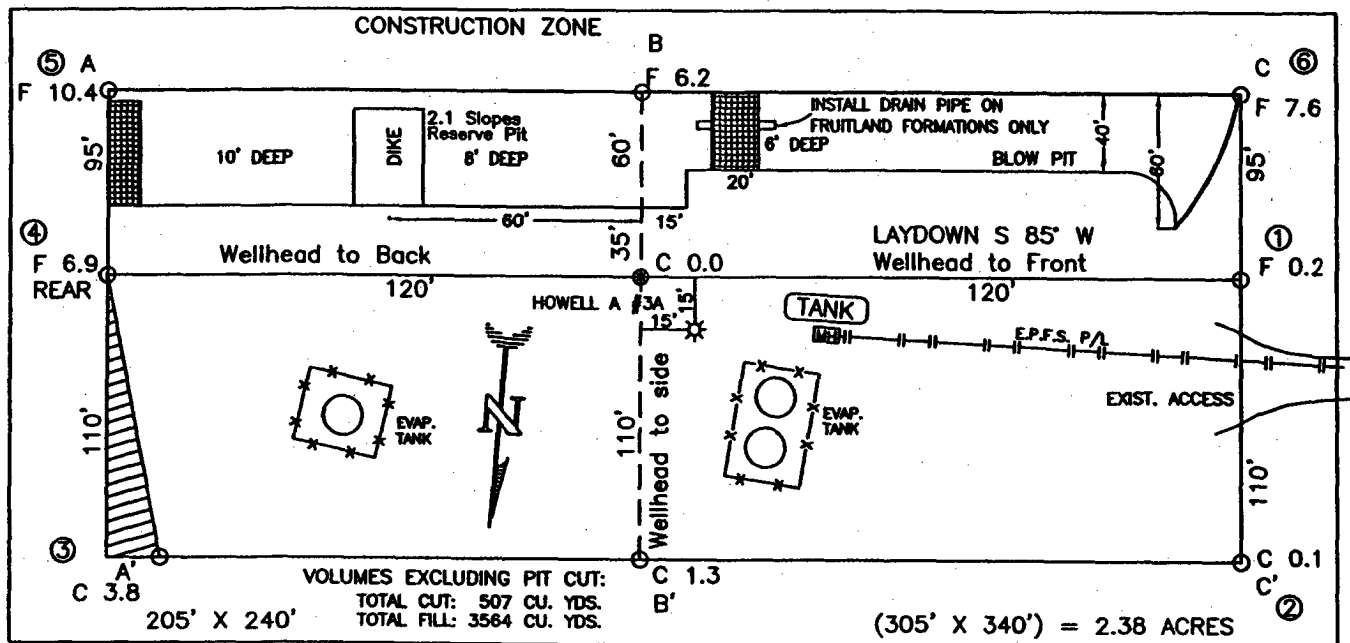
*Joni Clark*  
Signature  
Joni Clark  
Printed Name  
Regulatory Specialist  
Title  
12-10-03  
Date

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.

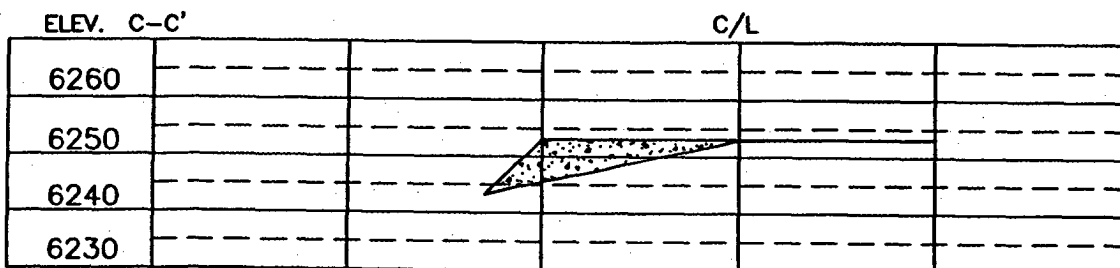
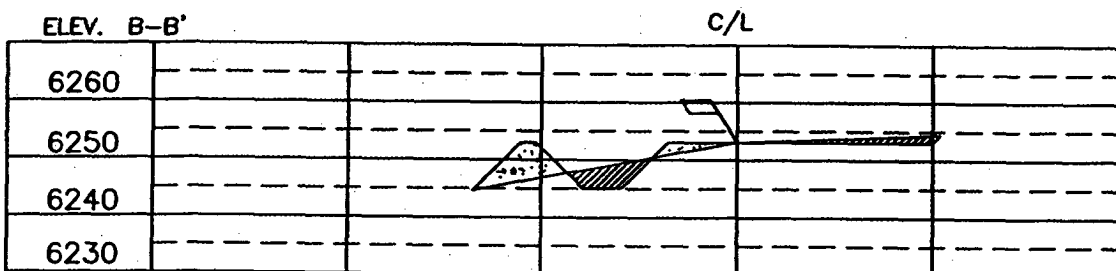
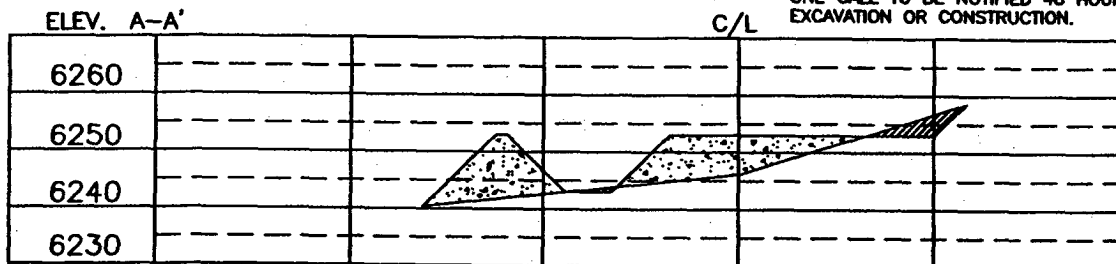
9-2-03  
Date of Survey  
DAVID A. JOHNSON  
Signature and Seal of Registered Professional Surveyor  
14827  
Certificate Number

**BURLINGTON RESOURCES OIL & GAS COMPANY LP**  
**HOWELL A #301S, 1515 FNL 1560 FWL**  
**SECTION 4, T-30-N, R-8-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO**  
**GROUND ELEVATION: 6253, DATE: AUGUST 26, 2003**



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: DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.



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.

DRAWN BY: B.L. ROW#: BR446 CADFILE: BR446CFB DATE: 9/02/03

**Daggett Enterprises, Inc.**  
 Surveying and Oil Field Services  
 P. O. Box 15088 Farmington, NM 87401  
 Phone (505) 328-1772 Fax (505) 328-8019

# OPERATIONS PLAN

**Well Name:** Howell A #301S  
**Location:** 1515' FNL, 1560' FWL Section 4, T-30-N, R-08-W  
Latitude 36° 50.5816' N, Longitude 107° 41.0245' W  
San Juan County, NM  
**Formation:** Basin Fruitland Coal  
**Elevation:** 6253' GR

Formation:	Top	Bottom	Contents
Surface	San Jose	1965'	
Ojo Alamo	1965'	2033'	aquifer
Kirtland	2033'	2645'	
Fruitland	2645'	2785'	
Fruitland Coal	2785'	3080'	gas
<b>Intermediate TD</b>	<b>2838'</b>		
B/Basal Coal	3080'	3085'	gas
Pictured Cliffs	3085'		
<b>Total Depth</b>	<b>3165'</b>		

**Logging Program:** none  
**Mudlog:** from 7" to 3165'  
**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
120-2838'	Non-dispersed	8.4-9.0	30-60	no control
2838-3165'	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' - 2838'	7"	20.0#	J-55
6 1/4"	2838' - 3165'	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' - 2838'	7"	20.0#	J-55
6 1/4"	2798' - 3165'	5 1/2"	15.5#	J-55

## **Tubing Program:**

0' - 3165'      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 @ 2033'. 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.

# BURLINGTON RESOURCES

RECEIVED

SAN JUAN DIVISION

2004 FEB 11 AM 10:18

February 10, 2004

070 Farmington, NM

Bureau of Land Management  
1235 La Plata Highway  
Farmington, New Mexico 87401

Dear Adrienne Garcia:

The surface cement slurry has been changed for the following wells to:

Cement with Type III cement with 0.25 pps Celloflake, 3% calcium chloride. (1.28 yeild, 15.2 ppg, 200% excess, bring cement to surface). Wait on cement appropriate time until cement achieves 250 psi compressive strength at 60 degrees F. prior to nipple up of BOPE. Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface. Test casing to 600 psi for 30 minutes.

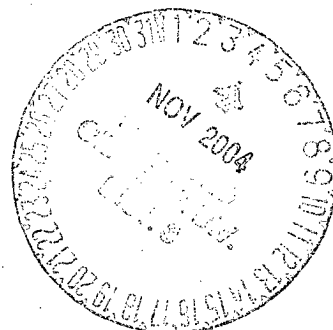
9-5/8" csg set @ 120'  
88 sxs cmt  
113 cu. ft. of slurry

Allison Unit 120S, NWSE, Sec. 30, T-32-N, R-6-W, Federal lease NM-04207.  
Allison Unit 121S, SENW, Sec. 30, T-32-N, R-6-W, Federal lease SF-081155.  
Carson SRC 101S, SWNW, Sec. 1, T-30-N, R-5-W, Federal lease NM-4453.  
Federal G 1N, SESW, Sec. 35, T-31-N, R-12-W, Federal lease SF-078120A.  
Hale 351S, SWNW, Sec. 34, T-31-N, R-8-W, Federal lease SF-079037.  
Hale 352S, NWSE, Sec. 27, T-31-N, R-8-W, Federal lease SF-079037.  
Howell A 301S, NENW, Sec. 4, T-30-N, R-8-W, Federal lease SF-078580.  
Howell Com J 301S, NWNW, Sec. 11, T-30-N, R-8-W, Federal lease NM-010468.  
Howell D 350S, SWSW, Sec. 28, T-31-N, R-8-W, Federal lease SF-078387.  
Howell D 351S, SENW, Sec. 29, T-31-N, R-8-W, Federal lease SF-078387.  
Johnston Federal 15S, NWSW, Sec. 35, T-31-N, R-9-W, Federal lease SF-078439.  
Johnston Federal 26S, SWNW, Sec. 7, T-31-N, R-9-W, Federal lease SF-078439.  
Johnston Federal 29S, SWSE, Sec. 7, T-31-N, R-9-W, Federal lease SF-078439.  
San Juan 32-9 Unit 250S, SWSE, Sec. 4, T-31-N, R-9-W, Federal lease SF-080875.  
San Juan 32-9 Unit 277S, SENW, Sec. 30, T-32-N, R-9-W, Federal lease SF-078509.  
San Juan 32-9 Unit 283S, NENW, Sec. 33, T-32-N, R-9-W, Federal lease SF-079048.  
Scott 100S, SENW, Sec. 29, T-32-N, R-10-W, Federal lease SF-078604.  
Scott Com 291S, NESE, Sec. 29, T-32-N, R-10-W, Federal lease SF-078604.  
Vanderslice 100S, SWNW, Sec. 18, T-32-N, R-10-W, Federal lease SF-078215A.  
Waller 100S, SESE, Sec. 11, T-32-N, R-11-W, Federal lease SF-078119A.  
Wilmer Canyon 101S, NENW, Sec. 25, T-32-N, R-8-W, Federal lease NM-6893.

Sincerely,



Tammy Wimsatt  
Regulatory Specialist



ACCEPTED FOR RECORD

NOV 01 2004

FARMINGTON FIELD OFFICE  
BY db

NMOC

**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 80 sx Type III cement with 0.25 pps Celloflake, 2% 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.

~~Waive the 6 hours WOC in lieu of 4 hours prior to NU of BOPE.~~ See BLM General Requirement

7" intermediate casing - lead w/242 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 (640 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 rams to 600#/30 min.

Intermediate TD to Total Depth - 7 1/6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, test blind rams and casing to 1500 psi for 30 minutes; all pipe rams and casing to 1500 psi for 30 minutes each.

From surface to TD - choke manifold (Reference Figure #3).

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 valves 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 4 is dedicated to the Fruitland Coal.

Date:

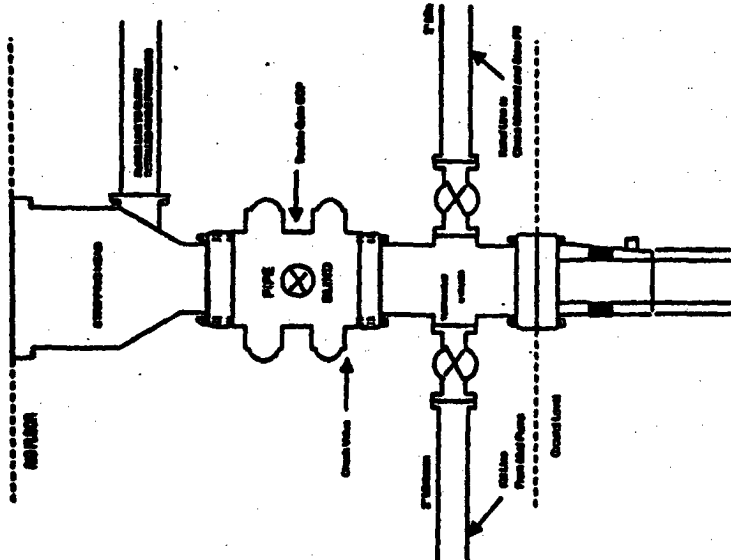
Dec 22, 2003

Drilling Engineer:

Jim McCarthy

# BURLINGTON RESOURCES

Completion/Workover Rig  
BOP Configuration  
2,000 psi System

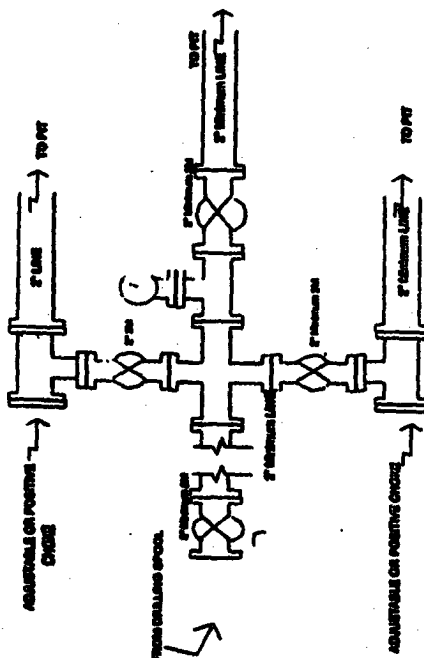


Minimum BOP Installation for all Completion/Workover Operations. 7-1/16" bore, 2000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A stripping head to be installed on the top of the BOP. All BOP equipment is 2000 psi working pressure or greater excluding 800 psi stripping head.

Figure #2

# BURLINGTON RESOURCES

Drilling Rig  
Choke Manifold Configuration  
2000 psi System



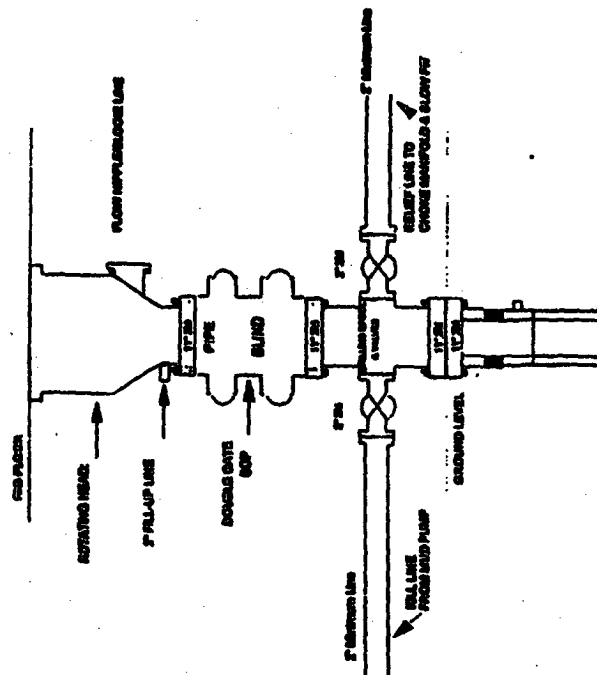
Choke manifold installation from Surface Casing Head to Total Depth. 2,000psi working pressure equipment with two choices.

Figure #3

4-20-01

# Burlington Resources

Drilling Rig  
2000 psi System



BOP Installation from Surface Casing Head to Total Depth. 11" Bore 10" Minimum 2000 psi working pressure double gate BOP to be equipped with blind rams and pipe rams. A 800 psi casing head on top of ram preventers. All BOP equipment is 2,000 psi working pressure

Figure #1

4-20-01

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

## Sundry Notices and Reports on Wells

2004 APR 27 PM 3:548

Lease Number  
SF-078580If Indian, All. or  
Tribe Name1. Type of Well  
GAS

070 FARMINGTON, NM

2. Name of Operator

**BURLINGTON  
RESOURCES**

OIL &amp; GAS COMPANY

7. Unit Agreement Name

3. Address &amp; Phone No. of Operator

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

8. Well Name & Number  
Howell A #301S

9. API Well No.

30-045- 32128

4. Location of Well, Footage, Sec., T, R, M

1515' FNL, 1560' FWL, Sec.4, T30N, R8W, NMPM

10. Field and Pool

Basin Fruitland Coal

11. County and State  
San Juan Co, NM

## 12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

## Type of Submission

## Type of Action

☒ Notice of Intent☐ Abandonment☒ Change of Plans☐ Subsequent Report☐ Recompletion☐ New Construction☐ Final Abandonment☐ Plugging Back☐ Non-Routine Fracturing☐ Casing Repair☐ Water Shut off☐ Altering Casing☐ Conversion to Injection☐ Other

## 13. Describe Proposed or Completed Operations

The BOP configuration has been revised for the subject well according to the following and attached diagram:

## 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). 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 valves to fit each drill string will be maintained and available on the rig floor.

14. I hereby certify that the foregoing is true and correct.

Signed Tammy Wimsatt Title Regulatory Specialist Date 04/013/04

fsb

(This space for Federal or State Office use)

APPROVED BY [Signature] Title AFM Date 11/1/04

CONDITION OF APPROVAL, if any:

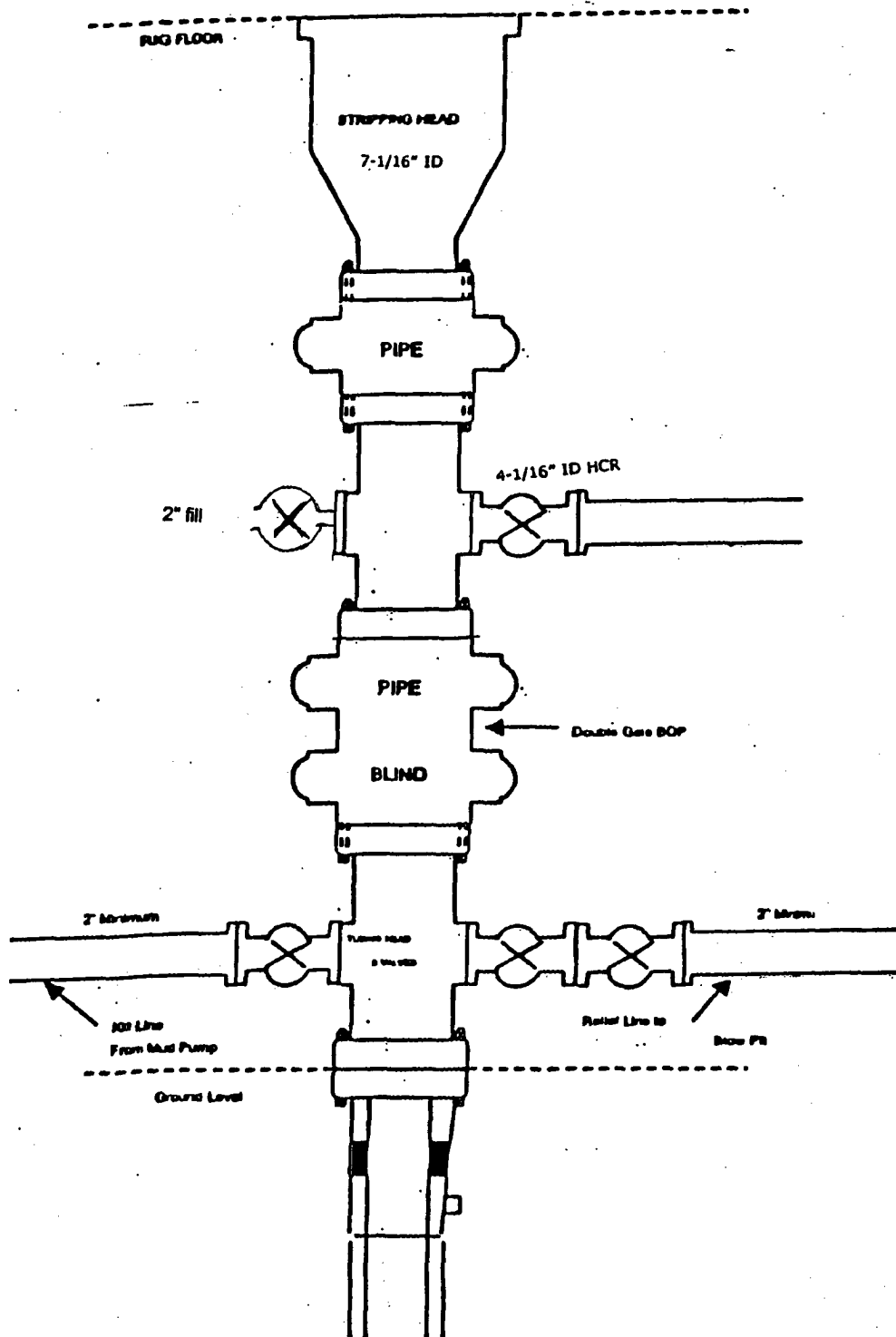
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOCD



# BURLINGTON RESOURCES

Figure #4  
Cavitation Rig  
BOP Configuration  
2,000 psi Minimum System



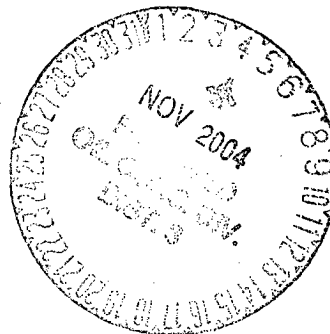
# BURLINGTON RESOURCES

SAN JUAN DIVISION

January 13, 2004

(Certified Mail – Return Receipt Requested)

Re: Howell A 301S  
Basin Fruitland Coal  
1515'FNL, 1560'FWL Section 4, T-30-N, R-8-W  
San Juan County, New Mexico



To the Affected Persons:

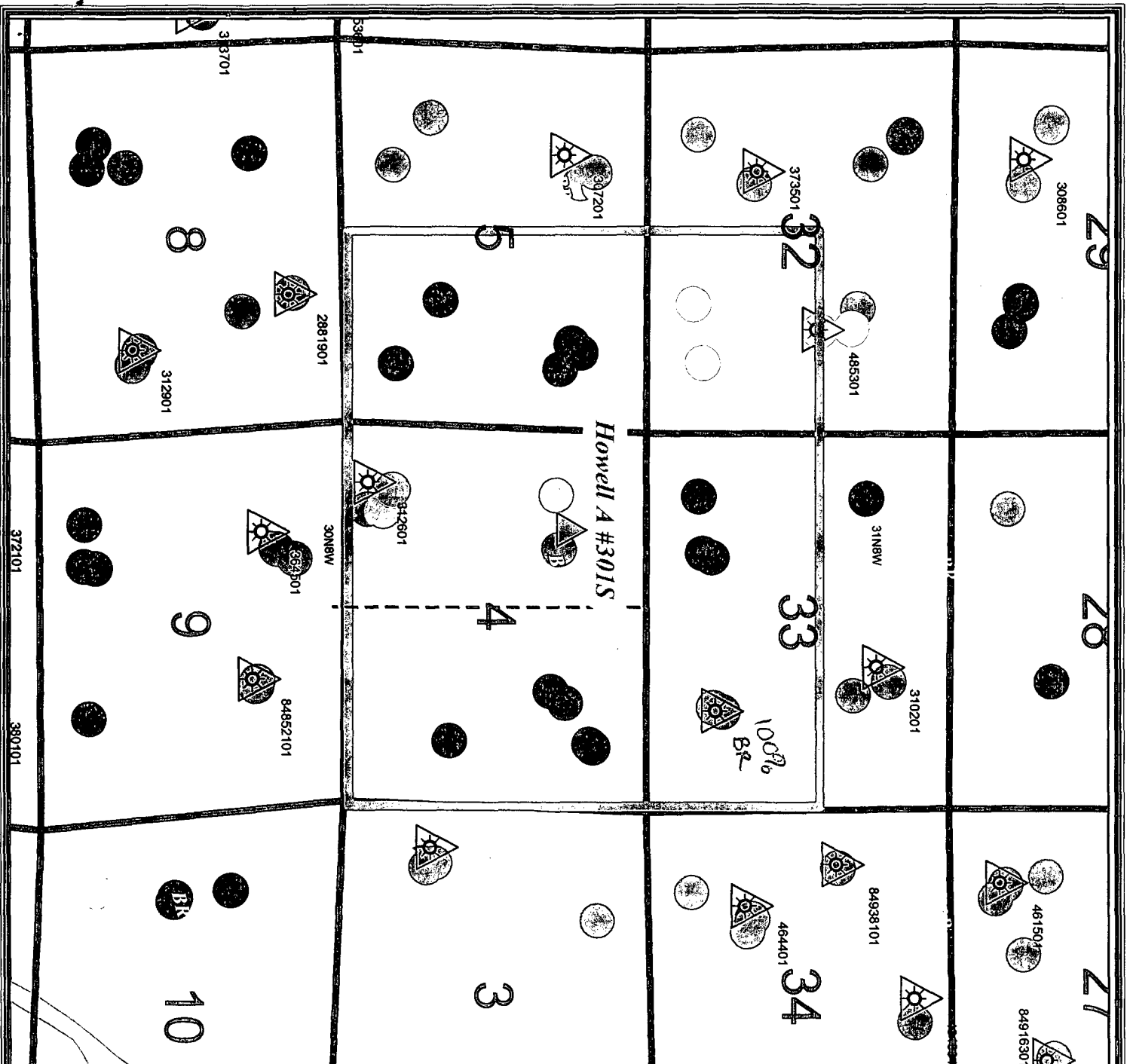
Burlington Resources Oil & Gas Company LP is submitting the enclosed Application for Permit to Drill to the appropriate regulatory agency(s) for approval. This well is located inside the High Productivity Area of the Basin-Fruitland Coal Pool as indicated on the attached plat. Notice is being made pursuant to New Mexico Oil Conservation Commission Order R-8768-F dated July 17, 2003.

The affected parties have twenty (20) days from receipt of this notice in which to file with the District Office of the New Mexico Oil Conservation Division written objection to the proposed Application for Permit to Drill.

Sincerely,

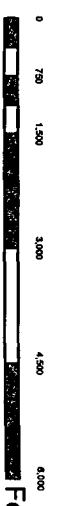
*Frances Bond*

Frances Bond  
Regulatory Assistant



- Legend**
- △ FRUITLAND COAL
  - **Current Operator**
  - Unknown
  - BURLINGTON RESOURCES O&G CO LP
  - BP AMERICA PRODUCTION COMPANY
  - CONOCOPHILLIPS COMPANY
  - Energen

**BURLINGTON  
RESOURCES**



1:71,167.736 - 1" equals 5,930.645'  
GCS North American 1927


**BURLINGTON RESOURCES**


*San Juan*

**Howell A #301S**

T30N-R8W  
Section 4

Prepared By: hmc Date: 9/19/2003  
File Number: Revised Date: 9/19/2003  
File Name: c:\p1\hmc\Projects\hmc\30 6 7\hmc\30 6 7.mxd

2. Article Number		COMPLETE THIS SECTION ON DELIVERY	
 7110 6605 9590 0007 5326		A. Signature X <i>ED 148200002</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to:		B. Received by (Printed Name) <input type="checkbox"/> C. Date of Delivery <i>JAN 16 2004</i>	
BP America Attn: Bryan Anderson PO Box 3092 PO Box 3092 Houston, TX 77253-3092  12/1/2003 1:17 PM Code: FTC HPA Infill		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES enter delivery address below: <input type="checkbox"/> No	
		3. Service Type <input checked="" type="checkbox"/> Certified	
		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811 <i>Howell A 3015</i> Domestic Return Receipt			

2. Article Number		COMPLETE THIS SECTION ON DELIVERY	
 7110 6605 9590 0007 5340		A. Signature X <i>[Signature]</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee	
1. Article Addressed to:		B. Received by (Printed Name) <input type="checkbox"/> C. Date of Delivery <i>JAN 16 2004</i>	
ConocoPhillips Company Chief Landman San Jaun/Rockies PO Box 2197 PO Box 2197 Houston, TX 77252-2197  12/1/2003 1:18 PM Code: FTC HPA Infill		D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES enter delivery address below: <input type="checkbox"/> No	
		3. Service Type <input checked="" type="checkbox"/> Certified	
		4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
PS Form 3811 <i>Howell A 3015</i> Domestic Return Receipt			