### **UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT**

### APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

്റ്5. Lease Number 1a. Type of Work DRILL NMSF-078716-A **Unit Reporting Number** 6. If Indian, All. or Tribe Type of Well 1b. GAS 2. Operator 7. Unit Agreement Name BURLINGTON RESCURCES Oil & Gas Company LP 3. Address & Phone No. of Operator 8. Farm or Lease Name PO Box 4289, Farmington, NM 87499 San Jacinto 9. Well Number (505) 326-9700 #6N 10. Field, Pool, Wildcat Location of Well Unit F (SENW), 1342' FNL & 1824' FWL, Basin DK/ Blanco MV F11. Sec., Twn, Rge, Mer. (NMPM) Sec. 20, T29N, R10W Lat. 36\*42.9181'N Long. 107\*54.5895'W API# 30-045-33920 14. Distance in Miles from Nearest Town 12. County 13. State 4.4 miles to Bloomfield, NM Post Office San Juan NM 15. Distance from Proposed Location to Nearest Property or Lease Line 1342 16. **Acres in Lease** 17. Acres Assigned to Well 320 N2 DK & 320 N2 MV 18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 279' San Jacinto #8 19. **Proposed Depth** 20. Rotary or Cable Tools 6447' Rotary 21. Elevations (DF, FT, GR, Etc.) 22. Approx. Date Work will Start 5610' GR 23. **Proposed Casing and Cementing Program** See Operations Plan attached 24. Authorized by: Régulatory Anályst PERMIT NO. APPROVAL DATE **APPROVED BY 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.

This well is NOT in the HPA area.



DP.HGCT f. 1675 N. French Dr., Hobbs, N.M. 88240

DISTRICT II 1301 W. Grand Ave., Artesia, N.M. 88210

1000 Rio Brozos Rd., Aztec, N.M. 87410

Talte of New Mexico
Energy, Minerals & Natural Resources Department
Off COMMERTYATION DIVISION
1220 South St. Francis Dr.

1220 South St. Francis Dr. Santa Fe, NM 87505 Form C 102 Revised October 12, 2005 Submit to Appropriate District Office

State Leave - 4 Copies

Fee Lease - 3 Copies

1 AMENDED REPORT

DISTRICT IV 1220 South St. Francis Dr., Santa Fe, NM 87505

		ν	VI 1. 1.	OCA NO	M AMD	ACI	REAGE DED	ICAHON P	FAT		
30-045	Number 3	920	7159	*Pool Code 99/72319		36	sin Dakota/	Pool Nor Blance Mes		:	227 <b>188 2 1</b> 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2
*Property Code 7450			<sup>3</sup> Property Name SAN JACINTO					* Well Number			
'00RID No 14536			*Oper					NY LP	* Elevation 5610		
				-			Location	<b></b>			
UL or lot no.	Section 20	Township 29-N	Range 10-W	Lot Idn	Feet from to	he	North/South line NORTH	Feet from the	East/We		County SAN JUAN
l		. <b></b>	"Bott	om Hole	. Locati	1 on 1	f Different Fr	om Surface	<del></del>		10/11/ 00/11/
UL or lot no.	Section	Township	Ronge	Lot Idn	Feet from t		North/South line	Feet from the	Eust/We	est line	County
<sup>12</sup> Dedicated Acres		1	oint or Infill	fill <sup>14</sup> Consolida		ution Code		<sup>15</sup> Order No.	<sup>15</sup> Order No.		<u> </u>
320 N2 D											
NO ALLOV	VABLE V						ON UNTIL ALL EN APPROVE			BEEN C	ONSOLIDATED
W (0) VS/ 2661.87 (C) NS/ 2661.87 (C) NS/	(C)  C.	LON LAT:	: 36.715 IG:107.91 36*42.91 G:107*54.5	1298 USA S USA S 31° N. (N 045° W. 81° N. (NA 5895° W. (N	58'25" W B.24' (C) F-078716-  IAD 83) (NAD 83) D 27)	A	USA SF-078266	ls true and belief, and interest or including the right to drift contract will interest, or compulsory division.  Signatur Philar Printed	complete to that this organ unleased miners or proposed by this well at the control of the contr	the best of nizotion eith rod interest it tom hole ic this location is such a mis reposition of process of pro	pursuant to a pursuant to a pursuant to a pursuant to a pursuant or a pu
1967 GLO							-	was plotted fr	om field notes supervision, on best of my	WKON	shown on this plat surveys made by me same is true and

Submit 3 Copies To Appropriate District	State of New Mexico	Form C-103
Office District I	Energy, Minerals and Natural Resources	May 27, 2004
1625 N. French Dr., Hobbs, NM 88240 District II		WELL API NO. 30-045 ÷ 33920
1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION DIVISION	5. Indicate Type of Lease
District III	1220 South St. Francis Dr.	STATE FEE
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe, NM 87505	6. State Oil & Gas Lease No. Federal SF-078716-A
District IV 1220 S. St. Francis Dr., Santa Fe, NM 8750	5	redefai Sr-0/8/10-A
SUNDRY NOTICE	ES AND REPORTS ON WELLS TO DRILL OR TO DEEPEN OR PLUG BACK TO A	7. Lease Name or Unit Agreement Name
DIFFERENT RESERVOIR. USE "APPLICATIO	N FOR PERMIT™ (FORM C-101) FOR SUCH	San Jacinto
PROPOSALS.)  1. Type of Well:		8. Well Number
Oil Well Gas Well X	Other	#6N
2. Name of Operator BURLINGTON RESO	URCES OIL & GAS COMPANY LP	9. OGRID Number 14538
3. Address of Operator		10. Pool name or Wildcat
4. Well Location	EET, FARMINGTON, NM 87402	Basin Dakota / Blanco Mesaverde
1	342 feet from the <u>North</u> line and	1824 feet from the West line
Section 20	Township 29N Rng 10W	V NMPM County San Juan
ll. E	Elevation (Show whether DR, RKB, RT, GR, etc.) 5610' GR	
Pit or Below-grade Tank Application	or Closure	)200
Pit type New Drill Depth to Groundwa	ater <100' Distance from nearest fresh water well	>1000 Distance from nearest surface water <1000
Pit Liner Thickness: 12	mil Below-Grade Tank: Volume	bbls; Construction Material
NOTICE OF IN PERFORM REMEDIAL WORK TEMPORARILY ABANDON PULL OR ALTER CASING	PLUG AND ABANDON REMEDIA CHANGE PLANS COMMEN	SUBSEQUENT REPORT OF:
OTHER: New 1	Drill X OTHER:	
	d operations. (Clearly state all pertinent details, and	
of starting any proposed work). or recompletion.	SEE RULE 1103. For Multiple Completions: Attac	ch wellbore diagram of proposed completion
or recompletion.		
New Drill, Lined:		
	nstruct a new drill pit. Based on Burlington's interpre in Burlington's Revised Drilling / Workover Pit Cons	etation of the Ecosphere's risk ranking criteria, the new struction / Operation Procedures dated November 11,
2004 on file at the NMOCD office. B dated August 2, 2004 on file at the N		ting to the Drilling / Workover Pit Closure Procedure
-		
	be the only pit that will be required. Under this circ libe lined, as per the risk ranking criteria.	umstance, a portion of this vent/flare pit will be designed
to manage nuits, and that portion wil	t be fined, as per the risk fanking effecta.	
	ve is true and complete to the best of my knowledge and according to NMOCD guidelines, a general permit X	
1/1	7 111111	
SIGNATURE	TITLE PH	nilana Thompson DATE 8/30/2006
Type or print name Philana 7 For State Use Only 0	The state of the s	Sbr-inc.com Telephone No. 505-326-9530
	M _ CEPUTY OIL &	gas inspector, dist. 40 Date SEP 2 1 2006
APPPROVED BY  Conditions of Approval (if any):	TITLE	DATE DATE

# BURLINGTON RESOURCES OIL & GAS COMPANY LP

SAN JACINTO No. 6N, 1342 FNL 1824 FWL SECTION 20, T-29-N, R-10-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO

GROUND ELEVATION: 5610, DATE: MAY 24, 2006

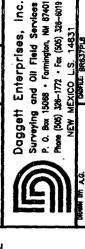
LAT. = 36.71531° N LONG. = 107.91045° W NAD 27 LAT. = 36'42.9181' N LONG. = 107'54.5895' W

2.7 2.7 <u>~</u> 9; **6** 130, 100 3.03 ACRES 79.54 Front BLOW PIT FRUITLAND FORMATIONS ONLY 11 Z Wellhead to (330' X 400') INSTALL DRAIN PIPE ON LAYDOWN × 300, , , , , , 32, apis to Wellhead B 7.4 5.2 130, ,99 230, O O CONSTRUCTION ZONE 2.1 Slopes Reserve Pit 8' DEEP 70, 55 YDS. 99 Wellhead to Back TOTAL CUT: 4392 TOTAL FILL: 1404 VOLUMES EXCLUDING DIKE 140, DEEP 50, 536' NEW ACCESS <u>.</u> 9 5.2 130, 100, 5.3 REAR ⊕, 1,2 (D) L \_∢ п

BLOW PIT. PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW -- 3' WIDE AND 1' ABOVE SHALLOW SIDE). OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO WIDE AND 1' ABOVE SHALLOW SIDE) RESERVE F BLOW PIT:

NOTE: ESTIMATED VOLUMES CALCULATED BY AVERAGE END AREA AT CROSS-SECTION SHOWN 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. NOTE:



# **BURLINGTON RESOURCES OIL & GAS COMPANY LP**

5610 5620 ELEV. 5990 5600 A-A SECTION 20, T-29-N, R-10-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO SAN JACINTO No. 6N, 1342 FNL 1824 FWL GROUND ELEVATION: 5610, DATE: MAY 24, 2006 C/L LONG. LONG. = 107'54,6895' W LAT. = 36'42.9181' N NAU 83 = 36.71531° N = 107.91045° NAD 27 

	<b></b>		<del>,</del>	,					,
5990	5600	5610	5620	ELEV. C-C	5990	5600	5610	5620	ELEV. B.
				)_C'		<del></del>			B-8'
				د/د				-	c/L
						<b>1</b>			

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.

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Surveying and Oil Field Services
P. O. Box 15068 • Farmington, NM 87401 Daggett Enterprises, Inc. Phone (505) 326-1772 · Fax (505) 326-6019

90/01/90 June

### OPERATIONS PLAN

Well Name:

SAN JACINTO 6N

Location:

1342' FNL & 1824' FWL, Section Sec 20 T29N R10W

San Juan County, New Mexico

Formation:

Basin Dakota/Blanco Mesaverde

Elevation:

5610' GL

Formation Tops:	Top	Bottom	<u>Contents</u>
Surface	San Jose	787'	
Ojo Alamo	787'	874'	aquifer
Kirtland	874'	1682'	gas
Fruitland	1682'	1902'	gas
Pictured Cliffs	1902'	1992'	gas
Lewis	1992'	252 <b>7</b> '	
Huerfanito Bentonite	2527'		
Chacra	2882'	3529'	gas
Massive Cliff House	3529'	3572'	gas
Menefee	3572'	4212'	gas
Massive Point Lookout	4212'	4594'	gas
Mancos Shale	4594'	5409'	
Upper Gallup	5409'	6157'	gas
Greenhorn	6157'	6215′	gas
Graneros	6215'	6276'	gas
Two Wells	6276'	6326'	gas
Paguate	6326'	6390'	gas
Cubero	6390'	6447'	gas
Encinal	6447'	6447'	gas
Total Depth:	6447'		gas

### Logging Program:

Mud Logs/Coring/DST

Mud logs - none

Coring - none

DST - none

Open hole - none

Cased hole - Gamma Ray, CBL - surface to TD

### Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	Vis.	Fluid Loss
0 - 120'	Spud MUD/Air/Air Mist	8.4 - 9.0	40 - 50	no control
120'- 2092'	LSND	8.4 - 9.0	30 - 60	no control
2092' - 6447'	Air/Air Mist/Nitrogen	n/a	n/a	n/a

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

<u> Hole Size</u>	<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 120'	9 5/8"	32.3#	H - 40
8 3/4"	0' - 2109'	7 "	20/23#	J-55
6 1/4"	0' - 6447'	4 1/2"	10.5#/11.6#	J-55

### Tubing Program:

<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
0' - 6447'	2 3/8"	4.7#	J-55

### BOP Specifications, Wellhead and Tests:

Surface to Intermediate TD -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, BOPE and casing will be tested to 600 psi for 30 minutes.

Intermediate TD to Total Depth -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, BOPE and casing will be tested to 600 psi for 30 minutes.

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 #2). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 1500 psi for 15 minutes.

### Wellhead -

9 5/8" x 7" x 4  $\frac{1}{2}$ " x 2 3/8" x 2000 psi tree assembly.

### General -

- 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.
- BOP pit level drill will be conducted weekly for each drill crew.
- All BOP tests & drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

### 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. (38 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, 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. 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.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

### 7" intermediate casing -

Lead with 162 sacks Premium Lite cement with 3% calcium chloride, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sacks Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss (472 cu ft 50% excess to circulate to surface). WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL or a temperature survey will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

### 7" intermediate casing alternative two stage -

Stage collar set 300' above the top of the Fruitland. First stage: Lead w/17 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss. Tail w/90 sxs Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss. Second stage: 146 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (472 cu ft - 50% excess to circulate to surface).

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo @ 874'. Two turbolating centralizers at the base of the Ojo Alamo @ 874'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

### $4\ 1/2$ " Production Casing -

Pump 283 sxs Premium Lite HS FM w/0.25 pps celloflake 0.3% CD-32, 6.25 pps LCM-1, 1% fluid loss, 6% gel, 7 pps CSE (593 cu.ft., 30% excess to achieve 100' overlap in 4-1/2" x 7" annulus). WOC a minimum of 18 hrs prior to completing.

### Cementing: Continued

Cement float collar stacked on top of float shoe.

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

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. The liner hanger will have a rubber packoff.

• If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

### Special Drilling Operations (Air/Mist Drilling):

The following equipment will be operational while air/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.
- The blooie line will be equipped with an automatic igniter or pilot light.
- 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.
- 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:

- This will be a Mesaverde and Dakota producing well.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal 300 psi
Pictured Cliffs 600 psi
Mesa Verde 700 psi
Dakota 2000 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The north half of Section 20 is dedicated to the Mesaverde and Dakota formations.

• This gas is dedicated.

Drilling Engineer

Date

## BURLINGTON RESOURCES

BURLINGTON RESOURCES

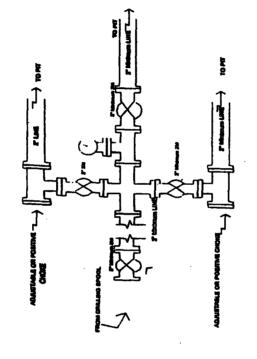
Completion/Workover Rig BOP Configuration 2,000 pel System

**Burilington Resources** 

Drilling Rig 2000 psi System

MO PLOOR

### Drilling Rig Choke Manifold Configuration 2000 pel System



Choke mentitod lesisituston from Burboe Cesting Point to Total Depth. 2,000psi working pressure equipment with two chokes.

Figure #3

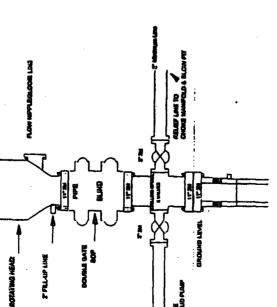
Minimum BOP tratalistion for all Completion/Workover Operations. 7-1/16" bore, 2000 pet minimum working pressure double gate BOP to be equipped with blind and

perama. A stripping has to be installed on the top of

the BOP. All BOP equipment is 2000 pel working pressure or greater emblyding 500 pel stripping head.

Physics #2

10-02-9



P institution from Surface Casing Point to Total Capth. 11" Spea (Normine), 2000 per sonship proteiuse beloble gate BOLD to be Appeal with billind rame and pipe name. A 800 per rousing head on top in preventions. All SOP equipment is 2,000 pel working pressure

Figure #1

4-20-01