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

	APPLICATION FOR PERMIT TO DRILL, DEEP	EN, OR PUBLICATION 2 35
1a. 1b.	Type of Work DRILL  Type of Well GAS FEB 2006	5. Lease Number CEIVED SF-078388 Unit Reporting Number NMNM078394B 6. If Indian, All. or Tribe
2.	Operator BURLINGTON RESCURCES Oil & Gas Company	7. Unit Agreement Name  Buerfanito Unit
3.	Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499  (505) 326-9700	<ul><li>8. Farm or Lease Name</li><li>9. Well Number</li><li>92F</li></ul>
4.	Location of Well Unit N (SESW), 660' FSL, 1615' FWL	10. Field, Pool, Wildcat Basin Dakota  [11. Sec., Twn, Rge, Mer. (NMPM)
	Latitude 36° 29.8271'N Longitude 107° 44.6284'W	NSec. 12, T26N, R9W  API # 30-045- 33600
14.	Distance in Miles from Nearest Town 18 miles to Bloomfield, NM	12. County 13. State San Juan NM
15.	Distance from Proposed Location to Nearest Property or Lease Li	ine
16.	Acres in Lease	17. Acres Assigned to Well 320 S/2 DR
18.	Distance from Proposed Location to Nearest Well, Drig, Compl, 6 873'- Huerfanito Unit 5	or Applied for on this Lease
19.	Proposed Depth 6628'	20. Rotary or Cable Tools Rotary
21.	Elevations (DF, FT, GR, Etc.) 6335'GL	22. Approx. Date Work will Start
23.	Proposed Casing and Cementing Program See Operations Plan attached	0 15 1
24.	Authorized by: Authorized by: Authorized by: Authorized by: Authorized by: Authorized by: Regulatory Compliance Assistant I	$\frac{2-15-0\phi}{\text{Date}}$
	OVED BY DIMON REE OF TITLE AT 1	DATE DATE 2/23/86

**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. PIO TOERAS ONS AUTHORIZED ARE



This action is subject to technical and croced . . . new norse sent to 49 C (% 35%) 3 and the many action of 100 C (% 35%) 3.

1625 N. French Dr., Hobbs, N.M. 68240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-10: Revised June 10, 2003

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

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. 2006 FEB 15 PM 2 State Lease - 4 Copies Santa Fe, NM 87505 2006 FEB 15 PM 2 State Lease - 3 Conies

Submit to Appropriate District Office

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

IGLO 1947 B.C.

Certificate Numbe

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

RECEIVED OTO FARMINGTON NO AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT <sup>2</sup> Pool Code <sup>3</sup>Pool Name API Number 30-045- 23(0 C Basin Dakota 71599 Well Number <sup>4</sup>Property Code <sup>8</sup>Property Name 7138 HUERFANITO UNIT 92F 7 OGRID No. \*Operator Name <sup>0</sup> Elevation 6335 BURLINGTON RESOURCES OIL & GAS COMPANY LP 14538 <sup>10</sup> Surface Location Ut or lot no. Section Township Lot Idn Feet from the North/South line Feet from the East/West line County Range 9-W 26-N SOUTH 1615 **WEST** 12 SAN JUAN N "Bottom Hole Location If Different From Surface North/South line Feet from the UL or lot no. Section Lot Idn Feet from the East/West line Township Range County Dedicated Acres <sup>13</sup> Joint or Infill <sup>14</sup> Consolidation Code 15 Order No. 320 S/2 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 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Amanda Sandoval Printed Name Regulatory Assistant II FD 2 1/2" GLO 1947 B.C. SURVEYOR CERTIFICATION ₹3. I hereby certify that the well location shown on this plat rae plotted from field notes of actual surveys made by me USA SF-078388 USA SF-078434 LAT: 36°29.8271° N. (NAD 27) LONG:107°44.6284° W. (NAD 27) 1615 FD 2 1/2" N 89'51'10" W FD 2 1/2"

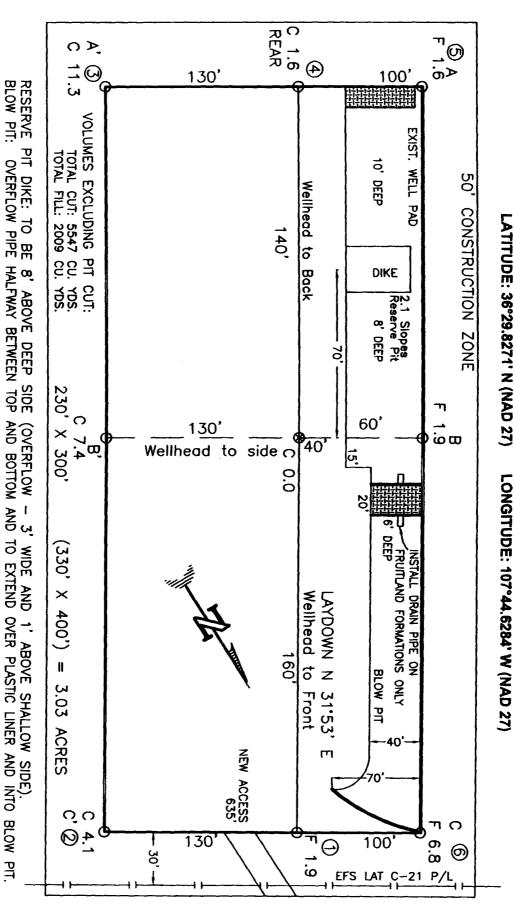
GLO 1947 B.C.

2605.21' (M)

Submit 3 Copies To Appropriate Dist Office	rict State of New	Mexico		Form C-103		
District I	Energy, Minerals and N	latural Resources		May 27, 2004		
1625 N. French Dr., Hobbs, NM 882			WELL API NO.			
District II 1301 W. Grand Ave., Artesia, NM 88	OIL CONSERVATI	ON DIVISION	5. Indicate Type of Lease	045		
District III	1220 South St. I		STATE	FEE		
1000 Rio Brazos Rd., Aztec, NM 874			6. State Oil & Gas Lease No	D.		
District IV	, 4 97505		SE 046	200		
1220 S. St. Francis Dr., Santa Fe, NA	OTICES AND REPORTS ON WELLS		SF-078388  7. Lease Name or Unit Agreement Name			
(DO NOT USE THIS FORM FOR PROPO	OSALS TO DRILL OR TO DEEPEN OR PLUG	BACK TO A	, Louis V. Marie G. Committee			
	CATION FOR PERMIT* (FORM C-101) FOR S	SUCH	Huerfanit	to Unit		
PROPOSALS.)  1. Type of Well:			8. Well Number			
Oil Well Gas Well	X Other		921	3		
2. Name of Operator			9. OGRID Number			
	RESOURCES OIL & GAS COMPAN	Y LP	1453 10. Pool name or Wildcat	38		
3. Address of Operator 3401 E. 30TH	STREET, FARMINGTON, NM 8740	2	Basin D	akota		
4. Well Location	STABLE TO THE TANK OF THE	<del>=</del>				
Unit Letter N	660 feet from the Sou		1615 feet from the	West line		
Section 12	Township 26N 11. Elevation (Show whether DR, RK	Rng 9W	NMPM Coun	ty San Juan		
	63:	•				
Pit or Below-grade Tank Application	or Closure					
Pit type new drill Depth to Gr	oundwater <u>&gt;100'</u> Distance from near	est fresh water well	>1000 Distance from neare	st surface water <1000		
Pit Liner Thickness: 12	mil Below-Grade Tank:	Volume	bbls; Construction Mater	ial		
PERFORM REMEDIAL WORK TEMPORARILY ABANDON PULL OR ALTER CASING  OTHER:  13. Describe proposed or cor of starting any proposed or recompletion.  New Drill, Lined:  Burlington Resources proposes Ecosphere's risk ranking criter Operation Procedures dated No that portion will be lined as per	PLUG AND ABANDON CHANGE PLANS MULTIPLE COMPL  New Drill Pit Inpleted operations. (Clearly state all p work). SEE RULE 1103. For Multiple to construct a new drilling pit and an a ia, the new drilling pit will be a lined p ovember 11, 2004 on file at the NMOC of the risk ranking criteria. Burlington ingust 2, 2004 on file at the NMOCD of	REMEDIAL COMMENC CASING/O  X OTHER: ertinent details, and go to completions: Attack associated vent/flare point as detailed in Burling D office. A portion of Resources anticipates	SUBSEQUENT REPOLITION OF THE POST OF THE P	P AND A  estimated date ed completion  erpretation of the rkover Pit Construction / gned to manage fluids and		
	on above is true and complete to the be or closed according to NMOCD guidelines	, a general permit X				
	manda Sandoval E-mail ad	dress: <u>asandoval</u>	Obr-inc.com Telephone No.	. 505-326-9891		
For State Use Only	1.1.1	DEPUTY ON A C	SAS INSPECIUM, DIST. (1)	(College)		
APPPROVED BY Conditions of Approval (if any	CT THI			DATE EB 2 7 2006		

# **BURLINGTON RESOURCES** HUERFANITO UNIT 92F, 660 FSL 1615 FWL OIL & GAS COMPANY LP

SECTION 12, T-26-N, R-9-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 6335, DATE: JANUARY 6, 2006



NOTE:

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.

Surveying and Oil Field Services

Daggett Enterprises, Inc.

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** HUERFANITO UNIT 92F, 660 FSL 1615 FWL

SECTION 12, T-26-N, R-9-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO

LATITUDE: 36°29.8271' N (NAD 27) **GROUND ELEVATION: 6335, DATE: JANUARY 6, 2006** LONGITUDE: 107°44.6284' W (NAD 27)

				_								<b>-</b>		
6310 -	6320	6330	6340	ELEV. C-C'	6310	6320	6330	6340	ELEV. B-B'	6310	6320	6330	6340	ELEV. A-A'
							7							
			-	c/L					C/L					c/L
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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 Fleid Services Daggett Enterprises, Inc. P. O. Box 15068 • Formington, NM 87401 Phone (505) 326-1772 · Fax (505) 326-6019

01/14/08

DATE: 12/20/05

# OPERATIONS PLAN

<u>Well Name:</u>

HUERFANITO UNIT 92F

Location:

660' FSL & 1615' FWL, Section Sec 12 T26N R09W

San Juan County, New Mexico

Formation:

Basin Dakota

Elevation:

6341' GL

Formation Tops:	Top	Bottom	<u>Contents</u>
Surface	San Jose	1253 '	
Ojo Alamo	1253 '	1370'	aquifer
Kirtland	1370'	1938'	gas
Fruitland Coal	1938'	2058'	gas
Pictured Cliffs	2058'	2155'	gas
Lewis	2155'	2498'	
Huerfanito Bentonite	2498'		
Chacra	2943 '	3628'	gas
Massive Cliff House	3628'	3720'	gas
Menefee	3720'	4388'	gas
Massive Point Lookout	4388'	4733'	gas
Mancos Shale	4733 '	5510'	
Upper Gallup	5510'	6354'	gas
Greenhorn	6354'	6411'	gas
Graneros	6411'	64361	gas
Two Wells	6436'	65261	gas
Paguate	6526'	6591'	gas
Cubero	6591'	6647'	gas
Encinal	6647'	6634'	gas
Total Depth:	6634'		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>	Type	<u>Weight Vis.</u>	Fluid Loss
0 - 120'	Spud MUD/Air/Air Mist	8.4 - 9.0 40 - 5	0 no control
120- 2255'	LSND	8.4 - 9.0 30 - 6	0 no control
2255 - 6634'	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' - 2255'	7 "	20/23#	J-55
6 1/4"	0' - 6634'	4 1/2"	10.5#	J-55

## Tubing Program:

Depth Interval	Csg.Size	Wt.	<u> Grade</u>
0' - 6634'	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, rams 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, rams and casing will be tested to 1500 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 2000 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 177 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 (124 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/7 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: 170 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (362 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 @ 1370'. Two turbolating centralizers at the base of the Ojo Alamo @ 1370'. 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 287 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 (568 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:

- The Mesa Verde and Dakota formations will be completed and commingled.
- 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 South half of Section 12 is dedicated to the Dakota formation.
- This gas is dedicated.

Drilling Engineer Date

Choke mentitot bestatistion from Burtos Casting Point to Total Depth. 2,000pal working pressure equipment with two chokes.

Figure #3

Figure 91

Minimum BOP installation for all Compitation/Workbows Operations. 7-V16\* bore, 2000 pel 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 pel working pressure or greater excluding 600 pel stripping head.

4-20-0<u>1</u>