



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO SANTA FE. NEW MEXICO 87505 (505) 827-7131

May 16, 1997

DECEIVED MAY 2 2 1997

Burlington Resources Oil & Gas Company San Juan Division P. O. Box 4289 Farmington, New Mexico 87499-4289 Attention: Peggy Bradfield OIL CON. DIV.

Administrative Order NSL-3796

Dear Ms. Bradfield:

Reference is made to your application dated April 7, 1997 for a non-standard gas well location for your proposed Frost Well No. 1-R to be drilled 1510 feet from the North line and 255 feet from the East line (Unit H) of Section 26, Township 27 North, Range 10 West, NMPM, Fulcher Kutz-Pictured Cliffs Pool, San Juan County, New Mexico. The NE/4 of said Section 26 shall be dedicated to the well forming a standard 160-acre gas spacing and proration unit.

The application has been duly filed under the provisions of Rule 104.F of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10533, issued by the Oil Conservation Commission in Case 11,351 on January 18, 1996.

By the authority granted me under the provisions of Division General Rule 104.F(2), the above-described unorthodox gas well location is hereby approved.

Sincerely,

William J. LeMay

Director

WJL/MES/kv

cc: Oil Conservation Division - Aztec

U. S. Bureau of Land Management - Farmington

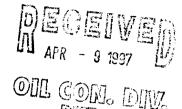
BURLINGTON RESOURCES

SAN JUAN DIVISION

April 7, 1997

Sent Federal Express

Mr. William LeMay New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505



Re:

Frost #1R

1510'FNL, 255'FEL Section 26, T-27-N, R-10-W, San Juan County, New Mexico API # 30-045-(not yet assigned)

Dear Mr. LeMay:

Sincerely,

Burlington Resources is applying for administrative approval of a non-standard location for the above location in the Pictured Cliffs formation. This application for the referenced location is due to terrain, and the presence of Angel Peak Campground.

The following attachments are for your review:

- 1. Application for Permit to Drill.
- Completed C-102 at referenced location.
- 3. Offset operators/owners plat
- 4. 7.5 minute topographic map showing the orthodox windows, and enlargement of the map to define topographic features.

We appreciate your earliest consideration of this application.

Peggy Bradfield
Regulatory/Compliance Representative

xc: Bureau of Land Management

WAIVER

hereby waives objection to Burlington Resources' application for a non-standard location for their Frost #1R as proposed above.

By: ______ Date: ______

xc: Amoco

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

	APPLICATION FOR PERMIT TO	DRILL, DEEPEN, OR PLUG BACK
1a.	Type of Work	5. Lease Number
	DRILL	SF-077951 Unit Reporting Number
1 b .	Type of Well	6. If Indian, All. or Tribe
ıb.	GAS	0. 1. maia., , 0
2.	Operator BURLINGTON RESOURCES Oil & Gas Company	7. Unit Agreement Name
3.	Address & Phone No. of Operator	8. Farm or Lease Name
	PO Box 4289, Farmington, NM 87499	Frost
	(505) 326-9700	9. Well Number 1R
4.	Location of Well	10. Field, Pool, Wildcat
	1510'FNL, 255'FEL	Fulcher Kutz Pic.Cliff 11. Sec., Twn, Rge, Mer. (NMPM)
	Latitude 36° 32.97, Longitude 107°	
		API# 30-045-
14.	Distance in Miles from Nearest Town	12. County 13. State
	9 miles to Huerfano	San Juan NM
15.	Distance from Proposed Location to Nearest Pro	perty or Lease Line
16.	Acres in Lease	17. Acres Assigned to Well 160 NE/4
18.	Distance from Proposed Location to Nearest We	I, Drlg, Compl, or Applied for on this Lease
19.	Proposed Depth	20. Rotary or Cable Tools
	2700 '	Rotary
21.	Elevations (DF, FT, GR, Etc.) 6661'GR	22. Approx. Date Work will Start
23.	Proposed Casing and Cementing Program See Operations Plan attached	
24.	Authorized by: Seary Stadne	1-15-97
24.	Regulatory/Compliance A	dministrator Date
PERM	MIT NO.	APPROVAL DATE
A DD5	DOVED BY TITLE	DATE
APP	ROVED BY TITLE	

Archaeological Report to be submitted
Threatened and Endangered Species Report to be submitted
NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

District I PO Box 1980, Hobbs, NM 88241-1980 District II PO Drawer OD, Artenia, NM 88211-0719 District III 1000 Rto Brazon Rd., Azzee, NM 87410 District IV

PO Box 2088. Santa Fe. NM 87504-2088

State of New Mexico Energy, Minerais & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe. NM 87504-2088 Form C-101 Reviseu February 21, 1994

Instructions on pack Submit to Appropriate District Office

State Lease - - Copie:

Fee Lease - 3 Copies

AMENDED REPORT

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OPERATIONS PLAN

Well Name: Frost #1R

Location: 1510'FNL, 255'FEL Section 26, T-27-N, R-10-W

San Juan County, New Mexico

Latitude 36° 32.97, Longitude 107° 51.37

Formation: Fulcher Kutz Pictured Cliffs

Elevation: 6661'GL

Formation:	Тор	Bottom	Contents
Surface	Nacimiento	1485′	
Ojo Alamo	1485′	1650 ′	aquifer
Kirtland	1650'	2150'	-
Fruitland	2150'	2463'	gas
Fruitland Coal	23 25 ′	2461′	gas
Pictured Cliffs	2463'		gas
Total Depth	2700 '		

Logging Program: Hi Res Ind, Den/Neut, MRL/GR to Total Depth.

Mud Program:

Interval	Type	Weight	Vis.	Flu	id Loss
0- 120'		8.4-9.0	40-50	no	control
120-2700'	LSND	8.4-9.0	40-60	no	control

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

<u>Hole Size</u>	Depth Interval	<u>Csg.Size</u>	Wt.	Grade
12 1/4"	0 - 120'	8 5/8"	23.0#	M-50
6 1/4"	0 - 2700'	3 1/2"	7.7#	WC-70

Tubing Program: - none

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

 $3\ 1/2"$ production casing - float shoe on bottom. Three centralizers run every other joint above shoe. Four centralizers run every 3rd joint to the base of the Ojo Alamo @ 1650'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1650'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment: 8 5/8" x 3 1/2" x 11" 2000 psi screw on independent wellhead.

Cementing:

- $8\ 5/8"$ surface casing cement with 129 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (149 cu.ft. of slurry, 200% excess to circulate to surface). WOC 12 hrs. Test casing to 600 psi for 30 minutes.
- 3 1/2" production casing Lead w/324 sx of 65/35 Class "3" Poz w/6% gel, 2% calcium chloride, and 1/4# flocele/sx. Tail w/100 sx Class "B" w/2% calcium chloride (691 cu.ft. of slurry, 75% excess to circulate to surface). WOC 12 hrs. If cement does not circulate to surface, a CBL will be run during completion to determine TOC.

BOP and tests:

Surface to TD - 11" 2000 psi (minimum double gate BOP stack (Reference Figure #1 and #2). Prior to drilling out surface casing, test rams to 600 psi/30 min.

Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 2000 psi/15 min.

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

Pipe rams will be actuated to 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:

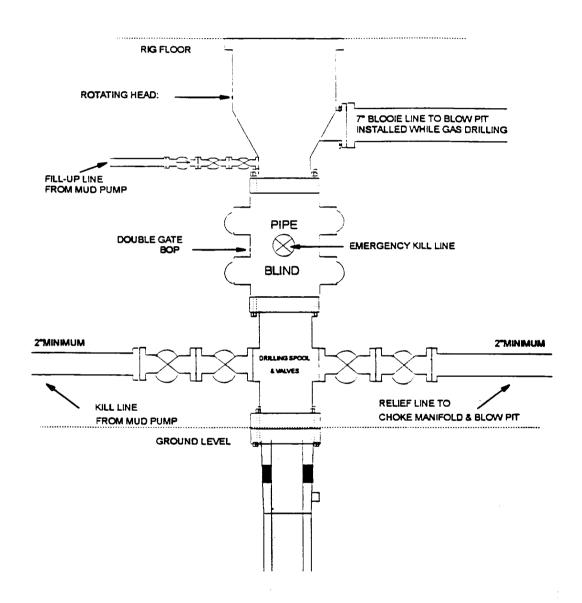
- * The Pictured Cliffs formation will be completed.
- * Anticipated pore pressure for the Pictured Cliffs is 300 psi.
- * This gas is dedicated.
- * The northeast quarter of the section is dedicated to the Pictured Cliffs.
- * New casing will be utilized.
- * Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.

Drilling Engineer

Date

BURLINGTON RESOURCES

BOP Configuration 2M psi System

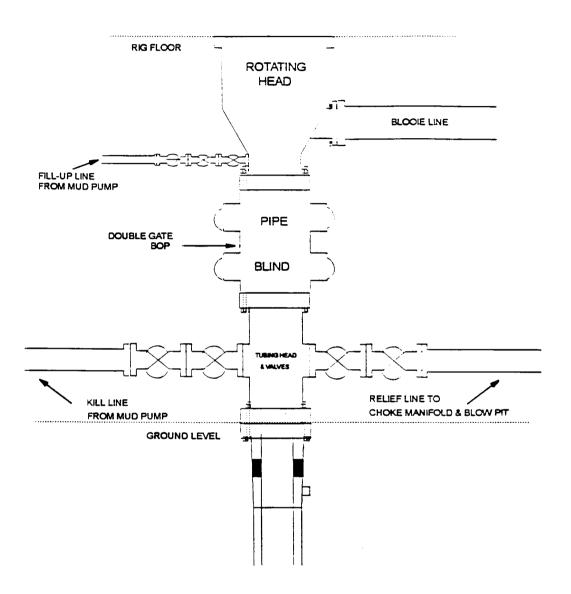


11" Bore, 2000psi minimum working pressure double gate BOP to be equipped with blind and pipe rams. A Schaffer Type 50 or equivalent rotating head to be installed on the top of the BOP. All equipment is 2000psi working pressure/or greater.

FIGURE #1

BURLINGTON RESOURCES

BOP Configuration 2M psi System

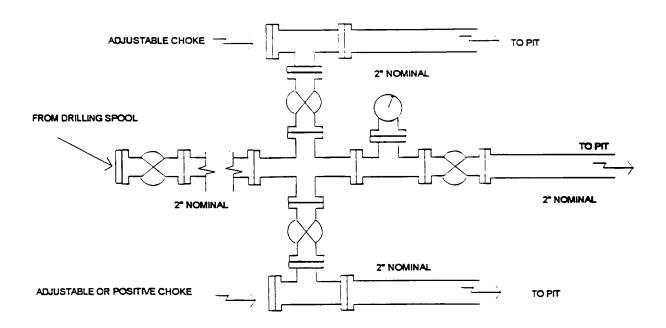


Minimum BOP installation for Completion operations. 7 1/16" Bore (6" Nominal), 2,000 psi minimum working pressure double gate BOP to be equipped with blind and pipe rams.

FIGURE #2

BURLINGTON RESOURCES

Choke Manifold Configuration 2M System



Minimum choke manifold installation from surface to Total Depth. 2" minimum, 2000psi working pressure equipment with two chokes.

Figure #3

AMM/06-01-94



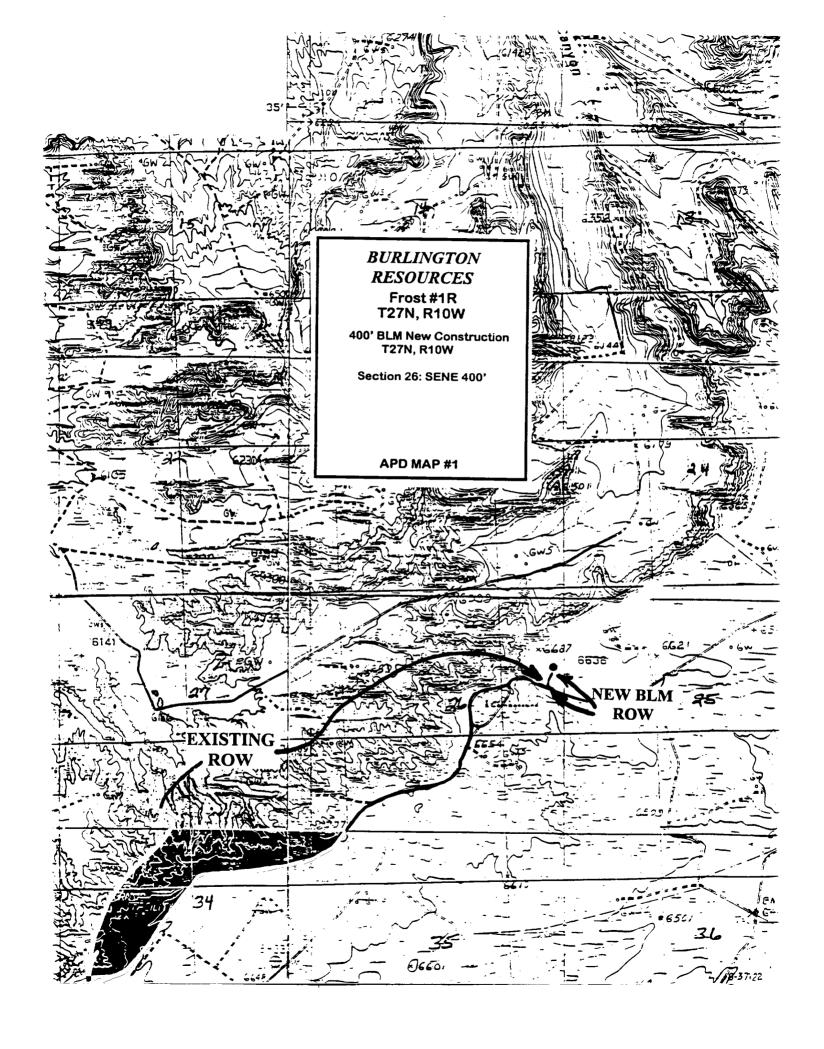
Frost #1R Multi-Point Surface Use Plan

- 1. Existing Roads Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
- Planned Access Road Refer to Map No. 1. The required new access road is shown on Map No. 1. The gradient, shoulder, crowning and other design elements will meet or exceed those specified by the responsible government agency. The new access road surface will not exceed twenty feet (20') in width. No additional turnarounds or turnouts will be required. Upon completion of the project, the access road will be adequately drained to control soil erosion. Approximately 400' of access road will be constructed. Pipelines are indicated on Map No. 1A.
- 3. Location of Existing Wells Refer to Map No. 1A.
- 4. Location of Existing and/or Proposed Facilities if Well is Productive
 - a. On the Well Pad Refer to Plat No. 1, anticipated production facilities plat.
 - b. Off the Well Pad Anticipated pipeline facilities are as shown on the attached plat by El Paso Field Services.
- Location and Type of Water Supply Water will be hauled by truck for the proposed project and will be obtained from Hilltop Water Well located in SW/4 of Section 26, T-27-N, R-11-W, New Mexico.
- 6. Source of Construction Materials If construction materials are required for the proposed project, such materials will be obtained from a commercial quarry.
- Methods of Handling Waste Materials All garbage and trash materials will be removed from the site for proper disposal. A portable toilet will be provided for human waste and serviced in a proper manner. If liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying waste materials into the watershed. Reserve pits will be lined as needed with either 12 mil bio-degradable plastic liner or a bentonite liner. All earthen pits will be so constructed as to prevent leakage from occurring; no earthen pit will be located on natural drainage. Generation of hazardous waste is not anticipated. Federal regulations will be adhered to regarding handling and disposal of such waste if so generated.
- 8. Ancillary Facilities None anticipated.
- 9. Wellsite Layout Refer to the location diagram and to the wellsite cut and fill diagram (Figure No. 4). The blow pit will be constructed with a 2'/160' grade to allow positive drainage to the reserve pit and prevent standing liquids in the blow pit.

- 10. Plans for Restoration of the Surface After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operations will be performed during the time period set forth by the responsible government agency. The permanent location facilities will be painted as designated by the responsible government agency.
- 11. Surface Ownership Bureau of Land Management
- 12. Other Information Environmental stipulations as outlined by the responsible government agency will be adhered to. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- 13. Operator's Representative and Certification Burlington Resources Oil & Gas Company Regional Drilling Manager, Post Office Box 4289, Farmington, NM 87499, telephone (505) 326-9700. I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan, are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Burlington Resources Oil and Gas Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

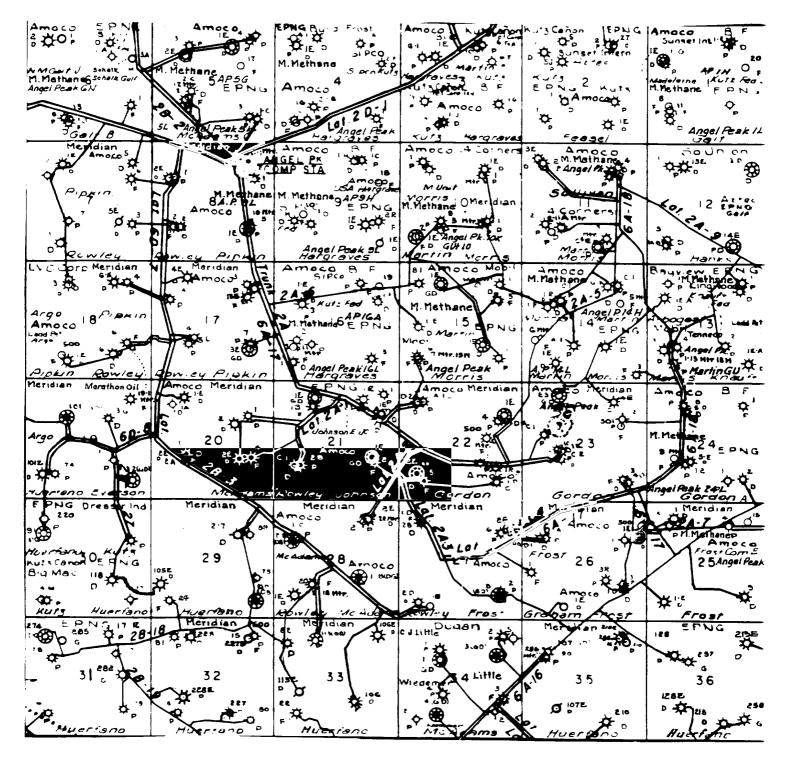
Regulatory/Compliance Administrator Date

pb



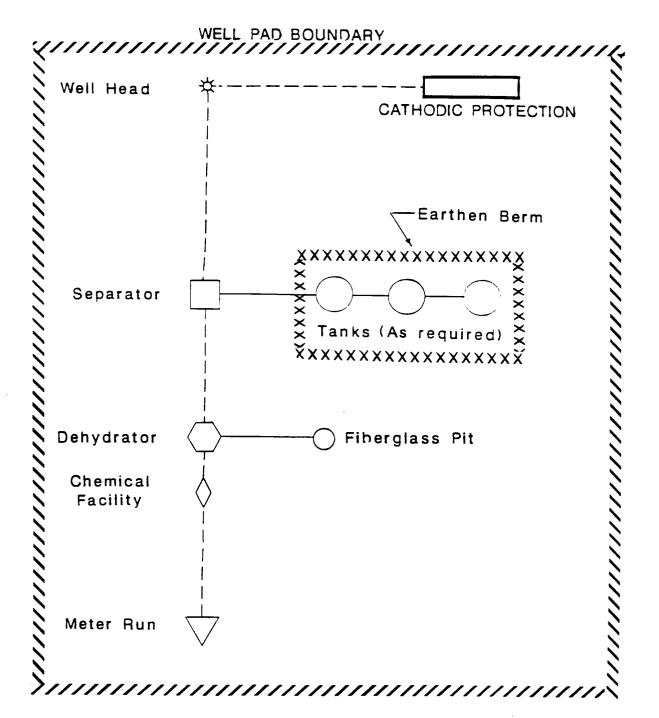
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MERIDIAN OIL INC.
Pipeline Map
T-27-N, R-10-W
San Juan County, New Mexico
FROST #/R

3/91 adw/mjb

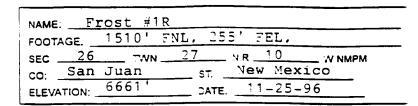


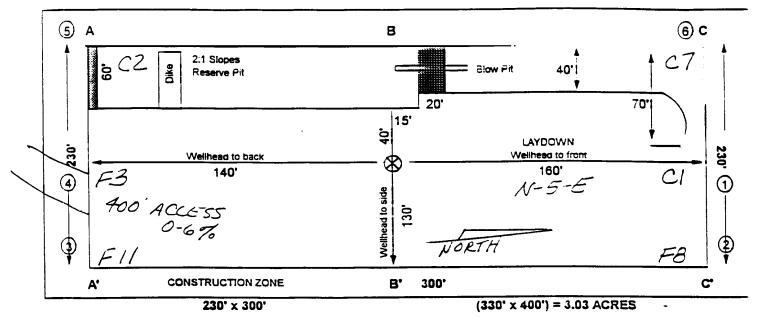
MERIDIAN OIL

ANTICIPATED
PRODUCTION FACILITIES
FOR A
PICTURED CLIFFS WELL

KFR 2/90

BURLINGTON RESOURCES PLAT #1





Reserve Pit Dike: to be 8' above Open side (overflow - 3' wide and 1' above enaitow side).

Blow Pit: overflow pipe halfway between top and bottom and to extend over plastic liner and into blow pit.

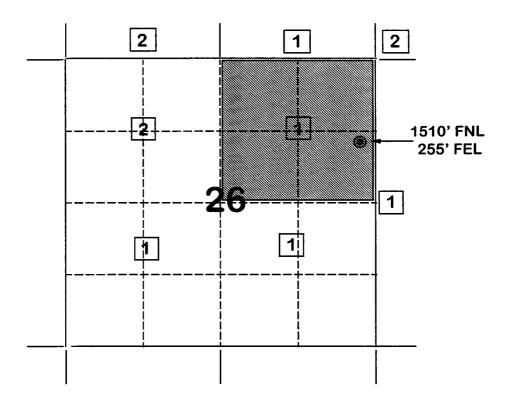


Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cable on well pad and/or access road at least two (2) working days prior to construction.

BURLINGTON RESOURCES OIL AND GAS COMPANY

Frost #1R OFFSET OPERATOR \ OWNER PLAT Nonstandard Location Pictured Cliffs Formation Well

Township 27 North, Range 10 West



1) Burlington Resources Oil and Gas Company

2) Amoco Production Company

Attn: Bruce Zimney

P.O. Box 800

Denver, CO 80201

Re:

Frost #1R

1510'FNL, 255'FEL Section 26, T-27-N, R-10-W, San Juan County, New Mexico API # 30-045-(not yet assigned)

I hereby certify that the following offset operators/owners have been mailed notification of our application for non-standard location to drill the referenced well.

Amoco Production Att: Bruce Zimney PO Box 800 Denver, CO 80201

Peggy Bradfield

Regulatory/Compliance Administrator

