

NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

September 20, 1997

Burlington Resources Oil & Gas Company P.O. Box 4289 Farmington, New Mexico 87499-4289 Attention: Peggy Bradfield DECEIVED N SEP 2 6 1997

OIL CON. DIV.

Administrative Order NSL-3873

Dear Ms. Bradfield:

Reference is made to your application dated August 22, 1997 for an unorthodox Blanco-Mesaverde "infill" gas well location on an existing standard 320-acre, more or less, gas spacing and proration unit ("GPU") for said Blanco-Mesaverde Pool, comprising the W/2 equivalent of Section 10, Township 30 North, Range 6 West, NMPM, Rio Arriba County, New Mexico. Said GPU is currently dedicated to the San Juan "30-6" Unit Well No. 34 (API No. 30-039-07866), located at a standard gas well location 800 feet from the South and West lines (Unit M) of said Section 10.

By the authority granted me under the provisions of Rule 2(d) of the "General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Blanco-Mesaverde Pool", as promulgated by Division Order No. R-8170, as amended, the following described well to be drilled at an unorthodox "infill" gas well location in said Section 10 is hereby approved:

San Juan "30-6" Unit Well No. 34-A 490' FNL - 2340' FWL (Unit C)

C10-30-4

Further, both the San Juan "30-6" Unit Well Nos. 34 and 34-A are to be dedicated to the subject GPU, further said wells and GPU will be subject to all existing rules, regulations, policies, and procedures applicable to prorated gas pools in Northwest New Mexico.

Sincerely,

William J. LeMa

Director

WJL/MES/kv

cc: Oil Conservation Division - Aztec

U. S. Bureau of Land Management - Farmington

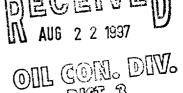
BURLINGTON RESOURCES

SAN JUAN DIVISION

August 22, 1997

Sent Federal Express

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



Re:

San Juan 30-6 Unit #34A

490'FNL, 2340'FWL Section 10, T-30-N, R-6-W, Rio Arriba County, New Mexico

API # 30-039-(not yet assigned)

Dear Mr. LeMay:

Burlington Resources is applying for administrative approval of a non-standard location for the above location in the Mesa Verde formation. This application for the referenced location is due to the road closure area, terrain, and the presence of archaeology.

The following attachments are for your review:

- 1. Application for Permit to Drill.
- 2. 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.

Sincerely. End heeld Peggy Bradfield

Regulatory/Compliance Administrator

xc: **Bureau of Land Management**

NMOCD - Aztec District Office

WAIVER hereby waives objection to Burlington Resources' application for a nonstandard location for their San Juan 30-6 Unit #34A as proposed above. By: _____ Date: xc: Phillips Petroleum

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

| | APPLICATION F | OR PERMIT TO DRILL, DEEPE | N, OR PLUG BACK | | |
|---------------|---|--|---|--|--|
| 1a. | Type of Work DRILL | 5. Lease Number SF-080714A Unit Reporting Number | | | |
| 1 b. 🚁 | Type of Well GAS | | 8910005380 6. If Indian, All. or Tribe | | |
| 2. | Operator BURLINGTON RESOURCES Oil 8 | & Gas Company | 7. Unit Agreement Name San Juan 30-6 Unit | | |
| 3. | Address & Phone No. of Operato PO Box 4289, Farmingt (505) 326-9700 | | 8. Farm or Lease Name San Juan 30-6 Unit 9. Well Number 34A | | |
| 4. | Location of Well 490'FNL, 2340'FWL Latitude 36 ⁰ 49.9, Long | 10. Field, Pool, Wildcat Blanco Mesa Verde 11. Sec., Twn, Rge, Mer. (NMPM) Sec 10, T-30-N, R-7-W API # 30-039- | | | |
| 14. | Distance in Miles from Nearest To 8 miles to Gobernador | own | 12. County 13. State Rio Arriba NM | | |
| 15. | Distance from Proposed Location to Nearest Property or Lease Line | | | | |
| 16. | Acres in Lease | n na wasan sa | 17. Acres Assigned to Well 320 W/2 | | |
| 18. | Distance from Proposed Location | to Nearest Weil, Drlg, Compl, or | Applied for on this Lease | | |
| 19. | Proposed Depth 5859' | PECEIVER | 20. Rotary or Cable Tools Rotary | | |
| 21. | Elevations (DF, FT, GR, Etc.) 6267'GR | LIN AUG 2 2 1997 | 22. Approx. Date Work will Start | | |
| 23. | Proposed Casing and Cementing See Operations Plan a | Program (10) (10) (10) (10) (10) (10) (10) (10) | 0 | | |
| 24. | Authorized by: Regulatory/ | Skad hud Compliance Administrato | 8-/ 9-97 Date | | |
| PERMIT NO. | | APPROVAL DA | ATE | | |
| APPRO | OVED BY | TITLE | | | |

NOTE: Notice of Staking 8-1-97

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

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

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

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

State of New Mexico Energy, Minerals & Natural Resources Department

Revised February Submit to Appropriate Distri.
State Lease Fee Lease -

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

AMENDED |

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OPERATIONS PLAN

Well Name: San Juan 30-6 Unit #34A

Location: 490'FNL, 2340'FWL Section 10, T-30-N, R-7-W

Rio Arriba County, New Mexico

Latitude 36° 49.9, Longitude 107° 27.0

Formation: Blanco Mesa Verde

Elevation: 6267'GL

| Formation Tops: | <u>Top</u> | Bottom | <u>Contents</u> |
|-----------------------|---------------|--------|-----------------|
| Surface | San Jose | 2319' | aguifer |
| Ojo Alamo | 2319' | 2744' | aquifer |
| Fruitland | 2744' | 3109' | - |
| Pictured Cliffs | 3109' | 3294' | gas |
| Lewis | 3294' | 3940' | gas |
| Intermediate TD | 3394' | | |
| Mesa Verde | 3940' | 4340' | gas |
| Chacra | 4340' | 5159' | gas |
| Massive Cliff House | 5159' | 5207′ | gas |
| Menefee | 5207' | 5459' | gas |
| Massive Point Lookout | 5 459' | | gas |
| Total Depth | 5859' | | _ |

Logging Program:

Cased hole logging - Gamma Ray Neutron Coring/DST - none

Mud Program:

| <u>Interval</u> | Type | Weight | Vis. | Fluid Loss |
|-----------------|----------|---------|-------|-------------|
| 0- 200' | Spud | 8.4-9.0 | 40-50 | no control |
| 200-3394' | LSND | 8.4-9.0 | 30-60 | no control |
| 3394-5859' | Gas/Mist | n/a | n/a | n/ a |

Pit levels will be visually monitored to detect gain or loss of fluid control.

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

| <u> Hole Size</u> | Depth Interval | Csq.Size | Wt. | <u>Grade</u> |
|-------------------|----------------|----------|-------|--------------|
| 12 1/4" | 0' - 200' | 9 5/8" | 32.3# | H-40 |
| 8 3/4" | 0' - 3394' | 7" | 20.0# | J-55 |
| 6 1/4" | 3294' - 5859' | 4 1/2" | 10.5# | J-55 |

Tubing Program:

0' - 5859' 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.

BOP Specifications, Wellhead and Tests (cont'd): 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 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 - cement with 163 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 12 hrs. 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 w/272 sx Class "B" w/3% econolite, 10# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% gel, 2% calcium chloride, 0.5# flocele/sx, and 10# gilsonite/sx (893 cu.ft. of slurry, 75% excess to circulate to surface.) WOC minimum of 12 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

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 at 2744'. Two turbolating centralizers at the base of the Ojo Alamo at 2744'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Liner -

Cement to circulate liner top. Lead with 157 sx 65/35 Class "B" poz w/6% gel, 5# gilsonite/sx and 1/4# flocele/sx. Tail with 135 sx 50/50 Class "B" poz w/1/4# flocele/sx, 5# gilsonite/sx and 0.3% fluid loss additive (470 cu.ft., 75% excess to circulate liner top). WOC a minimum of 18 hrs prior to completing.

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.
- The pipe will be rotated and/or reciprocated, if hole conditions permit.

Special Drilling Operations (Gas/Mist Drilling):

The following equipment will be operational while gas/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 formation will be completed.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal 800 psi Pictured Cliffs 800 psi Mesa Verde 700 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 west half of the section is dedicated to the Mesa Verde.
- This gas is dedicated.

Drilling Engineer

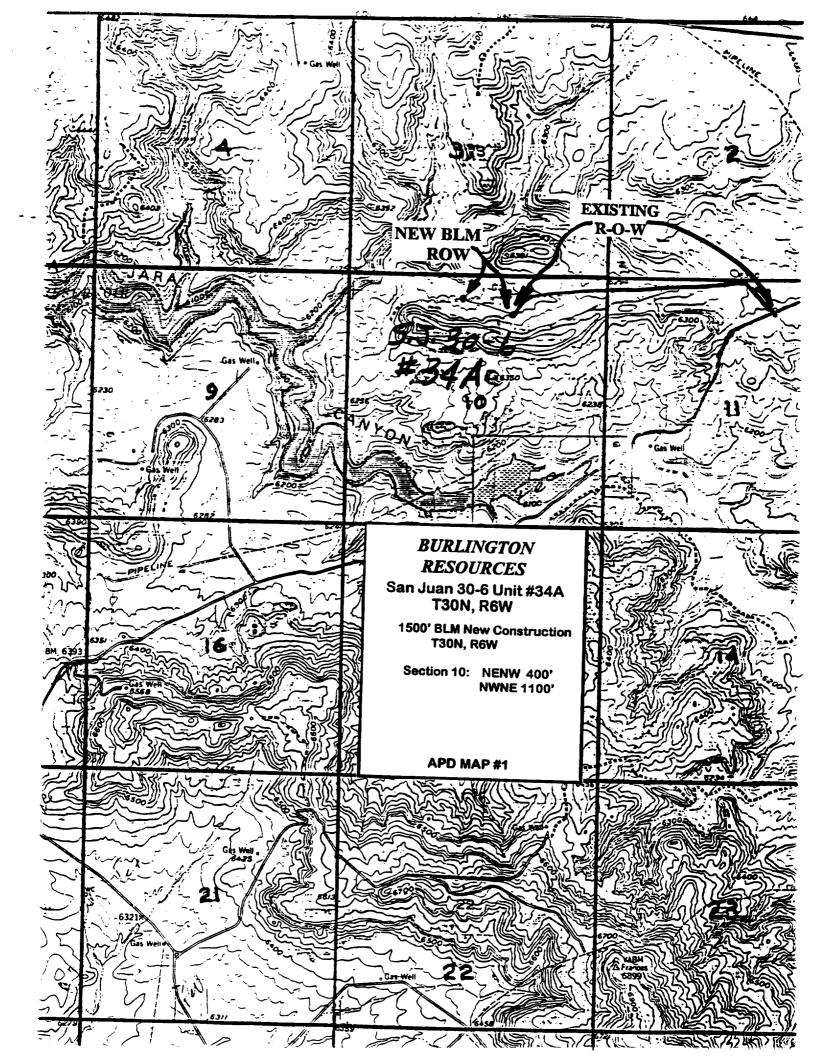
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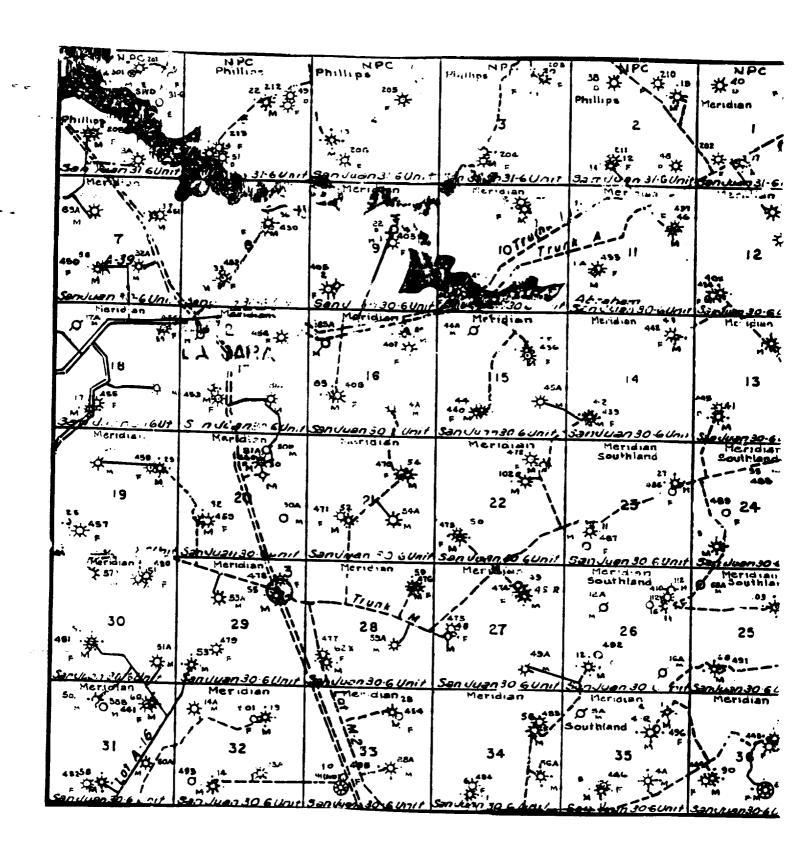


- 1. Existing Roads Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
- Planned Access Road Refer to Map No. 1. The required new access 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 1500' 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 as shown on the attached plat from Williams Field Service.
- Location and Type of Water Supply Water will be hauled by truck for the proposed project and will be obtained LaJara Water Hole located SW/4 Section 11, T-30-N, R-6-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.
- 7. 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.

- 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

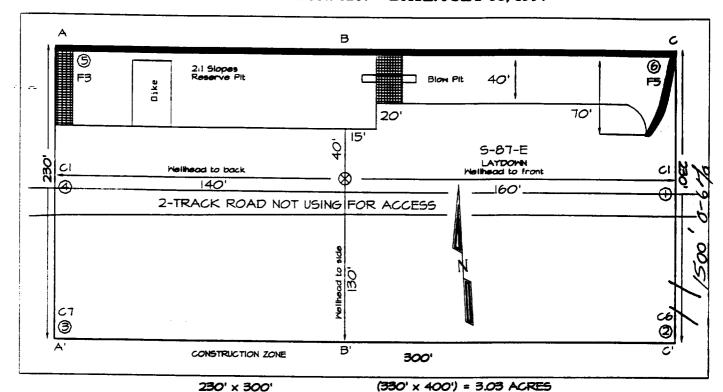




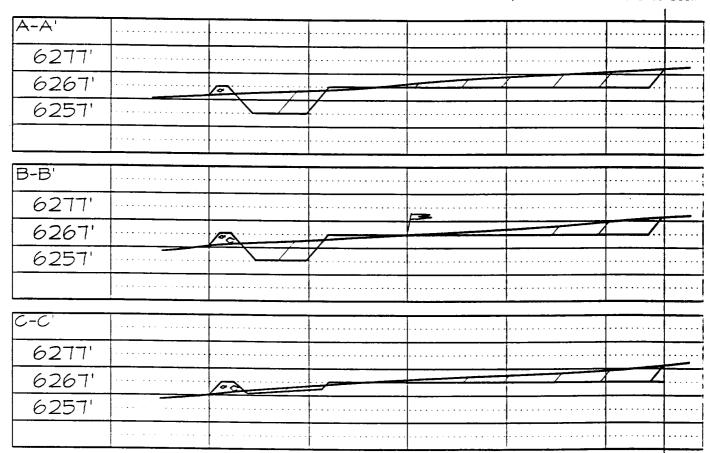
MERIDIAN OIL INC.
Pipeline Map
T-30-N, R-06-W
San Juan County, New Mexico
San Juan 30-6 Unit #34A
Map 1A

PLAT #1

BURLINGTON RESOURCES OIL & GAS COMPANY
SAN JUAN 30-6 UNIT #34A, 490' FNL & 2340' FWL
SECTION 10, T30N, R6W, NMPM, RIO ARRIBA COUNTY, NEW MEXICO
GROUND ELEVATION: 6267' DATE: JULY 08, 1997



Reserve Pit Dika: 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

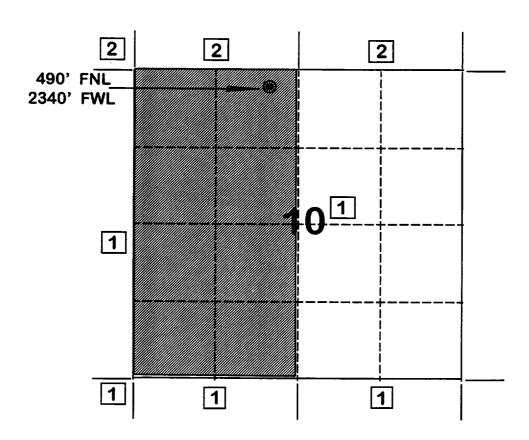


Note: Contractor should call One—Call for location of any marked or unmarked buried pipelines or ca on well pad and/or access road at least two (2) working days prior to construction

BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 30-6 Unit #34A OFFSET OPERATOR \ OWNER PLAT Nonstandard Location Mesaverde Formation Well

Township 30 North, Range 6 West



- 1) Burlington Resources Oil and Gas Company
- 2) Phillips Petroleum Company 5525 Hwy 64, NBU 3004 Farmington, NM 87401

Re:

San Juan 30-6 Unit #34A 490'FNL, 2340'FWL Section 10, T-30-N, R-6-W, Rio Arriba County, New Mexico API # 30-039-(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.

Dradfield 8/22/97

Phillips Petroleum Company 5525 Highway 64, NBU 3004 Farmington, NM 87401

Peggy Bradfield

Regulatory/Compliance Administrator



