NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

May 7, 1998

Burlington Resources Oil & Gas Company P. O. Box 4289 Farmington, New Mexico 87499-4289 Attention: Peggy Bradfield

Administrative Order NSL-4030

Dear Ms. Bradfield:

Reference is made to your application dated April 17, 1998 for a replacement Pictured Cliffs gas well to be drilled at an unorthodox gas well location within a standard 160-acre gas spacing and proration unit comprising the NE/4 of Section 11, Township 25 North, Range 8 West, NMPM, Ballard-Pictured Cliffs Pool, San Juan County, New Mexico.

It is our understanding that the proposed Quitzau Well No. 8-R is to be located 2100 feet from the North line and 2255 feet from the East line (Unit G) of said Section 11.725N-08 N

Initial development of Ballard-Pictured Cliffs gas pool production within the subject 160-acre gas spacing and proration unit commenced in 1956 when Benson-Montin drilled its Quitzau Well No. 8 (API No. 30-045-13306) at a standard gas well location 1204 feet from the North line and 1160 feet from the East line (Unit A) of said Section 11. In 1993 Meridian Oil Company, successor operator, plugged and abandoned the Quitzau Well No. 8 well.

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").

By the authority granted me under the provisions of Division General Rule 104.F(2), the above-described unorthodox gas well location for the proposed Quitzau Well No. 8-R is hereby approved.

Sincerely.

Jou Unotenbery

Director

LW/MES/kv

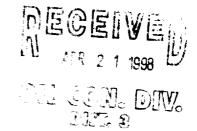
cc: New Mexico Oil Conservation Division - Aztec U. S. Bureau of Land Management - Farmington

BURLINGTON RESOURCES

BERIE HALLANS

Sent Federal Express

Ms. Lori Wrotenbery, Director New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505



Re:

Quitzau #8R

2100'FNL, 2255'FEL, Section 11, T-25-N, R-8-W, San Juan County, New Mexico 30-045-not assigned

Dear Ms. Wrotenbery:

Burlington Resources is applying for administrative approval of an unorthodox gas well location for the Ballard Pictured Cliffs pool. This application for the referenced location is due to extremely rough terrain and extensive archaeology on the topographical benches.

Production from the Ballard Pictured Cliffs pool is to be included in a standard 160 gas spacing and proration unit comprising the northeast quarter (NE/4) of said Section 11. Attached is a map showing the proposed non-standard location for the subject well. This map also shows the other wells in Section 11, T-25-N, R-8-W.

The Quitzau #8 (30-045-13306) was originally drilled and completed at 1204' FNL, 1160' FEL as a single Ballard Pictured Cliffs well in 1955. In September 1993 the well was plugged and abandoned.

The following attachments are for your review:

- 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.

Three copies of this application are being submitted to all offset owners/ operators by certified mail with a request that they furnish you with a Waiver of Objection, return one copy to this office, and retain one copy for their file.

We appreciate your earliest consideration of this application.

Sincerely, Shaakuck

Peggy Bradfield

Regulatory/Compliance Administrator

WAIVER

hereby waives objection to Burlington Resources' application for a non-standard location for their Hanks #5R as proposed above.

By:

Date:

xc: Redwolf Production
Taurus Exploration USA

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

| | APPLICATION FO | R PERMIT TO DRILL, DE | EPEN, OR PLUG BACK |
|-------|--|---|---|
| 1a. | Type of Work DRILL | | 5. Lease Number NM-04224 Unit Reporting Number |
| 1b. | Type of Well GAS | | 6. If Indian, All. or Tribe |
| 2. | Operator BURLINGTON RESOURCES Oil & | Gas Company | 7. Unit Agreement Name |
| 3. | Address & Phone No. of Operator PO Box 4289, Farmingto (505) 326-9700 | n, NM 87499 | 8. Farm or Lease Name Quitzau 9. Well Number 8R |
| 4. | Location of Well 2100'FNL, 2255'FEL Latitude 36 ^O 24.9, Longi | tude 107 ⁰ 39.0 | 10. Field, Pool, Wildcat Ballard Pic.Cliffs 11. Sec., Twn, Rge, Mer. (NMPM) Sec 11, T-25-N, R-8-W API # 30-045- |
| 14. | Distance in Miles from Nearest To- 10 miles to Huerfa | | 12. County 13. State SJ NM |
| 15. | Distance from Proposed Location t | o Nearest Property or Leas | e Line |
| 16. | Acres in Lease | | 17. Acres Assigned to Well 160 |
| 18. | Distance from Proposed Location t | o Nearest Well, Drlg, Com | ol, or Applied for on this Lease |
| 19. | Proposed Depth 2975' | | 20. Rotary or Cable Tools Rotary |
| 21. | Elevations (DF, FT, GR, Etc.) 7117'GR | | 22. Approx. Date Work will Start |
| 23. | Proposed Casing and Cementing P See Operations Plan at Authorized by: Regulatory/C | rogram tached Mahuld ompliance Administr | #/17/98 Date |
| PERMI | T NO | APPROVA | AL DATE |
| APPRO | OVED BY | TITLE | DATE |

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

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.

District 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, Munerals & Natural Resources Department

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

Form C-10 Revised February 21, 199

Instructions on pac Submit to Appropriate District Offic State Lease - 4 Copie Fee Lease - 3 Copie

AMENDED REPORT

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OPERATIONS PLAN

Well Name: Quitzau #8R

Location: 2100'FNL, 2255'FEL Section 11, T-25-N, R-8-W

San Juan County, New Mexico

Latitude 36° 24.9', Longitude 107° 39.0

Formation: Ballard Pictured Cliffs

Elevation: 7117'GL

| Formation: | Top | Bottom | Contents |
|-----------------|------------|--------|----------|
| Surface | Nacimiento | 1997′ | |
| Ojo Alamo | 1997' | 2172' | aquifer |
| Kirtland | 2172' | 2634' | _ |
| Fruitland | 2634' | 2750' | |
| Upper Coal | 2676′ | 2735' | gas |
| Basal Coal | 2735′ | 2750' | gas |
| Pictured Cliffs | 2750' | | gas |
| Total Depth | 2975' | | - |

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

Mud Program:

| <u>Interval</u> | Type | <u>Weight</u> | <u>Vis.</u> | Fluid Loss |
|-----------------|------|---------------|-------------|------------|
| 0- 120' | Spud | 8.4-9.0 | 40-50 | no control |
| 120-2975' | LSND | 8.4-9.0 | 40-60 | no control |

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

| <u>Hole Size</u> | Depth Interval | <u>Csq.Size</u> | Wt. | <u>Grade</u> |
|------------------|----------------|-----------------|-------|--------------|
| 12 1/4" | 0 - 120' | 7" | 20.0# | J-55 |
| 6 1/4" | 0 - 2975' | 3 1/2" | 7.7# | WC-70 |

Tubing Program: - none

Float Equipment: 7" 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 @ 2172'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 2172'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment: 7" x 3 1/2" x 11" 2000 psi screw on independent wellhead.

Quitzau #8R Page Two

Cementing:

7" surface casing - cement with 46 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (54 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. Test casing to 600 psi for 30 minutes.

3 1/2" production casing - Lead w/208 sx of 65/35 Class "B" Poz w/6% gel, 2% calcium chloride, and 1/4# flocele/sx. Tail w/100 sx Class "B" w/2% calcium chloride (499 cu.ft. of slurry, 75% excess to circulate to surface). WOC 8 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 Fruitland Coal is 300 psi and for the Pictured Cliffs is 600 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.

| | | | |
|----------|----------|------|--|
| Drillina | Engineer | Date | |
| | | Date | |

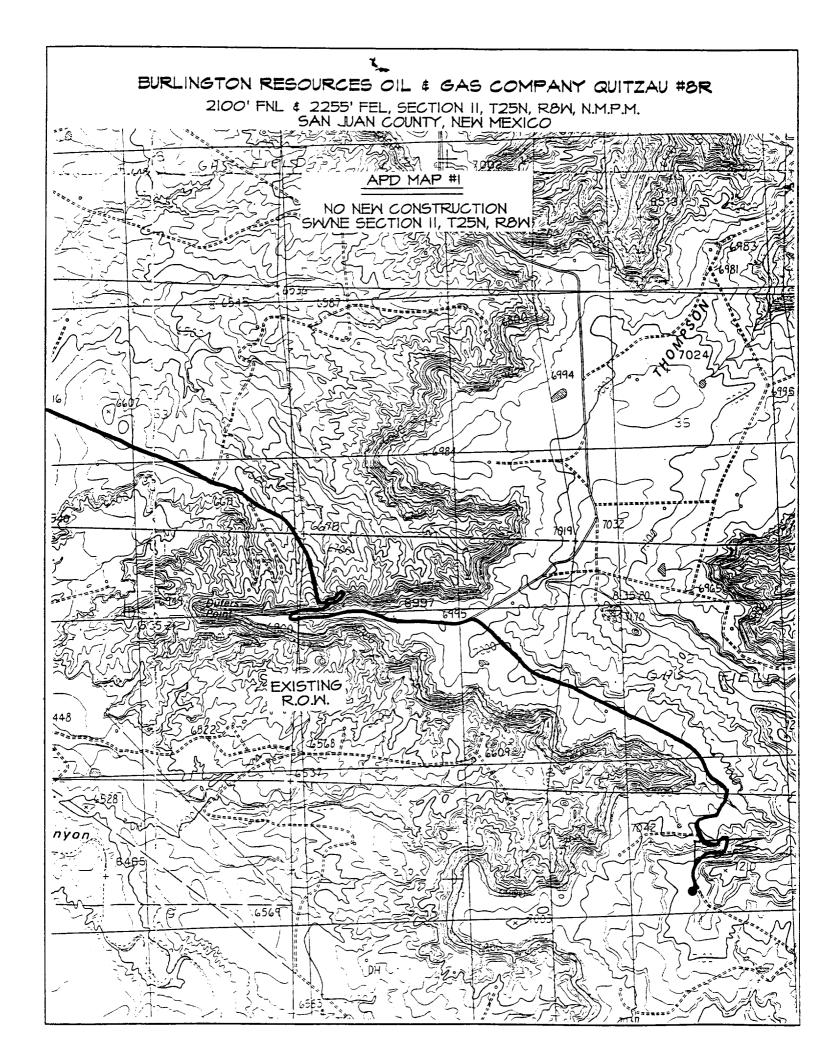


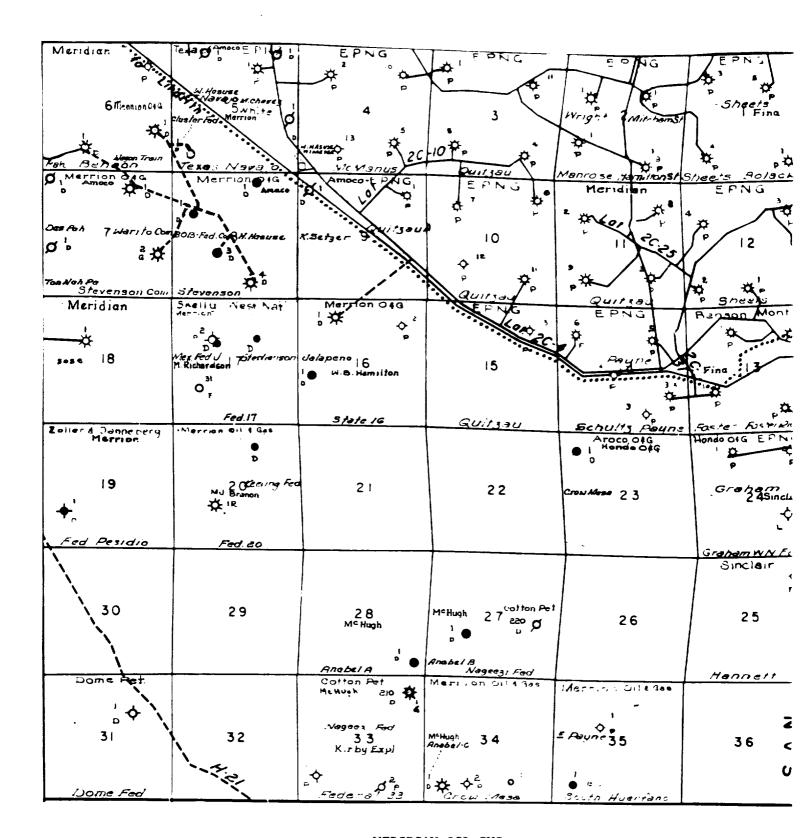
Quitzau #8R Multi-Point Surface Use Plan

- 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 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 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 Palluche Wash Water Hole located NE/4 Section 17, T-25-N, R-7-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.

- 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.

legulatory/Compliance Administrator Date





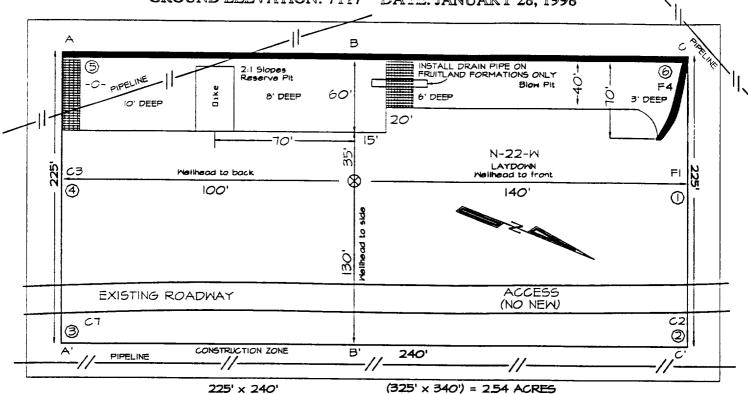
MERIDIAN OIL INC.
Pipeline Map
T-25-N, R-08-W
Juan County, New Mex

San Juan County, Mew Mexico Quitzau 8R Map 1A

PLAT #1

BURLINGTON RESOURCES OIL & GAS COMPANY QUITZAU #8R+2100' FNL & 2255' FEL

SECTION 11, T25N, R8W, NMPM, SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 7117' DATE: JANUARY 28, 1998



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.

| A-A' | | | | |
|-------|---------|---------------|-----|--|
| 7127' | | | | |
| 7117' | | 7 | 7 7 | |
| 7107' | | | | |
| | | | | |
| В-В' | | | | |
| 7127' | | | | |
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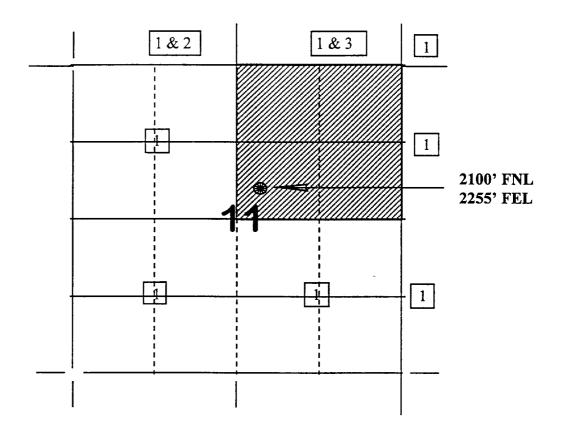
Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction

BURLINGTON RESOURCES OIL AND GAS COMPANY

Quitzau #8R OFFSET OPERATOR/OWNER PLAT Non Standard Location

Pictured Cliffs Formation Well

Township 25 North, Range 8 West



- 1) Burlington Resources
- 2) Redwolf Production Inc. P.O. Box 5382 Farmington, NM 87499
- 3) Taurus Exploration U.S.A. 2198 Bloomfield Highway Farmington, NM 87401

Re:

Quitzau #8R

2100'FNL, 2255'FEL, Section 11, T-25-N, R-8-W, San Juan County, New Mexico 30-045-not 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.

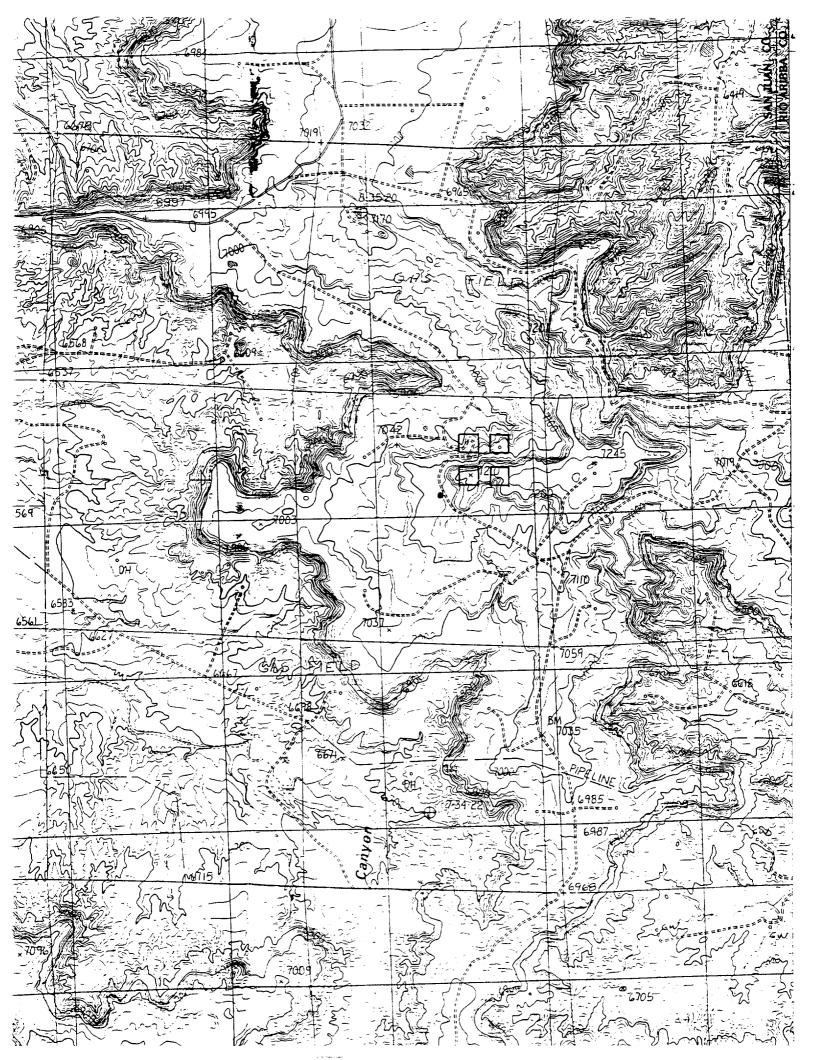
Redwolf Production Inc. PO Box 5382 Farmington, NM 87499

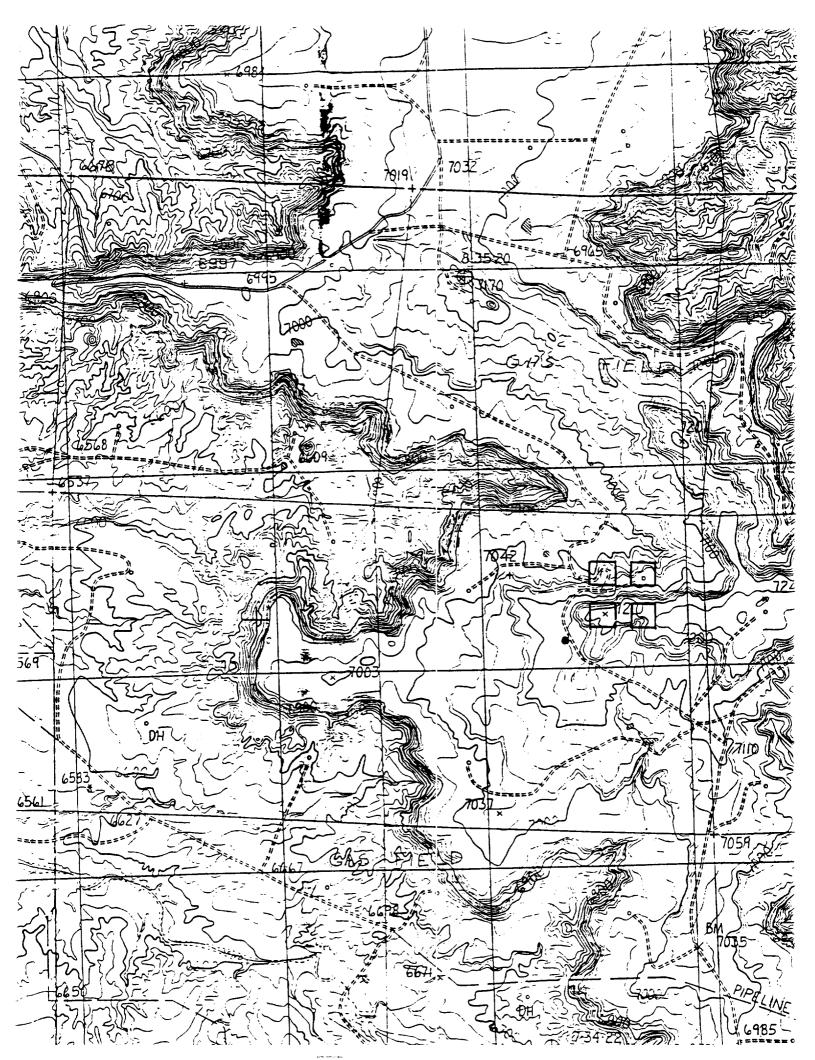
Taurus Exploration USA 2198 Bloomfield Highway Farmington, NM 87401

Peggy Bradfield

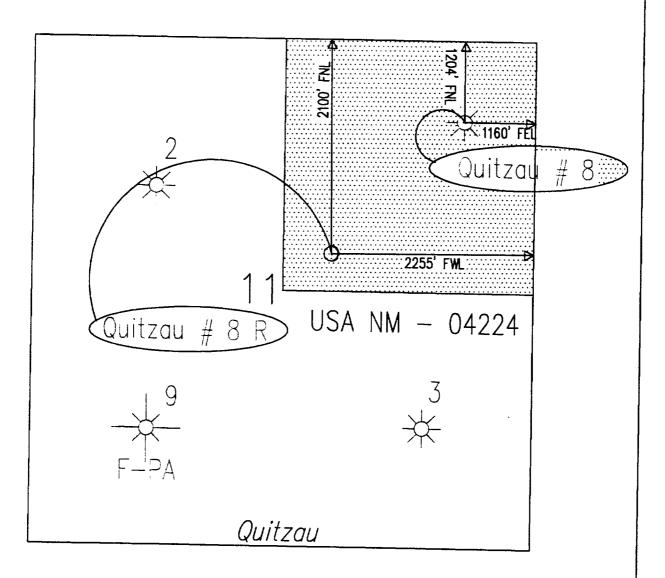
Regulatory/Compliance Administrator

Stad heed





WELL LOCATION PLAT



QUITZAU # 8 WELL
UNIT A (NENE) SECTION 11, T25N,R8W
(1204' FNL / 1160' FEL)

QUITZAU # 8 R WELL
UNIT G (SWNE) SECTION 11, T25N,R8W
(2100' FNL / 2255' FWL)
SAN JUAN CO.,NEW MEXICO