



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

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

April 16, 1998

RECEIVED  
APR 21 1998  
OIL CON. DIV.  
DIST. 3

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

*Administrative Order NSL-4006*

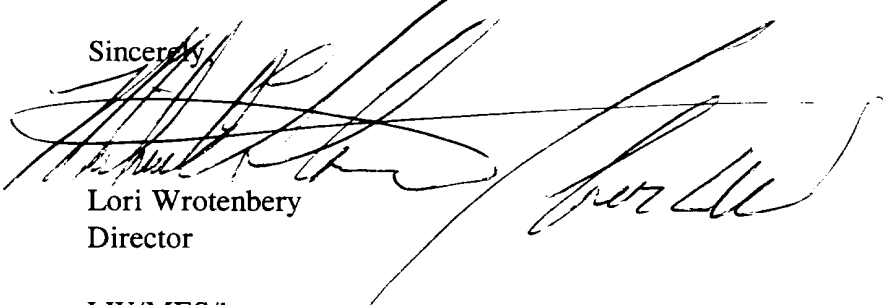
Dear Ms. Bradfield:

Reference is made to the following: (i) your original application dated March 12, 1998; (ii) the Division's initial response to said application by letter from Mr. Michael E. Stogner dated March 18, 1998; and, (iii) your response by fax dated April 16, 1998: all concerning Burlington Resources Oil & Gas Company's request for a non-standard Pictured Cliffs gas well location for the proposed Hanks Well No. 5-R to be drilled 295 feet from the South line and 560 feet from the West line (Lot 4/Unit M) of Section 7, Township 27 North, Range 9 West, NMPM, San Juan County, New Mexico. Lots 3 and 4 and the E/2 SW/4 (SW/4 equivalent) of said Section 7 are to be dedicated to said well in order to form a standard 161.58-acre gas spacing and proration unit for the Fulcher Kutz-Pictured Cliffs Pool.

This 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 is hereby approved.

Sincerely,

  
Lori Wrotenbery  
Director

LW/MES/kv

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

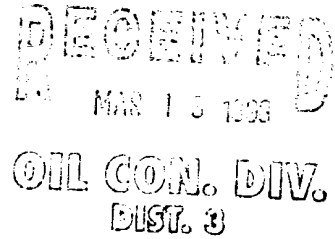
# BURLINGTON RESOURCES

SAN JUAN DIVISION

March 12, 1998

Sent Federal Express

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



Re: Hanks #5R  
295'FSL, 560'FWL, Section 7, T-27-N, R-9-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 Fulcher Kutz Pictured Cliffs pool. This application for the referenced location is due to terrain in the Badlands, the presence of the endangered gillia formosa plant.

Production from the Fulcher Kutz Pictured Cliffs pool is to be included in a standard 160 gas spacing and proration unit comprising the southwest quarter (SW/4) of said Section 7.

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.

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,

A handwritten signature in cursive script, appearing to read "Peggy Bradfield".

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: Amoco

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

|   |  |
|---|--|
| 1a. Type of Work<br>DRILL   | 5. Lease Number<br>SF-077874<br>Unit Reporting Number  |
| 1b. Type of Well<br>GAS   | 6. If Indian, All. or Tribe  |
| 2. Operator<br><b>BURLINGTON<br/>RESOURCES</b> Oil & Gas Company  | 7. Unit Agreement Name   |
| 3. Address & Phone No. of Operator<br>PO Box 4289, Farmington, NM 87499<br><br>(505) 326-9700   | 8. Farm or Lease Name<br>Hanks<br>9. Well Number<br>5R   |
| 4. Location of Well<br>295' FSL, 560' FWL<br><br>Latitude 36° 35.0, Longitude 107° 52.4   | 10. Field, Pool, Wildcat<br>Fulcher Kutz Pic.Cliffs<br>11. Sec., Twn, Rge, Mer. (NMPM)<br>Sec 7,T-27-N, R-9-W<br>API # 30-045- |
| 14. Distance in Miles from Nearest Town<br>10 miles to Bloomfield   | 12. County<br>SJ<br>13. State<br>NM  |
| 15. Distance from Proposed Location to Nearest Property or Lease Line<br>295'   | 17. Acres Assigned to Well<br>SW/4 160   |
| 16. Acres in Lease  |  |
| 18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease<br>2000'   |  |
| 19. Proposed Depth<br>2300'   | 20. Rotary or Cable Tools<br>Rotary  |
| 21. Elevations (DF, FT, GR, Etc.)<br>6180' GR   | 22. Approx. Date Work will Start   |
| 23. Proposed Casing and Cementing Program<br>See Operations Plan attached   |  |
| 24. Authorized by: <br>(Regulatory/Compliance Administrator) | 2/6/98<br>Date   |

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

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

Form C-1  
Revised February 21, 19  
Instructions on ba  
Appropriate District Off:  
State Lease - 4 Cop:  
Fee Lease - 3 Cop:

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

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

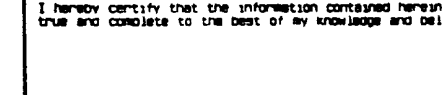

☐ AMENDED REPOF

|                |  |                              |
|----------------|--|------------------------------|
| 'API Number    | 'Pool Code                             | 'Pool Name                   |
| 30-045-        | 77200                                  | Fulcher Kutz Pictured Cliffs |
| 'Property Code | 'Property Name                         | 'Well Number                 |
|                | HANKS                                  | 5R                           |
| 'OGRID No.     | 'Operator Name                         | 'Elevation                   |
| 14538          | BURLINGTON RESOURCES OIL & GAS COMPANY | 6180'                        |

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County  |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|---------|
| M             | 7       | 27N      | 9W    |         | 295           | South            | 560           | West           | SAN JUA |

| UL or lot no. | Section | Township | Range | Lot 141 | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|

|                               |                               |                                  |                         |
|-------------------------------|-------------------------------|----------------------------------|-------------------------|
| <sup>12</sup> Dedicated Acres | <sup>13</sup> Joint or Infill | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |
| 160                           |                               |                                  |                         |

|                |                |          |   |
|----------------|----------------|----------|---|
| 15<br>1341.12' | 1308.78'       | 2617.56' | 17 OPERATOR CERTIFICATION<br>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  |
| 2584.56'       |                |          | <div data-bbox="1051 1002 1490 1097">  </div> <div data-bbox="1051 1097 1490 1146">           Signature<br/>           Peggy Bradfield         </div> <div data-bbox="1051 1146 1490 1194">           Printed Name<br/>           Regulatory Administrator         </div> <div data-bbox="1051 1194 1490 1241">           Title<br/>           2/6/98         </div> <div data-bbox="1051 1241 1490 1289">           Date<br/>           2/6/98         </div> |
| 2637.36'       | 7<br>SF-077874 | 2639.08' | 18 SURVEYOR CERTIFICATION<br>I hereby certify that the well location shown on this map was plotted from field notes of actual surveys made by or under my supervision, and that the same is true and correct to the best of my belief.  |
| 560'           | 1327.92'       | 2608.32' | JANUARY 9, 1998<br>Date of Survey<br>Signature and Seal of Professional Surveyor<br> Certificate Number  |

OPERATIONS PLAN

**Well Name:** Hanks #5R  
**Location:** 295' FSL, 560' FWL Section 7, T-27-N, R-9-W  
 San Juan County, New Mexico  
 Latitude 36° 35.0', Longitude 107° 52.4'  
**Formation:** Fulcher Kutz Pictured Cliffs  
**Elevation:** 6180' GL

| Formation:      | Top        | Bottom | Contents |
|-----------------|------------|--------|----------|
| Surface         | Nacimiento | 1154'  |          |
| Ojo Alamo       | 1154'      | 1294'  | aquifer  |
| Kirtland        | 1294'      | 1841'  |          |
| Fruitland       | 1841'      | 2094'  |          |
| Upper Coal      | 1979'      | 2069'  | gas      |
| Basal Coal      | 2069'      | 2094'  | gas      |
| Pictured Cliffs | 2094'      |        | gas      |
| Total Depth     | 2300'      |        |          |

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

**Mud Program:**

| Interval  | Type | Weight  | Vis.  | Fluid Loss |
|-----------|------|---------|-------|------------|
| 0- 120'   | Spud | 8.4-9.0 | 40-50 | no control |
| 120-2300' | LSND | 8.4-9.0 | 40-60 | no control |

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

| Hole Size | Depth Interval | Csq. Size | Wt.   | Grade |
|-----------|----------------|-----------|-------|-------|
| 12 1/4"   | 0 - 120'       | 8 5/8"    | 23.0# | M-50  |
| 6 1/4"    | 0 - 2300'      | 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 @ 1294'. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1294'. 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 8 hrs. Test casing to 600 psi for 30 minutes.

3 1/2" production casing - Lead w/257 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 (588 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.

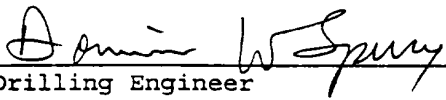
Completion - 6" 2000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams and casing to 2000 psi/15 min.

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 southwest 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  
Page 1

2-12-98  
Date  
February 6, 1998

**OPERATIONS PLAN**

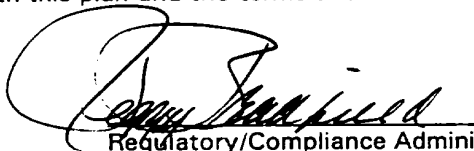
# ***BURLINGTON RESOURCES***

Hanks #5R

## **Multi-Point Surface Use Plan**

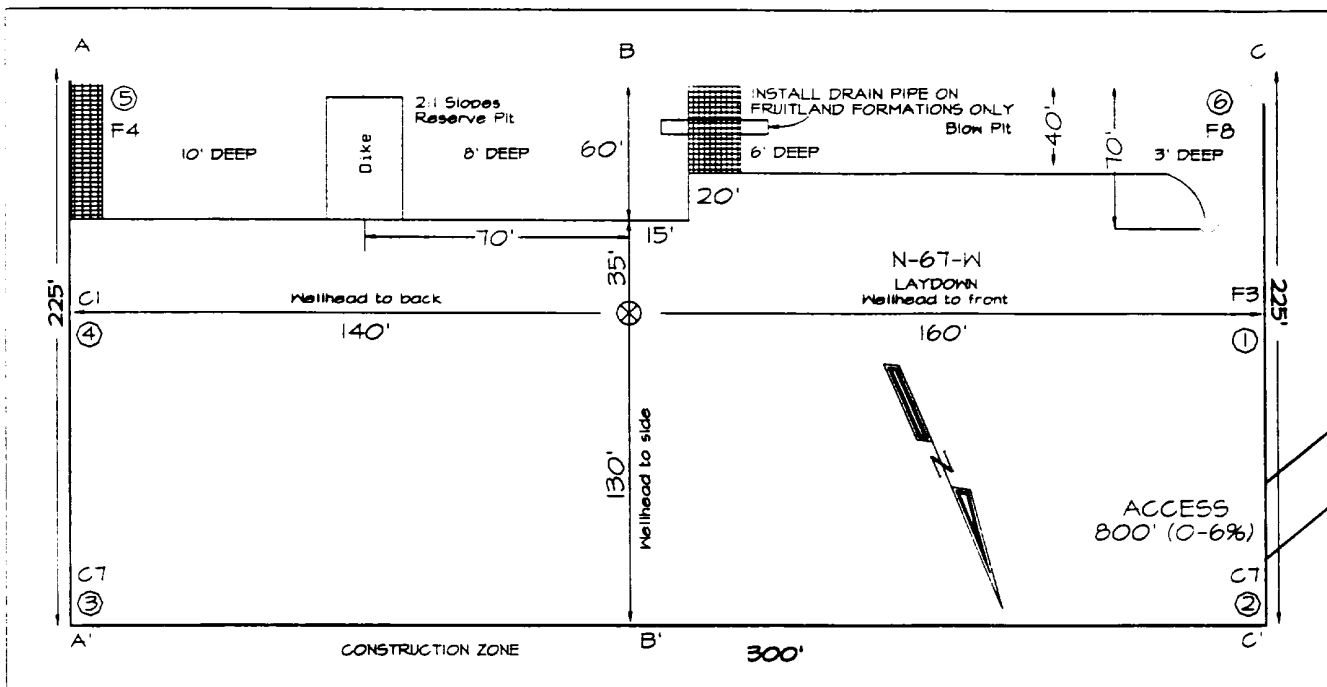
1. Existing Roads - Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
  2. Planned Access Road - Refer to Map No. 1. The required new access 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 800' 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.
  5. Location and Type of Water Supply - Water will be hauled by truck for the proposed project and will be obtained from San Juan Water Hole located SW/4 Section 20,T-28-N,R-9-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.

 2/27/98  
Regulatory/Compliance Administrator Date

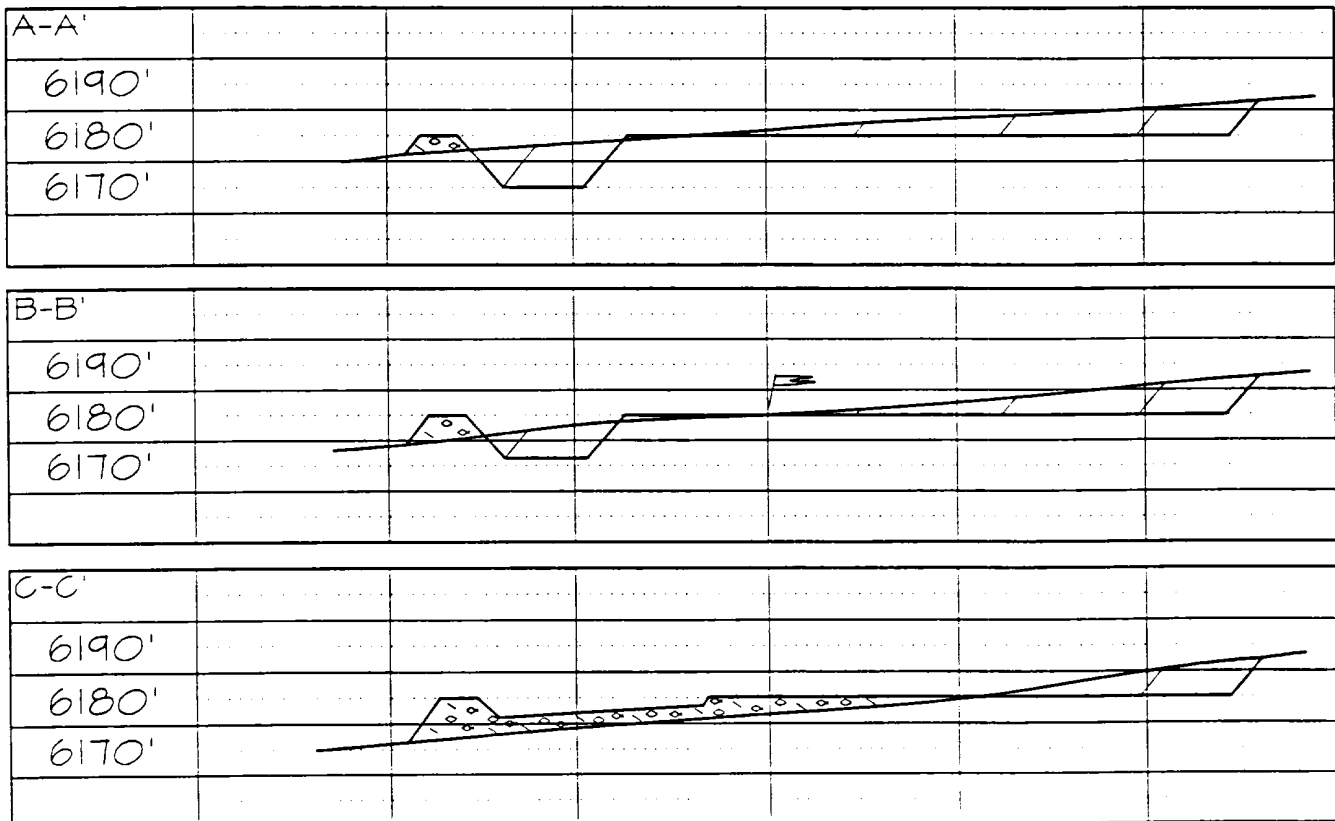
# PLAT #1

BURLINGTON RESOURCES OIL & GAS COMPANY  
HANKS #5R, 295' FSL & 560' FWL  
SECTION 7, T27N, R9W, NMPM, SAN JUAN COUNTY, NEW MEXICO  
GROUND ELEVATION: 6180' DATE: JANUARY 9, 1998



225' x 300' (325' x 400') = 2.98 ACRES

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.



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***

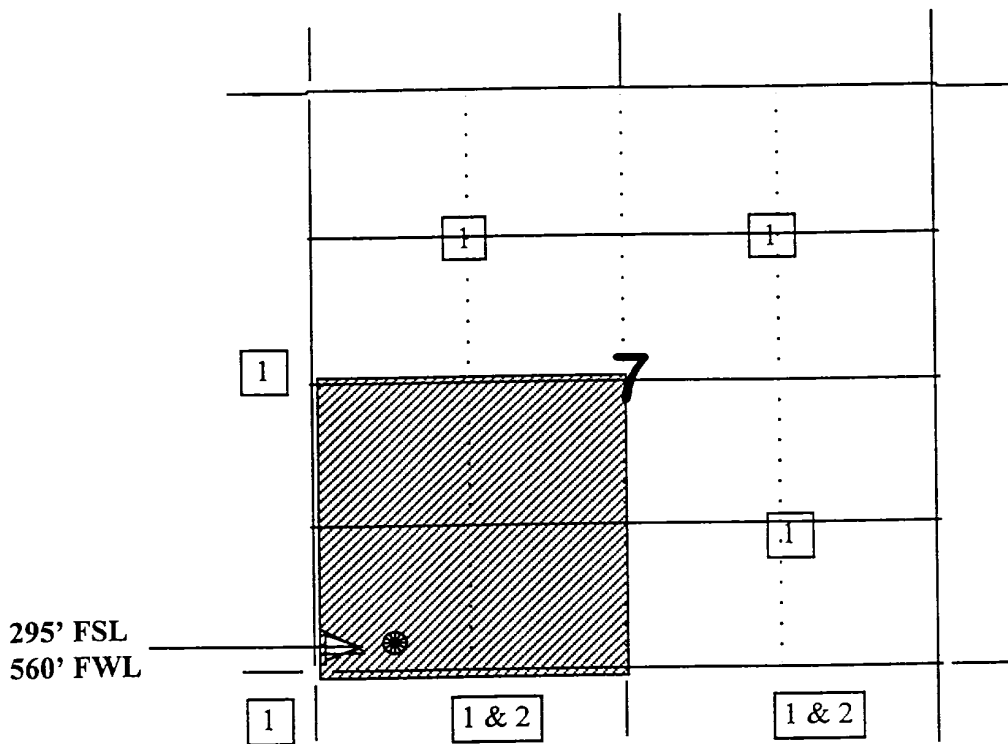
**Hanks #5R**

**OFFSET OPERATOR/OWNER PLAT**

**Non Standard Location**

**Pictured Cliffs Formation Well**

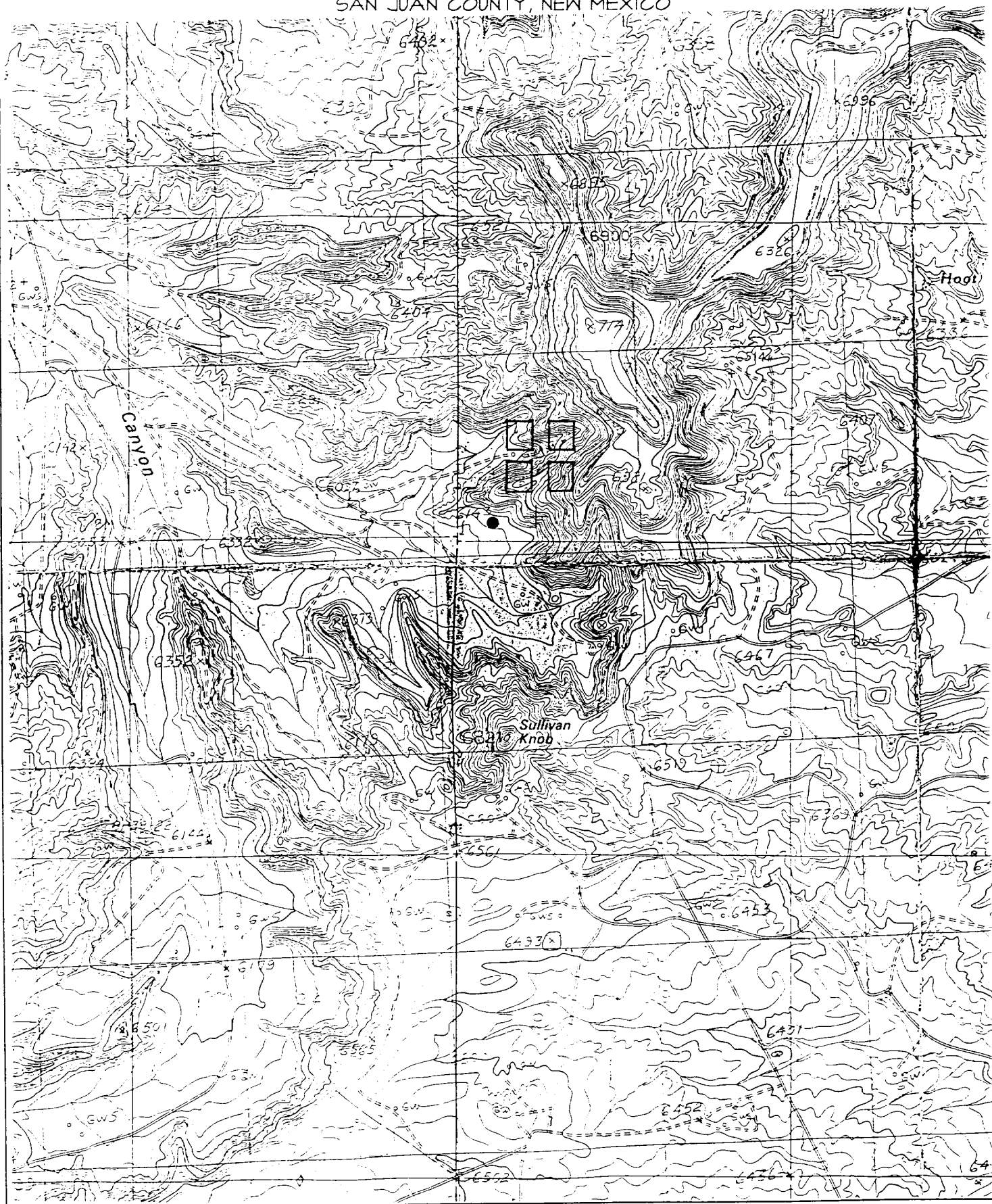
**Township 27 North, Range 9 West**



- 1) Burlington Resources
- 2) Amoco  
P.O. Box 800  
Denver, CO 80201

BURLINGTON RESOURCES OIL & GAS COMPANY HANKS #5R

295' FSL & 560' FWL, SECTION 7, T27N, R9W, N.M.P.M.  
SAN JUAN COUNTY, NEW MEXICO



295' FSL & 560' FWL, SECTION 7, T27N, R9W, N.M.P.M.  
SAN JUAN COUNTY, NEW MEXICO

