



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

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

April 12, 1999

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

Telefax No. (505) 326-9833

RECEIVED  
APR 13 1999  
OIL CON. DIV.  
DIST. 3

Administrative Order NSL-4254

Dear Ms. Bradfield:

Reference is made to your application submitted to the New Mexico Oil Conservation Division ("Division") on March 23, 1999 for an exception to the well location requirements provided within the "Special Rules and Regulations for the Basin-Dakota Pool," as promulgated by Division Order No. R-10987, for a non-standard Basin-Dakota infill gas well location in an existing 268.34-acre lay-down gas spacing and proration unit for the Basin-Dakota Pool comprising Lots 10 and 11, the SW/4, and the W/2 SE/4 (S/2 equivalent) of Section 1, Township 30 North, Range 5 West, NMPM, Rio Arriba County, New Mexico (approved by Division on May 17, 1979 by Order designation NWU-810). This unit is currently dedicated to Burlington's Carson "SRC" Well No. 1 (API No. 30-039-20267), located a standard gas well location 1540 feet from the South line and 990 feet from the West line (Unit M) of Section 1.

The application has been duly filed under the provisions of Division Rules 104.F and 605.B.

By the authority granted me under the provisions of Division Rule 104.F(2), the following described well to be drilled at an unorthodox infill gas well location in Section 1 is hereby approved:

Carson "SRC" Well No. 2-A  
1850' FSL & 1270' FEL (Unit J).

01-30N-5W Y

Further, both of the aforementioned Carson "SRC" Well Nos. 2 and 2-A and existing 268.34-acre gas spacing and proration unit will be subject to all existing rules, regulations, policies, and procedures applicable to prorated gas pools in Northwest, New Mexico.

Sincerely,

Lori Wrotenbery  
Director

Has Api #  
Int Me APD

LW/MES/kv

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

# BURLINGTON RESOURCES

SAN JUAN DIVISION

Sent Federal Express

Mr. Michael Stogner  
New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

Re: Carson SRC #2A  
1850'FSL, 1270'FEL Section 1, T-30-N, R-5-W, Rio Arriba County  
30-039-not assigned

Dear Mr. Stogner:

Burlington Resources is applying for administrative approval of an unorthodox gas well location for the Dakota pool. This location is at the request of the Carson National Forest (see attached letter) due to topography at a standard location. The SE/4 of Section 1 is fractional and consists of two narrow (209' wide) east and west drilling windows. These windows lie on steep slopes which would require heavy cuts and lengthy access roads with steep grades and wide sideslopes. This well is proposed to be drilled as a Mesa Verde-Dakota commingle and DHC-2226 has been issued. Order R-10987A covers the location of the Mesa Verde portion of this well.


Production from the Dakota pool is to be included in a 268.34 acre gas spacing and proration unit for the south half (S/2) in Section 1 and is to be dedicated to the Carson SRC #1 (30-039-20267) located at 1540'FSL, 990'FWL of Section 1. Production from the Mesa Verde pool is to be included in a 268.34 acre gas spacing and proration unit for the south half (S/2) in Section 1 and is to be dedicated to the Carson SRC #2 (30-039-21835) located at 870'FSL, 1450'FWL of Section 1. Order NSU 3-809 (attached) covers the non-standard proration unit for the Mesa Verde; and Order NSU 3-810 (attached) covers the non-standard proration unit for the Dakota.

The following attachments are for your review:

- Application for Permit to Drill.
- Completed C-102 at referenced location.
- Offset operators/owners plat
- 7.5 minute topographic map.

Three copies of this application are being submitted to offset operators by certified mail with a request that they furnish you with a Waiver of Objection, keep one copy for their files and return one copy to this office. We appreciate your earliest consideration of this application.

Sincerely,

  
Peggy Bradfield

Regulatory/Compliance Administrator

xc: NMOCD - Aztec District Office  
Bureau of Land Management

## WAIVER

\_\_\_\_\_ hereby waives objection to Burlington Resources' application for a non-standard location for the Carson SRC #2A as proposed above.

By: \_\_\_\_\_ Date: \_\_\_\_\_

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work  
DRILL

1b. Type of Well  
GAS

2. Operator  
**BURLINGTON RESOURCES** Oil & Gas Company

3. Address & Phone No. of Operator  
PO Box 4289, Farmington, NM 87499  
(505) 326-9700

4. Location of Well  
1850' FSL, 1270' FEL  
Latitude 36° 50' 22", Longitude 107° 18' 23"

5. Lease Number  
NM-4453  
Unit Reporting Number

6. If Indian, All. or Tribe

7. Unit Agreement Name

8. Farm or Lease Name  
Carson SRC

9. Well Number  
2A

10. Field, Pool, Wildcat  
Blanco MV/Basin DK

11. Sec., Twn, Rge, Mer. (NMPM)  
Sec. 1, T-30-N, R-5-W  
API # 30-039-

12. County  
Rio Arriba

13. State  
NM

14. Distance in Miles from Nearest Town  
70 miles to Bloomfield

15. Distance from Proposed Location to Nearest Property or Lease Line  
1270'

16. Acres in Lease

17. Acres Assigned to Well  
268.34 S/2

18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease  
2100'

19. Proposed Depth  
8202'

20. Rotary or Cable Tools  
Rotary

21. Elevations (DF, FT, GR, Etc.)  
6629' GR

22. Approx. Date Work will Start

23. Proposed Casing and Cementing Program  
See Operations Plan attached

24. Authorized by: L. J. Shalinski  
Regulatory/Compliance Administrator

Date 10-23-98

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED 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 KK, Artesia, NM 87211-0719  
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

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

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-	<sup>2</sup> Pool Code 71599/72319	<sup>3</sup> Pool Name Basin Dakota/Blanco Mesaverde
<sup>4</sup> Property Code 6897	<sup>5</sup> Property Name CARSON SRC	<sup>6</sup> Well Number # 2A
<sup>7</sup> OGBID No. 14538	<sup>8</sup> Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY	<sup>9</sup> Elevation 6629

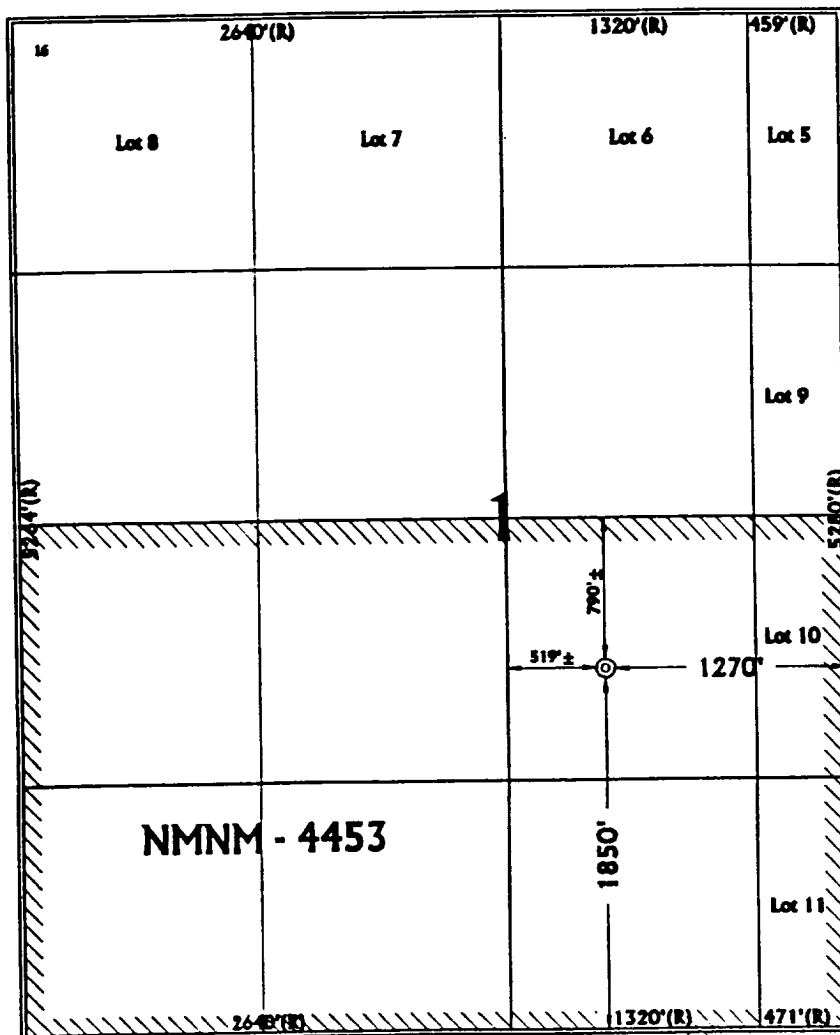
<sup>10</sup> Surface Location

UL or Lot No. J	Section 1	Township 30 N	Range 5 W	Lot Idn	Feet from the 1850	North/South line SOUTH	Feet from the 1270	East/West line EAST	County RIO ARriba
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<sup>11</sup> Bottom Hole Location If Different From Surface

<sup>1</sup> UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres DK: S/268.34 MV: S/268.34	<sup>13</sup> Joint or Infill 34	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



<sup>17</sup> OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*Peggy Bradfield*  
Signature  
Peggy Bradfield  
Printed Name  
Regulatory Administrator  
Title  
10-25-98  
Date

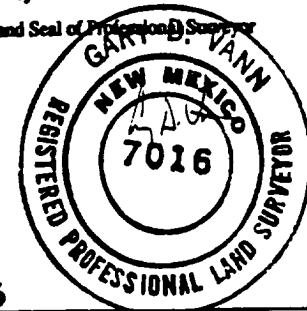
<sup>18</sup> SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

August 10, 1998

Date of Survey

Signature and Seal of Professional Surveyor



7016

Certificate Number

## OPERATIONS PLAN

**Well Name:** Carson SRC #2A  
**Location:** 1850' FSL, 1270' FEL, Sec 1, T-30-N, R-5-W  
Rio Arriba County, NM  
Latitude 36° 50' 22", Longitude 107° 18' 23"  
**Formation:** Blanco Mesa Verde/Basin Dakota  
**Elevation:** 6629' GL

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	2755'	
Ojo Alamo	2755'	2941'	aquifer
Kirtland	2941'	3010'	gas
Fruitland	3010'	3436'	gas
Pictured Cliffs	3436'	3679'	gas
Lewis	3679'	4438'	gas
<b>Intermediate TD</b>	<b>3779'</b>		
Mesa Verde	4438'	4799'	gas
Chacra	4799'	5609'	gas
Massive Cliff House	5609'	5664'	gas
Menefee	5664'	5862'	gas
Massive Point Lookout	5862'	6337'	gas
Mancos	6337'	7189'	gas
Gallup	7189'	7901'	gas
Greenhorn	7901'	7951'	gas
Graneros	7951'	8081'	gas
Dakota	8081'		gas
<b>TD (4 1/2" liner)</b>	<b>8202'</b>		

### Logging Program:

Cased hole - CBL - TD to 200' above TOC, GR/CNL across MV/DK

### Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0- 200'	Spud	8.4-9.0	40-50	no control
200-3779'	LSND	8.4-9.0	30-60	no control
3779-8202'	Gas	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>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	K-55
8 3/4"	0' - 3779'	7"	20.0#	J-55
6 1/4"	3679' - 8202'	4 1/2"	10.5#	K-55

### Tubing Program:

0' - 8202'      2 3/8"      4.70# EUE

**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 2 3/8" x 3000 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 drilling crew.
- All BOP tests and 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 2% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 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/347 sx Class "B" w/3% sodium metasilicate, 7# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% calcium chloride (1136 cu.ft. of slurry, 100% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage: Stage collar at 1889'. First stage: cement with 151 sx Class "B" cmt with 7 pps gilsonite, 1/2 pps cellophane, 3% metasilicate. Tailed w/90 sx Class "B" 50/50 poz w/2% gel, 2% calcium chloride, 0.5 pps Cellophane. Second stage: 195 sx Class "B" with 3% sodium metasilicate, 1/2 pps Cellophane, 10 pps Gilsonite (1136 cu.ft., 100% 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 at 2941'. Two turbolating centralizers at the base of the Ojo Alamo at 2941'. 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 cover minimum of 100' of 4 1/2" x 7" overlap. Lead with 527 sx 50/50 Class "B" Poz with 2% gel, 0.25 flocele/sx, 5# gilsonite/sx, and 0.3% fluid loss additive (696 cu.ft.), 50% excess to cement 4 1/2" x 7" overlap). WOC a minimum of 18 hrs prior to completing.

Cement float shoe on bottom with float collar spaced on top of shoe joint.

Note: To facilitate higher hydraulic stimulation completion work, no liner hanger will be used. In its place, a long string of 4 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 4 1/2" x 7" casing strings. After completion of the well, a 4 1/2" retrievable bridge plug will be set below the top of cement in the 4 1/2" x 7" overlap. The 4 1/2" casing will then be backed off above the top of cement in the 4 1/2" x 7" overlap and laid down. The 4 1/2" bridge plug will then be retrieved and the production tubing will be run to produce the well.

- 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.
- Deduster equipment will be utilized.
- 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:

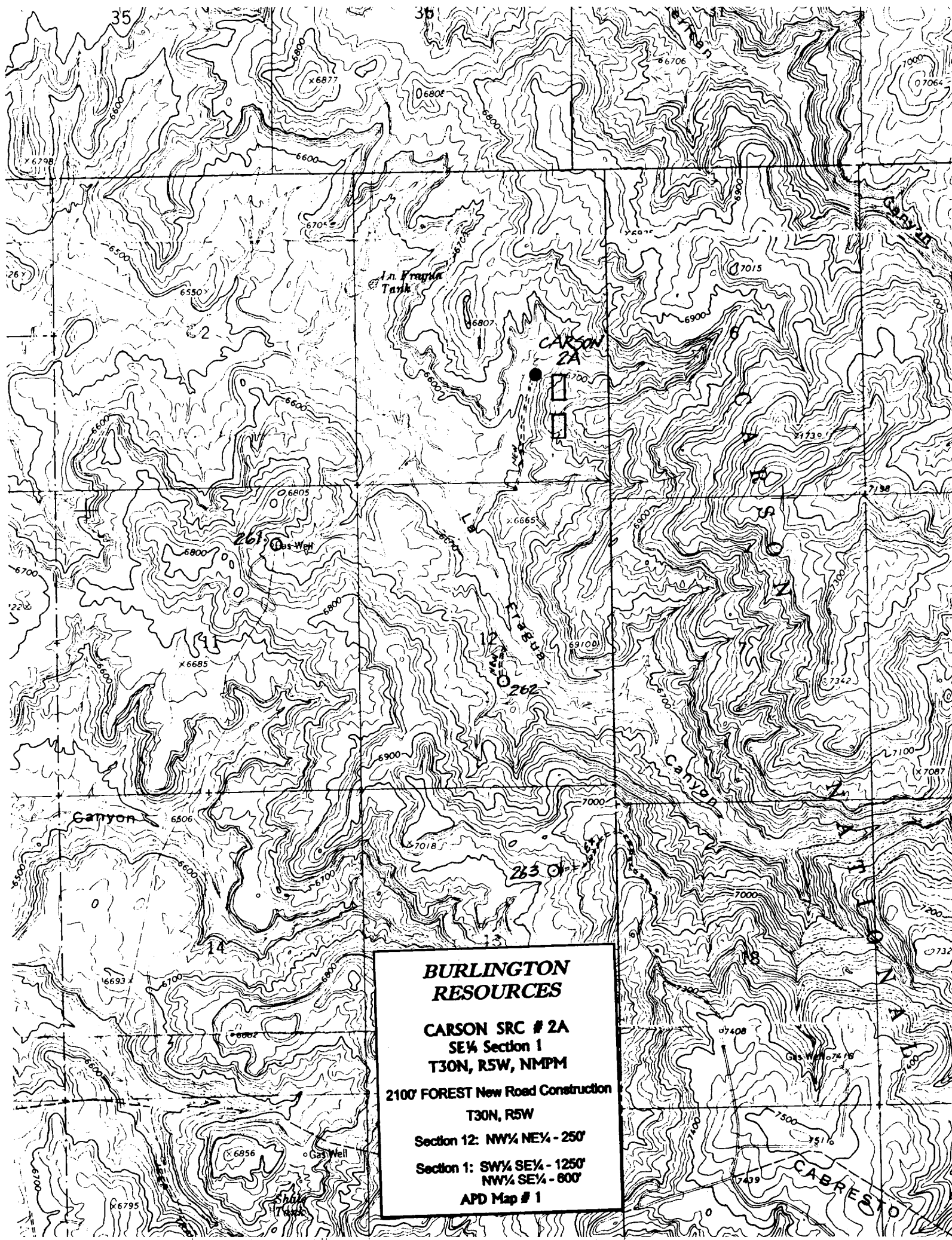
- The Dakota and Mesa Verde formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal	800 psi
Pictured Cliffs	800 psi
Mesa Verde	700 psi
Dakota	2500 psi
- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The South half of Section 1 is dedicated to the Mesa Verde and Dakota in this well.
- This gas is dedicated.

  
\_\_\_\_\_  
Drilling Engineer

11/2/98  
\_\_\_\_\_  
Date





**BURLINGTON  
RESOURCES**

**CARSON SRC # 2A  
SE 1/4 Section 1  
T30N, R5W, NMPM**

**2100' FOREST New Road Construction  
T30N, R5W**

**Section 12: NW 1/4 NE 1/4 - 250'**

**Section 1: SW 1/4 SE 1/4 - 1250'  
NW 1/4 SE 1/4 - 800'**

**APD Map # 1**

***BURLINGTON RESOURCES OIL AND GAS COMPANY***

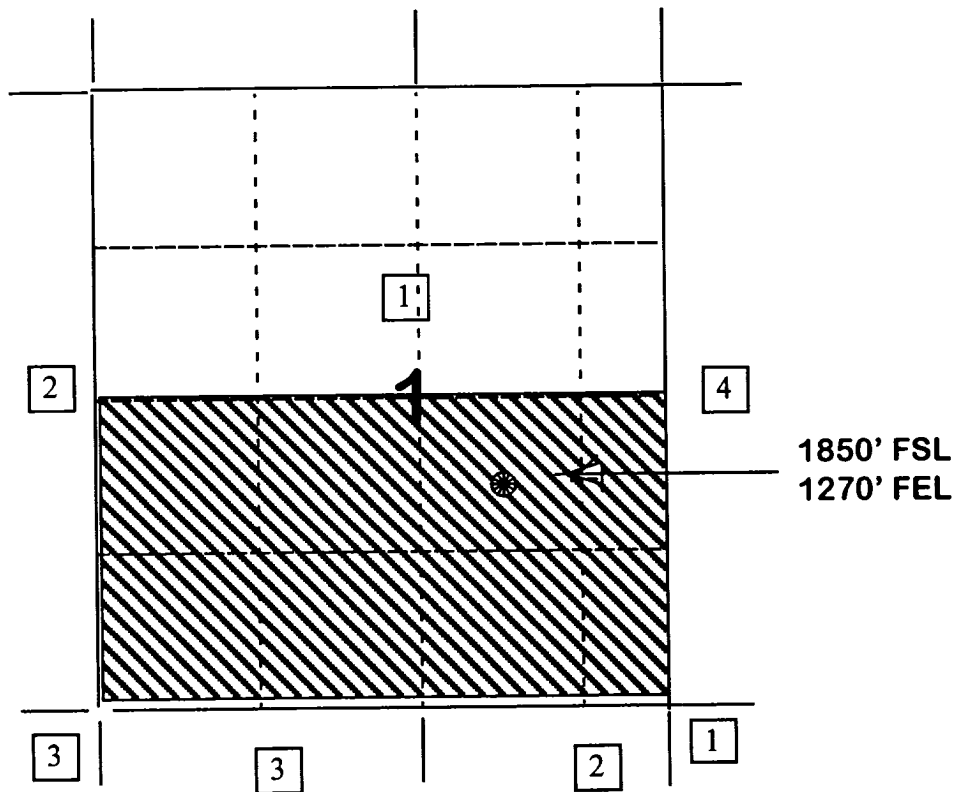
**Carson SRC #2A**

**OFFSET OPERATOR/OWNER PLAT**

**Nonstandard Location**

**Mesaverde / Dakota Formations**

**Township 30 North, Range 5 West**



**1) Burlington Resources**

**2) Schalk Development Co.**

**P.O. Box 2078**

**Farmington, NM 87499-2078**

**3) Phillips Petroleum Company**

**Attn: Mr. Scott Prather**

**5525 Hwy. 64, NBU 3004**

**Farmington, NM 87401**

**4) Taurus Exploration USA, Inc.**

**Attn: Ms. Kathy Clayton**

**2101 Sixth Ave. North**

**Birmingham, Alabama 35203**

Re: Carson SRC #2A  
1850'FSL, 1270'FEL Section 1, T-30-N, R-5-W, Rio Arriba County  
30-039-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.

Phillips Petroleum Company  
Att: Scott Prather  
5525 Highway 64, NBU 3004  
Farmington, NM 87401

Schalk Development Co  
PO Box 2078  
Farmington, NM 87499-2078

Taurus Exploration USA Inc.  
Att: Ms. Kathy Clayton  
2101 Sixth Avenue North  
Birmingham, Alabama 35203



Peggy Bradfield



United States  
Department of  
Agriculture

Forest  
Service , Jicarilla  
Ranger District

664 East Broadway  
Bloomfield, NM 87413  
(505) 632-2956  
Fax: (505) 632-3173

File Code: 2820

Date: 8/31/98

Chuck Smith  
Burlington Resources  
POB 4289  
Farmington, NM 87499

RE: Unorthodox location for wells:      San Juan 27-4 #39M  
   San Juan 27-4 #46M  
   San Juan 27-4 #52M  
   Carson SRC #2A

Dear Mr. Smith,

The Jicarilla Ranger District, Carson National Forest is requesting you apply for an unorthodox location as follows, as discussed by your company representative and Camela Hooley of this office:

SJ 27-4 #39M, T27N R4W Sec.5, 2250'FNL/910'FWL  
SJ 27-4 #46M, T27N R4W Sec.31, 1875'FN:/405'FWL  
SJ 27-4 #52M, T27n R4W Sec.29, 1040'FNL/1370'FWL  
Carson SRC #2A, T30N R5W Sec.1, 1850'FSL/1270'FEL

The mineral operator is required to comply with other other applicable regulations such as the Endangered Species Act and the Archeological Resources Protection Act under 36CFR228.112(c). The operator is also required under 36CFR228.108(c) to minimize or prevent damage to surface resources. The Carson National Forest Management Plan states that surface resource impacts will be minimized when administering mineral resources.

The following conditions apply which require an unorthodox location:


52M Archeological resources prevent locating the well in an orthodox location.

2A,  
39M,46M Topography prevents locating the well in an orthodox location.

46M Threatened/endangered species concerns prevent locating the well in an orthodox location.

52M,  
39M,46M Prevention of unnecessary resource damage requires the location be unorthodox. (Such as a previously disturbed area or existing road available outside the drilling window.)

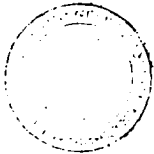
Thank you for your cooperation in this matter.

  
Don Case  
Acting District Ranger



Caring for the Land and Serving People

FS-6200-28b(3/92)



BRUCE KING  
GOVERNOR  
LARRY KEHOE  
SECRETARY

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE

May 17, 1979

1000 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87412  
(505) 334-6178

Southland Royalty Co.  
P. O. Drawer 570  
Farmington, NM 87401

NWU 3- 809

SUBJECT: NON-STANDARD GAS PRORATION UNIT CONSISTING OF 268.34  
ACRES IN THE Blanco Mesaverde GAS  
POOL DESCRIBED AS FOLLOWS:

TOWNSHIP 30 NORTH, RANGE 5 WEST, NMPM

SECTION: 1 S/2

By authority granted me by Rule 5 (B) of Order R-1670, as amended, the above-described acreage has been approved as a non-standard gas proration unit to be dedicated to the Carson SDC  
well no. 2, located 870/S; 1450/W of said  
Section 1.

  
Supervisor, District #3

xc: Oil Conservation Division  
Santa Fe, New Mexico

RECEIVED  
MAY 21 1979

FARMINGTON DISTRICT



BRUCE KING  
GOVERNOR  
LARRY KEHOE  
SECRETARY

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE

May 17, 1979

1000 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-6178

Southland Royalty Co.  
P. O. Drawer 570  
Farmington, NM 87401


NWU 3- 810

SUBJECT: NON-STANDARD GAS PRORATION UNIT CONSISTING OF 268.34  
ACRES IN THE Basin Dakota GAS  
POOL DESCRIBED AS FOLLOWS:

TOWNSHIP 30 NORTH, RANGE 5 WEST, NMPM

SECTION: 1 S/2

By authority granted me by Rule 5 (B) of Order R-1670, as amended, the above-described acreage has been approved as a non-standard gas proration unit to be dedicated to the Carson SRC  
well no. 1, located 1540/S; 990/W of said  
Section 1.

  
Supervisor, District #3

xc: Oil Conservation Division  
Santa Fe, New Mexico

RECEIVED

MAY 21 1979

ADMINISTRATIVE DISTRICT