

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

2001 MAR 29 PM 3:29

1a. Type of Work Deepen	5. Lease Number SF-078208 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, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name Sunray B 9. Well Number 2
4. Location of Well 1639' FSL, 1626' FWL Latitude 36° 36.84, Longitude 107° 107.83	10. Field, Pool, Wildcat Blanco MV/Basin DK 11. Sec., Twn, Rge, Mer. (NMPM) K Sec. 1, T-30-N, R-10-W API # 30-045-09838
14. Distance in Miles from Nearest Town	12. County San Juan 13. State NM
15. Distance from Proposed Location to Nearest Property or Lease Line 1626'	17. Acres Assigned to Well 256.51 W/2
16. Acres in Lease	18. Distance from Proposed Location to Nearest Well, Drig, Compl, or Applied for on this Lease
19. Proposed Depth 7695'	20. Rotary or Cable Tools Rotary
21. Elevations (DF, FT, GR, Etc.) 6458' GL	22. Approx. Date Work will Start
23. Proposed Casing and Cementing Program See attached procedure	24. Authorized by: <u>[Signature]</u> Regulatory/Compliance Supervisor
	Date <u>3-28-01</u>

PERMIT NO. _____

APPROVAL DATE 7/17/01

APPROVED BY _____

TITLE _____

DATE 7/17/01

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.

NMOCD

K✓

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, 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

¹ API Number 30-045-09838		² Pool Code 72319/71599		³ Pool Name Blanco Mesaverde/Basin Dakota	
⁴ Property Code 7563		⁵ Property Name Sunray B			⁶ Well Number 2
⁷ OGRID No. 14538		⁸ Operator Name Burlington Resources Oil & Gas Company			⁹ Elevation 6458' GL

¹⁰ Surface Location

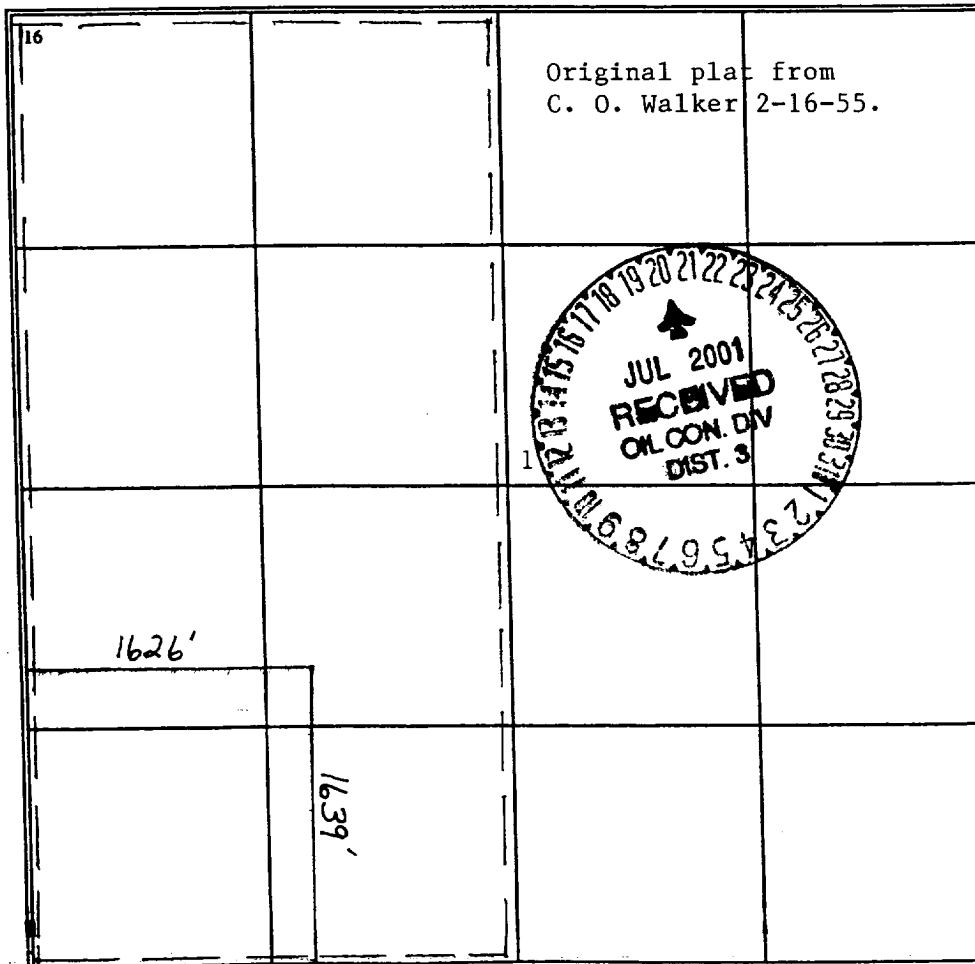
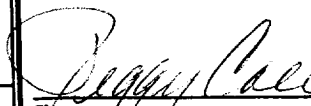
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	1	30N	10W		1639	South	1626	West	San Juan

¹¹ Bottom Hole Location If Different From Surface

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

¹² Dedicated Acres W/256.51	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
---	-------------------------------	----------------------------------	-------------------------

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

¹⁶ 		¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature Peggy Cole Printed Name Regulatory Supervisor Title 3-28-01 Date	
		¹⁸ 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. Date of Survey Signature and Seal of Professional Surveyer: Certificate Number	

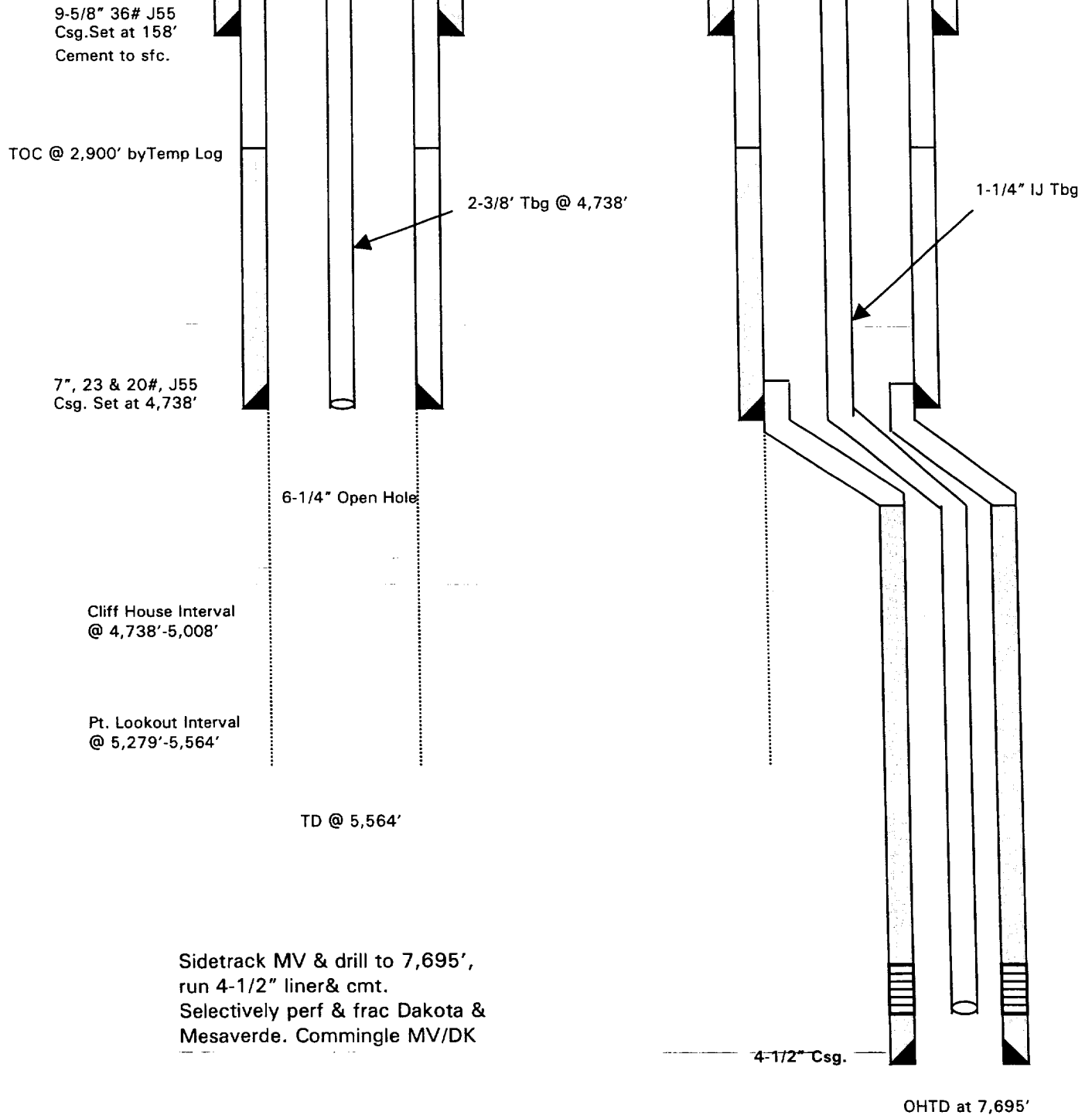
Sunray No 2B

It is intended to deepen the subject well to the Dakota formation by pulling the 2-3/8" tubing. The Mesa Verde will be side tracked and drill to new total depth of 7,695'. A 4-1/2" 10.5# J-55 liner will be run in the well from 4,638'-7,695' and will be cemented with 305 sacks of Class G cement (40% excess included). The Mesa Verde and Dakota formation will then be selectively perforated and fracture stimulated independently. A 2-3/8" tubing string will be run in the well and the well will be returned to production as a Mesa Verde/Dakota commingle completion. A C-102 plat is attached.

Sunray B#2
Unit K, Sec. 01, T30N, R10W
San Juan County, NM

CURRENT

PROPOSED



OPERATIONS PLAN

Well Name: Sunray B #2
Location: 1639' FSL, 1626' FWL, Sec.1, T-30-N, R-10-W
San Juan County, NM
Latitude 36° 50.2464, Longitude 107° 50.2266
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 6458' GR

<u>Formation Tops:</u>	<u>Top</u>	<u>Bottom</u>	<u>Contents</u>
Surface	San Jose	1695'	
Kirtland	1695'	2823'	gas
Fruitland	2823'	3168'	gas
Pictured Cliffs	3168'	4795'	gas
Massive Cliff House	4795'	5015'	gas
Menefee	5015'	5395'	gas
Massive Point Lookout	5395'	5870'	gas
Mancos	5870'	6510'	gas
Gallup	6510'	7435'	gas
Greenhorn	7435'	7489'	gas
Graneros	7489'	7537'	gas
Dakota	7537'		gas
TD	7730'		

Logging Program: Cased hole - GR/CBL - TD to surface

Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
4700-7730'	Air/N2	n/a	n/a	n/a

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>
6-1/4"	4600' - 7730'	4-1/2"	10.5#	J-55

Tubing Program: 0' - 7730' 2-3/8" 4.7# J-55

Operations:

It is intended to sidetrack the subject well to the Dakota formation by pulling the 2-3/8" tubing. Set a cement retainer at approximately 4700'. Squeeze existing Mesa Verde and open hole with 286 sx Standard Cement 50:50 Poz (100% excess in open hole). Set whipstock on top of cement retainer at approximately 4700'. Sidetrack out of 7" casing and drill 6-1/4" hole to a new total depth of 7730'. A 4-1/2" 10.5# J-55 liner will be run in the well from 4600'-7730' and will be cemented with 337 sacks of Class G cement (40% excess in open hole). The Mesa Verde and Dakota formations will then be selectively perforated and fracture stimulated independently. A 2-3/8" tubing string will be run in the well and the well will be returned to production as a Mesa Verde/Dakota commingle completion.

BOP Specifications, Wellhead and Tests:**Surface to Total Depth -**

2" nominal, 3000 psi minimum choke manifold (Reference Figure #3).

Completion Operations -

7 1/16" 3000 psi double gate BOP stack (Reference Figure #2). After nipple-up prior to drilling out, pipe rams, blind rams, well head, and manifold 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.

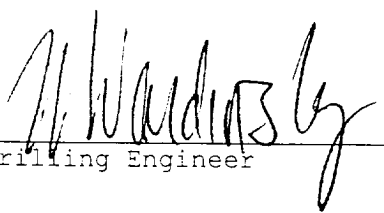
Special Drilling Operations (Gas/Mist Drilling):

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:
Dakota 2500 psi


Drilling Engineer

7/17/01
Date