

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED
58 MAR 13 PM 1:34
070 FARMINGTON, NM

| | |
|--|--|
| <p>1a. Type of Work DRILL</p> | <p>5. Lease Number SF-080675 Unit Reporting Number</p> |
| <p>1b. Type of Well GAS</p> | <p>Indian, All. or Tribe</p> |
| <p>2. Operator BURLINGTON RESOURCES 14538 Oil & Gas Company</p> | <p>Unit Agreement Name San Juan 27-4 Unit</p> |
| <p>3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700</p> | <p>8. Farm or Lease Name San Juan 27-4 Unit</p> <p>9. Well Number 37M</p> |
| <p>4. Location of Well 1560' FSL, 1680' FEL Latitude 36° 31.4, Longitude 107° 15.09</p> | <p>10. Field, Pool, Wildcat 73319 Blanco MV/Basin Dk 71594</p> <p>11. Sec., Twn, Rge, Mer. (NMPM) J Sec 33, T-27-N, R-4-W API # 30-039-75933</p> |
| <p>14. Distance in Miles from Nearest Town 50 miles to Blanco</p> | <p>12. County Rio Arriba</p> <p>13. State NM</p> |
| <p>15. Distance from Proposed Location to Nearest Property or Lease Line 1560'</p> | <p>17. Acres Assigned to Well 320 E/2 S/2 320</p> |
| <p>16. Acres in Lease This action is subject to the same procedural requirements as 49 CFR 3180.1, 3180.2, and 3180.3.</p> | |
| <p>18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 60'</p> | <p>20. Rotary or Cable Tools Rotary</p> |
| <p>19. Proposed Depth 8480 DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO THE PROVISIONS WITH ATTACHED "GENERAL REQUIREMENTS"</p> | |
| <p>21. Elevations (DF, FT, GR, Etc.) 7222' GR</p> | <p>22. Approx. Date Work will Start</p> |
| <p>23. Proposed Casing and Cementing Program See Operations Plan attached</p> | |
| <p>24. Authorized by: <u><i>Regina Brannick</i></u> Regulatory/Compliance Administrator</p> | <p><u>2/12/98</u> Date</p> |

RECEIVED
JUL 30 1998
OIL CON. DIV.
DIST. 3

PERMIT NO. _____ APPROVAL DATE JUL 28 1998
APPROVED BY JS/ Duane W. Spencer TITLE _____ DATE JUL 28 1998

Archaeological Report to be submitted by Arboles Contract Archaeology
NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

ok @

NMOCD

District I
 PO Box 1910, Hobbs, NM 88241-1910
 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

Form C-101
 Revised February 21, 1997
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

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

070 FARMINGTON, NM

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | | | |
|------------------------------|--|---|--|--|------------------------|
| 1 API Number 30-039-25933 | | 1 Pool Code 71599/72319 | | 1 Pool Name Basin Dakota/Blanco Mesaverde | |
| 1 Property Code 7452 | | 1 Property Name SAN JUAN 27-4 UNIT | | | 1 Well Number # 37M |
| 1 OGRID No. 14538 | | 1 Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY | | | 1 Elevation 7222 |

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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|------------|
| J | 33 | 27 N | 4 W | | 1560 | SOUTH | 1680 | EAST | RIO ARRIBA |

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 MV-320E DK-320E | 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 Bradfield Printed Name Regulatory Administrator Title 2/12/98 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. November 22, 1997 Date of Survey Signature and Seal of Professional Surveyor: 7016 Certificate Number |

OPERATIONS PLAN

Well Name: San Juan 27-4 Unit #37M
Location: 1560' FSL, 1680' FEL Sec 33, T-27-N, R-4-W
Rio Arriba County, NM
Latitude 36° 31.4, Longitude 107° 15.09
Formation: Blanco Mesa Verde/Basin Dakota
Elevation: 7222' GL

| <u>Formation Tops:</u> | <u>Top</u> | <u>Bottom</u> | <u>Contents</u> |
|--------------------------|--------------|---------------|-----------------|
| Surface | San Jose | 3500' | |
| Ojo Alamo | 3500' | 3580' | aquifer |
| Kirtland | 3580' | 3679' | |
| Fruitland | 3679' | 4022' | gas |
| Pictured Cliffs | 4022' | 4106' | gas |
| Lewis | 4106' | 4491' | gas |
| Intermediate TD | 4206' | | |
| Huerfanito Bentonite | 4491' | 4979' | gas |
| Chacra | 4979' | 5705' | |
| Massive Cliff House | 5705' | 5832' | gas |
| Menefee | 5832' | 6188' | gas |
| Mancos | 6188' | 6678' | |
| Massive Point Lookout | 6678' | 7323' | gas |
| Gallup | 7323' | 8135' | gas |
| Greenhorn | 8135' | 8225' | gas |
| Dakota | 8225' | | gas |
| TD (4 1/2" liner) | 8480' | | |

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 |
| 200-4206' | LSND | 8.4-9.0 | 30-60 | no control |
| 4206-8480' | Gas | n/a | n/a | n/a |

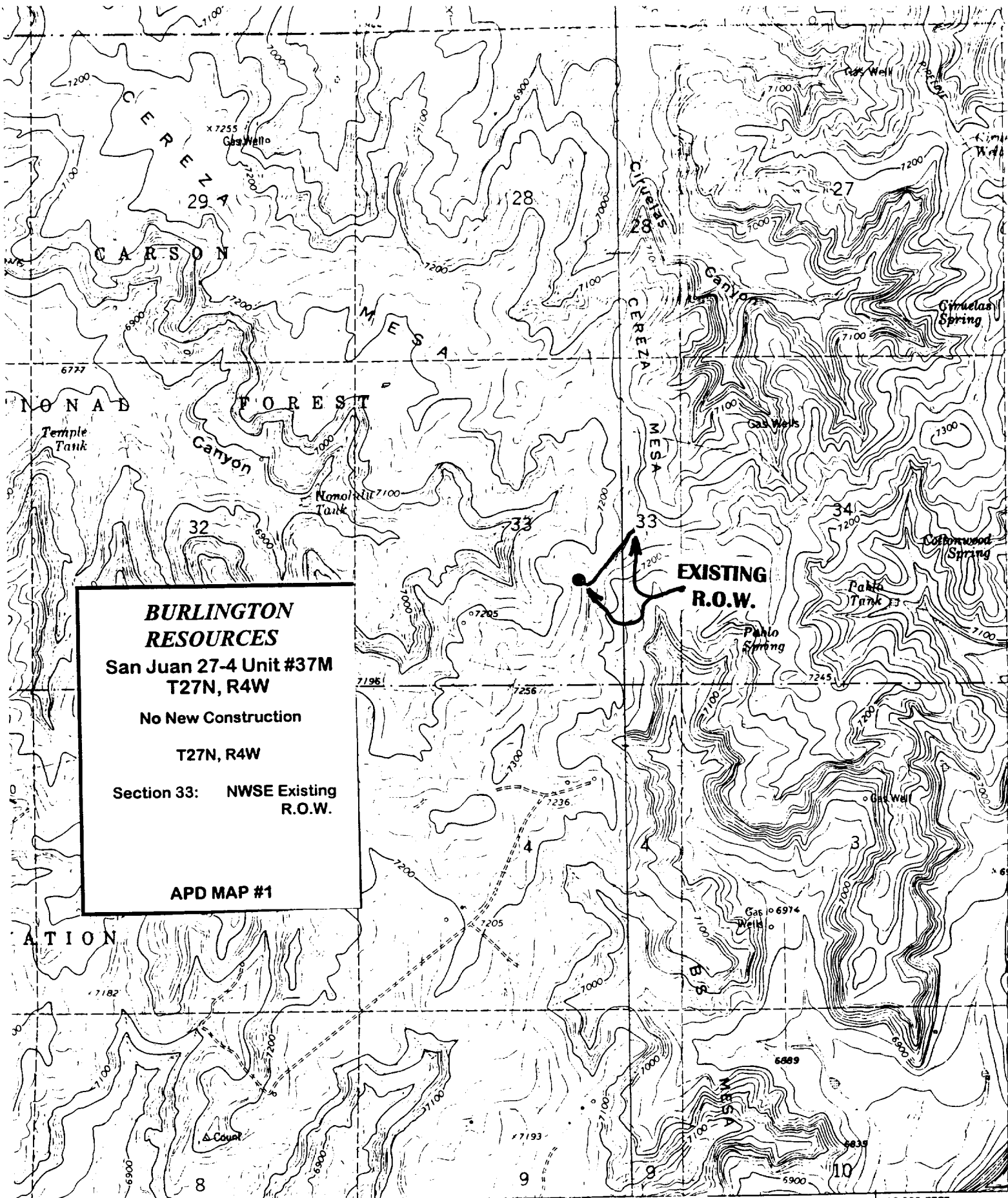
Pit levels will be visually monitored to detect gain or loss of fluid control.

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

| <u>Hole Size</u> | <u>Depth Interval</u> | <u>Csq. Size</u> | <u>Wt.</u> | <u>Grade</u> |
|------------------|-----------------------|------------------|------------|--------------|
| 12 1/4" | 0' - 200' | 9 5/8" | 32.3# | WC-50 |
| 8 3/4" | 0' - 4206' | 7" | 20.0# | J-55 |
| 6 1/4" | 4106' - 8480' | 4 1/2" | 10.5# | K-55 |

Tubing Program:

0' - 8480' 2 3/8" 4.70# EUE



**BURLINGTON
RESOURCES**
 San Juan 27-4 Unit #37M
 T27N, R4W
 No New Construction
 T27N, R4W
 Section 33: NWSE Existing
 R.O.W.
 APD MAP #1

**EXISTING
R.O.W.**

BURLINGTON RESOURCES OIL & GAS CO.
 SAN JUAN 27-4 UNIT #37M
 1560' F/SL 1680' F/EL
 SEC. 33, T27N, R4W, N.M.P.M.
 RIO ARRIBA COUNTY, NEW MEXICO

Edited, and published by the Geological S
 USGS and NOS/NOAA
 by photogrammetric methods from aerial
 taken 1958 and 1962. Field checked 1963
 Polyconic projection. 1927 North American datum

Light-duty