UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK Type of Work 5. Lease Number PH 070 SF-080673 1a. DRILL Unit Reporting Number 891001054A-MV 8910010540-Dk 1b. Type of Well If Indian, All. or Tribe GAS 9. Unit Agreement Name 2. Operator Oil & Gas Company San Juan 27-4 Unit 3. Address & Phone No. of Operator 8. Farm or Lease Name PO Box 4289, Farmington, NM 87499 San Juan 27-4 Unit 9. Well Number (505) 326-9700 5M 4. Location of Well 10. Field, Pool, Wildcat 773,4Blanco MV/Basin Dk 7755 1470'FSL, 840'FEL 11. Sec., Twn, Rge, Mer. (NMPM) Latitude 36° 35′ 04", Longitude 107° 17′ 08" Sec 7, T-27-N, R-4-W 30-039-14. Distance in Miles from Nearest Town 12. County 13. State 60 miles to Bloomfield NM 15. Distance from Proposed Location to Nearest Property or Lease Line 840' 16. Acres in Lease 17. Acres Assigned to Well /320 E/2 3 720 18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease Proposed Depth is subject to technical and Proposed Depth review pursuant to 43 CFR 3185.3 19. 20. Rotary or Cable Tools 8262 Rotary and appeal pursuant to 43 CFR 3186 4. Elevations (DF, FT, GR, Etc.) 21. 22. Approx. Date Work will Start 6950'GR DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED **Proposed Casing and Cementing Program** 23. "GENERAL REQUIREMENTS" See Operations Plan attached 24. Authorized by alatory/Compliance Administrator APPROVAL DATE PERMIT NO. APPROVED BY /S/ Duane W. Spencer TITLE DATISEP I (1 1908

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.

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District I PO Box 1980, Hobbs NM 88241-1980 PO Drawer KK, Artesia, NM 87211-0719 1000 Rio Brazos Rd., Azinc, NM 87410

State of New Mexico Energy, Minerals & Natural Resources Department

Form C Revised February 21.

Instructions on OIL CONSERVATION DIVISION OF Submit to Appropriate District C State Lease - 4 C

PO Box 2088 Santa Fe. NM 87504-2088

Pee Lease - 3 C

50 JULI -8 PH 4: 13 District IV AMENDED REP PO Box 2088, Santa Fe, NM: 87504-2088 WELL LOCATION AND ACREAGE DEDICATION PLAT. ¹ Pool Code 30-039-25964 |72319/71599 Blanco Mesaverde/Basin Dakota Wall Name # 5M SAN JUAN 27-4 UNIT 7452 OORID No. 14538 BURLINGTON RESOURCES OIL & GAS COMPANY 6950 Surface Location North/South line Bast/West line Feet from the Post from the UL or Lot No. **EAST RIO** ARF 1470 SOUTH 840 7 27 N 4 W I "Bottom Hole Location If Different From Surface East/West line County North/South line 1 UL or lot no. Foot from the Dodless Acc MV-E/320 Joint or infill DK-E/320 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDAT OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION "OPERATOR CERTIFICAT bereby certify that the information contained h true and complete to the best of my knowledge an Lot 1 LOLL CON. DIV. NMSF | 080673 Record "SURVEYOR CERTIFICAT I hereby certify that the well location shown on a ≥ was pioiled from field notes of actual surveys made or under my supervision, and that the same is . correct to the best of my belief. February 17, 1998 Lot 3 Date or Survey 2783.88 840 1470 Lot 4 FAFO PRAFE 7016

Certificate Number

OPERATIONS PLAN

Well Name: San Juan 27-4 Unit #5M

Location: 1470'FSL, 840'FEL Sec 7, T-27-N, R-4-W

Rio Arriba County, NM

Latitude 36° 32′ 04″, Longitude 107° 17′ 08″

Formation: Blanco Mesa Verde/Basin Dakota

Elevation: 6950'GL

Formation Tops:	<u>Top</u>	Bottom	Contents
Surface	San Jose	3215'	
Ojo Alamo	3215'	3389'	aquifer
Kirtland	3389'	3470'	
Fruitland	3470'	3818'	gas
Pictured Cliffs	3818'	3896'	gas
Lewis	3896'	4332'	gas
Intermediate TD	3996'		
Huerfanito Bentonite	4332'	4771'	gas
Chacra	4771'	5486'	
Massive Cliff House	5486'	5672'	gas
Menefee	5672'	5960'	gas
Massive Point Lookout	5960'	6500'	gas
Mancos Shale	6500′	7144'	
Gallup	7144'	7922'	gas
Greenhorn	7922'	7982'	gas
Dakota	7982′		gas
TD (4 1/2"liner)	8262'		

Logging Program:

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

Mud Program:

Interval	Type	<u>Weight</u>	<u>Vis.</u>	Fluid Loss
0- 2001	Spud	8.4-9.0	40-50	no control
200-39961	LSND	8.4-9.0	30-60	no control
3996-8262'	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>	Depth Interval	<u>Csq.Size</u>	Wt.	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 3996'	7"	20.0#	J-55
6 1/4"	3896' - 8262'	4 1/2"	10.5#	J-55

Tubing Program:

0' - 8262' 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.

