

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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JUN 13 10:21
BLM, NM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL		5. Lease Number NM-03547	
1b. Type of Well GAS		6. If Indian, Name of Allottee or Tribe	
2. Operator CAULKINS OIL COMPANY <i>3824</i>		7. Unit Agreement Name	
3. Address & Phone No. of Operator c/o ROBERT VERQUER P. O. Box 340, Bloomfield, NM 87413 (505) 632-1544		8. Farm or Lease Name <i>Number</i> <i>2460</i> BREECH "F" <i>8M</i>	
4. Location of Well 896' FSL & 1604' FEL		9. Well Number <i>8M</i> 30-039-25688	
14. Distance in Miles from Nearest Town 30 miles southeast of Blanco, NM Post Office.		10. Filed, Pool, or Wildcat Basin-Dakota, Blanco Mesa Verde <i>72319</i> <i>71599</i> <i>Sam Rk</i>	11. Section, Township, & Range, Meridian, or Block 0 34-27N6W
		12. County Rio Arriba	13. State New Mexico
15. Distance from Proposed Location To Nearest Property Line or Lease Line 1036'	16. Acres in Lease 1600 Acres	17. Acres Assigned to Well E - 320 Acres <i>E/320</i>	
18. Distance From Proposed Location To Nearest Well Drill, Compl., Or Applied For on Lease 664'	19. Proposed Depth 7670'	20. Rotary or Cable Tools ROTARY	
21. Elevations (DR, RT, GR, Etc.) 6610' GR		22. Approximate Date Work Will Start July 15, 1997	

23. Proposed Casing and Cementing Program

EXHIBITS attached as follows

"A" Location and Elevation Plat	"F" Drill Rig Layout
"B" Ten-Point Compliance Program	"G" Production Facility Schematic
"C" Blowout Preventer Schematic	"H" Acreage dedication plat
"D" Multi-Point Requirements for APD	
"E" Vicinity Map - Access Roads	

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OIL CON. DIV.
DIST. 3

24. Signed *Robert L. Verquer* Title Superintendent Date 05/12/97
Robert L. Verquer

Permit No. _____ Approval Date JUN 06 1997

Approved By */s/ Duane W. Spencer* Title _____ Date JUN - 6 1997

NOTE: THIS FORMAT IS ISSUED IN LIEU OF U.S. BLM FORM 3160-3

OK *(E)*

NMOCD

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

State of New Mexico
Energy, Minerals & Natural Resources Department

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

DISTRICT II
P.O. Drawer DD, Artesia, N.M. 88211-0719

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, NM 87504-2088

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31 1997

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
P.O. Box 2088, Santa Fe, NM 87504-2088

97 MAY 13 AM 10:23 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-25688		*Pool Code 72319/71599	*Pool Name Basin Dakota and Blanco Mesa Verde
*Property Code 2460	*Property Name BREECH "F"		*Well Number 8M
*GRID No. 3824	*Operator Name CAULKINS OIL COMPANY		*Elevation 6610

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
0	34	27N	6W		896	SOUTH	1604	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

*Dedicated Acres E 1300/320	*Joint or Infill	*Consolidation Code	*Order No.
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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

<p>16</p> <p>RECEIVED JUN 1 1997</p> <p>OIL CON. DIV. DIST. 3</p>	<p>FD. B.C. B.L.M.</p>		<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Robert L. Verquer</i> Signature</p> <p>Robert L. Verquer Printed Name</p> <p>Superintendent Title</p> <p>May 5, 1997 Date</p>
	<p>5360.6' (M) 5359.2' (R)</p>		<p>18 SURVEYOR CERTIFICATION</p> <p>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.</p> <p>APR 11 1997 Date of Survey</p> <p>Signature and Seal of Registered Surveyor</p> <p>NEW MEXICO REGISTERED PROFESSIONAL LAND SURVEYOR 8894</p>
	<p>1604'</p> <p>896'</p> <p>5242.38' (R)</p> <p>S 89-58 W</p>		<p>N 00-17 W</p> <p>Certificate Number</p>

EXHIBIT "H"

FD. B.C.
B.L.M.
1955

TEN POINT COMPLIANCE PROGRAM

RECEIVED
PLM

Caulkins Oil Company
Breech "F" 8-M
896' FSL & 1604' FEL, Sec. 34, 27N, 6W
Rio Arriba County, New Mexico
Lease No. NM - 03547

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070 00000000, NM

1. The Geological Surface Formation is : San Jose.
2. The Estimated Tops of Important Geological Markers:

Ojo Alamo	2576
Fruitland	3005
Picture Cliffs	3168
Chacra	4140
Point Lookout	5370
Greenhorn	7288
Dakota	7510
TD	7670

3. Estimated Depths and pressures of Anticipated Water, Oil, Gas or Minerals:

Substance	Formation	Depth	Pressure
Water	Alamo	2672	0
Gas	Fruit. and	3149	200
Gas	Pictured Cliffs	3224	450
Gas	Chara	4215	500
Gas	Mesa Verde	5476	1000
Gas	Dakota	7610	1500

4. The proposed casing program will be as follows:

Depth	Hole Size	O.D.	Weight	Grade	Type	New/Used
0-450	12-1/4	9-5/8	36#	J55	LT&C	NEW
0-1000	7-7/8	5-1/2	17#	K55	LT&C	NEW
1000-6650	7-7/8	5-1/2	15.5#	K55	LT&C	NEW
6650-7670	7-7/8	5-1/2	17#	K55	LT&C	NEW

The proposed cement program will be as follows:

Surface: 197 sacks class H with 1% CaCl
and 1/4# per sack cellophane flake.

VOLUME CALCULATIONS

YIELD 1.14 450 ft x 0.3132 cu-ft./ft with 60% excess = 225 cu-ft

PRODUCTION:

Cement will be run in three stages with stage tools set at approximately 3650' and 5650'.

1st stage

Cement thru shoe at approx. 7670' with 210 sacks class B 35/65 poz + 3% gel (bentonite) + 1/4# /sk cellophane flake followed by 100 sacks class H + 1% CaCl + 1/4# /sk cellophane flake.

VOLUME CALCULATIONS

YIELD 1.79 1361 ft x 0.1732 cu-ft./ft with 60% excess = 377 cu-ft

YIELD 1.14 659 ft x 0.1732 cu-ft./ft with 0% excess = 114 cu-ft

2nd stage

Cement thru tool at approx. 5650' with 207 sacks class B 35/65 poz + 3% gel (bentonite) + 1/4# /sk cellophane flake followed by 100 sacks class H + 1% CaCl + 1/4# /sk cellophane flake.

VOLUME CALCULATIONS

YIELD 1.79 1341 ft x 0.1732 cu-ft./ft with 60% excess = 372 cu-ft

YIELD 1.14 659 ft x 0.1732 cu-ft./ft with 0% excess = 114 cu-ft

EXHIBIT "B"

TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company
Breach "F" 8-M
896' FSL & 1604' FEL, Sec. 34, 27N, 6W
Rio Arriba County, New Mexico
Lease No. NM - 03547

3rd stage Cement thru tool at approx. 3650' with 463 sacks class B 35/65 poz + 6% gel (bentonite) + 1/4# /sk cellophane flake followed by 100 sacks class H + 1% CaCl + 1/4# /sk cellophane flake.

VOLUME CALCULATIONS

YIELD 1.79 2991 ft x 0.1732 cu-ft./ft with 60% excess = 829 cu-ft
YIELD 1.14 659 ft x 0.1732 cu-ft./ft with 0% excess = 114 cu-ft

NOTE: Cement volume will be based on information from open hole logs and will be calculated TD to surface plus 10%.

5. Operator's Minimum Specifications for Pressure Control:

EXHIBIT "C" is a schematic of a 2M blowout preventer system. The BOP's will be hydraulically tested prior to drilling out from under surface and operational checks will be made daily thereafter and recorded in the drilling tour report. Accessories to BOP will include floor safety valve and choke manifold with pressure rating equivalent to the BOP stack.

6. The type and Characteristics of the Proposed Circulating Muds:

Mud system will be gel-chemical with adequate stocks of absorbent agents on location to handle possible spills of fuel and oil in the surface. Heavier muds will be on location to be added if pressure requires.

Interval	Mud Wt	Vis	Fluid Loss	Ph	Additives
0-450	9.0	50	—	9	Lime
450-TD	9.0	34-40	8cc	9	Chemicals

7. Auxiliary equipment to be used is as follows:

- a. Float valve above bit.
- b. Monitoring of mud system will be visual.
- c. A sub with a full opening valve will be on the floor when the kelly is not in use.

8. Testing, logging and coring will be as follows:

- a. Cores - none will be taken.
- b. Drill stem tests - none anticipated.
- c. Logging - IEG and FDC from surface pipe to TD.

9. Anticipated Abnormal Pressures and Temperatures:

No abnormal pressure, temperatures or hydrogen sulfide gases are anticipated during the course of drilling to TD. The maximum bottom hole pressure to be expected is 1500 psi.

10. Anticipated Starting Date and Duration of the Operations:

The anticipated starting date is set for July 20, 1997, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 25 days.

