

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

FEB 27 AM 11:55

1a. Type of Work DRILL		5. Lease Number NM-03381 Farmington, NM	
1b. Type of Well GAS		6. If Indian, Name of Allottee or Tribe	
2. Operator CAULKINS OIL COMPANY		7. Unit Agreement Name API# 3003927329	
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 BREECH "B"	
4. Location of Well 1072 FSL & 1157' FWL		9. Well Number 305	
		10. Filed, Pool, or Wildcat Basin Dakota - Blanco Mesa Verde	
		11. Section, Township, & Range, Meridian, or Block 14-26N-7W	
14. Distance in Miles from Nearest Town 30 miles southeast of Blanco, NM Post Office.		12. County Rio Arriba	13. State New Mexico
15. Distance from Proposed Location To Nearest Property Line or Lease Line 1072'	16. Acres in Lease 1120 Acres	17. Acres Assigned to Well SW - 160 Acres	
18. Distance From Proposed Location To Nearest Well Drill, Compl., Or Applied For on Lease 120'	19. Proposed Depth 6875'	20. Rotary or Cable Tools ROTARY	
21. Elevations (DR, RT, GR, Etc.) 6140 GR		22. Approximate Date Work Will Start May 15, 2003	

23. Proposed Casing and Cementing Program

EXHIBITS attached as follows

"A" Location and Elevation Plat
"B" Ten-Point Compliance Program
"C" Blowout Preventer Schematic
"D" Multi-Point Requirements for APD
"E" Vicinity Map - Access Roads

"F" Drill Rig Layout
"G" Production Facility Schematic
"H" Acreage dedication plat
"I" Archaeological Report

24. Signed Robert L. Verquer Title Superintendent Date 02/14/03
Robert L. Verquer

Permit No. 14/ David J. Mandewicz Approval Date _____

Approved By _____ Title _____ Date APR 22 2003

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

This action is subject to technical and procedural review pursuant to 43 CFR 3165.8 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

NMOCD

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87506

Form C-102
Revised August 15, 2000

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

2040 South Pacheco
Santa Fe, NM 87505

*API Number 30-039-27329		*Pool Code 71599	*Pool Name Basin Dakota
*Property Code 2456	*Property Name BREECH B		*Well Number 305
*OGRID No. 003824	*Operator Name CAULKINS OIL COMPANY		*Elevation 6140'

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	14	26-N	7-W		1072	SOUTH	1157	WEST	RIO ARRIBA

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
²² Dedicated Acres			²³ Joint or Infill		²⁴ Consolidation Code		²⁵ Order No.		
160							R-10964		

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

Robert L. Vergara
Signature

Robert L. Verquer

Printed Name

Superintendent

Title

May 2, 2003

Date

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 Surveyor:

Certificate Number

DISTRICT II
811 South First, Artesia, N.M. 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, NM 87505

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-27329		*Pool Code 72319	*Pool Name South Blanco Mesa Verde
*Property Code 2456	*Property Name BREECH B		*Well Number 305
*OGRID No. 003824	*Operator Name CAULKINS OIL COMPANY		*Elevation 6140'

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
M	14	26-N	7-W		1072	SOUTH	1157	WEST	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			¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.		
160							R-10964		

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>17</p>	<p>18</p>
<p>SEC. CORNER FD 3 1/4" B.C. BLM 1954</p>	<p>14</p>	<p>15</p>
<p>N 01-39-01 E 2603.20' (M)</p>	<p>16</p>	<p>19</p>
<p>SEC. CORNER FD 3 1/4" B.C. BLM 1954</p>	<p>LAT. 36°28'54"N (NAD 83) LONG. 107°33'01" W (NAD 83)</p> <p>S 88-21-24 E 2647.53' (M)</p>	<p>SEC. CORNER FD 3 1/4" B.C. BLM 1954</p>

17 OPERATOR CERTIFICATION

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

Robert L. Verquer
Signature

Robert L. Verquer
Printed Name

Superintendent
Title

May 2, 2003
Date

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plan 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.

DAVIDA JOHNS
Date of Survey

14827
Signature and Seal of Professional Surveyor

14827
Certificate Number

EXHIBIT "B"

TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company
Breach "B" 305
1072' FSL & 1157' FWL, Sec. 14, 26N, 7W
Rio Arriba County, New Mexico
Lease No. NM - 03381

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

Ojo Alamo	1382
Fruitland	1976
Picture Cliffs	2278
Chacra	3176
Point Lookout	4584
Greenhorn	6519
Dakota	6671
TD	6875

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

Substance	Formation	Depth	Pressure
Water	Alamo	1465	0
Gas	Fruitland	2276	200
Gas	Pictured Cliffs	2318	450
Gas	Chara	3289	500
Gas	Mesa Verde	4824	1000
Gas	Dakota	6838	1500

4. The proposed casing program will be as follows:

Depth	Hole Size	O.D.	Weight	Grade	Type	New/Used
0-350	12-1/4	9-5/8	36#	J55	LT&C	NEW
0-1000	7-7/8	5-1/2	17#	K55	LT&C	NEW
1000-5830	7-7/8	5-1/2	15.50#	K55	LT&C	NEW
5875-6875	7-7/8	5-1/2	17#	K55	LT&C	NEW

The proposed cement program will be as follows:

Surface: 163 sacks class H with 1% CaCl and 1/4# per sack cellophane flake. *Circulate cement*

VOLUME CALCULATIONS

YIELD 1.14 350 ft x 0.3132 cu-ft/ft with 70% excess = 186 cu-ft

PRODUCTION:

Cement will be run in three stages with stage tools set at approximately 2875' and 4875'. *Toc @ 250' minimum*

1st stage Cement through shoe at approx. 6875' with 233 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 1341 ft x 0.1732 cu-ft/ft with 80% excess = 418 cu-ft

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

2nd stage Cement through shoe at approx. 4875' with 233 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 1341 ft x 0.1732 cu-ft/ft with 80% excess = 418 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 "B" 305
1072' FSL & 1157' FVL, Sec. 14, 26N, 7W
Rio Arriba County, New Mexico
Lease No. NM - 03381

3rd stage Cement through tool at approx. 2875' with 385 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 2216 ft x 0.1732 cu-ft/ft with 80% excess = 690 cu-ft

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

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 the following:

- A. 2" minimum kill line and valve.
- B. Choke line and valve
- C. 2 Chokes
- D. Upper kelly cock valve with handle.
- E. Safety valve and subs to fit all drill strings.
- F. Pressure gauge on choke manifold.
- G. 2" minimum choke line.
- H. Fill-up line above uppermost preventer.

6. The type and Characteristics of the Proposed Circulating Mud's:

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 mud's will be on location to be added if pressure requires.

Interval	Mud Wt	Vis	Fluid Loss	Ph	Additives
0- 350	9.0	50	—	9	Lime
350-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 - Cased hole Gas Spectrum Log bottom of 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 May 15, 2003, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 25 days.

EXHIBIT "C"

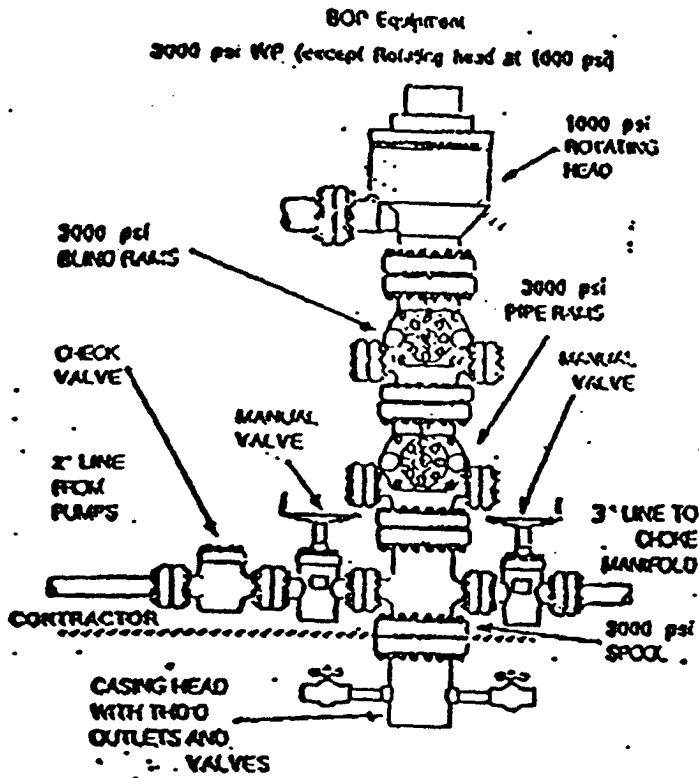


EXHIBIT "B" CHOKES MANIFOLD

