

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work <b>DRILL</b>		5. Lease Number NM-03381	
1b. Type of Well <b>GAS</b>		6. If Indian, Name of Allottee or Tribe 070 Farmington, NM	
2. Operator <b>CAULKINS OIL COMPANY</b>		7. Unit Agreement Name API# 3003927330	
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 <b>BREECH "B"</b>	
4. Location of Well  <b>1995 FNL &amp; 2005' FEL</b>		9. Well Number <b>147</b>	
10. Filed, Pool, or Wildcat <b>Basin Dakota</b>		11. Section, Township, & Range, Meridian, or Block 7-26N-6W	
14. Distance in Miles from Nearest Town <b>35 miles southeast of Blanco, NM Post Office.</b>		12. County <b>Rio Arriba</b>	13. State <b>New Mexico</b>
15. Distance from Proposed Location To Nearest Property Line or Lease Line	<b>1995'</b>	16. Acres in Lease <b>1120 Acres</b>	17. Acres Assigned to Well <b>821.0</b> <b>NORTH - 250 Acres</b>
18. Distance From Proposed Location To Nearest Well Drill, Compl., Or Applied For on Lease	<b>1295'</b>	19. Proposed Depth <b>7400'</b>	20. Rotary or Cable Tools <b>ROTARY</b>
21. Elevations (DR, RT, GR, Etc.) <b>6547 GR</b>		22. Approximate Date Work Will Start <b>June 5, 2003</b>	
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	"I" Archaeological Report
"E" Vicinity Map - Access Roads	

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

Permit No. \_\_\_\_\_ Approval Date \_\_\_\_\_

Approved By /s/ David J. Mankiewicz 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 3165.3  
and appeal pursuant to 43 CFR 3165.4

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

NMOC

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

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 87506

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 15, 2000

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

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-27330	<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name Basin Dakota
<sup>4</sup> Property Code 2456	<sup>5</sup> Property Name BREECH B	<sup>6</sup> Well Number 147
<sup>7</sup> GRID No. 003824	<sup>8</sup> Operator Name CAULKINS OIL COMPANY	<sup>9</sup> Elevation 6547'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	7	26-N	6-W		1995'	NORTH	2005'	EAST	RIO ARriba

<sup>11</sup> 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
<sup>12</sup> Dedicated Acres 320					<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> 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	<p>QTR. CORNER FD 3 1/4" B.C. BLM 1957</p> <p>LAT. 36°30'07"N (NAD 83) LONG. 107°30'24" W (NAD 83)</p>	<p>S 85-05-39 W 2669.33</p> <p>MAY 2003 OIL CONS. DIV. INST. 3</p> <p>664' 670' 661'</p>	<p>SEC. CORNER FD 3 1/4" B.C. BLM 1957</p> <p>S 01-07-36 W 2856.51'</p>	17 OPERATOR CERTIFICATION <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Robert L. Verquer</u> Signature</p> <p>Robert L. Verquer Printed Name</p> <p>Superintendent Title</p> <p>May 1, 2003 Date</p>
				18 SURVEYOR CERTIFICATION <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><u>DAVID A. THOMPSON</u> Surveyor</p> <p>14827 Professional Surveyor</p> <p>14827 Certificate Number</p>

EXHIBIT "B"

TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company  
Breach "B" 147  
1995' FNL & 2005' FEL, Sec. 7, 26N, 6W  
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	2138
Fruitland	2289
Picture Cliffs	2842
Chacra	3842
Point Lookout	5095
Greenhorn	7035
Dakota	7207
TD	7400

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

Substance	Formation	Depth	Pressure
Water	Alamo	2070	0
Gas	Fruitland	2838	200
Gas	Pictured Cliffs	2879	450
Gas	Chara	3893	500
Gas	Mesa Verde	5309	1000
Gas	Dakota	7351	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
1000-6400	7-7/8	5-1/2	15.50#	K55	LT&C	NEW
6400-7400	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.

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 3400' and 5400'.

**1st stage** Cement through shoe at approx. 7400' 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. 5400' 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

*circulate to surface*

*TOC at least to 250'*

EXHIBIT "B"

**TEN POINT COMPLIANCE PROGRAM**

Caulkins Oil Company  
Breach "B" 147  
1072' FSL & 1157' FWL, Sec. 7, 26N, 6W  
Rio Arriba County, New Mexico  
Lease No. NM - 03381

**3rd stage** Cement through tool at approx. 3400' with 477 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 2741 ft x 0.1732 cu-ft/ft with 80% excess = 854 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.

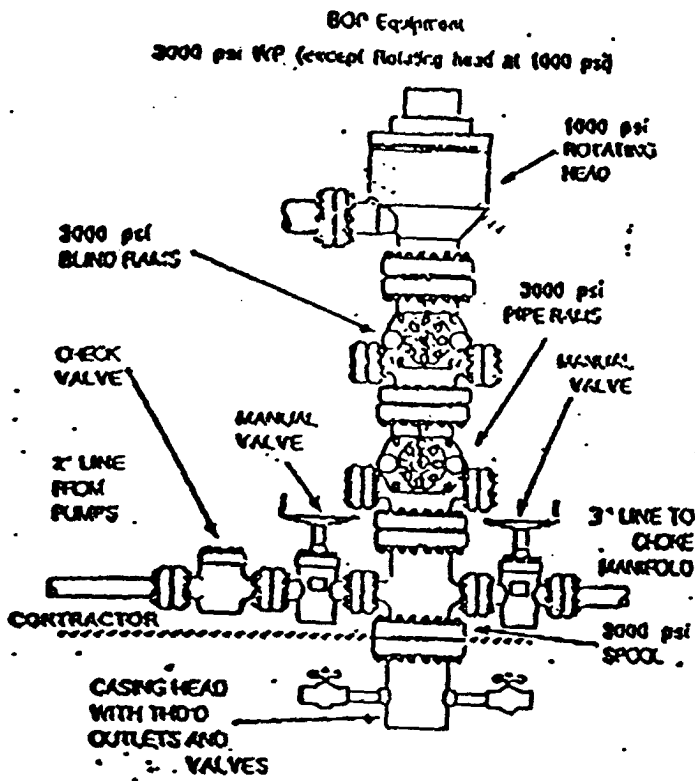
9. Anticipated Abnormal Pressures and Temperatures:

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 June 5, 2003, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 25 days.

# EXHIBIT "C"



# EXHIBIT "B" CHOKE MANIFOLD

