

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work <b>DRILL</b>		5. Lease Number <b>NM-03554</b>	
1b. Type of Well <b>GAS</b>		6. If Indian, Name of Allottee or Tribe <b>070 Harrington, NM</b>	
2. Operator <b>CAULKINS OIL COMPANY</b>		7. API Number <b>3003927675</b>	
3. Address & Phone No. of Operator <b>c/o ROBERT VERQUER</b> <b>1409 W. Aztec Blvd. # 7 Aztec, N. M. 87410</b> <b>(505) 334-4323</b>		8. Farm or Lease Name <b>BREECH "C"</b>	
4. Location of Well <b>1875 FSL &amp; 1840' FEL</b>		9. Well Number <b>303</b>	
14. Distance in Miles from Nearest Town <b>37 miles southeast of Blanco, NM Post Office.</b>		10. Filed, Pool, or Wildcat <b>Basin Dakota</b>	
		11. Section, Township, & Range, Meridian, or Block <b>13-26N-6W</b>	
15. Distance from Proposed Location To Nearest Property Line or Lease Line <b>1840'</b>		16. Acres in Lease <b>1920 Acres</b>	
18. Distance From Proposed Location To Nearest Well Drill, Compl., Or Applied For on Lease <b>850'</b>		19. Proposed Depth <b>7600</b>	
21. Elevations (DR, RT, GR, Etc.) <b>6633 GR</b>		22. Approximate Date Work Will Start <b>April 25, 2004</b>	
23. Proposed Casing and Cementing Program			
20. Rotary or Cable Tools <b>ROTARY</b>			
17. Acres Assigned to Well <b>SOUTH - 320 Acres</b>			

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  
"J" Land Owner Agreement

24. Signed Robert L. Verquer Title Superintendent Date 03/16/04  
Robert L. Verquer

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

Approved By DM Title \_\_\_\_\_ Date 4-14-04

See Attached conditions

of Approval and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4

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

NMOCD

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

## EXHIBIT "H"

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 15, 2000

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

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

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

## OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, NM 87505

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-27675		*Pool Code 71599	*Pool Name Basin Dakota
*Property Code 2457	*Property Name BREECH C		*Well Number 303
*OGRID No. 003824	*Operator Name CAULKINS OIL COMPANY		*Elevation 6633'

<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
J	13	26-N	6-W		1875	SOUTH	1840	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
*Dedicated Acres 320 80 designated			**Joint or Infill		**Consolidation Code		**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

<p>16</p> <p>SEC. CORNER FD 3 1/4" B.C. BLM 1957</p> <p>APR 2004 RESERVED OIL CONSERV. DIV. DIST. 8</p> <p>QTR. CORNER FD 3 1/4" B.C. BLM 1957</p> <p>1875'</p> <p>QTR. CORNER FD 3 1/4" B.C. BLM 1957</p>	<p>13</p> <p>LAT. 36°29'05"N (NAD 83) LONG. 107°24'59" W (NAD 83)</p> <p>1840'</p> <p>1875'</p> <p>SEC. CORNER FD 3 1/4" B.C. BLM 1957</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>March 16, 2003 Date</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>DAVID R. JOHNS NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 14827</p> <p>Date of Survey Signature and Seal of Professional Surveyor</p> <p>Certificate Number</p>			

## EXHIBIT "B"

## TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company  
 Breech "C" 303  
 1875' FSL & 1840' FEL, Sec. 13, 26N, 6W  
 Rio Arriba County, New Mexico  
 Lease No. NM - 03554

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

Ojo Alamo	2539
Fruitland	2899
Picture Cliffs	3071
Chacra	4059
Point Lookout	5189
Greenhorn	7218
Dakota	7402
TD	7600

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

Substance	Formation	Depth	Pressure
Water	Alamo	2539	0
Gas	Fruitland	3065	200
Gas	Pictured Cliffs	3128	450
Gas	Chara	4114	500
Gas	Mesa Verde	5441	1000
Gas	Dakota	7540	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
1000-6600	7-7/8	5-1/2	15.50#	K55	LT&C	NEW
6600-7600	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 3600' and 5600'.

## 1st stage

Cement through shoe at approx. 7600' 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 <sup>tool</sup>shoe at approx. 5600' 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 "C" 303  
1875' FSL & 1840' FEL, Sec. 13, 26N, 6W  
Rio Arriba County, New Mexico  
Lease No. NM - 03554

**3rd stage** Cement through tool at approx. 3600' with 512 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 2941 ft x 0.1732 cu-ft/ft with 80% excess = 917 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.

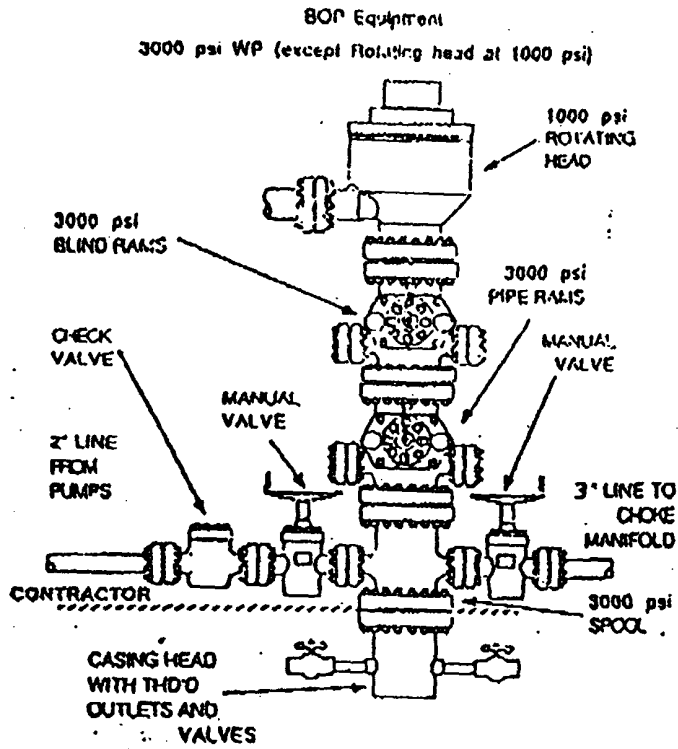
9. Anticipated Abnormal Pressures and Temperatures:

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.

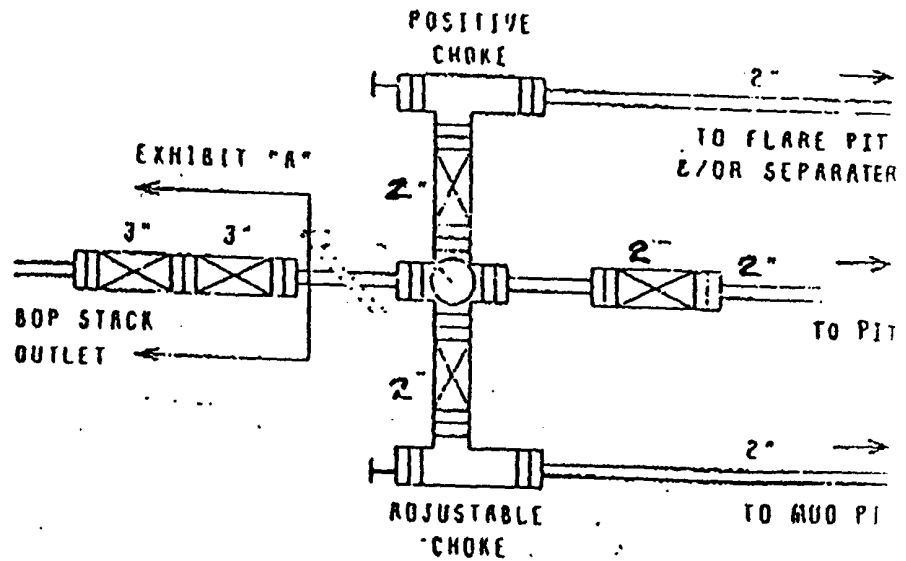
10. Anticipated Starting Date and Duration of the Operations:

The anticipated starting date is set for April 25, 2004, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 25 days.

# EXHIBIT "C"

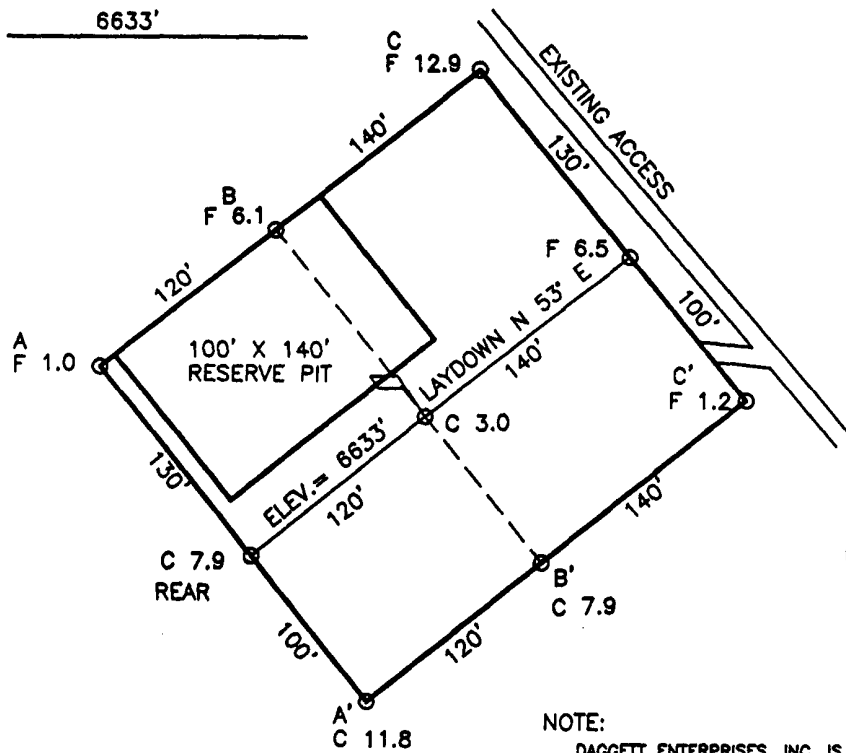


# EXHIBIT "B" CHOKE MANIFOLD



# EXHIBIT "A"

COMPANY: CAULKINS OIL COMPANY  
 LEASE: BREECH C No. 303  
 FOOTAGE: 1875' FSL 1840' FEL  
 SEC.: 13 TWN: 26-N RNG: 6-W NMPM  
 ELEVATION: 6633'



NOTE:  
 DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR  
 UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO  
 ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO  
 EXCAVATION OR CONSTRUCTION.

ELEV. A-A'	C/L
6670	
6660	
6650	
6640	
6630	
6620	
6610	

ELEV. B-B'	C/L
6670	
6660	
6650	
6640	
6630	
6620	
6610	

ELEV. C-C'	C/L
6670	
6660	
6650	
6640	
6630	
6620	
6610	

Daggett Enterprises, Inc.  
 Surveying and Oil Field Services  
 P. O. Box 15068 Farmington, NM 87401  
 Phone (505) 328-1772 Fax (505) 328-6019

