

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Form approved  
Budget Bureau No. 1004-0136  
Expires August 31, 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/> <b>PLUG BACK</b> <input type="checkbox"/>				5. LEASE DESIGNATION AND SERIAL NO. <b>NMNM-03554</b>	
b. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>				7. UNIT AGREEMENT NAME <b>APT # 30-C39-26769</b>	
2. NAME OF OPERATOR <b>CAULKINS OIL COMPANY</b>				8. FARM OR LEASE NAME <b>BREECH "C" 2157</b>	
3. ADDRESS OF OPERATOR <b>P.O. BOX 340 BLOOMFIELD, NM 87413</b>				9. WELL NO. <b>689-F</b>	
4. LOCATION OF WELL (Report location clearly, and in accordance with any State requirements) <b>At surface</b> <b>At proposed prod. zone 2001' F/S 1871' F/E (UNIT J)</b>				10. FIELD AND POOL, OR WILDCAT <b>BASIN DAKOTA</b>	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POSTOFFICE* <b>40 miles southeast of Blanco NM post office</b>				11. SEC., T., R. M., OR BLOCK AND SURVEY OR AREA <b>J SEC. 12-26N-6W</b>	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) <b>1871'</b>		16. NO. OF ACRES IN LEASE <b>1760'</b>		17. NO. OF ACRES ASSIGNED TO THIS WELL <b>South 320 acres</b>	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. <b>1263'</b>		19. PROPOSED DEPTH <b>7650'</b>		20. ROTARY OR CABLE TOOLS <b>ROTARY</b>	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) <b>6638 GR</b>				22. APPROX. DATE WORK WILL START*	
23. PROPOSED CASING AND CEMENTING PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	
<b>12 1/4"</b>	<b>9 5/8"</b>	<b>36#</b>	<b>350'</b>	<b>142 sacks (197 cu. ft.) Circ.</b>	
<b>7 7/8"</b>	<b>5 1/2"</b>	<b>15.5# &amp; 17#</b>	<b>7650'</b>	<b>1152 sacks (2151 cu. ft.) Circ.</b>	

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 Maps - Access Roads     | "J" Williams Field Services' Pipeline Plat |

This permit is subject to procedural review pursuant to 43 CFR 3160.3 and appeal pursuant to 43 CFR 3160.4.

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JUL 11 1991

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM. If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program if any.

24. SIGNED Robert L. Vargas TITLE SUPERINTENDENT DATE June 6, 2001  
PERMIT NO. \_\_\_\_\_ APPROVAL DATE 7/11/01

APPROVED BY /s/ Joel Ferrall TITLE \_\_\_\_\_ DATE \_\_\_\_\_

HOLD OVER FOR 1/5 E This format is in lieu of Bureau of Land Management form 3160-3

K

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 30-039-26764	*Pool Code 71599	*Pool Name Basin Dakota
*Property Code 2457	*Property Name BREECH C	*Well Number 689F
*OGRID No. 3824	*Operator Name	*Elevation

<sup>10</sup> Surface Location

UL or lot no.	Section 12	Township 26-N	Range 6-W	Lot Idn	Feet from the 2001'	North/South line SOUTH	Feet from the 1871'	East/West line EAST	County RIO ARriba
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<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
18 Dedicated Acres 320 S/A			19 Joint or Infill		14 Consolidation Code		15 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><b>16</b></p>	<p><b>17 OPERATOR CERTIFICATION</b></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>7-23-01 Date</p> <p><b>18 SURVEYOR CERTIFICATION</b></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>11-17-00 Date of Survey</p> <p><i>[Signature]</i> Signature and Seal of Professional Surveyor:</p> <p>8894 Certificate Number</p>
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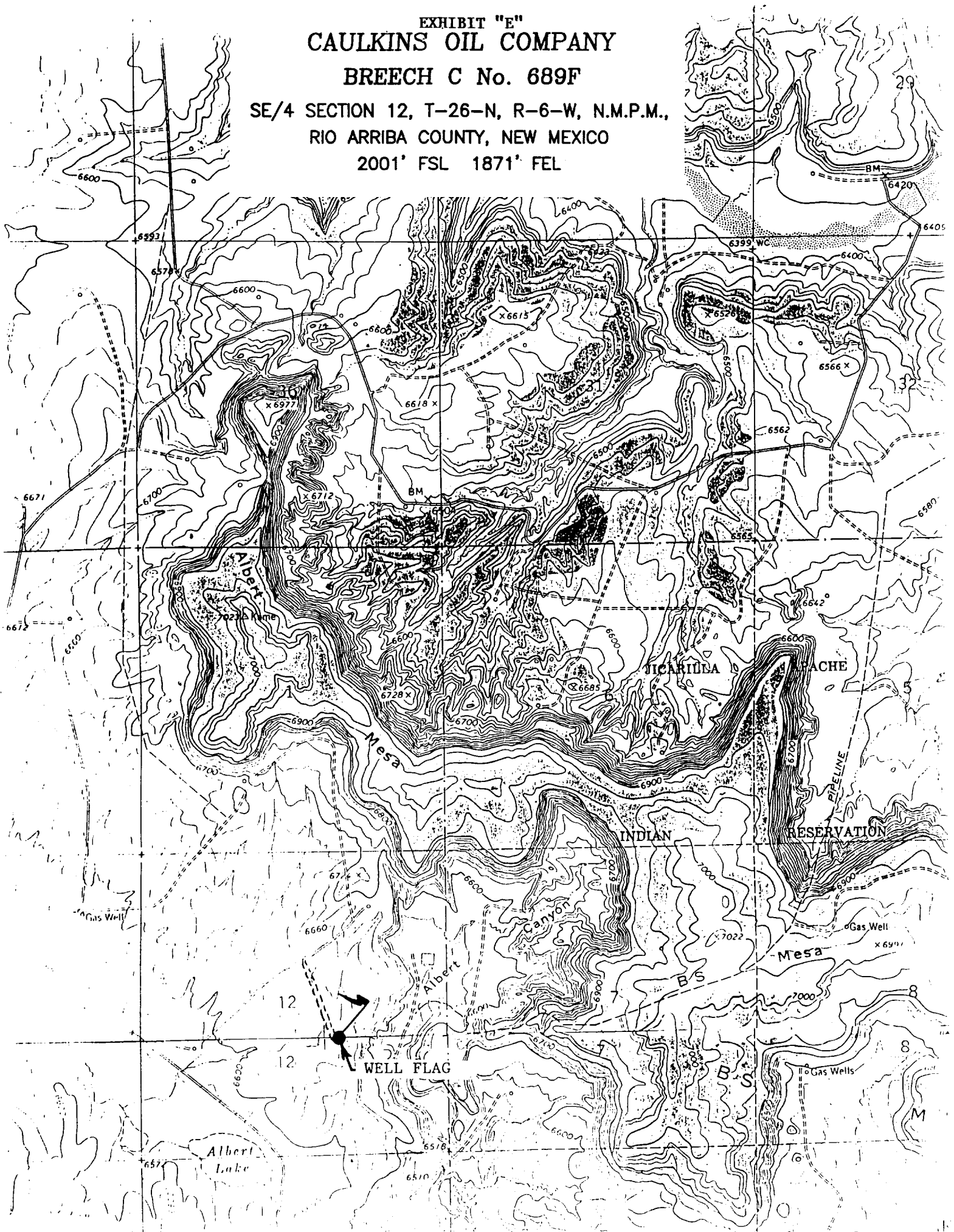
EXHIBIT "E"  
CAULKINS OIL COMPANY

BREECH C No. 689F

SE/4 SECTION 12, T-26-N, R-6-W, N.M.P.M.,

RIO ARriba COUNTY, NEW MEXICO

2001' FSL 1871' FEL



# EXHIBIT "B"

## TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company  
Breach "C" 689-F  
2001' FSL & 1871' FEL, Sec. 12, 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	2555'
Picture Cliffs	3123'
Cliff House	4812'
Tocito	6854'
Greenhorn	7258'
Dakota	7430'
TD	7650'

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

Substance	Formation	Depth	Pressure
Water	Alamo	2680'	0
Gas	Pictured Cliffs	3197'	450
Gas	Cliff House	4854'	800
Gas	Tocito	6878'	1200
Gas	Dakota	7624'	1400

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	36.00#	J55	LT&C	NEW
0-1000	7-7/8	5-1/2	17.00#	K55	LT&C	NEW
1000-6650	7-7/8	5-1/2	15.50#	K55	LT&C	NEW
6650-7650	7-7/8	5-1/2	17.00#	K55	LT&C	NEW

The proposed cement program will be as follows:

**Surface:** 142 sacks Type III with 1% CaCl  
and 1/4# per sack cellophane flake.

### VOLUME CALCULATIONS

YIELD 1.39 350 ft x 0.3132 cu-ft/ft with 80% excess = 197 cu-ft

### PRODUCTION:

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

**1st stage** Cement through shoe at approx. 7650' with 191 sacks Type III 35/65 poz + 6% gel (bentonite) + 1/4# /sk cellophane flake followed by 115 sacks Type III + 1% CaCl + 1/4# /sk cellophane flake.

### VOLUME CALCULATIONS

YIELD 2.07 1342 ft x 0.1732 cu-ft/ft with 70% excess = 395 cu-ft

YIELD 1.39 658 ft x 0.1732 cu-ft/ft with 40% excess = 160 cu-ft

**2nd stage** Cement through shoe at approx. 5650' with 191 sacks Type III 35/65 poz + 6% gel (bentonite) + 1/4# /sk cellophane flake followed by 115 sacks Type III + 1% CaCl + 1/4# /sk cellophane flake.

### VOLUME CALCULATIONS

YIELD 2.07 1342 ft x 0.1732 cu-ft/ft with 70% excess = 395 cu-ft

YIELD 1.39 658 ft x 0.1732 cu-ft/ft with 40% excess = 160 cu-ft

EXHIBIT "B"

TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company  
Breach "C" 689-F  
2001' FSL & 1871' FEL, Sec. 12, 26N, 6W  
Rio Arriba County, New Mexico  
Lease No. NM - 03554

3rd stage Cement through shoe at approx. 3650' with 425 sacks  
Type III 35/65 poz + 6% gel (bentonite) + 1/4# /sk  
cellophane flake followed by 115 sacks Type III  
+ 1% CaCl + 1/4# /sk cellophane flake.

VOLUME CALCULATIONS

YIELD 2.07 2992 ft x 0.1732 cu-ft/ft with 70% excess = 881 cu-ft  
YIELD 1.39 658 ft x 0.1732 cu-ft/ft with 40% excess = 160 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 following:

- A. 2" minimum kill line and valve.
- B. Choke line and valve.
- C. 2 chokes
- D. Upper kelly cock valve with handle available.
- 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 the 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 on 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	34-60	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.

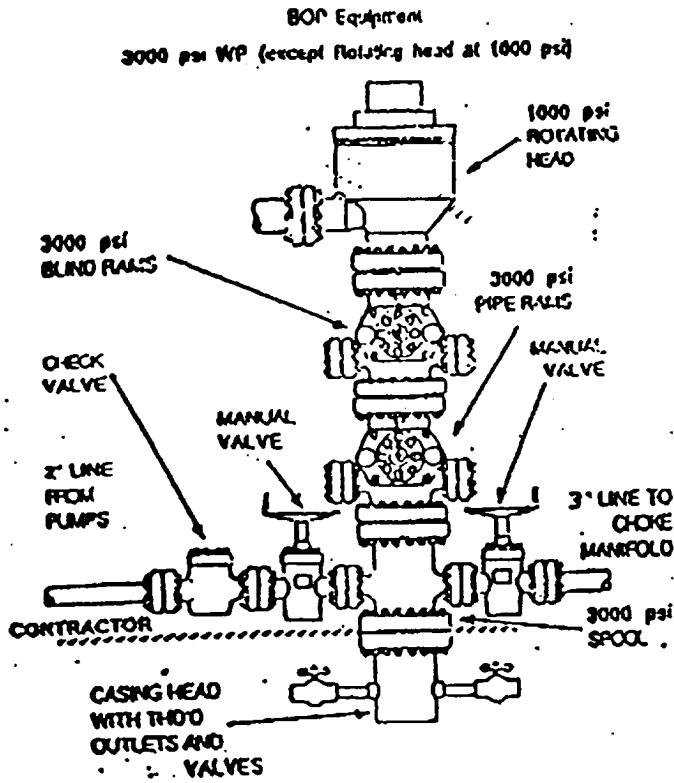
9. Anticipated Abnormal Pressures and Temperatures:

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, 2001,  
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

