UNITED STATES

DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

			7008 M/D 17 DH 2-0		
1a. Type of Work		5. Lease Number			
DRILL	4567	NMSF,079186 mington, NA			
1b. Type of Well		6 If Indian, Name of			
GAS 6	APP				
2. Operator	0, 5004	7. API Number	0007/7/		
CAULKINS OIL COMPANY		3000	39 27676		
3. Address & Phone No. of Operator	8. Farm or Lease Name				
c/o ROBERT VERQUE	BREECH "E"				
1409 W. Aztec Blvd. #7 Aztec, N.	M. 87410	9. Well Number			
(505) 334-4323		850			
4. Location of Well		10. Filed, Pool, or W	ildcat		
		Basin Dako	ta		
		11. Section, Townshi	ip, & Range, Meridian, or Block		
705 FNL & 2270' FWL		C 5-26N-6W			
14. Distance in Miles from Nearest Town	·	12. County	13. State		
35 miles southeast of Blanco, NM	Post Office.	Rio Arriba	New Mexico		
15. Distance from	16. Acres i	in Lease	17. Acres Assigned to Well		
Proposed Location			320.52		
To Nearest Property 705'	2560 Ad	res	NORTH - 320 Acres		
Line or Lease Line					
18. Distance From	19. Propos	sed Depth	20. Rotary or Cable Tools		
Proposed Location			ì		
To Nearest Well Drill, 1205'	7650'		ROTARY		
Compl., Or Applied					
For on Lease	<u>.</u>				
21. Elevations (DR, RT, GR, Etc.)		22. Approximate Date Work Will Start			
6640 GR		April 5, 200	4		
23. Proposed Casing and Cementing Program					
EVIJIDITO Maskadas fallousi					
EXHIBITS attached as follows "A" Location and Elevation Plat		"F" Drill Rig Lavout			
"B" Ten-Point Compliance Program		"G" Production Facility Schematic			
"C" Blowout Preventer Schematic		"H" Acerage dedication plat			
"D" Multi-Point Requirements for AP	"I" Archaeolgical Report				
"E" Vicinity Map - Access Roads		· / someongroun rec	port		
24. Signed Holest I Vergre	Title	Superintendent	Data 02/16/04		
Robert L. Verquer	- 110 0	Superintendent	Date_03/16/04		
Permit No.		Approval Date			
Approved By /s/ David J. Mankiewic	Z Title		_{Date} APR - 5		

This action is subject to technical and procedural review pursuant to 43 NOTESTHIS FORMAT IS ISSUED IN LIEU OF U.S. BLM FORM 3160-3 and appeal pursuant to 43 CFR 3165.4

EXHIBIT "H"

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

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

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

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

	•	W	ELL LO	CATION	N AND A	CREAG	E DEDI	CATION	PLAT		
1 API	Number	71/27	,	Pool Code				Pool N	nme		
Property C	7-6	1014	a - 71	599	• Propert	- Verne	Basin	n Dakota		• Wel	1 Number
7.159	>	*Property Name *Well Number BREECH E 850									
OGRID No) <u>.</u>				*Operato					• E	levation
003824					CAULKINS C	IL COMP	ANY			•	640'
			B14 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -		10 Surfac	e Locat	ion			<u> </u>	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the		/South line	Feet from	1	/West line	County
С	5	26-N	6-W		705		RTH	2270	WES	<u>ज</u>	RIO ARRIBA
			11 Botte	om Hole	Location	If Diff	erent Fro	m Surfac	e		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	Nort	h/South line	Feet from	he East	/West line	County
²⁶ Dedicated Acre	.		¹⁸ Joint or	infill	¹⁴ Consolidation	2 Code		¹⁸ Order No.			
320	N/2-3	20.52									
	lesigna		ggigvir) (D) (MT)	G COMMITTEE	TON IT	MOTE ATT		*****	DEN CO	MOOT IN AMEN
NO ALLOW	ADLE W				UNIT HAS					seen CO	NSOLIDATED
6 SEC. CORNER FD 3 1/4" B.C.			. 53	84-46-16 803.98' (M)			SEC. CORNE FD 3 1/4"	R B.C. 17	OPERAT	OR CER	RTIFICATION
BLM 1955	ŀ		705	1			BLM 1955	1 herel	y certify that	the informati	on contained herein
LOT 4	- [LOT	3		LOT 2	<u> </u>	LOT 1	11	and complete	to the best o	f my knowledge and
···- ·································	2270'	· ,	—● LA	T. 36°31′1 NG. 107°2	16.5"N (NAD 29'31" W (N	83) AD 83)		bellef.			
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2								R	obert L	. Verqu	er
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								-	- TO PAN	ESSIONAL	*
SEC. CORNER									1.01	4827	
FD 3 1/4" B.C.	1					1		Certifi	ate Number		

EXHIBIT "A"

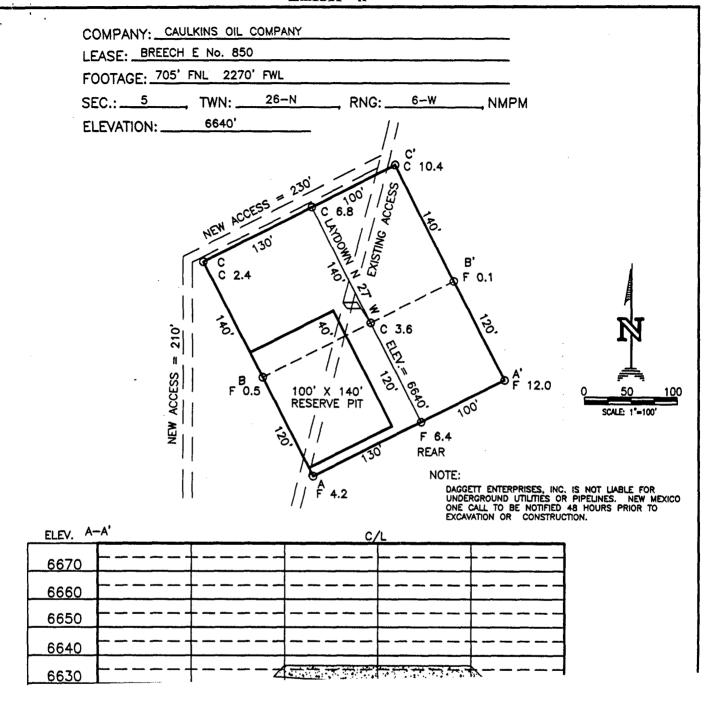


EXHIBIT "B"

TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company Breech "E" 850 705' FNL & 2270' FWL, Sec. 5, 26N, 6W Rio Arriba County, New Mexico Lease No. NMSF-079186

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

Ojo Alamo	2270
Fruitland	2850
Picture Cliffs	3096
Chacra	3905
Point Lookout	5272
Greenhorn	7258
Dakota	7448
TD	7650

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

Substance	Formation	Depth	Pressure	
Water	Alamo	2376	0	
Gas	Fruitland	3094	200	
Gas	Pictured Cliffs	3194	450	
Gas	Chara	3958	500	
Gas	Mesa Verde	5498	1000	
Gas	Dakota	7590	1500	

4. The proposed casing program will be as follows:

Depth	Hole Size	O.D.	Weight	Grade	Type	New/Used
0-350 0-1000 1000-6650 6650-7650	12-1/4 7-7/8 7-7/8 7-7/8	9-5/8 5-1/2 5-1/2 5-1/2	36# 17# 15.50# 17#	J55 K55 K55 K55	LT&C LT&C LT&C LT&C	NEW NEW NEW 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

Toc above 250

circulate cenut

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 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

Cement through shee at approx. 5650' 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
Breech "E" 850
705' FNL & 2270' FWL, Sec. 5, 26N, 6W
Rio Arriba County, New Mexico
Lease No. NMSF-079186

3rd stage

Cement through tool at approx. 3650' with 521 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 80% excess = 932 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. Saftey 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

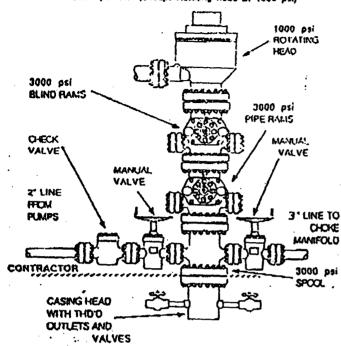
- 7. Auxiliary equipment to be used is as follows:
 - a. Float valve above bit.
 - b. Monitoring of mud system will be visual.
 - c. A sub with a full opening valve will be on the floor when the kelly is not in use.
- 8. Testing, logging and coring will be as follows:
 - a. Cores none will be taken.
 - 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 5,2004, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 25 days.

BOP Equipment
3000 psi WP (except flotating head at 1000 psi)



EXHIEIT "B" CHOKE MANIFOLD

