# **UNITED STATES**

# DEPARTMENT OF THE INTERIOR

# BUREAU OF LAND MANAGEMENT

# APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work		) 5. Lease Number	1 27		
DRILL	891017	6. If Indian, Name of	NMSF-079		
1b. Type of Well	4 0	6. If Indian, Name of 3		Inde	
GAS A	FEB 200m	3			
2. Operator  CAULKINS OIL COMPANY  O	1	7. Unit Agreement Na	ame - 290	(18	
3. Address & Phone No. of Operator	Discourse of the second	8. Farm or Lease Na			
c/o ROBERT VERQUE	<b>.</b>	SANCHEZ	iii <del>o</del>		
1409 W Aztec blvd. Suite B 7, Azi	A 4.7	9. Well Number		·····	
(505) 334-4323	8. Weil (Namber				
4. Location of Well		10. Filed, Pool, or W	ildcat		
	•	Basin Dako			
		11. Section, Townsh		e, Meridian, or Block	
1600 FNL & 1600' FWL		24-26N-6W			
14. Distance in Miles from Nearest Town		12. County		13. State	
45 miles southeast of Blanco, NM	Post Office.	Rio Arriba	<u> </u>	New Mexico	
15. Distance from	16. Acres	in Lease	17. Acr	es Assigned to Well	
Proposed Location					
To Nearest Property 1040'	640 Ac	res		WEST - 320 Acres	
Line or Lease Line					
18. Distance From	19. Propo	sed Depth	20. Ro	otary or Cable Tools	
Proposed Location					
To Nearest Well Drill, 940°	7550			ROTARY	
Compl., Or Applied					
For on Lease		22. Approximate D			
21. Elevations (DR, RT, GR, Etc.)	21. Elevations (DR, RT, GR, Etc.)				
`		n.a.			
6602 GR		July 15, 200	<del></del>		
23. Proposed Casing and Cementing Program	<u> </u>	July 15, 20	<del></del>		
23. Proposed Casing and Cementing Program	<u> </u>	July 15, 20			
23. Proposed Casing and Cementing Program  EXHIBITS attached as follows	Diat		<u> </u>		
23. Proposed Casing and Cementing Program  EXHIBITS attached as follows  "A" C-103 & Location and Elevation		"F" Drill Rig Layout		afic	
23. Proposed Casing and Cementing Program  EXHIBITS attached as follows  "A" C-103 & Location and Elevation  "B" Ten-Point Compliance Program		"F" Drill Rig Layout "G" Production Faci	ility Schema	atic	
23. Proposed Casing and Cementing Program  EXHIBITS attached as follows  "A" C-103 & Location and Elevation  "B" Ten-Point Compliance Program  "C" Blowout Preventer Schematic	1	"F" Drill Rig Layout "G" Production Faci "H" Acerage dedicat	ility Schema	atic	
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DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

NMOCD

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DESTRICT I 1625 K. French Dr., Hobbs, N.M. 88240 State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102 Revised August 15, 2000

DESTRICT II 811 South Pirst, Artesia, N.M. 88210 Submit to Appropriate District Office State Lease — 4 Copies Fee Lease — 3 Copies

DESTRICT III 1000 Rio Brazos Rd., Axtoc, N.M. 87410

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

☐ AMENDED REPORT

DISTRICT IV 2040 South Pacheco, Santa Ye, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT									
20 x 70	Number 9418 Pool Code Pool Name 71599 Basin Dakota								
Property Co		1410		Basin Dakota		Mumber			
2463									8
OGRID No.								<del></del>	Elevation
003824	4				CAULKINS OIL	COMPANY			6602'
	<u> </u>	<del> </del>			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
F	24	26-N	6-W		1600	NORTH	1600	WEST	RIO ARRIBA
						f Different Fro			
UL or lot no.	Section	Township	Range	Lot kin	Feet from the	North/South line	Feet from the	East/West line	County
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SEC. CORNER FD 3 1/4" B.C.							Certificate	WOLES ESO.	
BLM 1957									

# EXHIBIT "H" State of New Mexico

Energy, Minerals & Natural Resources Department

Revised October 18, 1994 Instructions on back

# PO Box 1980, Hobbs, NM 88241-1980 District II 811 South First, Artesia, NM 88210

**OIL CONSERVATION DIVISION** 

Submit to Appropriate District Office

District III

1000 Rio Brazos Rd., Aztec, NM 87410

1220 South St. Francis Drive Santa Fe, NM 87504

State Lease - 4 Copies Fee Lease - 3 Copies

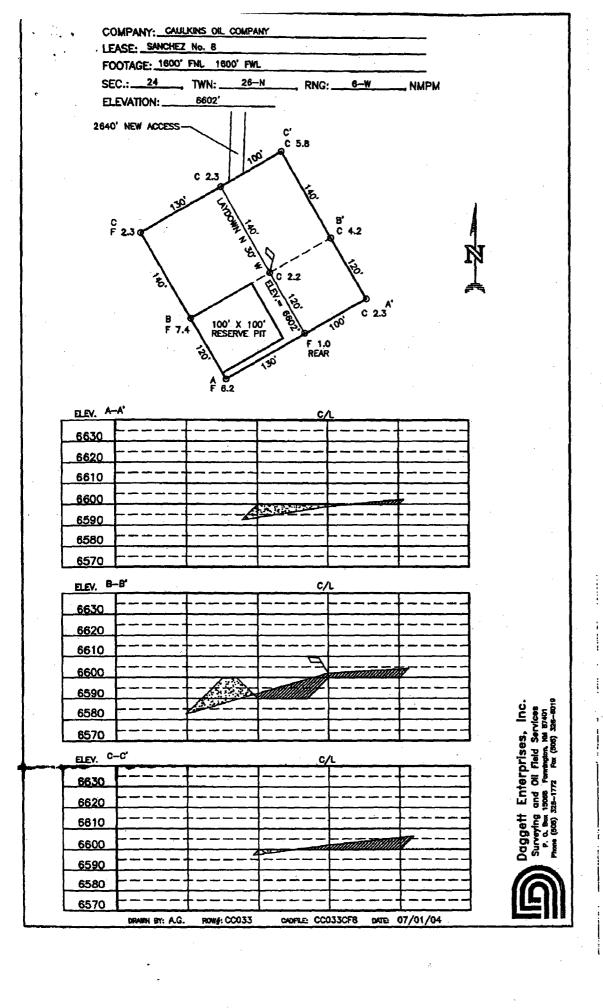
District IV

2040 South Pacheco, Santa Fe, NM 87505

	AMENDED REPORT

		7	WELL LO	CAT	ION AND AC	REAGE DEDI	CATION	PLAT		WILLIADED RELOKT	
17	API Numbe	r		<sup>2</sup> Pool 715	1	' Pool Name Basin Dakota					
<sup>4</sup> Property 0	Property Code				5 Proper	Froperty Name 'Well Number SANCHEZ 8					
	<sup>7</sup> OGRID No. 003824				<del>-</del>	Operator Name 'Eleulkins Oil Company 6					
					<sup>10</sup> Surfac	e Location					
UL or lot no.	Section	Township	Range	Lot Idn	1	North/South line	Feet from t			County	
F	24	26N	6W	<u> </u>	1600'	NORTH	1600		EST	Rio Arriba	
UL or lot no.	Section	Township	Range	ttom Lot Ide		If Different Fr	om Surfa		t line	County	
02 01 101 1101	200,000	10000	,,			1101111100111111111		inc inc	· imic	County	
<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint o	or Infill	Consolidation	Code	<sup>15</sup> Order No.						
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Submit 3 Copies To Appropriate District	State of N	lew Me	xico	EXHIBIT	"A"	$\mathbf{F}$	orm C-103
Office ' District I	Energy, Minerals a	nd Natu	ral Resourc	es	CI I ADINO		May 27, 2004
1625 N. French Dr., Hobbs, NM 88240 District II	1				ELL API NO.		
1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVA			$N \mid \frac{1}{5}$	Indicate Type	of Lease	
<u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South			] .	STATE	FEE FEE	
District IV	Santa Fe,	NM 87	505	6.	State Oil & G	as Lease No.	
1220 S. St. Francis Dr., Santa Fe, NM 87505							
SUNDRY NOTIC (DO NOT USE THIS FORM FOR PROPOSA DIFFERENT RESERVOIR. USE "APPLICA		EN OR PLU	JG BACK TO		Lease Name of	or Unit Agreer	nent Name
PROPOSALS.)  1. Type of Well: Oil Well   (	as Well X Other			8.	Well Number		
1. Type of well. On well	ias wen in Other					8	
2. Name of Operator Caulkins Oil Company				9.	OGRID Num	ber 003824	
3. Address of Operator				10	. Pool name o		
1409 W. Aztec Blvd., Suite B7, Azte	c New Mexico 87410			"		asin Dakota	
4. Well Location				L			
Unit Letter F: 1600'	feet from the North	line a	and 1600'	feet fron	n the West	line	
Section 24 Town			NMP			Rio Arriba	
	11. Elevation (Show who						
Pit or Below-grade Tank Application X or							
Pit type <u>Drilling</u> Depth to Groundwater		st fresh wa	ter well 1 mi	le Distance	from nearest su	rface water 1/2	mile
Į.	elow-Grade Tank: Volume:		bbls; Constr				
						- Doto	
12. Check A	ppropriate Box to Ind	ncate in	ature of in	ouce, Kej	port of Other	r Data	
NOTICE OF INT	ENTION TO:			SUBSE	QUENT RE	<b>EPORT OF</b>	•
PERFORM REMEDIAL WORK	PLUG AND ABANDON		REMEDIA			ALTERING	CASING 🗌
TEMPORARILY ABANDON    TEMPORARILY ABANDON   TEMPORARIL ABANDON   TEMPOR	CHANGE PLANS				IG OPNS.	P AND A	
PULL OR ALTER CASING	MULTIPLE COMPL		CASING/C	EMENT JO	B □		
OTHER: Drilling Pit		X	OTHER:				
13. Describe proposed or comple							
of starting any proposed wor or recompletion.	k). SEE RULE 1103. Fo	or Multip	le Completio	ons: Attach	wellbore diag	ram of propos	ed completion
Construct new below grade drilling pi	t along with location.						
Cut and fill diagram attached.							
A liner will be installed in the pit to pi	revent ground water conta	amination	ì.				
Construction is scheduled to begin, M	-						
Construction is scheduled to begin, ivi	arch 2003						
	·						
I hereby certify that the information al grade tank has been/will be constructed and	pove is true and complete closed according to NMOCD	to the be	est of my kne , a general	owledge an permit 🔲 or	d belief. I furt an (attached) alt	her certify that a ernative OCD-ap	ny pit or below- proved plan .
SIGNATURE Robert 2 V/2							-
Type or print name Robert L. Verque		<u>Superir</u> address:	ntendent	_ DATE _ T	January 12, 20 Telephone No.	005 505-334-432	3
For State Use Only	111					FFD	11 0000
ADDROVIDA SVI	Ik dan	PER .	uty oil 8 g	as inspect	OR, DIST. AT		11 2005
APPROVED BY:  Conditions of Approval (if any):	T	TTLE	<u></u>			DATE	



#### **EXHIBIT "B"**

# TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company Sanchez 8 1600' FNL & 1600' FWL, Sec. 24, 26N, 6W Rio Arriba County, New Mexico Lease No. NMSF-079304

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

2179
2782
3033
3927
5071
7183
7369
7550

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

Substance	Formation	Depth	Pressure	
Water	Alamo	2300	0	
Gas	Fruitland	3029	300	
Gas	Pictured Cliffs	3114	450	
Gas	Chara	3978	600	
Gas	Mesa Verde	5450	1200	
Gas	Dakota	7523	1700	

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
1000-6550	7-7/8	5-1/2	15.50#	K55	LT&C	NEW
6550-7550	7-7/8	5-1/2	17#	K55	LT&C	NEW

The proposed cement program will be as follows:

Surface:

186 sacks class B with 1% CaCl and 1/4# per sack cellophane flake.

**VOLUME CALCULATIONS** 

YIELD 1.18 350 ft x 0.3132 cu-ft/ft with 100% excess = 219 cu-ft

PRODUCTION:

Cement will be run in three stages with

stage tools set at approximately 3550' and 5550'.

1st stage

Cement through shoe at approx. 7550' with 202 sacks Premium I ite FM + 0.25 lbs/sack Cello Flake +

Premium Lite FM + 0.25 lbs/sack Cello Flake + 8% bwoc Bentonite followed by 78 sacks Type III Cement + 0.2% bwoc R-3 + 0.25 lbs/sack Cello flake.

**VOLUME CALCULATIONS** 

YIELD 2.07 1341 ft x 0.1732 cu-ft/ft with 80% excess = 418 cu-ft YIELD 1.46 659 ft x 0.1732 cu-ft/ft with 0% excess = 114 cu-ft

2nd stage

Cement through DV tool at approx. 5550' with 202 sacks Premium Lite FM + 0.25 lbs/sack Cello Flake + 8% bwoc Bentonite followed by 78 sacks Type III Cement + 0.2% bwoc R-3 + 0.25 lbs/sack Cello flake.

VOLUME CALCULATIONS
YIELD 2.07 1341 ft x 0.1732 cu-ft/ft with 80% excess = 418 cu-ft
YIELD 1.46 659 ft x 0.1732 cu-ft/ft with 0% excess = 114 cu-ft

#### **EXHIBIT "B"**

### TEN POINT COMPLIANCE PROGRAM

Caulkins Oil Company Sanchez 8 1600' FNL & 1600' FWL, Sec. 24, 26N, 6W Rio Arriba County, New Mexico Lease No. NMSF-079304

3rd stage

Cement through DV tool at approx. 3550' with 435 sacks Premium Lite FM + 0.25 lbs/sack Cello Flake + 8% bwoc Bentonite followed by 78 sacks Type III Cement + 0.2% bwoc R-3 + 0.25 lbs/sack Cello flake.

**VOLUME CALCULATIONS** YIELD 2.07 2891 ft x 0.1732 cu-ft/ft with 80% excess = 901 cu-ft YIELD 1.46 659 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

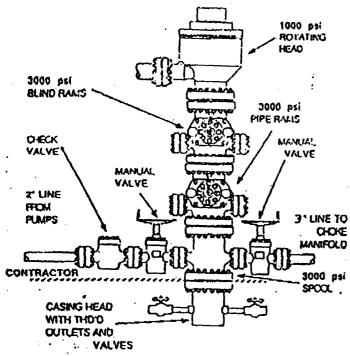
- 7. Auxiliary equipment to be used is as follows:
  - a. Float valve above bit.
  - b. Monitoring of mud system will be visual.
  - c. A sub with a full opening valve will be on the floor when the kelly is not in use.
- 8. Testing, logging and coring will be as follows:
  - a. Cores none will be taken.
  - b. Drill stem tests none anticipated.
  - c. Logging Cased hole Gas Spectrum Log from 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 1700 psi.

10. Anticipated Starting Date and Duration of the Operations:

The anticipated starting date is set for July 15, 2004, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 25 days.

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



# EXHIBIT "B"

