N.M. Oil'Cons. DIV-Dist. 2 1301 W. Grand Avenue Artesia, NM 88210

Form 3160-3

RECEIVED

FORM APPROVED

UNITED STATES

APR 2 9 2005

BUREAU OF LAND MANA	NM-108922 6. If Indian, Allottee or Tribe Name					
APPLICATION FOR PERMIT TO DI						
ta. Type of Work: DRILL REENTE	7. If Unit or CA Agreement, Name and No.					
			1	8. Lease Name and We	il No.	
lb. Type of Well: 🔲 Oil Well 💆 Gas Well 🔲 Other	Deer Canyon 8 Federal, #1					
2. Name of Operator	9. API Well No.					
Purvis Operating Co. Wc.				30-015- 34100		
P.O. Box 11006 Midland, TX 79702	36. Phone No. (432) 6	(include area code) 8247346		10. Field and Pool, or Es	•	
4. Location of Well (Report location clearly and in accordance with	any State requir	rements.*)	.]	11. Sec., T., R., M., or B	lk. and Survey or Area	
At surface 1350'FSL & 660' FWL At proposed prod. zone				Sec. 8-T20S	-R21E	
14. Distance in miles and direction from nearest town or post office*				12. County or Parish.	13. State	
19.2 miles south of Hope, NM				Eddy	NM	
15. Distance from proposed blocation to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of Ad	·	17. Specing	ing Unit dedicated to this well		
18. Distance from proposed location*	19. Proposed		l	IA Bond No. on file		
to nearest well, drilling, completed, applied for, on this lease, ft. 1980' P/A	7,900	•		ied for.		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		nate date work will sta	u.	23. Estimated duration		
4608' GL	Apı	11 18, 2005		3 - 4 weeks	·	
	24. Attac	hments 🥻	armolf C	entrolled Water B	eelm	
The following, completed in accordance with the requirements of Onsho	re Oil and Gas (
Well plat certified by a registered surveyor.	1	4. Bond to cover to	he operation	s unless covered by an e	xisting bond on file (see	
 A Drilling Plan. A Surface Use Plan (if the location is on National Forest System) 	Lands the	5. Operator certific				
SUPO shall be filed with the appropriate Forest Service Office).		6. Such other site authorized office		rmation and/or plans as	may be required by the	
25. Signature /	, Name (Printed/Typed)		;I	Date	
Deverget Smith	Geo	rge R. Smith	agent	<u>:1</u>	3/18/05	
Agent for Purvis Operating Co.						
Approved by (Signature) /s/ Joe G. Lara	Name ((Printed/Typed) Jo	e G. L	ara	Date APR 2 8 200	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Office Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct

*(Instructions on reverse)

operations thereon.

Lease Responsibility Statement: Purvis Operating Co. accepts all applicable terms, conditions, stipulations, and restrictions APPROVING Concerning operations conducted on the leased land or portion thereof.

GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Conditions of approval, if any, are attached.

FIELD MANAGER

>9.5

APPROVAL FOR 1 YEAR

Sheddel I 1625 M. French Dr. Hobbe, NM 88240 Heritel II 811 South First, Artesto, NM 88210 Charles III 1000 No Brezoe Rd., Actor HM 87410

State of New Mexico Energy, Minerals & Natural Resources

Form C-102 Revised March 17, 1989 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, N M 87505

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API	Pool Code				T	Pool Hame Undesignated							
Property Co.	Property Nome DEER CANYON "8" FEDERAL						Well Number						
OCRED No. 131559				Operation Name PURVIS OPERATING COMPANY						Elevation 4608			
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UL or Lot No.	Section 8		-S	Range 21	1	ad Man.		Foot	from the	North/South tine	Feet from the	East/Vitest fire WEST	EDDY
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UL or Lot No.	Section		retrib	Range		of Ide.	"		from the			East/West line	County
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APPLICATION FOR DRILLING

PURVIS OPERATING CO.

Deer Canyon 8 Federal, Well No. 1
1350' FSL & 660' FWL, Sec 8 T20S-R21E
Eddy County, New Mexico
Lease No.: NM-108922
(Exploratory Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Purvis Operating Co. submits the following items of pertinent information in accordance with BLM requirements:

- 1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
- 2. The estimated tops of geologic markers are as follows:

San Andres	1350'	Cisco	6047'
Glorieta	1850'	Canyon	6285'
Tubb	2700'	Strawn	6562'
Abo	3414'	Atoka	7332'
Wolfcamp	4407'	Morrow	7595'
•		Chester	7700'
		T.D	7900'

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 300'.

Oil: None expected.

Gas: Possible in the Atoka below 7332' and the Morrow below 7595'.

4. Proposed Casing Program:

•	CASING SIZE WEI		ADE IO	INT CETT	INC DEPTH	OHANTITY OF CEMENT		
NOLESIZE	CASING SIZE WE	GRI GR	ADE 30	ILI SELL	INGDEFIN	OUANTITY OF CEMENT		
12 1/4"	8 5/8"	32.0#	J-55	ST&C	1,550'	Circ. 880 sx "C" cement.		
<i>7 7/</i> 8"	5 1/2"	17.0#	N-80	LT&C	7,900'	500 sx "C" TOC 600' above top pay		

5. Proposed Control Equipment: A 11" 5000 psi wp Shaffer Type LWS Double Gate BOP will be installed on the 8 5/8" casing and operated as a 3000 psi BOP. The 8 5/8" casing and BOP will be tested to a maximum of 1500 psi as per Onshore Oil and Gas Order No. 2 IIIBh, before drilling out with 7 7/8" and will be inspected and operated daily. See Exhibit "E".

6	. MUD PRO	DGRA	M:	MUD WEIGHT	VIS.	W/L CONTROL		
	0' - 1	550':	Fr. water Air-Mist	-		No W/L control		
	1550' - 6	300':	Cut Brine mud:	8.8 - 9.4 ppg	28 - 29	No W/L control		
1	6300' - 7	900':	Brine Gel/Starch:	9.4 - 9.8 ppg	32 - 34	W/L control 10 cc +/-		

- 7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.
- 8. Testing, Logging, and Coring Program:

Drill Stem Tests: One possible in the Wolfcamp and the Morrow.

Logging: T.D.to 1550': DLL, Sonic Log, G/R

T.D to 6250': CNL, FDL T.D to 6400': FMI 1550' to Surface: GR As dictated by logs

Coring: As dictated by logs.

PURVIS OPERATING CO. Deer Canyon 8 Federal, Well No. 1 Page 2

- 9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated evacuated BHP = 3476 and SHP = 1738 with a temperature of 139°.
- 10. H₂S: None expected.
- Anticipated starting date: April 18, 2005.
 Anticipated completion of drilling operations: Approximately 30-40 days.

