

6049

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

F-24

Form 3160-3  
(August 1999)

0557

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

APR 29 2005

DOB-ARTE-010

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-108922	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator Purvis Operating Co. W.C. Morrow		7. If Unit or CA Agreement, Name and No.	
3a. Address P.O. Box 11006 Midland, TX 79702		8. Lease Name and Well No. Deer Canyon 8 Federal, #1	
3b. Phone No. (include area code) (432) 682-7346		9. API Well No. 30-015-34100	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1350' FSL & 660' FWL At proposed prod. zone		10. Field and Pool, or Exploratory	
14. Distance in miles and direction from nearest town or post office* 19.2 miles south of Hope, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 8-T20S-R21E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	16. No. of Acres in lease 1608.88	17. Spacing Unit dedicated to this well 320	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1980' P/A	19. Proposed Depth 7,900'	20. BLM/BIA Bond No. on file Applied for.	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4608' GL	22. Approximate date work will start* April 18, 2005	23. Estimated duration 3 - 4 weeks	

## 24. Attachments

Karnell Controlled Water Basin

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification.   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>George R. Smith</i>	Name (Printed/Typed) George R. Smith, agent	Date 3/18/05
Title Agent for Purvis Operating Co.		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date APR 28 2005
Title ACTING FIELD MANAGER		
Office CARLSBAD FIELD 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 operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

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.

\*(Instructions on reverse)

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

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

29.5

*George R. Smith*  
George R. Smith, agent

District I  
25 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-144  
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Purvis Operating Company Telephone: 432/682-7346 e-mail address: \_\_\_\_\_

Address: P.O. Box 11006 Midland, TX 79702

Facility or well name: Deer Canyon 8 Federal, Well #1 API # 30-015-34100 U/L or Qtr/Qtr NE4SW4 Sec 8 T20S R 21E

County: Eddy Latitude N 32.58234 Longitude W 104.82269 NAD: 1927 ☐ 1983 X Surface Owner Federal X State ☐ Private ☐ Indian ☐

<b>Pit</b> Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input type="checkbox"/> Thickness <u>12</u> mil Clay <input type="checkbox"/> Volume <u>10,000</u> bbl	<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not. _____
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet (20 points) 50 feet or more, but less than 100 feet (10 points) 100 feet or more (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes (20 points) No (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) 1000 feet or more (0 points)
	Ranking Score (Total Points) -0-

**If this is a pit closure:** (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:

onsite ☐ offsite ☐ If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines X, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: March 18, 2005

Printed Name/Title Agent for Purvis Operating Co.

Signature George R. Smith

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval Date: APR 29 2005 Field Rep

Printed Name/Title \_\_\_\_\_

Signature DR

District I  
1625 N. French Dr. Hobbs, NM 88240

District II  
811 South First, Artesia, NM 88210

District III  
1000 Rio Grande Rd., Aztec NM 87410

District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, N M 87505

Form C-102

Revised March 17, 1999  
Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		Undesignated
Property Code	Property Name	Well Number
	DEER CANYON "8" FEDERAL	1
OGRIID No.	Operation Name	Elevation
131559	PURVIS OPERATING COMPANY	4608

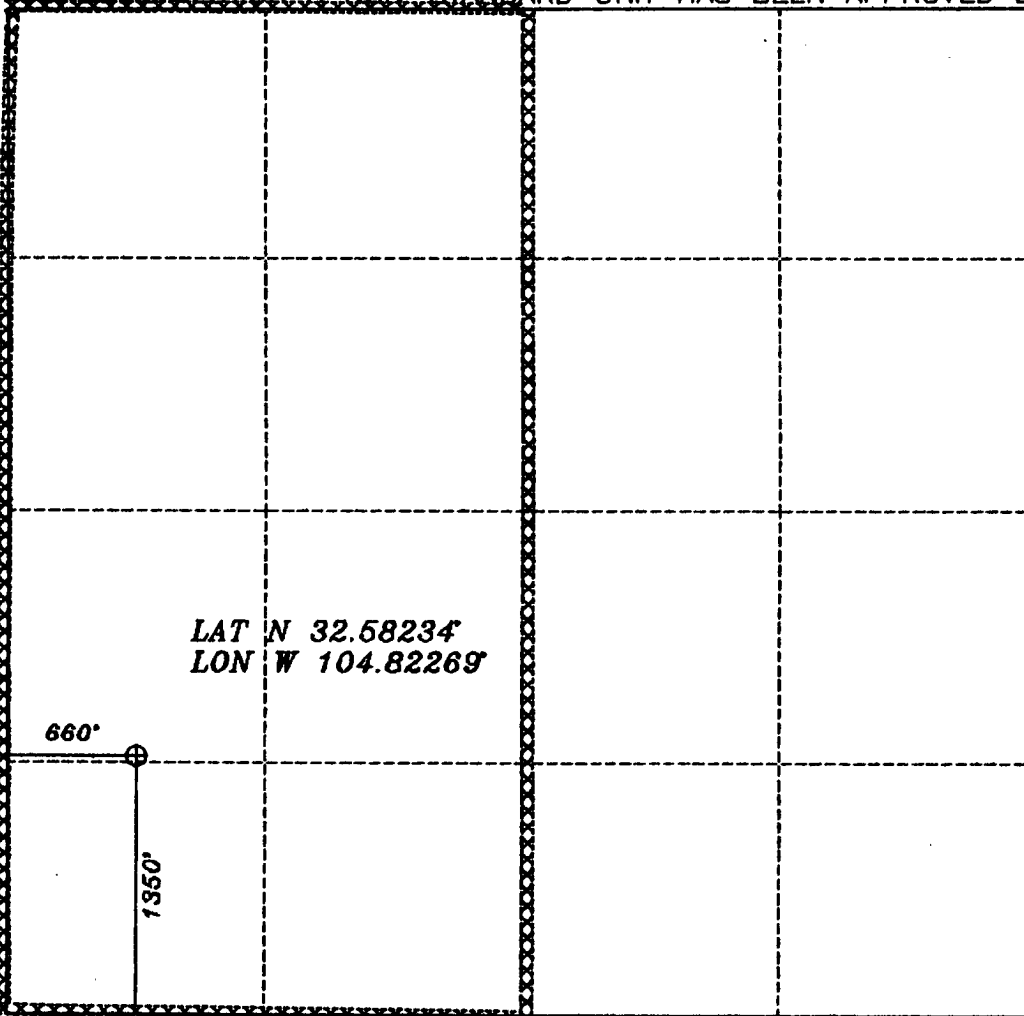
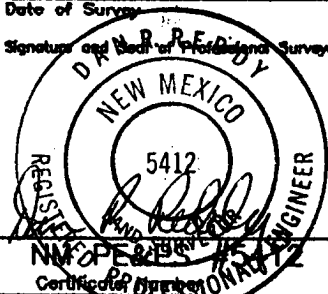
Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from the	North/South line	Feet from the	East/West line	County
L	8	20-S	21-E		1350	SOUTH	660	WEST	EDDY

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	Joint or Infill	Consolidation Code	Order No.						
320									

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTEREST HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<b>OPERATOR CERTIFICATION</b> I HEREBY CERTIFY THAT THE INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.
	Signature <u>George R. Smith</u>
	Printed Name <u>George R. Smith</u>
	Title <u>agent</u>
Date <u>March 18, 2005</u>	
<b>SURVEYOR CERTIFICATION</b> 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 KNOWLEDGE AND BELIEF.	
<u>FEBRUARY 4, 2005</u>	
Date of Survey	
Signature and Seal of Professional Surveyor	
	

## 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:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	32.0#	J-55	ST&C	1,550'	Circ. 880 sx "C" cement.
7 7/8"	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 PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
0' - 1550': Fr. water Air-Mist			No W/L control
1550' - 6300': Cut Brine mud:	8.8 - 9.4 ppg	28 - 29	No W/L control
6300' - 7900': 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

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. H<sub>2</sub>S: None expected.

11. Anticipated starting date: April 18, 2005.

Anticipated completion of drilling operations: Approximately 30-40 days.

## **MULTI POINT SURFACE USE AND OPERATIONS PLAN**

**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)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan to be followed in rehabilitating the surface and environmental effects associated with the operations.

### **1. EXISTING ROADS:**

- A. Exhibit "A" is a portion of a USGS Topographic map showing the location of the proposed well as staked. The well site location is approximately 19.2 road miles south of Hope, NM. Traveling south of Hope on Eddy County Rd #12 and CR #20 there will be 17.5 miles of paved highway and 1.7 miles of oilfield/ranch road.
- B. Directions: Travel west from Artesia, NM on U.S. Highway 82 for approximately 34 miles to a Hope, NM. Turn south on Eddy County Rd.#12 for 7.1 miles to the junction with CR 20. Turn southwest on CR Rd. #20 for 10.4 miles to a caliche road on the east, running southeast. Continue southeast on this caliche oilfield/ranch road for 1.2 miles to stakes on the east side of the road marking the proposed access road that will run east for .5 mile to the northwest corner of the proposed well site.

### **2. PLANNED ACCESS ROAD:**

- A. Length and Width: The proposed access roads will be approximately 2100 feet long. The proposed and existing roads are color coded on Exhibit "A".
- B. Construction: The proposed access road will be constructed by water, blade and grid the existing rocky surface and topping with compacted caliche as needed. The existing roads will be water, blade, and grid and topped with compacted as needed also. The surface will be properly drained.
- C. Turnouts: There will be at least four turnouts in the existing road and one in the proposed road, increasing the road width to 20 feet for passing.
- D. Culverts: None.
- E. Cuts and Fills: None required.
- F. Gates, Cattle guards: One cattle guard will be required on the existing access road.
- G. Off lease right of way: None required.

### **3. LOCATION OF EXISTING WELLS:**

- A. Existing wells within a two-mile radius are shown on Exhibit "C".

**11. OTHER INFORMATION:     cont.....**

- G. Surface Ownership: The proposed well site and access road is on Federal surface and minerals.
- H. There is no evidence of archaeological, historical or cultural sites in the staked area. Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202, is conducting an archaeological survey and their report will be submitted to the appropriate government agencies.

**12. OPERATOR'S REPRESENTATIVE:**


- A. The field representative for assuring compliance with the approved use and operations plan is as follows:

Donnie Brown  
Purvis Operating Co.  
P.O. Box 11006  
Midland, TX 79702  
Office Phone: (432) 682-7346  
Cell Phone:   (432) 638-3441

**13. CERTIFICATION:**

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Purvis Operating Co. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

March 18, 2005

  
\_\_\_\_\_  
George R. Smith  
Agent for: Purvis Operating Co.

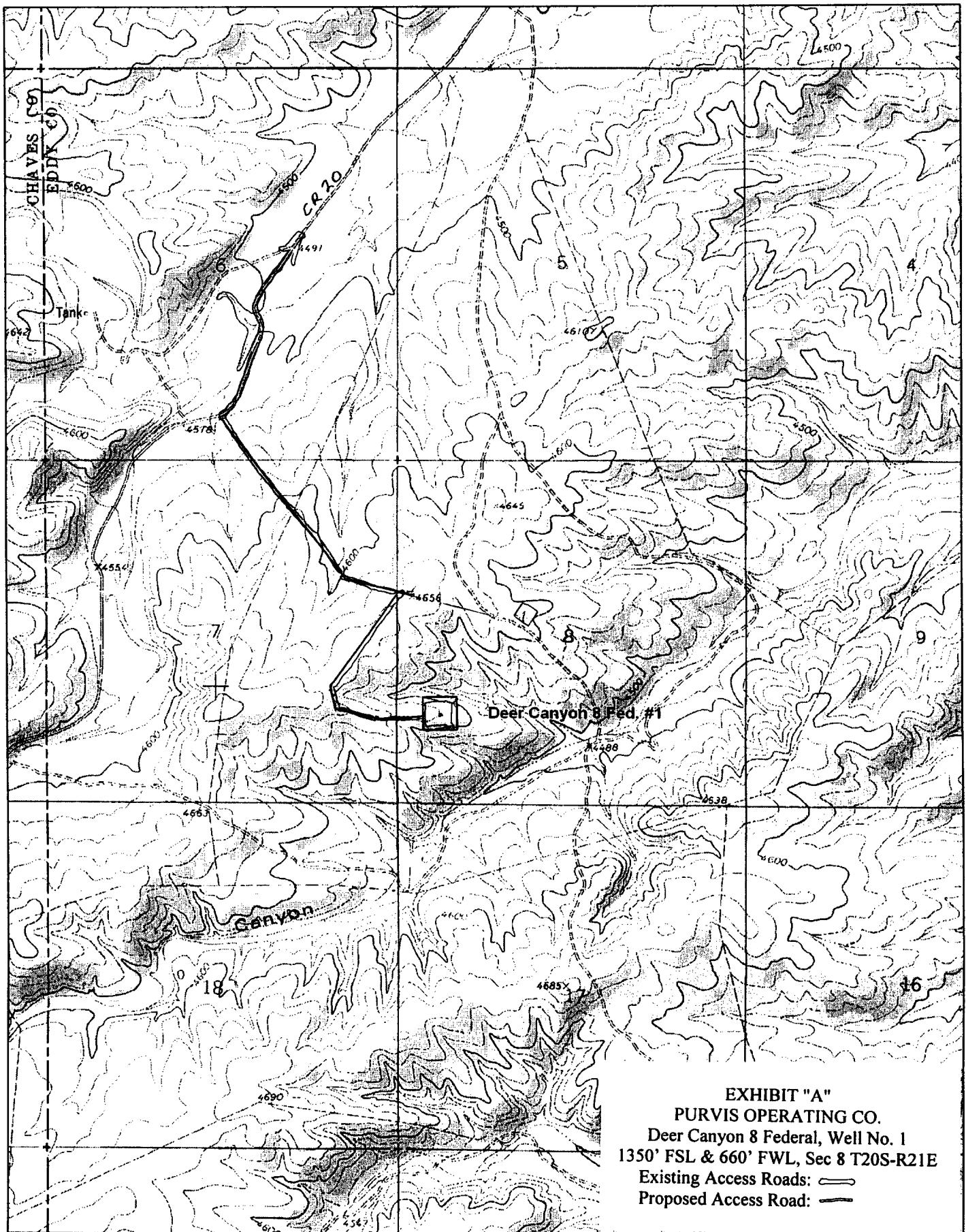


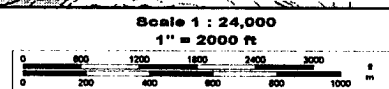


EXHIBIT "A"  
 PURVIS OPERATING CO.  
 Deer Canyon 8 Federal, Well No. 1  
 1350' FSL & 660' FWL, Sec 8 T20S-R21E  
 Existing Access Roads:   
 Proposed Access Road: 

DELOORME

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 www.delorme.com



TN  
 MN  
 8.4°E



RIG #1

BLOWOUT PREVENTOR ARRANGEMENT

11" SHAFFER TYPE LWS, 5000 psi WP

11" GK HYDRIL, 5000 psi WP

80 GALLON, 4 STATION PAYNE ACCUMULATOR

3000 psi WP CHOKE MANIFOLD

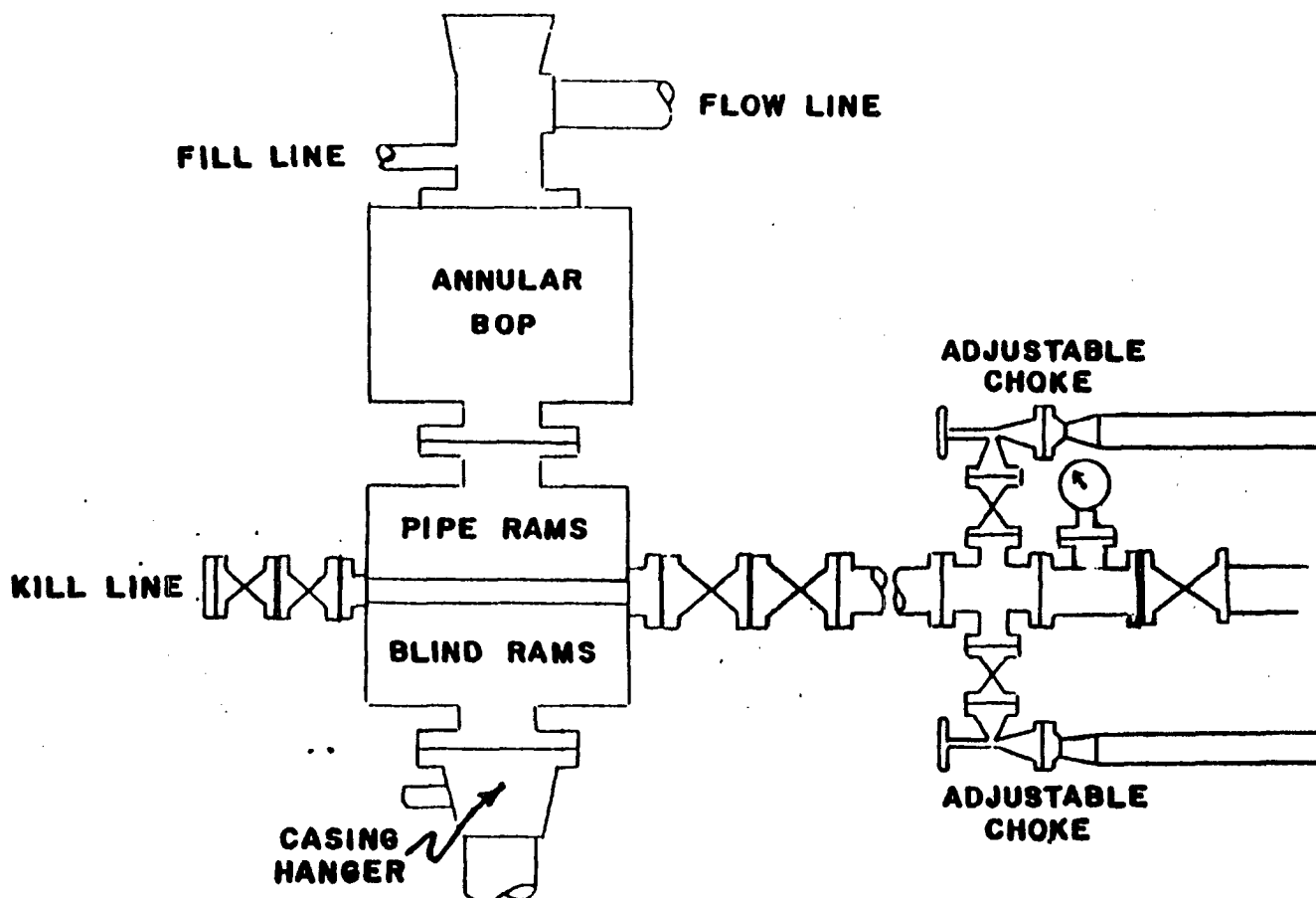


EXHIBIT "E"  
PURVIS OPERATING CO.  
Deer Canyon & Federal, Well No. 1  
BOP Specifications