

N.M. Oil Cons. DIV-Dist. 2

1301 W. Grand Avenue

Artesia, NM 88210

Form 3160-3
(August 1999)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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-58803
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 Elk Oil Company		7. If Unit or CA Agreement, Name and No.
3a. Address P.O. Box 310 Roswell, NM 88202		8. Lease Name and Well No. Cobra Federal, Well No. 2
3b. Phone No. (include area code) (505) 623-3190		9. API Well No. 30-005-63735
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1710' FSL & 950' FWL At proposed prod. zone same		10. Field and Pool, or Exploratory Undesignated Wildcat - Pre-Combustion
14. Distance in miles and direction from nearest town or post office* 22 miles east of Roswell, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 19-T11S-R27E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 950'	16. No. of Acres in lease 620.56	12. County or Parish Chaves
17. Spacing Unit dedicated to this well 320	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 3,720'	13. State NM
19. Proposed Depth 6,800'	20. BLM/BIA Bond No. on file NM-1892	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration 3 - 4 weeks

24. Attachments

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

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- 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	Date 12/29/04
Title Agent for Elk Oil Company		
Approved by (Signature) /S/LARRY D. BRAY	Name (Printed/Typed) /S/LARRY D. BRAY	Date FEB 08 2005
Title Assistant Field Manager, Lands And Minerals	Office ROSWELL FIELD OFFICE	APPROVED FOR 1 YEAR

Application approval does not warrant or certify that 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.

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: ELK OIL CO. accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof.

George R. Smith
George R. Smith, agentCEMENT TO COVER ALL OIL,
GAS AND WATER BEARING
ZONES i.e.; Glaciers
OCP

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised June 10, 2003
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 COBRA FED		Well Number 2
OGRID No. 7147	Operator Name ELK OIL COMPANY		Elevation 3687

¹⁰ **Surface Location**

UL or lot no. L	Section 19	Township 11S	Range 27E	Lot Idn	Feet from the 1710	North/South line SOUTH	Feet from the 950	East/West line WEST	County CHAVES
---------------------------	----------------------	------------------------	---------------------	---------	------------------------------	----------------------------------	-----------------------------	-------------------------------	-------------------------

¹¹ **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 320	"Joint or Infill	"Consolidation Code Com	"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

	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature <u>George R. Smith</u> Printed Name George R. Smith, agent for Title and E-mail Address Elk Oil Company Date December 29, 2004 Date	
	¹⁸ SURVEYOR CERTIFICATION 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. Date of Survey <u>11/22/04</u> Signature and Seal of Professional Surveyor: Certificate Number	

APPLICATION FOR DRILLING
ELK OIL CO.
Cobra Federal, Well No. 2
1710' FSL & 950' FWL, Sec. 19-T11S-R27E
Chaves County, New Mexico
Lease No.: NM-58803
(Exploratory Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Elk Oil 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	1,120'	Wolfcamp	5,390'
Glorieta	2,300'	Cisco Penn	5,900'
Tubb	3,790'	Silurica	6,240'
Abo	4,550'	T.D.	6,800'

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

Water: Surface water in the Triassic between 150' - 200'.
Oil: All potential zones.
Gas: All potential zones.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24.0#	J-55	ST&C	0' - 1,075'	Circ. 700 sx "C"
7 7/8"	5 1/2"	15.5#	J-55	LT&C	0' - 4,000'	
7 7/8"	5 1/2"	17.0#	N-80	LT&C	4,000' - 6,800'	600 sx "C"

5. Proposed Control Equipment: See Exhibit "E":

BOP Program:

A 10" 3000 psi wp Shaffer, Type E, double ram BOP, will be installed on the 8 5/8" casing and used as a 2000 psi wp system. Casing and BOP will be tested to 1500 psi as per Onshore Oil & Gas Order No. 2 before drilling out with 7 7/8.

6. Mud Program:

		MUD WEIGHT	VIS.	W/L CONTROL
0' - 1,075':	Fresh water Gel, Paper, LCM:	9.8 - 10.0 ppg	28 - 30	No W/L control
1,075' - 4,500':	Use 10# brine mud to top of Abo	9.8 - 10.0 ppg	28 - 30	No W/L control
4,500' - 6,800':	Brine mud, starch, salt & gel	10.0 - 10.2 ppg	50 - 70	W/L control <6cc

7. Auxiliary Equipment: Blowout Preventer, Kelly cock,.

8. Testing, Logging, and Coring Program:

Drill Stem Tests: None planned.

Logging: T.D. to 1075': Schlumberger Platform Express: 3 Detector Litho Density. GR/Neutron,
Azimuthal Laterlog, Micro-CFL

1075' to surface: GR/Neutron

Coring: None planned.

ELK OIL CO.

Cobra Federal, Well No. 2

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 surface pressure = 1496 psi (evac. hole) with BH temperature of 128°.
10. H₂S: None expected. None in previously drilled wells.
11. Anticipated starting date: January 10, 2005.
Anticipated completion of drilling operations: Approx. 3 – 4 weeks.

MULTI POINT SURFACE USE AND OPERATIONS PLAN

ELK OIL COMPANY
Cobra Federal, Well No. 2
1710' FSL & 950' FWL, Sec. 19-T11S-R27E
Chaves County, New Mexico
Lease No.: NM-58803
(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 environmental effects associated with the operations.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM Surface Management Quad map showing the location of the proposed well as staked. The well site location is approximately 24 road miles east of Roswell, NM. Traveling east of Roswell on U.S. Highway 380 there will be 17 miles of paved road and 4.8 miles of gravel county road "Aleut", then 2 miles of ranch/oilfield road.
- B. Directions: Travel east of Roswell, NM on U. S. Highway #380 for 17 miles to the County Road Aleut turnoff .7 mile past MM 172. Turn south on gravel county road for approximately 4.8 to a Cooper Cattle Co., Rock House Ranch sign. Turn right at this road junction, the county road on the left continues southeast to the ranch. Continue west for 2.5 miles to the Cobra Fed. Com., Well #1. The start of the proposed access road is on the southwest corner of the well pad and will run west for approximately 2,200 feet and then south for 2,600 feet to the southeast corner of the proposed well site.

2. PLANNED ACCESS ROAD:

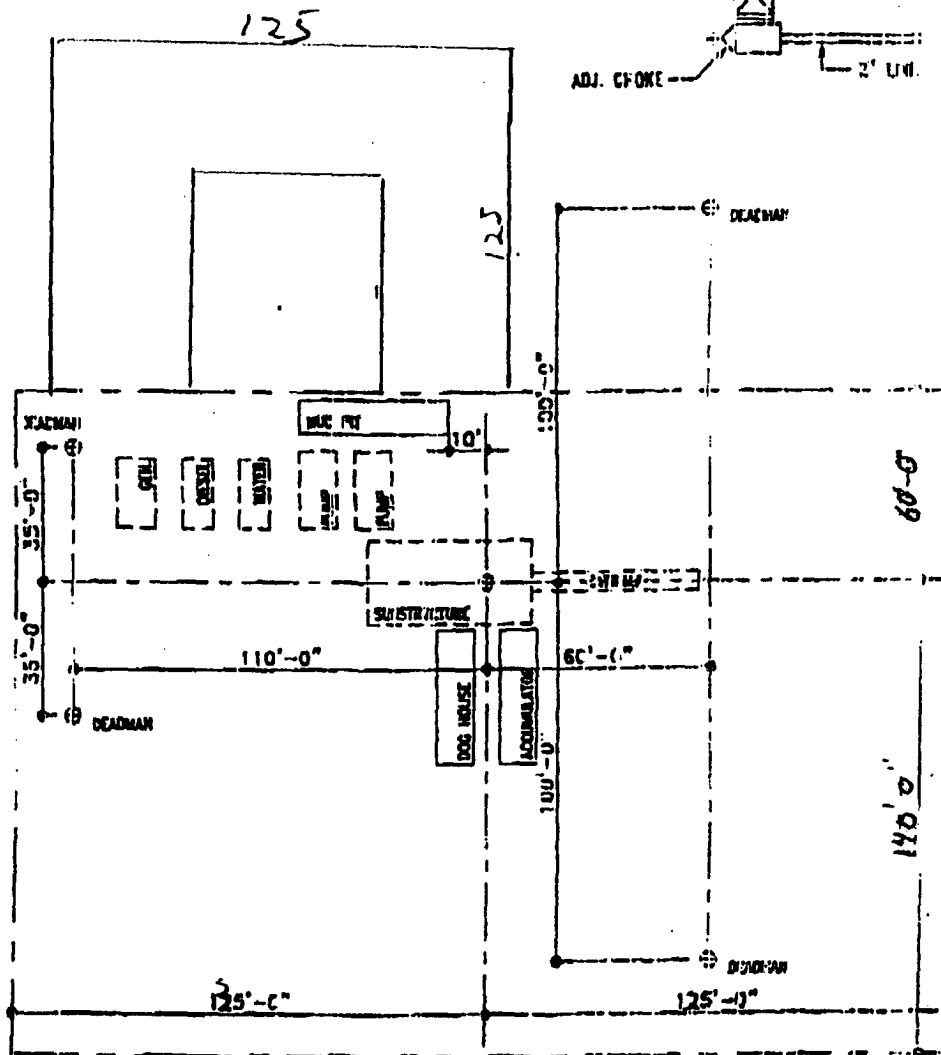
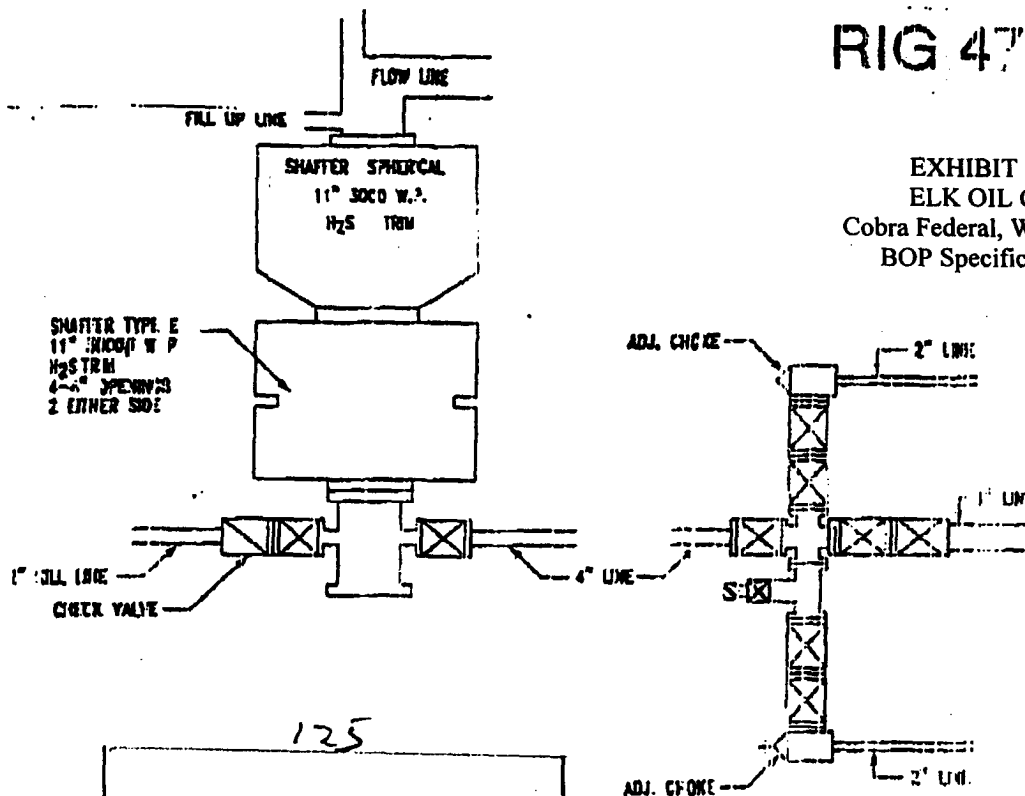
- A. Length and Width: The proposed access road is approximately 4,800 feet in length, 12 feet wide (24' Max.). The proposed and existing roads are color coded on Exhibit "A".
- B. Construction: The new access road will be constructed by grading and topping with compacted caliche. The surface will be properly drained.
- C. Turnouts: There will be at least four turnouts, increasing the width to 20 feet for passing.
- D. Culverts: None required.
- E. Cuts and Fills: None required.
- F. Gates, Cattle guards: One required.
- G. Off Lease ROW: No Federal off lease ROW is required, however, a fee surface ROW for 2.5 miles of existing and new roads plus the location is covered with new and previous agreements with the surface owners. See Self Certification Statements attached.

3. LOCATION OF EXISTING WELLS:

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

RIG 478

EXHIBIT "E"
ELK OIL CO.
Cobra Federal, Well No. 2
BOP Specifications



SURFACE
MATERIAL
STORAGE

EXHIBIT "D"
ELK OIL CO.
Cobra Federal, Well No. 2
Pad & Pit Layout