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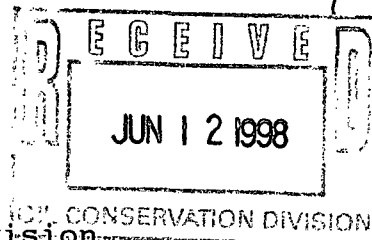
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505-764-5480

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PAUL A. COOTER, Of Counsel

June 11, 1998

Mr. Michael E. Stogner
New Mexico Oil Conservation Division
PO Box 6429
Santa Fe, NM 87505



Re: Administrative Approval of an Unorthodox Oil Well Location for the Maddren "B" Federal No. 11 Well to be Located 1310' FNL and 1310' FWL, Unit D, Section 27, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico

Dear Mr. Stogner:

Shahara Oil, LLC applies for administrative approval of the captioned unorthodox oil well location. The NW/4 Section 27 is included in Federal Lease NM 0467934. The well will be drilled to a depth of approximately 4500 feet to test the San Andres formation. Well spacing is 40 acres, to which the NW/4NW/4 Section 27 will be dedicated.

A copy of the appropriate Application for Permit to Drill and its attachments filed with and approved by the BLM office in Roswell is enclosed with this application. The NW/4 Section 27 is included in the Grayburg-Jackson Premier Sand Unit dated December 10, 1964 which covers the depths of approximately 3230 feet to 3243 feet in some 1,080 acres, more or less. Shahara Oil is the operator of that unit and together with its co-working interest owners owns 100% of the operating rights in the Unit.

Within the immediate future, Shahara Oil and its co-working interest owners propose to expand that Premier Sand Unit to cover the depths from the surface to the base of the San Andres formation, and when that is done, the captioned well will be included therein, provided the same is found to be capable of producing as a unit well.

As heretofore mentioned, there are no offset operators affected by this application for Shahara Oil and its co-working interest owners own all rights to the base of the San Andres formation underlying the NW/4 Section 27.

Respectfully submitted,

Paul A. Cooter
Attorney for Shahara Oil, LLC

enc.

OPERATOR'S COPY

Form 3160-3
(July 1992)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on
reverse side)

FORM APPROVED
OMB NO. 1004-0136

Expires February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN		5. LEASE DESIGNATION AND SERIAL NO. LC-053259A NM-0467934	
1a. TYPE OF WORK Drill <input checked="" type="checkbox"/> Deepen <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
b. TYPE OF WELL Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone <input type="checkbox"/>		7. UNIT AGREEMENT NAME	
2. NAME OF OPERATOR Shahara Oil, LLC		8. FARM OR LEASE NAME, WELL NO. Madden "B" Federal No. 11	
3. ADDRESS AND TELEPHONE NO. 207 W McKay, Carlsbad, NM 88220 505-885-5433 Fax: 505-885-4989		9. API WELL NO. 30-015-30008	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1310' FNL & 1310' FWL, Unit D At proposed prod. zone UNORTHODOX LOCATION Same		10. FIELD AND POOL, OR WILDCAT Grayburg Jackson, 7R-QN-GB-SA	
11. SEC., T., R., M., OR BLK AND SURVEY OR AREA Sec. 27, T17S, R30E		12. COUNTY OR PARISH Eddy County	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 2.5 miles southwest of Loco Hills, NM		13. STATE NM	
15. DISTANCE FROM PROPOSED * LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	1310'	16. NO. OF ACRES IN LEASE 440	17. NO. OF ACRES ASSIGNED TO THIS WELL 40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	1813'	19. PROPOSED DEPTH 4500' ✓	20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3647' GR		22. APPROX. DATE WORK WILL START* January 15, 1997	

**SUBJECT TO
LIKE APPROVAL
BY STATE**

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24# K-55	500'	250 sx - circulate
7 7/8"	5 1/2"	17# J-55	4000' 4500'	600 sx
				100' above 8 5/8" csg shoe

WITNESS

ROSWELL CONTAMINATED WATER BASIN

The operator proposes to drill to a depth sufficient to test the Queen and Yates for oil. Specific programs are outlined in the following attachments:

- DRILLING PROGRAM
- SURFACE USE AND OPERATING PLAN
- EXHIBIT A - ROAD MAP
- EXHIBIT B - EXISTING WELL MAP
- EXHIBIT C - LOCATION AND ACREAGE DEDICATION PLAT
- EXHIBIT C-1 - TOPO MAP
- EXHIBIT D - DRILLING AND RIG LAYOUT
- EXHIBIT E - 3M BOP EQUIPMENT
- EXHIBIT F - TOP OF SALT MAP

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

RECEIVED
1997 DEC 19 P 12:59
BUREAU OF LAND MANAGEMENT
LAND RESOURCE AREA
acs
1/14/98

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Melanie Foster TITLE Agent DATE 12/19/97

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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:

APPROVED BY Charles B. Lopez TITLE ADM - Minerals DATE 1/20/98

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

DRILLING PROGRAM

Shahara Oil, LLC
Maddren "B" Federal No. 11
1310' FNL & 1310' FWL, Unit D
Section 27, T17S, R30E
Eddy County, New Mexico
Lease No. NM-0467934

In connection with Form 3160-3, Application for Permit to Drill subject well, Shahara Oil, LLC. submits the following items of pertinent information in accordance with BLM requirements:

1. Geologic Name of Surface Formation: Permian
2. Estimated Tops of Important Geologic Markers and

<u>Formation</u>	<u>Depth</u>
Top of Salt	450'
Base of Salt	1100'
Queen	2300'
Grayburg	2650'
San Andres	3050'
Total Depth	4500'

3. Estimated Depths of Fresh Water, Oil and Gas:

There is little if any fresh water in this area. Oil is expected in the Queen, Grayburg and San Andres below 2300'. No other formations are expected to give up oil, gas or fresh water in measurable quantities. Any surface fresh water sands will be protected by setting 8 5/8" casing at approximately 500' into the anhydrite just above the top of salt estimated to be between 435' and 535', see exhibit F, and circulating cement to surface. 5 1/2" production casing will be set at TD and cemented to 100' above the 8 5/8" casing shoe.

The pore pressure gradient is normal (+8.4 ppg) down through the Queens. No abnormal pressures are anticipated.

4. Casing and Cement Program

<u>Hole Size</u>	<u>Casing</u>		<u>Casing OD</u>	<u>Weight, Grade, Coupling, Cond.</u>
	<u>From</u>	<u>To</u>		
12 1/4"	0'	500'	8 5/8"	24# K-55 STC New
7 7/8"	0'	TD	5 1/2"	17# J-55 LTC New

Minimum Design Factors: Collapse 1.125, Burst 1.1, Tension 1.7.

8 5/8" Surface Casing Set at 500'

Cement to surface with 300 sx of Class C with additives.

5 1/2" Production Casing Set at TD

Cement with 600 sx of Class C with additives. Will bring top of cement 100' above the 8 5/8" casing shoe.

5. Minimum Specifications for Pressure Control:

7 7/8" Hole - The following BOP equipment will be nipped up on the 8 5/8" casing and used continuously until TD is reached for the 7 7/8" hole.

The blowout preventer equipment (BOP) shown in Exhibit "E" will consist of a 3000 psi WP double ram type preventer and a 3M annular (bag type) preventer with rotating head. Both BOP's will be hydraulically operated. At the drilling contractor's option, 5M BOP's may be substituted. H₂S trim will not be required.

Before drilling out from under the 8 5/8" surface casing, all BOP's and accessory equipment will be tested to 1000 psi with the rig pump. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

BLM method to calculate minimum BOP requirements:

$$(.052)(8.4 \text{ ppg})(\overset{4500}{3200}) - (0.22 \text{ psi/ft})(\overset{4500}{3200}) = 672 \text{ psi } 976 \text{ psi}$$

Minimum BOP requirements: 2M BOP stack and manifold system

6. Proposed Mud System:

The well will be drilled to TD with a combination of fresh water and 10# brine. The applicable depths and properties of this system are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight</u> <u>(ppg)</u>	<u>Viscosity</u> <u>(sec)</u>	<u>Water Loss</u> <u>cc</u>
0-400'	Fresh water	8.4	28	NC
400- 3200' <u>4500'</u>	Brine	10.0	29	NC

Sufficient mud materials to maintain mud properties and meet minimum lost circulation requirements will be kept at the well site at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A kelly cock will be kept in the string at all times.
- A full opening drill pipe stabbing valve (TIW/inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- An electronic pit volume totalizer system will NOT be used. The drilling fluids system will be visually monitored at all time.

8. Logging, Testing and Coring Programs:

- a) Drillstem tests will be run on the basis of drilling shows.
- b) The electric logging program will consist of:
GR-DLL-MSFL-Cal - TD-2000'
GR-CNL-CDL-Cal - TD-2000'
GR-CDL-Cal - TD-Surface
- c) No cores are planned.
- d) Further testing procedures will be determined after the 5 1/2" production casing has been cemented at TD.

9. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures, temperatures, or other potential hazards are anticipated.

No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported, or are known to exist at this depth in this area. No major lost circulation zones have been reported in offsetting wells.

The maximum anticipated bottom hole pressure is approximately ¹⁹⁴⁹~~1386~~ psi.

~~4500~~(3200' x .433 psi/ft = ~~1386~~ psi) ¹⁹⁴⁹ psi

The maximum anticipated bottom hole temperature is 90 degrees F.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is January 15, 1998. Once commenced, the drilling operation should be complete in 10 days. If the well is productive, an additional 30 days will be required for completion, testing, and installation of permanent facilities.

SURFACE USE AND OPERATING PLAN

Shahara Oil, LLC
Maddren "B" Federal No. 11
1310' FNL & 1310' FWL, Unit D
Section 27, T17S, R30E
Eddy County, New Mexico
Lease No. NM-0467934

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 the operations plan to be followed in rehabilitating the surface after completion of the operation to that a complete appraisal can be made of the environmental effects associated with the operations.

<u>Located:</u>	2.5 miles southwest of Loco Hills, New Mexico														
<u>Federal Lease Number:</u>	NM-0467934														
<u>Lease Issued:</u>	N/A														
<u>Acres in Lease:</u>	320 acres														
<u>Record lessee:</u>	Phillips Petroleum Company														
<u>Surface Ownership:</u>	Federal														
<u>Grazing Permittee:</u>	Charles Martin, Inc.														
<u>Pool:</u>	Grayburg Jackson, 7R-QN-GB-SA														
<u>Pool Rules:</u>	The 40 acre oil well spacing rules apply to this location, being 330' to the nearest side boundary or 1/4-1/4 section line , nor closer than 330' to the nearest well capable of producing from the same formation.														
<u>Exhibits:</u>	<table><tbody><tr><td>"A"</td><td>Road Map</td></tr><tr><td>"B"</td><td>Existing Wells Map</td></tr><tr><td>"C"</td><td>Well Location and Acreage Dedication Plat</td></tr><tr><td>"C-1"</td><td>Topo Map (Location Verification Map)</td></tr><tr><td>"D"</td><td>Drilling Rig Layout Diagram</td></tr><tr><td>"E"</td><td>BOP Equipment</td></tr><tr><td>"F"</td><td>Top of Salt Map</td></tr></tbody></table>	"A"	Road Map	"B"	Existing Wells Map	"C"	Well Location and Acreage Dedication Plat	"C-1"	Topo Map (Location Verification Map)	"D"	Drilling Rig Layout Diagram	"E"	BOP Equipment	"F"	Top of Salt Map
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"D"	Drilling Rig Layout Diagram														
"E"	BOP Equipment														
"F"	Top of Salt Map														

1. **Existing Roads:**

- a) The well site and elevation plat for the proposed well is shown in Exhibit "C". It was staked by John West Engineering, Hobbs, NM.
- b) All roads to the location are shown on Exhibit "A". The existing roads are illustrated in yellow and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the on-site inspection.
- c) Directions to location: From Loco Hills, go south on Hagerman Cutoff 0.3 miles, then left on main lease road 1.3 miles. Turn left on lease road, go 0.3 miles, bear right then go 0.5 miles southeast to location.
- d) Routing grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. **Proposed Access Road:**

No new access roads are necessary.

3. **Location of Existing Wells:**

Exhibit "B" shows all existing wells within a one-mile radius of this well.

4. **Location of Existing and/or Proposed Facilities:**

- a) Shahara Oil, LLC operates a production facility on the Maddren "B" Federal Lease.
- b) If the oil well proves to be commercial, the necessary production facilities will be installed on the drilling pad and flow lines will be installed to the production facilities and storage tanks. Flowlines will follow access roads and tie in to existing flowlines where possible.
- c) An electric powerline will be required. Central Valley Electric Cooperative, Inc. of Artesia is currently engineering the plans. Attachments to this APD or Sundry Notices will be submitted concerning the electric powerlines as soon as possible.

5. **Location and Type of Water Supply:**

The well will be drilled with a combination of brine and fresh water mud system as outlined in the drilling program.

The water necessary for drilling operations will be purchased and trucked to the wellsite, or will be moved to the well site by way of a temporary pipeline laid on the ground along existing and proposed roads.

6. **Source of Construction Materials:**

Caliche needed for the road and well pad will be taken from the proposed reserve pit. An alternate plan will be to obtain caliche from a borrow pit located within the 400' x 400' archaeologically cleared tract at the proposed well site. If sufficient quality or quantity of caliche is not available, it will be transported to the proposed road and well site from an existing BLM approved caliche pit. The BLM will be notified and consulted if caliche must be obtained off location.

7. **Method of Handling Waste Disposal:**

- a) Drill cuttings will be disposed into the reserve pit.
- b) Drilling fluids will be contained in the reserve pit. The reserve pit will be an earthen pit, approximately 150' x 150' x 6' deep and fenced on three sides prior to drilling. The fourth side will be fenced immediately following rig removal. The reserve pit will be lined with plastic (5-7 mil thickness) to minimize loss of drilling fluids.
- c) Water produced from the well during completion may be disposed into the reserve pit or a steel tank (depending upon rates).
- d) Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- e) Oil produced during testing will be stored in steel test tanks until sold.
- f) Trash, waste paper, garbage and junk will be placed in a trash bin located on the drill site pad. It will be transported to an approved landfill for disposal within 30 days after completion of drilling and/or completion of operations. All waste material will be contained to prevent scattering by the wind.
- g) A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations.

8. **Ancillary Facilities:**

No other facilities will be built as a result of the operations on this well.

9. **Well Site Layout:**

- a) Exhibit "D" shows the relative location and dimensions of the well pad, mud pits, reserve pit, location of the major rig components, and location of parking area.
- b) Cut and fill requirements will be minor, but clearing and leveling of the well site will be necessary. Top soil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection.

- c) The reserve pit will be lined with a high quality plastic sheeting (5-7 mil thickness).
- d) The pad and pit area are staked and flagged.

10. **Plans for Reclamation of the Surface:**

- a) After completion of drilling and/or completion of operations, all equipment and other material not needed for operations will be removed. The pit area will be allowed to dry before reclamation. If the borrow pit is constructed, the cuttings in the reserve pit will be deep buried in the borrow pit, and the reserve pit and borrow pit will be broken out, filled, and leveled. The location will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.
- b) Three sides of the reserve pit will be fenced prior to and during drilling operations. The borrow pit will be fenced on all four sides after the location is built. At the time the rig is removed, the reserve pit will be fenced on the fourth side to prevent livestock or wildlife from being entrapped in the pit. The fencing will remain in place until the pits are cleaned up and leveled.
- c) After abandonment, all equipment, trash and junk will be removed and the well site will be cleaned.
- d) Topsoil removed from the drill site will be used to recontour the pit area to the original natural level. The disturbed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.

11. **Other Information:**

- a) Topography: The land surface in the area is undulating with small sand dunes. In the immediate area of the well site, the land slope is to the southwest.
- b) Soil: Top soil at the well site is loamy sand.
- c) Flora and Fauna: The vegetation cover is moderate. It includes range grasses, weeds, scrub oak bushes, and mesquite bushes. Wildlife in the area is that typical of a semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, hawks, dove, quail and other small birds.
- d) Ponds and Streams: There are no rivers or streams within a mile of this proposed location.
- e) Residences and Other Structures: There are no occupied dwellings within a mile of this location.
- f) Archaeological, Historical, or Other Cultural Sites: None are know of in the area. An archaeological survey has been conducted by Desert West Archaeological Services.

g) Land Use: Grazing, oil and gas production and wildlife habitat.

h) Surface Ownership: Federal

12. **Operator's Representative:**

Perry L. Hughes, President
Shahara Oil, LLC
207 W. McKay
Carlsbad, NM 88220

Phone: 505-885-5433
Fax: 505-885-4989

13. **Certification:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that the statements made in this 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 Shahara Oil, LLC and its contractors and sub-contractors 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 false statement.

12/12/97
Date

Thallia Marshall
Thallia Marshall, Agent

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

APPLICABILITY:

The provisions of this plan are effective when drilling operations are conducted in areas where zones may be penetrated that are known to contain, or may be reasonably expected to contain, hydrogen sulfide gas in concentrations of 100 parts per million or more.

TRAINING REQUIREMENTS:

- A. When conducting drilling operations in an area where hydrogen sulfide gas might be encountered, all personnel at the well site will have had proper training in the following areas:
 - 1. The hazards and characteristics of hydrogen sulfide gas (H_2S).
 - 2. Toxicity of hydrogen sulfide and sulfur dioxide.
 - 3. Hydrogen sulfide gas detectors, warning systems, evacuation procedures, and proper use and maintenance of personal protective equipment.
 - 4. Proper rescue procedures, first aid, and artificial respiration.
- B. In addition, supervisory personnel will be trained in the following areas:
 - 1. The effects of hydrogen sulfide on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
 - 2. Corrective action and shut-in procedures when drilling or reworking a well, and blowout prevention and well control procedures.
 - 3. The contents and requirements of the Hydrogen Sulfide Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable hydrogen sulfide zone (within 3 days or 500 feet) and weekly hydrogen sulfide and well control drills for all personnel in each crew. The initial training session will include a review of the site specific Hydrogen Sulfide Drilling Operations Plan and the Public Protection Plan. This plan will be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

WELL SITE DIAGRAM:

A. Attached is a detailed well site diagram showing:

1. Drilling rig orientation
2. Prevailing wind direction (Southwest)
3. Location of briefing areas
4. Location of Caution/Danger signs
5. Location of hydrogen sulfide monitors
6. Location of wind direction indicators

HYDROGEN SULFIDE SAFETY EQUIPMENT:

- A. All safety equipment and systems will be installed, tested, and deemed operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone reasonably expected to contain hydrogen sulfide.
- B. During drilling operations, a flare line will be routed from the BOP manifold to the reserve pit. Should suspected sour gas be vented through the flare line, a flare pistol will be used to ignite the flare.
- C. Protective equipment for essential personnel will be installed and maintained as follows:
1. 30-minute air packs will be maintained on the rig floor and near the briefing area.
 2. 30-minute work units will be maintained at the H₂S trailer and/or on the rig floor.
 3. 30-minute escape units will be maintained on the rig floor.
 4. 300 cubic ft. air cylinders will be maintained in the H₂S trailer.
 5. Associated breathing air equipment will also be installed and maintained.
 6. Hydrogen sulfide monitor will be located in the dog house on the rig floor with sensors placed on the rig floor, at the bell nipple, the shale shaker, and in the pit areas.
 7. An audible/visual alarm will be located near the dog house on the rig floor.

VISUAL WARNING SYSTEMS:

- A. High visibility Caution/Danger signs will be posted on roads providing direct access to the well location.
- B. Green, yellow and red conditions flags to be displayed to denote Normal Conditions, Potential

Danger and Danger, H₂S present.

- C. Wind socks to be located at the protection center and in the pit area to continuously indicate wind direction.

CIRCULATING MEDIUM:

- A. Drilling fluid to be conditioned to minimize the volume of H₂S circulated to the surface.

SPECIAL WELL CONTROL EQUIPMENT:

- A. In addition to the normal BOP stack and choke manifold, a drilling head will be used to help control and H₂S contaminated drilling fluid.

WELL TESTING:

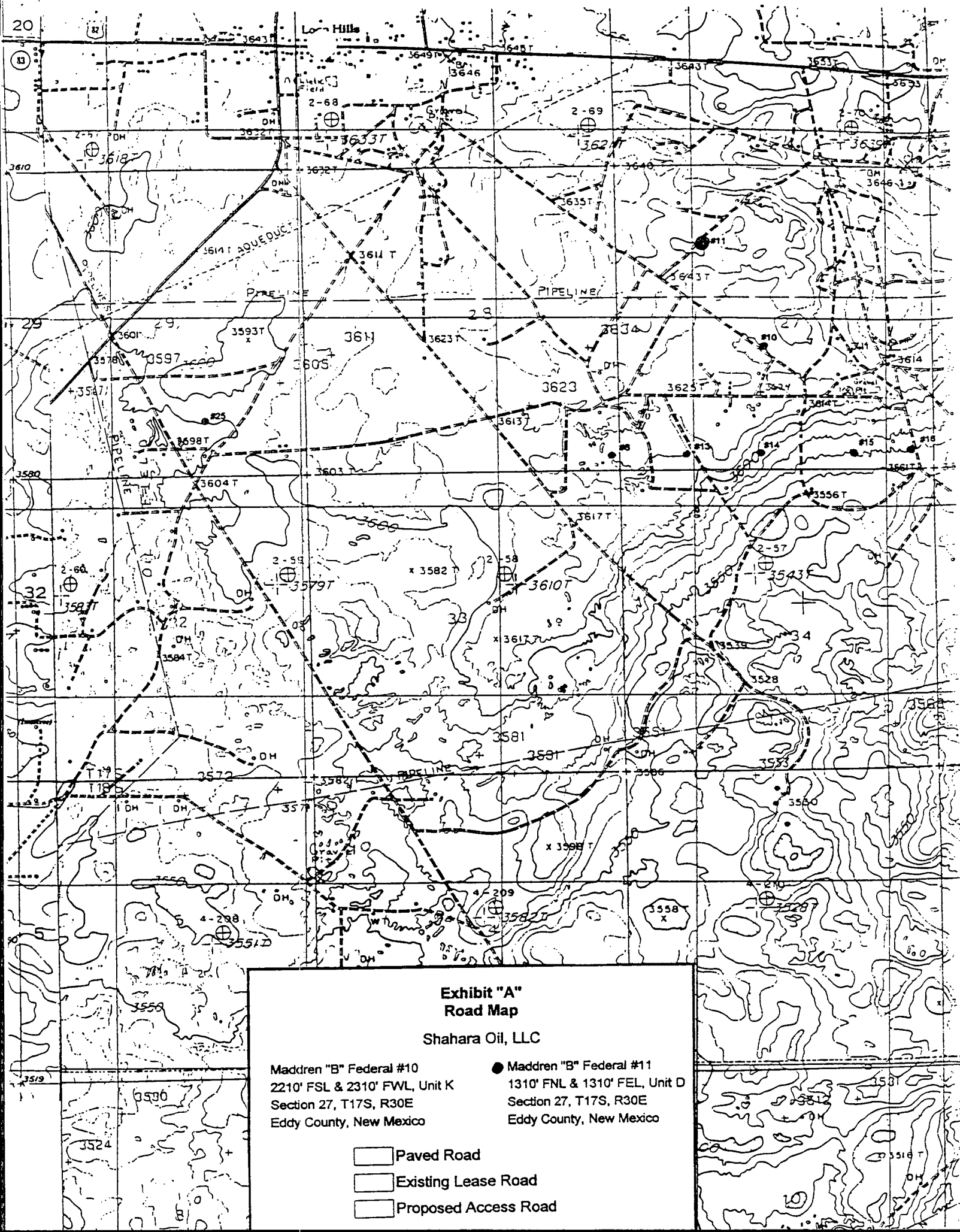
- A. Drill stem testing of zones known, or reasonably expected, to contain H₂S in concentrations of 100 ppm or more will use the closed chamber method of testing.

COMMUNICATION:

- A. Radio communication will be available at the drilling rig and also in company vehicles.

ADDITIONAL INFORMATION:

- A. Additional information concerning Emergency Reaction Steps, Ignition Procedures, Training Requirements and Emergency Equipment Requirements will be available on location at the well site.



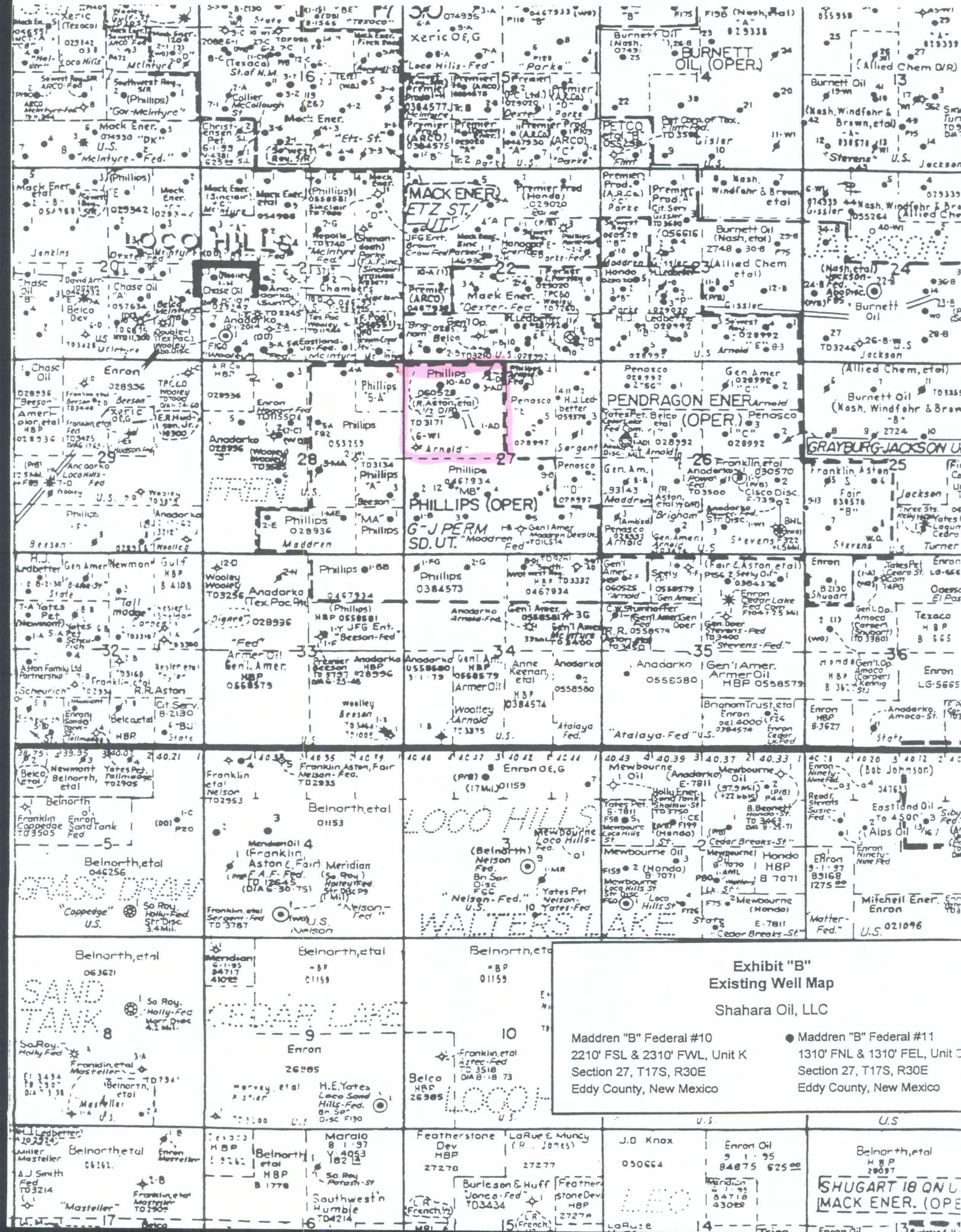


Exhibit "B"
Existing Well Map
Shahara Oil, LLC

Madderan "B" Federal #10
2210' FSL & 2310' FWL, Unit K
Section 27, T17S, R30E
Eddy County, New Mexico

Madderan "B" Federal #11
1310' FNL & 1310' FEL, Unit C
Section 27, T17S, R30E
Eddy County, New Mexico

SHUGART 18 ON U
MACK ENER. (OPER.)

P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department.

Form C-102

Revised February 10, 1994
Submit to Appropriate District Office

State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II

P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III

1000 Rio Brazos Rd., Artec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT IV

P.O. Box 2088, Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 28509	Pool Name Grayburg Jackson 7 Rivers - QN-GB-SA
Property Code 17366	Property Name MADDREN "B" FEDERAL	Well Number 11
OGRID No. 143119	Operator Name SHAHARA OIL, LLC	Elevation 3647

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	27	17 S	30 E		1310	NORTH	1310	WEST	EDDY

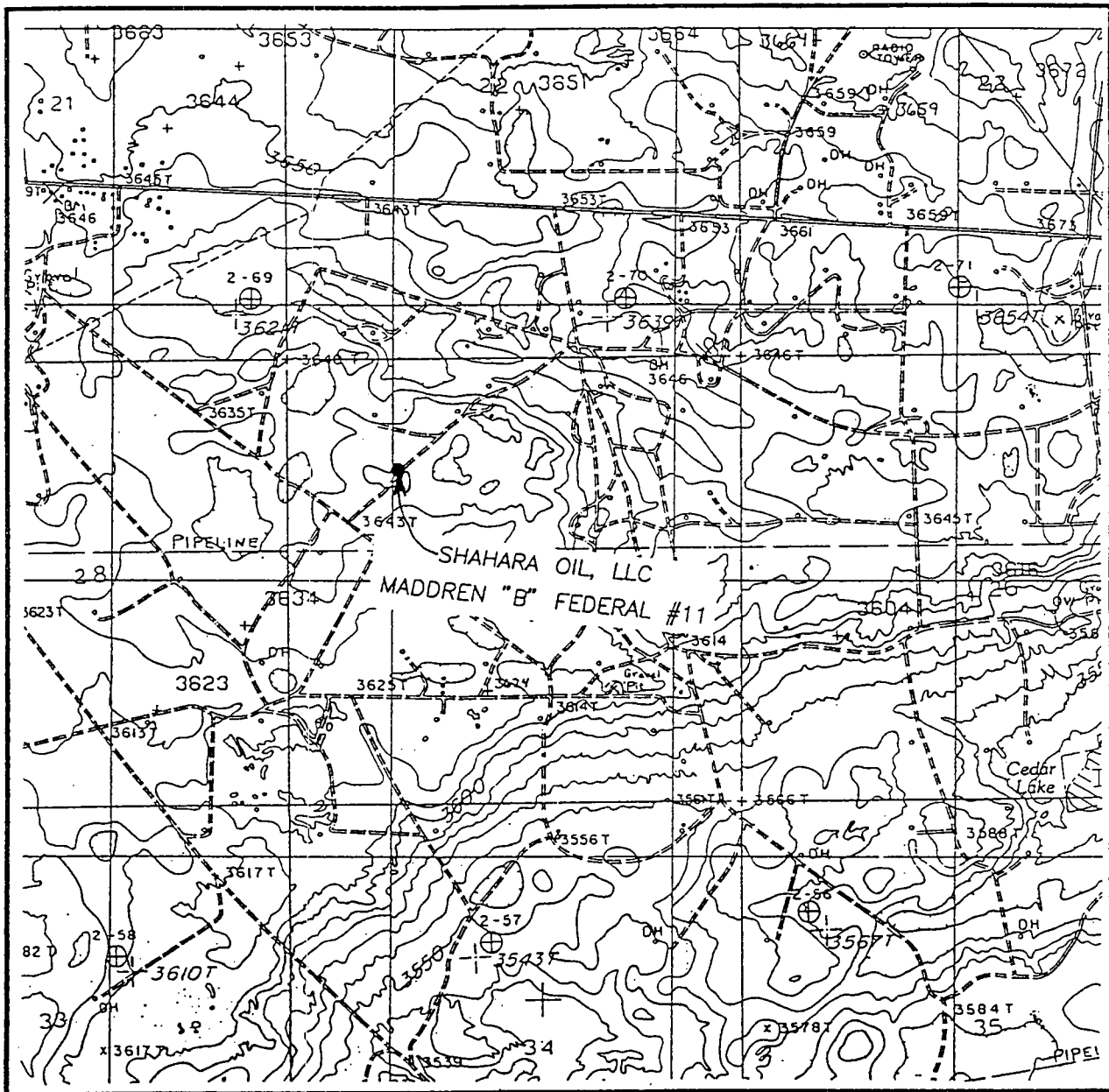
Bottom Hole Location If Different From Surface

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.						

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

<div style="text-align: center;"> </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center; margin: 0;">OPERATOR CERTIFICATION</p> <p style="font-size: small; margin: 5px 0;">I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p style="margin: 5px 0;"> </p> <p style="margin: 5px 0;">Signature _____</p> <p style="margin: 5px 0;"> </p> <p style="margin: 5px 0;">Printed Name _____</p> <p style="margin: 5px 0;"> </p> <p style="margin: 5px 0;">Title _____</p> <p style="margin: 5px 0;"> </p> <p style="margin: 5px 0;">Date _____</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center; margin: 0;">SURVEYOR CERTIFICATION</p> <p style="font-size: small; margin: 5px 0;">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.</p> <p style="text-align: center; margin: 10px 0;">DECEMBER 1, 1997</p> <p style="margin: 5px 0;">Date Surveyed _____ JLP</p> <p style="margin: 5px 0;">Signature & Seal _____</p> <p style="margin: 5px 0;">Professional Surveyor _____</p> <p style="text-align: center; margin: 10px 0;"> </p> <p style="margin: 5px 0;"> </p> <p style="margin: 5px 0;"> </p> <p style="margin: 5px 0;"> </p> <p style="margin: 5px 0;"> </p> </div>
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LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL - 10'

SEC. 27 TWP. 17-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1310' FNL & 1310' FWL

ELEVATION 3647

OPERATOR SHAHARA OIL, LLC

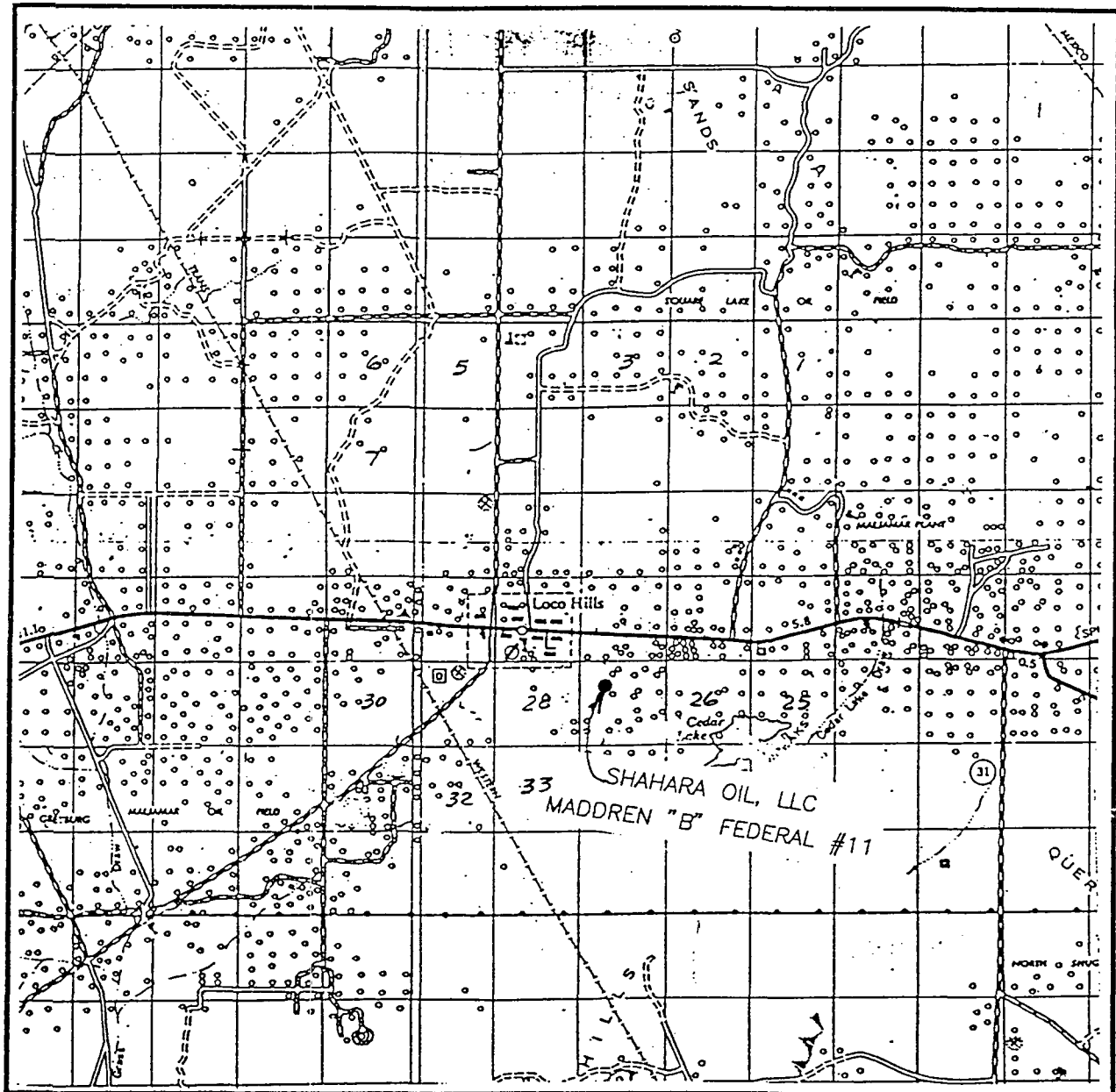
LEASE MADDREN "B" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

LOCO HILLS, N.M.

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO
(505) 393-3117

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 27 TWP. 17-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1310' FNL & 1310' FWL

ELEVATION 3647

OPERATOR SHAHARA OIL, LLC

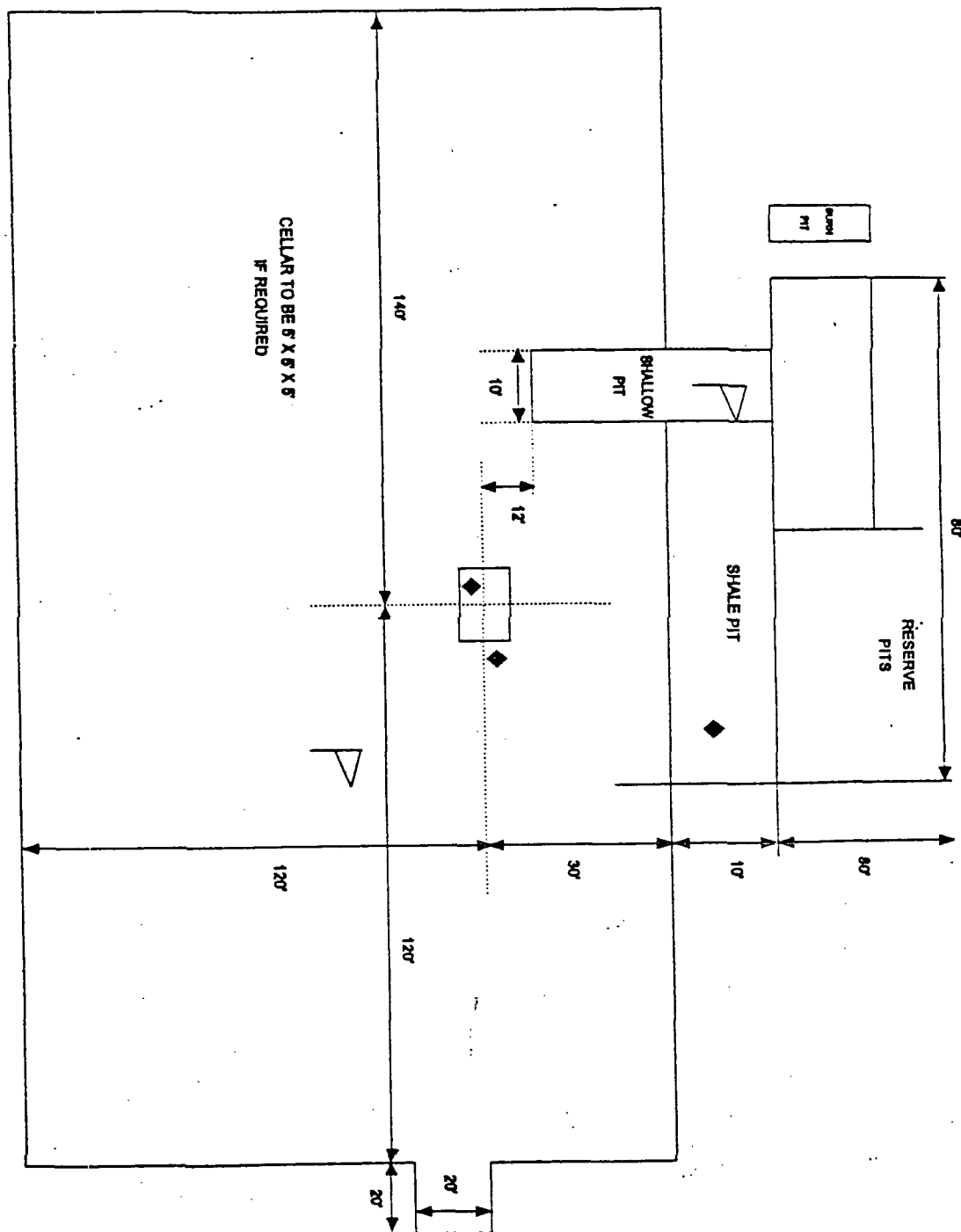
LEASE MADDREN "B" FEDERAL

JOHN WEST ENGINEERING

HOBBS, NEW MEXICO

(505) 393-3117

- ◆ - H2S Monitors with alarms at the well nipple and shale shaker
- △ - Wind Direction Indicators
- - Safe Breathing areas with caution signs and protective breathing equipment. Min. 150 ft from wellhead.



Prevailing Wind Direction
Southwest

N

Exhibit "D"
Rig Layout

Shahara Oil, LLC
Maddren "B" Federal #10
2210' FSL & 2310' FWL, Unit K
Section 27, T17S, R30E
Eddy County, New Mexico

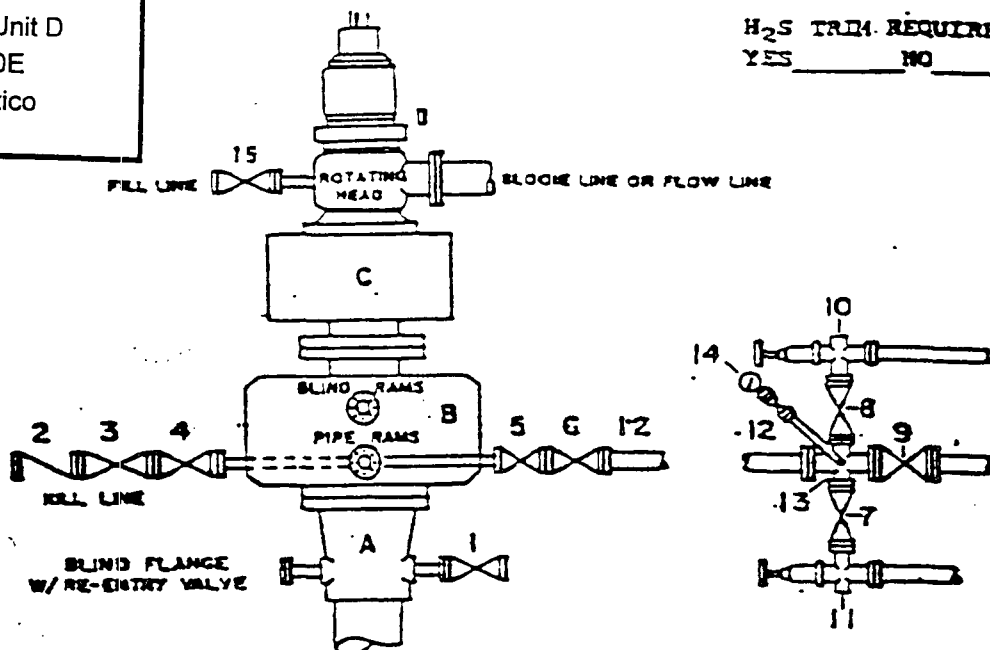
Exhibit "E"
BOP Diagram

Shahara Oil, LLC

Maddren "B" Federal #11
1310' FNL & 1310' FEL, Unit D
Section 27, T17S, R30E
Eddy County, New Mexico

DRILLING CONTROL
CONDITION III-B 3000 PSI WP

H₂S TRM. REQUIRED
YES NO



DRILLING CONTROL

MATERIAL LIST - CONDITION III - B

- | | |
|-------------------|---|
| A | Wellhead |
| B | 3000# W.P. Dual ram type preventer, hydraulic operated with 1" steel, 3000# W.P. control lines (where sub-structure height is adequate, 2 - 3000# W.P. single ram preventers may be utilized with 3000# W.P. drilling spool with 1" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line. The drilling spool is to be installed below the single ram type preventers). |
| C | 3000# W.P. Annular Preventer with 1" steel, 3000# W.P. control lines. |
| D | Rotating Head with fill up outlet and extended Bleed line. |
| 1, 3, 4,
7, 8, | 1" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torq Plug valve. |
| 2 | 1" minimum 3000# W.P. back pressure valve. |
| 5, 6, 9 | 3" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torq Plug valve. |
| 12 | 3" minimum Schedule 80, Grade B, seamless line pipe. |
| 13 | 1" minimum x 3" minimum 3000# W.P. flanged cross. |
| 10, 11 | 1" minimum 3000# W.P. adjustable choke bodies. |
| 14 | Cameron Mud Gauge or equivalent (location optional in Choke line). |
| 15 | 1" minimum 3000# W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torq Plug valve. |

SCALE:	DATE	EST. NO.	REV. NO.
DRAWN BY			
CHECKED BY			
APPROVED BY			

EXHIBIT E

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

OPERATOR'S NAME SHAHARA OIL LLC WELL NO. & NAME #11 MADDREN "B" FEDERAL
LOCATION 1310' F N L & 1310' F W L SEC. 27, T. 17S, R. 30E.
LEASE NO. NM-0467934 COUNTY EDDY STATE NEW MEXICO

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- ☐ Lesser Prairie Chicken (Stips attached) ☐ Floodplain (Stips attached)
☐ San Simon Swale (Stips attached) ☐ Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

☒ The BLM will monitor construction of this drill site. Notify the ☒ Carlsbad Resource Area Office at (505) 887-6544 ☐ Hobbs Office at (505) 393-3612, at least 3 working days prior to commencing construction.

☒ Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.

☐ All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____ inches in depth. Approximately _____ cubic yards of topsoil material will be stockpiled for reclamation.

☐ Other

III. WELL COMPLETION REQUIREMENTS

☐ A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

☒ Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at a depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

☐ A. Seed Mixture 1 (Loamy Site)
Lehmans Lovegrass (*Eragrostis lehmanniana*) 1.0
Side Oats Grass (*Bouteloua curtipendula*) 5.0
Sand Dropseed (*Sporobolus cryptandrus*) 1.0

☐ B. Seed Mixture 2 (Sandy Sites)
Sand Dropseed (*Sporobolus cryptandrus*) 1.0
Sand Lovegrass (*Eragrostis trichodes*) 1.0
Plains Bristlegrass (*Setaria macrostachya*) 2.0

☐ C. Seed Mixture 3 (Shallow Sites)
Sideoats Grama (*Bouteloua curtipendula*) 1.0
Lehmans Lovegrass (*Eragrostis lehmanniana*) 1.0
or Boar Lovegrass (*E. chloromelas*)

☒ D. Seed Mixture 4 ("Gyp" Sites)
Alkali Sacaton (*Sporobolus airoides*) 1.0
Four-Wing Saltbush (*Atriplex canescens*) 5.0

Seeding should be done either late in the fall (September 15 - November 15, before freeze up) or early as possible the following spring to take advantage of available ground moisture.

☐ Other

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- 1) Lined as specified above and,
- 2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and is capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to proceed by BLM.

TRASH PIT STIPS

All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Shahara Oil LLC
Well Name & No. Maddren B Federal #11
Location: 1310' FNL, 1310' FWL, Section 27, T17S R30E, Eddy County, New Mexico
Lease: NM-0467934

.....

I. DRILLING OPERATIONS REQUIREMENTS:

The Bureau of Land Management (BLM) is to be notified at the Carlsbad Resource Area Office, 620 East Greene St., Carlsbad, NM 88220, (505) 887-6544 for wells in Eddy County in sufficient time for a representative to witness:

1. Spudding
2. Cementing casing: 8-5/8 inch 5-1/2 inch
3. BOP tests
4. A Hydrogen Sulfide (H₂S) Drilling Operation Contingency Plan shall be activated prior to drilling into the Seven Rivers formation. A copy of the plan shall be posted at the drilling site.
5. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
6. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The 8-5/8 inch surface casing shall be set at 500 feet or above the top of the salt and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. The minimum required fill of cement behind the 5-1/2 inch production casing is to tie back 100 feet into the surface casing.

III. PRESSURE CONTROL:

The BOPE shall be installed before drilling below the 8-5/8 inch casing and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

Before drilling below the 8-5/8 inch surface casing shoe, the blowout preventer assembly shall consist of a minimum of: One Annular Preventer and/or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.

Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.

The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

BLM Serial Number NM-0467934
Company Reference SHAHARA OIL LLC
#11 MADDREN "B" FEDERAL

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES
IN THE ROSWELL DISTRICT, BLM

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
 - a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.

(over)

b. Activities of other parties including, but not limited to:

- (1) Land clearing.
- (2) Earth-disturbing and earth-moving work.
- (3) Blasting.
- (4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. All construction and maintenance activity will be confined to the authorized right-of-way width of _____ feet. *→ to follow road ROW area*

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 24 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" - Carlsbad Canyon, Munsell Soil Color No. 2.5Y 6/2 (formerly Sandstone Brown); designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. Special Stipulations: *None.*

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division

311 S. 1st Street

Artesia, NM 88210-2834

FORM APPROVED

Budget Bureau No. 1004-0135

Expires March 31, 1983

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT -" for such proposals.

5. Lease Designation and Serial No.
NM0467934

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Shahara Oil, LLC

3. Address and Telephone No.

**207 W. McKay, Carlsbad, NM 88220
505-885-5433**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**1310' FNL & 1310' FWL, Unit D
Section 27, T17S, R30E**

8. Well Name and No.

Maddren "B" Federal No. 11

9. Well API No.

30-015-30008

10. Field and Pool, or Exploratory Area

Grayburg Jackson, 7R-Qn-GB-SA

11. County or Parish, State

Eddy County, New Mexico

12. **CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment ☒ Change of Plans
☐ Recompletion ☐ New Construction
☐ Plugging Back ☐ Non-Routine Fracturing
☐ Casing Repair ☐ Water Shut-Off
☐ Altering Casing ☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this zone.)

1. Propose to change TD of well to 5000'. Casing program to remain 5 1/2" 17# J-55 @ TD.

MAR 1998
RECEIVED
OCD - ARTESIA

14. I hereby certify that the foregoing is true and correct

Signed

Perry L. Hughes

Title **President**

Date **03/09/98**

(THIS SPACE FOR FEDERAL OR STATE OFFICE USE)

Approved By

(ORIG. SGD.) LES BABYAK

Title

PETROLEUM ENGINEER

Date

MAR 23 1998

Conditions of approval, if any:

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

*See Instruction on Reverse Side

N. M. Oil Cons. Division

811 S. 1ST ST.

ARTESIA, NM 88210-2834

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE
(Other instructions on
reverse side)

FORM APPROVED

OMB NO. 1004-0136

Expires February 28, 1995

Form 3160-3
(July 1992)

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

Drill



Deepen



b. TYPE OF WELL

Oil Well



Gas Well



Other

Single Zone



Multiple Zone

2. NAME OF OPERATOR

143119

Shahara Oil, LLC

3. ADDRESS AND TELEPHONE NO.

207 W McKay, Carlsbad, NM 88220

505-885-5433

Fax: 505-885-4989

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. *)

At surface

1310' FNL & 1310' FWL, Unit D

At proposed prod. zone

UNORTHODOX LOCATION
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE *

2.5 miles southwest of Loco Hills, NM

15. DISTANCE FROM PROPOSED *

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

1310'

(Also to nearest drlg. unit line, if any)

18. DISTANCE FROM PROPOSED LOCATION *

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

1813'

16. NO. OF ACRES IN LEASE

440

17. NO. OF ACRES ASSIGNED

TO THIS WELL

40

19. PROPOSED DEPTH

4500'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3647' GR

22. APPROX. DATE WORK WILL START *

January 15, 1997

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24# K-55	500'	250 sx - circulate
7 7/8"	5 1/2"	17# J-55	4000' 4500'	600 sx
				100' above 8 5/8" csg shoe

The operator proposes to drill to a depth sufficient to test the Queen and Yates for oil. Specific programs are outlined in the following attachments:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

DRILLING PROGRAM
SURFACE USE AND OPERATING PLAN
EXHIBIT A - ROAD MAP
EXHIBIT B - EXISTING WELL MAP
EXHIBIT C - LOCATION AND ACREAGE DEDICATION PLAT
EXHIBIT C-1 - TOPO MAP
EXHIBIT D - DRILLING AND RIG LAYOUT
EXHIBIT E - 3M BOP EQUIPMENT
EXHIBIT F - TOP OF SALT MAP

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Melanie Foster TITLE Agent DATE 12/19/97

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

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:

APPROVED BY (ORIG. SGD.) ARMANDO L. LOPEZ TITLE Acting ADL MINERALS DATE 1-20-98

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

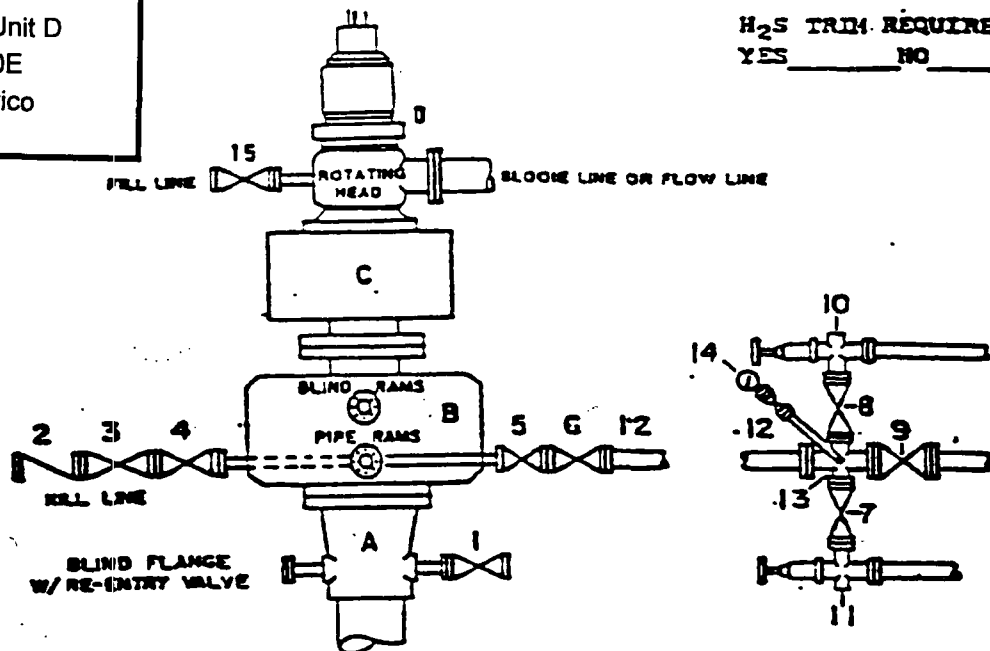
Exhibit "E"
BOP Diagram

Shahara Oil, LLC

Maddren "B" Federal #11
1310' FNL & 1310' FEL, Unit D
Section 27, T17S, R30E
Eddy County, New Mexico

DRILLING CONTROL
CONDITION III-B 3000 PSI WP

H₂S TRIM REQUIRED
YES _____ NO _____



DRILLING CONTROL

MATERIAL LIST - CONDITION III - B

- | | |
|----------------|---|
| A | Wellhead |
| B | 3000# W.P. Dual ram type preventer, hydraulic operated with 1" steel, 3000# W.P. control lines (where sub-structure height is adequate, 2 - 3000# W.P. single ram preventers may be utilized with 3000# W.P. drilling spool with 2" minimum flanged outlet for kill line and 3" minimum flanged outlet for choke line. The drilling spool is to be installed below the single ram type preventers). |
| C | 3000# W.P. Annular Preventer with 1" steel, 3000# W.P. control lines. |
| D | Rotating Head with fill up outlet and extended Bloom line. |
| 1, 3, 4, 7, 8, | 2" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve. |
| 2 | 2" minimum 3000# W.P. back pressure valve. |
| 9, 6, 9 | 3" minimum 3000# W.P. flanged full opening steel gate valve, or Halliburton Lo Torc Plug valve. |
| 12 | 3" minimum Schedule 80, Grade 2, seamless line pipe. |
| 13 | 2" minimum x 3" minimum 3000# W.P. flanged cross. |
| 10, 11 | 2" minimum 3000# W.P. adjustable choke bodies. |
| 14 | Cameron Mud Gauge or equivalent (location optional in Choke line). |
| 15 | 3" minimum 3000# W.P. flanged or threaded full opening steel gate valve, or Halliburton Lo Torc Plug valve. |

SCALE:	DATE	REV. NO.	REV. NO.
DRAWN BY			
CHECKED BY			
APPROVED BY			

EXHIBIT E

GRAYBURG JACKSON PREMIER SAND UNIT AREA

No. 14-08-0001-8723

APPROVED: November 5, 1965

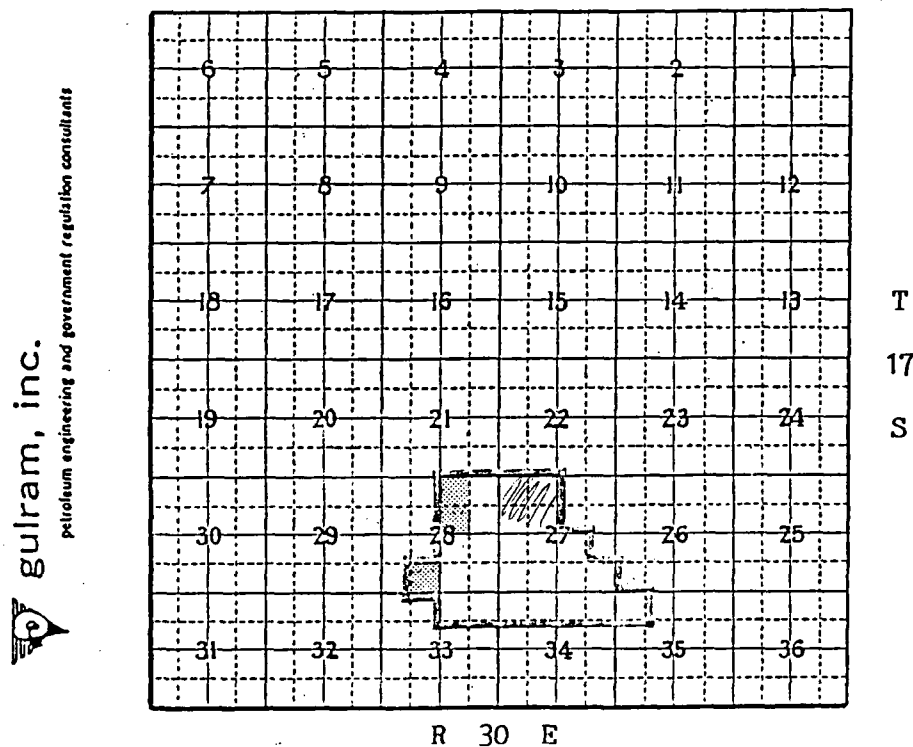
EFFECTIVE: December 1, 1965

WATERFLOOD

Premier Sand of Grayburg Formation

Eddy County, New Mexico

Phillips Petroleum Company, Operator



Original Unit Area - Federal 1,080.00 acres

-Lands Automatically Eliminated, effective December 2, 1970

Remaining Unit Land - Federal 960.00 acres

CMD :.
QG6C101

ONGARD
C101-APPLICATION FOR PERMIT TO DRILL

08/26/98 15:13:58
OGOIV -EMD2

OGRID Idn : 143119 API Well No: 30 15 30008 APD Status(A/C/P): A
Opr Name, Addr: SHAHARA OIL CORPORATION Aprvl/Cncl Date : 01-20-1998
207 W MCKAY
CARLSBAD,NM 88220

Prop Idn: 17366 MADDREN B FEDERAL

Well No: 11

	U/L	Sec	Township	Range	Lot Idn	North/South	East/West
	---	---	-----	-----	-----	-----	-----
Surface Locn : D	27	17S	30E			FTG 1310 F N	FTG 1310 F W
OCD U/L : D		API County :	15				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) : R
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation : 3647

State Lease No: Multiple Comp (Y/N) : N
Prpsd Depth : 4500 Prpsd Frmtn : QUEEN

E7024: Only view is allowed

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

CMD :
QG5SECT

ONGARD
INQUIRE LAND BY SECTION

08/26/98 15:02:57
OGOIV -EMD2
PAGE NO: 1

Sec : 27 Twp : 17S Rng : 30E Section Type : NORMAL

D 40.00 Federal owned A A A A	C 40.00 Federal owned A A	B 40.00 Federal owned U A A	A 40.00 Federal owned U A A A
E 40.00 Federal owned A	F 40.00 Federal owned A	G 40.00 Federal owned U A A	H 40.00 Federal owned U A

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

08/26/98 15:03:10
OGOIV -EMD2
PAGE NO: 2

Sec : 27 Twp : 17S Rng : 30E Section Type : NORMAL

L 40.00 Federal owned A A	K 40.00 Federal owned A A	J 40.00 Federal owned A A	I 40.00 Federal owned U A A
M 40.00 Federal owned A A	N 40.00 Federal owned A A	O 40.00 Federal owned A	P 40.00 Federal owned A A A

PF01 HELP
PF07 BKWD

PF02
PF08 FWD

PF03 EXIT
PF09 PRINT

PF04 GoTo
PF10 SDIV

PF05
PF11

PF06
PF12

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 3083
Order No. R-2749

APPLICATION OF GENERAL AMERICAN OIL
COMPANY OF TEXAS FOR A WATERFLOOD
PROJECT, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 22, 1964, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 29th day of July, 1964, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, General American Oil Company of Texas, seeks permission to institute a waterflood project in the Grayburg Jackson Pool by the injection of water into the Premier Sand through twelve injection wells on acreage which it has acquired or will acquire in Sections 27, 28, 33, and 34, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, General American Oil Company of Texas, is hereby authorized to institute a waterflood project in two stages in the Grayburg Jackson Pool by the injection of water into the Premier Sand through the following-described wells in Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico:

Stage I

Arnold "D" No. 1, 1980 feet from the North line and
1980 feet from the West line of
Section 27;

Arnold "D" No. 6, 2310 feet from the North line and
330 feet from the West line of
Section 27;

Maddren "B" No. 9, 2310 feet from the South line and
1650 feet from the East line of
Section 27;

Maddren "A" No. 2, 2615 feet from the North line and
1295 feet from the East line of
Section 28;

Maddren "E" No. 1, 990 feet from the South line and
1650 feet from the East line of
Section 28;

Beeson "B" No. 1, 330 feet from the North line and
990 feet from the East line of
Section 33;

Arnold "D" No. 8, 330 feet from the North line and
2140 feet from the East line of
Section 34;

Arnold "D" No. 9, 330 feet from the North line and
640 feet from the East line of
Section 34;

-3-

CASE No. 3083
Order No. R-2749

Federal "G" No. 1, 330 feet from the North line and
330 feet from the West line of
Section 34;

Federal "G" No. 2, 330 feet from the North line and
1650 feet from the West line of
Section 34;

Stage II

Arnold "D" No. 7, 25 feet from the North line and
1100 feet from the West line of
Section 27;

Beeson "A" No. 2, 330 feet from the North line and
330 feet from the East line of
Section 28.

(2) That the subject waterflood project shall be governed
by the provisions of Rules 701, 702, and 703 of the Commission
Rules and Regulations.

(3) That monthly progress reports of the waterflood project
herein authorized shall be submitted to the Commission in accord-
ance with Rules 704 and 1119 of the Commission Rules and Regula-
tions.

(4) That jurisdiction of this cause is retained for the
entry of such further orders as the Commission may deem neces-
sary.

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/