

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N. M. Oil & Gas Division
SUBMIT IN TRIPLICATION
911 S. 1ST ST.
ARTESIA, NM 88210
(Other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0116
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
1b. TYPE OF WELL

DRILL ☒ DEEPEN ☐
OIL WELL ☒ GAS WELL ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐
OTHER ZONE ☐

2. NAME OF OPERATOR
Saga Petroleum LLC c/o Continental Land Resources LLC

3. ADDRESS AND TELEPHONE NO.
P.O. Box 2691, Roswell, NM 88202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)
1310' FSL & 360' FWL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE
11 miles north of Loco, NM

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, T.O. 360'
(Also to nearest drip, unit line, if any)

16. NO. OF ACRES IN LEASE
160.00

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 600'

19. PROPOSED DEPTH
3000'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3824

5. LEASE DESIGNATION AND SERIAL NO.
LC-060398

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
20342
W. Henshaw Premier Unit #107

8. FARM OR LEASE NAME, WELL NO.

9. API WELL NO.
30-015-31493

10. FIELD AND POOL, OR WILDCAT
W. Henshaw Grayburg

11. SEC. T., R., M., BLOCK AND SURVEY OR AREA
4, T16S-30E

12. COUNTY OR PARISH
Eddy

13. STATE
NM

17. NO. OF ACRES ASSIGNED TO THIS WELL
40.0

20. ROTARY OR CABLE TOOLS
Rotary

22. APPROX. DATE WORK WILL START
ASAP

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#	450'	Circulate to surface
7-7/8"	5-1/2"	15.5#	3000'	380 sxs

Duration of Program: Drilling - Ten (10) days
Completion - Nine (9) days
See attached for complete Drilling Program

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portions thereof, as described.

EXHIBITS

- Exhibit "A": Drilling Program
Exhibit "B": Surface Use Plan
Exhibit "C": Land Survey Plat
Exhibit "D": Location Plat
Exhibit "E": Existing Well Plat
Exhibit "F": Rig Layout
Exhibit "G": BOP Program

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.

SIGNED [Signature] TITLE Agent/Saga Petroleum LLC DATE 9/15/00

PERMIT No. _____ APPROVAL DATE _____

APPROVED BY [Signature] TITLE Lands And Minerals DATE DEC 01 2000

EXHIBIT "A"
West Henshaw Premier Unit #107

DRILLING PROGRAM

I. The geological surface formation is Quaternary.

II. Estimated Tops of Geological Markers:

<u>FORMATION</u>	<u>DEPTH</u>
Yates	1400'
Queen	2125'
Penrose	2275'
Premier	2825'
San Andres	2850'
TD	3000'

III. Estimated depths at which water, oil, gas or other mineral-bearing formations are expected to be encountered:

<u>SUBSTANCE</u>	<u>DEPTH</u>
Fresh Water	None anticipated
Oil	2850'
Gas	2850'

IV. Proposed Casing Program:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Grade</u>	<u>Weight Per Foot</u>	<u>Depth</u>
12-1/4"	8-5/8"	J-55	24#	450'
7-7/8"	5-1/2"	J-55	15.5#	3000'

B. Proposed Cement Program:

8-5/8"

Cement with 310 sacks Class C, 2.% CACL2 and 56.0% H2O, circulate to surface.

5-1/2"

Cement with 260 sacks 35:65 POZ (35% POZ 65% Clas.. C) 6.0% Gel (Bentonite), 5.0 LB/SK salt and 105% H2O and 120 sacks 50:50 POZ (50% POZ: 50% Class C), 2.0% Gel (Bentonite), 5.0% LB/SK salt, 0.2% CD-32, 0.4% FL-62 and 57.0% H2O

V. Proposed Mud Program:

The well will be drilled to 450' using fresh water/soad ash/bentonite and ground paper (Weight 8.4 to 9.4). From 450' to 2,700', brine water will be used (Weight 10-10.2). From 2,700' to 2,900', mud up mixing yellow starch for a water loss of 10-15cc and salt gel for a viscosity of 32 to 35 sec/1000cc. Maintain a 9-10pH with caustic soda and continue to mix paper for seepage losses and to sweep hole. At TD mix 3,5 gal cns of Envirodrill NE (MF-55) prior to pulling out of the hole for E Logs & to run casing.

VI. Proposed Control Equipment:

Will install Shaffer type E 10" series 900 hydraulic BOP. See Exhibit "G" for BOP layout.

VII. Auxiliary Equipment:

Blowout preventor, gas detector, kelly cock, pit level monitor, flow sensors, and stabbing valve.

VIII. A. Testing Program:

Drill Stem Tests: If necessary

B. Logging Program:

CNL, DLL or GL, CDL or GR

C. Coring Program:

None planned

- IX. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered, however, the proposed mud program will be modified.
- X. H₂S: None anticipated as none encountered in previously drilled wells in the vicinity.

EXHIBIT "B"

SURFACE USE AND OPERATIONS PLAN

CULTURAL RESOURCES SURVEY

APPROXIMATE REHABILITATION SCHEDULE

LOCALITY: West Henshaw Premier Unit #107

LOCATION: SWSW OF SECTION 4 T16S-R30E, NMPM
EDDY COUNTY, NEW MEXICO

OPERATOR: SAGA PETROLEUM LLC

SUBMITTED TO:

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

CARLSBAD DISTRICT OFFICE

P.O. BOX 1778

CARLSBAD, NEW MEXICO 88220

TELEPHONE (505) 887-6544

This plan is submitted to provide permitting agencies with information necessary to allow an appraisal of the environmental effects associated with the proposed drilling operations. Within the context of typical drilling operations, this plan provides for protection of surface resources and other environmental components. This plan has been developed in conformity with the United States Geological Survey NTL-6 guidelines, Bureau of Land Management Oil and Gas Order No. 1, and in connection and consultation with the private surface owner of record, it other than the United States of America, as well as the Roswell District Office for the Bureau of Land Management and the United States Department of the Interior personnel.

PART #1

1) Surface Location:

SWSW of Section 4, Township 16 South, Range 30 East, NMPM
 Eddy County, New Mexico
 1310' FSL & 360' FWL
 See attached Exhibit "C"

2) Bottom Hole Location

SWSW of Section 4, Township 16 South, Range 30 East, NMPM
 Eddy County, New Mexico
 1310' FSL & 360' FWL
 See attached Exhibit "C"

3) Lease Issued:

a) LC-060398

4) Record Lessee:

a)	B.E. Spencer Trust	33.33%
	Box 593	
	Artesia, NM 88211	
	Elzibeth C. Chaney	16.67%
	Unknown	

Ruby C. Bell
1331 3rd Street
New Orleans, LA 70137
16.67%

Paul Slayton
P.O. Box 2035
Roswell, NM 88202
33.33%

5) Acres in Lease: 160.00

6) Acres Dedicated to Well:

There are 40.0.00 acres dedicated to this well which takes in the SWSW of Sec. 4, Township 16 South, Range 30 East, Eddy County, New Mexico.

PART #2:

1) Existing Roads:

Exhibit "D" comprises 2 maps showing location of the proposed well, as staked, in relation to Eddy County Road 217 and existing roads. Road 217 will be used for approximately 11 miles north of Loco Hills, New Mexico to Eddy County Road 256. Turn east go approximately 1/4 mile and turn right (south) for approximately 1/4 mile and turn right (west). Go approximately 1/4 mile to the West Henshaw Premier Unit #4. The new access road goes south for approximately 1/8 mile to the West Henshaw Premier Unit #107. Access is highlighted on the Exhibit "D".

2) Planned Access:

A. Length and Width: The new access road will be approximately 500 feet long and 20' wide.

3) Location of Existing Wells:

Exhibit "E" shows exiting wells within a 1-mile radius of the proposed well.

4) Location of Tank Battery, production Facilities & Production Gathering & Service Lines:

If gas production is achieved, the location of the line will be determined by the purchaser laying the gather system to is existing lines.

5) Location and Type of Water Supply:

There is no useable water in this area. All water needed for drilling, testing and completion will be trucked in by a commercial transport on existing roads as shown on Exhibit "D".

6) Source of Construction Materials:

If it is necessary to use caliche on the new road and location, it will be obtained from the existing pits in the area as determined by the dirt contractor. The topsoil from the location (if any) will be stockpiled near the SE/corner of the location for future rehabilitation. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

7) Method of Handling Waste Material:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system.
- E. Saga Petroleum LLC will comply with current laws and regulations pertaining to the disposal of human waste.
- F. All waste materials will be contained to prevent scattering by the wind and will be removed from the well site within 30 days after drilling and/or completion operations are finished.

8) Ancillary Facilities: None required.

9) Well Site Layout:

- A. Exhibit "F" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area have been staked and flagged.
- B. Mat Size: 100' X 250' plus reserve pits.
- C. Cut & Fill: Only minor leveling of the drilling site is anticipated.

- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

10) Plans for Restoration of the Surface:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, Saga Petroleum LLC will comply with all rehabilitation and/or vegetation requirements of the Bureau of Land Management, and such rehabilitation will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

11) Other Information:

- A. Topography: The topography of the land surrounding the staked well is gentle rolling sand dunes, but generally flat, depicted on Exhibit "D".
- B. Soil: The topsoil at the well site is a brown sandy loam.
- C. Flora and Fauna: Vegetation consists of chinery oat and a sparse cover of grass, mainly grama, dropseed, three-awn, some tabosa and burro grass along with mesquite, yucca, cactus and miscellaneous wildflowers. The wildlife consists of rabbits, coyotes, antelope, rattlesnakes, dove, quail, prairie chickens and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: There are not ponds or streams in the area of the well location or access road.
- E. Residences and Other Structures: There is a fence that runs northwest/southeast along the southwest corner of the location. The fence will be moved to the west around the location.
- F. Surface Ownership: The surface around the location and access road is owned by the United States of America under the management of the Bureau of Land Management.
- G. Land Use: The land is used for grazing cattle.

H. Archaeological, Historical, and Other Cultural Sites:


Bob Martin of Carlsbad, New Mexico conducted an archaeological survey of the proposed access road and well pad. A report will be filed with the BLM under separate cover.

I. Operator's Senior Representatives:

Joe Clement
Saga Petroleum LLC
415 W. Wall, Suite 835
Midland, TX 79705
(915) 684-4293 Office Mobile (915) 557-7929

CERTIFICATION

I hereby certify that I have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that 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 Saga Petroleum LLC 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.


James L. Schultz
Agent for Saga Petroleum LLC
c/o Continental Land Resources LLC
P.O. Box 2691
Roswell, NM 88202-2691
(505) 626-6879 FAX (505) 622-3615
Date: 9-15-00

DISTRICT I
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 88, Aramisa, NM 88211-0719

OIL CONSERVATION DIVISION

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name West Henshaw Grayburg
Property Code	Property Name WEST HENSHAW PREMIER UNIT	Well Number 107
OGRID No.	Operator Name SAGA PETROLEUM LLC	Elevation 3824

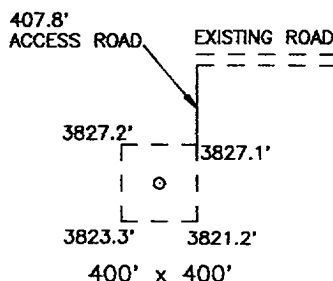
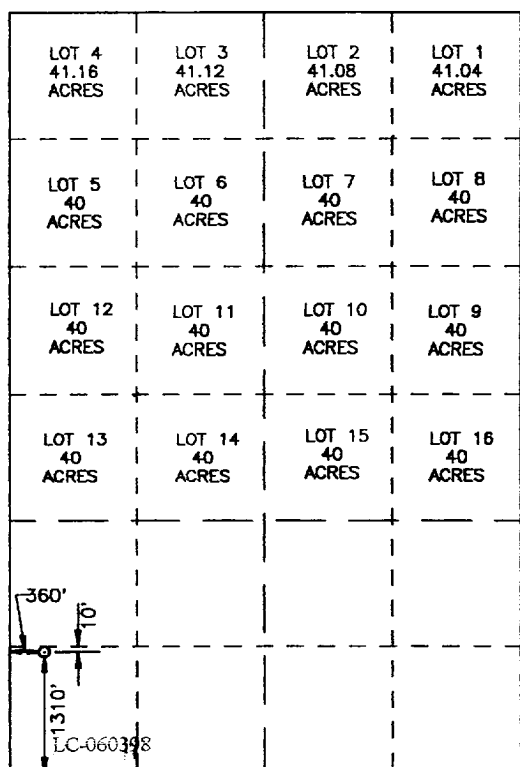
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	4	16 S	30 E		1310	SOUTH	360	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 40.0	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



OPERATOR CERTIFICATION

I hereby certify the the information
contained herein is true and complete to the
best of my knowledge and belief.

Signature
James L. Schultz

Printed Name
Agent/Saga Petroleum LLC

Title
9/15/00

Date

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.

SEPTEMBER 1, 2000

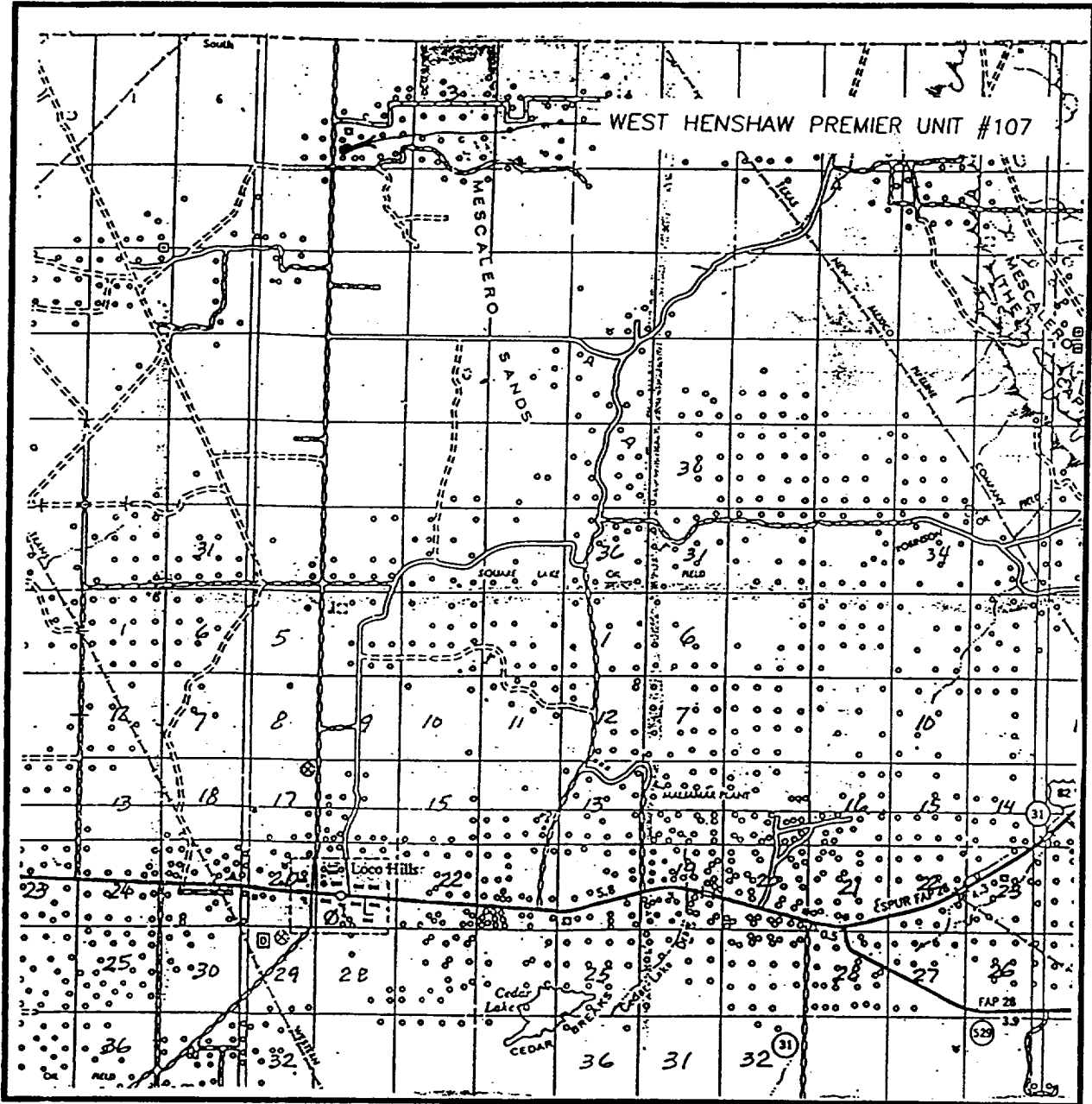
Date Surveyed
Signature & Seal of
Professional Surveyor

W.O. Num. 00-11-1052

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239

VICINITY MAP

EXHIBIT D - 1



SCALE: 1" = 2 MILES

SEC. 4 TWP. 16-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1310' FSL & 360' FWL

ELEVATION 3824'

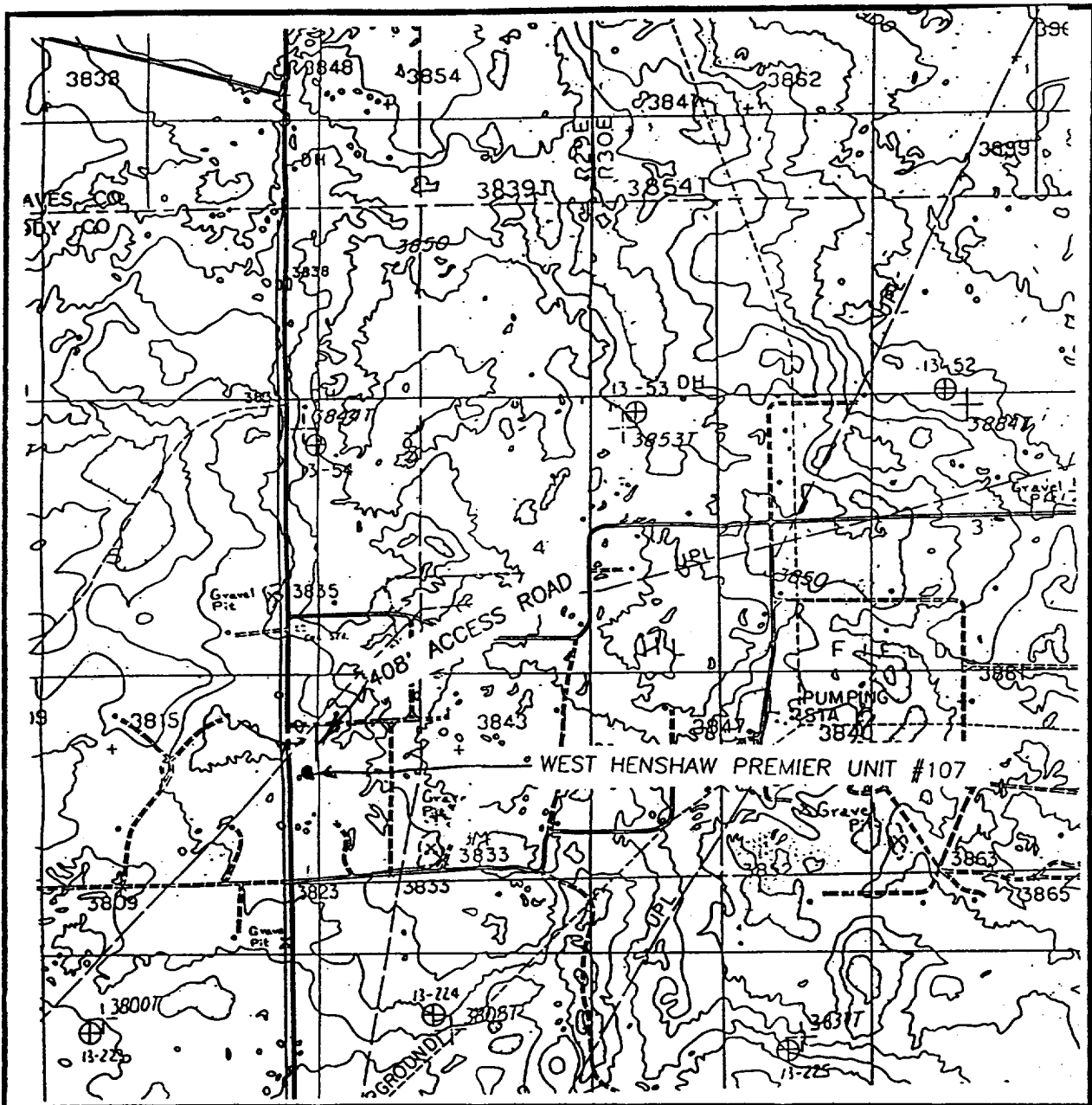
OPERATOR SAGA PETROLEUM LLC

LEASE WEST HENSHAW PREMIER UNIT

JOHN WEST SURVEYING
HOBBS, NEW MEXICO

(505) 393-3117

EXHIBIT D - 2



SCALE: 1" = 2000'

CONTOUR INTERVAL - 10'

SEC. 4 TWP. 16-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1310' FSL & 360' FWL

ELEVATION 3824'

OPERATOR SAGA PETROLEUM LLC

LEASE WEST HENSHAW PREMIER UNIT

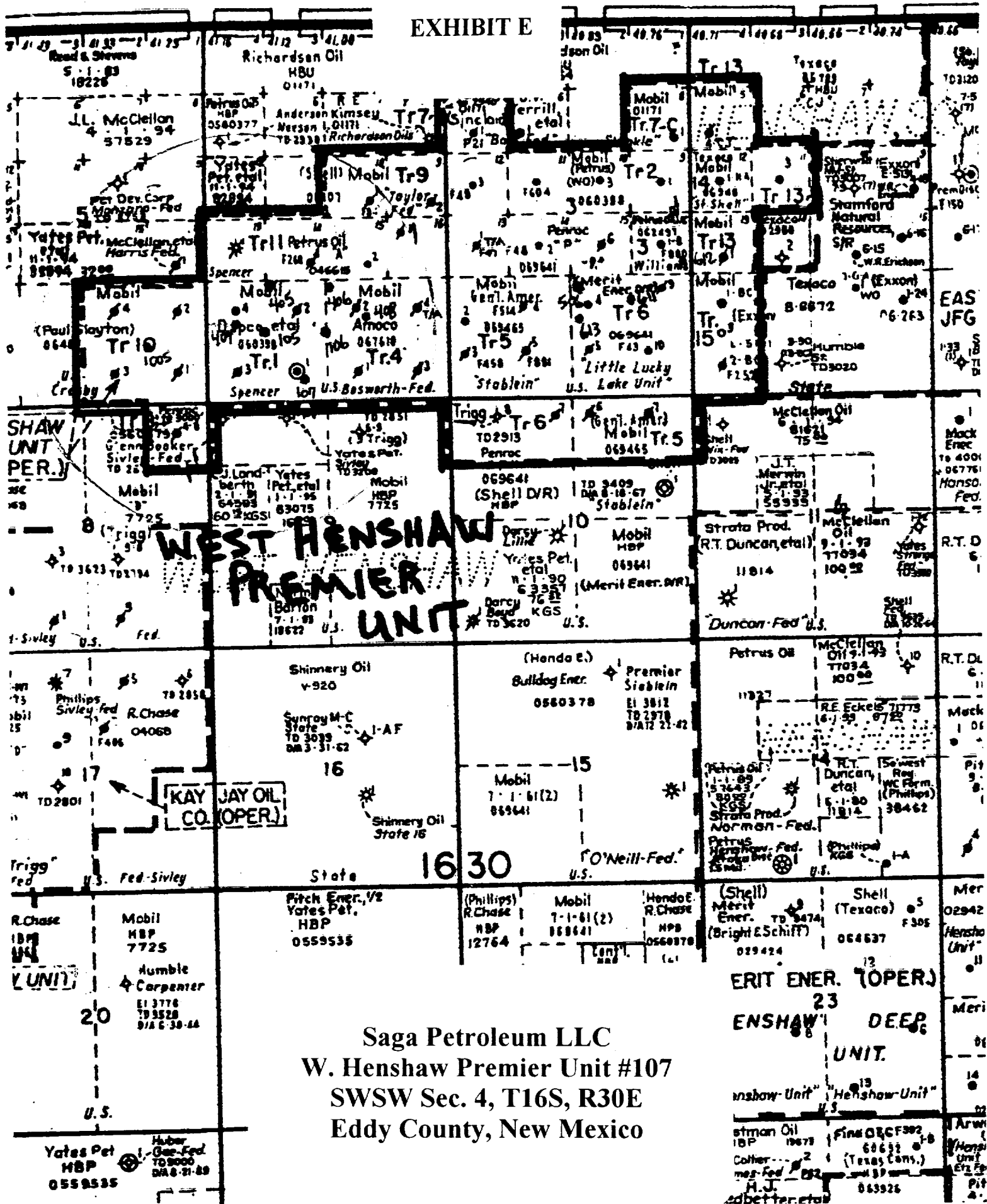
U.S.G.S. TOPOGRAPHIC MAP

HENSHAW TANK, BASIN WELL, N.M.

**JOHN WEST SURVEYING
HOBBS, NEW MEXICO**

(505) 393-3117

EXHIBIT E

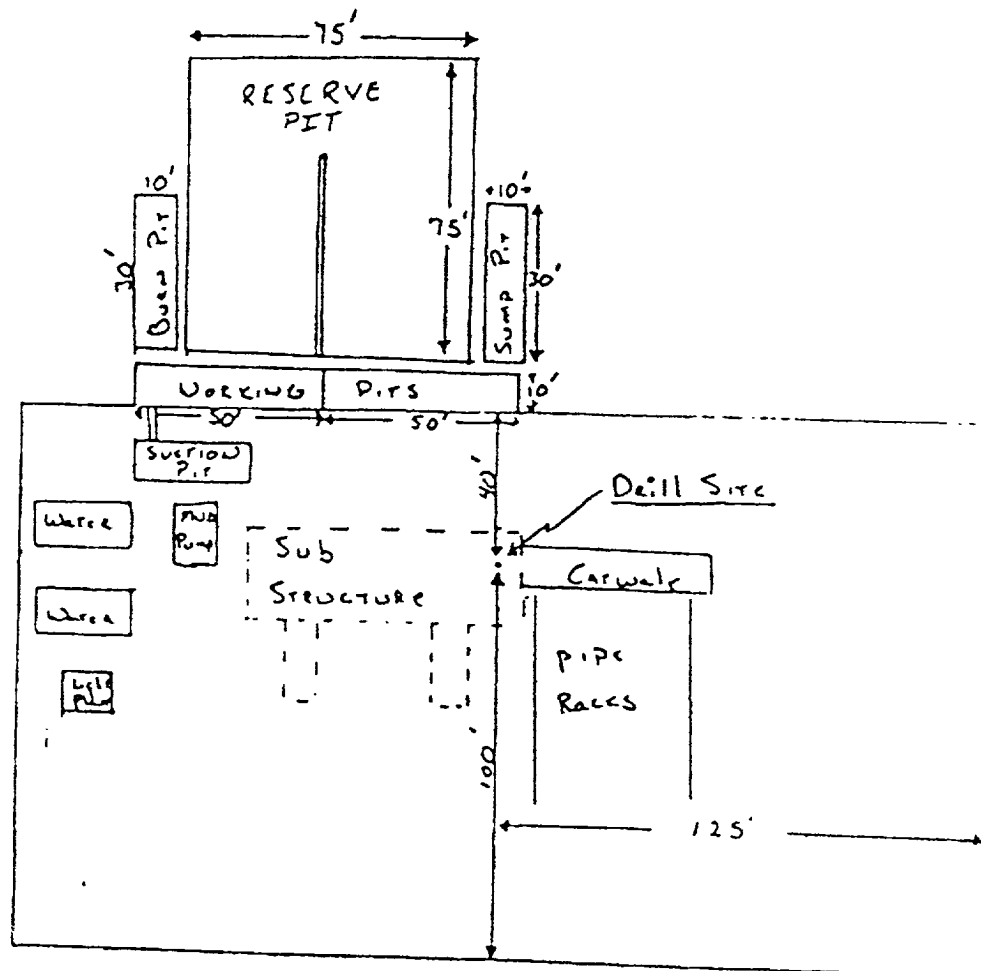


SUGGESTED PAD DIMENSIONS

Reserve Pits 4 ft. deep, plastic lined

Working pits 5 ft. deep

No cellar



Scale 1" = 50'

EXHIBIT G

