

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. TYPE OF WORK
DRILL ☒ DEEPEN ☐
2. TYPE OF WELL
OIL WELL ☒ GAS WELL ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐
3. NAME OF OPERATOR
Saga Petroleum LLC c/o Continental Land Resources LLC
4. ADDRESS AND TELEPHONE NO.
P.O. Box 2691, Roswell, NM 88202
5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
1310' FSL & 2590' FEL

6. LEASE DESIGNATION AND SERIAL NO.
LC-067610
7. IF INDIAN, ALLOTTEE OR TRIBE NAME

8. UNIT AGREEMENT NAME
W. Henshaw Premier Unit #106

9. FARM OR LEASE NAME, WELL NO.
20342

10. API WELL NO.
30-015-31378

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

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

13. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE
11 miles north of Loco, NM
14. COUNTY OR PARISH
Eddy
15. STATE
NM

16. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, T.O. 1310'
(Also to nearest drig. unit line, if any)
17. NO. OF ACRES IN LEASE
160.00
18. NO. OF ACRES ASSIGNED TO THIS WELL
40.0

19. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1000'
20. PROPOSED DEPTH
3000'
21. ROTARY OR CABLE TOOLS
Rotary

22. ELEVATIONS (Show whether DF, RT, GR, etc.)
3835'
23. 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

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

GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS

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 8/8/00

PERMIT No. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the land which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL: APPROVED BY LARRY D. BRAY TITLE Lands And Minerals DATE OCT 09 2000

*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 "A"
West Henshaw Premier Unit #106

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% Class 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 #106
LOCATION: SWSE 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:

SWSE of Section 4, Township 16 South, Range 30 East, NMPM
Eddy County, New Mexico
1310' FSL & 2590' FEL
See attached Exhibit "C"

2) Bottom Hole Location

SWSE of Section 4, Township 16 South, Range 30 East, NMPM
Eddy County, New Mexico
1310' FSL & 2590' FEL
See attached Exhibit "C"

3) Lease Issued:

a) LC-067610

4) Record Lessee:

a)	Occidental Permian Ltd.	100%
	580 Westlake Park Blvd	
	Houston, TX 77079	

5) Acres in Lease: 160.0000

6) Acres Dedicated to Well:

There are 40.0.00 acres dedicated to this well which takes in the SWSE 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 3/4 mile to the new access road on the right (south). The new access road goes south for approximately 1/2 mile, then turn West (right) to the West Henshaw Premier Unit #106. Access is highlighted on the Exhibit "D".

2) Planned Access:

A. Length and Width: The new access road will be approximately 1720 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 are no occupied residences or other structures on, or in the immediate vicinity of the proposed 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:


In 1997, Desert West Archaeological Services conducted an archaeological survey of the proposed well pad and a portion of the new access road. Pecos Archeological Consultants will conduct a survey of the remaining portion of the access road and file a report 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
(915) 557-7929 - Mobile

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: 8-8-00

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

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

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

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

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		West Henshaw Grayburg
Property Code	Property Name	Well Number
	WEST HENSHAW PREMIER UNIT	106
OGRID No.	Operator Name	Elevation
	SAGA PETROLEUM LLC	3847

Surface Location

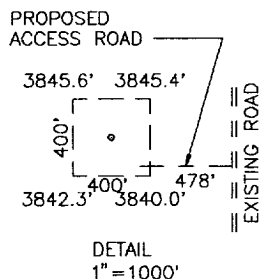
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	4	16 S	30 E		1310	SOUTH	2590	EAST	EDDY

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.						
40.0									

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

4	3	2	1
41.16 AC.	41.12 AC.	41.08 AC.	41.04 AC.
5	6	7	8
40.00 AC.	40.00 AC.	40.00 AC.	40.00 AC.
12	11	10	9
40.00 AC.	40.00 AC.	40.00 AC.	40.00 AC.
13	14	15	16
40.00 AC.	40.00 AC.	40.00 AC.	40.00 AC.
SEE DETAIL			
2590'			
1310'			
LC-067610			



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

8/8/00
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 15, 1997

Date Surveyed DMCC

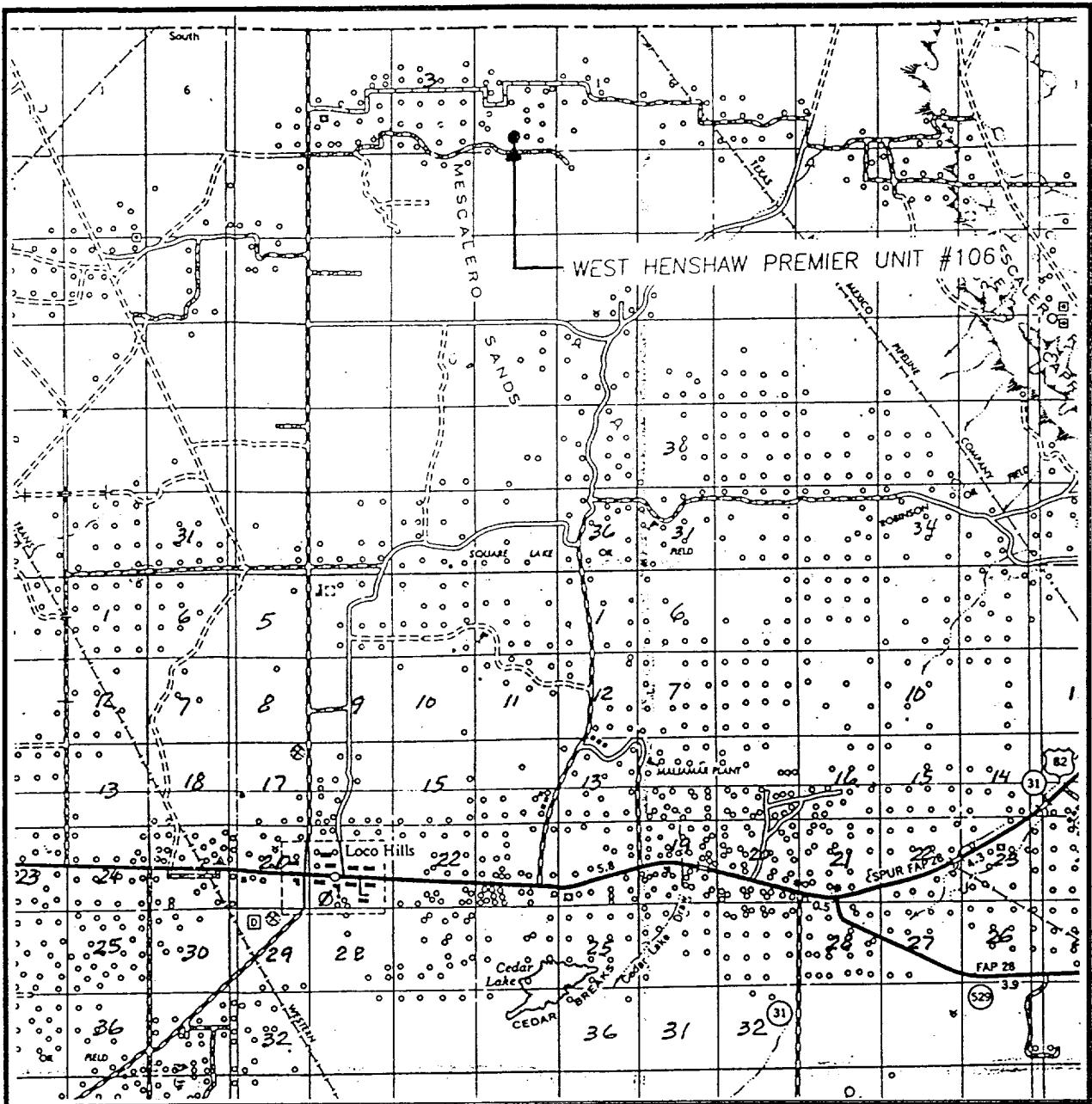
Signature & Seal of
Professional Surveyor

97-11-1468

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY EIDSON 12641

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 & 2590' FEL

ELEVATION 3847

OPERATOR SAGA PETROLEUM LLC

LEASE WEST HENSHAW PREMIER UNIT

JOHN WEST ENGINEERING
HOBBS, NEW MEXICO

(505) 393-3117

LOCATION VERIFICATION MAP

EXHIBIT D - 2

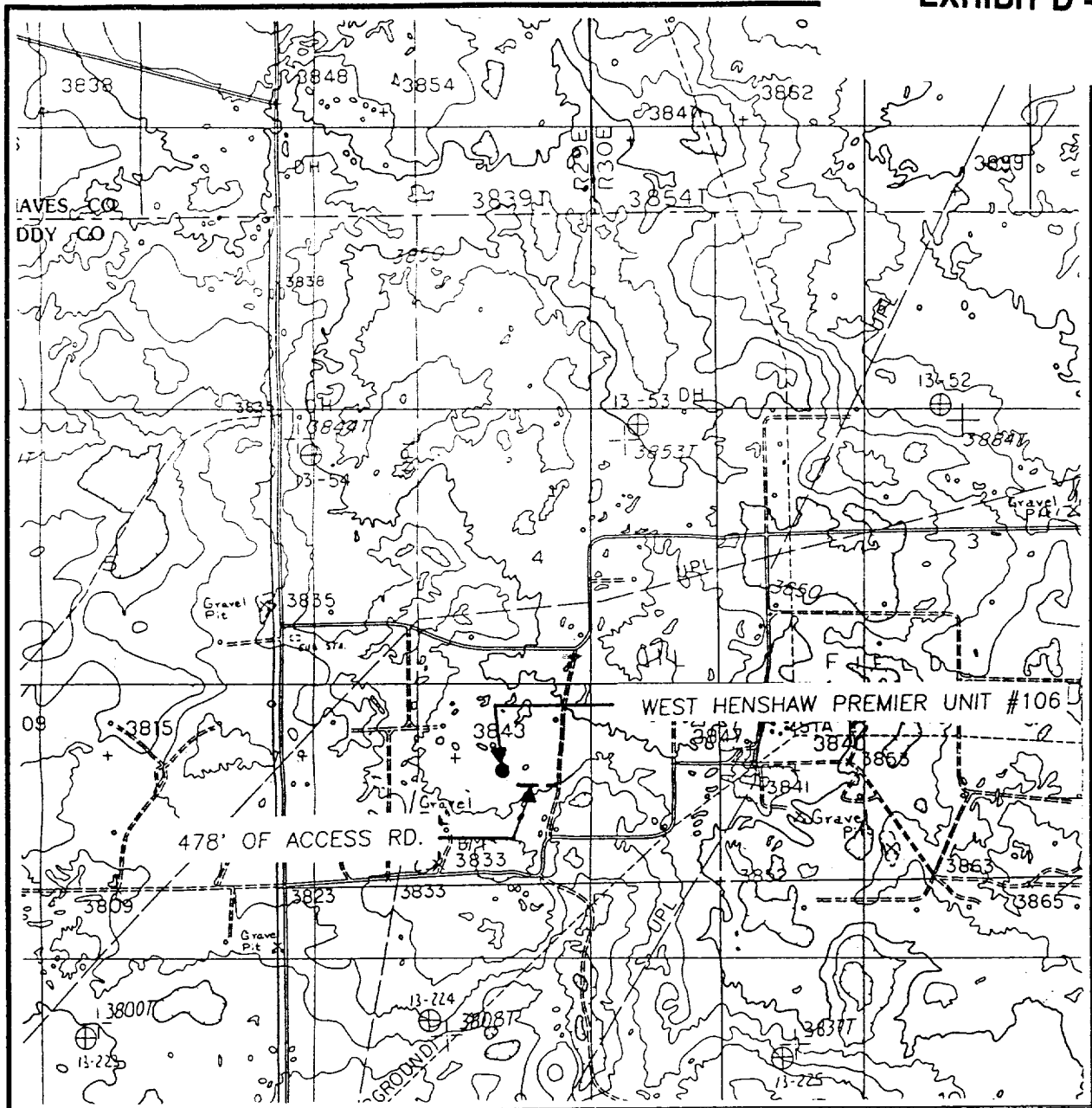
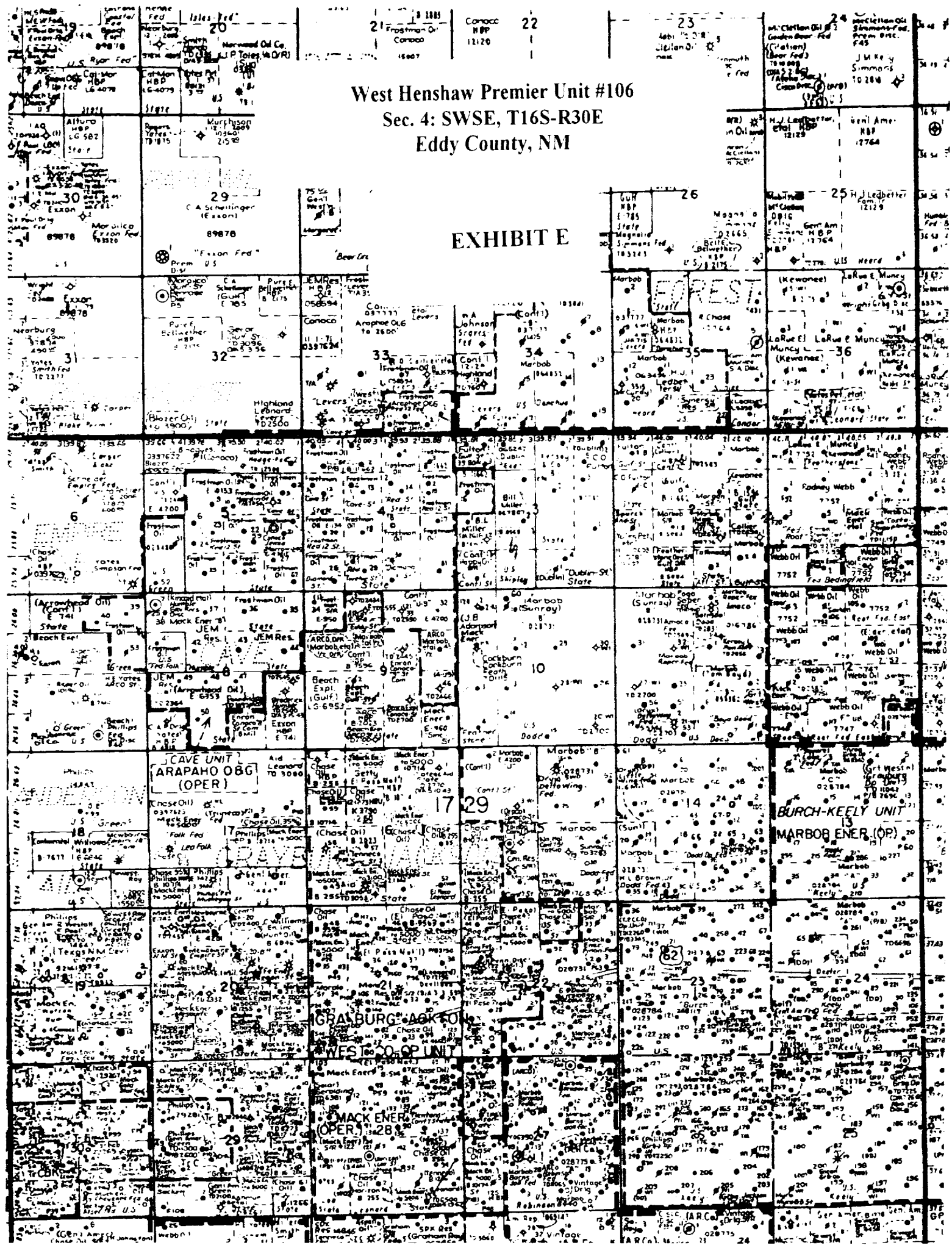


EXHIBIT E

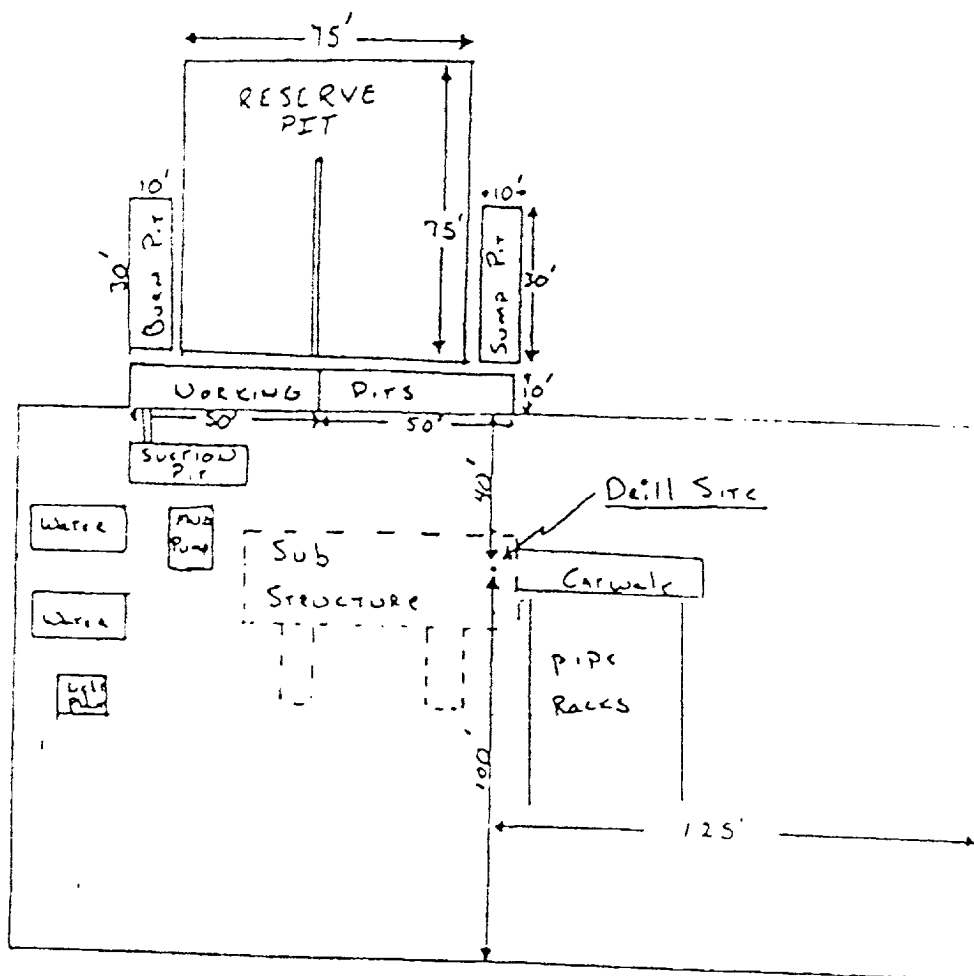


SUGGESTED PAD DIMENSIONS

Reserve Pits 4 ft. deep, plastic lined

Working pits 5 ft. deep

No cellar



Scale 1" = 50'

