

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
DRILL ☐ DEEPEN ☐
1b. TYPE OF WELL
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.)
1260' FSL & 1260' FEL
Unit 0

11 miles north of Loco, NM

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, T.O. 1260'
(Also to nearest drg. unit line, if any)

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1000'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3841'

5. LEASE DESIGNATION AND SERIAL NO.
CC NM 067610

7. UNIT AGREEMENT NAME
W. Henshaw Premier Unit #407

8. FARM OR LEASE NAME, WELL NO.
W Henshaw Premier Unit #407

9. API WELL NO.
30-05-31685

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

17. NO. OF ACRES ASSIGNED TO THIS WELL
40.0

20. ROTARY OR CABLE TOOLS
Rotary

22. APPROX. DATE WORK WILL START
ASAP

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#	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 10/20/00

PERMIT No. APPROVAL DATE

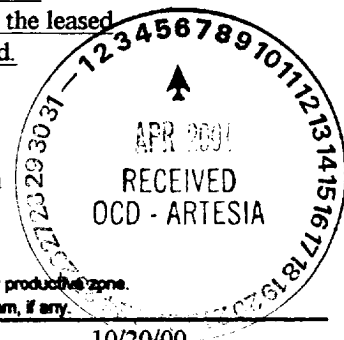
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:
APPROVED BY (ORIG. SGD.) ARMANDO A. LOPEZ TITLE Acting DATE APR 06 2001

*See Instructions On Reverse Side

APPROVED FOR 1 YEAR

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.



ROSWELL CONTROLLED WATER BASIN

EXHIBIT "A"
West Henshaw Premier Unit #407

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, 2.0% 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.

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 Dept.

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

Form C-102

Revised February 10, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code		Pool Name	
Property Code	Property Name			Well Number	
	WEST HENSHAW PREMIER UNIT			407	
OGRID No.	Operator Name			Elevation	
	SAGA PETROLEUM LLC			3833	

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		1260	SOUTH	1410	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

LOT 4	LOT 3	LOT 2	LOT 1
41.16 AC	41.12 AC	41.08 AC	41.04 AC
LOT 5	LOT 6	LOT 7	LOT 8
40 AC.	40 AC.	40 AC.	40 AC.
LOT 12	LOT 11	LOT 10	LOT 9
40 AC.	40 AC.	40 AC.	40 AC.
LOT 13	LOT 14	LOT 15	LOT 16
40 AC.	40 AC.	40 AC.	40 AC.
		3841.8	3845.8
		3821.6	3829.8

SCALE: 1" = 2000'

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

Title

1/20/01

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.

JANUARY 11, 2001

Date Surveyed

AWB

Signature & Seal of
Professional Surveyor

Ronald J. Edson 01/18/01
01-11-0034

Certificate No. RONALD J. EDSON 3239
GARY EDSON 12641

2001 JAN 25 11:43



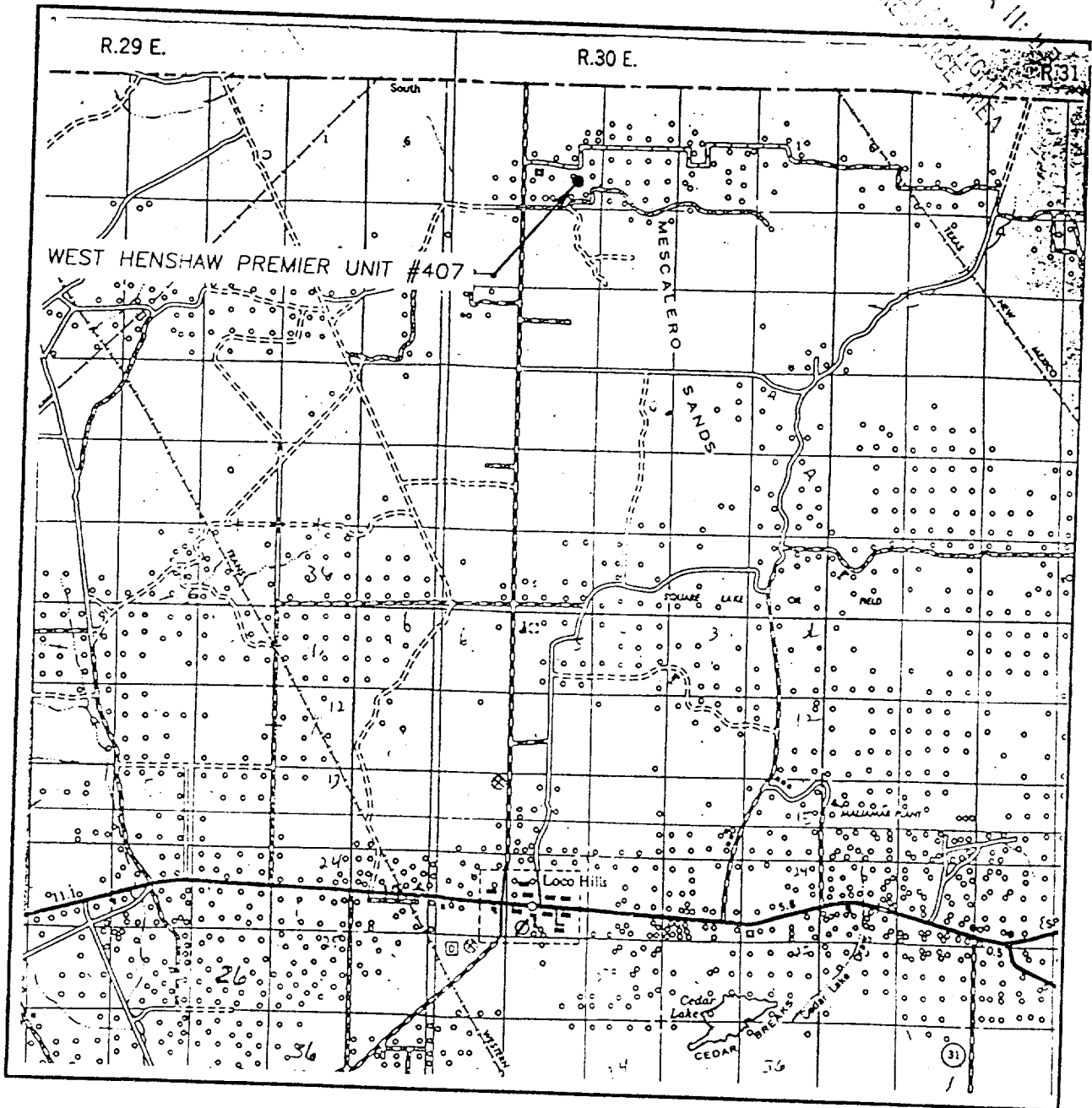
CONTOUR INTERVAL: 5'
HENSHAW TANK N.M.

U.S.G.S. TOPOGRAPHIC MAP
HENSHAW TANK, N.M.

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

VICINITY MAP

RECEIVED
2001 JAN 25 11:11 AM
COUNTY RECORDS
EDDY COUNTY, NEW MEXICO



SCALE: 1" = 2 MILES

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

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1260' FSL & 1410' FEL

ELEVATION 3833

OPERATOR SAGA PETROLEUM LLC

LEASE WEST HENSHAW PREMIER UNIT #407

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

EXHIBIT "B"

AMENDED SURFACE USE AND OPERATIONS PLAN

CULTURAL RESOURCES SURVEY

APPROXIMATE REHABILITATION SCHEDULE

LOCALITY: West Henshaw Premier Unit #407

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

RECEIVED
BUREAU OF LAND MANAGEMENT
APR 25 11:43 AM '07

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
1260' FSL & 1410' FEL
See attached Exhibit "C"

2) Bottom Hole Location

SWSE of Section 4, Township 16 South, Range 30 East, NMPM
Eddy County, New Mexico
1260' FSL & 1410' FEL
See attached Exhibit "C"

3) Lease Issued:

a) LC-067610

4) Record Lessee:

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

5) Acres in Lease:

SE4 160.00

6) Acres Dedicated to Well:

There are 40.00 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 $\frac{3}{4}$ miles before Eddy County Road 256. Turn east go approximately $\frac{3}{4}$ mile and turn left (north) for approximately $\frac{1}{4}$ mile and turn right (east) on to the new access road. The new access road is approximately 383' long. Access is highlighted on the Exhibit "D".

2) Planned Access:

A. Length and Width: The new access road will be approximately 383 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 its 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 the operation 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 pipeline which runs parallel to the north side of 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:

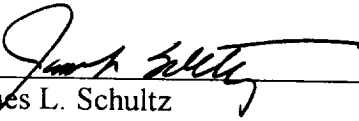
Archeological Survey Consultants of Roswell, NM conducted an archaeological survey of the well pad. A report will be filed under separate cover. Bob Martin of Carlsbad, New Mexico conducted an archaeological survey of the proposed access road. A report will be filed with the BLM under separate cover.

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: 1-20-01

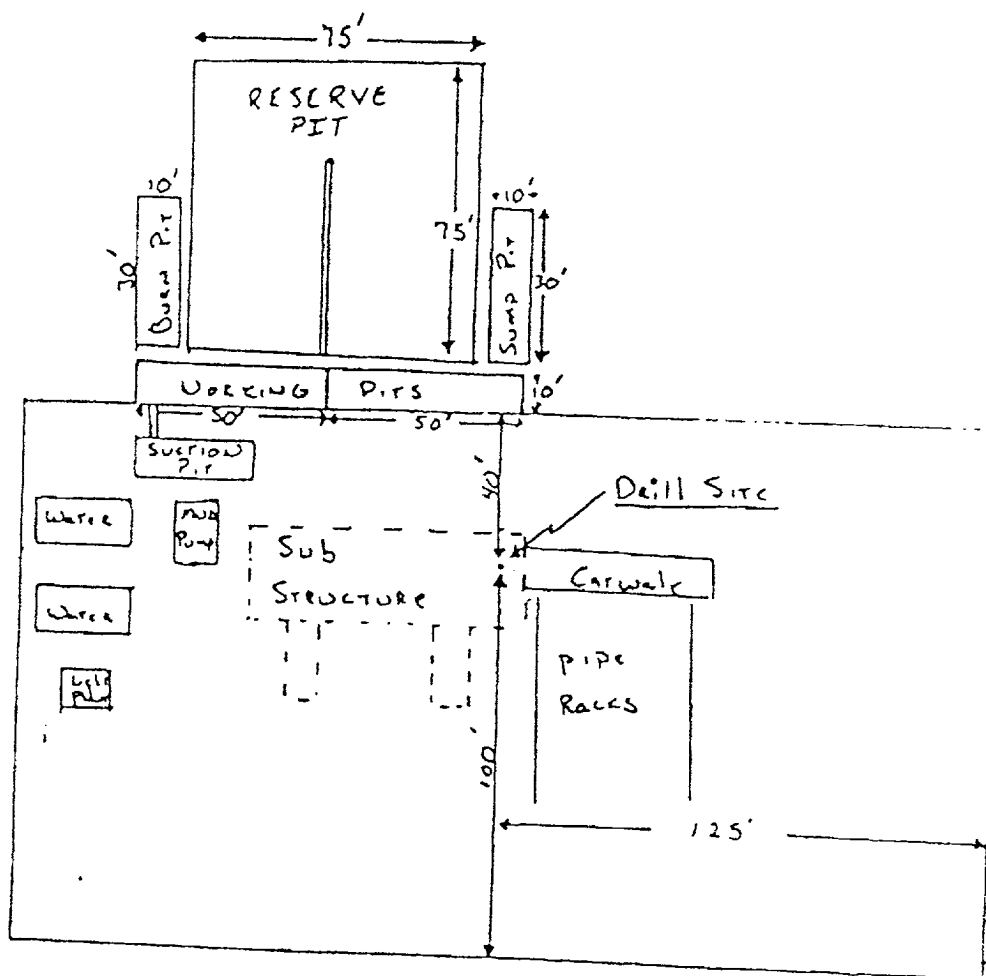
EXHIBIT E

SUGGESTED PAD DIMENSIONS

Reserve Pits 4 ft. deep, plastic lined

Working pits 5 ft. deep

No cellar



Scale 1" = 50'

