Cross Section of the H. N. G. Oil Company
Wilson 21 Federal #6Y, 1700' FNL & 890' FWL
Section 21, T-26-S, R-36-E, Lea County, New Mexico

34.4

34.0

34.0

37.8

H. N. G. Oil Company
Wilson 21 Federal #6Y

34.9 37.4 36.8 35.2 2934 34.0 34.0 34.0 34.0

34.0

34.4

34.4

Scale 1"=50'

34.2

TOPOGRAPHIC LAND SURVEYORS

APPLICATION FOR PERMIT TO DRILL

1. The geologic surface formation is Quaternary.

2. The estimated tops of important geologic markers are:

1.	Yates ≈ 3150 Feet	6.	
2.		7.	
3.		8.	
4.		9.	
5.		10.	

3. Depths at which oil, water, or gas bearing formations are expected to be encountered.
Yates From 3150 Feet To T.D.

4. Brief description of testing, logging, and coring programs.
Will probably Run openhole logs CNL-Density And Forxo-guard at T.D., pulling the gamma ray To Surface Thru Pipe which will be set at about 1300 Feet

5. Any anticipated abnormal pressures or temperatures expected? Any potential hazards - H2S?
NONE Expected

1. (A) Pressure control equipment to be used.

900 Series Double Cameron Type "U" BOP w/ Blind Rams & Pipe Rams
BOP can be activated from closing unit
Drill String Safety Valve can be installed at surface [illegible] point

(B) Pressure ratings (or API series).

900 Series. 3000 psi.

(C) Testing procedures and frequency.

BOP will be tested at installation point

(D) Schematic Diagram.

Attached

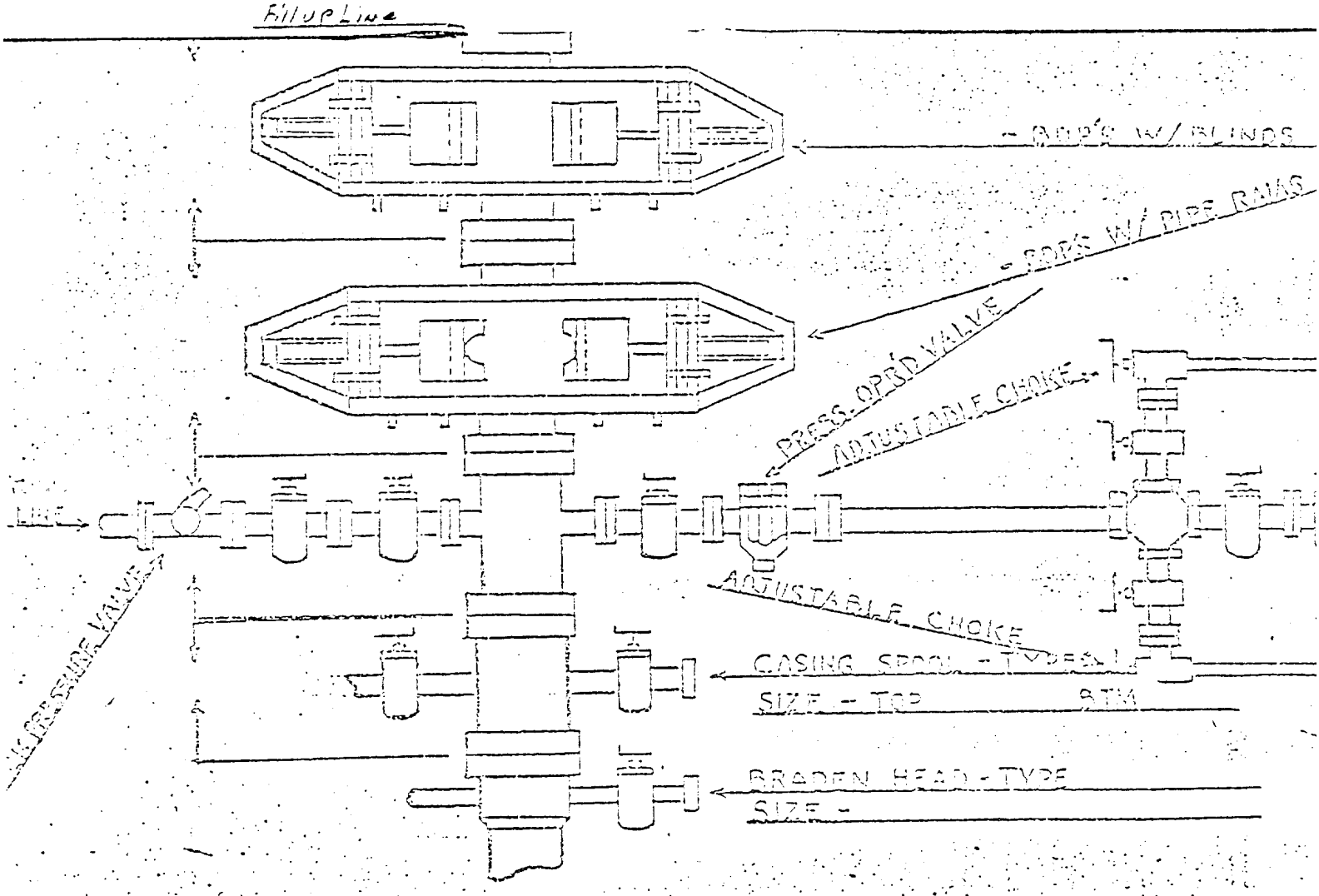
2. Mud Program

Type and Characteristics

0 - 1000 - Native
1000 - T.D 10.0 ppg Brine water

Quantities and types of weighting material to be maintained

Some Barite on Location


Fill up Line
- BOP'S W/ BLINDS
- BOPS W/ PIPE RAMS
PRESS. OPS'D VALVE
ADJUSTABLE CHOKE
LINE
ADJUSTABLE CHOKE
CASING SPOOL - TYPE
SIZE - TOP
BTM
BRADEN HEAD - TYPE
SIZE -

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
MING OIL COMPANY
Wilson 11 Federal Sec. 21-26S-36E
Lea County, New Mexico
Lease New Mexico 23199

#1	300' FSL & 1650' FWL	#5	2000' FNL & 1980' FWL
#2	330' FSL & 990' FWL	#6	1700' FNL & 990' FWL
#3	1910' FSL & 1800' FWL	#7	660' FNL & 2000' FWL
#4	1620' FSL & 990' FWL	#8	630' FNL & 990' FWL

This plan is submitted with the Application for Permit to Drill the above described wells. The purpose of the plan is to describe the location of the proposed wells, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS:

A. Exhibit "A" depicts the location of the proposed wells as staked. Upon entering Jal, New Mexico, proceed south on No. 3rd from Hwy. 128 approximately 3 miles where NM 205, an improved road begins. Approximately 6.1 miles southwest an existing lease road goes north .4 mile before breaking to the northeast and proceeding for another .4 mile to well #3. Wells #3 & 4 will set directly off of this existing lease road.

B. Portions of the existing lease road will have minor repairs to upgrade the road. Repairs will consist of replacing the eroded caliche surface with a new caliche surface 6 inches deep and 12 feet wide, watered and compacted.

2. PLANNED ACCESS ROADS:

A. Length and width: Initial new road required will be 12 feet wide and 1358 feet long to the south with 660' of access running east and west. This new road is labled and color coded green (Exhibit A). If drilling is continued, the remianing wells will be drilled with the new lease road extending north 2618 feet (red line exhibit A) with 1970 feet of access road to the various wells as needed. The center line of the proposed new road from the beginning to the wells, has been staked and flagged with the stakes being visible from any one to the next.

B. Surfacing Material: Six inches of caliche, water compacted, and graded.

C. Maximum Grade: 3 percent

D. Turnouts: One passing turnout will be constructed approximately 679 feet north of wells 1 and 2. If northern road is built, two turnouts will be constructed at 1000 foot intervals.

E. Drainage Design: New road will have a drop of 6 inches from center line on each side.

F. Culverts: None required.

G. Cuts and Fills: None required.

H. Gates, Cattleguards: One cattleguard will be installed in fence dividing section lines. Location is marked with X on exhibits A & B.

3. LOCATION OF EXISTING WELLS:

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

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. There are no existing production facilities.

B. If production is encountered, a temporary facility will be established on the southwest corner of the drill pad on #1 well, and if warrented, a centeral battery at a later date built at the intersection of the existing lease road and proposed new lease road (see exhibit B). If #1 well is productive, the flow line will be located on the well pad and no additional surface disturbance will occur. The remaining flowlines if laid would pass under roads in route to the facility thus requiring conduit installation when needed.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. Water for drilling will be purchased from commercial sources and transported by truck to the wellsites over the existing and proposed roads shown on Exhibits "A" and "B".

6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for surfacing the road and the well pads will be obtained from commercial sources and transported by truck to the various sites.
FROM PIT SE¼SE¼ SEC. 9

7. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.

C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.

D. Current law and regulations pertaining the disposal of human waste will be complied with.

E. Trash, waste paper, garbage, and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of trash pit is shown on Exhibit "C".

F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

A. None required.

9. WELLSITE LAYOUT:

A. Exhibit "C" shows the relative location and dimensions of the wellpad, mud pits, reserve pit, trash pit, and location of major rig components.

B. Only minor levelling of the wellsite will be required. No significant cuts and fills will be necessary.

C. The reserve pit will be plastic lined.

D. The pad and pit area has been staked and flagged.

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 location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.

B. Any unguarded pits containing fluids will be fenced until they are filled.

C. After abandonment of the wells, surface restoration will be in accordance with the agreement with the surface owner. Pits will be filled and location will be cleaned. The pit area, and well pads will be ripped to promote revegetation. Access roads will remain as per agreement with the surface owner.

11. OTHER INFORMATION:

A. Topography: Land surface is undulatory and dumy, sloping gently toward the south at about 20 feet per mile.

B. Soil: Soil a deep fine sand underlain caliche.

C. Flora and Fauna: The vegetative cover is moderate and is primarily shinnery with some perenial native range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles and some birds.

D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the area.

E. Residences and Other Structures: None. The nearest water well is a windmill approximately 2 miles southeast of #1.

F. Archeological, Historical and Cultural Sites: None observed in the area, except for a small archelogical site north of restaked location on well #8.

G. Land Use: Grazing and hunting in season.

H. Surface Ownership: The surface area of both the access road and drill sites are privately owned by Mr. Monty Beckham, Box 1230, Jal, New Mexico.

12. OPERATOR'S REPRESENTATIVE:

The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

Mr. Phil Stinson
4016 East Everglade
Odessa, Texas 79760

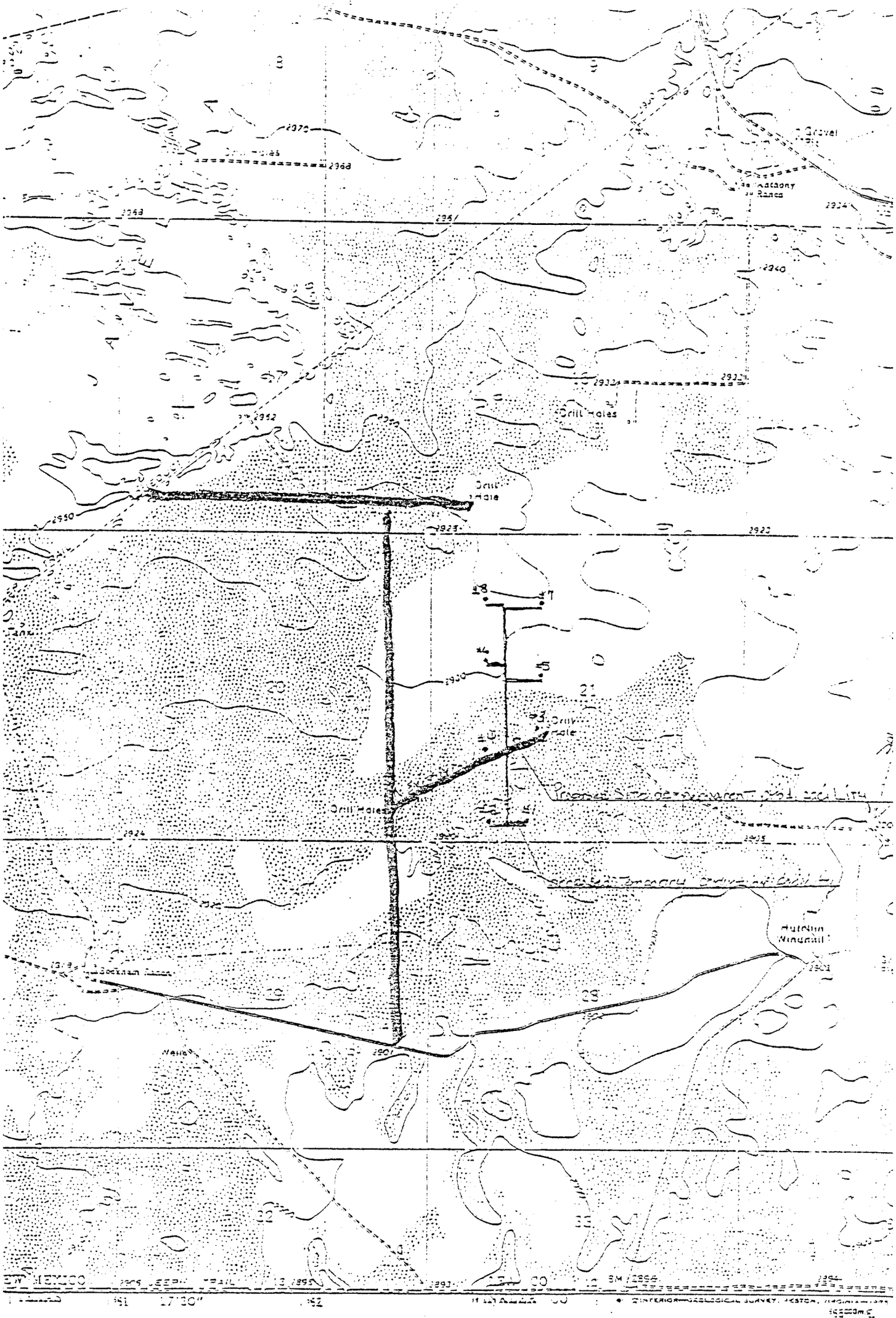
Phone: Business 1/915/683-4871
Home 1/915/362-6240

13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; 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 HNG Oil Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Oct 13, 1978
DATE

W.L. Lorette
Vice-President of Operations



Scale 1" = 2000'

Exhibit "B"

NEW MEXICO

MILE

7000 FEET

KILOMETRE

ROAD CLASSIFICATION

Primary highway; hard surface

Light-duty road, hard or improved surface

Secondary highway; hard surface

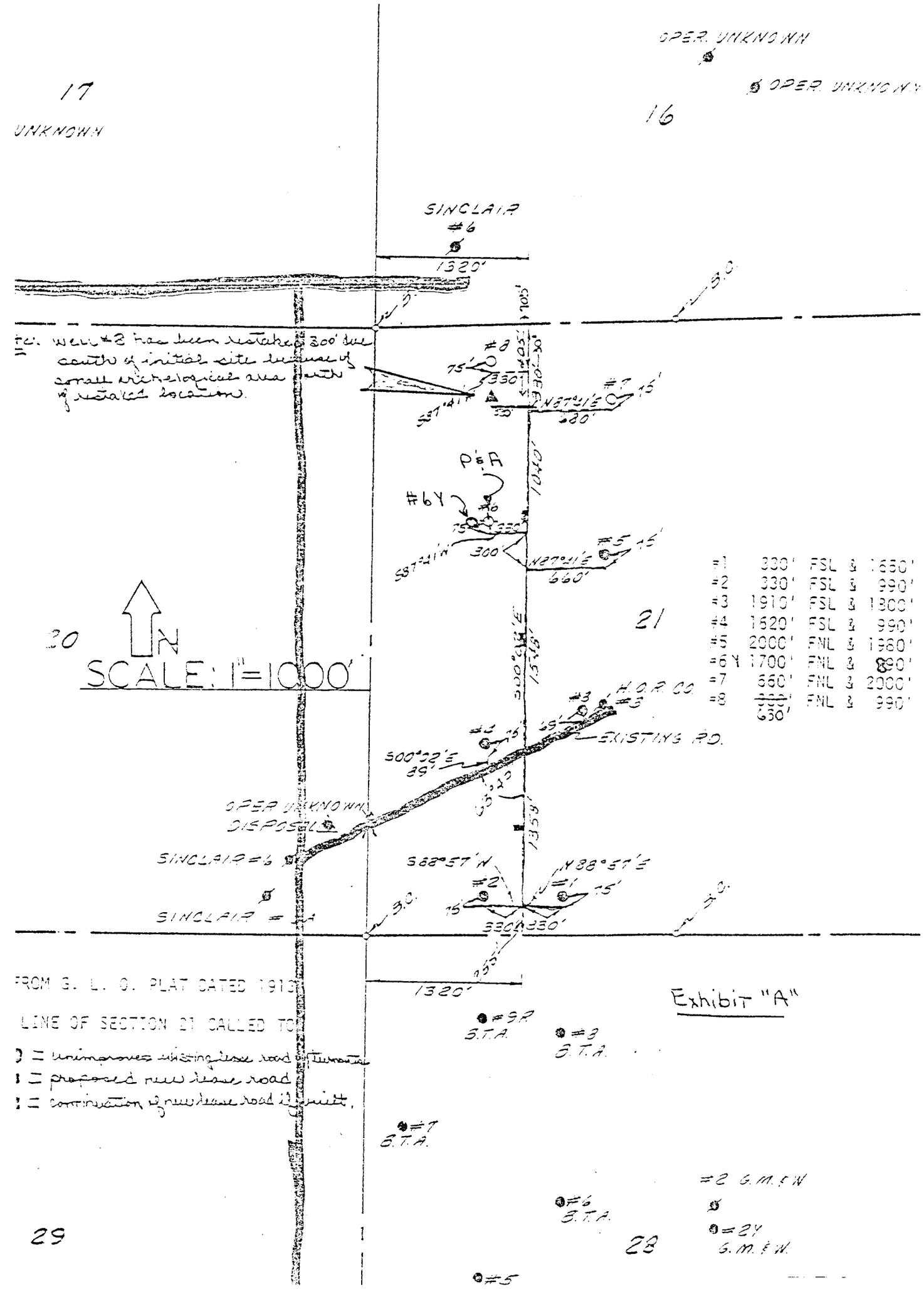
Unimproved road

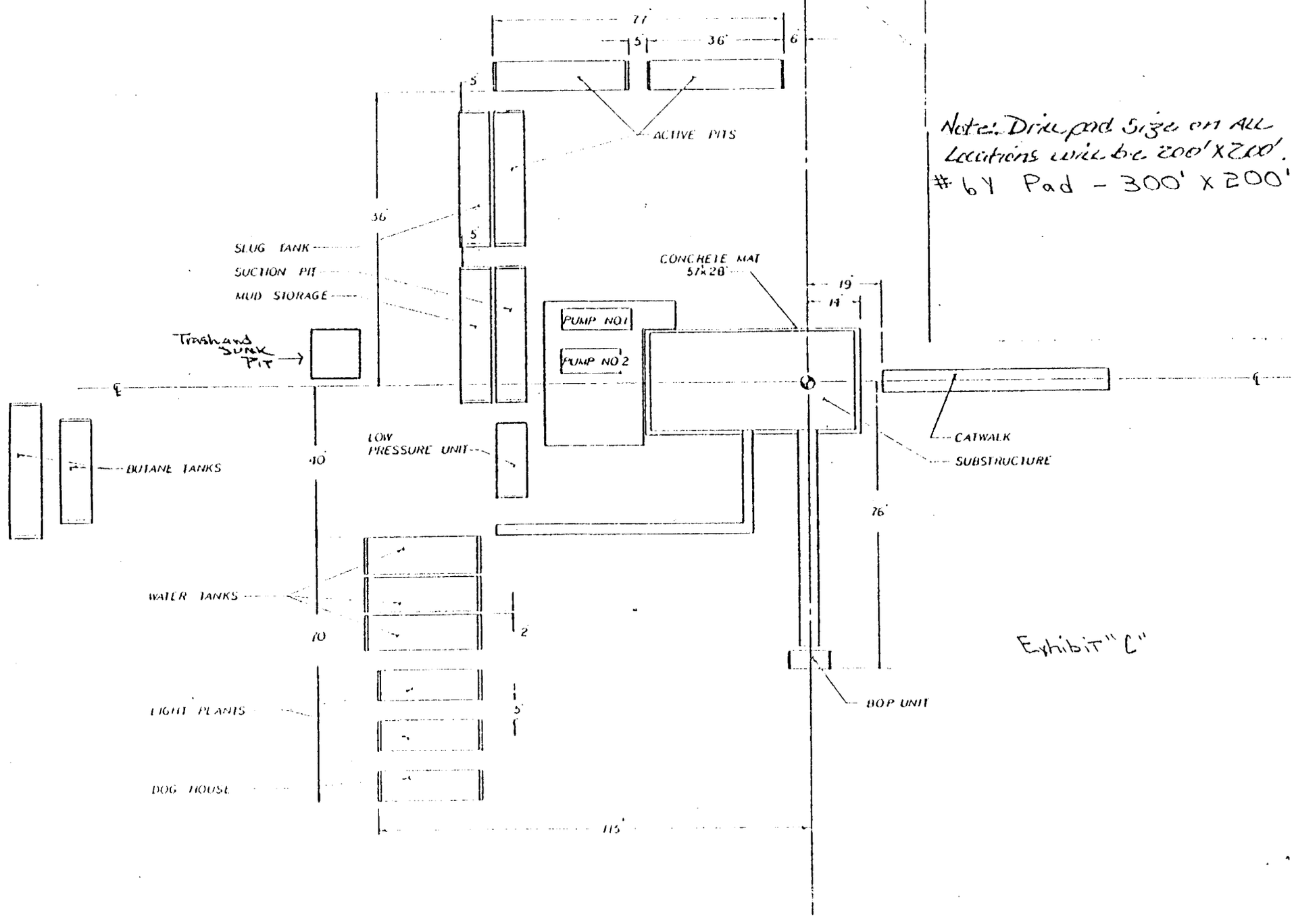
Interstate Route

U. S. Route

State R

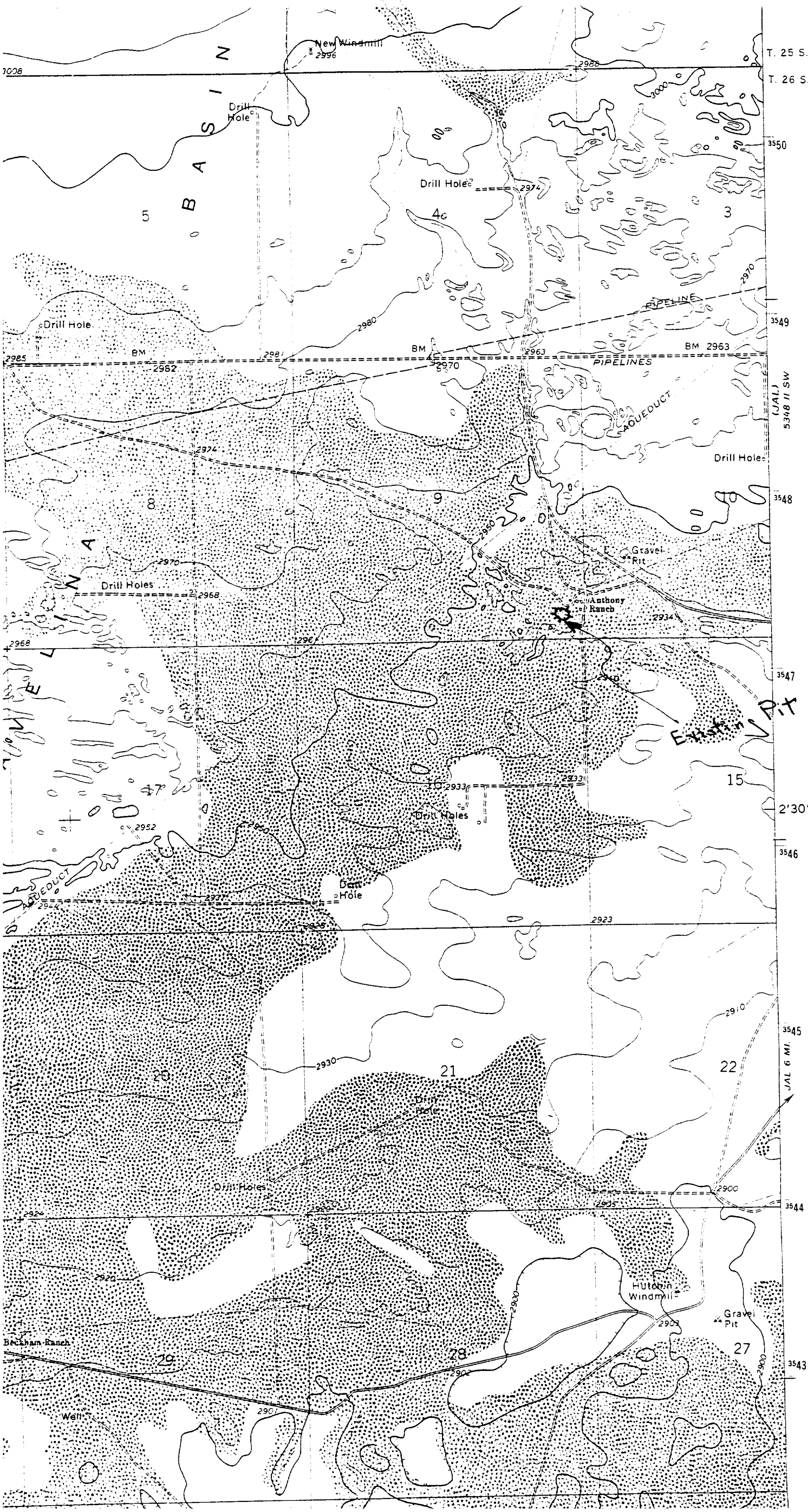
Plat showing [redacted] roads and relation of H. [redacted] S. OIL COMPANY Wilson 21 Federal No. 1, 2, 3, 4, 5, 6, 7 and 8 wells to all producing, abandoned, and disposal wells in Section 17, 16, 20, 21 and 28, T-26-S, R-36-E, Lea County, New Mexico





Note: Drill pad size on all locations will be 200' x 200'.
#64 Pad - 300' x 200'

Exhibit "C"



T. 25 S.
T. 26 S.
New Windmill
2996
2988
3000
Drill Hole
BASIN
5
4
3
3550
Drill Hole
2974
2980
2970
PIPELINE
3549
Drill Hole
BM
2985
2962
2981
BM
2970
2963
BM 2963
PIPELINES
AQUEDUCT
(JAL)
5348 II SW
Drill Hole
2974
8
9
10
3548
2950
Gravel Pit
2970
Drill Holes
2968
Anthony Ranch
2934
2968
3547
Existing Pit
15
16
2933
2931
17
Drill Holes
2'30"
2952
3546
2950
AQUEDUCT
2944
2937
Drill Hole
2923
2910
3545
2930
20
21
22
JAL 6 MI.
Drill Hole
Drill Holes
2900
2905
3544
2924
2920
2900
Hutchin Windmill
Gravel Pit
2903
Beckham Ranch
29
28
27
3543
2900
Well

Borrow Pit, Section 9, T26S, R36E,
Lea County, New Mexico

Location

The existing borrow pit is situated in the:

SE¼SE¼, Section 9, T26S, R36E, NMPM, Lea County, NM

Map Reference: USGS JAVELINA BASIN QUADRANGLE, 7.5 Minute Series, 1973.

Terrain

The investigated borrow pit is located in a district marked by exceptional coppice dune development. Associated dunes reach as much as 6 m or more in height. Basinal areas tend to be closed and circular in shape. Pedons uniformly belong to the Typic Torripsamment subgroup and consist of sandy loams and loamy sands. Surficial deposits are underlain by a thin veneer of indurated caliche of a secondary type and thence a thick deposit of lacustrine deposits laid down during Pleistocene times.

Floristics

Principal denizens of local soils making up the observed floral overstory are: *Prosopis juliflora*, *Artiplex canescens*, and *Yucca glauca*. Forbs include: *Maurandya wislizenii*, *Croton sp.*, *Eriogonum annuum*, *Hedyotis humifusa*, *Mentzelia sp.*, *Solanum eleaegnifolium*, and *Senecio spartiodes*. Grasses include: *Aristida sp.*, *Sporobolus sp.*, *Cenchrus incertus*, and *Chloris cuculata*.

Cultural Resources

No archaeological sites or isolated manifestations were recorded during this reconnaissance. Owing to the presence of a

thick alluvium of lacustrine sediments underlying surficial deposits, lithic inclusions are absent in attendant soils. When combined with a shortage of water this area was tapped primarily for its faunal and avian resources rather that its flora.

Recommendations

NMAS recommends clearance for the proposed expansion of the caliche pit and suggests that HNG OIL COMPANY proceed with its existing plans. Clearance, of course, is granted by the Bureau of Land Management.