Form 9-331 C
(May 1963)

NMOCC COPY

SUBMIT IN TRIPLICATE (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-22788

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED
DEC 29 1978
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

JAN 12 1979

5. LEASE DESIGNATION AND SERIAL NO.: NM 17425

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Golden Lane 36 Federa

2. NAME OF OPERATOR: HNG Oil Company

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: P.O. Box 2267, Midland, Texas 79702

10. FIELD AND POOL, OR WILDCAT: Wildcat (Morrow)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 2080' FSL & 1880' FEL
At proposed prod. zone: Same

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 36, T-20-S R-29-

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 14 miles NE of Carlsbad

12. COUNTY OR PARISH: Eddy

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
1880'	640	320
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
NONE	13,000	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3395' GR

22. APPROX. DATE WORK WILL START*: 2-1-79

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	~~13-3/8"~~ 16"	48#	650'	600 sacks
12-1/4"	9-5/8"	40#	~~2450'~~ 3000'	2000 sacks
8-1/2"	7"	26# - 29#	10,250'	700 sacks
6-1/8"	4-1/2" Liner	13.5#	13,000'	250 sacks

Pressure Control Program

A double blow-out preventer and rotating head with a choke manifold will be installed at the 9-5/8 and 7-inch casing setting point. The drill string will be equipped with a safety valve. The 9-5/8 inch casing will be tested to 3000 lbs. and the 7-inch to 5000 lbs. after installation.

Acreage is no dedicated.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 Betty A. Gildon TITLE Regulatory Clerk DATE 12-28-78

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE 1-12-79

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

United States Department of the Interior

GEOLOGICAL SURVEY
P. O. Box 26124
Albuquerque, New Mexico 87125

JAN 12 1979

HNG Oil Company
Post Office Box 2267
Midland, Texas 79702

HNG OIL COMPANY
Golden Lane "36" Fed. No. 1
2080 FSL 1880 FEL Sec. 36, T20S, R29E
Eddy County Lease No. NM-17425
Above Data Required on Well Sign

Gentlemen:

Your APPLICATION FOR PERMIT TO DRILL the above-described well in the Secretary's Oil-Potash Area to a depth of 13,000 feet to test the Morrow is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.

2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.

3. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should be not less than 8" x 5" in size and each page should identify the well.

4. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate sandstone brown (Federal Standard Color No. 595A, color 20318 or 30318).

5. Before drilling below the 9-5/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.

6. A kelly cock will be installed and maintained in operable condition.

7. After setting the 9-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.

8. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:

   (1) A recording pit level indicator to determine pit volume gains and losses.

   (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.

   (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.

9. Notify the Survey in sufficient time to witness the cementing of the 9-5/8" casing.

10. Cement behind the 13-5/8" and 9-5/8" casing must be circulated.

Sincerely yours,

(Original Signed) JOE D. RAMEY

Area Oil and Gas Supervisor

Enclosure

cc:
Regional Manager, Denver
Mining Branch (2)
BLM, Roswell (w/cy Notice)
✓ NMOCD, Artesia (2 w/2 cys Notice)
Artesia
Roswell (w/cy Notice)
Area Potash
Area Chronc.

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
H. N. G. OIL COMPANY	GOLDEN LANE 36 Federal	1

Unit Letter	Section	Township	Range	County
J	36	T-20-S	R-29-E	Eddy

Actual Footage Location of Well:
2080' feet from the South line and 1880' feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3395	Morrow	Wildcat	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

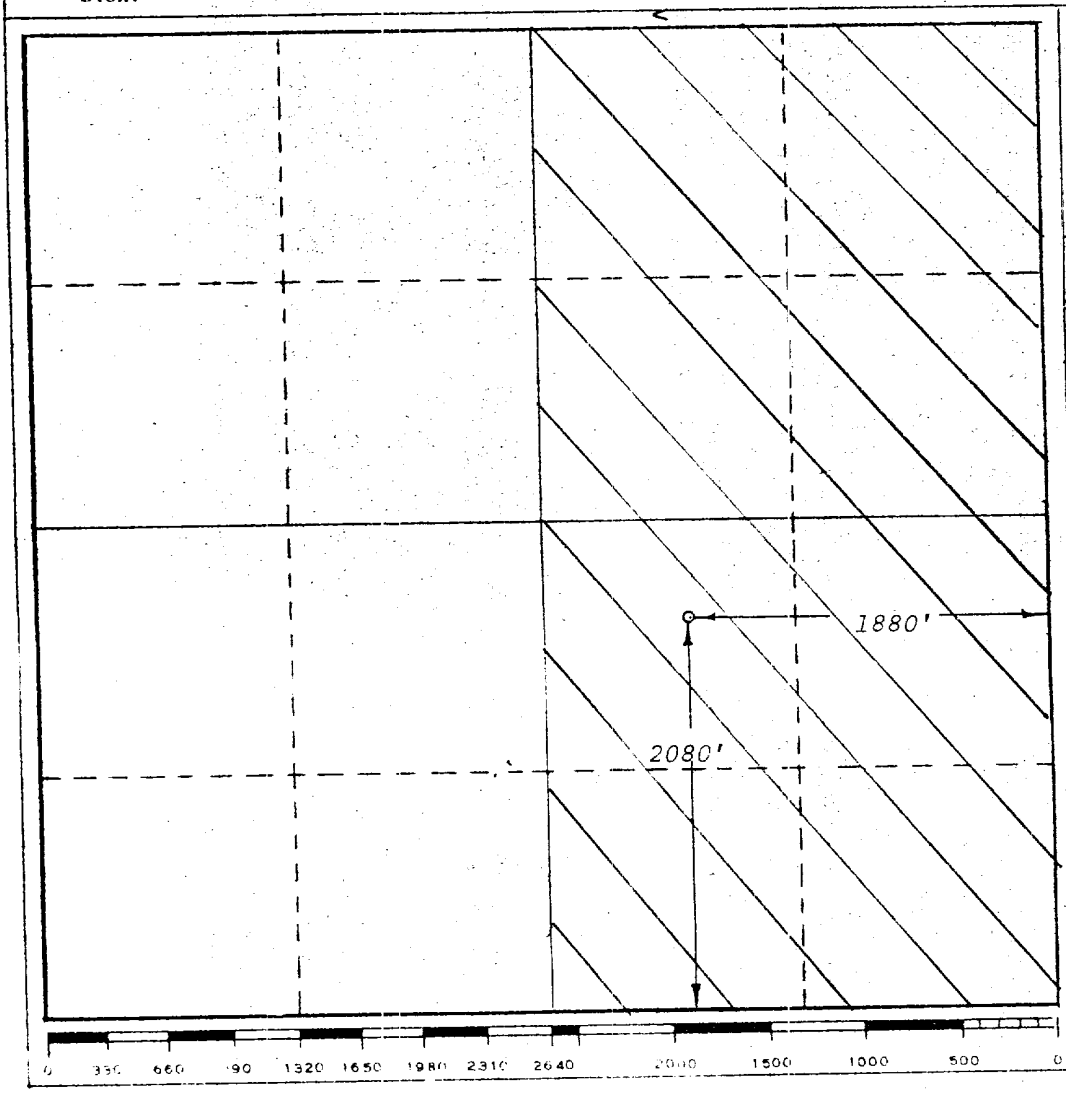
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Betty A. Gildon

Name: Betty A. Gildon

Position: Regulatory Clerk

Company: HNG Oil Company

Date: December 28, 1978

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 knowledge and belief.

Date Surveyed: 11-13-78

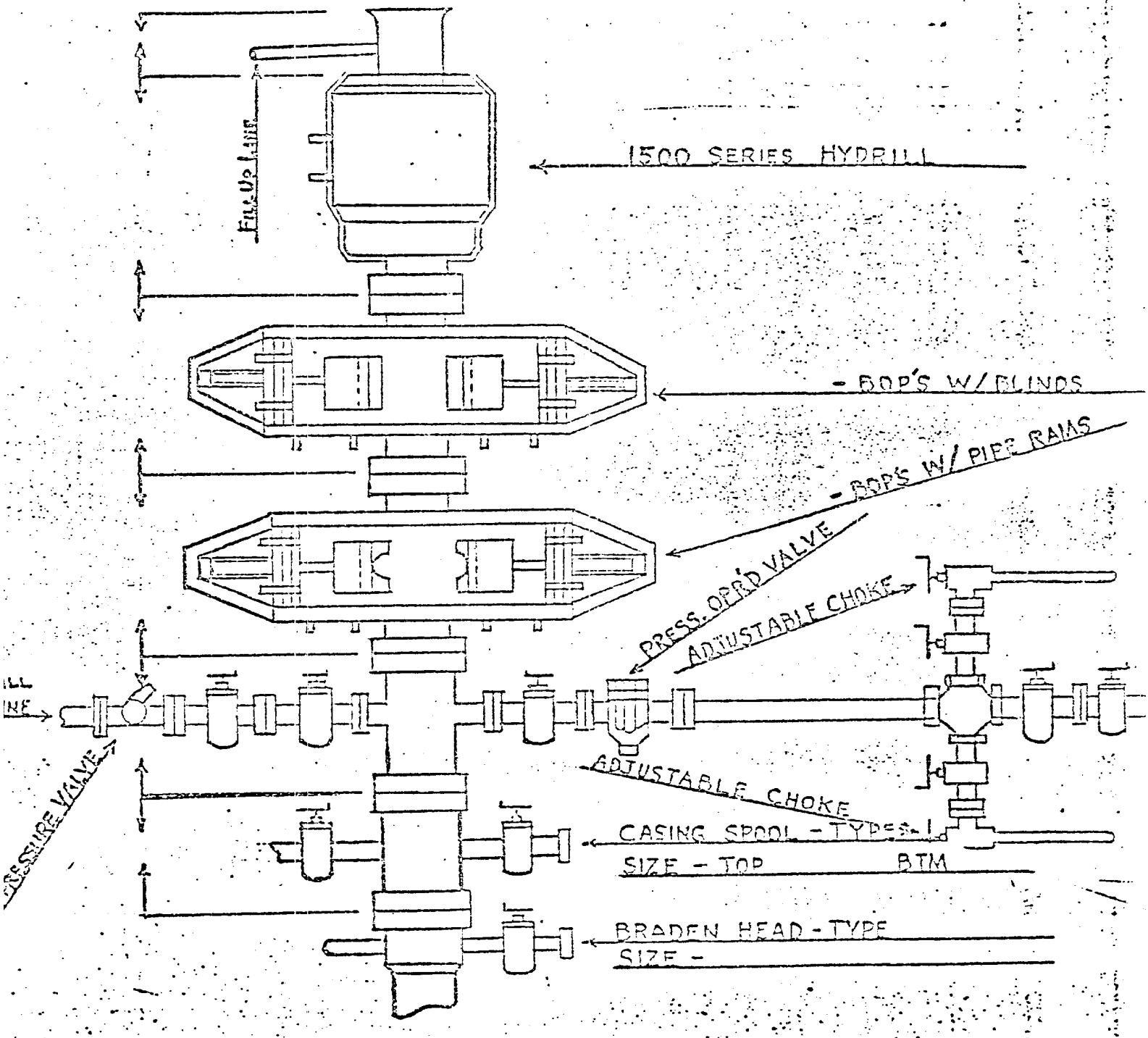
Registered Professional Engineer and/or Land Surveyor

Gary L. Jones

NEW MEXICO — GARY L. JONES — 6689 — REGISTERED LAND SURVEYOR

Certificate No. 6689

DRILLER'S ZERO 1ft ABOVE ROTORY TABLE



APPLICATION FOR PERMIT TO DRILL

1. The geologic surface formation is Quaternary.

2. The estimated tops of important geologic markers are:

1.	Delaware Sand 5190	6.	Abo 11050
2.	Bone Spring Lm 6490	7.	Morrow Clastics 11830
3.	3rd Bone Spring Sd 9300	8.	
4.	Wolfcamp 9750	9.	
5.	Strawn Lm 10920	10.	

3. Depths at which oil, water, or gas bearing formations are expected to be encountered.

Wolfcamp Limes	9750 - 10300
Strawn Lime	10920 - 11070
Abo Sd	11630 - 11650
Morrow Sands	11830 - 12650

4. Brief description of testing, logging, and coring programs.

Gamma Ray : Surface - TD
Sonic and/or Neutron - Density : Top Zone Sd - T.D.
Dual Laterolog : Top Zone Sd - TD
Mud Logger : Top Zone Sd - TD
Drillstem test as necessary
No coring anticipated

5. Any anticipated abnormal pressures or temperatures expected? Any potential hazards - H2S?

Possible abnormal pressures from Wolfcamp through the Abo

No H_2S zones expected.

GOLDEN LANE DERAL "36" #1

1. (A) Pressure control equipment to be used.
1 - 1500 Series Hydrill Annular BOP
1 - 900 Series Double Cameron Type U BOP with blind rams and pipe rams.
BOP can be actuated from remote control closing unit.
Drill string safety valve will be installed at 10-3/4" casing p

(B) Pressure ratings (or API series).

900 Series - 3000# W.P.
1500 Series - 5000# W.P.

(C) Testing procedures and frequency.

BOP's will be tested at installation point as indicated on drill permit application.

(D) Schematic Diagram.

Attached

2. Mud Program

Type and Characteristics

0 - 400' - Native
400' - 2500' - 10.0 ppg Brinewater
2500' - 10,250' - 10.0 ppg Brinewater
If higher weight is required, a brine mud would be used having the following characteristics:

10.0 - 12.5 ppg
30 - 50 Viscosity
10 - 20 CC Fluid Loss

Quantities and types of weighting material to be maintained

500 sx Barite on location

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

HNG OIL COMPANY

Golden Lane Federal 36 #1
Sec. 36 T-20S R-29E
Eddy County, New Mexico
Lease New Mexico 26880

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 operation 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 enviromental effects associated with the operation.

1. EXISTING ROADS:
   A. Exhibit "A" depicts the location of the proposed well as staked. As noted, the wells location is directly south of NM 62-180 and .8 miles west of NM 31.

2. PLANNED ACCESS ROADS:
   A. Length and Width: Initial new road required will be 12 feet wide and 1030 feet long to the south. This new road is labled and color coded on Exhibit "B". The center line of the proposed new road from the beginning to the well 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 500 feet north of the wellsite.
   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 line dividing property lines.

3. LOCATION OF EXISTING WELLS:
   A. Existing wells are shown on Exhibit "B".

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 drill pad, and if warrented, a production facility would be built at a later date in the immediate area of the drill pad location. If the well is productive, the flowline would also be located on the drill pad site and no additional surface disturbance will occur.

5. LOCATION AND TYPE OF WATER SUPPLY:
   A. Water for drilling will be purchased from a commercial source and transported by truck to the wellsite over the proposed road shown on Exhibit "B".

6. SOURCE OF CONSTRUCTION MATERIALS:
   A. Caliche for surfacing the road and the well pad will be obtained from commercial sources and transported by truck to the site.

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 laws and regulations pertaining to the disposal of human waste will be complied with.
   E. Trash, waste paper, garbage, and ink 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 well 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 operation will be removed. Pits will be filled and location cleaned of all trash and junk to leave the wellsite in as an alsthetically pleasing condition as possible.
   B. Any unguarded pits containing fluids will be fenced until they are filled.
   C. After abondonment of the well, 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 pad will be ripped to promote revegetation. Access roads will be dealt with as per agreement with the surface owner.

11. OTHER INFORMATION:
   A. Topography: Land surface is undulatory and duny, sloping gently toward the south at about 30 feet per mile.

B. Soil: So is 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. There are no water wells in the area.
F. Archeological, Historical and Cultural Sites: An archeological site was noted on the southern boundries of the location but will be avoided by restricting operations to within 100' of the southwest corner of the well pad.
G. Land Use: Grazing and hunting in season.
H. Surface Ownership: Federally owned.

12. OPERATOR'S REPRESENTATIVE:
The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

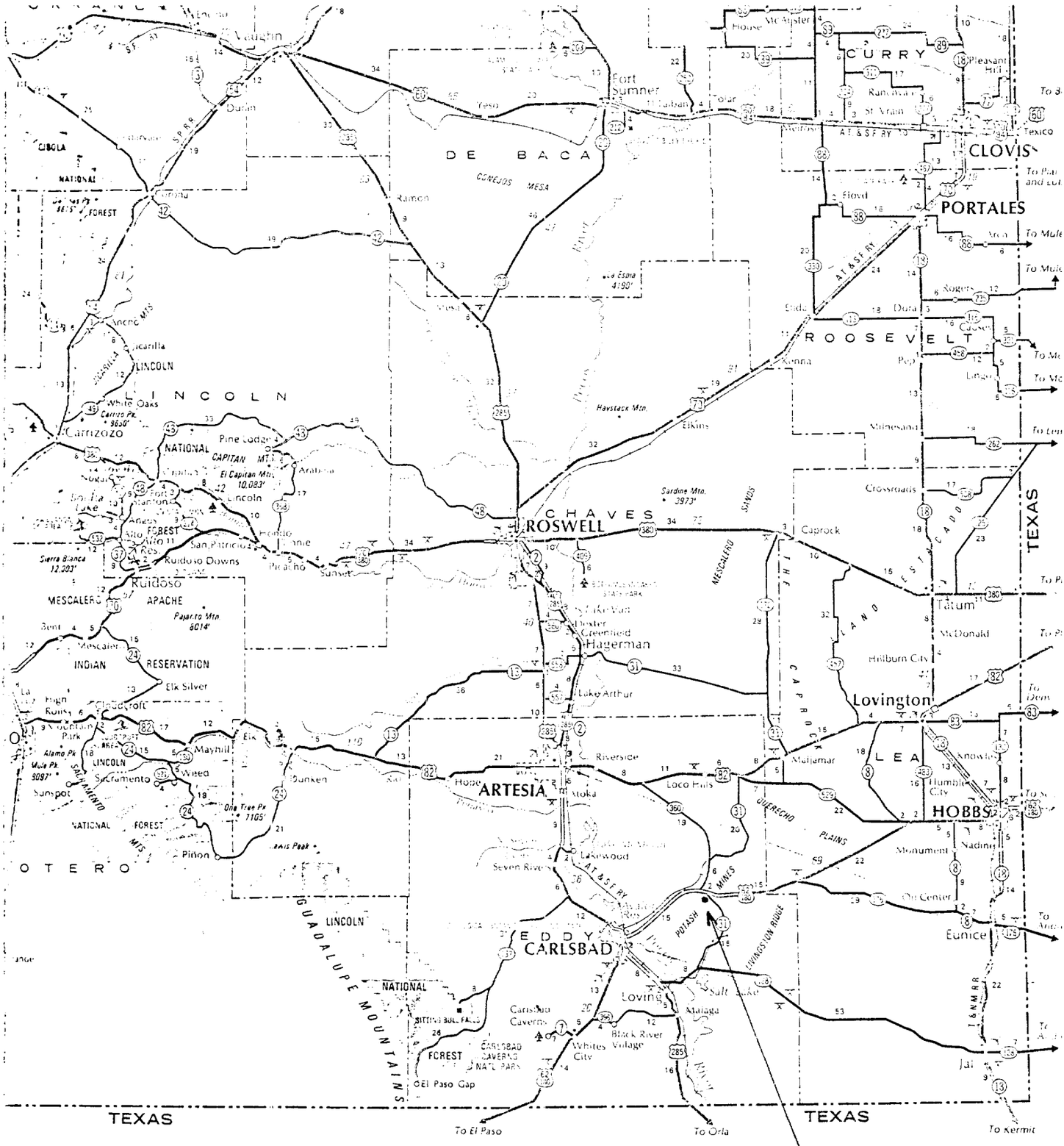
Mr. Phil Stinson
4016 East Everglade
Odessa, Texas 79760

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.

November 28, 1978

W.L. Lorette
Vice-President Of Operations



Well Site

N

SPECIAL FEATURES

- Parks and Monuments
- Pueblos
- Points of interest
- Commercial Airports
- Military Airports
- Race Track
- Roadside Rest Areas
- Ski Areas
- Fish Hatcheries

POPULATION SYMBOLS

- State Capital
- County Seats

Official

ROAD MAP of NEW MEXICO

ISSUED BY
NEW MEXICO STATE HIGHWAY DEPARTMENT

SCALE IN MILES

1973

Exhibit "A"

ARTERIES IN PRINCIPAL CITIES

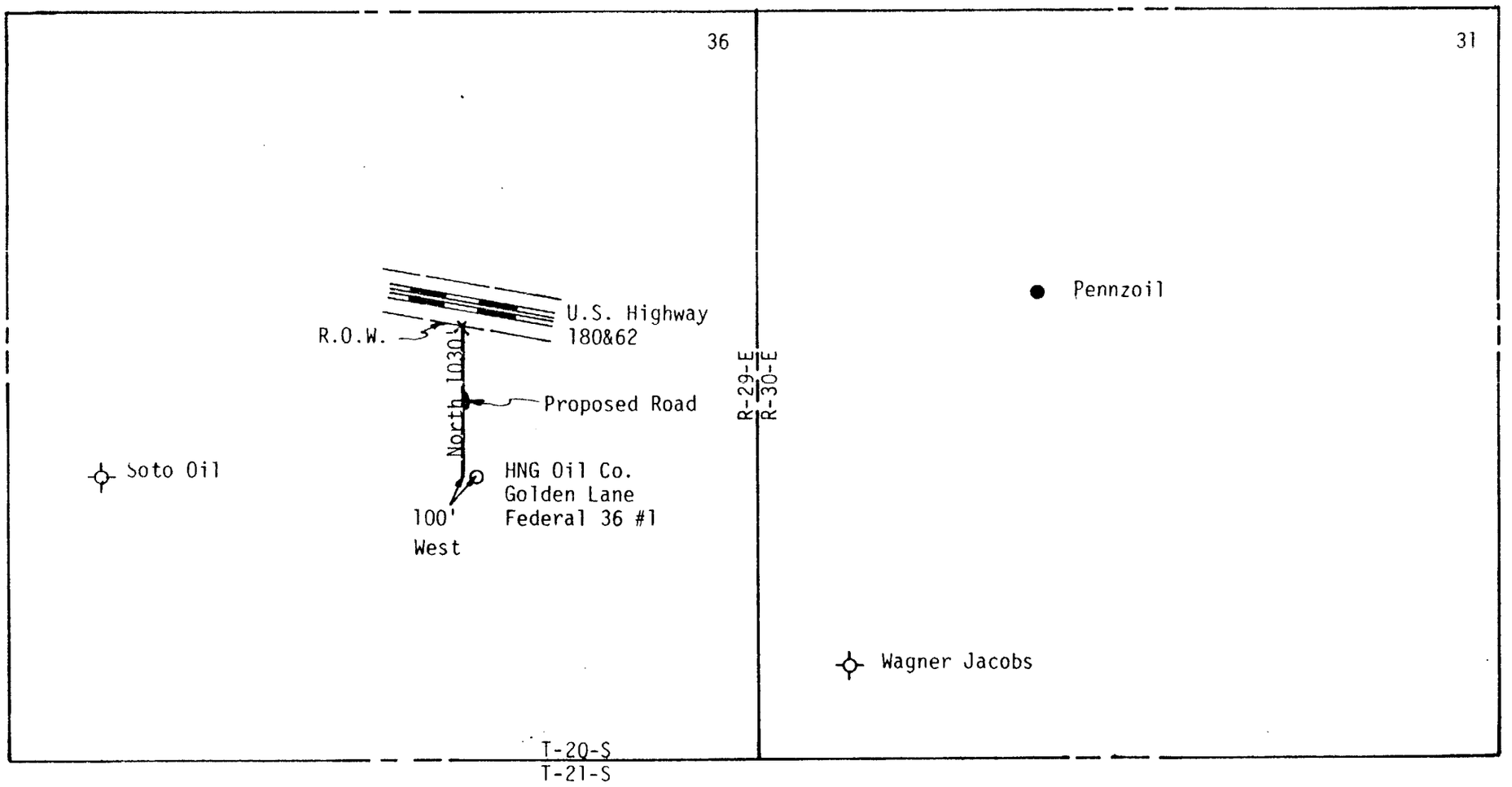
Exhibit "B"

Plat showing proposed road and relation of producing and dry wells within 1 mile of the H. N. G. OIL COMPANY-Golden Lane Federal 36 #1 ~~1980~~ 2080' FSL & ~~1980~~ 1980' FEL Section 36 T-20-S R-29-E, Eddy County, New Mexico.

——— Proposed new road.

X Cattleguard

▬ passing Turnout



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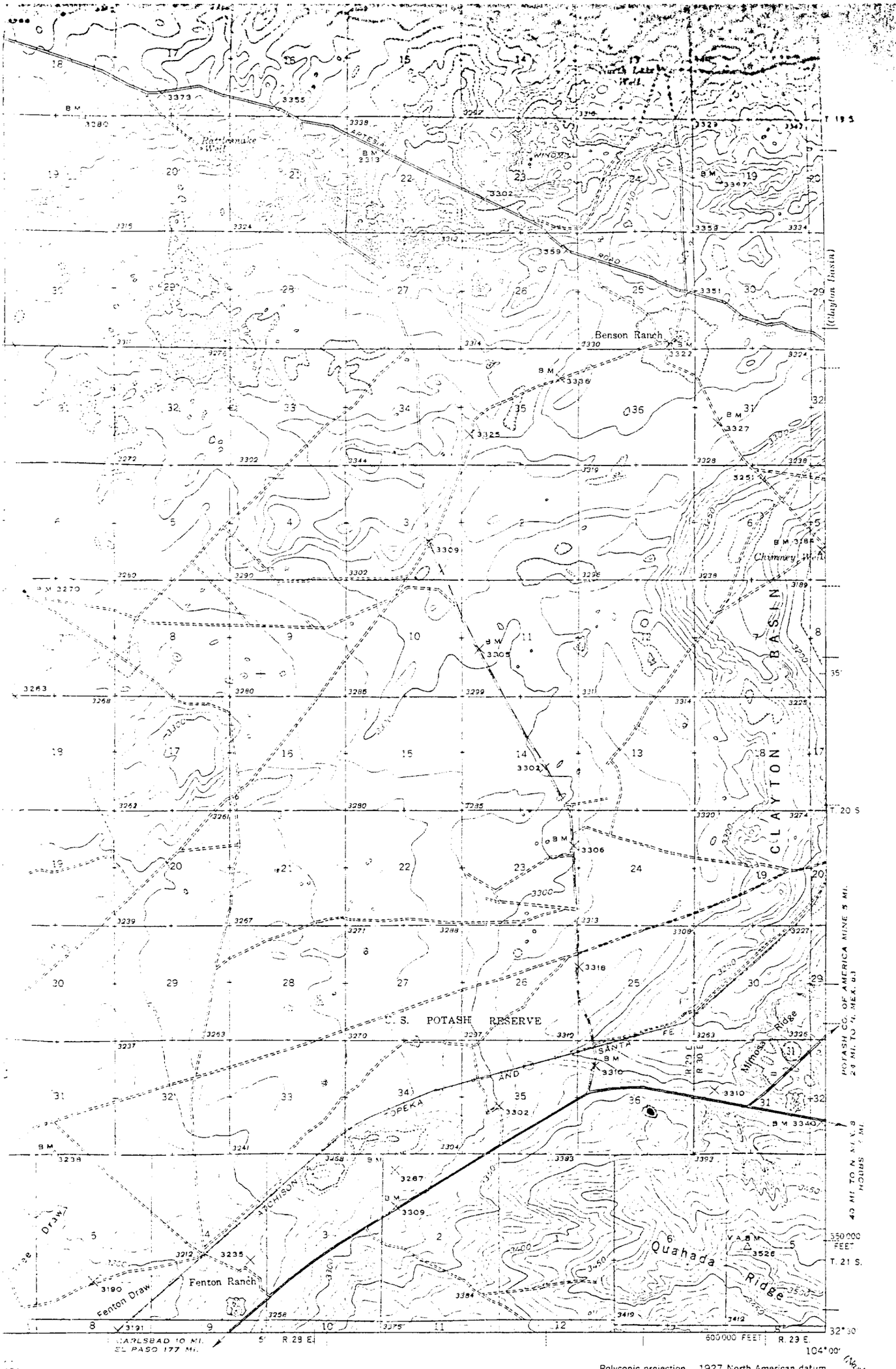
SCALE 1" = 1000'

○ Staked Location

● Producing Well

⊕ Dry Hole

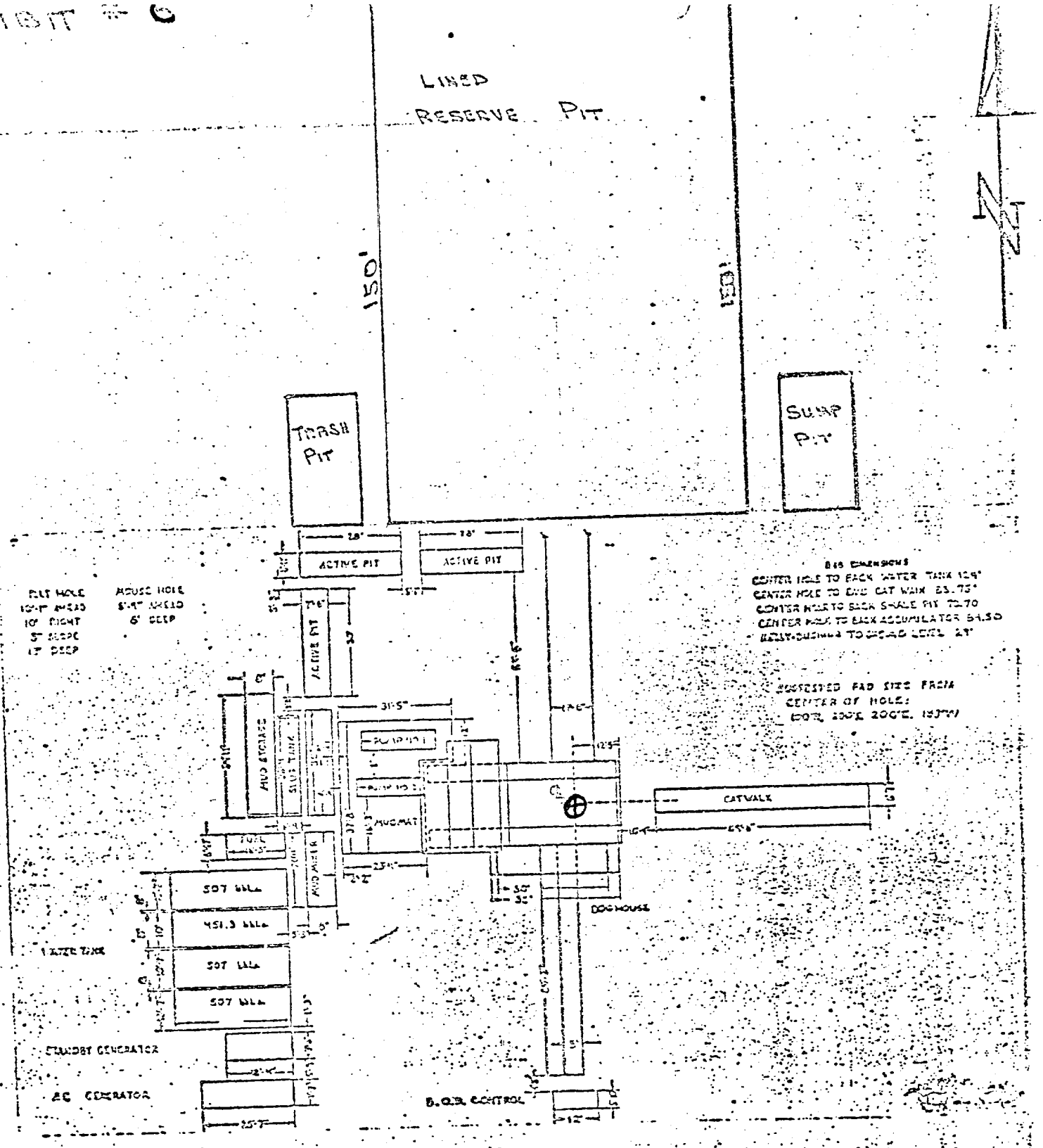


Polyconic projection. 1927 North American datum
5000 yard grid based on U. S. zone system, E
10000 foot grid based on New Mexico (East)
rectangular coordinate system

OIL CITY, N. MEX.
N3230—W10400/15
Edition of 1943
reprinted 1949

GOLDEN LANE Fed. 36 #1
~~1980~~ 2080 FSL - ~~1980~~ 1650 FEL
T-20-S, R-29-E
SECT. 36

EXHIBIT # 6



RIG LAYOUT

Archaeological Clearance Report

for

HNG Oil Company

Golden Lane Federal 36 Well No. 1

Prepared

By

Dr. J. Loring Haskell

Submitted

By

Dr. J. Loring Haskell
Principal Investigator
New Mexico Archaeological Services, Inc.
Carlsbad, New Mexico

21 November 1978

Permit No. 78-NM-120

Introduction

On 20 November 1978, New Mexico Archaeological Services, Inc., (NMAS), Carlsbad, conducted an archaeological reconnaissance for HNG Oil Company, Midland, on lands administered by the Bureau of Land Management in Eddy County, New Mexico. Reconnoitered areas will be impacted by the construction of a lease road and a drill location. This project was administered by Mr. C.M. Guerry, HNG Oil Company, and Dr. J. Loring Haskell, NMAS. Dr. Haskell undertook the project for HNG Oil under cloudy weather conditions.

Survey Technique

HNG's proposed access road was examined by walking it in close interval (15° or less), 20 ft wide, zigzag pattern. The location was investigated by traversing it in a series of east-west, 20 ft wide, zigzag transects. This technique served to promote optimal conditions for the visual examination of areas to impacted by construction related activities.

Golden Lane Federal 36 Well No. 1

Location

This location will measure 400 X 400 ft and will be situated 1980 ft from the east line and 1980 ft from the south line of:

Section 36, T20S, R29E, NMPM, Eddy County, NM (BLM)

Thus it will be situated in the:

NW¼SE¼, Section 36, T20S, R29E, NMPM, Eddy County, NM (BLM)

Its associated access road will measure 12 X 1030 ft and will pass through the:

SW¼SE¼, Section 36, T20S, R29E, NMPM, Eddy County, NM (BLM)
NW¼SE¼, Section 36, T20S, R29E, NMPM, Eddy County, NM (BLM)

Map Reference: USGS Oil City Quadrangle, 15 Minute Series, 1963.

Terrain

The investigated locality lies on the north-facing slope and shoulder of Quahada Ridge. This feature in its broader context demarcates the western margin of Nash Draw which is the principal drainage in the immediate area. Numerous small erosional channels, however, head on the upper portions of the ridge and discharge into Clayton Basin. The crest and shoulder of Quahada Ridge are distinguished by coppice dunes and deflation basins which are generally stable or semi-stable. Soil individuals, overlying the Rustler Formation, belong to the Haplargid-Torripsamment association with peds typically being of the Typic Torripsamment subgroup. Chert, quartzite, and Caliche inclusions commonly occur in pedons.

Floristics

Typic Torripsamments support an overstory dominated by Prosopis juliflora, Yucca glauca, and sporadic occurrences of Artemisia filifolia and Quercus havardii. Less sandy soils support Larrea tridentata. Condalia ericoides occurs in a belt midway up the ridge. Observed forbs in duned-deflated areas include Senecio spartioides, Croton pottsii, Gutierrezia sarothrae Eriogonum annuum, Allionia sp., Helianthus sp., Dithyrea wislizenii, Palafoxia sphacelata, Suaeda sp., and Pectis sp. Typical representatives of the Gramineae found in the sand hills include Sporobolus cryptandrus, Muhlenbergia porteri, Cenchrus

incertus, Setaria macrostachya, Munroa squarrosa, and Andropogon sp. Acacia greggii is sporadic on the deep sandy loams.

Cultural Resources

During the course of this reconnaissance NMAS recorded 1 archaeological site, viz., NMAS 5010.

NMAS 5010

Location: NW¼SE¼, Section 36, T20S, R29E, NMPM, Eddy County, NM

UTM: Not Available

Ownership: Bureau of Land Management Administration

Size of Site: 22 X 115 m

Type of Site: Special Activity Zone

Cultural Affiliation: Jornada Mogollon

Nature of Site: NMAS 5010 is a large site consisting of a number of major concentrations with an often light scatter between them. This site occupies the northwestern crest of Quahada Ridge and is situated within a series of inter-connected deflation basins. Sheetwash has carried some cultural material down slope. Material remains consist of an undetermined number of hearths, large amounts of burned caliche cobbles, primary and secondary decortication flakes, utilized flakes, cores, ground stone, mano and metate fragments, and Jornada Brown and Carlsbad Brown potsherds. Ceramics establish its temporality at sometime between A.D. 900 and 1350. Economic activities centered on the exploitation of wild vegetal resources and hunting pursuits as evidenced by the presence of significant amounts of milling equipment as well as chert and quartzite debitage resulting from tool manufacture.

A mid- to late-summer occupation is indicated by these remains.

Recommendations

NMAS recommends clearance for HNG Oil Company's proposed Golden Lane Federal 36 Well No.1 provided the continued integrity of NMAS 5010 is assured. As located, the pad's southwestermost corner will impact the site on a primary basis if HNG takes its full 400 X 400 ft area. (It should be noted that HNG cannot shift its location further north owing to the fact that the intended, economically-important, geological formation could be missed in the event this course of action is followed.) The extensive nature of NMAS 5010 precludes shifting the location toward the south, the west, or for that matter toward the east. NMAS, thus suggests that the southwesternmost corner of the location be deleted from the proposed work area (Fig.1). The area suggested for deletion from the proposed pad has been demarcated by strips of blue and yellow flagging which have been placed at 20 to 30 ft intervals on mesquite trees. If this area is avoided, the site's integrity will be guaranteed. The buffer, consisting of a string of coppice dunes, will protect the site from primary as well as secondary impact. Prior to construction the dirt contractor, as well as the drilling crew, should be fully cognizant of the fact that this area is to be avoided by men and equipment. In addition, it should be stressed that the area lying outside the pad on the south, and particularly on the southeast, is archaeologically sensitive as well and is to be avoided also. Excepting the aformentioned southwesternmost

corner, remaining portions of the pad are free of cultural resources as is the associated access road. If NMAS' suggestions are acceptable to all parties, it is suggested that construction-related activities proceed on schedule.

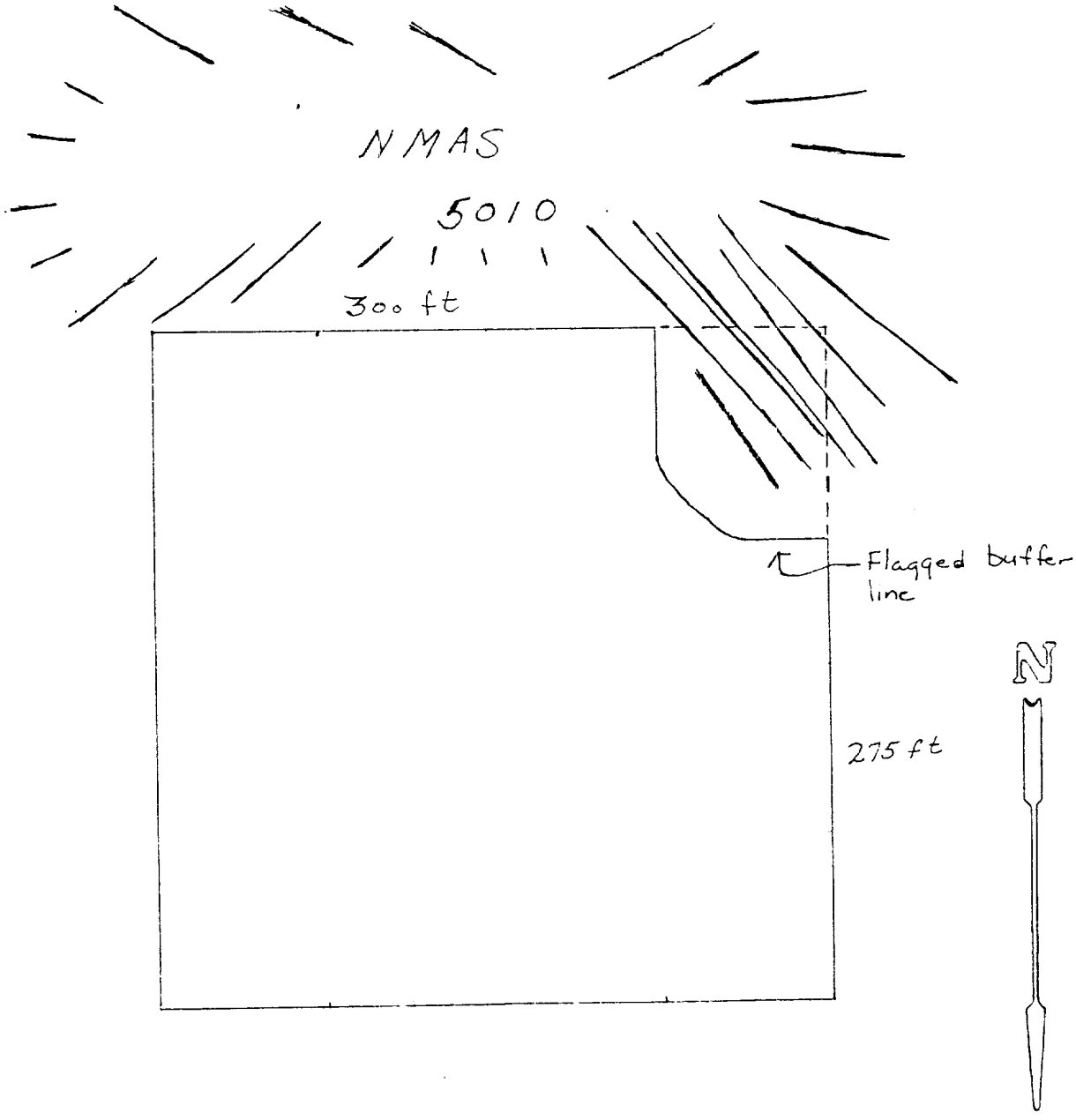
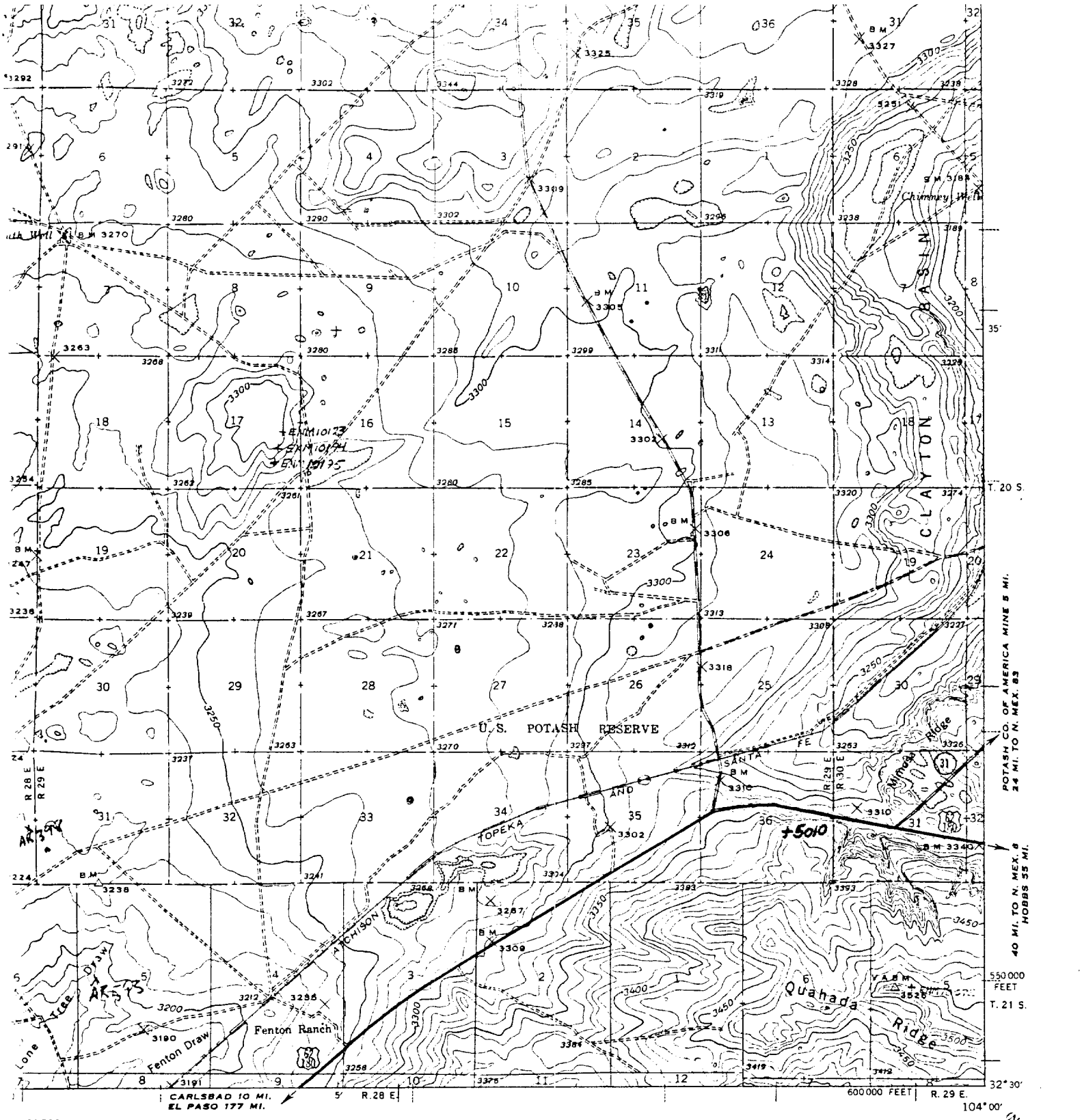


Fig.1. Schematic representation indicating location of HNG Oil Company's proposed Golden Lane Federal 36 Well No. 1 vis à vis NMAS 5010. Area situated southwest of flagged buffer line lies outside NMAS' suggested work area.



1.62500

2 3 4 MILES

000 12000 15000 18000 21000 FEET

3 4 5 KILOMETERS

erval 10 feet
ean sea level

Polyconic projection. 1927 North American datum
5000 yard grid based on U. S. zone system, E
10000 foot grid based on New Mexico (East)
rectangular coordinate system

OIL CITY, N. MEX.

N3230—W10400/15
Edition of 1943
reprinted 1949