

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY(Other instructions on  
reverse side)

30-015-22210

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☐MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

HNG Oil Company

## 3. ADDRESS OF OPERATOR

Box 2267, Midland, Texas 79702

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1980' FNL &amp; 760' FEL

At proposed prod. zone

Same

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* ARTESIA, OFFICE

16 Miles South of Carlsbad, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

760

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

None

## 16. NO. OF ACRES IN LEASE

640

## 19. PROPOSED DEPTH

12,600

## 17. NO. OF ACRES ASSIGNED

TO THIS WELL

320

## 20. ROTARY OR CABLE TOOLS

Rotary

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

3356.1 GR.

## 22. APPROX. DATE WORK WILL START\*

June 1977

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/2"	10-3/4"	40.5#	2250	800 sx circ cmt to surf
8 1/2"	7"	23# to 26#	9200	900 sx calc cmt top @ 5000
6-1/8"	4 1/2" liner	13.5#	12600	300 sx cmt top @ 9200

## PRESSURE CONTROL PROGRAM

Blow-out preventer and annular preventer with choke manifold and drill string safety valve will be installed @ 10-3/4" csg pnt. All equip will be tested to 3000 lb. W.P.

(Same as above) installed @ 7" csg pnt. All equip tested to 5000# W.P.

RECEIVED

MAY 12 1977

GAS SALES NOT DEDICATED

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present production 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

TITLE

DATE

(This space for Federal or State office use)

JUL 14 1977

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ACTING DISTRICT ENGINEER

JUL 14 1977

THIS APPROVAL IS RESCINDED IF OPERATIONS  
ARE NOT COMMENCED WITHIN 3 MONTHS.  
OCT 14 1977

DECLARED WATER BASE Side.  
\*See Instructions On Reverse  
CEMENT BEHIND THE  
CASING MUST BE CIPED 10 3/4"

NOTIFY UEGS IN SUFFICIENT TIME TO  
WITNESS CEMENTING THE 10 3/4" CASING

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-1  
Superseded O-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

HNG OIL COMPANY		Lease # BOWDEN FED. "A" COM.		Area 1	
Section 30	Township 24 South	Range 27 East	County Eddy		

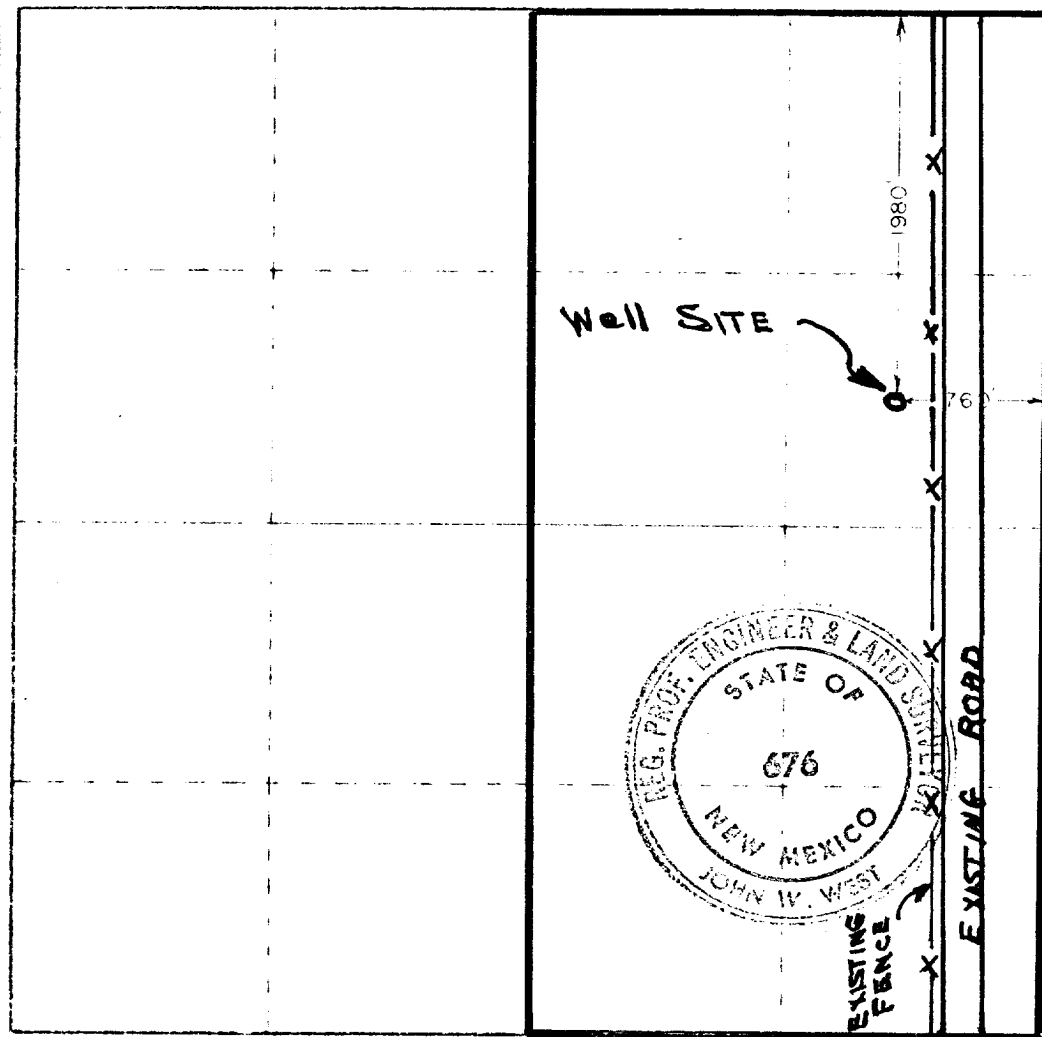
1980 feet from the North line and 760 feet from the East line		Ground Level Elev 3356.1		Producing Formation <i>Mazon</i>		Pool <i>WC</i>		Estimated Acreage 320	
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1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat. **EAST HALF SECT. 30**
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 been consolidated by communitization, unitization, force-pooling, etc?

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

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.

*Tom Pickering*  
Tom Pickering  
Adm. Supervisor  
HNG OIL COMPANY

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.

March 18, 1977

Registered Professional Engineer and Land Surveyor

*John W. West*  
John W. West  
676

150 850 90 120 650 1980 2310 2640 2000 1800 1000 500



P. O. BOX 2267, MIDLAND, TEXAS 79701 (915) 683-4871

Bowden Federal "A" Com. #2

Communitization Applied for

Section 30            T-24-S            R-27-E

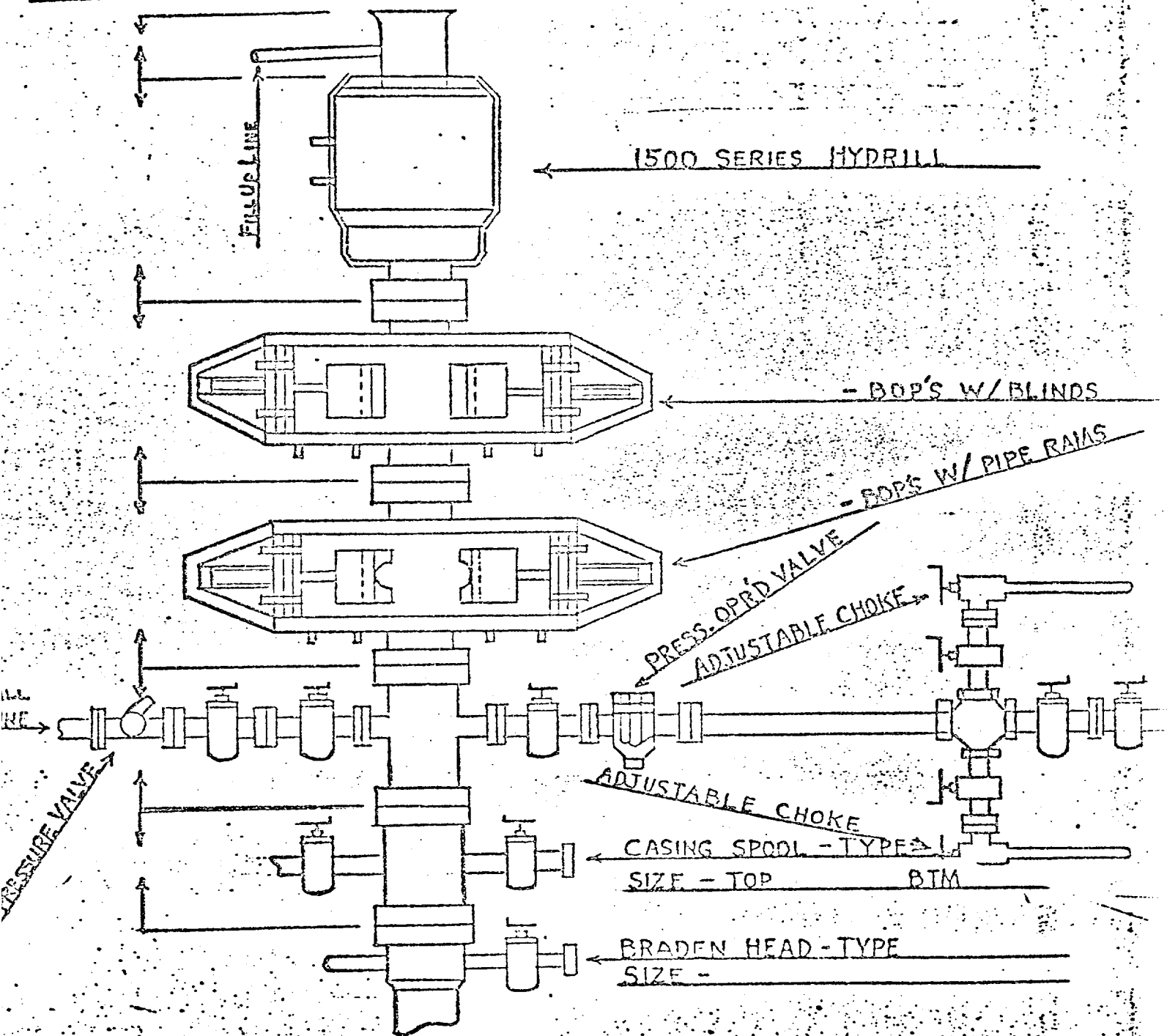
Lease: NM - 0353184            SE/4  
         NM - 0353184 - A       NE/4

HNG owns 100%  
Subject to ORRI

SE/4            R. C. Bowden and wife Cathryn  
                 N. Bowden  
                 4/7 of 5% of 8/8 ths.  
                 Mrs. H. K. Ireland, Jr.  
                 3/7 of 5% of 8/8 ths.

NE/4            R. C. Bowden and wife Cathryn  
                 N. Bowden  
                 5% of 8/8 ths.

DRILLER'S ZERO 1ft ABOVE ROTARY TABLE



# APPLICATION FOR PERMIT TO DRILL

1. The geologic surface formation is Salado

2. The estimated tops of important geologic markers are:

1. Delaware Lime	2270	6. Atoka Lime	11250
2. Bone Spring Lime	5840	7. Morrow Clastics	11750
3. 3rd Bone Spring Sand	8620	8.	
4. Wolfcamp	9070	9.	
5. Strawn Lime	10950	10.	

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

Wolfcamp 9970'  
Strawn 10950'  
Morrow Sands 11750'-12400'

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

DST as necessary

Logging - Mud logger on hole 2250 - TD

Electric Log Program:

Surface - TD

10800 - TD

2250 - TD

GR - Sonic

Neut - Dens.

Dual LL or DIL

Dipmeter 10800 - TD

5. Any anticipated abnormal pressures or temperatures expected? Any potential hazards -H<sub>2</sub>S?

NONE

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 point.

(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' - 10250' - 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

RECEIVED

SURFACE USE AND OPERATIONS PLAN  
HNG OIL COMPANY  
BOWDEN FEDERAL "A" COM #1  
EDDY COUNTY, NEW MEXICO

MAY 12 1977

U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

The following information and plans are submitted for the drilling of the subject well as directed in the NTL-6 publication.

1. The proposed location is approximately 16 miles due south of Carlsbad, New Mexico. Go south on the Old Caverns road until pavement ends and continue south on caliche road known as the Forehand Crossing road for approximately 2-1/2 miles. The location is 150' west of this county maintained road (see Exhibit #1). No improvements will be necessary for the existing roads.
2. The planned access road is shown on Exhibit #2. There will be constructed a 12' wide caliche based road of 150' straight into the well site. The terrain from the existing county road to the well site is relatively flat so that no culverts will be required. Any drainage which will occur will be over an insignificant wide area. No turnouts will be required due to the short length of the proposed access road. A cattleguard will be installed at the point the existing road and the proposed access road begin.
3. Location of existing wells are shown on Exhibit #5.
4. There are no production facilities on this lease at the present time. If production is established, a production unit will be set at the well site. HNG Oil Company does not have any production, gathering, or service lines within a one mile radius of the proposed location. Exhibit #3 shows the proposed area for production facilities if production is established. It will consist of:
  - A. One 300 bbl. water tank
  - B. One or two 210 oil storage tanks (depending upon amount of production).
  - C. One production unit consisting of treater, high and low pressure separating device.
5. The water used in the drilling operations will be purchased from a commercial source. There are no plans to attempt to drill for water on the lease. The purchased water will be trucked to the location, using the existing and proposed roads.
6. The proposed access road of 150' will require only grading and a caliche base added. The proposed drill site contains some caliche and when the location is cleared, leveled, and the mud pits dug, this material can be utilized on the proposed access road and drilling site. If additional caliche is required, there is an existing open caliche pit approximately one mile north of the well site.
7. Waste material, including drill cuttings, trash, sewage, garbage, chemicals, etc., will be collected in earthen pits and back-filled upon completion of drilling operations. Drilling fluids, oil and/or water will be accumulated in lined reserve pits and will be either recovered or allowed to evaporate. Upon completion of operations, and evaporation or recovery, the pits will be back-filled and leveled burying all residue left in the pits.

8. There will be no ancillary facilities required.
9. Exhibit #2 shows the drill pad and access road. Exhibit #4 shows the rig layout. The reserve pit will be lined.
10. Upon completion of drilling operations, the degree of restoration of the surface will depend upon if production is established. If the operation is not successful, then the whole drill site will be leveled and contoured back to the original form. All pits will be filled, after drying, and all waste material buried. The access road into the drill site will also be removed and leveled unless the B.L.M. desires it be left in place.

If production is established, then the drill pad area will be required for production facilities and as a work and safety area. However, all pits and waste will be either removed or buried as stated above.

The leveling of the pits and removal of the trash and waste will be done no later than thirty days after drilling operations cease. Any additional or special rehabilitation efforts that the B.L.M. requires will be honored.

11. The surface area of both the access road and drill site are federally owned. The surface is leased for cattle grazing. The area around the drill site has a gradual sloping trend to the north. The surface supports a sparse growth of grass and other semi-arid type vegetation.

It is our plan to employ the Agency of Conservation Archaeology at Eastern New Mexico University to make an archaeological study of the subject area.

12. Operator's representative conducting this drilling operation is:

Mr. Phil Stinson  
4016 East Everglade  
Odessa, Texas 79760

Phone - Bus. 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 drill site 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 work associated with the operations proposed herein will be performed by HNG Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved.

DATE: May 11, 1977

BY: 

W. L. Lorette  
Operations Manager



R.24 E.

BURNING OF PINEHILL MOUNTAIN

R.25 E.

R.26 E.

R.27 E.



HNG OIL CO.  
BOWDEN FEDERAL "30"  
COM. #1

WELL SITE

SECTION LINE

BOWDEN T2N. 37E. CO. 11. 1

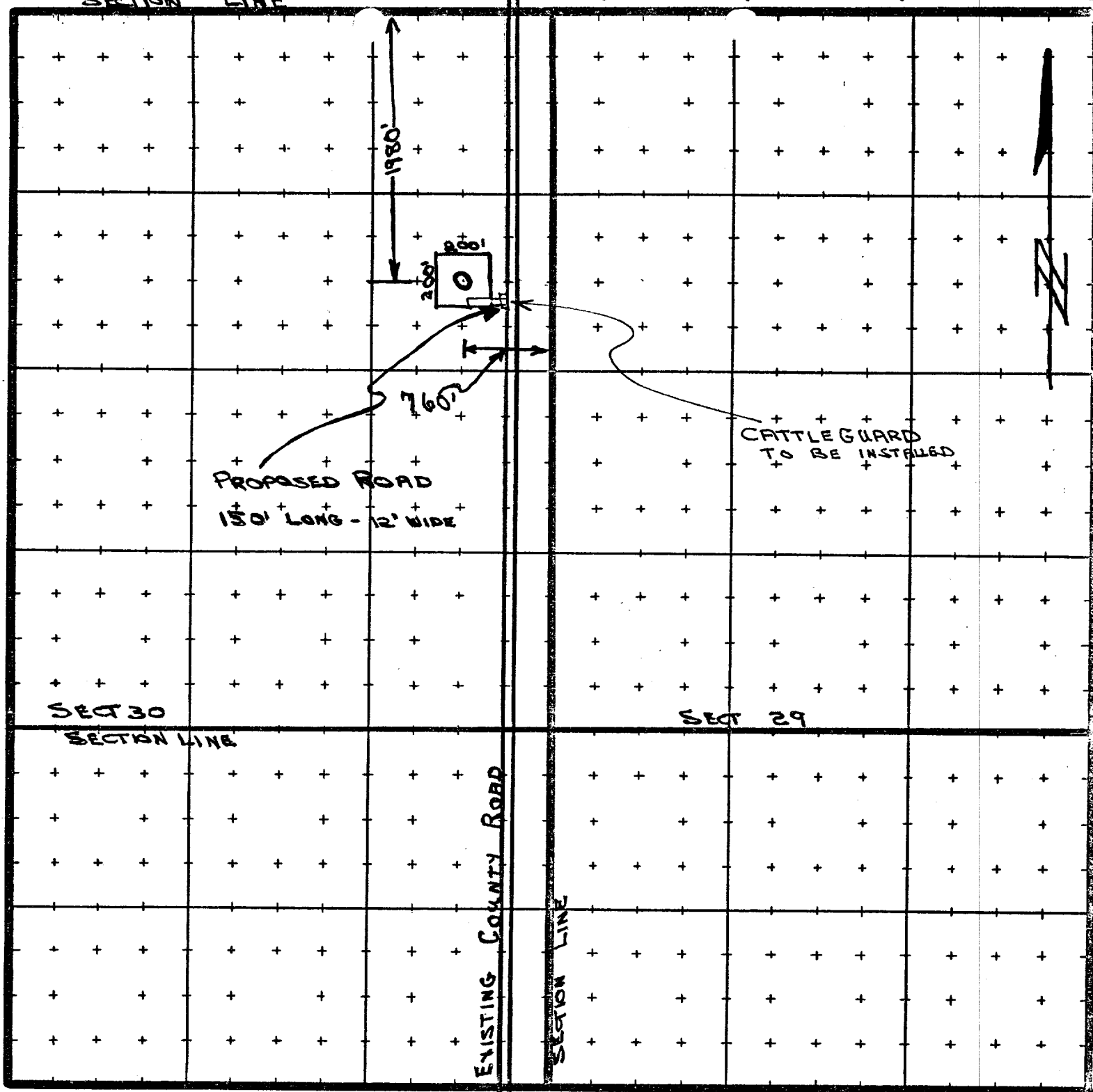
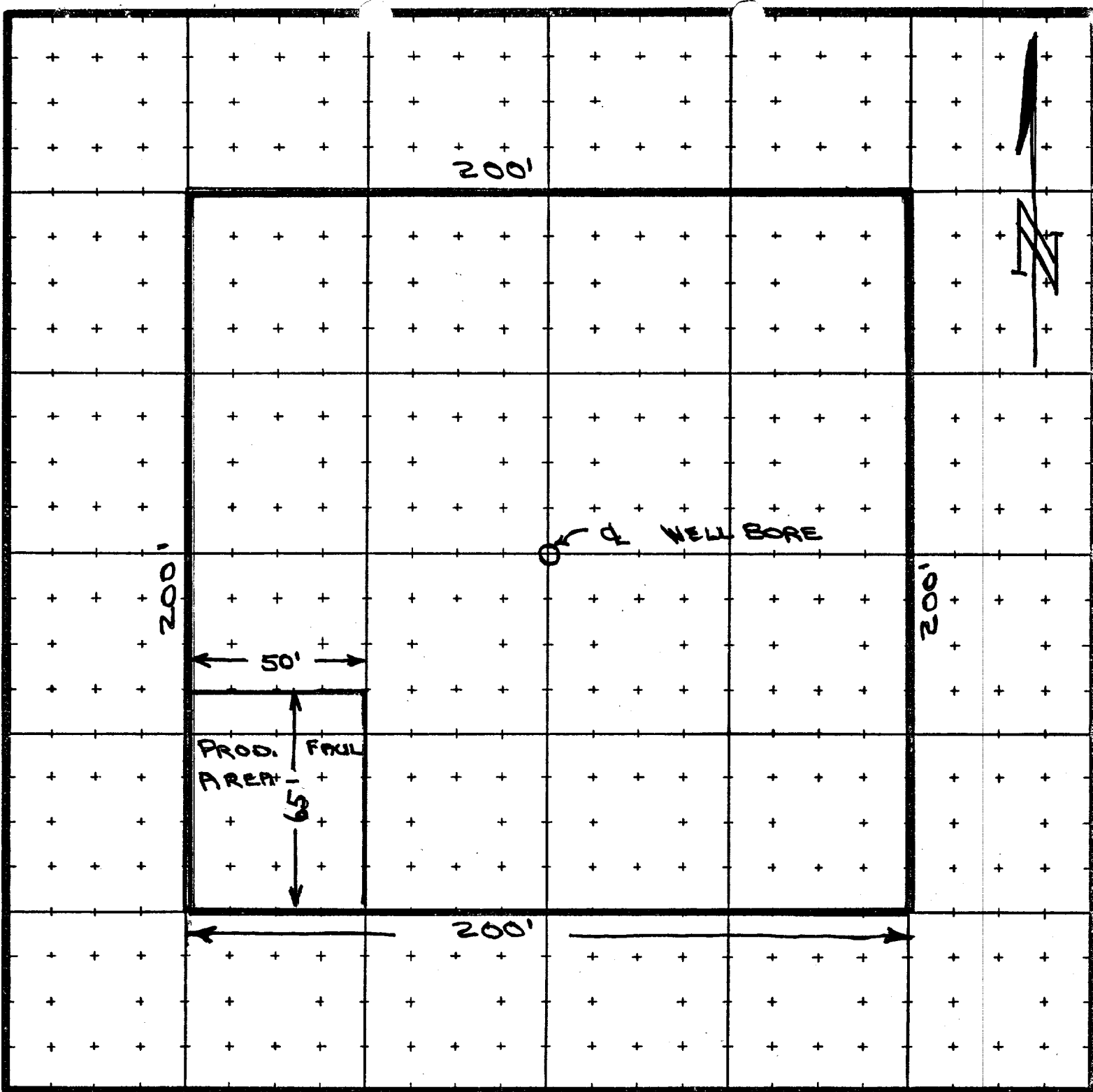
County EDDY State NEW MEXICOSection 30 Township 24-S Range 27-ERemarks: DRILL PAD  
PROPOSED ACCESS ROAD

EXHIBIT # 2

Scale 1" = 1000'

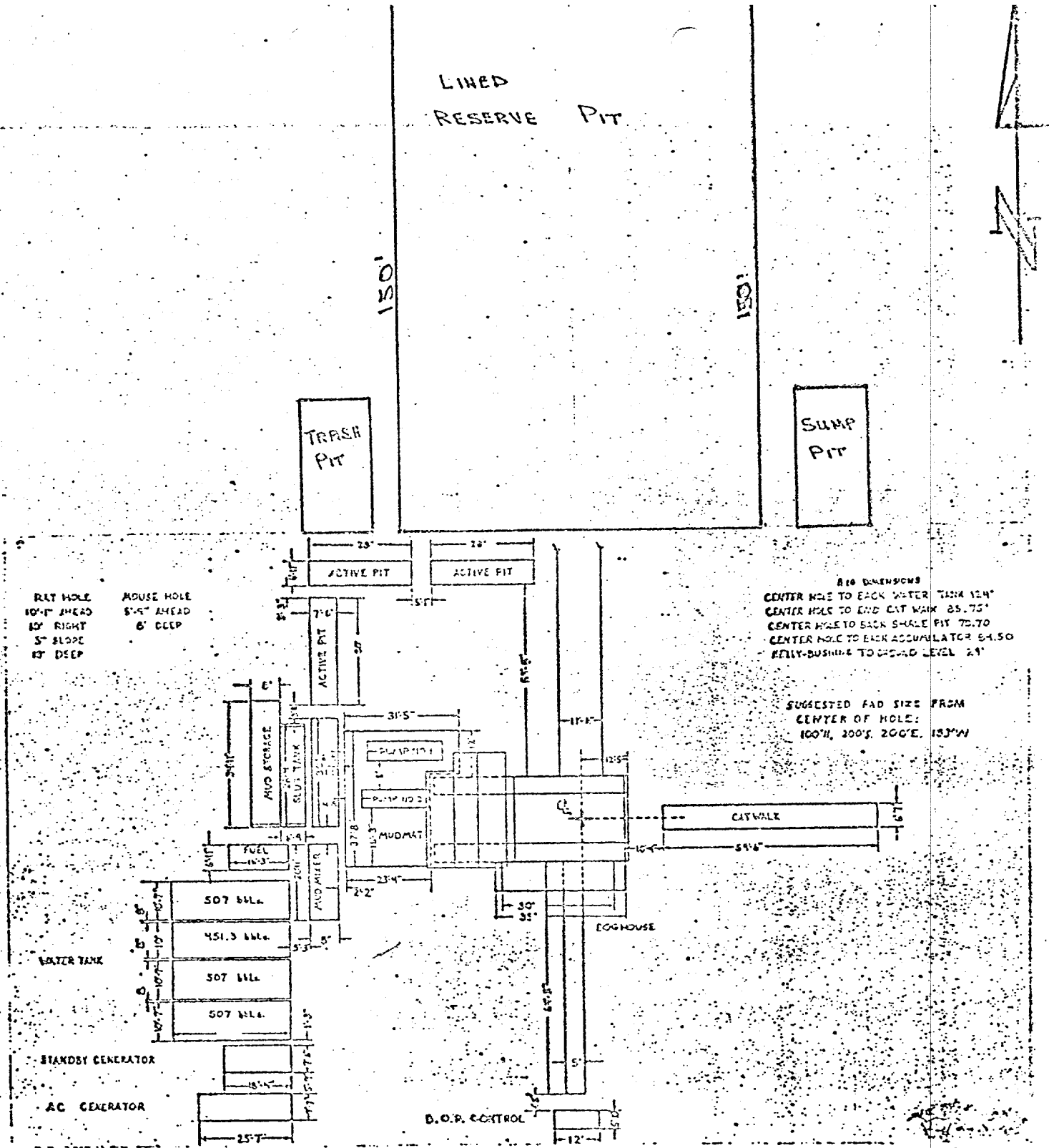
Sold By MIDLAND MAP COMPANY



County EDDY Co. State NEW MEXICO  
 Section 30 Township 24-S Range 27-E

Remarks: DRILL PAD w/ PRODUCTION FACILITIES  
AREA.

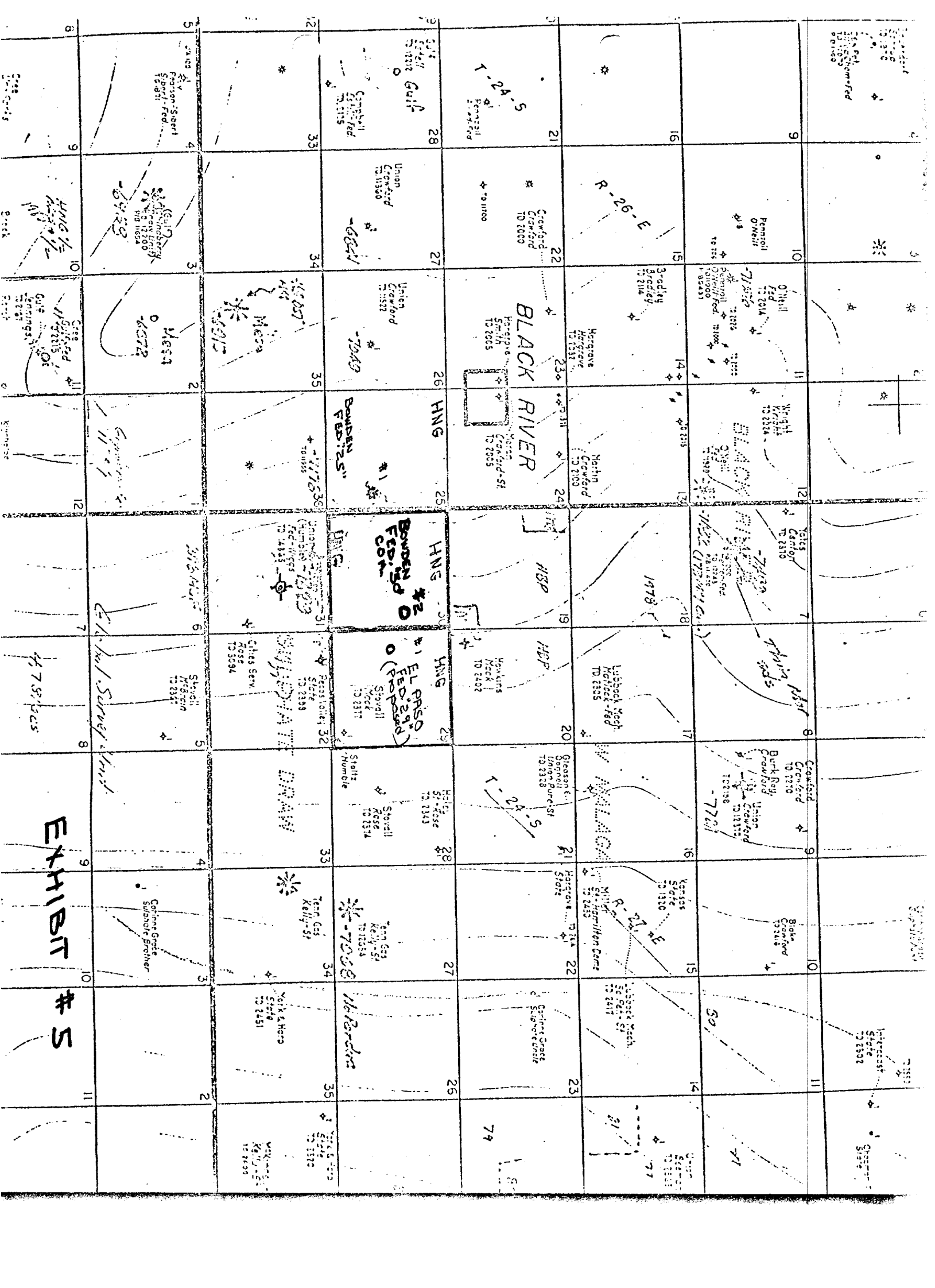
EXHIBIT # 3



RIG LAYOUT

EXHIBIT # 4

SCALE 1" = 40'



10-24-5  
Crawford  
10-24-5

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BUREAU OF LAND MANAGEMENT  
ROSWELL, NEW MEXICO

January 29, 1976

Lease # NM-0353184-A  
Operator HNG Oil Company  
Well Name 1-Bowden Federal "A" Com.  
Location Sec 30, T24S, R27E

"STANDARD STIPULATIONS FOR ALL DRILLING  
IN RELATION TO OIL AND GAS ACTIVITIES  
IN THE ROSWELL DISTRICT"

(The following list of 14 stipulations are some of the more commonly used stipulations for oil and gas drilling operations in southeastern New Mexico. The blocks checkmarked in red designate the stipulations applicable to the particular drilling permit listed above. Special or additional stipulations (if any) are written in under #15.)

- ☒ 1. If, during operations, the operator or any person working in his behalf, discover any historic or prehistoric ruin, monument or site, or any object of antiquity subject to the Antiquities Act of June 8, 1906, (34 Stat. 225, 16 U.S.C. Secs. 431-433), and 43 CFR Part 3, then work will be suspended and the discovery promptly reported to the District Manager. The Bureau will then take such action as required under the Act and regulations thereunder. When directed by the District Manager, the operator will obtain, at his expense, a qualified archaeologist to examine and, if necessary, excavate or gather such ruins or objects.
- ☒ 2. All access roads constructed in conjunction with the drilling permit should be limited to 12 feet in width, along with turnouts. If well is a producer, all roads will be adequately drained to control runoff and soil erosion. Drainage facilities may include ditches, water bars, culverts and/or any other measure deemed necessary by the responsible BLM representative.
- ☒ 3. Each existing fence to be crossed by the permittee will be braced and tied off before cutting so as to prevent slacking of the wire. The opening will be protected as necessary during construction to prevent the escape of livestock and upon completion of construction, the fence will be repaired to BLM specifications. A cattleguard with an adjacent 12 foot gate will be installed in any fence where a road is to be regularly traveled.

- ☐ 4. When a road or construction in connection with the drilling operation breaks or destroys a natural barrier used for livestock controls, gap thus opened shall be fenced to prevent drift of livestock. Said fences shall be constructed according to BLM specifications.
- ☒ 5. Materials removed during construction must be disposed of in such a manner that it does not detract from the aesthetics and does not accelerate erosion. When clearing the area of operations of vegetation other than grass, the vegetation removed will be placed in drainages, washes, gullies, etc., and "walked down" by crawler type tractor. If no drainages are in the immediate area, the vegetation will be "walked down" in place. After construction has been completed, the affected area will be left in as aesthetically pleasing condition as possible. All trash resultant from construction activities will be disposed of. Any large rocks left as a result of construction activities will not be piled or left in rolls but will be left so they do not detract from the scenic attributes of the area and will not hinder the movement of livestock or big game animals.
- ☒ 6. Any "available topsoil" encountered during the construction of the drill site area will be stockpiled and made available for re-surfacing of the reserve pit area (after pits are covered) after completion of the drilling operation.
- ☒ 7. "Caliche" for use in the construction of the drill pad and access road shall be obtained from existing authorized pits whenever possible, as determined by the responsible BLM representative. No new pits shall be opened without prior approval from the responsible BLM representative.
- ☒ 8. The "mud pits" shall be well constructed and under no circumstances will they be allowed to leak or be cut to drain. They shall not be located on natural drainages. Waste or discharge of any kind will not be allowed to enter any drainage. Any plastic material used to line pits and/or sumps shall be cut-off below ground level, as far down as possible, and disposed of before the pits are covered. All unattended pits, containing liquids, will be fenced and the liquid portion allowed to evaporate before the pits are broken.
- ☒ 9. All pits found to contain toxic liquids will be fenced and covered with a fine-mesh netting for the protection of wildlife as directed by the responsible BLM representative.

- ☒ 10. All waste associated with the drilling operation will be buried in place (in a separate trash pit) or removed and deposited in an approved sanitary landfill. All garbage (metal containers will be crushed) and debris left on site will be buried at least three feet deep. All trash and debris will be buried or removed from the site within one month after removal of the drill rig. The permittee will comply with all state laws and regulations pertaining to the disposal of human waste.
- ☐ 11. If the well is a producer, during cleanup: all cut and fill banks will be made to be no steeper than \_\_\_\_\_ slope wherever possible.
- ☒ 12. The well "site", if a producer, will be maintained and kept clean of all trash and litter or other foreign material which detracts from the surrounding environment. Maintenance shall also include measures necessary to stabilize soil conditions (other than reseeding) on the road and pad area, and maintenance of facilities associated with said well, to the satisfaction of the District Manager for the lifetime of the well.
- ☒ 13. In the event the oil or gas test results in a dry hole, the drill pad and access road will be ripped in accordance with "BLM Roswell Districts' Ripping Recommendations for Caliche or Compacted Drill Pads and Access Roads" (3109). (Reseeding of the affected areas may be required at the discretion of the District Manager).
- ☒ 14. All structures above ground not subject to applicable conservation and safety requirements should be painted a non-glare, non-reflective, non-chalking color that simulates the natural colors of the site. *(Fed. standard 595, color 30318)*
- ☐ 15. Special Stipulations: