Form 9-331 C
(May 1963)

N. M. O. C. C. COPY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse)

Copy to SF

Form approved.
Budget Bureau No. 42-R1425.

30-015-21965

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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

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

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2. NAME OF OPERATOR: Hanson Oil Corporation

3. ADDRESS OF OPERATOR: P.O. Box 1515, Roswell, New Mexico 88201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 660' From South [redacted] Line and 660' From East [redacted] Line
At proposed prod. zone: Unit P

5. LEASE DESIGNATION AND SERIAL NO.: NM-14900
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Square Lake Federal
9. WELL NO.: #1
10. FIELD AND POOL, OR WILDCAT: Square Lake
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 28 T 16-S, R 30-E
12. COUNTY OR PARISH: Eddy
13. STATE: N. M.

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 5 Miles North of Loco Hills, New Mexico

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
660'	80	40
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**
N/A	3300	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3759' G.L.

22. APPROX. DATE WORK WILL START*: November 1, 1976

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	500'	Suff. to Circ.
7 7/8"	4 1/2"	11.6#	3300'	Suff to Cover Queen

It is proposed to drill the above captioned well to a depth of 3300' or to a sufficent depth to test the San Andres Formation. If oil or gas is found in commercial quantities the above casing program will be followed. The well will then be logged, perforated and stimulated as conditions require. B.O.P. will be used during drilling and completion operations.

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ARTESIA, NEW MEXICO

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 Ray Wilk TITLE V.P. Production DATE 10-20-76

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED
NOV 1976
/s/ [illegible]
SECRETARY

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

THIS APPROVAL IS RESCINDED IF OPERATIONS ARE NOT COMMENCED WITHIN 3 MONTHS.
EXPIRES FEB 04 1977

See Instructions On Reverse Side

N MEXICO OIL CONSERVATION COMMIS

WELL LOCATION AND ACREAGE DEDICATION PLAT

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ARTESIA, NEW MEXICO

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
HANSON OIL CORP.	Square Lake-Federal	1

Unit Letter	Section	Township	Range	County
P	28	16 South	30 East	Eddy

Actual Footage Location of Well:
660 feet from the south line and 660 feet from the east line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3759.0	G-SA	Sq. Lake	40

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

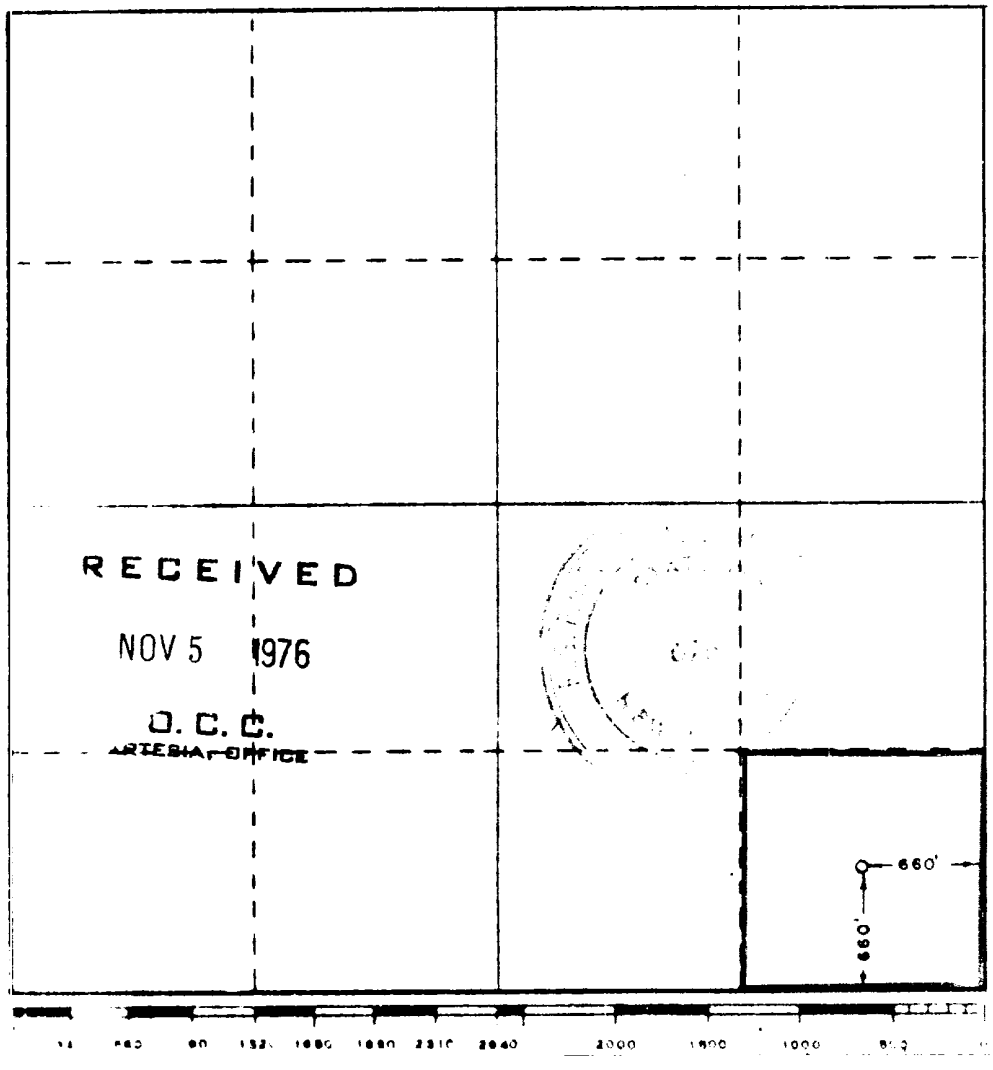
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.



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NOV 5 1976
O. C. C.
ARTESIA, OFFICE

CERTIFICATION

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

Name: Ray Wills

Position: Vice-President-Production

Company: Hanson Oil Corporation

Date: October 20, 1976

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: Sept. 26, 1976

Registered Professional Engineer and/or Land Surveyor: John W. West

Certificate No. 676

SURFACE USE AND OPERATIONS PLAN

SQUARE LAKE FEDERAL #1

EDDY COUNTY, NEW MEXICO

The following multipoint requirements and surface use plan is submitted for the subject well by Hanson Oil Corporation:

1. Existing Roads

   A. Proposed well as staked. See surveyor's plat.

   B. As shown, the planned well is approximately five (5) miles North of Loco Hills, New Mexico. To reach the planned well, take unnumbered highway north out of Loco Hills, New Mexico four (4) miles; at this point turn east; continue over caliche road in Easterly direction one-half (1/2) mile; road will then turn to the North for three-fourths (3/4) miles; at this point turn east one-fourth (1/4) mile. At this point turn north on proposed new road for one-fourth (1/4) mile to location as staked.

   C. Existing Roads: See Exhibit #1

   D. See Exhibit #1

   E. Not applicable

   F. Existing roads will be bladed and watered as is necessary to maintain a useable road.

2. Planned Access Roads: See Exhibit #1

   1. Width: See Exhibit #5

   2. Maximum grades: See Exhibit #5

   3. Turnouts: See Exhibit #1

   4. Drainage Design: See Exhibit #5

   5. No culverts will be necessary as only insignificant, widely dispersed drainage could occur across the proposed route. No major cuts or fills will be necessary.

   6. Surfacing Material: All construction materials will be of local origin and no surface material will be distrubed except for the grading of the actual roads. Gravel or caliche will be used from Sec. 4, T 17-S, R 30-E. This caliche pit is open and in use. No additional roads will be necessary to get to this pit.

   7. Gates are not necessary; cattleguards: See Exhibit #1; no fence cuts will be made.

   8. Planned access road has been center-line flagged.

SQUARE LAKE FEDERAL #1

EDDY COUNTY, NEW MEXICO

3. Location of existing wells in a one-mile radius are shown on Exhibit #1.

(1) Water Wells: None
(2) Abandoned Wells: Section 27, 28 and 33 - See Exhibit #1
(3) Temporarily abandoned wells - None
(4) Disposal wells - None
(5) Drilling wells - None
(6) Producing wells - Sec. 27, 33 & 34-See Exhibit #1
(7) Shut-in wells - None
(8) Injection wells - None
(9) Monitoring or observation wells for other resources - None

4. Location of Existing and / or proposed facilities;

A. There are no existing facilities within a one-mile radius from location owned or controlled by Hanson Oil Corporation.
(1) Tank batteries: None
(2) Production facilities: None
(3) Oil gathering lines: None
(4) Gas gathering lines: None
(5) Injection lines: None
(6) Disposal lines: None

B. In the event production is established, Hanson Oil Corporation will build a tank battery on the well pad.
(1) Proposed location of tank battery to be on well pad.
(2) Dimensions of facilities - See Exhibit #2
(3) All construction material will be of local origin and no surface material will be disturbed except those necessary for the actual grading of well pad. Gravel or caliche from Sec. 4, T 17-S, R 30-E. This caliche pit is open and in use. No additional roads will be necessary to get to this pit.
(4) The entire tank battery will be surrounded by a 3' ditch and 2½' fire wall to prevent overflow spillage into surrounding drainage areas. The entire tank battery will then be fenced. Any pits left open will be flagged to protect waterfowl if this precautionary measure is deemed necessary by the Wildlife Management.

C. Rehabilitation of disturbed areas:

If production is established, following completion of tank battery erection, necessary well producing equipment, etc., all pits with the exception of a flare pit, will be filled (after they dry up) and the surrounding location leveled. Disturbed area no longer needed for operations will then be reseeded using as much topsoil as possible and utilizing seed types and quantities as recommended for this area by agronomist

C. (Continued)

and the Bureau of Land Management. All reseeding will be done with a reasonable effort to establish a more attractive soil stabilizing growth of vegetation than what previously existed at the site. Reseeding will take place at the first opportunity following completion of well in accordance with the recommended seasonal seeding periods (late Spring). The unused disturbed area then will be fenced from time of reseeding until grass is established.

5. Location and type of Water Supply

A. Water to be used in drilling the proposed well will be hauled from producing wells in Sec. 3, 4, & 27.

B. Said water will be transported by truck over improved and proposed access road shown on Exhibit #1.

C. No water wells are planned to be drilled on the lease in connection with the drilling of the proposed well.

6. Source of Construction Materials

A. All construction material will be of local origin and no surface areas will be disturbed except for the actual grading of the road and drilling site.

B. Construction material will be moved from Federal land. See Exhibit #1 Sec. 4, T 17-S, R 30-E.

C. Materials, gravel will be used for roads and drill sit.

D. See Exhibit #1

7. Methods for Handling Waste Disposal

(1) Cuttings: Drill cuttings will be accumulated in the earthen reserve pit and after the pit has dried will be bladed into the bottom of the pit and buried.
(2) Drilling fluids: The drilling fluids will be left in the reserve pit and allowed to evaporate after any oil accumulation in the pit has been removed and hauled to the production facility for recovery.
(3) Produced Fluids (oil, water): If production is established, oil will be trucked by the purchaser over access road shown on Exhibit #1. Water will be trucked to an approved water disposal system over the same road.
(4) Sewage: Sewage will be collected in a pit at least 6' deep below an outside latrine; suitable chemical will be added to aid

7. Methods for Handling Waste Disposal (Continued)

decomposition of the waste material and then backfilled following completion of the propsed well or in a chemical facility for that purpose.

(5) Trash and garbage will be contained in an earthen pit. See Exhibit #4, and buried following drilling operations. Said pit to be fenced with small mesh wire to prevent wind from scattering trash before being burned or buried.

(6) Following completion of drilling operations, all pits will be filled (after they dry up) and area surrounding the location leveled.

8. Ancillary Facilities

No ancillary facilities will be constructed.

9. Well Site Layout

(1) Cross sections of drill pad - See Exhibit #3
(2) See Exhibit #4
(3) See Exhibit #4
(4) Statement as to whether pits are to be lined or unlined: There are plans to line the earthen pit with a polyethylene liner.

10. Plans for Restoration of Surface

(1) Following completion of drilling operations, any oil accumulation on pits will be removed and hauled to a production facility to be recovered. All pits will be filled (after they dry up) and the area surrounding the location leveled. The location will then be graded to conform with the original topography and contours made as are necessary to achieve the same. All waste material will be buried in an earthen pit following completion of operations.

(2) Reseeding of the drillsite, including access roads, will take place at the first opportunity following completion of operations in accordance with the recommended seasonal seeding periods. All reseeding will be as recommended for this area by agronomist and the Bureau of Land Management.

(3) Prior to rig release, pits will be fenced and so maintained until clean-up operations are complete. After the location has been leveled and all pits backfilled, said location will be fenced from time of reseeding until grass is established.

(4) Any oil accumulations on pits shall be removed and hauled to production facility for recovery. In the event it becomes necessary to leave oil in any pit for any reason, we will install overhead flagging.

 SURFACE USE AND OPERATIONS PLAN (Continued)

SQUARE LAKE FEDERAL #1

EDDY COUNTY, NEW MEXICO

10. Plans for Restoration of Surface (Continued)

(5) Commencement of rehabilitation operations shall begin immediately after rig release and shall continue in a good and workmanlike manner until complete.

11. Other Information

(1) The area around the drilling site is small sand dunes. The surface supports a sparse growth of grass with a few clumps of cactus.
(2) There are no other surface use activities planned. The surface at the location is Federally owned.
(3) There are no fresh water wells near the propsed location. No lakes, streams, no occupied dwellings, no known archeological historical or cultural sites in the general area of the location.

12. The Hanson Oil Corporation representative conducting this drilling operation is:

Mr. Ray Willis — Phone No. (505) 622-7330 Office
P.O. Box 1515 — Phone No. (505) 622-7765 Home
Roswell, New Mexico
88201

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 work associated with the operations proposed herein will be performed by Hanson Oil Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

10-14-76
(Date)

Ray Willis

Ray Willis, Vice-President, Production

APPLICATION FOR DRILLING

SQUARE LAKE FEDERAL #1

EDDY COUNTY, NEW MEXICO

In conjunction with permitting subject well for drilling in Section 8, T 16-S, R 30-E, Hanson Oil Corporation submits the following 10 points of petinent information in accordance with United States Geological Survey letter of July 1, 1976:

1. The surface formation is Red Beds.

2. The estimated tops of geologic markers are as follows:

Yates	1360'
Fren	1600'
Queen	2210'
Grayburg	2540'
Premier	2860'
San Andres	2975'
T. D.	3300'

3. No fresh water is expected to be encountered. No gas is expected to be encountered. The depth at which oil is expected to be encountered is at 2975'

4. Casing Program:

24# K-55, 8 5/8" to 500' (New)
11.6# K-55, 4 1/2" 0 to 3300' (New)

5. Blowout preventer: Ram type, series 900 with double hydraulic 10# rams. This is a Shaffer blowout preventer (3000# working pressure) with a Payne closing unit. The fill, kill, and choke lines are indicated on the blowout preventer specification sheet Exhibit #6.

6. Circulation Medium: Earthen pits will be used to hold mud and cuttings and the drilling fluid as follows:

Surface 0' - 500'

Spud with Gel/lime slurry having a viscosity of 32 - 34 sec. This type of fluid should be sufficient for the safe running of surface casing.

Open Hole 500' - 3,300'

Drill out from under surface casing with brine water to minimize leeching Salt Section. We suggest circulating the reserve pit to minimize solids build-up. At 3,100' we suggest coming back into working pits and mudding up with Brinegel and Loid for a mud with the following properties:

Weight	10.1 - 10.3 ppg
Viscosity	34 - 36 sec
Fluid Loss	10 - 12 ml

A fluid with the above properties should be adequate to provide safe logging and casing operations.

APPLICATION FOR DRILLING (Continued)

SQUARE LAKE FEDERAL #1

EDDY COUNTY, NEW MEXICO

7. Auziliary Equipment: Kelly cocks or flats at the bit will not be used in drilling the subject well. The mud system (pit levels) will be monitored visually by the rig crew. A sub with a full opening valve in good working order for stabbing into the drill pipe will be available on the drilling rig floor.

8. Testing and Logging Program: No D.S.T.'s will be taken. No cores are planned. Gamma-Ray Caliper and Formation Density logs will be run from base of surface to T.D.

9. No abnormal bottom hole pressure (BHP) is anticipated. Based on offsetting BHP data, the BHP in subject well is anticipated to be 1625# @ 3300'. This is equivalent to a pressure gradient of .49 lbs. per foot of depth.

10. The anticipated starting date is November 1, 1976, with completion of drilling operations on November 15, 1976. Stimulating and completion of well would be immediately after drilling operations are finished.

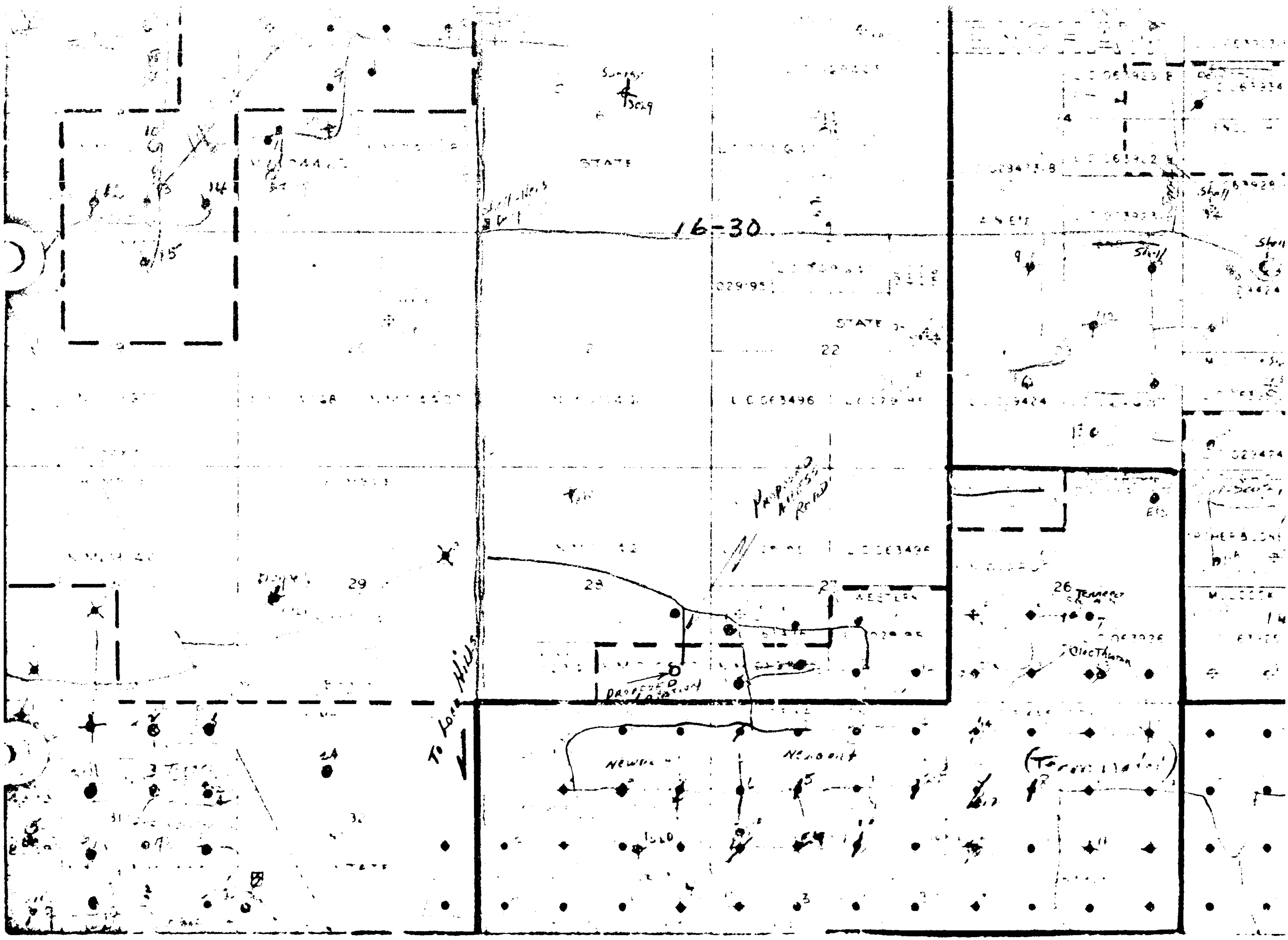
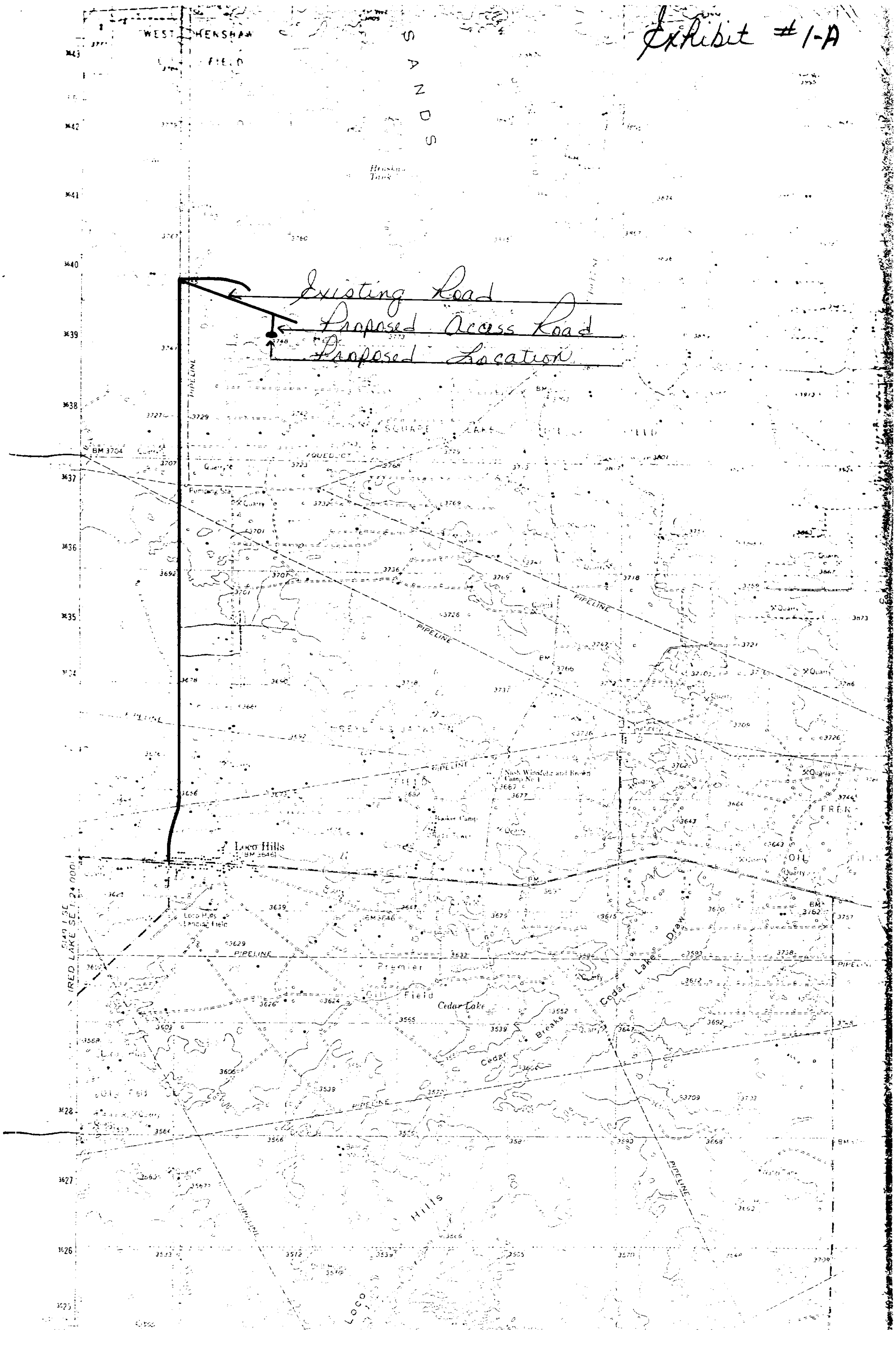

16-30
STATE
STATE
22
29
28
27
26
L C 063496
Proposed Access Road
Proposed Location
To Loco Hills
Newmont
Newmont
Western
Tenneco
(Terminated)
Shell
Shell
Sunray

Exhibit #1

Exhibit #1-A

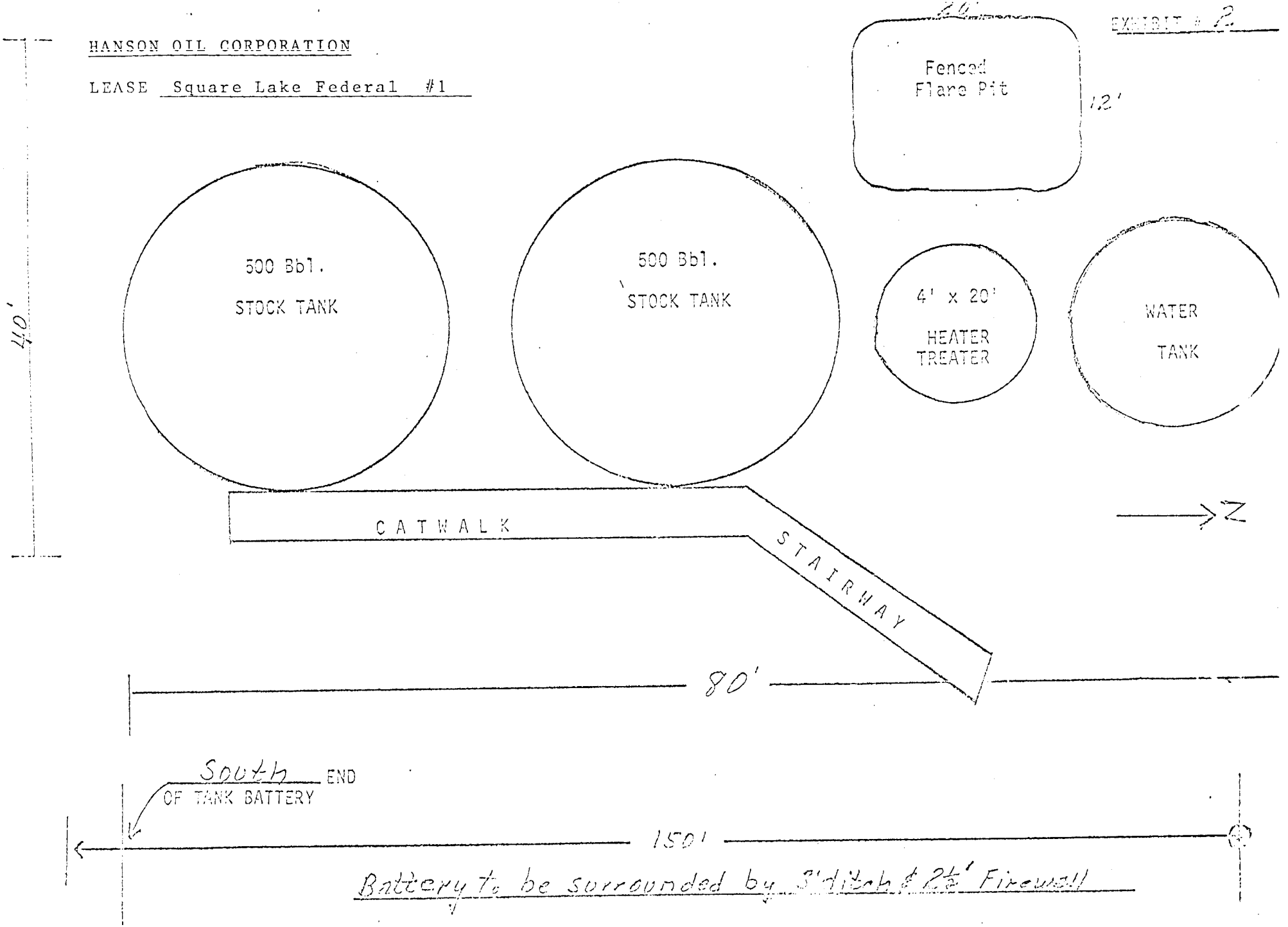


Existing Road
Proposed Access Road
Proposed Location
WEST HENSHAW FIELD
SANDS
SQUARE LAKE
PIPELINE
Loco Hills
Premier Oil Field
Cedar Lake
Cedar Breaks
Cedar Lake Draw
Loco Hills

EXHIBIT # 2

HANSON OIL CORPORATION

LEASE Square Lake Federal #1



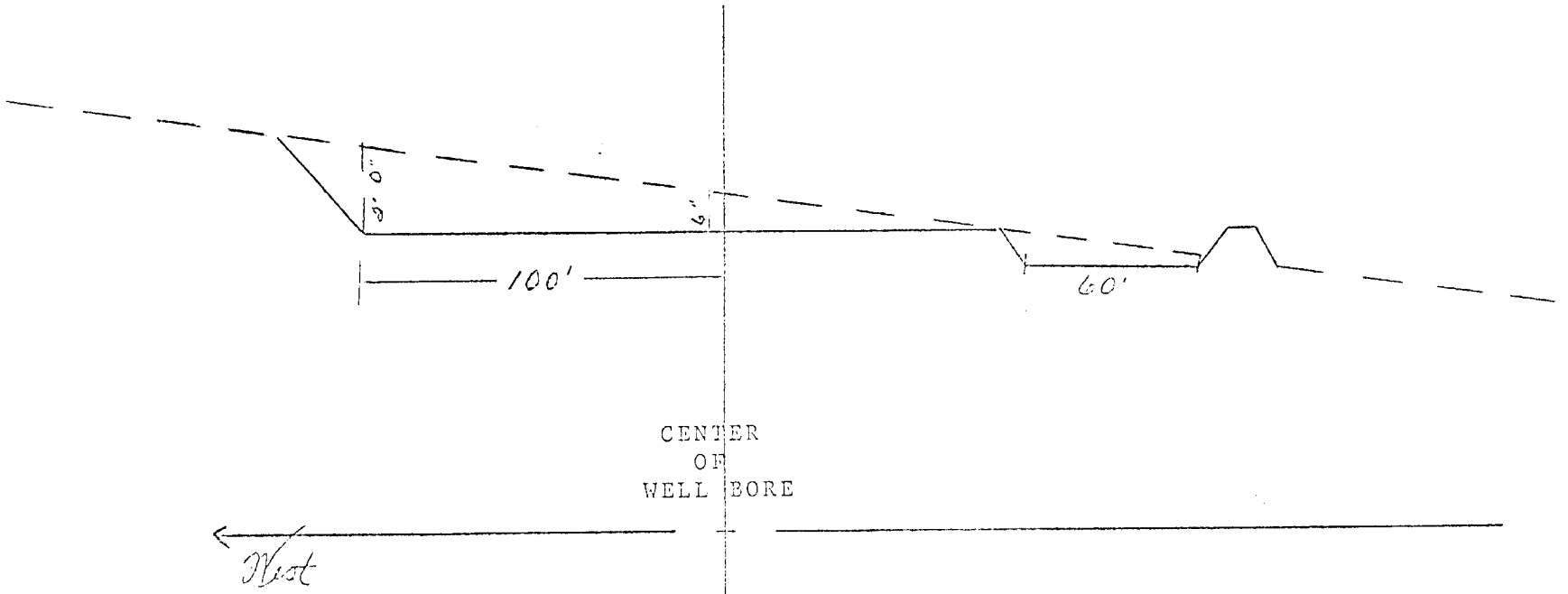
HANSON OIL CORPORATION

EXHIBIT "3"

LEASE Square Lake Federal

WELL #1

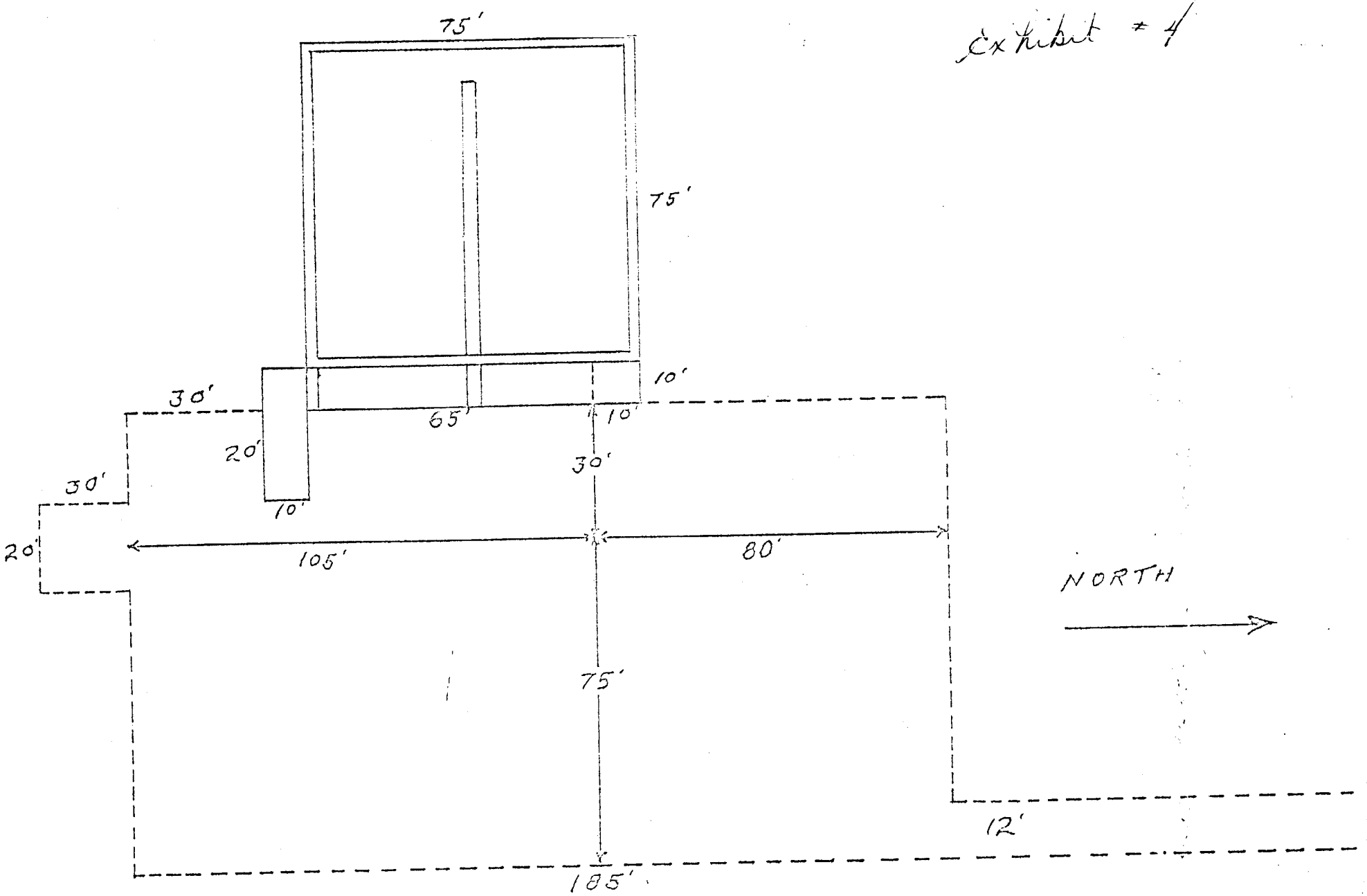
CROSS SECTION OF DRILLING SITE



CENTER
OF
WELL BORE

West

Exhibit #4



SQUARE LAKE FEDERAL #1
660 FEL 660 FSL SEC 28-16-30E
EDDY COUNTY NEW MEXICO

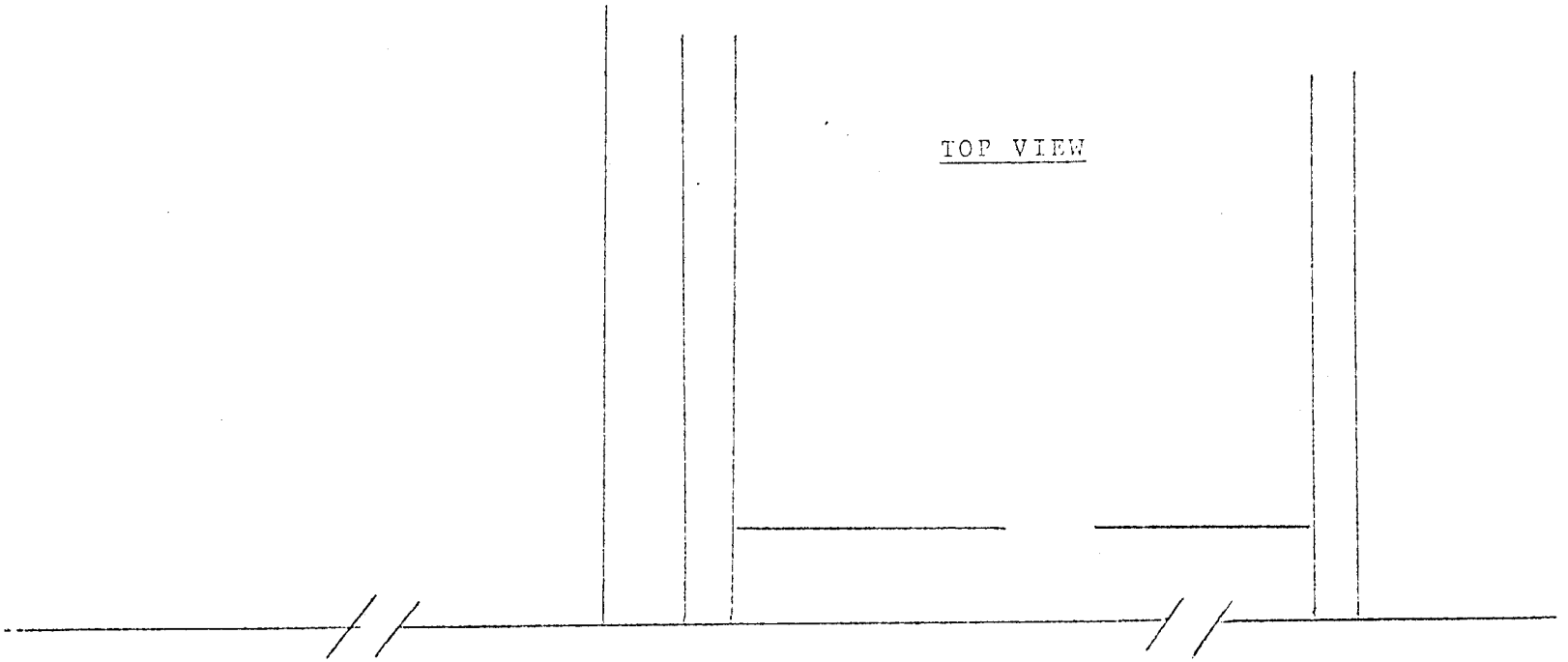
HANSON OIL CORPORATION

EXHIBIT " 5 "

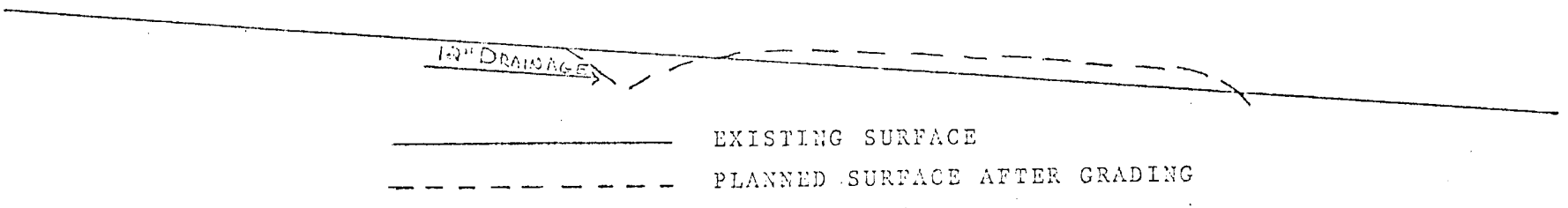
LEASE Square Lake Federal

WELL #1

CROSS-SECTION OF PLANNED ACCESS ROAD



CROSS - SECTION

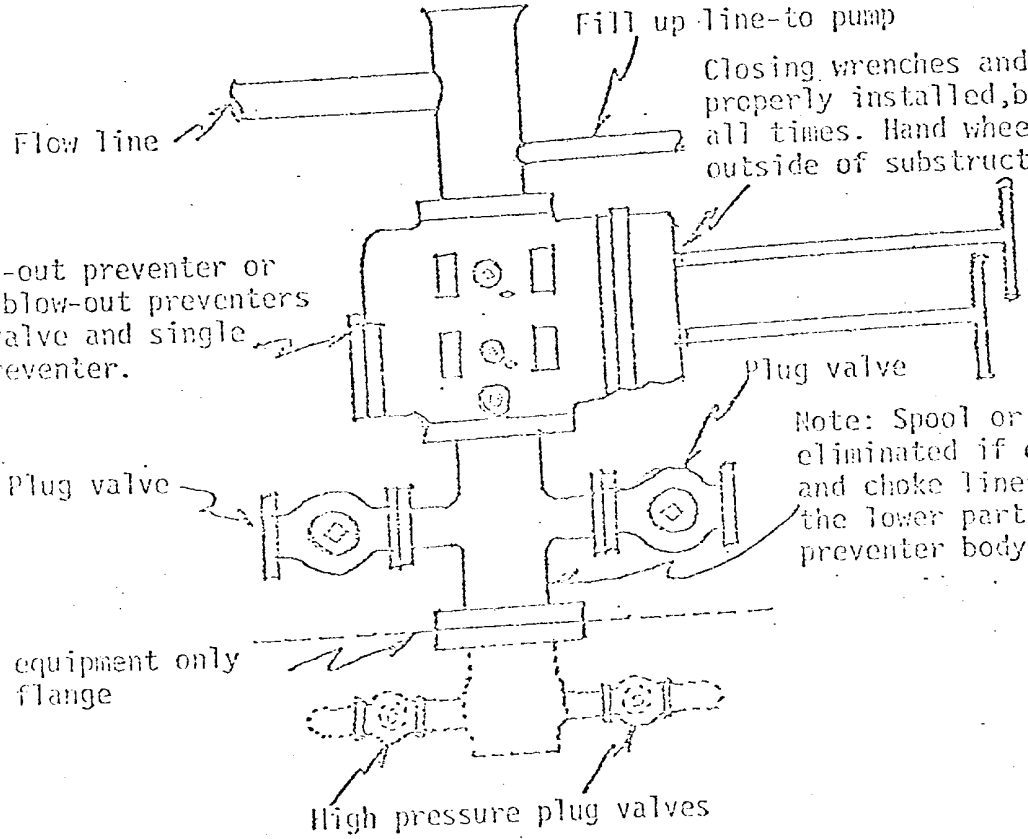


ANSON OIL CORPORATION

MINIMUM BLOW-OUT PREVENTER REQUIREMENTS

XHIBIT "6"

Drilling nipple to be so constructed that it can be removed, without use of a welder, through rotary table opening



NOTE:

When drilling use:
Top Preventer-Blind rams or master valve
Bottom Preventer-Drill pipe rams

When running casing use:
Top Preventer-Casing rams
Bottom Preventer-Blind rams or master valve

NOTE:

1. Blow-out preventers,master valve and all fittings must be in good conditio 2,000#W.P.(4,000 P.S.I.test)minimum.
2. Equipment through which bit must pass shall be as large as inside diameter of the casing that is being drilled through.
3. Nipple above blow-out preventer shall be same size as casing being drilled through.
4. All fittings to be flanged.
5. Safety Valve (2" minimum opening)with sub or connection to drill pipe on ri floor at all times.