Form 9-331 C
(May 1963)

COPY TO O. C. C.

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

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 [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Gifford, Mitchell & Wisenbaker

3. ADDRESS OF OPERATOR
1280 Midland Nat'l Bank Twr., Midland, Texas 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
660' FNL & 660' FEL of Section 31
At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.
NM 10195

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NA

7. UNIT AGREEMENT NAME
Undesignated

8. FARM OR LEASE NAME
Spotted Tail Federal

9. WELL NO.
2

10. FIELD AND POOL, OR WILDCAT
Undesignated Yates

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 31, T-25-S, R-36-E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
6 miles Southwest of Jal, New Mexico

12. COUNTY OR PARISH: Lea
13. STATE: N. M.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 660'

16. NO. OF ACRES IN LEASE: 640'

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 1320.5

19. PROPOSED DEPTH: 3300

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
GR = 3038.5

22. APPROX. DATE WORK WILL START*
11/10/78

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# | 1400' | 750 sx. |
| 7 7/8" | 5 1/2" | 14# | 3300' | 450 sx. |

The Blowout Preventer Program will consist of one 10" 3000 psi WP double BOP (1 pipe ram, 1 blind ram). The BOP will be installed when 8 5/8" casing is set and cemented.

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

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 L. B. Stott TITLE Production Engineer DATE 10/13/78

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

James A. Gillis

*See Instructions On Reverse Side

# 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. |
|---|---|---|
| GIFFORD, MITCHELL & WISENBAKER | SPOTTED TAIL FEDERAL | 2 |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| J | 31 | 25-S | 36-E | LEA |

Actual Footage Location of Well:
660 feet from the North line and 660 feet from the East line

| Ground Level Elev. | Producing Formation | Pool | Dedicated Acreage: |
|---|---|---|---|
| 3038.5 | | | Acres |

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

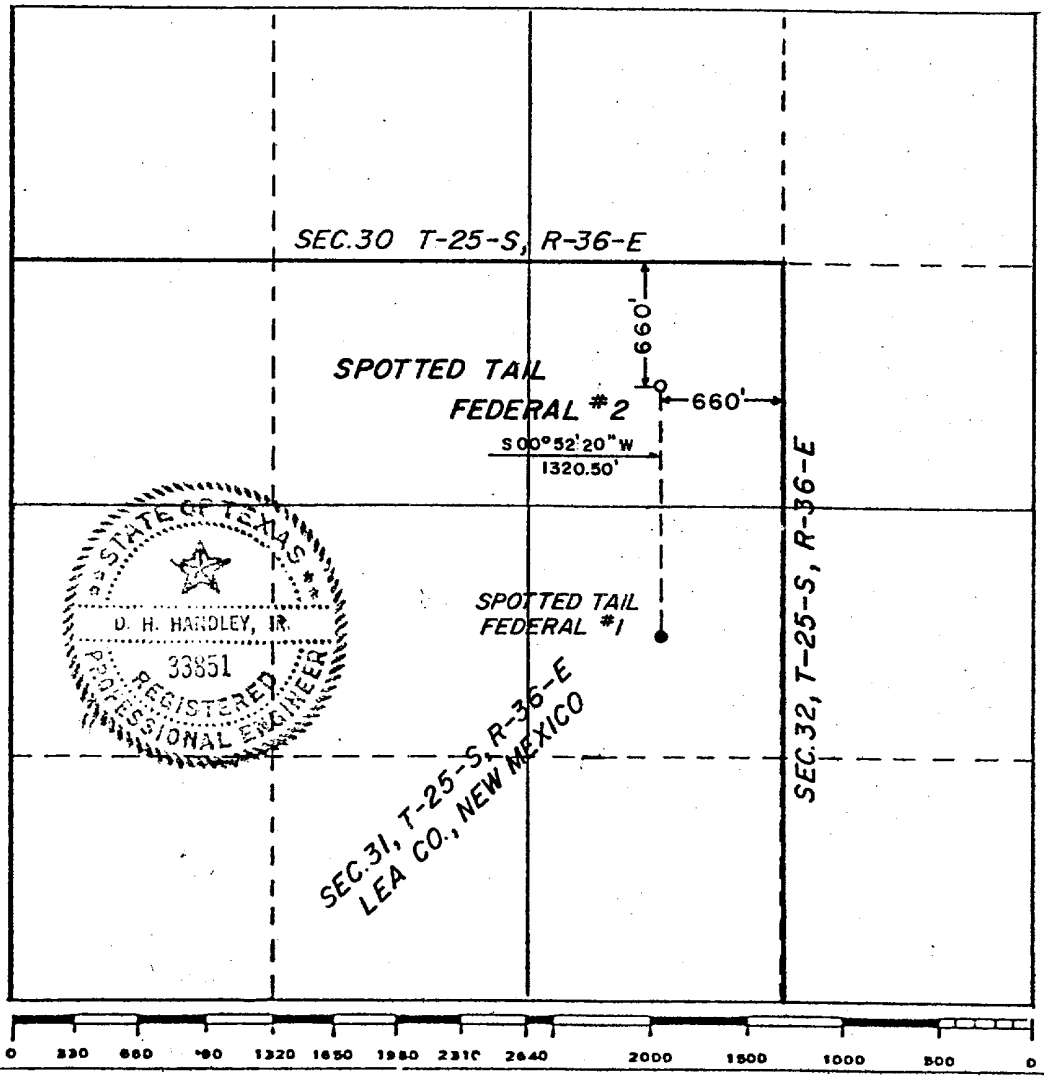
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.*

Name

Position

Company

Date

*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
10-10-78

Registered Professional Engineer and/or Land Surveyor
D. H. Handley

Certificate No.
33851

GIFFORD, MITCHELL & WISENBAKER

#2 SPOTTED TAIL FEDERAL

1. Geologic name of the surface formation.

   Quaternary Alluvium

2. Estimated tops of important geologic markers.

| | |
|---|---|
| Rustler | 1,000' |
| Salado | 1,600' |
| Tansill | 3,150' |
| Yates | 3,350' |

3. Estimated depths at which anticipated water, oil, or other mineral-bearing formations are expected to be encountered.

   Water - Ground water anticipated 200 - 300'
   Oil - 3,250'

4. Proposed Casing Program:

| String | Size, Weight, Grade | Minimum Condition | Depth Interval |
|---|---|---|---|
| Surface | 8-5/8" /24/ H-40 | Class II | 0-1400' |
| Production | 5½"/ 14 /H-40 | Class II | 0-3300' |

   Casing strings run will be at least as strong as string shown. Actual pipe run may be different depending on casing available.

5. Minimum specifications for pressure control equipment:

   a) Casinghead Equipment

   Casinghead: 8-5/8" STC x 4-1/2" 2000 psi WP screwed
   Tubinghead: 4-1/2" x 2-3/8" 2000 psi screwed
   Tree: 2-3/8" 2000 psi WP screwed

   b) Blowout Preventers

   Refer to attached drawing. The BOP will be installed after the 8-5/8 surface casing is set and will be no smaller than 10" API nor less than 2000 psi WP.

   c) BOP Control Unit

   Remotely located, hydraulically operated.

   d) Testing

   When installed on the 8-5/8" casing, the BOP will be tested to a low pressure (200-300 psi) and to at least 1500 psi. Thereafter, it will

be tested approximately weekly to 1500 psi. An operational test of the BOP will be performed each round trip but no more than once a day. The pipe ram will be closed around the drill pipe, and the blind rams will be closed while the pipe is out of the hole.

6. Type and anticipated characteristics of drilling fluid:

Surface hole will be drilled with a minimum weight fresh water spud mud compatible with operating conditions.

Production hole will be drilled with brine water. Depending on hole conditions and DST and core requirements, the system may be mudded up as follows:

Type: Saturated Brine
Weight: 9-10 ppg
Funnel Viscosity: 28-35 sec.
Water Loss: 10-30 cc.
Solids: Minimum
pH: 10.5+

Not less than 75 barrels of fluid will be in the pits.

7. Auxiliary Control Equipment:

a) Lower Kelly Cock

b) Full opening ball type safety valve to fit each size of drill pipe on the rig floor on trips.

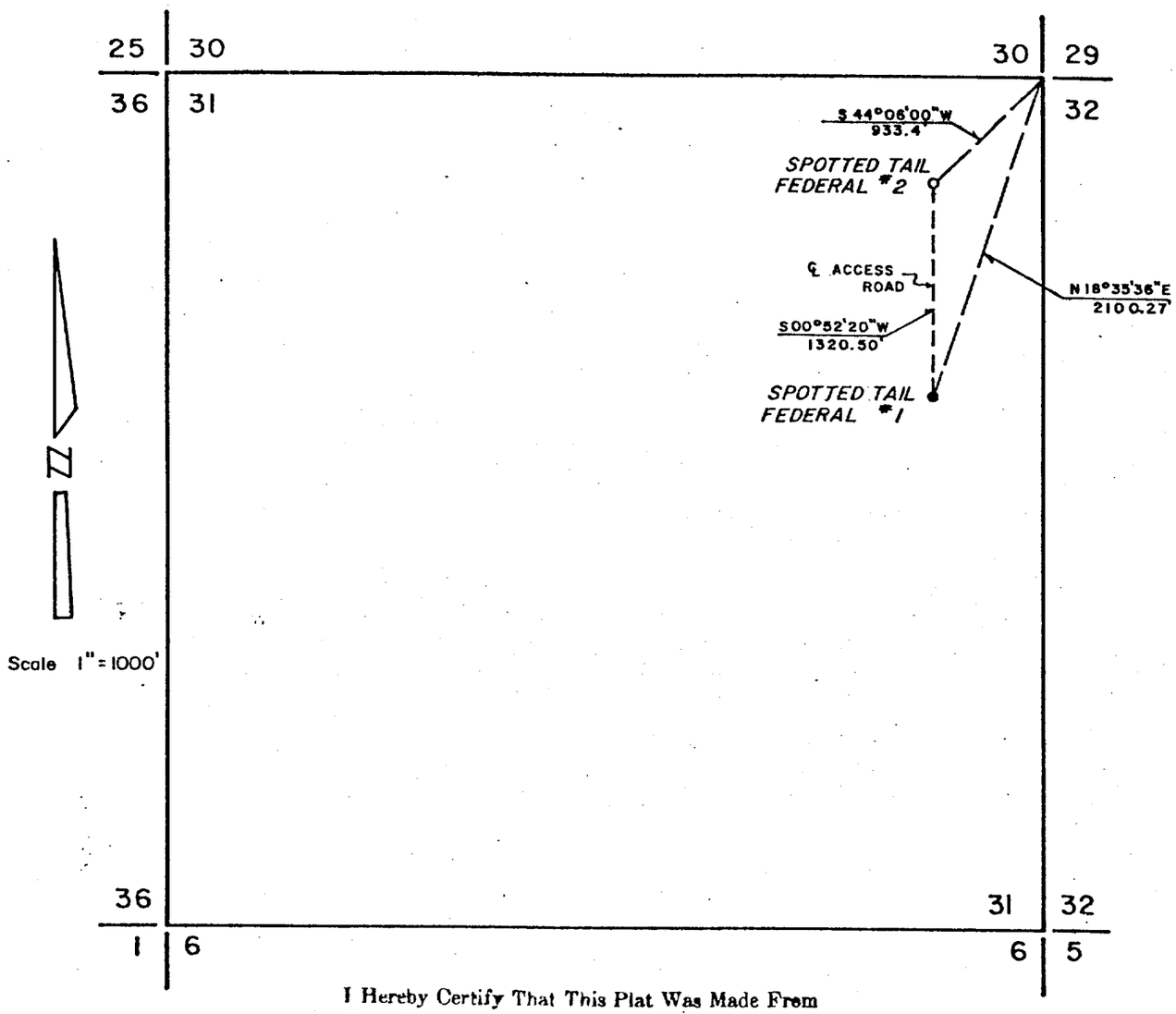
8. Testing, logging, and coring program to be followed:

0 - T.D.: Gamma Ray, Sonic, FDC-CNL, and DLL or DIL
3250-3350: Possible 2DST's depending on shows
3250-3300: Approximate 50' core in pay zone

9. No abnormal temperatures or pressures are anticipated. The pressure can be controlled by the hydrostatic head of drilling fluid in the hole. Hydrogen sulfide gas is expected to be minimal.

10. It is anticipated that the drilling operations will begin on or before Nov. 26, 1978.

SEC. 31, T-25-S, R-36-E
LEA COUNTY, N.M.




I Hereby Certify That This Plat Was Made From Notes Taken In The Field In An Actual Bonafide Survey And That The Same Is True And Correct To The Best Of My Belief.

D. H. Handley

STATE OF TEXAS
D. H. HANDLEY, JR.
33851
REGISTERED
PROFESSIONAL ENGINEER

BK. WL-2, PG. 17

B & W SURVEYING & MAPPING, INC.

MIDLAND, TEXAS

PLAT SHOWING ACCESS ROAD TO GIFFORD, MITCHELL & WISENBAKER'S SPOTTED TAIL FEDERAL NO. 2 IN SEC. 31, T-25-S, R-36-E
LEA COUNTY, NEW MEXICO

| | | | |
|---|---|---|---|
| DWN. T.J.A. | DATE 10/12/78 | CKD. D.H.H. | APP. |
| JOB WL-080 | DWG. NO. WL-080-1-B | | REV. |

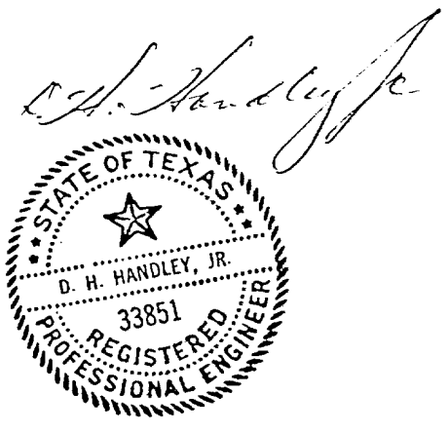
GMW Access Road

A strip or tract of land twenty (20) feet in width, for an access road in, thru and across Section 31, T-25-S, R-36-E, of the Central New Mexico Meridian; said strip or tract or land lying ten (10) feet left of and ten (10) feet right of the following described centerline:

Beginning at a point in the Northeast quarter of the Northeast quarter of said Section 31; said point bearing S 44°06'00" W, a distance of 933.4 feet from the Northeast corner of said Section 31;

THENCE, S 00°52'20" W, a distance of 1320.50 feet to a point; from which said point, the Northeast corner of said Section 31 bears N 18°35'36" E, a distance of 2100.27 feet.

The above described centerline being, in all, a total distance of 1320.50 feet or 80.03 rods in length.



SURFACE USE PLAN

Gifford, Mitchell & Wisenbaker - Exploratory Well
No. 2 Spotted Tail Federal - Lease No. NM-10195 - 660' FNL and 660' FEL Section 31, 25S-36E
Lea County, New Mexico

1. EXISTING ROADS - Detailed map showing drillsite location in relation to a town or known point and all existing roads within three miles of the drillsite are shown on Exhibit "A".

From Jal, go southwesterly on paved road 3 miles to Bennett; continue on improved road approximately 1-1/2 miles to a graded road going westerly. Proceed westerly on graded road 4 miles, then Northerly 1 mile to drillsite.

2. PLANNED ROADS - It is planned to construct approximately 1320' of new road as shown on Exhibit "A". The existing access road will be improved by grading, widening and adding caliche where necessary. Caliche will be hauled from a pit near the Anthony ranch house located on private lands.

1) Width of the new road to be constructed will be approximately 16 feet.

2) No grade change will be made in any part of the existing access road or the new road to be constructed in excess of 5 percent.

3) No turnouts will be necessary.

4) No special drainage features will be necessary.

5) No culverts will be required.

6) Caliche will be used only on a portion of the road.

7) No cattleguards will be required.

8) The proposed new road is center-line flagged.

3. LOCATION OF EXISTING WELLS WITHIN TWO MILE RADIUS -

1) Water wells - There are windmills located approximately one mile northeast of the drillsite and a water well at the Anthony ranch house approximately 2 miles southeast of the drillsite.

2) Abandoned wells - Several dry holes are shown on Exhibit "A" within 2 miles of drillsite.

3) Temporarily abandoned wells - None

4) Disposal wells - None

5) Drilling wells - None

6) Producing wells - There are three producing wells South and Southeast of drillsite.

7) Shut-In wells - There is one shut-in well East of drillsite waiting on pipeline connection.

8) Injection wells - None

9) Monitoring or observation wells for other resources - None

4. TANK BATTERIES, PRODUCTION FACILITIES AND LEASE PIPELINES -

A. There are tank batteries, production facilities or pipelines within one mile of the location controlled by lessee servicing the wells mentioned in 3(6&7).

B. In the event of production, new facilities are shown on Exhibit "B".

1) Proposed location and attendant lines by flagging if off of well pad shown on Exhibit "B".

2) Dimensions of facilities are shown on Exhibit "B".

3) Production facilities will be constructed on drillsite pad using caliche surface.

4) Equipment and pit will be fenced and flagged to protect livestock and wildlife, if necessary.

C. Rehabilitation will be done on any disturbed areas no longer needed for operations after completion of the production facilities. This will consist of reshaping the existing surface and seeding as specified.

5. LOCATION AND TYPE OF WATER SUPPLY -

A. Water will be hauled from an existing water well located approximately three miles southeast of drillsite. In the event brine water is used, it will be hauled by truck from a source outside the area. In the event water is pumped, the pipeline will be laid on the surface of the ground along the access road to the drillsite.

No water well will be drilled.

6. SOURCE OF CONSTRUCTION MATERIALS -

A. Caliche will be obtained from a privately owned pit

B. No construction material will be used from Federal or Indian lands.

C. Caliche secured from private sources will be used where needed on the road and drillsite.

D. All access roads are shown on Exhibit "A".

7. WASTE DISPOSAL -

A. Drill cuttings will be disposed of in the reserve pit.

B. Drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry.

C. Trash, waste paper, garbage and junk will be burned or buried with a minimum of 24" cover. Waste material will be contained to prevent scattering by wind prior to ultimate disposal.

D. Any produced water will be contained in tanks and be disposed of in an approved manner. Oil produced will be stored in tanks until sold, at which time it will be hauled from location.

E. Current laws and regulations pertaining to disposal of human waste will be complied with.

F. If productive, maintenance waste will be placed in special containers and buried or hauled away periodically.

8. ANCILIARY FACILITIES - No camps, airstrips, et cetera, will be constructed.

9. WELL SITE LAYOUT -

A. Refer to Exhibit "B" for well site layout.

B. Dimensions may vary slightly depending on size of drilling rig available.

C. Terrain at the well site is very flat as shown on Exhibit "B".

D. The pad will be topped with material obtained from the reserve pit or material hauled in from private property traversed by the access road.

E. The reserve pit will be approximately 125' x 150' top width.

10. RESTORATION OF SURFACE -

1) At the time of completion and abandonment of the well, the pits will be backfilled and the entire disturbed area will be sloped to coincide with the adjacent undisturbed area. The top soil will be distributed over the entire disturbed area. Prior to leaving the drillsite upon rig move out and before reshaping any pit that is to remain open for drying will be fenced until backfilling and reshaping can be done.

2) When well is abandoned the new road will be rehabilitated as per BLM recommendations.

3) Any rehabilitation of the drill pad will comply with BLM specifications.

4) Any oil on pits will be removed or otherwise disposed of to USGS and BLM approval.

5) Rehabilitation operations will be completed as soon as practical after abandonment of the well and no later than the Fall after abandonment.

11. OTHER INFORMATION -

A. Terrain - Flat prairie.

B. Soil - Sandy.

C. Sparse vegetation - Mesquite and some native grasses.

D. There are no buildings, ponds, water wells, archeological, historical or cultural sites in the immediate area.

E. Surface use is grazing.

F. Effect on Environment - Drillsite, which is in nearly flat semi-arid, desert country, is in a low environmental risk area. The total effect of drilling and producing in this area would be minimal. No known archeological, historical, or cultural sites exist in the drill or road areas.

G. Surface ownership - the drillsite and new access road is located on BLM lands.

H. Open Pits - All unattended pits containing mud or other liquids will be fenced.

I. Well sign - Sign identifying and locating well will be maintained at drillsite commencing with the spudding of the well.

12. OPERATOR'S REPRESENTATIVE - Field representative who can be contacted concerning compliance of this Surface Use Plan is:

Jim Salners
1280 Midland National Bank Tower
Midland, TX 79701
Office Phone: (915) 682-6282
Home Phone: (915) 683-8927

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

Gifford, Mitchell & Wisenbaker and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. A copy of this plan will be posted at the well site during the drilling of the well for reference by all contractors and subcontractors.

GIFFORD, MITCHELL & WISENBAKER

Date 12/27/78

By _____
Joe N. Gifford

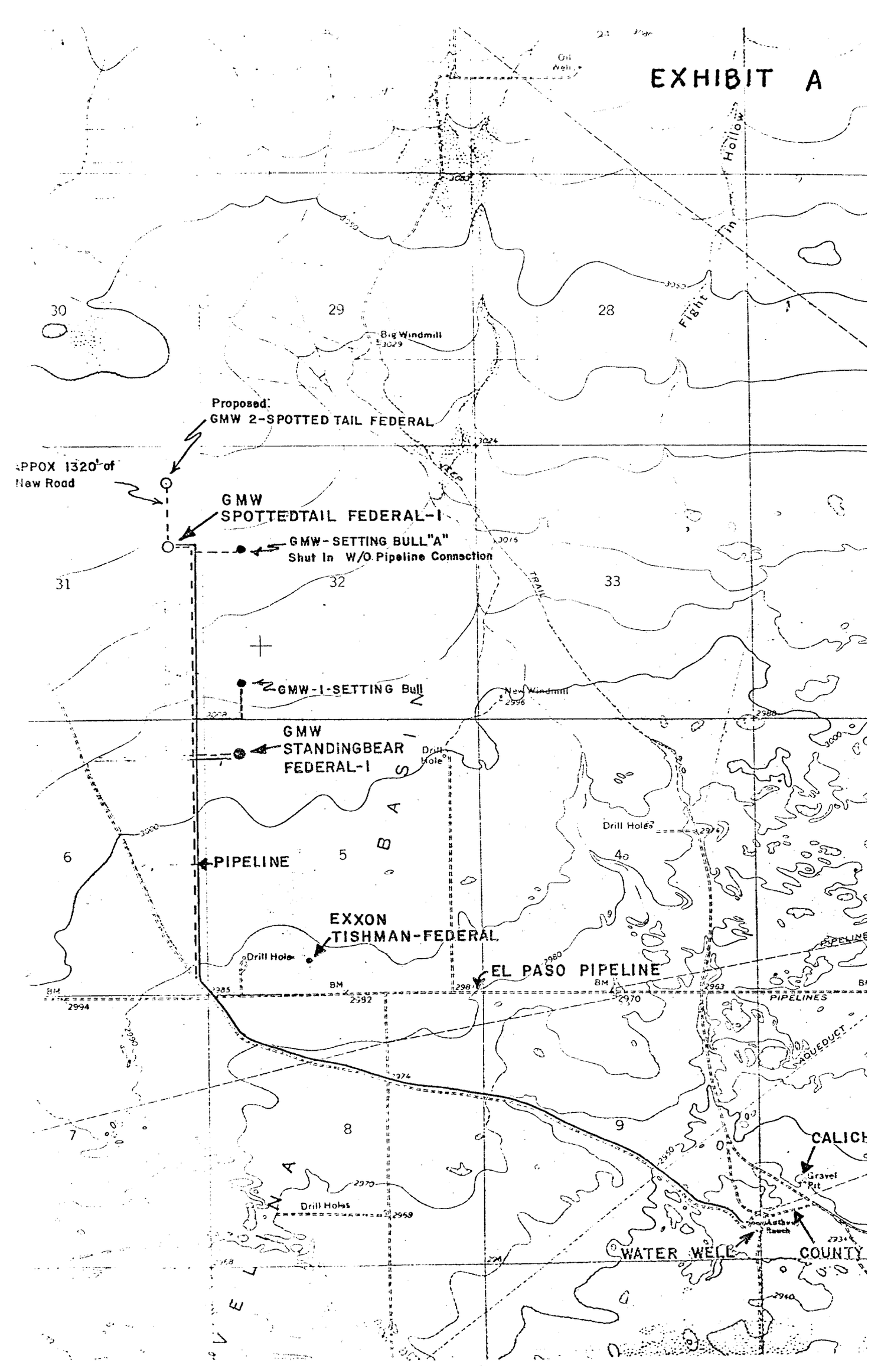


EXHIBIT A
Proposed:
GMW 2-SPOTTED TAIL FEDERAL
APPOX 1320' of
New Road
GMW
SPOTTEDTAIL FEDERAL-1
GMW-SETTING BULL"A"
Shut In W/O Pipeline Connection
GMW-1-SETTING Bull
GMW
STANDINGBEAR
FEDERAL-1
PIPELINE
EXXON
TISHMAN-FEDERAL
EL PASO PIPELINE
Big Windmill
New Windmill
Drill Hole
Drill Holes
Fight Indian Hollow
TRAIL
JEEP
PIPELINES
AQUEDUCT
CALICH
Gravel Pit
WATER WELL
COUNTY
BASIN
VELINA
30
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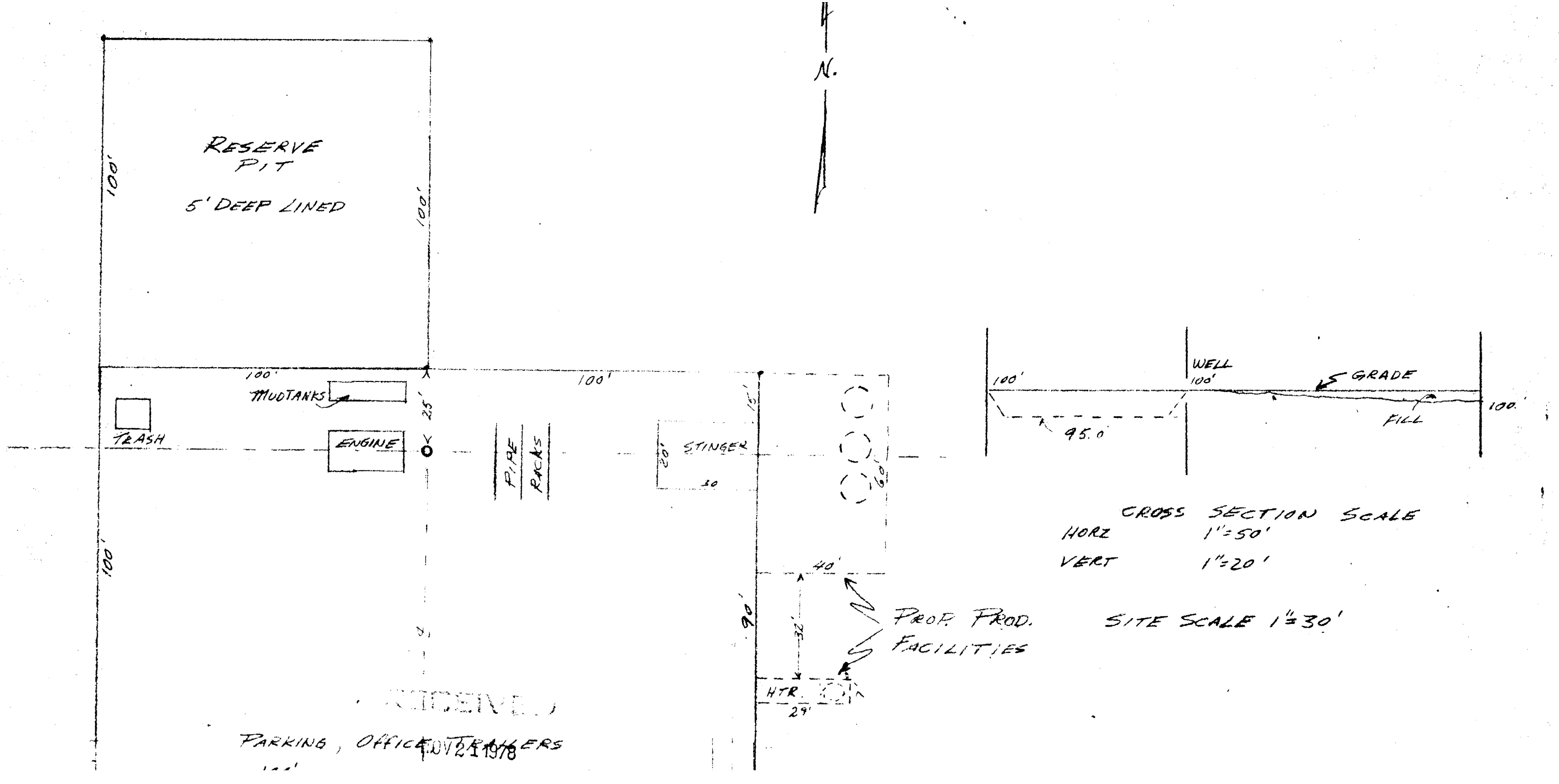
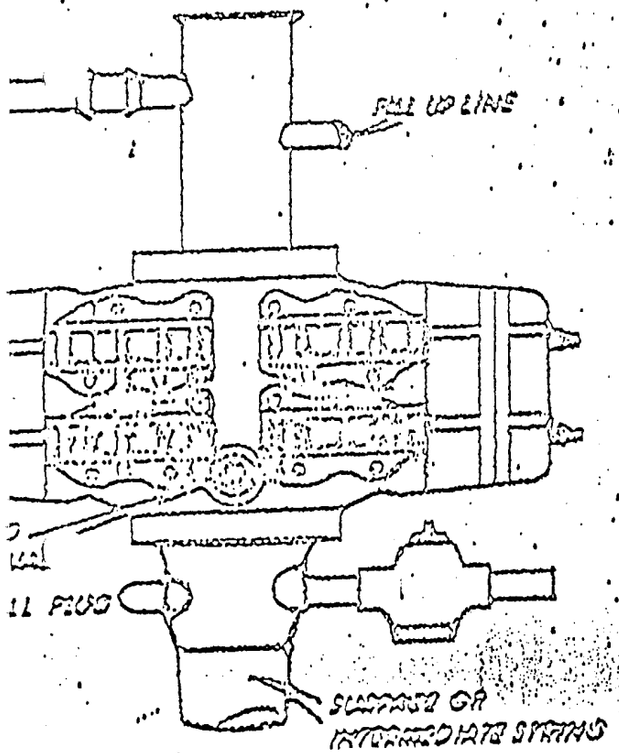
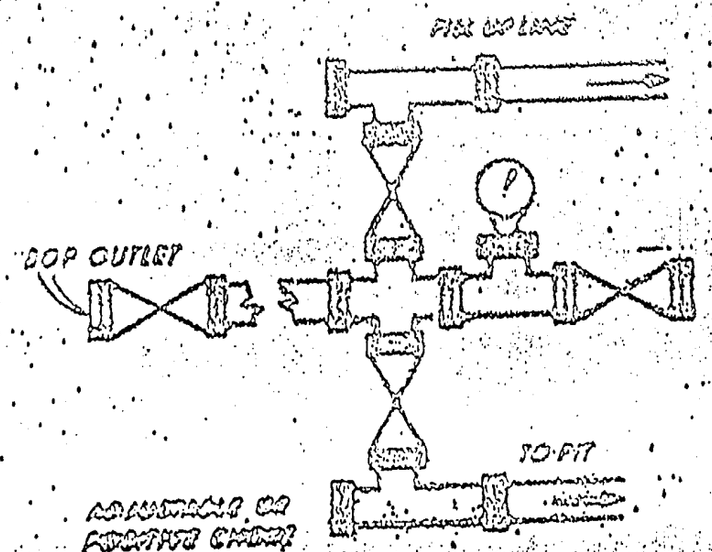

N.
RESERVE PIT
5' DEEP LINED
100'
100'
100'
100'
MUDTANKS
TRASH
ENGINE
25'
PIPE RACKS
20'
STINGER
10
15'
60'
40'
90'
32'
HTR.
24'
PROP. PROD. FACILITIES
PARKING, OFFICE & TRAILERS
100'
WELL
100'
GRADE
FILL
95.0
100'
CROSS SECTION SCALE
HORZ 1"=50'
VERT 1"=20'
SITE SCALE 1"=30'
NOV 21 1978




1. BOP VALVES AND ALL WORKING FITTINGS SHOULD BE IN GOOD WORKING CONDITION.
2. ALL BOLTS TO BE INSTALLED AND TIGHT.
3. ALL VALVES TO BE 3000# W.P. OR BETTER.
4. AFTER NIPPLING UP TEST RAMS AND PRESSURE UP TO 1500# FOR 15 MINUTES AND CHECK FOR POSSIBLE LEAKS.
5. ALL CREW MEMBERS TO BE FAMILIAR WITH BOP AND ACCUMULATORS.
6. KEEP HOLE FULL ON TRIPS.
7. USE ONLY FLANGE TYPE FITTINGS.
8. RECHECK BOLTS FOR TIGHTNESS BEFORE 5000 FT. OR ENTERING PRODUCTION ZONES.
9. WHEN DRILLING USE,
   TOP PREVENTER - DRILL PIPE RAMS
   BOTTOM PREVENTER BLIND RAMS
10. WHEN RUNNING CASING USE,
    TOP PREVENTER - CASING RAMS
    BOTTOM PREVENTER BLIND RAMS