30-015-26748

Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM-01165

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

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

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

RECEIVED
MAY 15 1991
O. C. D.
ARTESIA, OFFICE

7. UNIT AGREEMENT NAME: Voluntary

8. FARM OR LEASE NAME: Yates Federal

2. NAME OF OPERATOR: Marathon Oil Company

9. WELL NO.: 18

3. ADDRESS OF OPERATOR: P. O. Box 552, Midland, TX 79702

10. FIELD AND POOL, OR WILDCAT: Burtonflat (Delaware)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 990' FNL & 990' FEL
At proposed prod. zone: 990' FNL & 990' FEL

Ut. A

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 18, T-20-S, R-29-E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 15 miles NE of Carlsbad, NM

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
4290'	2560	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**
* 764	3800'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3263' GR

22. APPROX. DATE WORK WILL START*: May 20, 1991

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"	48	350'	360 sx - circulate
12-1/4"	9-5/8"	32.3	1250'	450 sx - circulate
8-3/4"	7"	20	3150'	505 sx - TOC @ 600'
6-1/4"	4-1/2"	10.5	3800'	120 sx - TOC @ 2600'

Propose to drill to a TD of 3800'.
All casing will be run and cemented in accordance with regulations and by approved methods.
Blowout prevention equipment will be applied as outlined in Additional Information.
See attached Multipoint Surface Use Plan and Additional Information for specific drilling operations.

* Distance to Yates Federal #10

Post ID-1
5-24-91
New Lse & API

APR 25 1991
O. C. D.
ARTESIA, OFFICE

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 _____ TITLE Drilling Superintendent DATE 4/25/91

(This space for Federal or State office use)

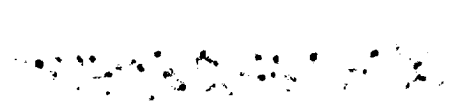
PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 5-14-91

CONDITIONS OF APPROVAL, IF ANY:
APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised 1-1-89

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
MARATHON OIL COMPANY	YATES FEDERAL	18

Unit Letter	Section	Township	Range	County
A	18	20 SOUTH	29 EAST NMPM	EDDY

Actual Footage Location of Well:
990 feet from the NORTH line and 990 feet from the EAST line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3263.8'	Lamar (535)	Burtonflat (Delaware)	40 Acres

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

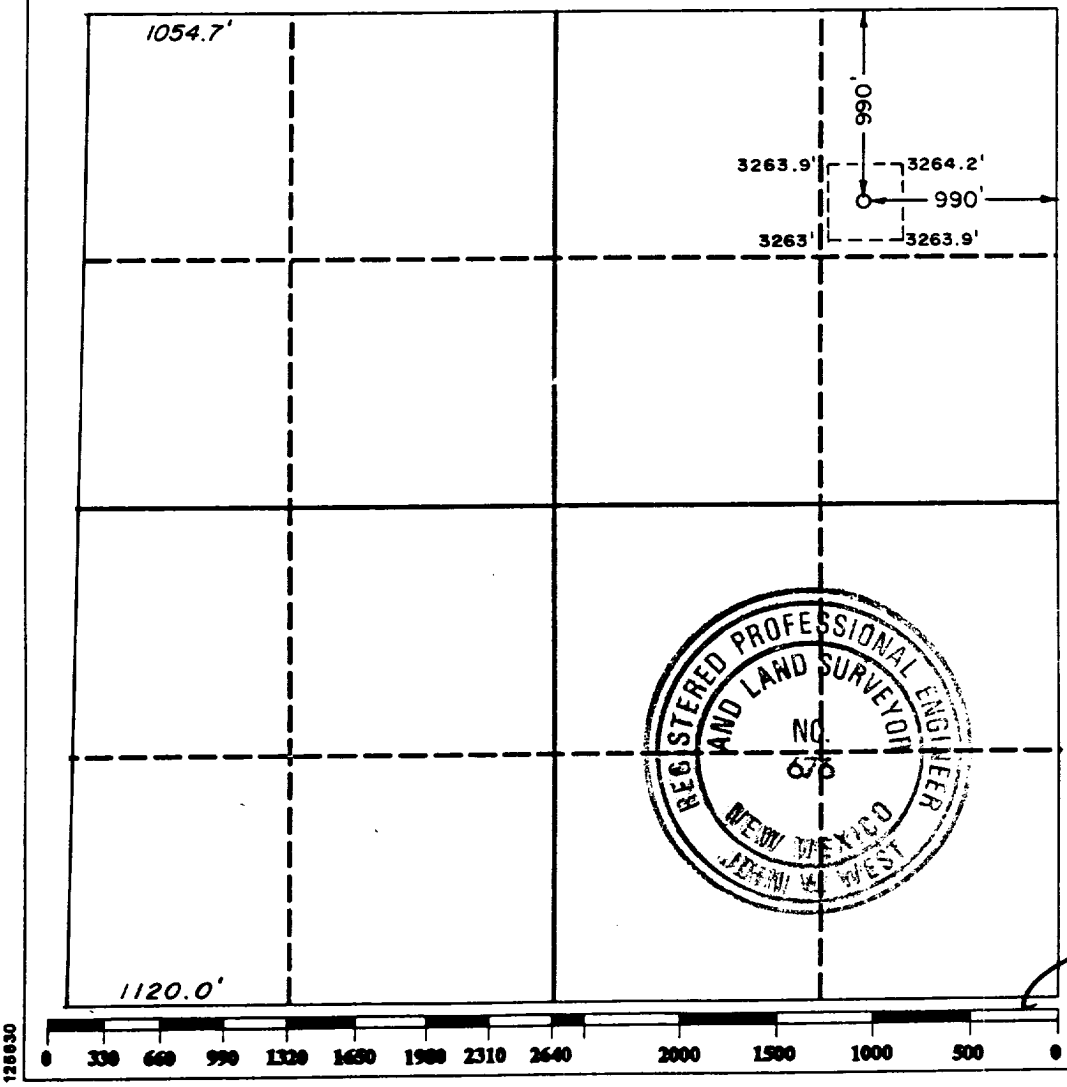
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest 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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature

Printed Name
S. L. Atnipp

Position
Drilling Superintendent

Company
Marathon Oil Company

Date
4/25/91

SURVEYOR CERTIFICATION

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 supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
April 8, 1991

Signature & Seal of
Professional Surveyor

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239

128630

MULTIPOINT SURFACE USE AND OPERATIONS PLAN

Marathon Oil Company

YATES FEDERAL #18
990' FNL & 990' FEL
Section 18, T-20-S, R-29-E
Eddy County, New Mexico
Lease: 01165

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

1. Existing Roads

Exhibit "A" is a portion of a topographic map showing the location of the proposed well as staked. From Hobbs, take U.S. 62-180 west past mile marker 50. Turn north on Eddy Co. Rd. 238. Follow 238 north and west for 6.4 miles, then north on caliche road .8 mile into location. All existing roads used to access the proposed location shall be maintained in the same or better condition than presently found.

2. Planned Access Roads

A. Length and Width

The proposed access road will be approximately 500 feet in length and 16 feet in width. The proposed access road will enter the location from the east.

B. Surfacing Material

6" caliche rolled and packed.

C. Maximum Grade

Three Percent (3%)

D. Turnouts

None Required

E. Drainage Design

Natural drainage.

F. Culverts

As needed.

G. Cuts and Fills

None required.

H. Gates, Cattlegaurds and Fences

16' wide cattleguard in pasture fence that intersects proposed access road.

3. Location of Existing Wells

Exhibit "B" is a map showing the location of all the wells within a one mile radius of the proposed well.

4. Location of Existing and Proposed Facilities

A. Exhibit "C" is a map of the existing roads with the proposed well location.

B. In the event of a producible oil well, oil will be stored at the battery location on the Yates Federal #3 pad with production metered at the location. The gas will be piped to existing flow lines in a manner to be determined at a later date. All flowlines have been centerline staked from wellsites to holding facilities.

5. Location and Type of Water Supply

Water will be furnished and trucked by a Contractor.

6. Source of Construction Materials

Caliche for surfacing the drilling pad will be obtained from a pit in the NE/4 of the NW/4 section of Section 20, T-20-S, R-25-E.

7. Methods of Handling Waste Disposal

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

B. Drilling fluids will be vacuumed from the reserve pit and hauled to an approved disposal well. Reserve pit contents will be allowed to dry and pitwalls backfilled. All areas of the pad and reserve pit not necessary to production will be re-contoured. Top soil will be redistributed and reseeded with the recommended seed mixture.

C. Water produced during tests will be disposed of in the drilling pits and hauled to an approved salt water disposal well.

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

E. Trash, waste paper, garbage, and junk will be stored in a trailer on location and hauled to an approved disposal site.

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

8. Ancillary Facilities

None required.

9. Wellsite Layout

Exhibit "D" shows the relative location of the rig components and reserve pits.

10. Plans for Restoration of Surface

A. After finishing drilling and completion operations all equipment and other materials not necessary for operations will be removed. Pits will be filled and leveled and the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as is possible.

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

C. After abandonment of well, equipment will be removed, the location will be cleaned, and the pad and access road will be ripped and returned to as near the original appearance as is possible.

D. In the event of a producer, the land not necessary for production operations will be re-contoured and seeded with the recommended mixture submitted by the BLM.

11. Other Information:

A. Topography

The location is situated on a duned landform.

B. Soil

Typic Torripsamment subgroup.

C. Flora and Fauna

The vegetation cover consists of native range grasses with yucca plants, cactus and mesquite. Wild life in the area includes rabbits, dove, quail, and other inhabitants typical of semi-arid climate.

D. Ponds and Streams

Local drainage in this area is internal.

E. Residence and Structures

None nearby.

F. Archaeological, Historical and Cultural Sites

None observed in the area. The Archaeological Inspection Report is being forwarded by Archaeological Consultants, Inc.

G. Land Use

Grazing with hunting in season.

H. Surface Ownership

The proposed wellsite is on land owned by the Federal Government.

12. Operators Representative

Stanley L. Atnipp
P. O. Box 552
Midland, TX 79702
(915) 682-1626

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 place are, to the best of my knowledge true and correct; and, that the work associated with the operations proposed herein will be performed by Marathon Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

S. L. Atnipp
Drilling Superintendent

4/25/91
Date

MARATHON OIL COMPANY

YATES FEDERAL #18
ADDITIONAL INFORMATION
Comply with Order 1

In conjunction with Form 9-331C, Application to drill subject well, Marathon Oil Company submits the following items of information in accordance with BLM requirements:

1. Geological Name of Surface Formation

Quaternary Alluvium

2. Estimated Tops of Important Geological Markers

Rustler	400'
Base of Salt	975'
Yates	975'
Capitan Reef	1200'
Lamar SJS	3120'
1st Sand	3210'
2nd Sand	3360'

3. Estimated Depths of Anticipated Water, Oil or Gas Bearing Formations

Yates (water)	975'
Capitan Reef (water)	1200'
Lamar (water & oil) SJS	3120'
1st Sand (water & oil)	3210'
2nd Sand (water & oil)	3360'

4. Casing and Cementing Program

13-3/8" Surface to 350':	Cement to surface with 360 sxs Class "C" with 2% $CaCl_2$
9-5/8" Intermediate to 1250':	Cement to surface with 350 sxs Modified Lite followed by 100 sxs Class "C" with 2% $CaCl_2$
7" Intermediate to 3150'	Cement to surface w/ 330 sx modified lite followed by 175 sx Class "C" w/ 2% $CaCl_2$
4-1/2" Production to 3800':	Cement to 2600' with 120 sx Class "C"

5. Pressure Control Equipment (Exhibit E)

20" Conductor	21-1/2" diverter or rotating head - function test to 2000 psi
13-3/8" Surface:	13-5/8" 3000 psi working pressure annular preventer tested to 3000 psi
	13-5/8" 3000 psi working pressure pipe and blind rams tested to 3000 psi
9-5/8" Intermediate:	11" 3000 psi working pressure annular preventer tested to 3000 psi
	11" 3000 psi working pressure pipe rams and blind rams tested to 3000 psi Choke manifold tested to 3000 psi
7" Intermediate	11" 3000 psi working pressure annular preventer tested to 3000 psi
	11" 3000 psi working pressure pipe rams and blind rams tested to 3000 psi Choke manifold tested to 3000 psi

6. Proposed Mud Program

0 - 300'	Native; Mud Wt:	8.5 - 8.8, Viscosity 28-34 Sec
300' - 1,250'	Brine Water; Mud Wt:	10.0 - 10.2, Viscosity 28-32 Sec
1,250' - 3,150'	Fresh Water; Mud Wt:	8.4 - 8.6, Viscosity 28-30 Sec
3,150' - 3,700'	Fresh Water; Mud Wt:	8.5 - 8.8, Viscosity 34-38 Sec

7. Auxiliary Equipment

A safety valve and subs to fit all strings will be kept on the floor at all times. An upper kelly cock valve will be utilized with the handle available on the rig floor.
Surface Hole: Stroke Counter
Intermediate Hole: PVT, Gas Separator
Production Hole: PVT, Gas Separator, H2S Monitor

8. Testing, Logging, and Coring Programs

A. Coring Program:

None anticipated.

B. Testing Program:

None anticipated.

C. Logging Program:

TD-Surface - GR/LDT/CN, Sonic/DLL/RXO, FMS, RFT

D. Mud Logging Services:

Not required.

9. Abnormal Pressures, Temperatures or Potential Hazards

Possible losses in surface and intermediate hole. Possible sulphur water flow between 1000'-2000'.

10. Anticipated Starting Date

As soon as possible

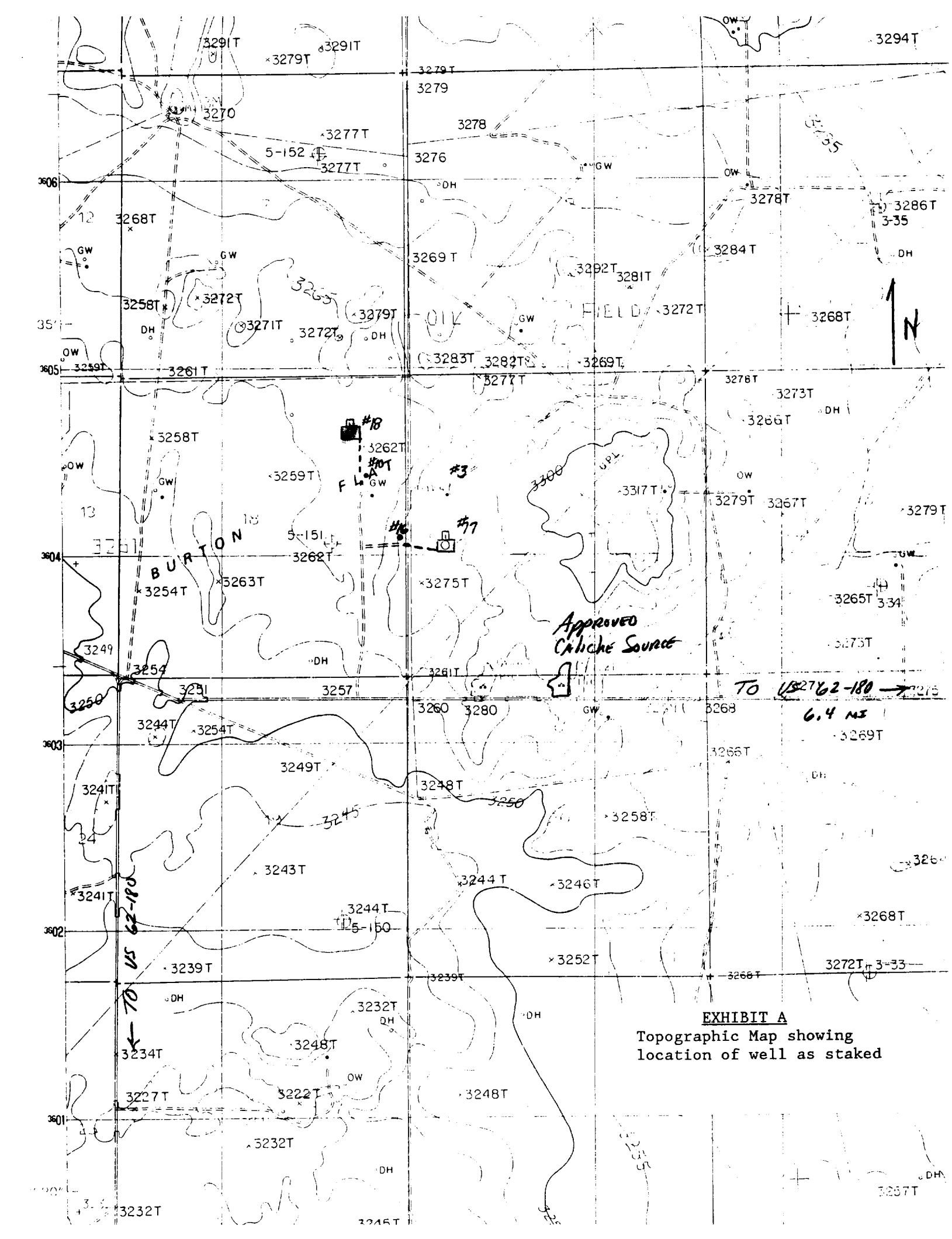


EXHIBIT A

Topographic Map showing location of well as staked

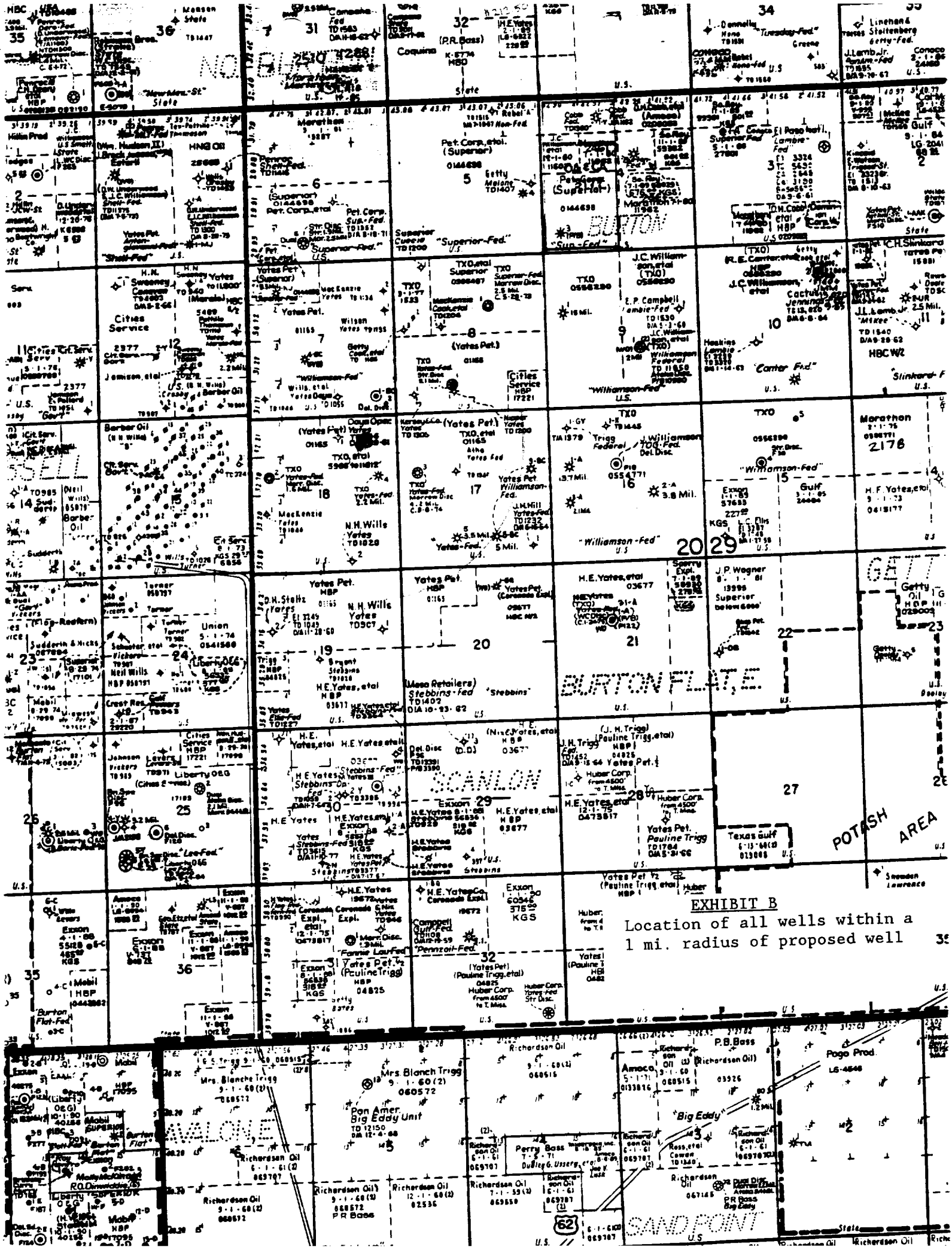


EXHIBIT B

Location of all wells within a 1 mi. radius of proposed well

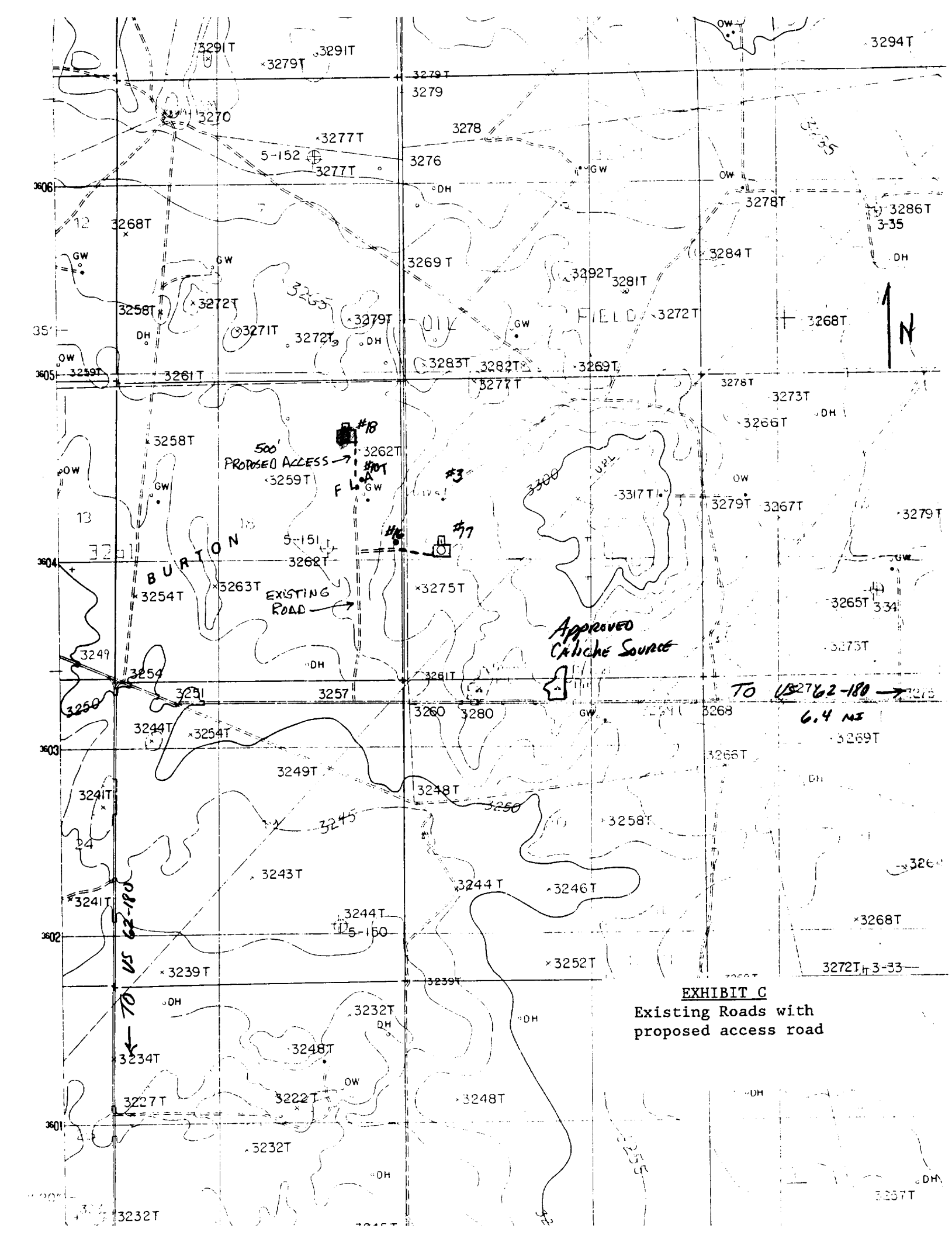


EXHIBIT C
Existing Roads with proposed access road

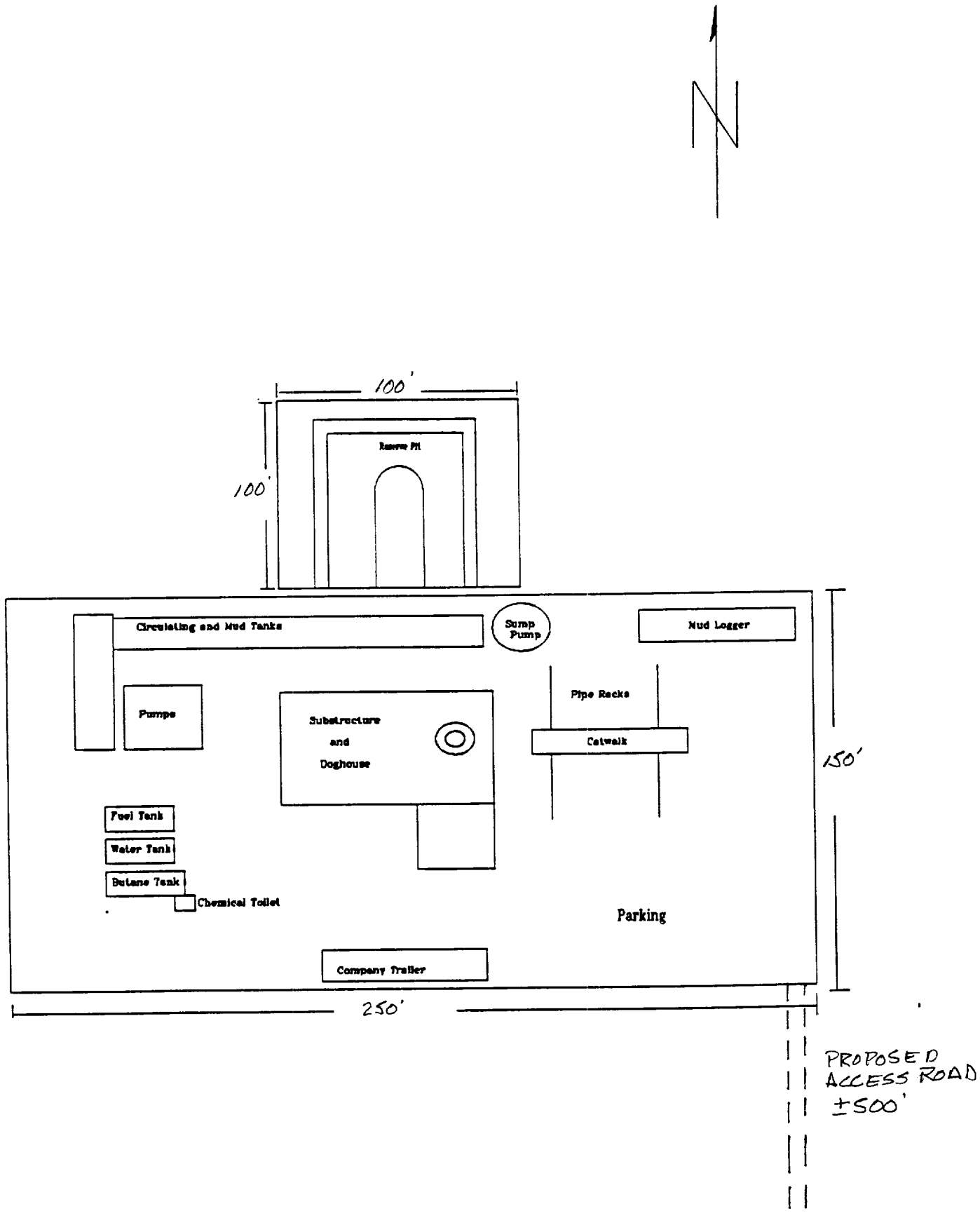
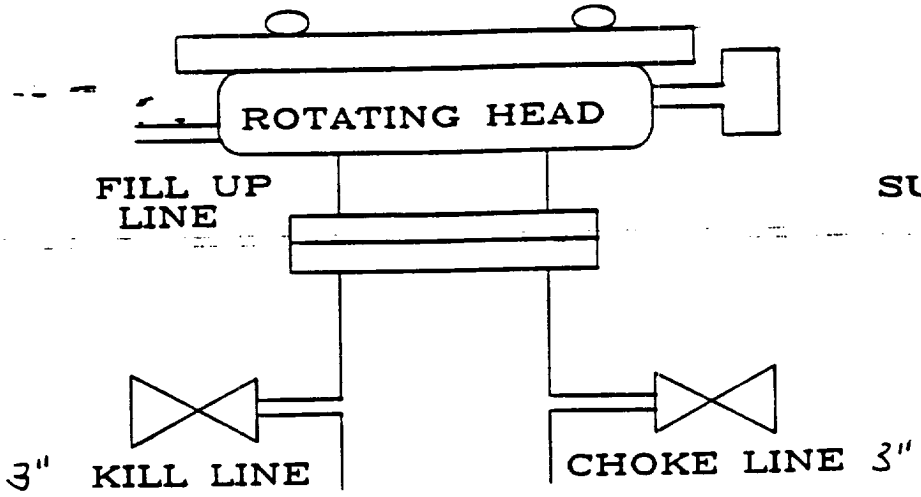
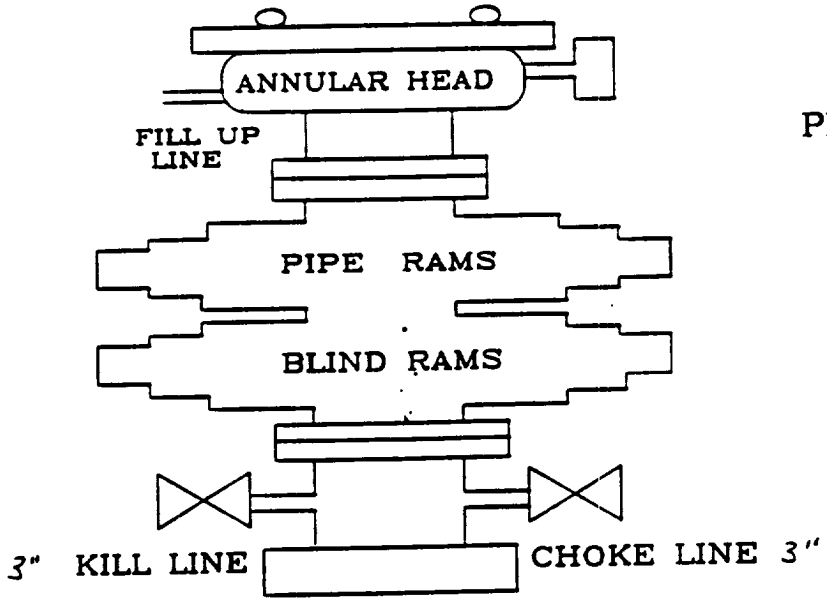
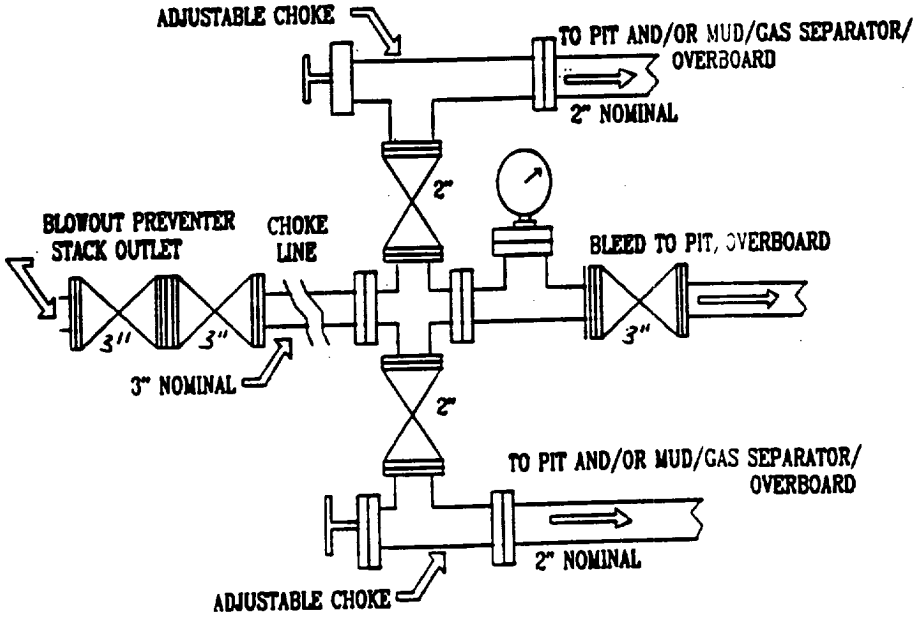


EXHIBIT D
Relative location of rig components & reserve pit


ROTATING HEAD
FILL UP LINE
SURFACE STACK
3" KILL LINE
CHOKE LINE 3"


ANNULAR HEAD
FILL UP LINE
PRODUCTION STACK
PIPE RAMS
BLIND RAMS
3" KILL LINE
CHOKE LINE 3"


ADJUSTABLE CHOKE
TO PIT AND/OR MUD/GAS SEPARATOR/ OVERBOARD
2" NOMINAL
2"
BLOWOUT PREVENTER STACK OUTLET
CHOKE LINE
BLEED TO PIT, OVERBOARD
3"
3"
3"
3" NOMINAL
2"
TO PIT AND/OR MUD/GAS SEPARATOR/ OVERBOARD
2" NOMINAL
ADJUSTABLE CHOKE