

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

Marathon Oil Company

RECEIVED

3. ADDRESS OF OPERATOR

P. O. Box 552, Midland, TX 79702

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

At surface
1750' FNL & 1800' FEL

At proposed prod. zone

1750' FNL & 1800' FEL

DEC 26 '90

O. C. D.

ARTESIA, OFFICE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

4390'

16. NO. OF ACRES IN LEASE

1600

17. NO. OF ACRES ASSIGNED
TO THIS WELL

640

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

3500'

19. PROPOSED DEPTH

9600'

20. ROTARY OR CABLE TOOLS

Rotary

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

3780.8' GR

22. APPROX. DATE WORK WILL START*

December 15, 1990

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	750'	835 sx - circulate
11"	8-5/8"	24 & 32	2450'	1350 sx - circulate
7-7/8"	5-1/2"	15.5 & 17	9600'	1500 sx - SEE STIPS.

Propose to drill to a TD of \pm 9600'.

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 from North Indian Basin Unit #1, Section 9.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

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 12/27/90

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE 12/20/90

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-88

OIL CONSERVATION DIVISION

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

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

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

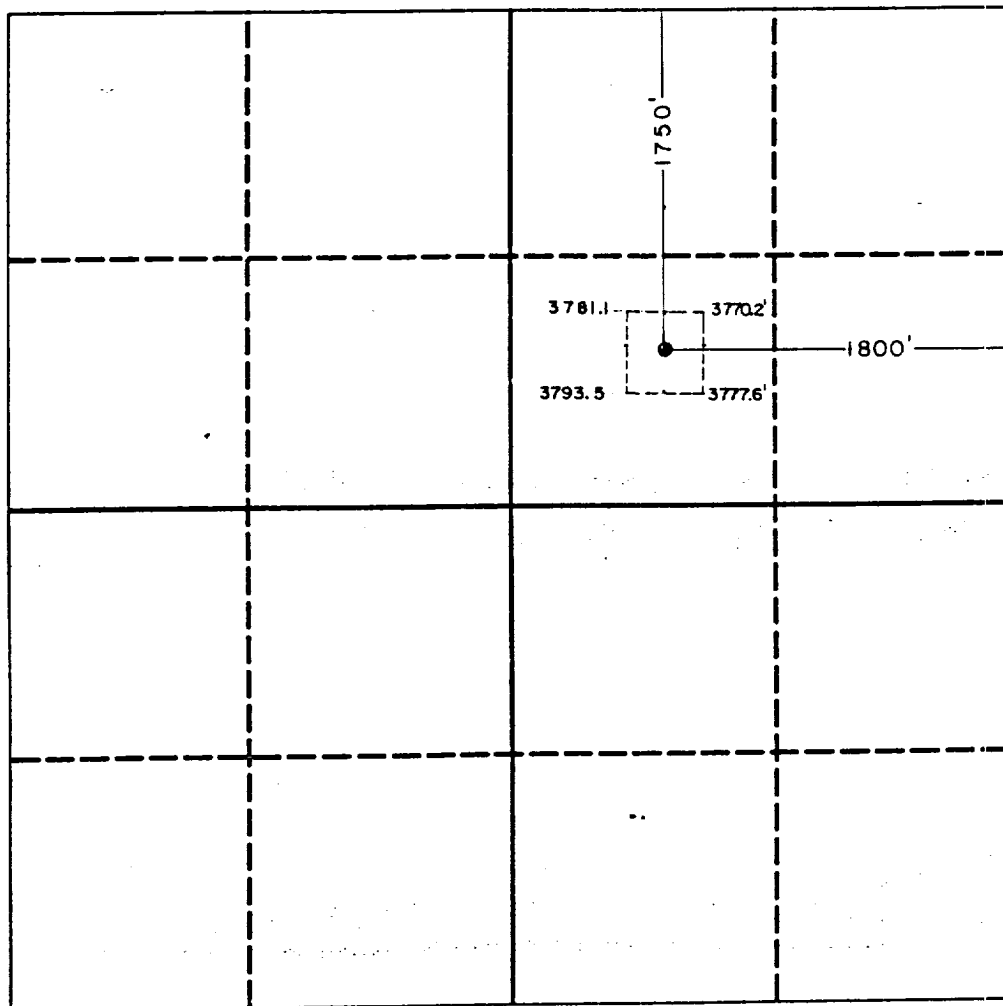
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator MARATHON OIL CO.			Lease NORTH INDIAN BASIN UNIT		Well No. 10
Unit Letter G	Section 10	Township 21 SOUTH	Range 23 EAST	County EDDY	
Actual Footage Location of Well: 1750 feet from the NORTH line and 1800 feet from the EAST line					
Ground level Elev. 3780.8	Producing Formation MORROW		Pool Indian Basin	Dedicated Acreage: 640 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 is true and complete to the best of my knowledge and belief.

Signature *[Signature]*
Printed Name
S. L. Atnipp
Position
Drilling Superintendent
Company
Marathon Oil Company
Date
12/7/90

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

Date Surveyed
11-29-90

Signature & Seal of
Professional Surveyor

[Signature]
Certificate No. 07 JOHN W. WEST 676
RONALD J. ELLISON 3239
NEW MEXICO
JOHN W. WEST

MULTIPOINT SURFACE USE AND OPERATIONS PLAN

Marathon Oil Company

NORTH INDIAN BASIN UNIT #10
1750' FNL & 1800' FEL
Section 10, T-21-S, R-23-E
Eddy County, New Mexico
Lease: USA-NM-05551

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. Go north of Carlsbad 10 miles on Hwy. 285 and turn left on Hwy. 401 - Marathon Road - for \pm 3 miles. Turn right on Hwy. 403 - Gray Oak Road for 2.5 miles, cross cattle guard and continue .3 mile to 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

An access road will not be required as the proposed location falls beside an existing road.

B. Surfacing Material

6" of caliche compacted and rolled

C. Maximum Grade

Three Percent (3%)

D. Turnouts

None Required

E. Drainage Design

Natural drainage.

F. Culverts

None required.

G. Cuts and Fills

None required.

H. Gates, Cattlegaurds and Fences

None Required.

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 Indian Basin Unit #10 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.

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 the constuction of the reserve pit and pad.

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 Limestone Ridge.

B. Soil

Ector-Reagan Complex.

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 energy development with hunting in season.

H. Surface Ownership

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

12. Operators Representative

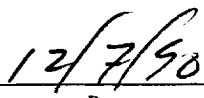
Stanley L. Atnipp
P. O. Box 552
Midland, TX 79702
(915) 682-1626

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



Date

MARATHON OIL COMPANY

NORTH INDIAN BASIN UNIT #10
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

Grayburg	180'	U. Penn	7420'
San Andres	510'	Morrow "C"	9000'
Glorietta	2090'	Morrow "B"	9220'
U. Bone Spring	3700'	Morrow "A"	9330'
Wolfcamp	6310'	Miss.	9440'

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

Grayburg (water & oil)	180'	U. Penn (gas & water)	7420'
San Andres (water & oil)	510'	Morrow "C" (gas & water)	9000'
Glorietta (water & oil)	2090'	Morrow "B" (gas & water)	9220'
U. Bone Spring (water & oil)	3700'	Morrow "A" (gas & water)	9330'
Wolfcamp (water & oil)	6310'	Miss. (gas & water)	9440'

4. Casing and Cementing Program

13-3/8" Surface to 250':	Cement to surface with 300 sxs Class "C" with 2% CaCl_2
8-5/8" Intermediate to 2000':	Cement to surface with 395 sxs Modified Lite followed by 200 sxs Class "C" with 2% CaCl_2
5-1/2" Production to 9600':	Cement 1st Stage with 500 sx Class "H" + 3% Kcl Cement 2nd Stage with 600 sx Class "H" lite, tail-in with 100 sx Class "H" + 2% gel

5. Pressure Control Equipment (Exhibit E)

20" Conductor:	20" annular preventer w/ diverter system. Function test prior to drill out.
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Additional Information

Page 2

13-3/8" Surface:	13-5/8" 3000 psi working pressure annular preventer tested to 2000 psi
	13-5/8" 3000 psi working pressure pipe and blind rams tested to 3000 psi
8-5/8" Intermediate:	11" 3000 psi working pressure annular preventer tested to 2000 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' - 250'	Native; Mud Wt: 8.3 - 8.5, Viscosity 28-34 Sec
250' - 2000'	Brine Water; Mud Wt: 8.3 - 8.5, Viscosity 28-32 Sec
2000' - 6000'	Fresh Water; Mud Wt: 8.3 - 8.5, Viscosity 28-32 Sec
6000' - 7200'	Fresh Water; Mud Wt: 8.5 - 8.9, Viscosity 32-44 Sec FL 15-25
7200' - 9600'	Fresh Water; Mud Wt: 8.5 - 8.9, Viscosity 30-34 Sec FLC 15

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.

8. Testing, Logging, and Coring Programs

- A. Coring Program: None anticipated.
- B. Testing Program: 1 DST in Upper Penn, 1 DST in Morrow.
- C. Logging Program: TD-Surface - FDC/LDT/CNL, GR/SP/DLL/MSFL, DIL/GR

9. Abnormal Pressures, Temperatures or Potential Hazards

None anticipated

10. Anticipated Starting Date

As soon as possible

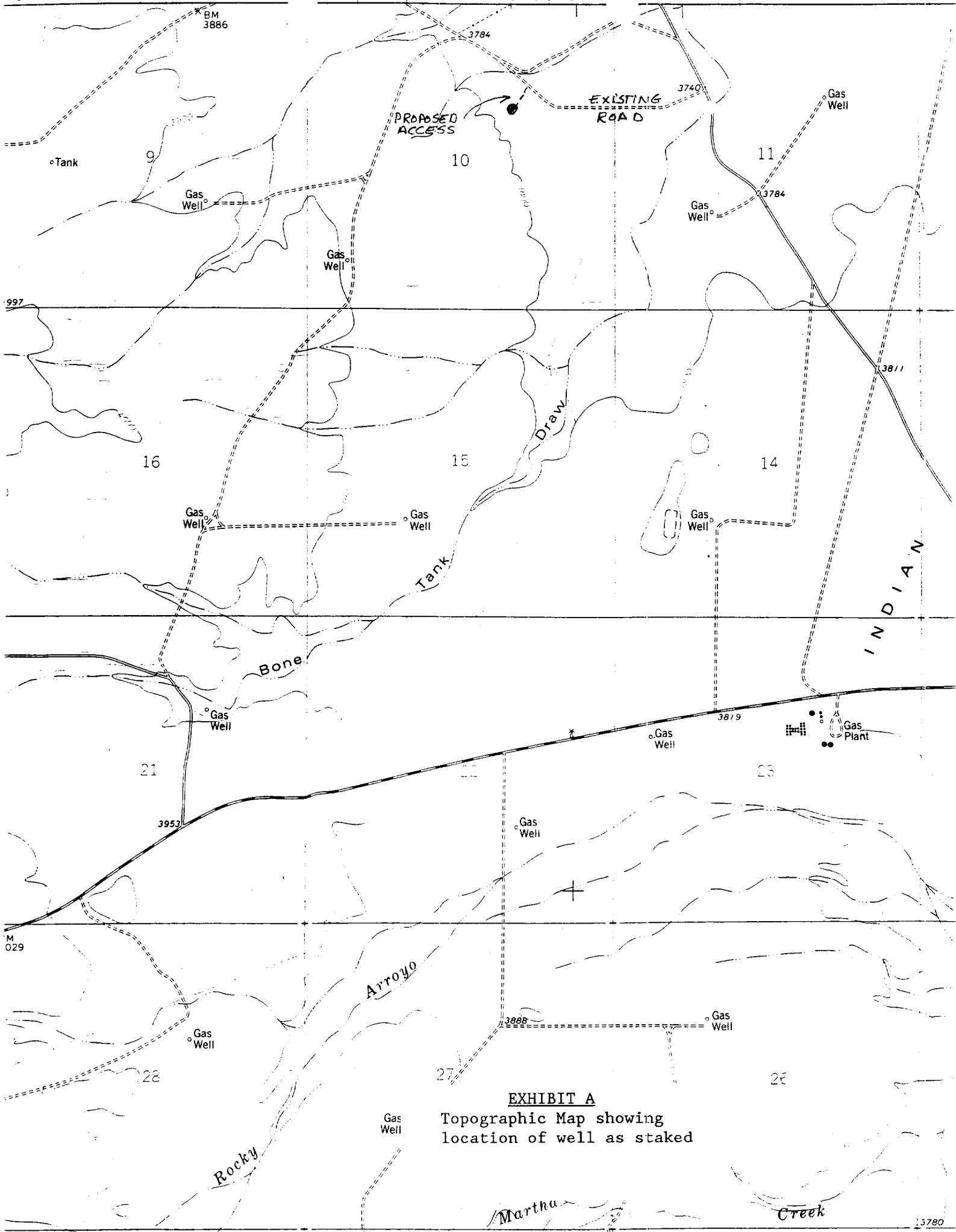
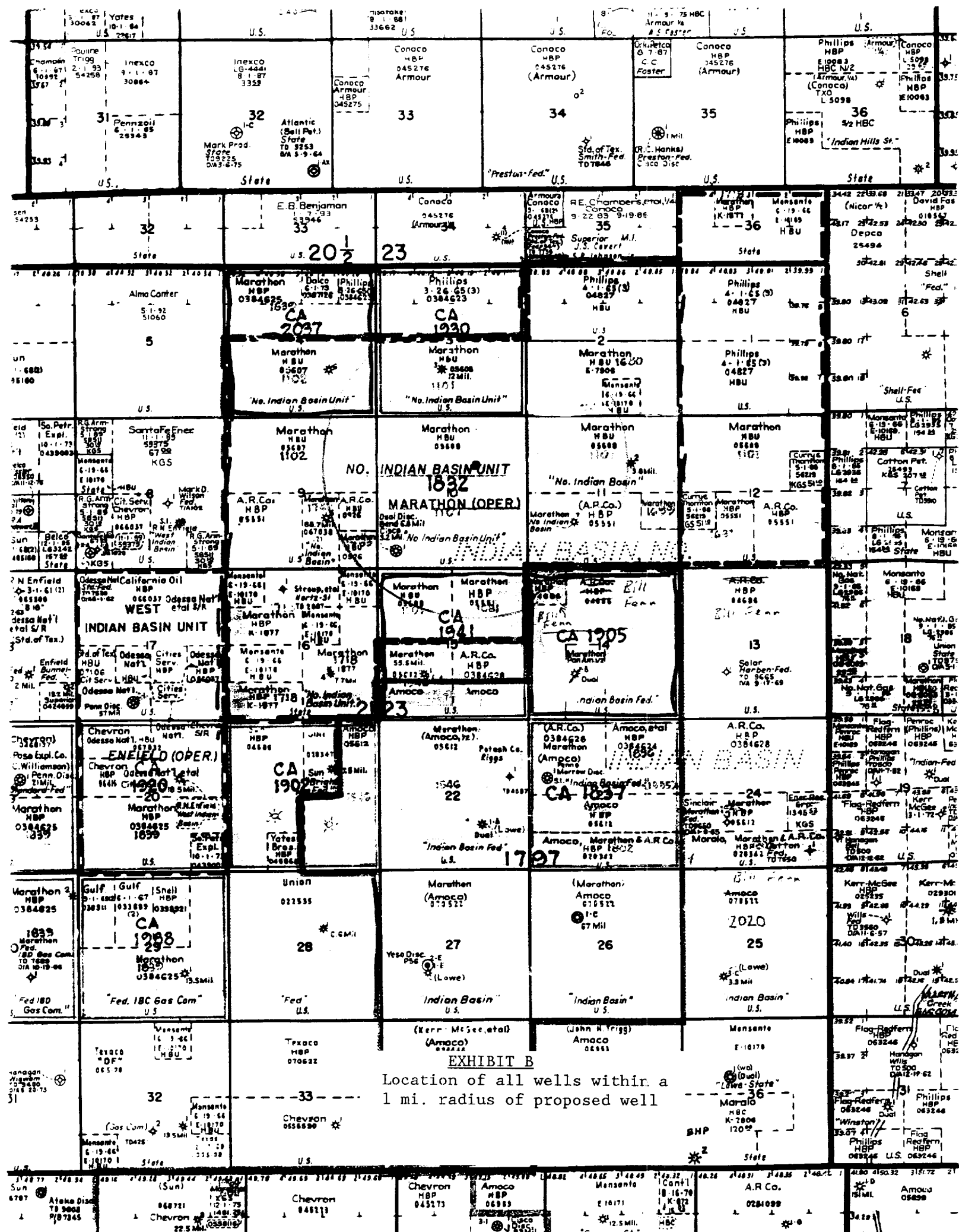


EXHIBIT A
Topographic Map showing
location of well as staked



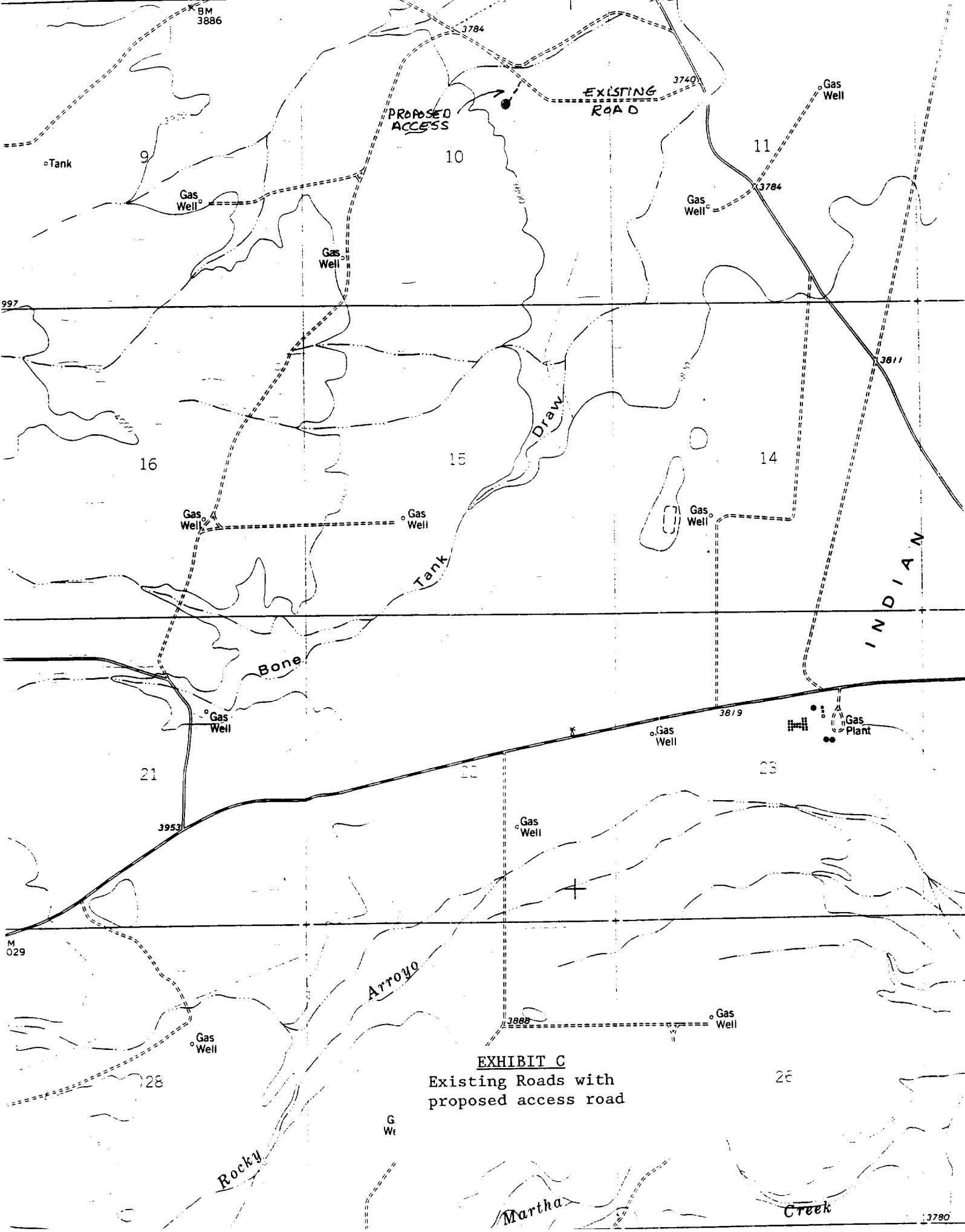


EXHIBIT C
Existing Roads with
proposed access road

EXISTING ROAD

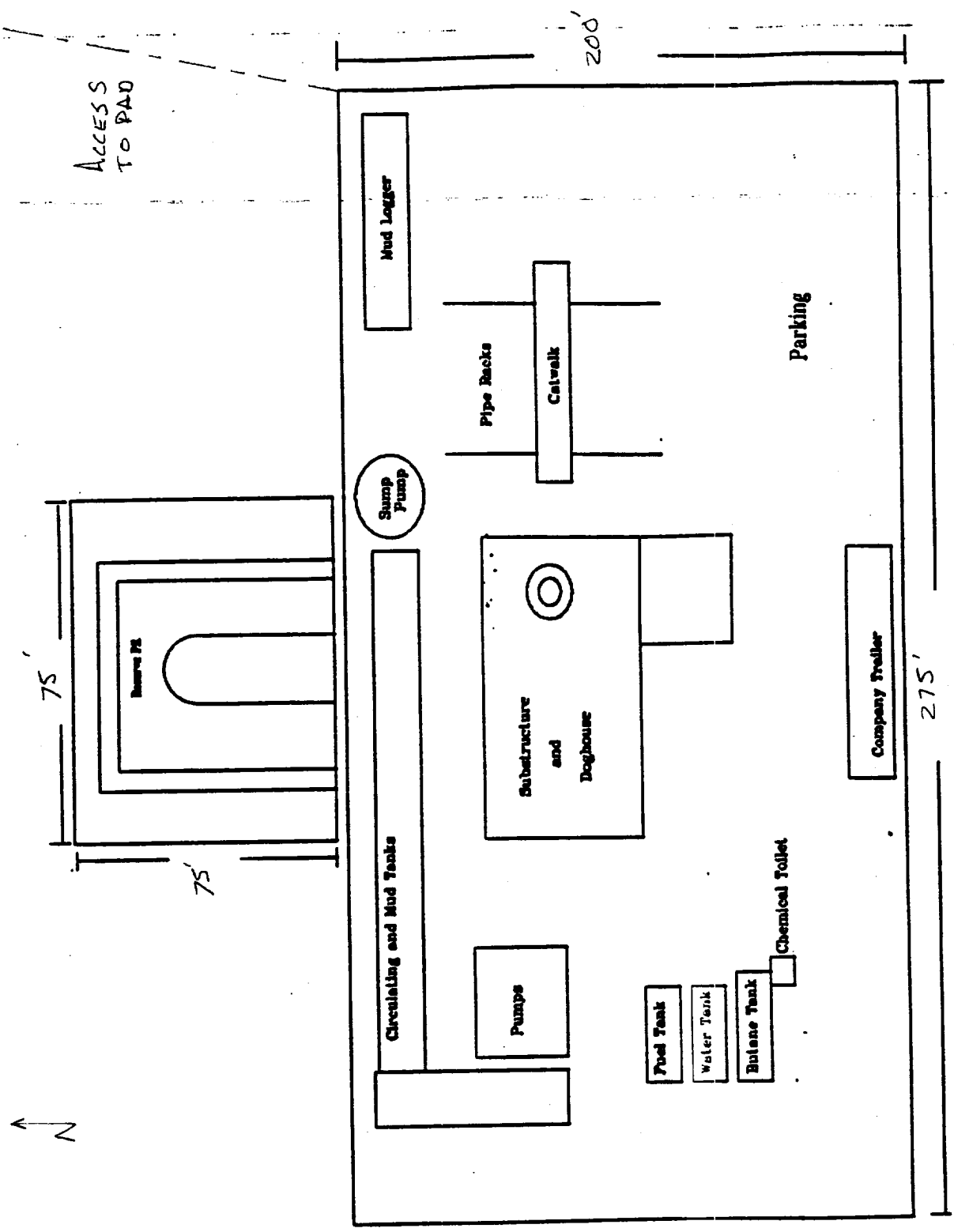


EXHIBIT D
Relative location of rig
components & reserve pit

