

N.M.G.S. 4021

SUBMIT IN TRIPLICATE\*  
(Other instru s on  
reverse aForm approved.  
Budget Bureau No. 42-R1425UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## 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

General American Oil Company of Texas

## 3. ADDRESS OF OPERATOR

P. O. Box 128, Loco Hills, New Mexico 88255

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

At surface

2310' FSL &amp; 330' FWL

At proposed prod. zone Same

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

4

## 16. DISTANCE FROM PROPOSED\*

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

330'

## 16. NO. OF ACRES IN LEASE

800

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.

500'

## 19. PROPOSED DEPTH

3240'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

3594.6' GL

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

July, 81

## 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"	20#	400' - 500'	Circulate to surface
7 7/8"	5 1/2"	15.5#	3240'	230± sacks

We propose to drill this well to 3240', and complete in the Grayburg and San Andres.

Mud program: Water and native mud will be used to 200' from TD. Salt gel will be used the remainder of the hole.

All zones indicating porosity will be acidized or sand fraced.

A 10" 3000# blowout preventor will be used during drilling operations.

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 Landell N. HawkinsTITLE Field SuperintendentDATE June 5, 1981

(This space for Federal or State office use)

FOR GEORGE H. STEWART

PERMIT NO.

APPROVAL DATE

JUN 16 1981

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:JAMES A. GILLHAM  
DISTRICT SUPERVISOR

TITLE

DATE

\*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

GAOC  
RECEIVED  
MAY 13 1981

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator <b>GENERAL AMERICAN OIL CO. OF TEXAS</b>		Lease <b>BURCH "B"</b>		NEW MEXICO Well No. <b>34</b>	
Unit Letter <b>L</b>	Section <b>23</b>	Township <b>17 SOUTH</b>	Range <b>29 EAST</b>	County <b>EDDY</b>	

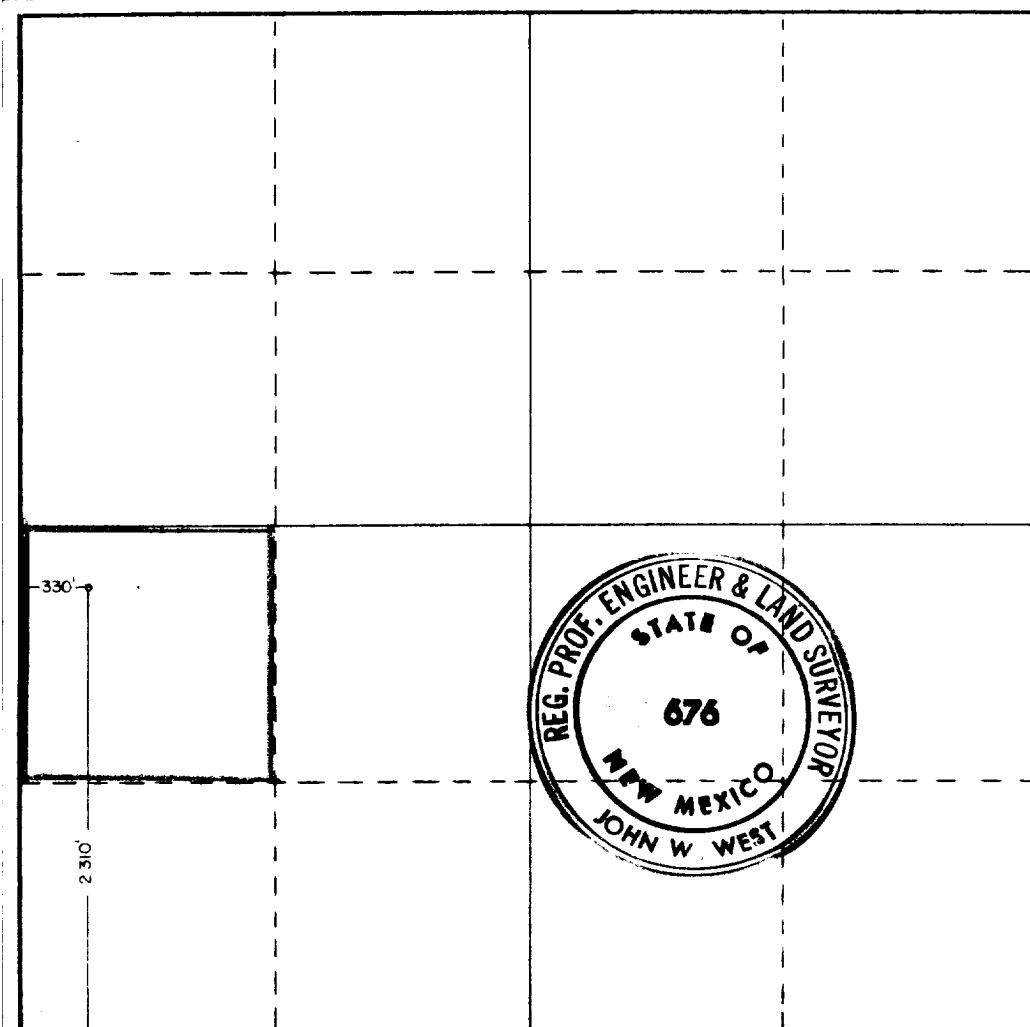
Actual Footage Location of Well: <b>2310</b> feet from the <b>SOUTH</b> line and <b>330</b> feet from the <b>WEST</b> line					
Ground Level Elev. <b>3594.6</b>	Producing Formation <b>Grayburg - Jackson</b>	Pool <b>Grayburg - <del>San Andres</del> SR-Q-45-SA</b>	Dedicated Acreage: <b>40</b> Acres		

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 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.

Lendell N. Hawkins  
Name

Lendell N. Hawkins  
Position

Field Superintendent  
Company

General American Oil Co. of Tx.  
Date

June 5, 1981

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  
5-8-81

Registered Professional Engineer  
and/or Land Surveyor

John W. West

Certificate No. JOHN W. WEST 676  
PATRICK A. ROMERO 6663  
Ronald J. Eidson 3239

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

## DRILLING PROGNOSIS

BURCH "B" #34  
BURCH "C" #44  
GRAYBURG-JACKSON  
EDDY COUNTY, NEW MEXICO

- I. OBJECTIVE: Drill 2 infill wells in the Grayburg-Jackson Field, Eddy County, New Mexico.
- II. LOCATION:   Burch "B" #34           330' FWL & 2310' FSL           Sec. 23, T-17S, R-29E  
                  Burch "C" #44           2310' FE1 & 2310' FSL           Sec. 23, T-17S, R-29E
- III. BUDGET CLASSIFICATION: Developmental.
- IV. PROJECTED TOTAL DEPTH, HOLE SIZE, SLOPE TEST, DRILL PIPE MEASUREMENTS:
- A. 12-1/4" hole to Top of Salt (approximately 400'-500') to accomodate 8-5/8" surface casing.
  - B. 7-7/8" hole to total depth; Burch "B" #34, 3240' and Burch "C" #44, 3300' to accomodate 5-1/2" production casing.
  - C. Estimated drilling time 6-7 days per well.
  - D. Slope test will be run at each bit trip, 500' interval, or as directed by company representative.
  - E. Drill pipe will be strapped out of hole before any coring, testing, or logging.
- V. DRILLING CONTRACT:
- A. Contractor: W. E. K. Drilling Company, Inc.
  - B. Type of Contractor: Footage
  - C. Contract Depth: 3300'
- VI. MUD PROGRAM:
- | <u>Interval</u>   | <u>Type Mud</u>    | <u>Weight</u> | <u>Viscosity</u> | <u>WL</u> |
|-------------------|--------------------|---------------|------------------|-----------|
| 0' — 200' from TD | Fresh & Salt Water | 9-10          | 28 - 30          | NC        |
| 200' from TD — TD | Salt GEL           | 10-11         | 36 - 40          | NC        |
- VII. TYPICAL GEOLOGICAL TOPS FOR SECTION 23, TOWNSHIP 17-SOUTH, RANGE 29-EAST:
- | <u>Top</u>    | <u>Vertical Depth</u> | <u>Subsea Depth</u> |
|---------------|-----------------------|---------------------|
| A. Queen      | 1807'                 | + 1782'             |
| B. Grayburg   | 1962'                 | + 1627'             |
| C. Loco Hills | 2258'                 | + 1331'             |
| D. Metex      | 2370'                 | + 1219'             |
| E. San Andres | 2496'                 | + 1093'             |
| F. Lovington  | 2586'                 | + 1003'             |
- VIII. SAMPLES
- A. Samples will be taken at 10' intervals from 2200' to TD or as directed by Company representative.

IX. CORES AND DRILL STEM TESTS:

A. No cores or DSTS are planned.

X. LOGS:

A. Logging program will consist of Sidewall Neutron—Gamma Ray—Caliper Log from 0' — TD.

XI. CASING PROGRAM:

A. Surface: 8-5/8" 20# K-55 ST&C casing will be run to just above Top of Salt and cemented with Class "C" cement with 2% calcium chloride. If cement does not circulate, the casing will be cemented to surface with ready-mix or 1" pipe down the backside. Appropriate float equipment will be run and a dry sample of the cement caught.

B. Production: 5-1/2" 15.5# K-55 ST&C casing will be run to TD. Sufficient volume of Class "H" cement with 10# sand, 5# salt, 1/4# Floccel, and 3/4 of 1% CFR-2 per bag will be pumped to cover all zones of interest. Appropriate float equipment will be run and a dry sample of the cement caught. There will be a 20' shoe joint in each of these wells.

XII. SAFETY PROGRAM:

The safety program will conform to all U.S.G.S. rules and regulations. The B.O.P.E. will be checked at least once a week or as directed by company representative.

XIII. THIRD PARTY SERVICES:

A. Surveying:	John West Engineering
B. Dirt Work:	Jabo Rowland Construction
C. Water & Trucking:	I & W Trucking
D. Mud:	Marr's Mud Company
E. Cementing:	Halliburton or Western
F. Logging:	Dresser Atlas
G. Stimulation:	Halliburton or Western

SUBMITTED BY: Rendell N. Hawkins  
DATE: \_\_\_\_\_

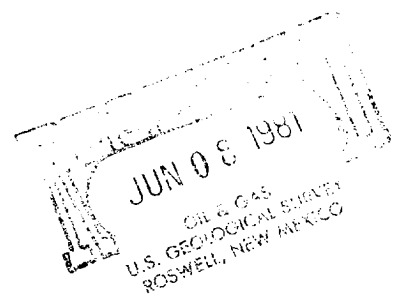
MSS/mjc

APPROVED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

GENERAL AMERICAN OIL COMPANY OF TEXAS

SURFACE USE PLAN

BURCH "B" # 34



SURFACE USE PLAN

BURCH "B" #34  
LC-028793-b 028784-93-6  
EDDY COUNTY, NEW MEXICO

The proposed well is located 4.1 miles west of Loco Hills, New Mexico on the south side of U. S. Highway 82. The following is a discussion of pertinent information concerning the possible effect the well might have on the surrounding environment. A copy of this plan will be posted on the drilling rig, so all contractors and sub-contractors will be aware of it's contents.

- I. AERIAL ROAD MAP - Exhibit "A" is a portion of the Red Lake S. E. U.S.G.S. Map. This shows the well in relationship to U. S. Highway 82 and the access roads.
- II. LOCATION OF EXISTING WELLS - The location of existing wells in the immediate area is shown on Exhibit "B".
- III. PROPOSED WELL MAT AND IMMEDIATE AREA - Refer to Exhibit "C" for direction orientation and road access to well site.
  - A. Mat Size - 140' X 180'.
  - B. Surface - The surface will be topped with at least 6" of caliche, bladed, watered and compacted. Caliche will be bought from B.L.M. by dirt contractor.
  - C. Reserve Pit - 60' X 70' unlined.
  - D. Cut and Fill - No fill will be needed. Existing small sand dunes will be topped and covered with caliche.
  - E. Drill Site Layout - Exhibit "C" shows the location and layout of pits and drilling equipment.
  - F. Setting and Environment
    1. Terrian - Low rolling sand dunes.
    2. Soil - Loamy Sand.
    3. Vegetation - Vegetation in the area is approximately 35% by density. It is primarily shrubs consisting mainly of broom snakeweed.
    4. Surface Use - Grazing.
    5. Other (Drill Site) - The proposed well is in semi-arid desert country and is a low risk environmental area.
  - G. Distances
    1. Ponds and Streams - There are no natural surface waters within 3 miles.

G. Distances (Continued)

2. Water Wells - There are no water wells within 2 miles.
3. Residences and Buildings - There are no residences or buildings within 1-1/2 miles.
4. Arroyos, Canyons, Etc. - There are no other surface features besides low rolling sand dunes.

H. Well Sign - A sign identifying the well and location will be posted commencing with the spudding of the well.

I. Open Pits - All open pits will be guarded.

IV. ROADS

A. Existing Roads - All existing roads are shown on Exhibit "B".

B. Proposed Road - The proposed road is 240' long and shown on Exhibit "B".

C. Fences and Cattleguards - All fences and cattleguards will be maintained by General American.

V. TANK BATTERY - As this is an infill well, General American already has facilities on this lease.

VI. LEASE — PIPELINES

A. Existing - Existing pipelines are shown on Exhibit "B".

B. Planned - If production is encountered, 300' + new 2" line will be laid to the main flowline running to the battery.

VII. WASTE DISPOSAL - Barrel trash containers will be in accessible locations on the drilling site. On Exhibit "C" you will find a disposal pit for all trash resulting from the drilling operation. When the drilling and completing of this well is over, the disposal pit will be covered with at least 2' of topsoil. If the well is productive, maintenance waste will be placed in special containers, and hauled away periodically. Any produced water will be disposed of through the leases's current S.W.D. system.

VIII. WATER SUPPLY - All water needed for the drilling and completing of this well will be trucked in.

IX. ARCHEOLOGICAL RESOURCES - See Exhibit "D", Archeological Clearance Report.

X. RESTORATION OF SURFACE - If well is productive, the pits will be backfilled and leveled as soon as is practical after completion. Upon final abandonment of the well, the well site will be returned to it's original condition per B.L.M. requirements.

- XI. OPERATOR'S REPRESENTATIVE - Field personnel who can be contacted regarding this well and this surface use plan are:

DRILLING AND PRODUCTION

L. N. Hawkins  
Field Superintendent  
P. O. Box 128  
Loco Hills, New Mexico 88255  
Office: (505) 677-2481  
Home: (505) 677-2277

M. S. Sansing  
Engineer  
P. O. Box 128  
Loco Hills, New Mexico 88255  
Office: (505) 677-2481  
Home: (505) 677-3106

XII. CERTIFICATION

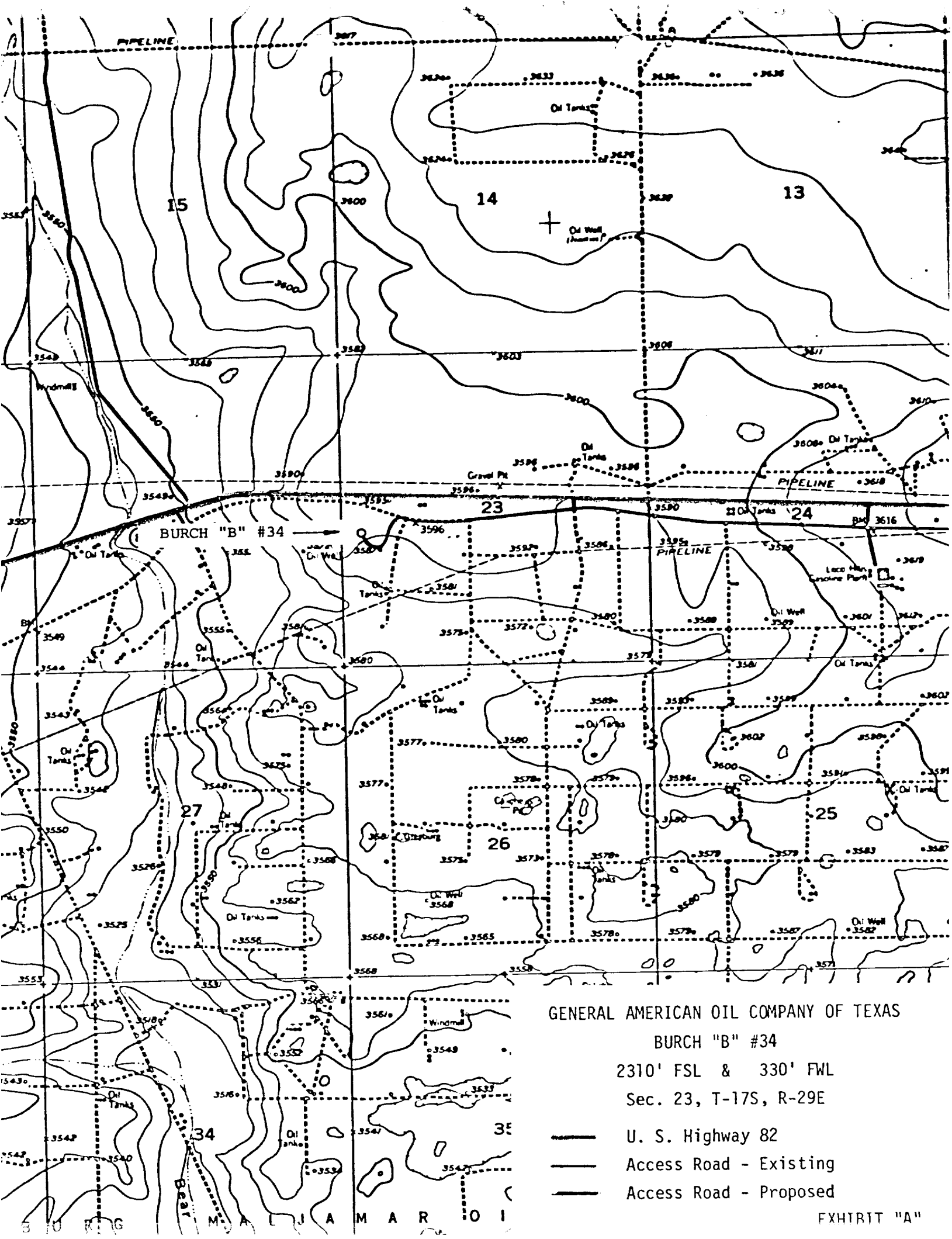
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions as they actually exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the proposed work performed by General American Oil Company and its Contractors and Sub-Contractors will conform to this plan.

MSS/mjc

*Lendell N. Hawkins*

\_\_\_\_\_  
Date





GENERAL AMERICAN OIL COMPANY OF TEXAS

BURCH "B" #34

2310' FSL & 330' FWL

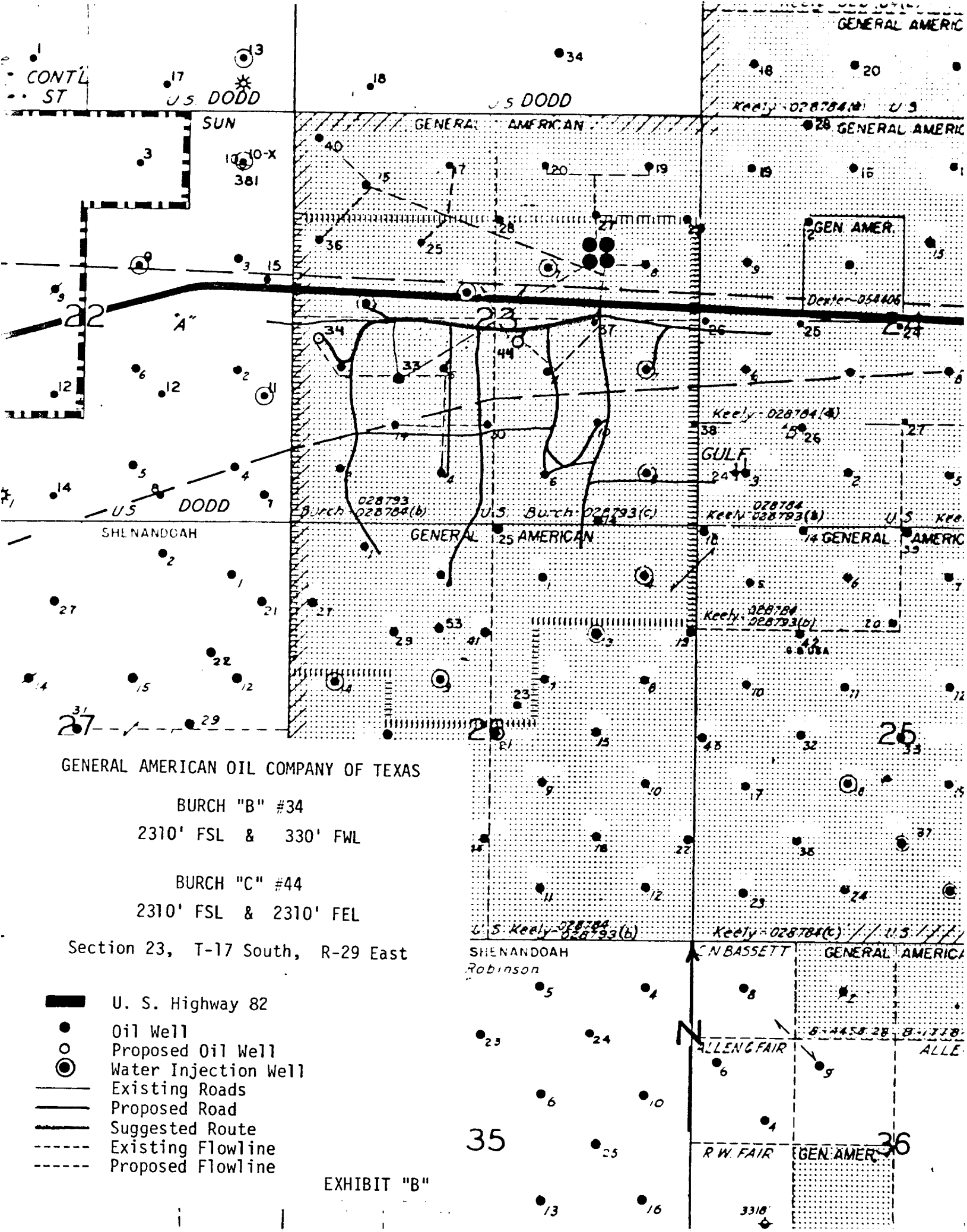
Sec. 23, T-17S, R-29E

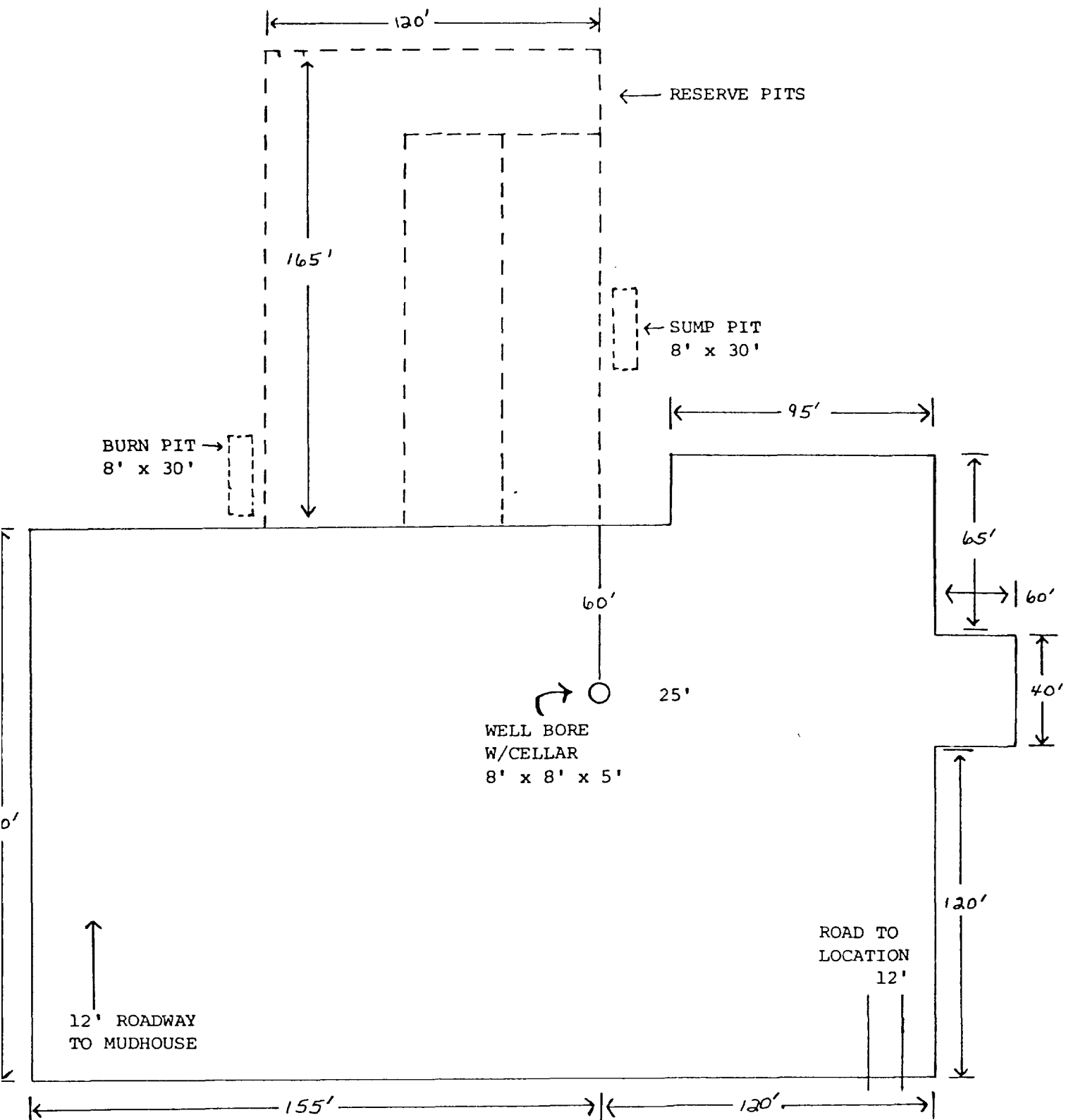
U. S. Highway 82

Access Road - Existing

Access Road - Proposed

EXHIBIT "A"





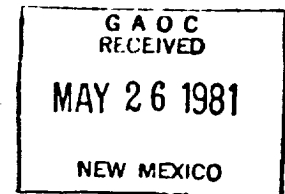
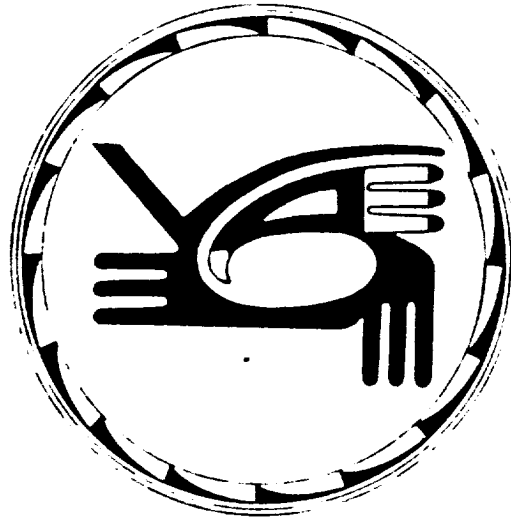
SCALE: 1 inch = 50 feet



EXHIBIT "C"

# A C A

Llano Estacado Center for Advanced  
Professional Studies and Research  
Eastern New Mexico University  
Portales, New Mexico 88130



Archaeological Clearance Report  
for  
General American Oil Company

Price No. 2  
Road to Price No. 2  
Birch "C" No. 44  
Road to Birch "C" No. 44  
Birch "B" No. 34  
Road to Birch "B" No. 34

F81-258

by  
Terry Fifield

Edited and Submitted by  
Dr. Colleen M. Beck  
Director

May 21, 1981

## Birch "B" No. 34

### Location

The proposed well pad is located 4.1 miles west of Loco Hills, New Mexico, in the Pecos River Valley. The pad measures 400 X 400 feet (121.9 X 121.9 meters) and is situated as follows:

NW 1/4 SW 1/4, Section 23, T17S R29E, NMPM, Eddy County, NM (BIM)

Plat: Figure 7

Map Reference: USGS Red Lake SE Quadrangle, 7.5 minute series, 1955 (figure 8)

### Terrain

The proposed well pad is located in the Pecos River Valley, 0.8 miles east of Bear Grass Draw. It is situated on an undulating alluvial plain overlain by low dunes. The elevation is 3590 feet (1094.2 meters). The soil encountered in the area is predominantly a calcareous loamy sand. Taxonomically, it can be classified as a member of the haplargids-torripsamments association. Lithic inclusions consist of abundant amounts of small caliche fragments.

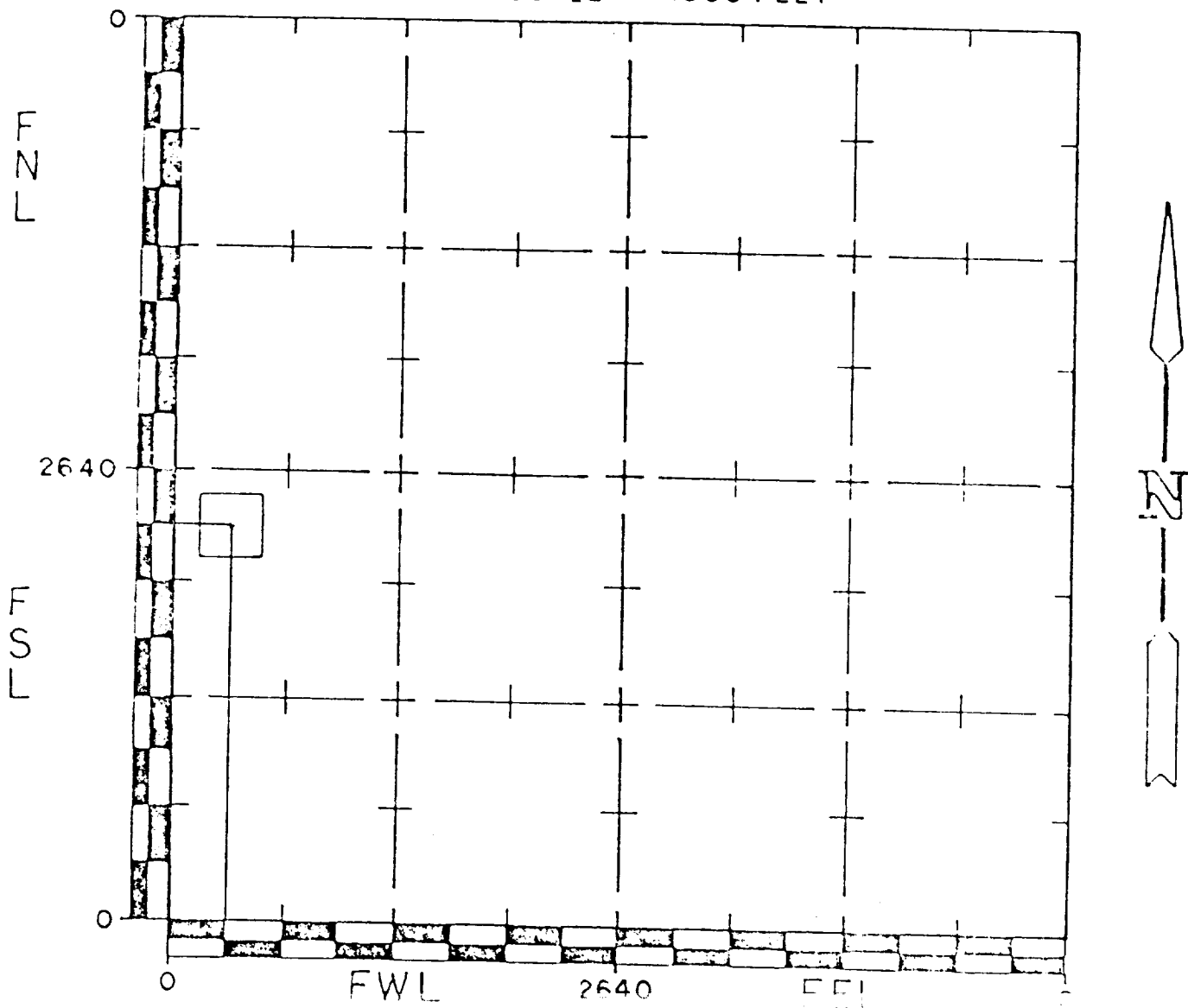
### Floristics

ACA encountered a moderate floral assemblage at this location. The density of the vegetation in the area is approximately 35 percent,

# AGENCY FOR CONSERVATION ARCHAEOLOGY WELL LOCATION SCHEMATIC

COMPANY: General American Oil LEASE: Birch "B" WELL NO.: 33  
2310 FEET FROM THE S LINE 330 FEET FROM THE W LINE  
SECTION: 23 TOWNSHIP: T17S RANGE: R29E  
COUNTY: Eddy STATE: NM  
OWNERSHIP: BLM

SCALE: 1"=1000 FEET



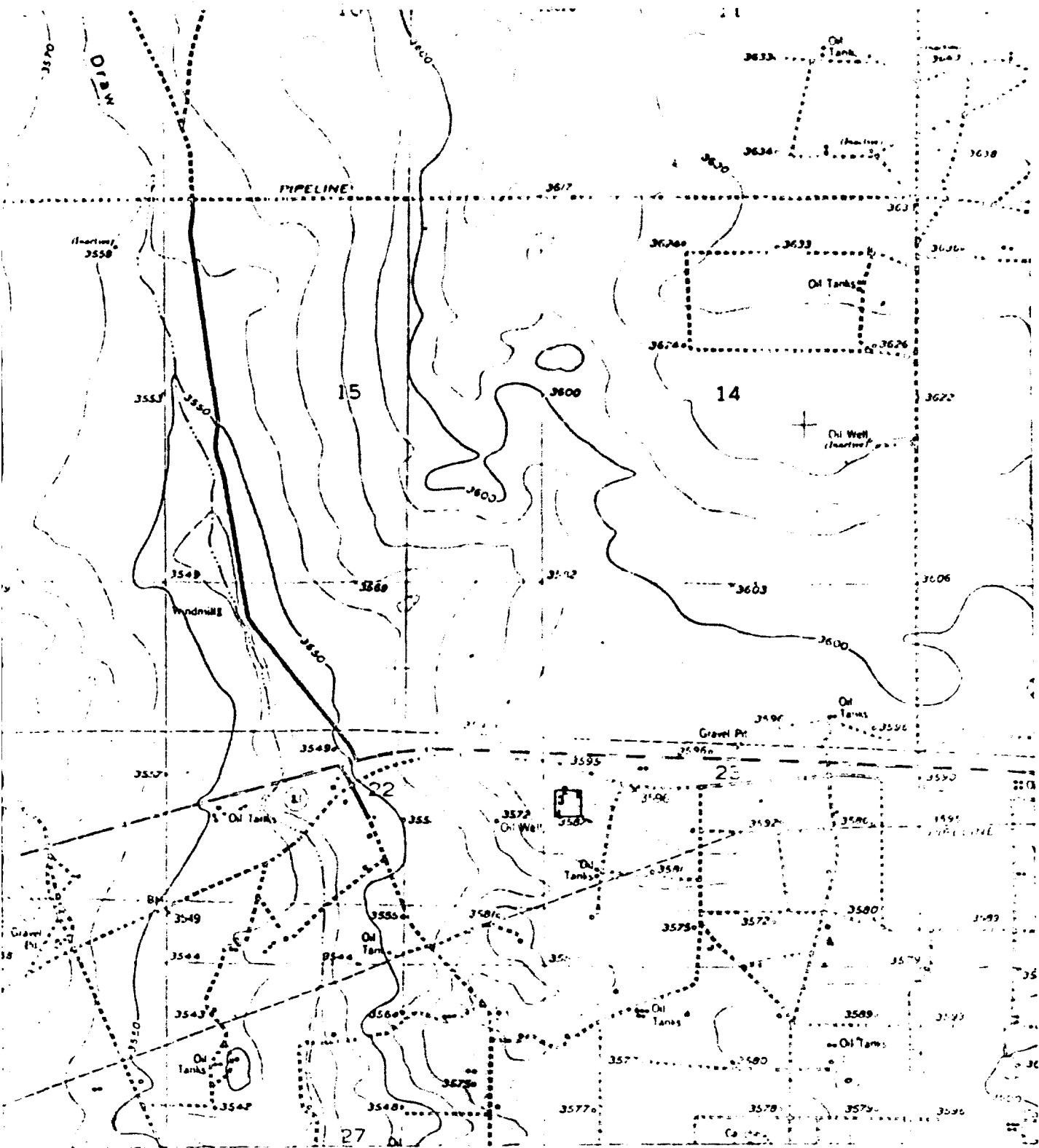
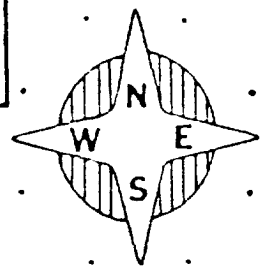


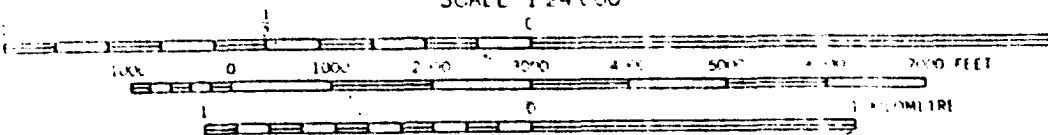
Figure 8: Location of Birch "B" No. 34  
Section 23, T17S, R29E, Eddy County

Map Reference: USGS Red Lake SE Quadrangle, 1955

7.5 MINUTE  
SERIES



SCALE 1:24,000



consisting primarily of shrubs. The dominant species is broom snakeweed (Gutierrezia Sarothrae). Among other species present are javelina bush (Condalia ericoides), mesquite (Prosopis juliflora), and sand sage (Artemisia filifolia).

#### Cultural Resources

During this survey ACA did not encounter any archaeological sites. However the following isolated manifestations were recorded:

IM-2: is a red chert flake, found 25 feet from the north line and 15 feet from the east line.

IM-3: is a red quartzite flake, found 173 feet from the west line and on the north line.

IM-4: is a black quartzite flake, found 92 feet from the north line and 80 feet from the west line.

IM-5: is a red quartzite flake, found 20 feet from the south line and 22 feet from the west line.

A review of the National Register did not find any properties listed for this location.

#### Recommendations

ACA recommends clearance for the proposed well pad and suggests that construction be allowed to proceed as currently planned.

#### Road to Birch "B" No. 34

##### Location

The proposed access road is located 4.1 miles west of Loco Hills, New Mexico, in the Pecos River Valley. The access road measures 50 X 240 feet (15.2 X 73.2 meters) and is situated as follows:

NW 1/4 SW 1/4, Section 23, T17S R29E, NMPM, Eddy County, NM (BLM)

Map Reference: USGS Red Lake SE Quadrangle, 7.5 minute series, 1955 (figure 9)

##### Terrain

The proposed access road is located in the Pecos River Valley, 0.8 miles east of Bear Grass Draw. It is situated on an undulating alluvial plain overlain by low dunes. The elevation varies from 3588 to 3591 feet (1093.6 to 1094.5 meters). The soil encountered in the area is



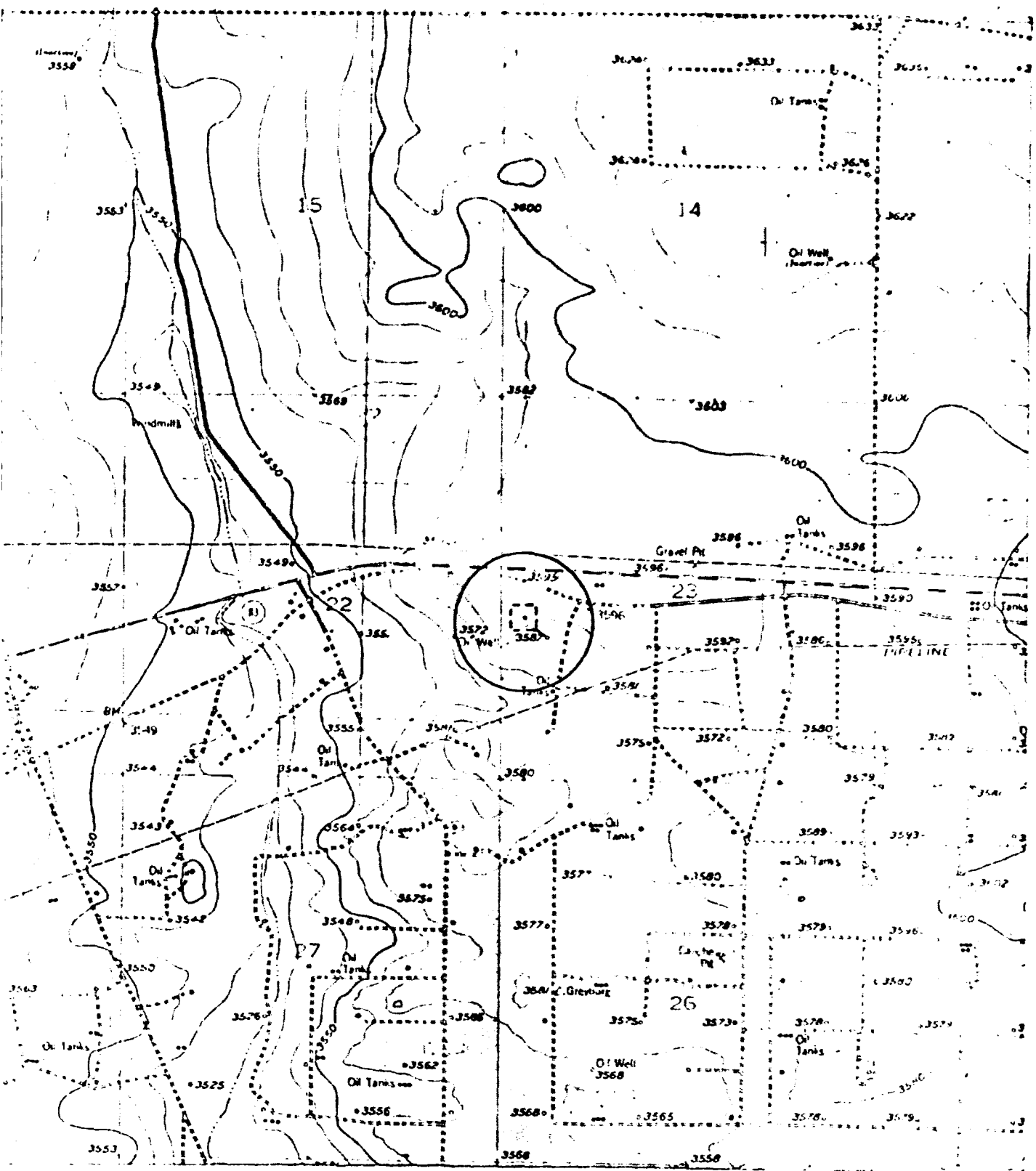
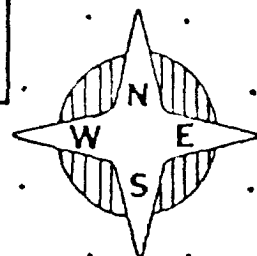
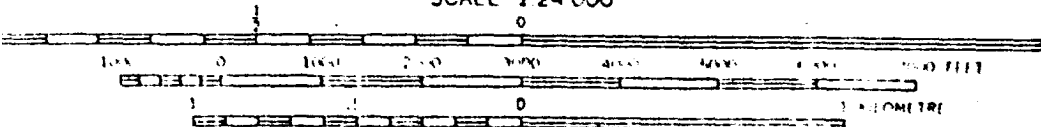


Figure 9: Location of the Road to Birch "B" No. 34  
Section 23, T17S, R29E, Eddy County

Map Reference: USGS Red Lake SE Quadrangle, 1955

7.5 MINUTE  
SERIES

SCALE 1:24,000



predominantly a calcareous loamy sand. Taxonomically, it can be classified as a member of the haplargids-torripsamments association. Lithic inclusions consist of abundant amounts of small caliche fragments.

#### Floristics

ACA encountered a moderate floral assemblage at this location. The density of the vegetation in the area is approximately 35 percent, consisting primarily of shrubs. The dominant species is broom snakeweed (Gutierrezia Sarothrae). Among other species present are javelina bush (Condalia ericoides), and mesquite (Prosopis juliflora).

#### Cultural Resources

ACA did not encounter any archaeological sites or isolated manifestations, either within or near the proposed facility.

A review of the National Register did not find any properties listed for this location.

#### Recommendations

ACA recommends clearance for the proposed access road and suggests that construction be allowed to proceed as currently planned.

