

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)Form approved.  
Budget Bureau No. 42-B1425.

30-015-23167

5. LEASE DESIGNATION AND SERIAL NO.

LC-028793-C RECEIVED

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME FEB 7 1980

8. FARM OR LEASE NAME O.C.D.

Burch C. ARTESIA OFFICE

9. WELL NO.

#42

10. FIELD AND POOL, OR WILDCAT

Grayburg Jackson

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREAu 4-A  
Sec. 30, T-17-S, R-30-E

12. COUNTY OR PARISH 13. STATE

Eddy

N. M.

## 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

1295' FNL and 1295' FEL  
At proposed prod. zone

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

2.2 Miles Southwest of Loco Hills

## 10. DISTANCE FROM PROPOSED\*

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

1295'

## 16. NO. OF ACRES IN LEASE

1115

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.

800'

## 19. PROPOSED DEPTH

3600'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

3603.4 GR

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

January 31, 1980

## 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'	Circulate
7 7/8"	5 1/2"	15.5#	3600'	350 Sacks

We propose to drill this well to 3600' and complete in the Grayburg San Andres.

All zones indicating porosity will be acidized or sand fraced.

Mud Program: Water and native mud well be used and approximately 100' from T.D.  
we will mud up to get the hole in shape to log.

A 10" 3000# blowout preventor will be used in drilling of this well.

NSL 1/145  
1-29-80

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

Londell Hawkins

TITLE Asst. Field Superintendent DATE December 27, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

2-6-80

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

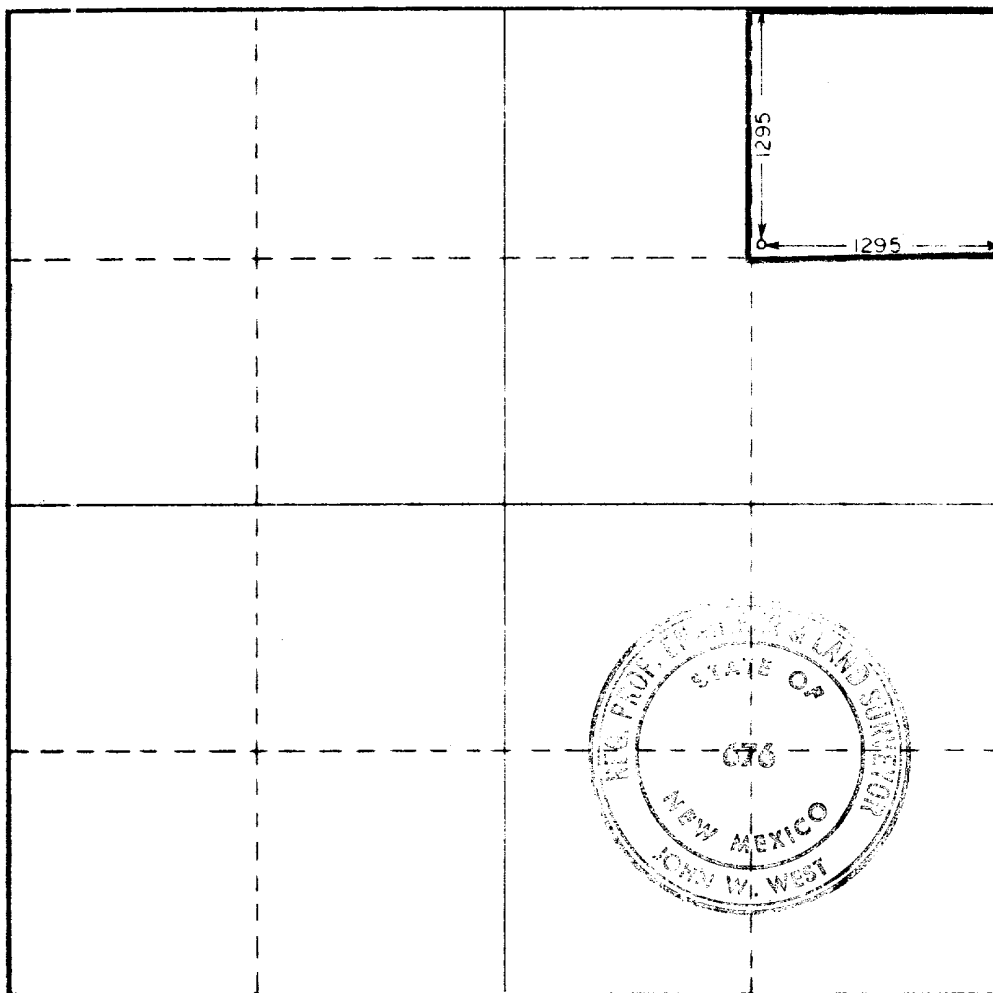
All distances must be from the outer boundaries of the Section

Operator <b>GENERAL AMERICAN OIL CO. OF TEXAS</b>			Lease <b>Burch C</b>			Well No. <b>42</b>		
Unit Letter <b>A</b>	Section <b>30</b>	Township <b>17 South</b>		Range <b>30 East</b>	County <b>Eddy</b>			
Actual Footage Location of Well:								
<b>1295</b>		feet from the <b>North</b>		<b>1295</b>		feet from the <b>East</b>		
Ground Level Elev. <b>3503.4</b>		Producing Formation <b>San Andres</b>		Foot <b>Grayburg-Jackson</b>		Dedicated Acreage <b>40 Acres</b>		

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, forced pooling, etc?  
☐ Yes ☐ No If answer is "yes," type of consolidation **ARTESIA, OFFICE**

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**

Assistant Field Superintendent

General American Oil Co. of Texas

December 26, 1979

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.

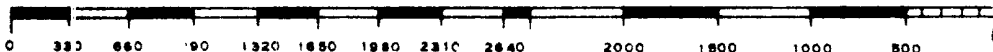
Date Surveyed

**December 15, 1979**

Registered Professional Engineer and/or Land Surveyor

*John W. West*

Certificate No. **John W. West 676**  
**Ronald J. Eidson 3239**





N.M.O.C.D. COPY

# United States Department of the Interior

RECEIVED

## GEOLOGICAL SURVEY

FEB 7 1980

P. O. Drawer U  
Artesia, New Mexico 88210

O. C. D.  
ARTESIA, OFFICE

February 6, 1980

General American Oil Co of Tex  
P. O. Box 128  
Loco Hills, New Mexico 88255

Gentlemen:

GENERAL AMERICAN OIL CO OF TEXAS  
Burch C No. 42  
1295 FNL 1295 FEL Sec. 30 T.17S R.30E  
Eddy County Lease No. LC 028793-c

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 3,600 feet to test the San Andres is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
3. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should not be less than 8" x 5" in size and each page should identify the well.
4. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
5. Cement behind the 8-5/8" casing must be circulated.
6. Special stipulations: Use caliche pit in NW/4 NW/4 Section 30, T.17S., R.30E., (BLM).
7. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

GEORGE H. STEWART

George H. Stewart  
Acting District Engineer



I. Objective:

Drill 3 infill wells in the Grayburg Jackson Field, Eddy Co., New Mexico. Two of these wells will continue the infill pattern on 20 acre spacing as already established. The other well will be located inside the Grayburg Keely Unit area to develop Grayburg and San Andres production which can not be combined with Keely zone production.

II. Location:

Wells to be located as follows:

Burch C #42 1295' FNL & 1295' FEL Sec. 30-17S-30E  
Burch C #43 1345' FSL & 1345' FEL Sec. 18-17S-30E  
Burch B #33 1850' FSL & 1490' FWL Sec. 23-17S-29E

III. Budget Classification:

Developmental Drilling.

IV. Projected Total Depth, Hole Size, Slope Test:

- A. 12 $\frac{1}{4}$ " hole to the top of the salt to accomodate 8 5/8" surface casing (approximately 350'-500').
- B. 7 7/8" hole to approximately 3300'-3600' to accomodate 5 $\frac{1}{2}$ " production casing.
- C. Estimated drilling time 6-7 days per well.
- D. Slope test will be run on each bit trip or 500' intervals.
- E. If any coring or drill stem testing is done pipe will be strapped out of hole prior to coring or testing.

V. Drilling Contractor:

- A. Contractor: WEK Drilling Company, Inc. (probable)
- B. Type Contract: Footage
- C. Contract Depth: 3600'

VI. Mud Program:

Probably will be furnished by Marrs Mud Co.

Interval	Type Mud	Wt	Viscosity	wl
0' - 3400'	Fresh & Salt water	9-10	28-30	NC
3400' - 3600'	Salt Mud	10-11	36-38	NC
(will mud up 200' from TD)				

VII. Typical Geological Tops  
(Middle of unit area)

<u>Tops</u>	<u>Vertical Depth</u>	<u>Subsea</u>
Queen	1880'	+ 1715'
Loco Hills	2340'	+ 1255'
Main Metex	2450'	+ 1145'
San Andres	2585'	+ 1010'
Lovington	2690'	+ 905'
Jackson Pays	2870'	+ 725'
Lower San Andres	3150'	+ 445'
Keely Pay	3330'	+ 265'
Sub Keely Pay	3450'	+ 145'

VIII. Samples:

- A. 10' samples from 2200' to TD or as directed by company representative.

IX. Cores and Drill Stem Test:

- A. At present time no cores or drill stem tests are planned.

X. Logs:

- A. Proposed logging program consists of :  
Sidewall Neutron-Gamma Ray-Caliper 0' - TD

XI. Casing and Tubing Program:

- A. Surface: 8 5/8" 20# range 2 casing to be set just above the top of the salt section and cemented to the surface with class C cement with 2% CaCl. If cement does not surface the casing will be cemented down backside with 1".
- B. Production: 5 1/2" K-55 15.5# ST&C casing. Sufficient volume of class H cement with 1/4" floccel, 3/4 of 1% CFR-2, 5# salt, 10# sand per sack will be pumped to cover well above all zones of interest.

XII. Safety Program:

- A. Blow out preventors will be used as well as close observation by company personnel to assure the well is safely drilled.

XIII. Third Party Services:

Surveying:	Jones & Co. or John West Engineering
Dirt Work:	Jabo Rowland or Sweatt Construction
Cementing:	Halliburton or B.J.
Logging:	Dresser Atlas
Stimulation:	Western or Cardinal
Drilling Mud:	Marr's Mud Co.
Water & Trucking:	I & W or Caprock

## SURFACE USE PLAN

GENERAL AMERICAN OIL COMPANY OF TEXAS WELL: Burch C #42  
LEASE: LC-028793 (c) EDDY COUNTY, NEW MEXICO

The subject well is located approximately 24 miles East of Artesia, New Mexico on the South side of U.S. Highway 82. The following is a discussion of pertinent information concerning possible effect, which the proposed drilling of the well may have on the environment, of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and sub-contractors will be aware of all items of this plan.

1. AERIAL ROAD MAP - Exhibit A is a portion of the Artesia Quadrangle Map #106 and Maljamar Quadrangle Map 107 showing well site in relation to U.S. Highway 82. Access road, which is shown on Exhibit B and colored in red, exits the highway about 25 miles East of Artesia, New Mexico.
2. LOCATION OF EXISTING WELLS - The location of existing wells in the immediate area of the proposed well is shown on Exhibit B.
3. PROPOSED WELL MAT AND IMMEDIATE AREA - Refer to Exhibit C for direction orientation and road access.
  - a. MAT SIZE - 140' x 180'.
  - b. SURFACED - Will be topped with 6" of caliche, bladed, watered and compacted. Caliche to be purchased from B.L.M. by dirt contractor.
  - c. RESERVE PIT - 60' x 70' pit unlined, joining mat to North.
  - d. CUT & FILL - Location is basically flat except for small sand dunes. No fill will be needed except existing sand dunes leveled and topped with caliche.
  - e. DRILL SITE LAYOUT - Exhibit C shows the location and layout including position of the Rig, Mud Tanks, Reserve Pits, Pipe Racks and etc. The Rig will be erected with the V-Door to the East.
  - f. SETTING AND ENVIRONMENT
    - (1) Terrain - Low rolling sand hills.
    - (2) Soil - Sandy Soil.
    - (3) Vegetation - Sparse vegetation, being mostly mesquite, shennery, weeds and other semi-desert plants, with some grass.
    - (4) Surface Use - Grazing.
    - (5) Other - Drillsite - Which is in sandy semi-arid desert country, is in a low environment risk area. The total effect of drilling and producing this and other wells in this area would be very minimal.

g. DISTANCES TO

- (1) Ponds and Streams - There are no surface waters within 3 miles.
- (2) Water Wells - There are no water wells within 1/2 mile.
- (3) Residences and Buildings - There are no residences or buildings within 1/2 mile.
- (4) Arroyos, Canyons, Hills and etc. - Outside of small sand dunes there are no surface features.

h. WELL SIGN - Sign identifying and locating proposed well will be maintained at the drill site commencing with the spudding of the well.

i. OPEN PITS - All pits containing mud or other liquids will be guarded.

4. ROADS

a. EXISTING ROADS - All existing roads within the immediate area of well site are shown on Exhibit B and are colored yellow.

b. PLANNED ROADS - Planned access road will require about 1250 feet of new road that is 12 feet wide. The road will be surfaced with caliche. The proposed road is colored blue and a suggested route to the location colored red on Exhibit B.

c. FENCES, GATES AND CATTLE GUARDS - Will be maintained as General American Oil Company already operates several hundred wells in the immediate area.

5. TANK BATTERY - If production is encountered no additional battery will be required as sufficient facilities are already on the lease.

6. LEASE - PIPELINES

a. EXISTING - All existing pipelines are shown on Exhibit B.

b. PLANNED - If production is encountered, proposed flowline shown on Exhibit B, will consist of 2" steel line laid on top of the ground.

7. WASTE DISPOSAL - Barrel trash containers will be in accessible locations within the drill site area during the drilling and completion operations. A waste disposal pit will be deep enough to handle waste and will be covered with a minimum of 2 feet of top soil. See Exhibit C for pit location. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. Any produced water will be disposed of through the currently existing S.W.D. systems.

8. WATER SUPPLY - Water supply to drill this well will be furnished through a 2" PVC line laid through the drilling area. Location of the water line is shown on Exhibit B.

9. ARCHAEOLOGICAL RESOURCES - See attached Conservation Archaeology's Clearance Report.
10. RESTORATION OF SURFACE - If well is productive, pits will be backfilled and leveled as soon as practical. Upon final abandonment of well, well site will be leveled and cleaned, with land returned as near as practical to original condition.
11. OPERATOR'S REPRESENTATIVES - Field personnel who can be contacted concerning compliance of this surface use plan are as follows:

Drilling and Production

Lendell Hawkins  
P. O. Box 128  
Loco Hills, New Mexico 88255  
Office Phone: 505-677-2481  
Home Phone: 505-677-2277

OR

Fred Starkey  
P. O. Box 128  
Loco Hills, New Mexico 88255  
Office Phone: 505-677-2481  
Home Phone: 505-746-9397

12. 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.

December 27, 1979  
Date

Lendell Hawkins  
Lendell Hawkins, Asst. Field Superintendent



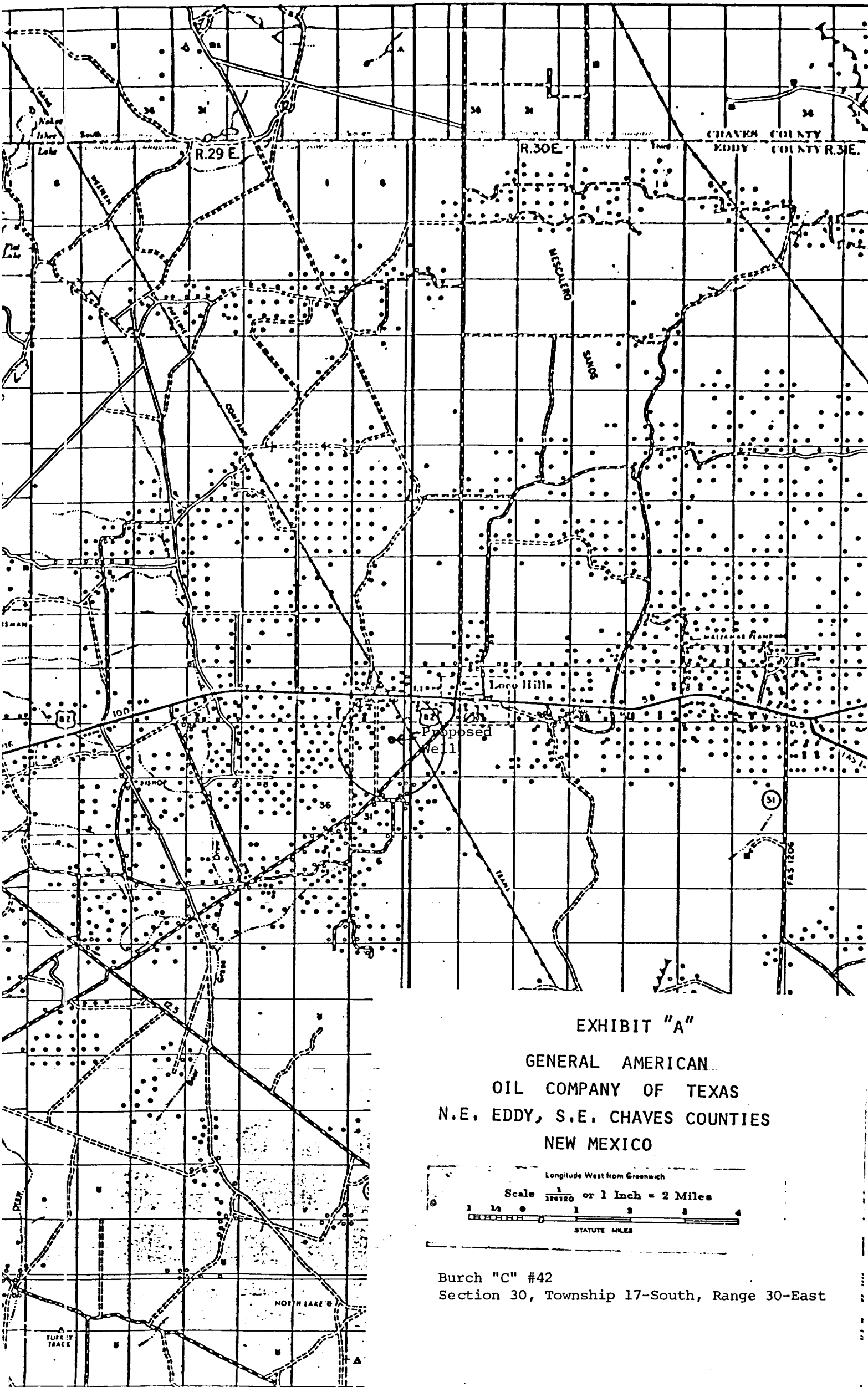
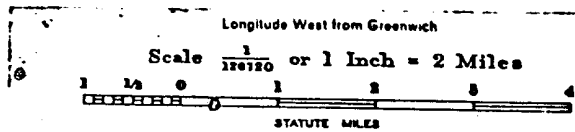
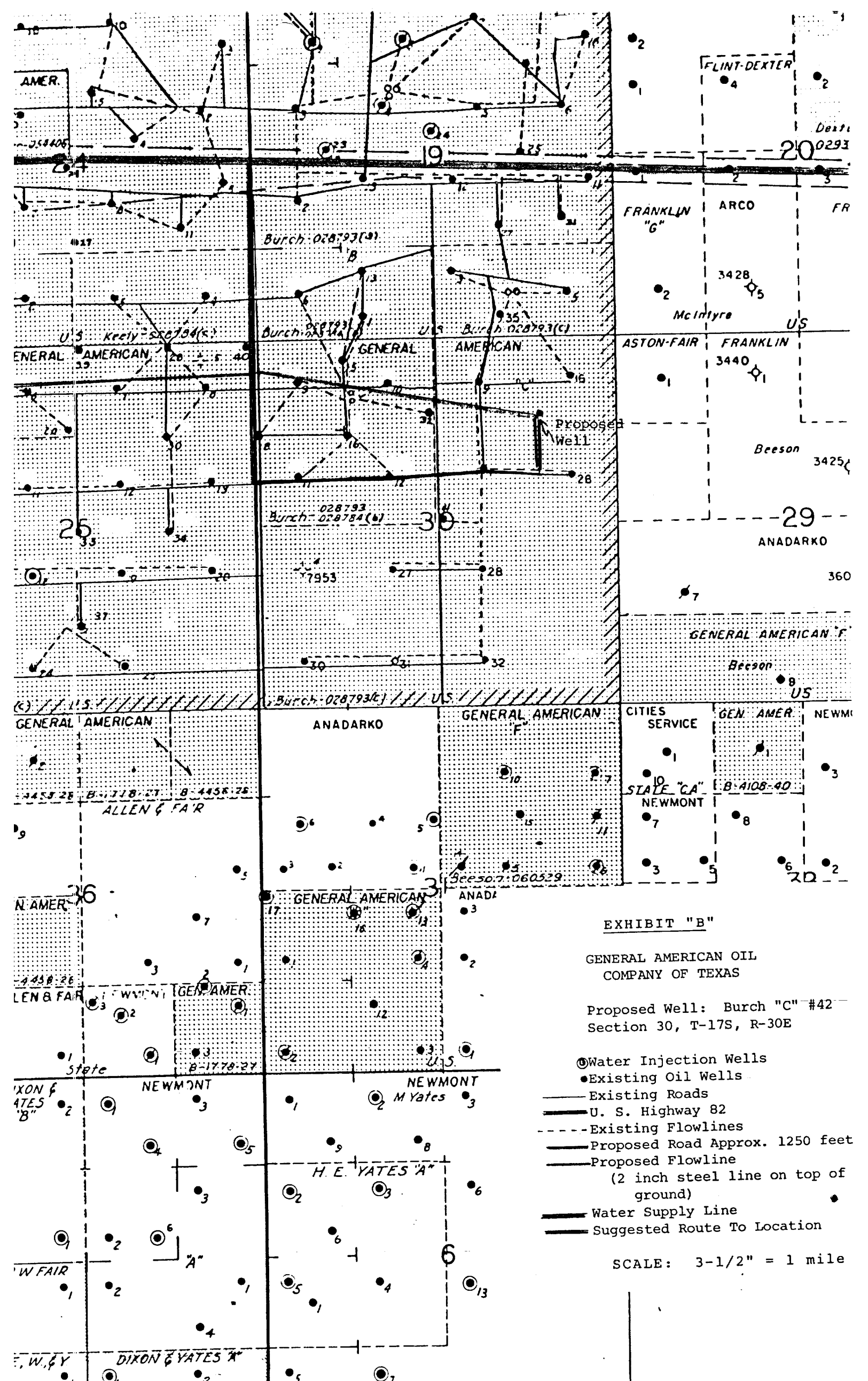


EXHIBIT "A"

GENERAL AMERICAN  
OIL COMPANY OF TEXAS  
N.E. EDDY, S.E. CHAVES COUNTIES  
NEW MEXICO



Burch "C" #42  
Section 30, Township 17-South, Range 30-East



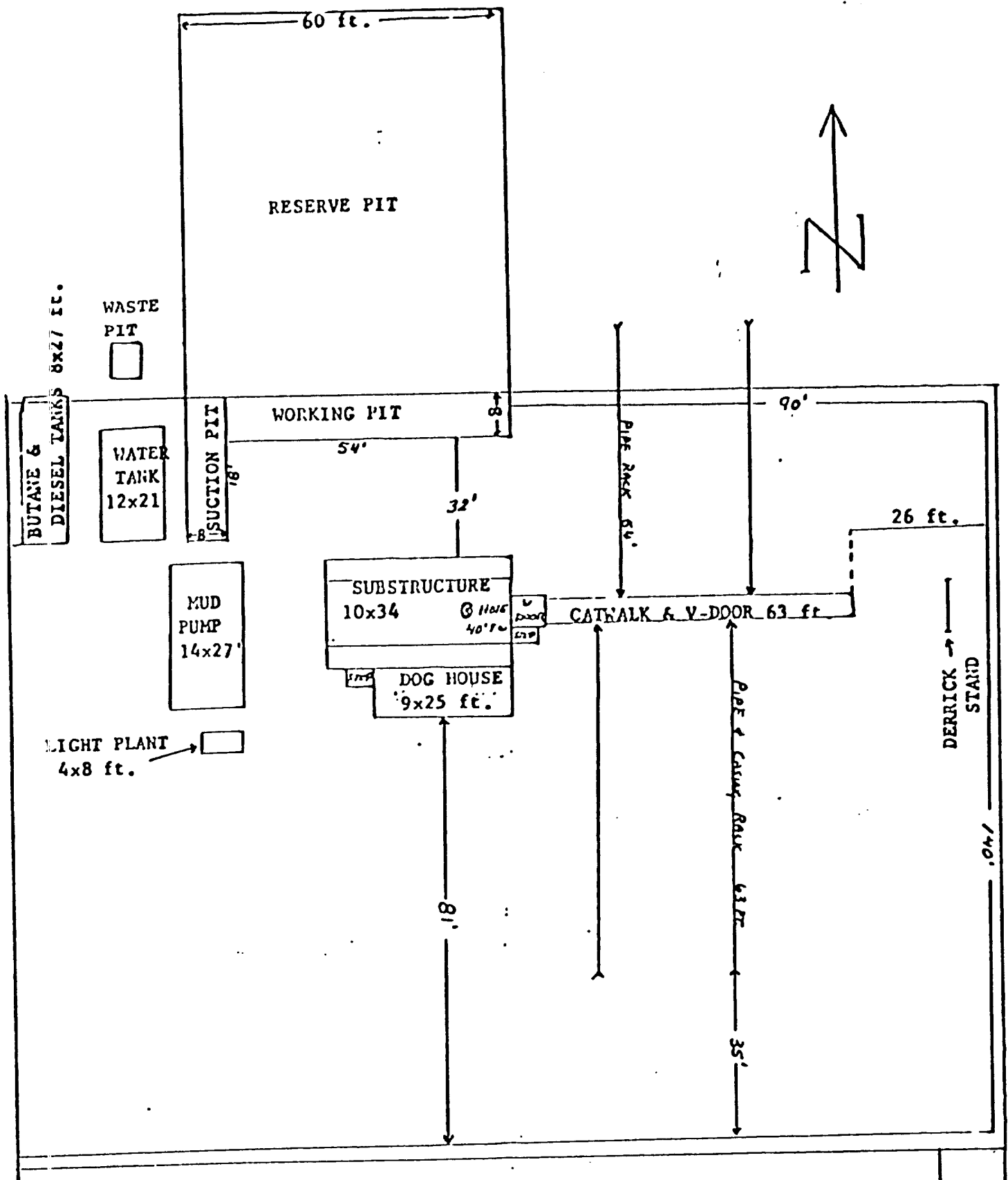


EXHIBIT "C"  
Scale: 1" = 25'

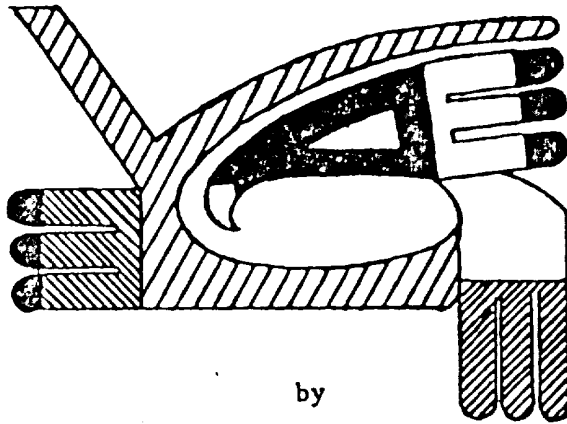
ROAD TO LOCATION 12' WIDE

ARCHAEOLOGICAL CLEARANCE REPORT

For

GENERAL AMERICAN OIL COMPANY

80-166



by

Rodrick MacLennan

Edited and Submitted by

Dr. Peter S. Miller  
Director

AGENCY FOR CONSERVATION ARCHAEOLOGY

Llano Estacado Center for Advanced  
Professional Studies and Research

Eastern New Mexico University  
Portales, New Mexico 88130

December 22, 1979

## INTRODUCTION

An archaeological reconnaissance was recently completed by the Agency for Conservation Archaeology, Eastern New Mexico University, Portales, New Mexico, for General American Oil Company in Eddy County, New Mexico. The reconnoitered area will be impacted by the construction of 4 well pads, 3 roads and 5 caliche pits. The project was administered jointly by Mr. Lendell Hawkins of General American Oil Company and Dr. Peter S. Miller, Director, Agency for Conservation Archaeology. This report was prepared by the Roswell Office of ACA, Rodrick MacLennan, Manager.

The field work was conducted on December 21, 1979 by Rod MacLennan. Good field and weather conditions prevailed throughout the course of this reconnaissance. The survey was completed under Federal Antiquities Permit No. 79-NM-049. A search of the National Register has been made and properties within this location are not listed on the Register.

## SURVEY TECHNIQUES

Visual inspection of the well pads was completed by walking a series of parallel transects. Each transect was covered in a tightly spaced zigzag pattern. All access roads were examined as individual transects, with tightly spaced zigzag patterns covering the length and breadth. The caliche pits were inspected by walking a series of parallel transects. Each transect was covered in a tightly spaced zigzag pattern. The distance between the transects was 20 feet. These methods maximized the opportunity of observing any cultural resources within or near the proposed areas of impact.

### Burch "C" No. 42

#### Location

The proposed well pad and access line are located 2.2 miles west of Loco Hills, New Mexico, near the Querecho Plains. The pad measures 400 X 400 feet and the access road measures 15 X 1250 feet. They are situated as follows:

NE $\frac{1}{4}$ NE $\frac{1}{4}$ , Section 30, T17S, R30E, NMPM, Eddy County, New Mexico (BLM)

NW $\frac{1}{4}$ NE $\frac{1}{4}$ , Section 30, T17S, R30E, NMPM, Eddy County, New Mexico (BLM)

SW $\frac{1}{4}$ NE $\frac{1}{4}$ , Section 30, T17S, R30E, NMPM, Eddy County, New Mexico (BLM)

SE $\frac{1}{4}$ NE $\frac{1}{4}$ , Section 30, T17S, R30E, NMPM, Eddy County, New Mexico (BLM)

Map Reference: USGS Red Lake SE Quadrangle, 7.5 minute series, 1955  
(see Figures 3 & 4).

#### Terrain

The proposed well pad and access right-of-way are located near the Querecho Plains and are 2.5 miles east of Bear Grass Draw. They are situated on a gently undulating plain overlain by a dune field. The elevation in the area is approximately 3603 feet.

# WELL LOCATION AND ACREAGE DEDICATION PLAN

Effective 1-4-65

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

General American Oil Company		Burch "C"		Well No. 42
Section 30	Township 17 South	Range 30 East	County Eddy	
Latitude Location of Well:				
1295 feet from the North line and	1295 feet from the East line			
Level Elev. 360.1	Producing Formation	Pool	Dedicated Acreage	

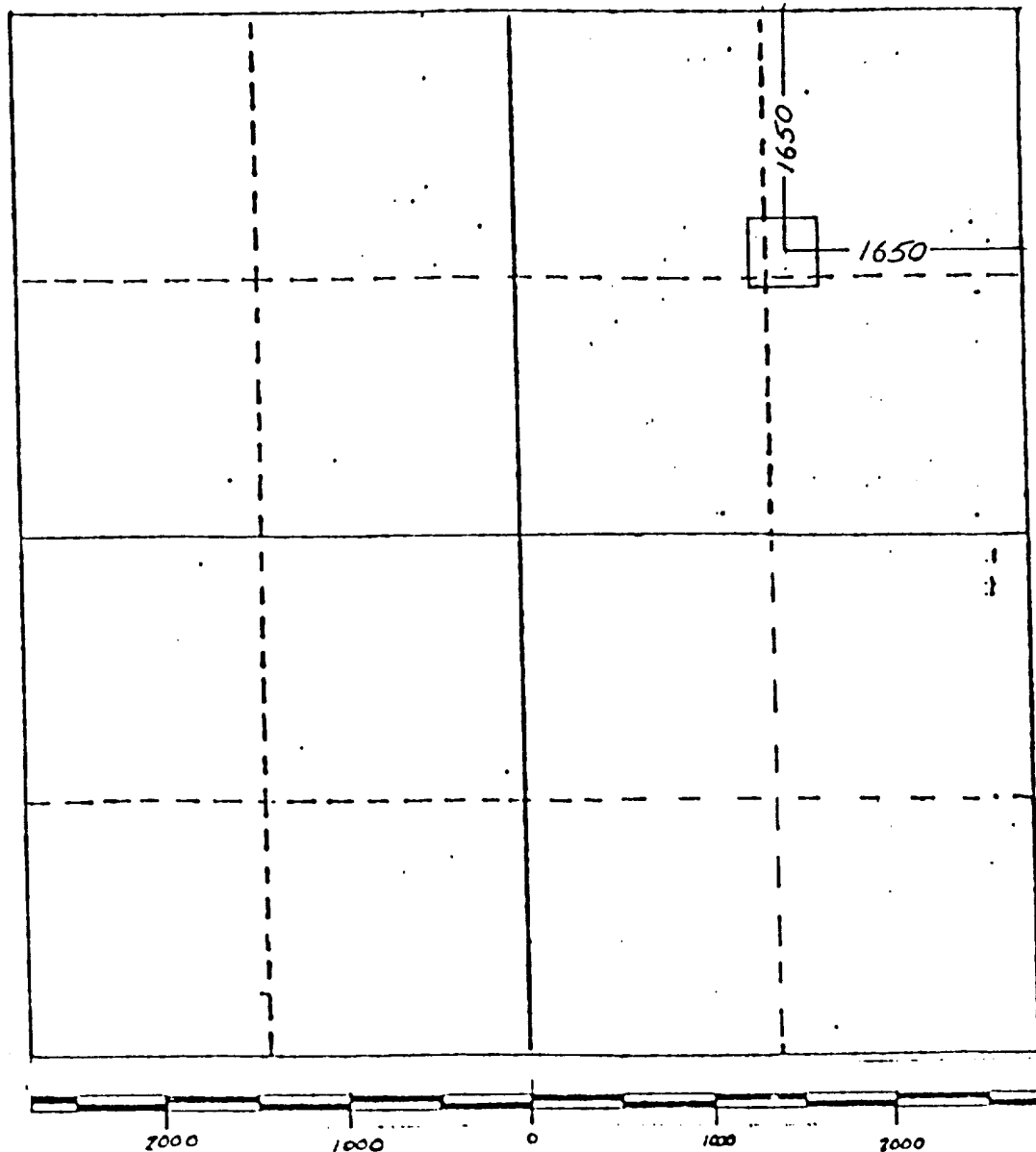


Figure 3

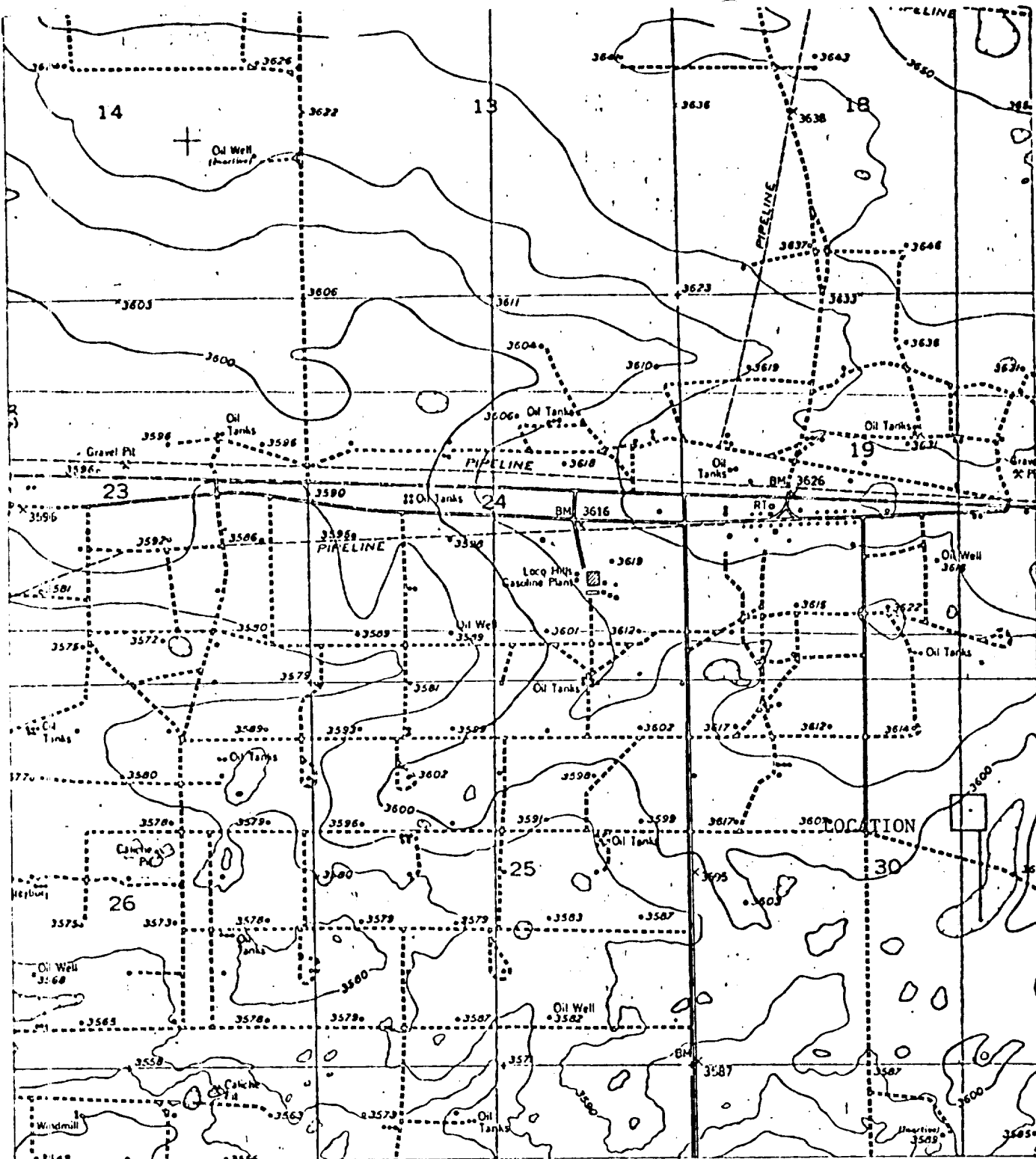
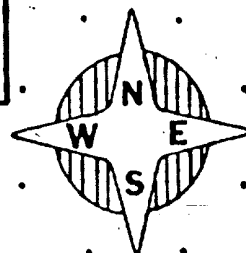


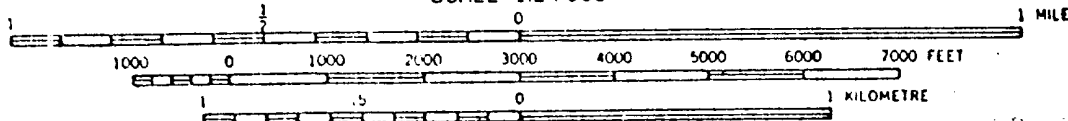
Figure 4: Location of General American Oil's Burch "C" No. 42  
Section 30, T17S, R30E, Eddy County

Map Reference: USGS Red Lake SE Quadrangle, 1955

7.5 MINUTE  
SERIES



SCALE 1:24 000



### Terrain (Cont.)

The soils encountered in the area are predominantly calcareous sands. No lithic inclusions were found within this soil. Taxonomically, this soil can be classified as a member of the Haplargid-Torripsamment association.

### Floristics

ACA encountered a sparse floral assemblage in this area. The density of the vegetation in the area is approximately ten percent, consisting mostly of shrub species. Among the species present are: mesquite (Prosopis juliflora), oak brush (Quercus havardii), plains yucca (Yucca campestris), black grama (Bouteloua eriopoda), blue grama (Bouteloua gracilis), Indian wheat (Plantago purshii), leatherweed croton (Croton potsii), and broom snakeweed (Gutierrezia sarothrae).

### Cultural Resources

ACA did not encounter any archaeological sites or isolated manifestations either within or near the proposed facilities. A review of ACA's site files and the National Register did not find any properties listed for this location.

### Recommendations

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



## Caliche Pit No. 5

### Location

The proposed caliche pit is located 2.5 miles southwest of Loco Hills, New Mexico, near the Querecho Plains. The caliche pit measures 400 X 450 feet and is located as follows:

NW $\frac{1}{4}$ NW $\frac{1}{4}$ , Section 30, T17S, R30E, NMPM, Eddy County, New Mexico (BLM)

Map Reference: USGS Red Lake SE Quadrangle, 7.5 minute series, 1955  
(see Figure 13).

### Terrain

The proposed caliche pit is located near the Querecho Plains and is 3.5 miles east of Bear Grass Draw. The pit is located on a gently undulating plain which is overlain by a dune field. The elevation is 3610 feet.

The soils encountered in the area are predominantly calcareous sands. Taxonomically, this soil can be classified as a member of the Haplargid-Torripsamment association.

### Floristics

ACA encountered a sparse floral assemblage in the vicinity of the caliche pit. The density of the vegetation is approximately ten percent, consisting primarily of shrubs. Among the species present are: mesquite (Prosopis juliflora), oak brush (Quercus havardii), and broom snakeweed (Gutierrezia sarothrae).

### Cultural Resources

ACA did not encounter any archaeological sites or isolated manifestations during the course of this reconnaissance. A review of ACA's site files and the National Register did not show any properties listed for this location.

### Recommendations

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

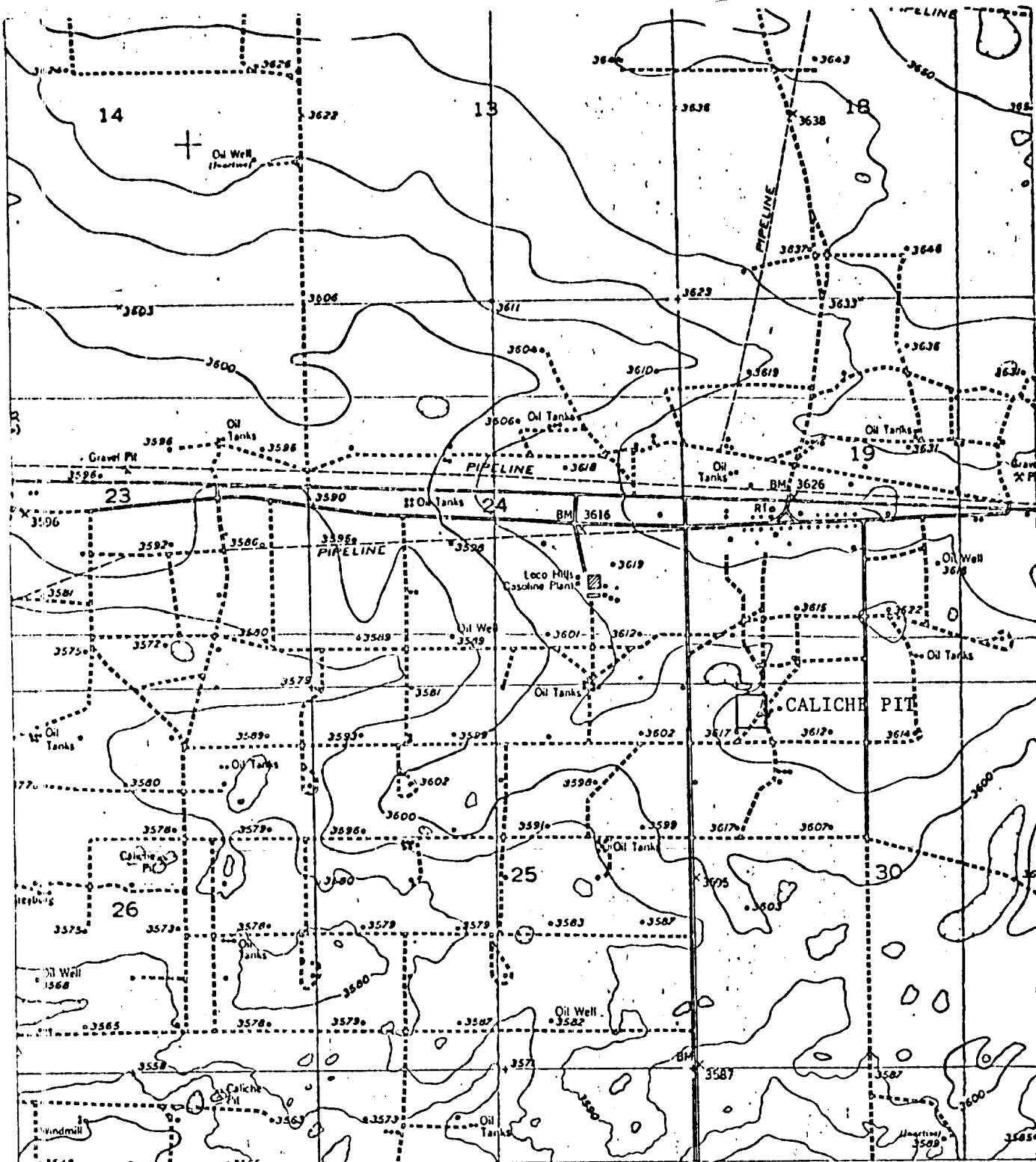
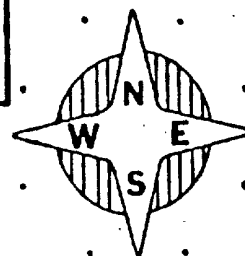


Figure 13: Location of Caliche Pit No. 5  
Section 30, T17S, R30E, Eddy County

Map Reference: USGS Red Lake SE Quadrangle, 1955

7.5 MINUTE  
SERIES



SCALE 1:24 000

