

UNITED 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

Amoco Production Company

## 3. ADDRESS OF OPERATOR

P. O. Drawer A, Levelland, TX 79336

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

At surface

990' FNL X 400' FWL, Section 15 (Unit D, NW $\frac{1}{4}$  NW $\frac{1}{4}$ )

At proposed prod. zone

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

2.6 miles Northeast of Jal, New Mexico

## 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

80

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.

## 19. PROPOSED DEPTH

3700'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

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

5-18-78

## 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"	32#	1100'	Circulate
7-7/8"	5-1/2"	15.5#-17#	3700'	Circulate

Propose to drill and equip well in the Queen formation. After reaching TD logs will be run and evaluated; perforate and stimulate as necessary in attempting commercial production.

Mud Program: 0' - 1100' - Native mud and fresh water.

1100' - 3700' - Commercial mud and brine water to maintain good hole conditions.

BOP Program attached.

Gas committed to El Paso Natural Gas Contract No. 21207

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

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

*Ray W. Cox*

TITLE

Administrative Supervisor

DATE

3-27-78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

0 &amp; 5 - USGS-H

1 - Div.

1 - Susp.

1 - RC

\*See Instructions On Reverse Side

APPROVED  
AS AMENDED

APR 7 1978

A.A.L.  
ACTING DISTRICT ENGINEER

THE UNIVERSITY OF  
MICHIGAN LIBRARY  
ANN ARBOR, MICH.

RECEIVED  
JUN 11 1964

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION FORM

Form C-10,  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

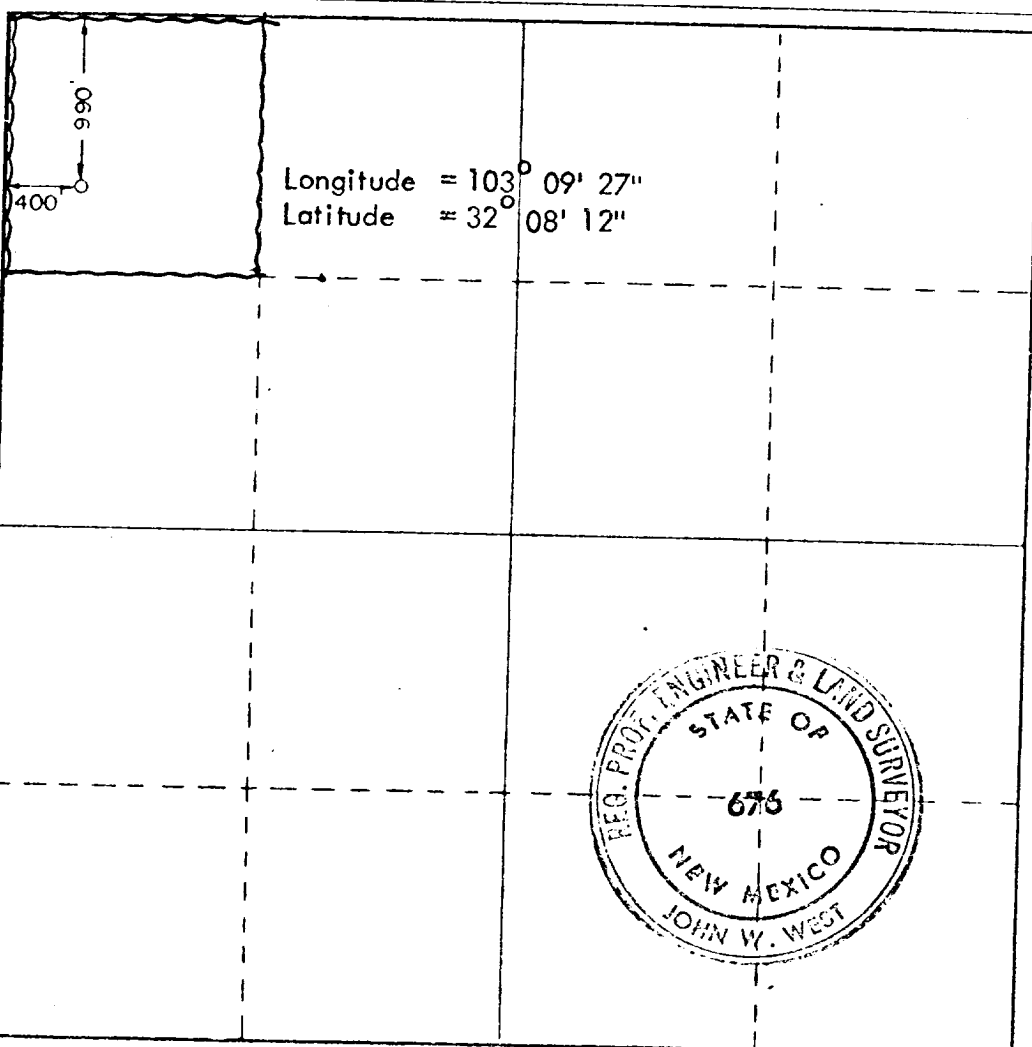
Operator <b>Amoco Production Co.</b>			Lease <b>Langlies B</b>		Well No. <b>4</b>
Unit Letter <b>D</b>	Section <b>15</b>	Township <b>25 South</b>	Range <b>37 East</b>	County <b>Lea</b>	
Actual Well Location of Well: <b>400</b> feet from the <b>West</b> line and <b>990</b> feet from the <b>North</b> line					
Ground Level Elev. <b>3114.8</b>	Producing Formation <b>QUEEN</b>		Pool <b>LANGLIE MATTIX</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.

Name *D.R. Couch*  
Position Administrative Analyst (SG)

Company AMOCO PRODUCTION COMPANY

Date 3-10-78

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 3/7/78

Registered Professional Engineer and/or Land Surveyor

*John W. West*

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

OIL CONSERVATION COMM.  
#10885, N. M.

171 1978

RECEIVED

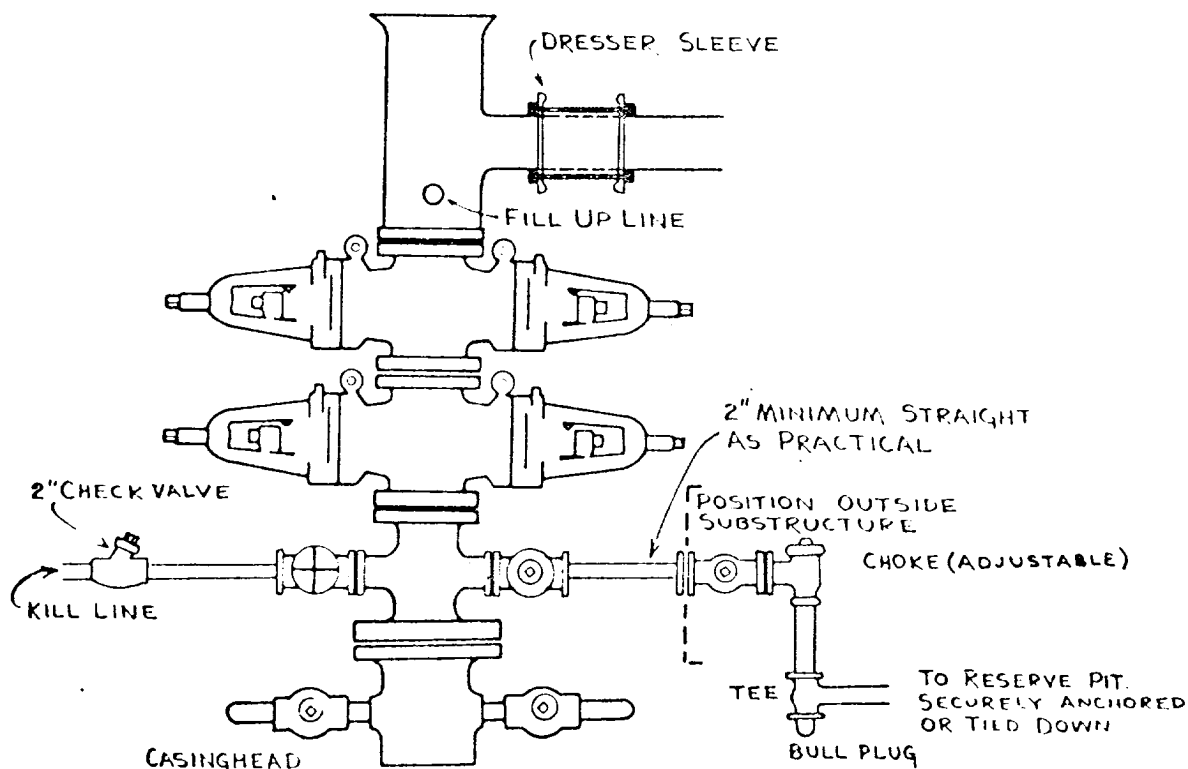
ATTACHMENT "B"  
STANDARD 2000 PSI W.P. BOP STACK

1. BLOW-OUT PREVENTERS MAY BE MANUAL OPERATED.
2. ALL EQUIPMENT MUST BE IN GOOD CONDITION, 2,000 PSI W.P. (4,000 PSI TEST) MINIMUM.
3. BELL NIPPLE ABOVE BLOW-OUT PREVENTER SHALL BE SAME SIZE AS CASING BEING DRILLED THROUGH.
4. KELLY COCK TO BE INSTALLED ON KELLY.
5. FULL OPENING SAFETY VALVE 2,000 PSI W.P. (4,000 PSI TEST) MINIMUM, MUST BE AVAILABLE ON RIG FLOOR AT ALL TIMES WITH PROPER CONNECTION OR SUBS TO FIT ANY TOOL JOINT IN STRING.
6. SPOOL OR CROSS MAY BE ELIMINATED IF CONNECTIONS ARE AVAILABLE IN THE LOWER PART OF THE BLOW-OUT PREVENTER BODY.
7. DOUBLE OR SPACE SAVER TYPE PREVENTERS MAY BE USED IN LIEU OF TWO SINGLE PREVENTERS.
8. BOP RAMS TO BE INSTALLED AS FOLLOWS:\*

TOP PREVENTER	-	DRILL PIPE OR CASING RAMS
BOTTOM PREVENTER	-	BLIND RAMS

\*AMCOO AREA SUPT. MAY REVERSE LOCATION OF RAMS.

9. EXTENSIONS AND HAND WHEELS TO BE INSTALLED AND BRACED AT ALL TIMES.
10. MANIFOLD VALVES MAY BE GATE OR PLUG METAL TO METAL SEAL 2" MINIMUM.



Attachment to "Application for Permit to Drill", Form 9-331 C

Langlie "B" Federal Well No. 4  
Unit D, 990' FNL X 400' FWL, Section 15, T-25-S, R-37-E, Lea County, NM

1. Location

See attached Form C-102

2. Elevation

See attached Form C-102

3. Geologic name of surface formation.

Quaternary

4. Type of drilling tools and associated equipment to be utilized.

See Form 9-331 C

5. Proposed drilling depth.

See Form 9-331 C

6. Estimated tops of important geologic markers.

Rustler - 1060'                      Queen - 3400'  
Yates - 2690'

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

Queen - 3400'

8. Proposed casing program, including size, grade, and weight of each string and whether it is new or used.

<u>Depth</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>New or Used</u>
1100'	8-5/8"	32#	K-55	New
3700'	5-1/2"	15.5#,17#	K-55	New

9. Proposed cementing program.

8-5/8" csg - Circulate to surface  
5-1/2" csg - Circulate to surface

10. Blowout Preventer Program is attached.
11. Type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling, and the quantities and types of mud and weighting material to be maintained.  
Surf to 1100' - Native mud and fresh water  
1100' to 3700' - Commercial mud and brine water to maintain good hole conditions.
12. Testing, logging and coring programs to be followed with provisions made for required flexibility.  
  
CNL, FDC, GR W/Caliper - Surf. to TD  
DLL W/Micro SFL - Surf to TD
13. Any anticipated abnormal pressure or temperatures expected to be encountered or potential hazards, such as hydrogen sulfide gas, along with plans for mitigating such hazards.  
  
None Anticipated.
14. Anticipated starting date and duration of operation.  
  
*Start 5/18/78. Complete 5/30/78.*
15. Other facets of the proposed operation operator wishes to point out for the Geological Survey's consideration of the application.  
  
None.

ATTACHMENT TO FORM 9-331C

APPLICATION FOR PERMIT TO DRILL

LEASE Langlie "B" Federal WELL NO. 4  
LOCATION Unit D, 990' FNL X 400' FWL, Sec. 15, T-25-S, R-37-E  
POOL Langlie Mattix Queen  
COUNTY Lea

The undersigned hereby states that Amoco's representative, Mr. E. E. Pauley, personally contacted Mr. Ralph Wrinkle, the owner/lessee of the surface land where the proposed work is to be conducted and advised him of the proposed work, the construction site and pertinent roads included in the project. It is further stated that, upon being fully advised of the extent of the work and the effect upon the surface, said owner has consented to the said work and that agreement as to the compensation for damages to the surface estate has been reached.

If the well is a producer, all pits will be cut, filled and leveled as soon as practical after the pits are dry. If the well is a dry hole, pits will be filled as above, a dry hole marker will be installed, and the location and pad will remain intact.

Ray W. Cox  
Ray W. Cox  
Administrative Supervisor

3-28-78

Date



### Proposed Development Plan for Surface Use

Amoco Production Company's Langlie "B" Federal Well No. 4, Unit D, 990' FNL X 400' FWL, Sec. 15, T-25-S, R-37-E, Lea County - (Development Well)

1. Existing roads including location of exit from main highway.  
Detailed map showing drillsite location in relation to the nearest town and all existing roads within one mile of the wellsite are shown on Exhibit A. From Jal, go east on Hwy 128 1.8 miles. Turn north on paved road .8 mile. 300' of new road will be built east to location. See Exhibit B.
2. Planned access roads.  
300' new road will be built using caliche
3. Location of existing wells.  
All existing wells within one mile radius are shown on Exhibit C .
4. Location of tank batteries and flow lines.  
If the well is commercially productive, the production facilities (i.e. tanks, separators and treaters) will be located on the southeast end of the drilling pad.  
See Exhibit D.
5. Location and type of water supply.  
Fresh water and brine water will be hauled from Jal, New Mexico by XL Transport Co., Jal, New Mexico
6. Source of construction materials.  
Caliche will be obtained from an existing pit located approximately .2 mile southwest of location.  
SW  $\frac{1}{4}$  NW  $\frac{1}{4}$  Section 15, T-25-S, R-37-E  
See Exhibit B.
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. ANCILLARY FACILITIES -

No camps, airstrips, etc. will be constructed.

#### 9. WELLSITE LAYOUT -

- a. Size of Drilling Pad - 220' X 150' X 6"
- b. Compacted - Caliche
- c. Surfaced - No
- d. 300' square area around wellsite has been cleared by archaeologist.
- e. See Exhibit D.

#### 10. RESTORATION OF SURFACE -

Producing Well - all pits will be cut, filled, and leveled as soon as practical to original condition with rehabilitation to commence following removal of drilling and completion equipment. Rehabilitation to be completed in 180 days if possible.

Dry Hole - same as above with dry hole marker to be installed and surface reseeded if required.

#### 11. OTHER INFORMATION -

- a. Terrain - Broad, flat plain.
- b. Soil - Sandy clay loams w/angular caliche inclusions.
- c. Vegetation - Broom, snakeweed and mesquite
- d. Surface Use - Grazing.
- e. Ponds and Streams - None.
- f. Water Wells - None.
- g. Residences and Buildings - Lea County Airport located south of well.
- h. Arroyos, Canyons, etc. - None.
- i. Well Sign - Posted at drillsite.
- j. Open Pits - All pits containing liquid or mud will be fenced.
- k. Archaeological Resources - Drillsite, which is in broad, flat plain is in a low environmental risk area. The total effect of drilling and producing would be minimal. No known archaeological, historical, or cultural sites exist in the drill or road areas.

12. OPERATOR'S REPRESENTATIVE -

Field personnel responsible for compliance with development plan for surface use is:

J. H. Hankins, Senior Drilling Foreman  
P. O. Drawer "A"  
Levelland, TX 79336  
Office Phone: 806-894-3163

LEASE & WELL NUMBER Langlie "B" Federal Well No. 4

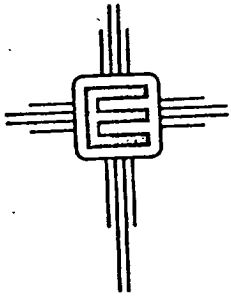
LOCATION Unit D, 990' RNL X 400' FWL, Sec. 15, T-25-S, R-37-E, Lea County

Certification: The following statement is to be incorporated in the plan and must be signed by the lessee's or operator's field representative who is identified in Item No. 12 of the plan.

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 AMOCO PRODUCTION COMPANY and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

3-28-78  
DATE

*J. H. Hamilton* Sr. Drlg. Foreman  
NAME AND TITLE



17 March 1978

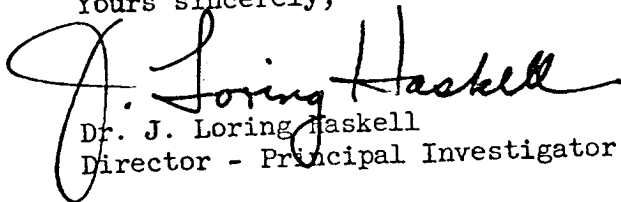
Mr. Bob Couch  
Amoco Production Co.  
P. O. Drawer A  
Levelland, TX 79336

Dear Mr. Couch:

Enclosed please find the Agency for Conservation Archaeology's clearance report for Amoco Production Company. No cultural resources were recorded during the course of this reconnaissance.

If I may be of further service to you, do not hesitate to call me at (505) 562-3332.

Yours sincerely,

  
Dr. J. Loring Haskell  
Director - Principal Investigator

dlg

Enclosure

Archaeological Clearance Report

for

Amoco Production Company

Federal H #1  
Langlie A #3  
Langlie B #3  
Langlie B #4

by

Dr. J. Loring Haskell

Submitted by

Dr. J. Loring Haskell  
Director - Principal Investigator  
Agency for Conservation Archaeology  
Eastern New Mexico University  
Portales

16 March 1978

## INTRODUCTION

An archaeological reconnaissance was recently completed by the Agency for Conservation Archaeology, Eastern New Mexico University, Portales, for Amoco Production Company on federal lands in Lea County, New Mexico. Reconnoitered locations will be impacted by the construction of oil wells as well as accesses in two instances. The project was administered by Mr. Bob Couch, Amoco Production Company, and Dr. J. Loring Haskell, Director - Principal Investigator, Agency for Conservation Archaeology. Dr. Haskell undertook the project on 15 March 1978 under excellent weather conditions. The reconnaissance was performed under Federal Antiquities Permit No. 78-NM-015.

## SURVEY TECHNIQUE

The drill locations were walked in a series of overlapping, zigzag, 15 ft wide transects from north to south and thence south to north. This technique was repeated until each location had been thoroughly investigated for evidence of man's past activities. The proposed right-of-way was reconnoitered by walking it in a close interval, 25 ft wide, zigzag pattern. Utilized field techniques ensured a thorough examination of areas of primary and secondary impact.

### Federal H #1

#### Location

The proposed location is situated 660 ft from the south line and 1980 ft from the west line and will measure 400 X 400 ft. It is located in the:

SE $\frac{1}{4}$ SW $\frac{1}{4}$ , Section 26, T23S, R33E, NMPM, Lea County, New Mexico (BLM)

Map Reference: USGS Hat Mesa Quadrangle, 15 Minute Series, 1968.

The proposed access will measure 12 X 600 ft and will pass through the:

SE $\frac{1}{4}$ SW $\frac{1}{4}$ , Section 26, T23S, R33E, NMPM, Lea County, New Mexico (BLM)

Map Reference: USGS Hat Mesa Quadrangle, 15 Minute Series, 1968.

### Terrain

Topographically, the local landform consists of an essentially flat and featureless plain. Soils are sandy loams and tend to be deep and non-calcareous. Soil individuals are Typic Haplargids and strong brown (7.5YR 4/6 dry) in color.

### Floristics

The dominant plants in the area are Prosopis juliflora and Gutierrezia sarothrae. Prosopis occurs as low shrub throughout the immediate area. Plants are spaced at regular intervals but do not occur in thickets. In addition, Yucca glauca is well represented locally as is Senecio longilobus and Eriogonum wrightii. Croton texensis, Condalia ericoides, Opuntia macrocentra, and Acacia vernicosa are sporadic. A solitary, but unidentified, specimen of Echinocereous was observed in the area. Principal grasses are Aristida sp. and Scleropogon brevifolius.

### Cultural Resources

No archaeological sites, or isolated manifestations, were recorded during the course of this reconnaissance.

### Recommendations

ACA recommends clearance for the proposed Federal H #1 and suggests that construction proceed without modification of existing plans.

Langlie A #3

### Location

The proposed location is situated 660 ft from the south line and 1980 ft from the west line and measures 400 X 400 ft. It lies in the:



SE $\frac{1}{4}$ SW $\frac{1}{4}$ , Section 9, T25S, R37E, NMPM, Lea County, New Mexico (BLM)

Map Reference: USGS Jal NW Quadrangle, 7.5 Minute Series, 1969.

The proposed location adjoins an existing right-of-way, and hence, no additional access is needed.

#### Terrain

Local terrain is distinguished by a flat plain which rises gradually toward the west. Drainage is in the direction of the southeast. Angular caliche cobbles are strewn about the immediate area and average 6 to 10 cm in diameter. Soils are sandy clay loams and are brown (10YR 5/3 dry) in color. Areal soil individuals are assignable to the Typic Paleorthid sub-group and are highly calcareous and thin.

#### Floristics

For all intents and purposes, the floral assemblage is composed entirely of Prosopis juliflora and Gutierrezia sarothrae. Grasses are scarce and unidentifiable. A solitary Ferocactus sp. was observed in the immediate vicinity.

#### Cultural Resources

Contemporary trash is present in the area and is composed of tin cans, galvanized metal containers, metal drums, glass, et cetera. No archaeological sites were recorded.

#### Recommendations

ACA recommends clearance for the Langlie A #3 and suggests that construction proceed without modification of existing plans.

#### Langlie B #3

#### Location

The proposed location is situated 2130 ft from the north line and 400 ft from

the west line and measures 400 X 400 ft. It is located in the:

SW $\frac{1}{4}$ NW $\frac{1}{4}$ , Section 15, T25S, R37E, NMPM, Lea County, New Mexico (BLM)

Map Reference: USGS Jal NW Quadrangle, 7.5 Minute Series 1969.

The proposed location adjoins an existing right-of-way, and hence, will require no additional access.

#### Terrain

A broad, flat plain serves to demarcate this locality. It tends to rise on the west with slope toward the southeast. Soil individuals are sandy clay loams with angular caliche inclusions. Associated detritus averages 4 to 15 cm in diameter. Soils are taxonomically assignable to the Typic Paleorthid sub-group.

#### Floristics

The area, as a whole, is marked by a nearly purely stand of Gutierrezia sarothrae. Grass species are scarce to non-existent. Ferocactus sp. and Opuntia macrocentra do occur but are infrequent. Several specimens of Prosopis juliflora are present.

#### Cultural Resources

Contemporary trash litters the entire area but tends to be concentrated on the west side of the location. Trash consists of a wide array of twentieth century cultural detritus, viz., rubber tires, 3-gallon cans, tin cans of assorted types, springs and so forth. No archaeological sites were recorded at this location.

#### Recommendations

ACA recommends clearance for Amoco's Langlie B #3 and suggests that construction proceed without modification of existing plans.

Langlie B #4Location

The proposed location is situated 400 ft from the west line and 990 ft from the north line and measures 400 X 400 ft. It is located in the:

NW $\frac{1}{4}$ NW $\frac{1}{4}$ , Section 15, T25S, R37E, NMPM, Lea County, New Mexico (BLM)

Map Reference: USGS Jal NW Quadrangle, 7.5 Minute Series, 1969 .

The proposed access measures 12 X 300 ft and will pass through the:

W $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ , Section 15, T25S, R37E, NMPM, Lea County, New Mexico (BLM)

Map Reference: USGS Jal NW Quadrangle, 7.5 Minute Series, 1969.

Terrain

Local physiography is composed of a flat and featureless plain. Soils are thin, sandy clay lomas with angular caliche inclusions. The immediate area is distinguished by numerous mounds, probably the remains of old bore holes, which are literally riddled with krotovinas. Associated soils are grayish brown (10YR 5/2 dry). Elsewhere, soils are brown (10YR 5/3 dry). All soils are taxonomically Typic Haplargids.

Floristics

Gutierrezia sarothrae and Prosopis juliflora are co-dominant at this locality. Croton texensis occurs sporadically throughout the area as do several unidentified grasses. Atriplex canescens is abundant along the extreme eastern edge of the location.

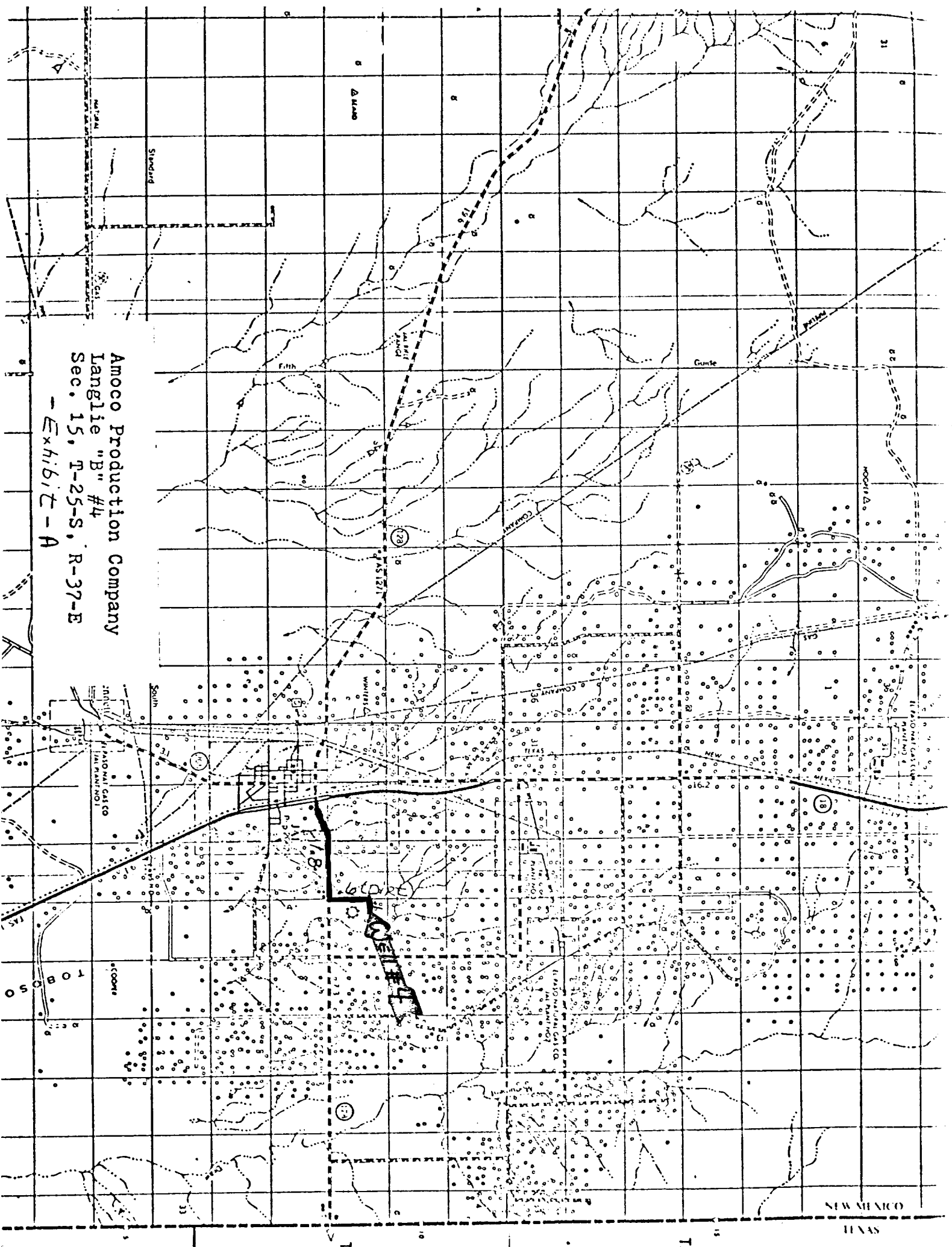
Cultural Resources

No cultural resources were recorded during the course of this reconnaissance.

Recommendations

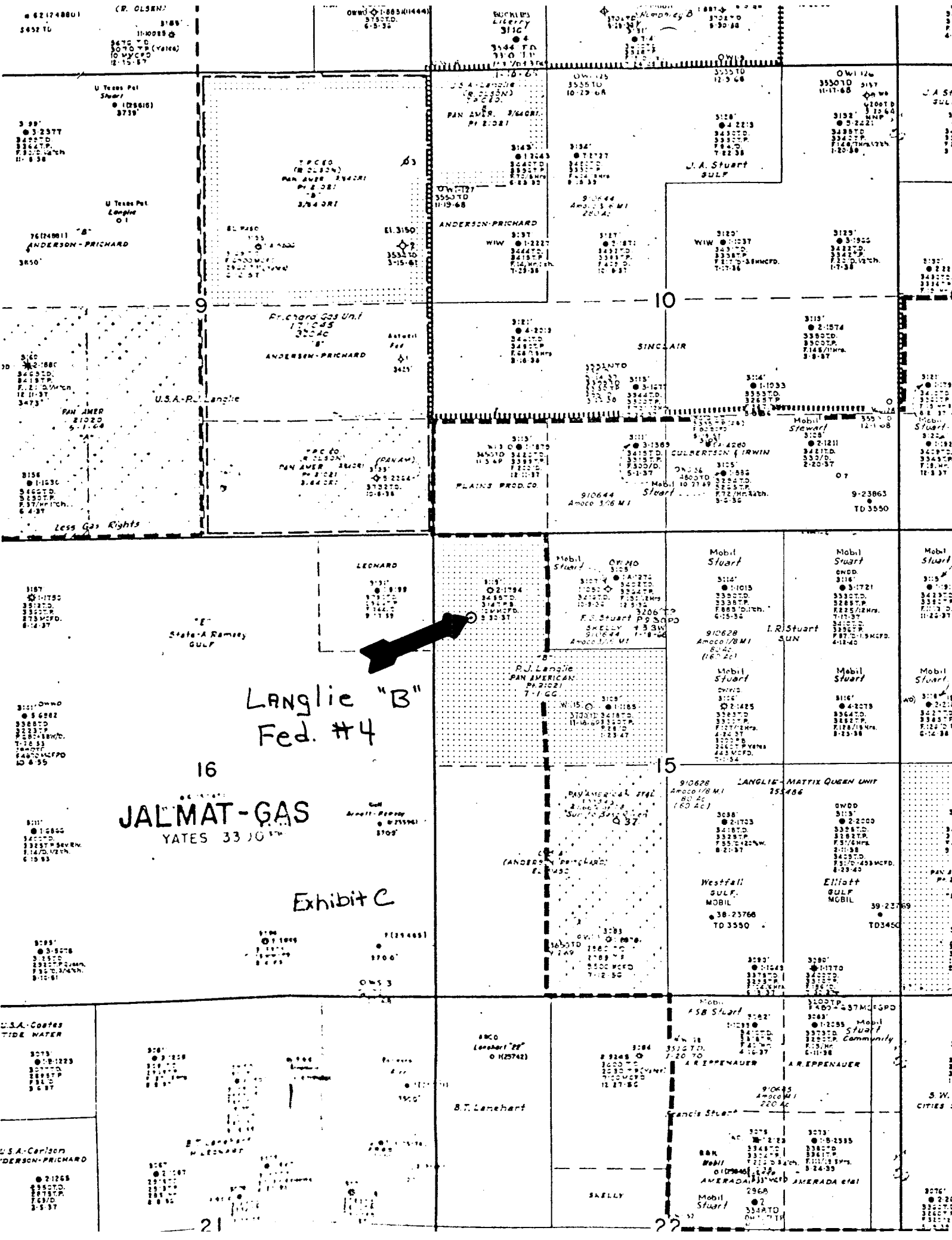
ACA recommends clearance for Amoco's proposed Langlie B #4 and suggests that construction proceed without modification of existing plans.

Amoco Production Company  
Langlie "B" #4  
Sec. 15, T-25-S, R-37-E  
-Exhibit-A



NEW BRUNSWICK  
TEXAS





LANGLIE "B"  
Fed. #4

JALMAT-GAS  
YATES 33 JO

Exhibit C



Amoco Production Company

ENGINEERING CHART

FILE

APPN

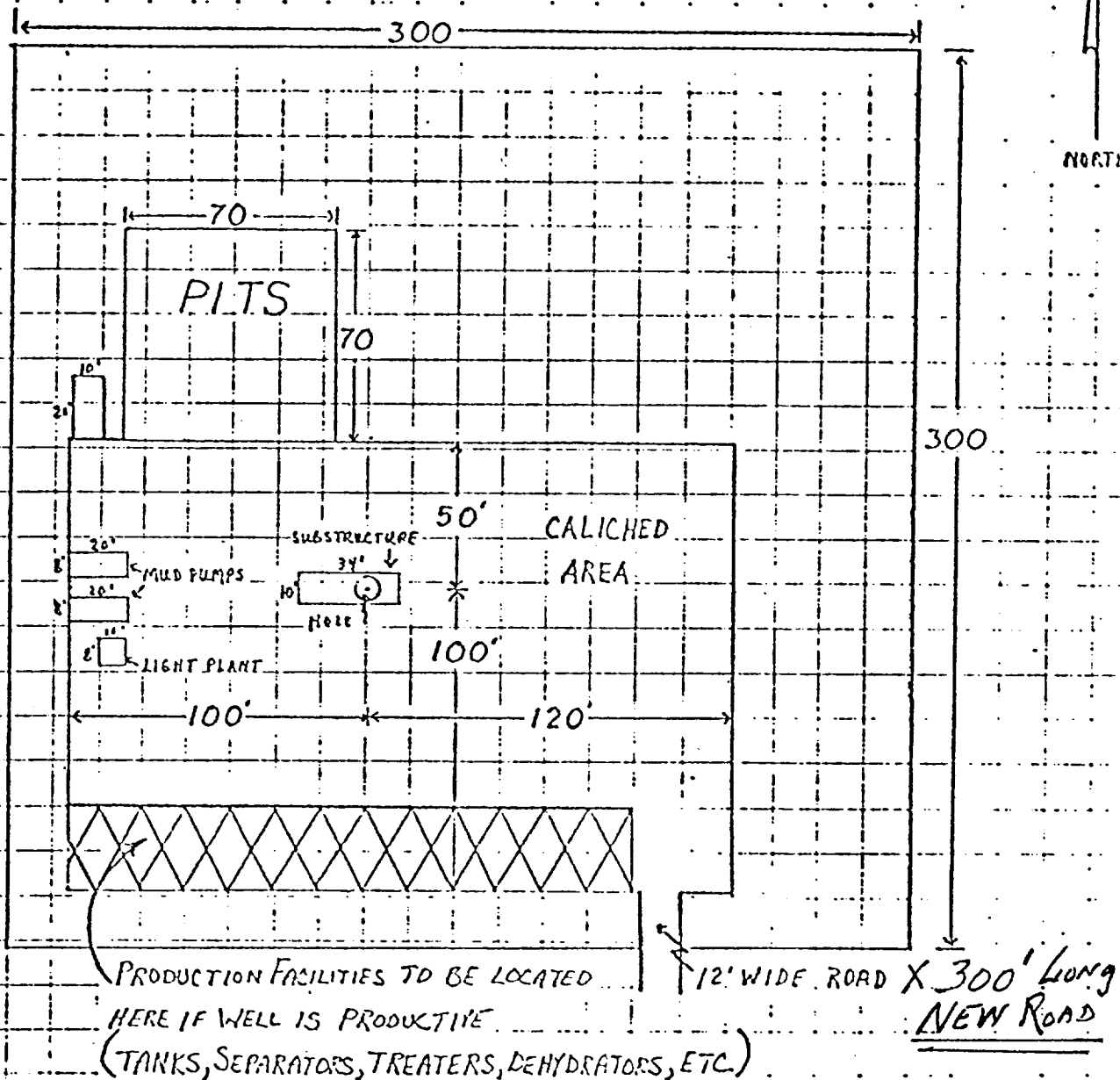
SUBJECT DRILL SITE DIMENSION

DATE 10-29-76

SHALLOW WELLS (LESS THAN 7500')

BY RC

SCALE - 1" = 60'



CELLAR SIZE

5'X5'X4'

AMOCO PRODUCTION COMPANY  
LANGFIE "B" WELL #4  
SEC. 15, T-25-S, R-37-E  
EXHIBIT D



U. S. Geological Survey

HOBBS DISTRICT

Amoco Production Co.  
No. 4 Langlie "B" Federal  
NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 15-25S-37E  
Lea County, New Mexico

Above Data Required on Well Sign

CONDITIONS OF APPROVAL

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Drilling Operations on Federal Oil and Gas Leases, dated January 1, 1977.
2. Notify this office (telephone (505) 393-3612) when the well is to be spudded and in sufficient time for a representative to witness all cementing operations. Attached are names and telephone numbers of Geological Survey and Bureau of Land Management personnel who are available for consultation during construction, drilling, completion, and rehabilitation activities.
3. Immediate notice is required of all blowouts, fires, spills, and accidents involving life-threatening injuries or loss of life.
4. Secure prior approval of the District Engineer for variance from the approved drilling program and before commencing plugging operations, plug-back work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely.
5. Blowout prevention equipment is to be installed, tested, and in working order before drilling below the surface casing and shall be maintained ready for use until drilling operations are completed.
6. Operations must be in compliance with the provisions of the landowner agreement concerning surface disturbance and surface restoration.

COUNTY	LEA	FIELD	Langlie Mattix	STATE	NM
OPR	AMOCO PRODUCTION CO.			API	30-025-25900
NO	4	LEASE	Langlie "B" Federal	MAP	
	Sec 15, T25S, R37E			COORD	11-2-40 NM
	990' FNL, 400' FWL of Sec				
	3 mi NE/Jal			SPD	5-23-78
				CMP	10-20-78
CNL	8 5/8" at 1100' w/550 SX			WELL CLASS	INTL D TUN D
	5 1/2" at 3700' w/700 SX			FORMATION	DATE M FORMATION DATE M
				TD	3700' (QUEN)
				PBD	3654'
DRY & ABANDONED					

CONTR	Cactus #65	OPRS ELEV	3139' GL	PD	3700' RT
-------	------------	-----------	----------	----	----------

F.R. 4-17-78  
(Queen)  
5-25-78 Drig 333'  
6-2-78 TD 1100'; WOC  
6-23-78 TD 3700'; PBD 3654'; Swbg  
Perf (Queen) 3352-58', 3384-88', 3458-64',  
3467-72', 3481-93', 3542-45' w/2 SPF  
Acid (3352-3545') 2350 gals (15%)  
Frac (3352-3545') 40,000 gals + 77,500# sd  
6-27-78 TD 3700'; PBD 3654'; Swbg  
Swbd 3 BO + 139 BLW in 11 hrs (3352-3545')  
7-7-78 TD 3700'; PBD 3654'; RUP  
Swbd 5 BO + 48 BLW + 26 BNW in 5 hrs (3352-  
3545')  
7-12-78 TD 3700'; PBD 3654'; WO Pmp  
7-26-78 TD 3700'; PBD 3654'; TOP

11-2-40 NM

LEA  
AMOCO PRODUCTION CO.

Langlie Mattix  
4 Langlie "B" Federal  
Sec 15, T25S, R37E

NM  
Page #2

7-26-78 Continued  
Ppd 3 BO + 111 BW in 24 hrs (3352-3545')  
8-2-78 TD 3700'; PBD 3654'; TOP  
Ppd 3 BO + 103 BW in 24 hrs (3352-3545')  
8-9-78 TD 3700'; PBD 3654'; TOP  
Ppd 1 BO + 100 BW in 24 hrs (3352-3545')  
3-18-78 TD 3700'; PBD 3654'; TOP  
Ppd 119 BW in 24 hrs (3352-3545')  
8-24-78 TD 3700'; PBD 3654'; TOP  
Ppd 111 BW in 24 hrs (3352-3545')  
9-18-78 TD 3700'; PBD 3654'; WOSP  
Ppd 4 BO + 11 BW in 24 hrs (3352-3545')

11-2-40 NM

4-16-79 TD 3700'; Dry & Abandoned  
Rig Released 6-2-78  
11-11-78 COMPLETION ISSUED  
4-21-79 RE-ISSUE OF SUSPENDED COMPLETION

11-2-40 NM  
IC 30-025-70127-78