

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

RECEIVED
MAY 8 1978
SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

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, Texas 79336

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

At surface
2310' FSL X 990' FWL, Section 14, (Unit C, NW $\frac{1}{4}$, SW $\frac{1}{4}$)

At proposed prod. zone

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

3.1 miles Northeast of Jal, New Mexico

15. DISTANCE FROM PROPOSED*

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

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

16. NO. OF ACRES IN LEASE

19. PROPOSED DEPTH

6100'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3108.3 GR

22. APPROX. DATE WORK WILL START*

5-25-78

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#	1000'	Circulate
7-7/8"	5-1/2"	15.5#-17#	6100'	Circulate

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

Mud Program: 0' - 1000' - Native mud and fresh water.
1000' - 6100' - Commercial mud and brine water to maintain good hole conditions.

BOP Program attached.

Gas committed to El Paso Natural Gas (Contract No. 11564)

Archaeological Report Attached. Unless Drilling Operations have Commenced, this drilling approval Expires _____

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

D. R. Lucas

TITLE

Administrative Analyst (SG)

DATE

May 4, 1978

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

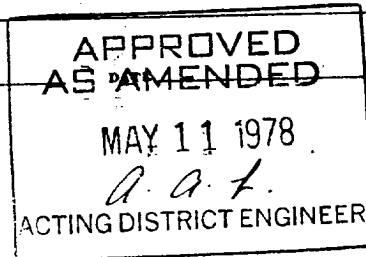
0 + 5 - USGS-H

1 - Div

1 - Susp

1 - RC

*See Instructions On Reverse Side



5. LEASE DESIGNATION AND SERIAL NO.

LC-03-2511-B (b)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Langlie "B" Tract 1 Fed

9. WELL NO.

6

10. FIELD AND POOL, OR WILDCAT

Justis-Tubb UNDESIGNATED

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

14-25-37

12. COUNTY OR PARISH

Lea

13. STATE

NM

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PL

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

All distances must be from the outer boundaries of the Section

Operator Amoco Production Co.			Lease Langlie B Tract 1 Fed.		Well No. 6
Unit Letter L	Section 14	Township 25 South	Range 37 East	County Lea	
Actual Footage Location of Well: 2310 feet from the South line and 990 feet from the West line					
Ground Level Elev. 3108.3	Producing Formation TUBB		Pool JUSTIS UNDESIGNATED	Dedicated Acreage: 40 Acres	

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

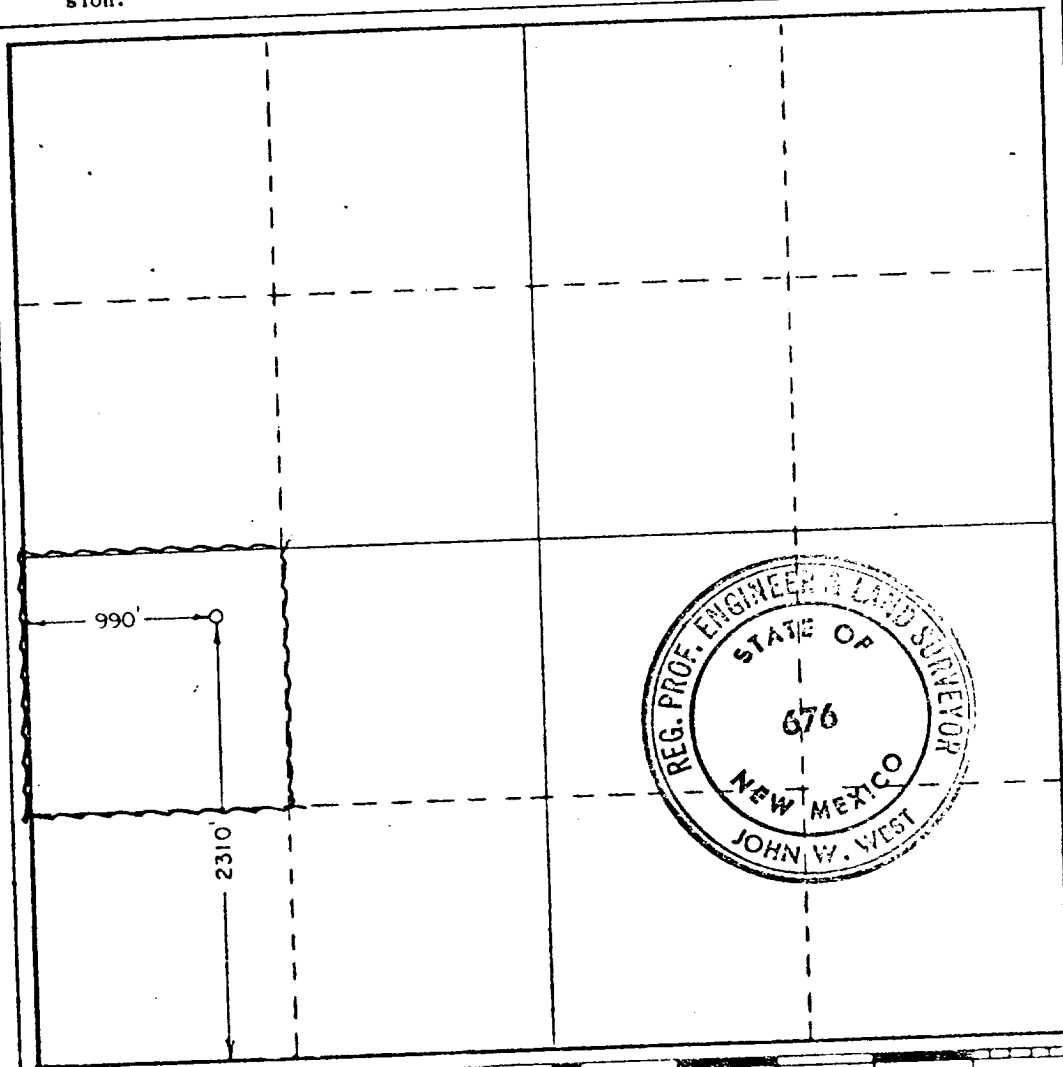
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the 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 *John W. West*
Administrative Analyst (SG)

Company *Amoco Production Company*
Date *4-21-78*

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
4/14/78

Registered Professional Engineer and/or Land Surveyor

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

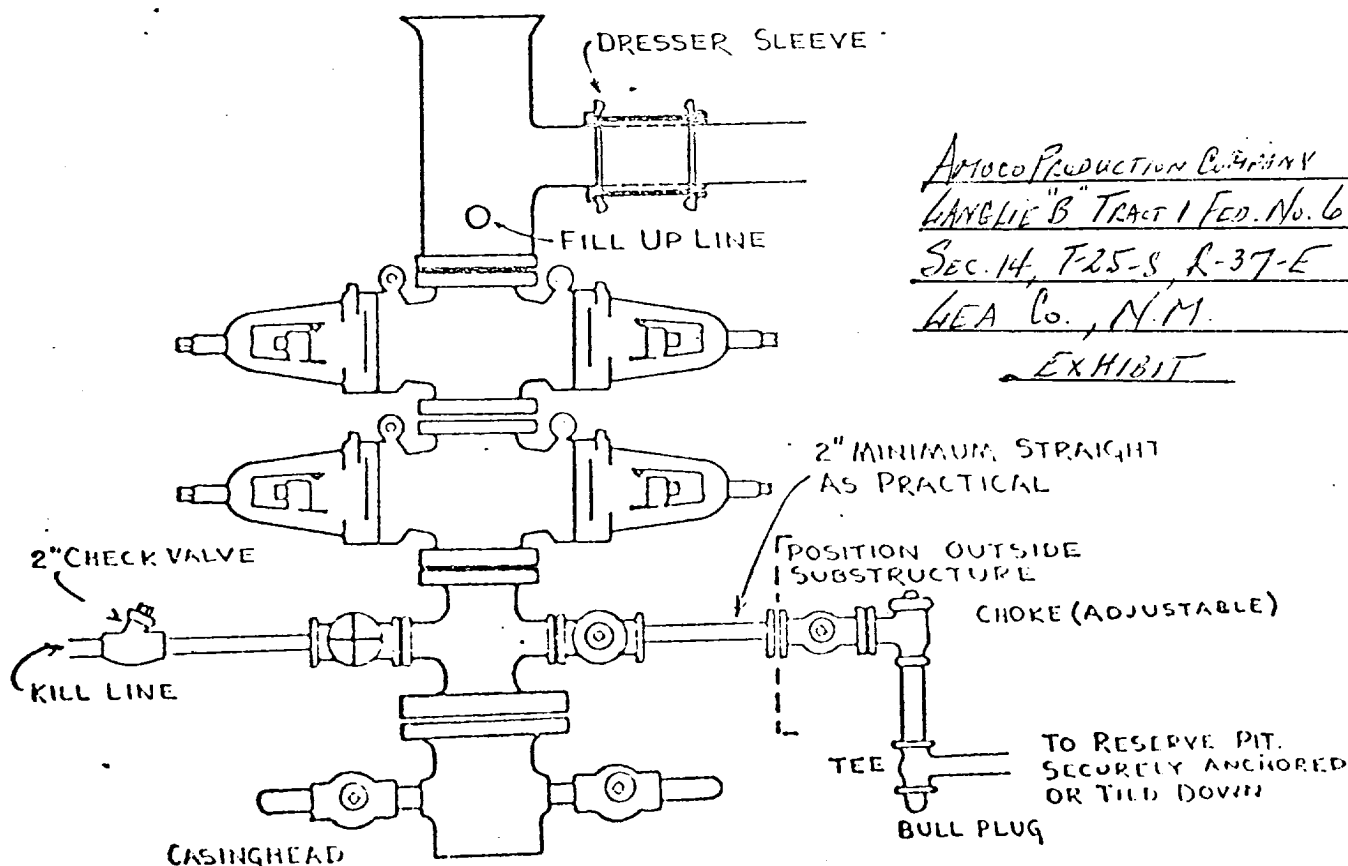
0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

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

*AMOCO 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.



AMOCO PRODUCTION COMPANY
LANGLEY "B" TRACT 1 FED. No. 6
SEC. 14, T-25-S, R-37-E
WEA Co., N.M.
EXHIBIT

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

Langlie "B" Tract 1 Federal Well No. 6
Unit L, 2310' FSL X 990' FWL, Section 14, 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 - 950' Tubb - 5750'

Queen - 3115'

Paddock - 4815'

Blaine - 5165'

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

Paddock - 4815' Tubb - 5750'

Blaine - 5165'

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>
1000'	8-5/8"	32#	K-55	New
6100'	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. (Exhibit E)
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 1000' - Native mud and fresh water.
 - 1000' to 6100' - 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 5-25-78. Complete 6-15-78.
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 Tract 1 Federal WELL NO. 6
LOCATION Unit L, 2310' FSL X 990' FWL, Sec 14, T-25-S, R-37-E
POOL Justis
COUNTY Lea

The undersigned hereby states that Amoco's representative, Mr. E.E. Pauley, personally contacted Nadine Owen (Turner), 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.



D.R. Couch
Administrative Analyst (SG)

May 4, 1978
Date

Proposed Development Plan for Surface

Amoco Production Company's Langlie "B" Tract 1 Federal Well No. 6, Unit L,
2310' FSL X 990' FWL, Sec. 14, 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, 2.8 mile turn north on paved road .3 miles, turn east across cattleguard and go northeast on lease road .2 miles, 120' of new road will be built to location.

2. Planned access roads.

120' new road will be built. No caliche needed.

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.

No caliche required.

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"
- b. Compacted
- 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/antular claiche inclusions.
- c. Vegetation - Broom, snakeweed and mesquite.
- d. Surface Use - Grazing.
- e. Ponds and Streams - None.
- f. Water Wells - None.
- g. Residences and Buildings - None.
- 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" Tract 1 Federal No. 6

LOCATION Unit L, 2310' FSL X 990' FWL, Sec. 14, T-25-S, R37 -E, Lea County

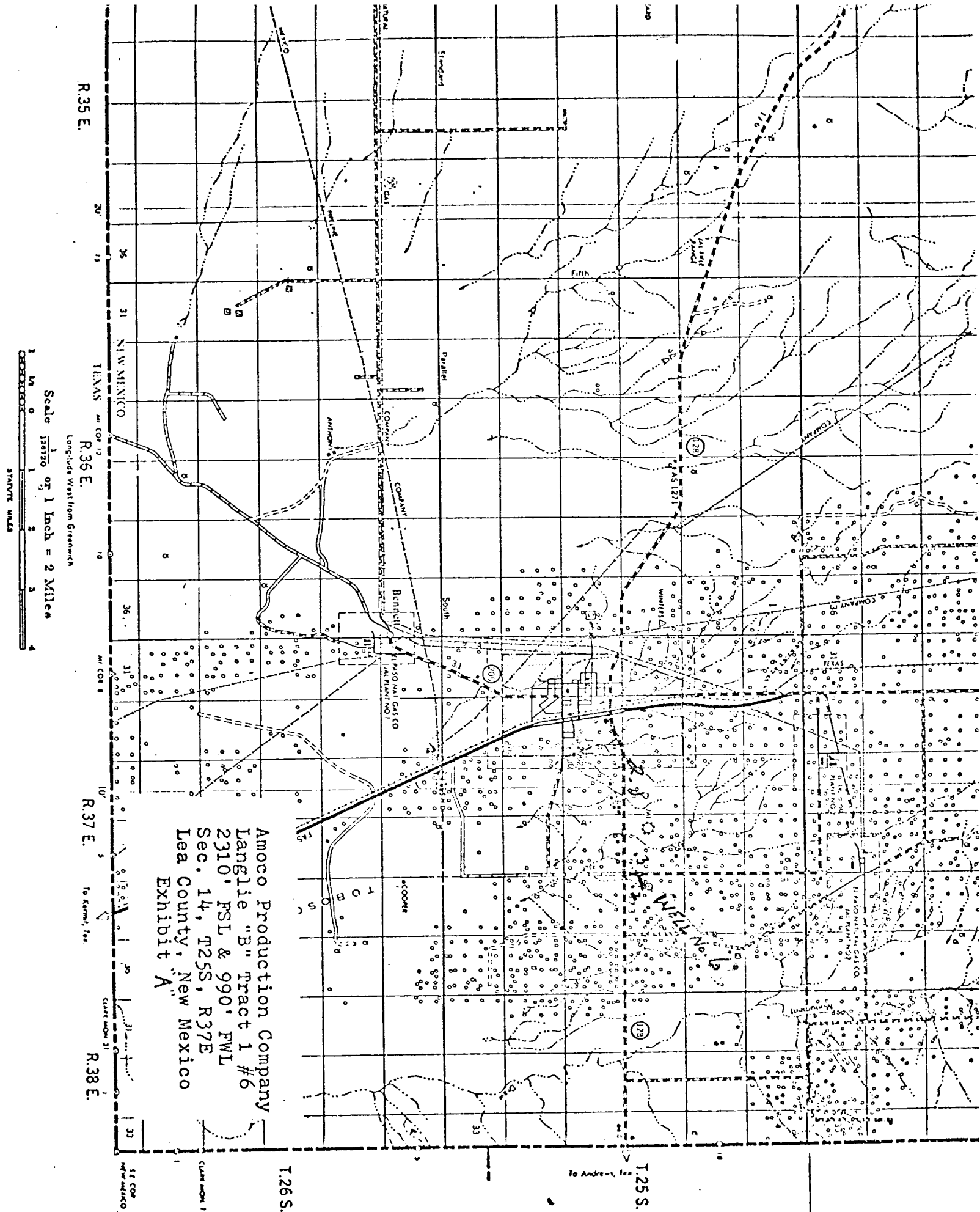
Certification: The following statement is to be incorporated in the plan and must be signed by the lessee's or operator's field representative who is identified in Item No. 12 of the plan.

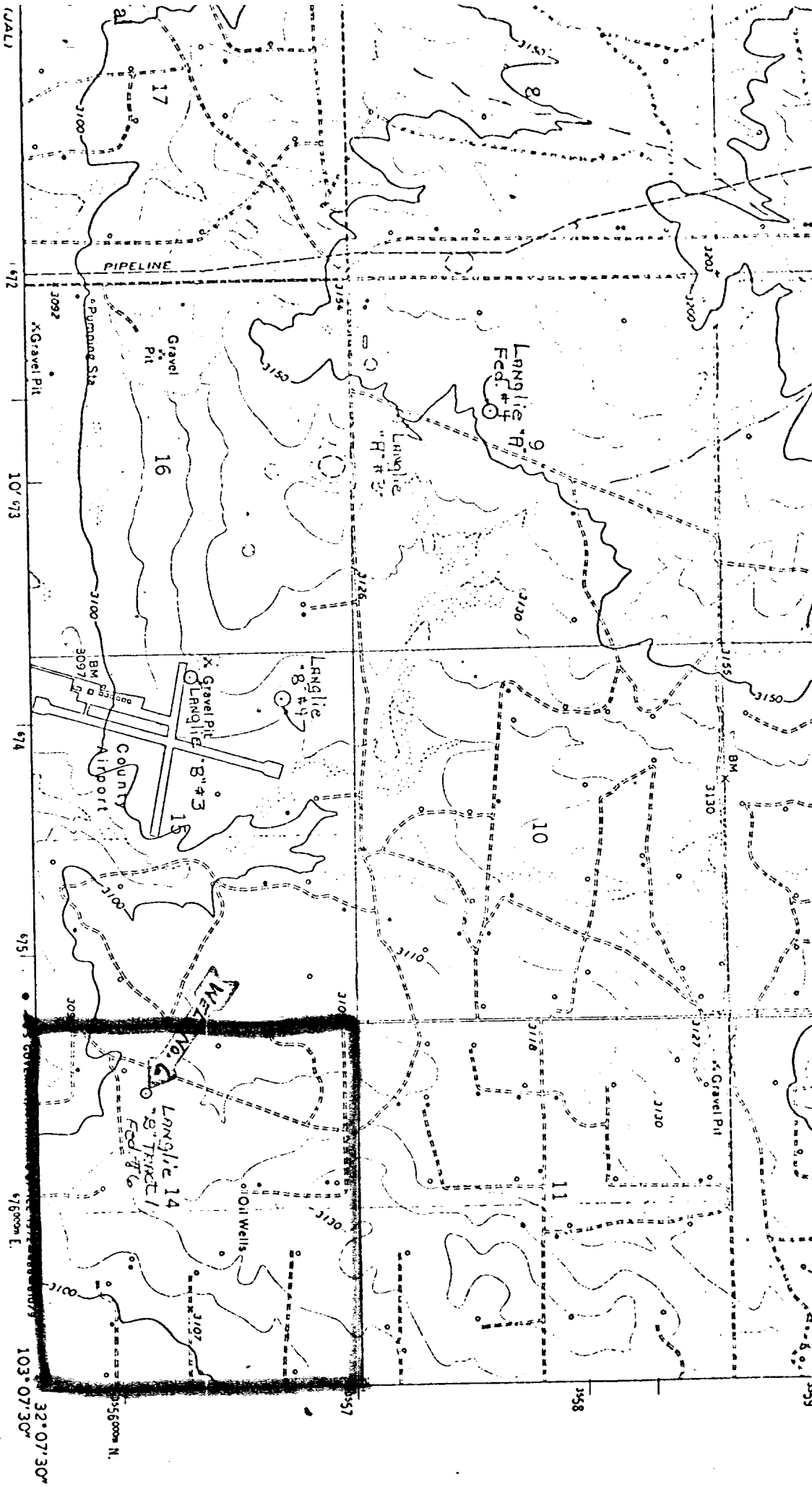
I hereby certify that I, or persons under my direct supervision have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated 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.

May 4, 1978
DATE,


NAME AND TITLE

Sr. Drilg. Foreman





(JAL)
48 11 SW
E 124000
3000 4000 5000 6000 7000 FEET
1 MILE
INTERVAL 10 FEET
MEAN SEA LEVEL

NEW MEXI
QUADRANGLE

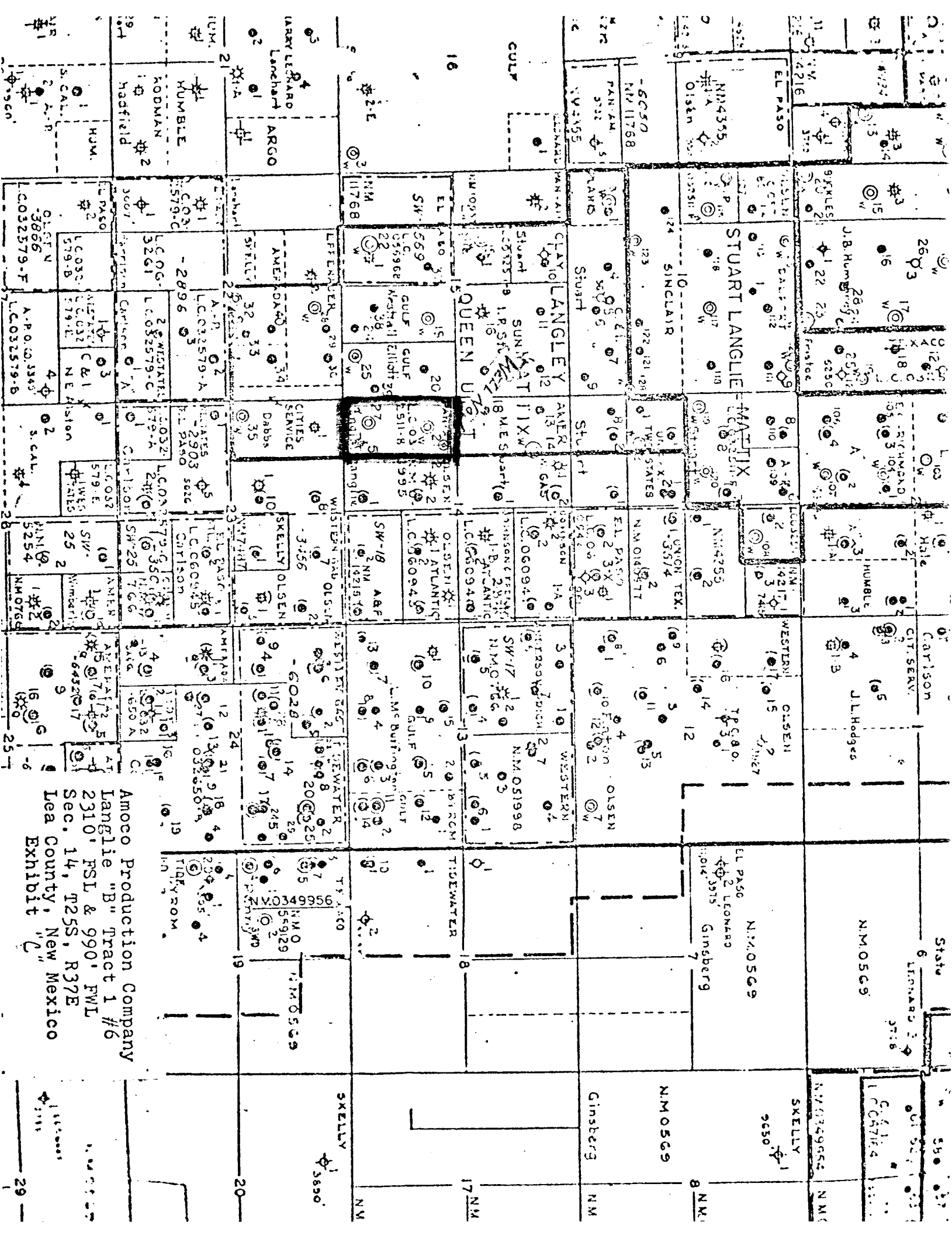
Amoco Production Company
Langlie "B" Tract 1 #6
2310' FSL & 990' FWL
Sec. 14, T25S, R37E
Lea County, New Mexico
Exhibit B

ROAD CLASSIFICATION
Primary highway, all weather, Light-duty road, all weather,
hard surface
Unimproved road, fair or dry
weather
State Route

JAL NW, N. MEX.
N3207.5-W10307.5/7.5

1969

AMS 5348 II NW-SERIES V881



Amoco Production Company
Langleie "B" Tract 1 #6
2310' FSL & 990' FWL
Sec. 14, T25S, R37E
Lea County, New Mexico
Exhibit "C"

300

70

70

PITS

10

20

20

30

8

8

10

6

MUD PUMPS

LIGHT PLANT

SUBSTRUCTURE

34

10

HOLE

50

100

120

CALICED AREA

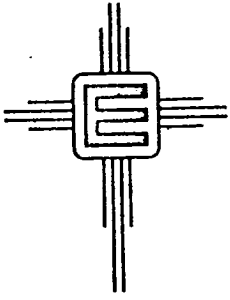
300

12' WIDE ROAD

PRODUCTION FACILITIES TO BE LOCATED HERE IF WELL IS PRODUCTIVE (TANKS, SEPARATORS, TREATERS, DEHYDRATORS, ETC.)

NEW ROAD

NORTH



3 May 1978

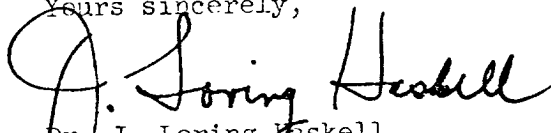
Mr. Bob Couch
Amoco Production Company
P. O. Drawer A
Levelland, Texas 79336

Dear Mr. Couch:

Enclosed please find the Agency for Conservation Archaeology's clearance report for Amoco Production Company. Other than contemporary trash, no archaeological sites, or isolated manifestations, 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 Report

Amoco Production Company

Gillully "B" Federal # 19
Gillully "B" Federal # 20
Gillully "B" Federal # 21
Gillully "B" Federal # 22
Gillully "B" Federal # 23
Gillully "B" Federal # 24
Gillully "B" Federal # 25
Gillully "B" Federal # 26
Gillully "B" Federal # 27
Gillully "B" Federal # 28
Gillully "B" Federal # 29
Gillully "B" Federal # 30

And Proposed accesses to these locations
Langlie B Tract 1 Federal #6

by

Dr. J. Loring Haskell

Submitted

by

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

1 May 1978

INTRODUCTION

An archaeological reconnaissance was recently performed by the Agency for Conservation Archaeology (ACA), Eastern New Mexico University, Portales, for Amoco Production Company in Lea County, New Mexico. Reconnoitered areas will be impacted by a series of drill locations and access roads. The project was administered for Amoco by Mr. Bob Couch and for ACA by Dr. J. Loring Haskell, Director - Principal Investigator. Dr. Haskell and Scott C. Schermer undertook the project on 26 April 1978 under excellent field and weather conditions. (78-NM-015)

SURVEY TECHNIQUE

Each location was walked in a series of zigzag, north-south and thence south to north transects which measured 15 ft in breadth. Areas lying immediately outside ~~these~~ locations were reconnoitered as well, i.e., a zone measuring an additional 20 ft on all sides. Accesses were investigated by walking them in a close interval, 25 ft wide, zigzag transect. These techniques combined served to maximize the visual examination of areas of primary and secondary impact.

Gillully "B" Federal #19

Location

The proposed pad measures 300 X 300 ft and is situated 1980 ft from the north line and 1980 ft from the east line of the:

NE $\frac{1}{4}$, Section 21, T20S, R37E, NMPM, Lea County, New Mexico (BLM)

More specifically, it is situated in the:

SE $\frac{1}{4}$ NE $\frac{1}{4}$, Section 21, T20S, R37E, NMPM, Lea County, New Mexico (BLM)

The associated access will be discussed below.

Map Reference: USGS Monument Quadrangle, 15 Minute Series, 1963.

Langlie B Tract 1 Federal #6Location

The proposed location measures 300 X 300 ft and is located 990 ft from the west line and 2310 ft from the south line of the:

SW $\frac{1}{4}$, Section 14, T25S, R37E, NMPM, Lea County, New Mexico (BLM)

More specifically, it is situated in the:

NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 14, T25S, R37E, NMPM, Lea County, New Mexico (BLM)

The access will measure 12 X 120 ft and will pass through the:

NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 14, T25S, R37E, NMPM, Lea County, New Mexico (BLM)

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

Terrain

Topographically, this area is characterized by a flat, open plain with low hummocks. These latter features seldom exceed .25 m in height. Soils are clay loams and often include pea-sized caliche gravels. Several localities are marked by caliche cobbles which range between 5 and 10 cm in diameter. Invariably, soil individuals are very pale brown (10YR 7/3 dry) in color. The area, as a whole, is distinguished by a high degree of rodent activity.

Floristics

Locally, the floral community is notable for its lack of diversity. Principal plants include Prosopis juliflora, Opuntia sp., Ferocactus sp., and Tridens pulchellus. Prosopis forms a coppice on areal hummocks.

Cultural Resources

No archaeological sites, or isolated manifestations, were recorded during this reconnaissance. Contemporary trash includes cans and the collar of a galvanized container.

Recommendations

ACA recommends clearance for the proposed drill location and access road and suggests that construction proceed without modification of existing plans.