

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

COPY TO O. C. C. (Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

30-025-26094
5. LEASE DESIGNATION AND SERIAL NO. NM-7488
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME Myers B Federal R/A A
9. WELL NO. 35
10. FIELD AND POOL, OR WILDCAT Langlie Mattix (Queen)
11. SEC., T., R., M., OR BLOC. AND SURVEY OR AREA (A) 9-24-37
12. COUNTY OR PARISH Lea 13. STATE NM
17. NO. OF ACRES ASSIGNED TO THIS WELL 40
20. ROTARY OR CABLE TOOLS Rotary
22. APPROX. DATE WORK WILL START* October 5, 1978

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL [X] DEEPEN [] PLUG BACK []

b. TYPE OF WELL OIL WELL [] GAS WELL [X] OTHER [] SINGLE ZONE [X] 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' FSL & 330' FWL Sec. 9 (Unit M SW/4 of SW/4) At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approximately 8 miles north 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

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 3600'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3260.2 GR

22. APPROX. DATE WORK WILL START* October 5, 1978

PROPOSED CASING AND CEMENTING PROGRAM

Table with 5 columns: SIZE OF HOLE, SIZE OF CASING, WEIGHT PER FOOT, SETTING DEPTH, QUANTITY OF CEMENT. Rows include 11" or 12 1/4" hole with 9 5/8" casing and 7 7/8" hole with 5 1/2" casing.

Unless Drilling Operations have Commenced, this drilling approval Expires Dec 31, 1978

SEE ATTACHED FOR CONDITIONS OF APPROVAL

After reaching TD, logs and cores will be run and evaluated. Perforate and/or stimulate as necessary in attempting commercial production.

MUD: 0" - 1100' - Native mud x fresh water. 1100' - 3600' - Brine water, native mud and sufficient commercial mud to maintain good hole conditions.

BOP program attached. "APPROVAL TO FLARE GRANTED WHILE DRILLING AND TESTING."

Archaeological Clearance Report Attached.

Gas is dedicated to El Paso Natural Gas.

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.

SIGNED Administrative Analyst (SG) DATE 9-15-78

(This space for Federal or State office use)

PERMIT NO. [Signature]

APPROVAL DATE

APPROVED BY TITLE

APPROVED AS AMENDED SEP 28 1978 JAMES F. SIMS DISTRICT ENGINEER

- 0+5 - USGS-H
1 - Div
1 - RC
1 - SUSP

*See Instructions On Reverse Side

10/15/10

TO THE
HONORABLE MEMBERS OF THE
COMMISSION ON
THE STATUS OF WOMEN
10/15/10

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

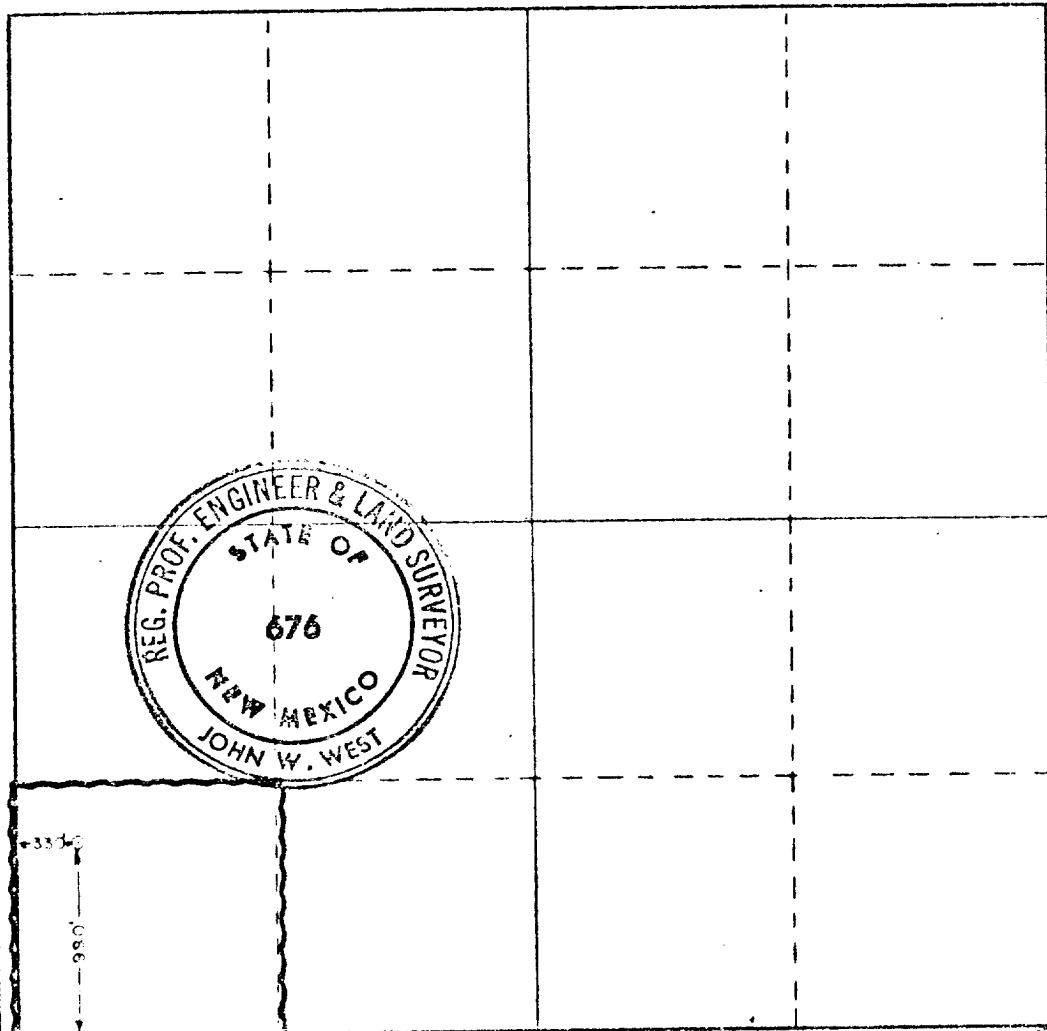
Operator Amoco Production Co.			Lease Myers "B" Federal R/A A		Well No. 35
Section M	Section 9	Township 24 South	Range 37 East	County Lea	
Approximate Location of Well: 970 feet from the South line and 330 feet from the West line					
Ground Elev. Elev. 3260.2	Producing Formation QUEEN		Pool LANGLIE MATTIX	Dedicated Acreage 4.0 A. 100	

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: *D.R. Cushman* **D.R. Cushman**

Position: **Administrative Analyst (SG)**

Company: **AMOCO PRODUCTION COMPANY**

Date: **9-11-78**

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: **September 7, 1978**

Registered Professional Engineer and/or Land Surveyor

John W. West

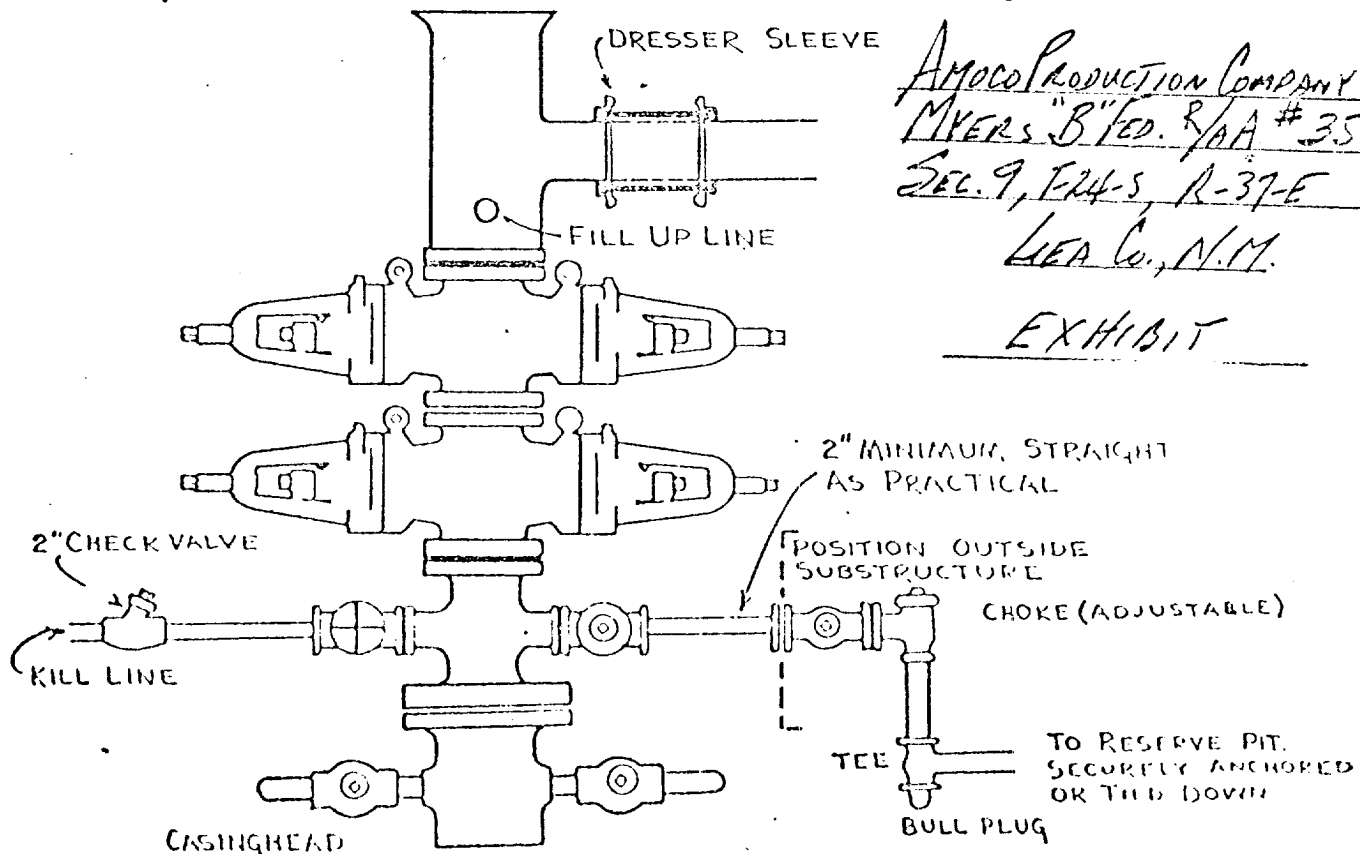
Certificate No. **John W. West 676**

Ronald J. Eidson 3239

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
MYERS "B" FED. R/A # 35
SEC. 9, F-24-S, R-37-E
LEA Co., N.M.

EXHIBIT

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

Myers "B" Federal R/A A Well No. 35, Unit M, 990' FSL X 330' FWL,
Sec. 9, T-24-S, R-37-E, Lea County, New Mexico

1. Location

See attached Form C-102

2. Elevation

See attached Form C-102

3. Geologic name of surface formation.

Ogallala

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	1070'
Yates	2706'
Queen	3260'

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

Queen 3260'

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'	9 5/8"	36#	K-55 ST&C	New
3600'	5 1/2"	14#	K-55 ST&C	New

9. Proposed cementing program.

9 5/8" Casing - Sufficient cement to circulate to surface.
5 1/2" Casing - Sufficient cement to 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.
 - 0' - 1100' - Native mud & fresh water
 - 1100' - 3600' - Brine water, native mud and sufficient commercial mud to maintain good hole conditions.
12. Testing, logging and coring programs to be followed with provisions made for required flexibility.
 - 0' - 3600' - CNL-FDC-GR w/caliper
 - 0' - 3600' - Dual Laterolog-Micro SFL
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 10-5-78. Complete 10-31-78.
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 Myers B Federal R/A A WELL NO. 35
LOCATION Unit M, Sec. 9, T-24-S, R-37-E
POOL Langlie Mattix (Queen)
COUNTY Lea County, New Mexico

The undersigned hereby states that Amoco's representative, Mr. E.E. Pauley, personally contacted Clyde Cooper (Jal, N.M.), 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)

9-15-78
Date

Proposed Development Plan for Surface U

Amoco Production Company's Myers B Federal R/A A Well No. 35, Unit M, 990' FSL x 330' FWL, Sec. 9, T-24-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 north on Highway 18 for six miles. Turn east on dirt road 1 mile, north 1.2 miles - 300' new road east to location well #35.

2. Planned access roads.

300' of new road will be built. (See Exhibit A)

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 and brine water will be hauled by Commercial Carrier, XL (Jal, NM)

6. Source of construction materials.

Caliche will be obtained from an existing pit 3/4 mile NE of the wellsite. NW/4 of NE/4 Sec. 9, T-24-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. 450' 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 - undulating plaine with small depressions formed by wind x water erosion.
- b. Soil - Thin, Sandy Loams.
- c. Vegetation - Shinnery Oak, Yucca, Sagebrush, Mesquite, and Various Grasses
- d. Surface Use - Grazing. (See archaeological report attached)
- 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 undulating plains, semi-arid, desert country, is in a low environmental risk area. The total effect of drilling and producing in this area would be minimal. No known archeological, 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 Myers B Federal R/A A Well No. 35

LOCATION Unit M, 990' FSL X 330' FWL, Sec. 9, T-24-S, R-32-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.

9-15-78
DATE

J.H. Hawkins Sr. Drlg. Foreman
NAME AND TITLE

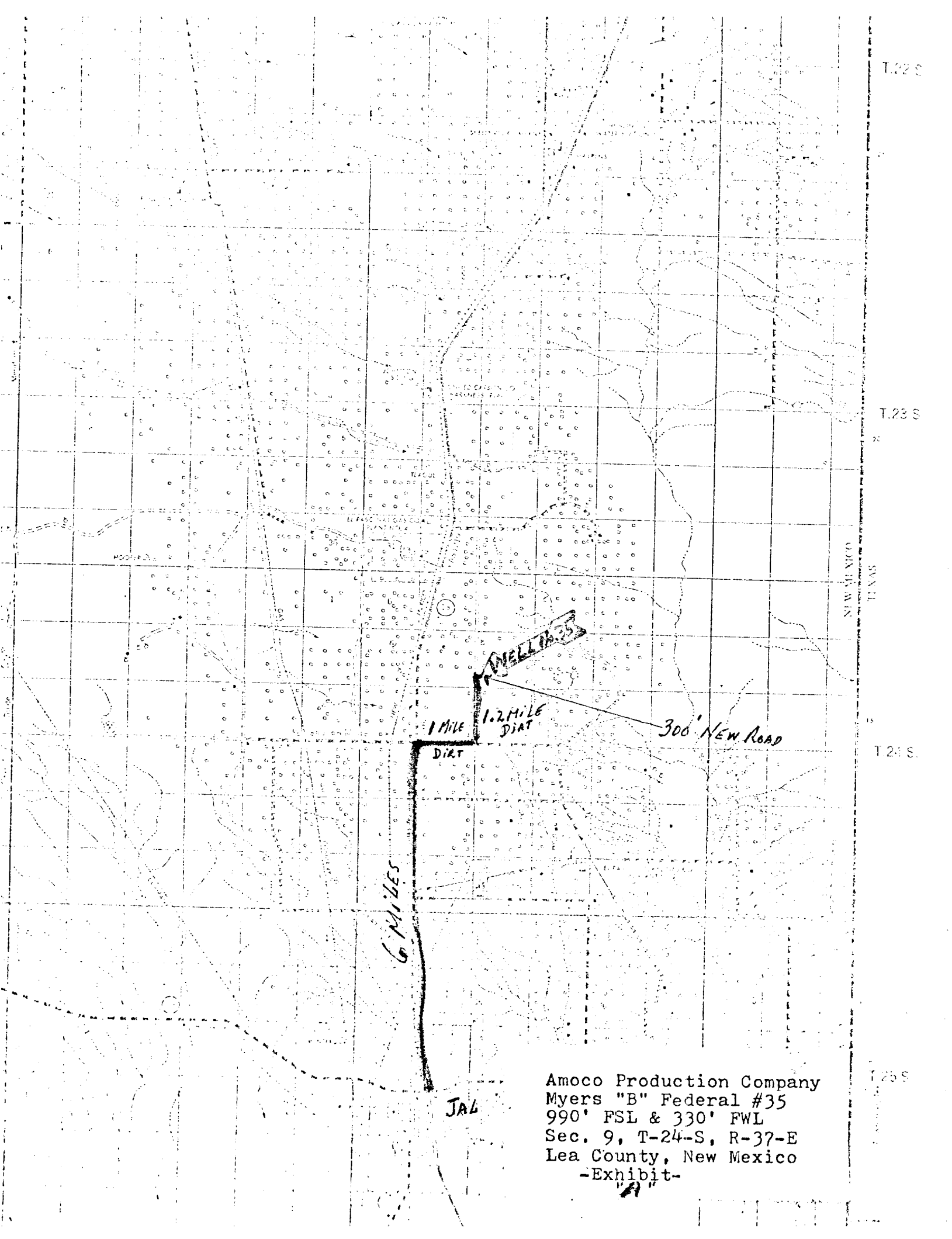
T.22 S

T.23 S

T.24 S

T.25 S

NEW MEXICO
TEXAS



6 MILES

1 MILE
DIAT

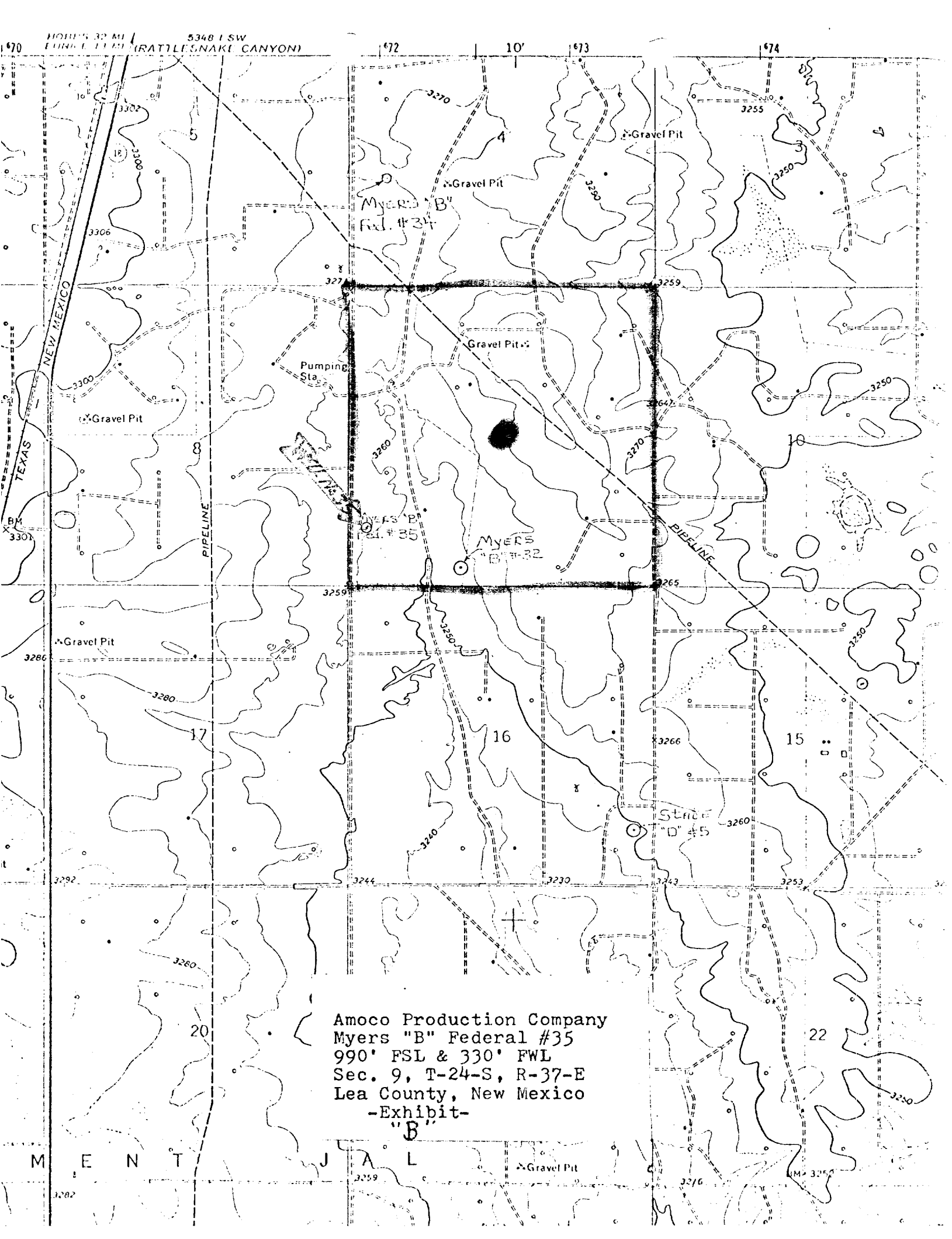
1.2 MILE
DIAT

300' New Road

WELL #35

JAL

Amoco Production Company
 Myers "B" Federal #35
 990' FSL & 330' FWL
 Sec. 9, T-24-S, R-37-E
 Lea County, New Mexico
 -Exhibit-



HOLEY'S 32 MI / 5348 I SW
LUNN L 11 MI (RATTLESLAKE CANYON)

NEW MEXICO
TEXAS

PIPELINE

PIPELINE

Amoco Production Company
Myers "B" Federal #35
990' FSL & 330' FWL
Sec. 9, T-24-S, R-37-E
Lea County, New Mexico
-Exhibit-
"B"

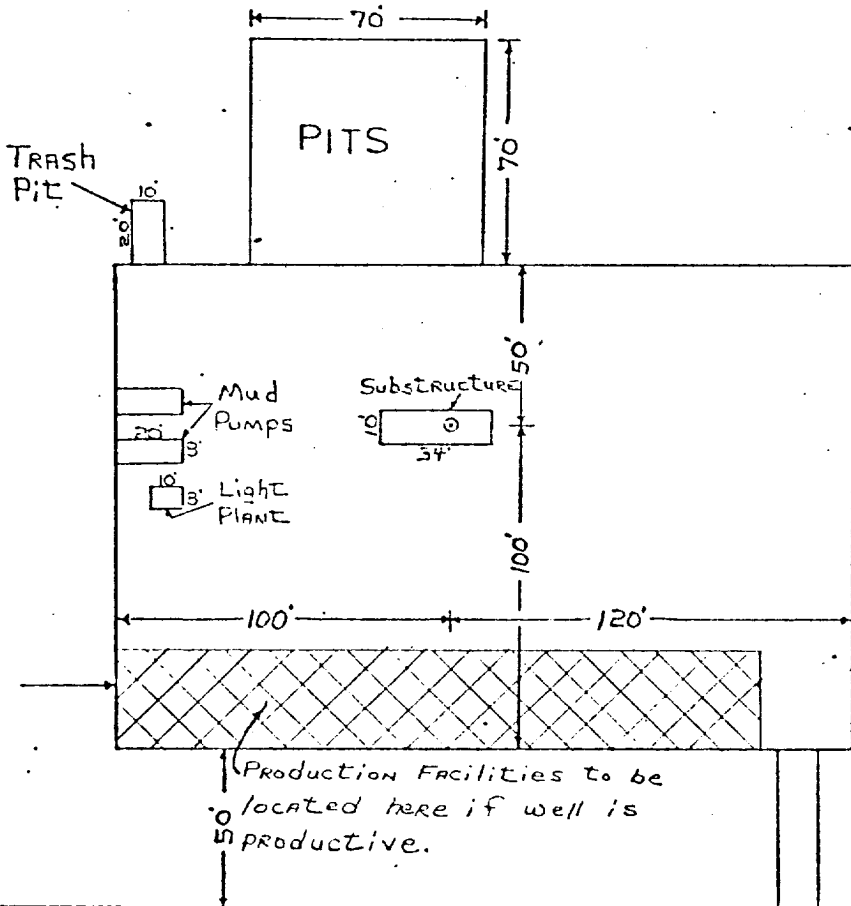
M E N T J A L

DRILL SITE DIMENSIONS

LESS THAN 8000'

450'

450'



AMOCO PRODUCTION COMPANY
MYERS "B" FEDERAL R/AA WELL # 35
990' FSL & 330' FWL
SEC. 9, T-24-S, R-37-E
LEA CO., N.M.

12' Wide Road X 300' New Road

EXHIBIT "D"



Reconnaissance
Excavation
Analysis
Explanation
Curation

NMAS

New Mexico Archaeological Services, Inc.

P. O. Box 1341
Carlsbad, New Mexico 88220
(505) 887-7646

13 September 1978

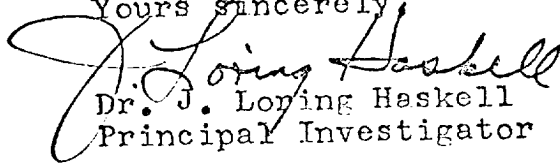
Mr. Bob Couch
Amoco Production Company
P. O. Drawer A
Levelland, Tx 79336

Dear Mr. Couch:

Enclosed please N.M.A.S.' archaeological clearance report for Amoco's proposed Myers "B" Federal Well No. 35 and South Mattix Unit Well No. 34. No cultural resources were recorded during N.M.A.S.' reconnaissance excepting contemporary detritus.

If you have any questions concerning N.M.A.S.' report, please do not hesitate to call me. Thank you for calling on us to do this survey.

Yours sincerely,


Dr. J. Loring Haskell
Principal Investigator

Enclosure

cc: Ms. Ann Ramage, BLM, Roswell
Mr. Jim Sims, USGS, Hobbs
Mr. Thomas W. Merlan, SHPO, Santa Fe

kb

Archaeological Clearance Report
for

Amoco Production Company
Myers "B" Federal Well No. 35
South Mattix Unit Well No. 34

Prepared

by

Dr. J. Loring Haskell

Submitted

by

Dr. J. Loring Haskell
Principal Investigator
New Mexico Archaeological Services, Inc.
Carlsbad, New Mexico

13 September 1978

Permit No. 78-NM-120

Introduction

On 13 September 1978, New Mexico Archaeological Services, Inc., (NMAS), Carlsbad, completed an archaeological reconnaissance for Amoco Production Company on lands administered by the Bureau of Land Management in Lea County, New Mexico. Reconnoitered locations and, in one instance, a proposed right-of-way, will be impacted by drilling activities and a suitable access. The project was administered by Mr. Bob Couch, Amoco Production Company, and Dr. J. Loring Haskell, Principal Investigator, NMAS. Dr. Haskell undertook the survey under excellent field and weather conditions.

Survey Technique

Each location was walked in a series of 20 ft wide, close interval, zigzag transects. In addition, one access was investigated by walking it in a tight, 20 ft wide, zigzag pattern. Combined these techniques served to maximize the visual coverage of areas of primary and secondary impact.

Myers "B" Federal Well No. 35

Location

The proposed location will measure 450 X 450 ft and will be situated 990 ft from the south line and 330 ft from the west line:

Section 9, T24S, R37E, NMPM, Lea County, New Mexico (BLM)

More specifically, it is situated in the:

SW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 9, T24S, R37E, NMPM, Lea County, New Mexico (BLM)

The associated access road will measure 12 X 300 ft and will pass through the:

SW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 9, T24S, R37E, NMPM, Lea County, New Mexico (BLM)

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

Terrain

Areal terrain is marked by a flat, nondescript plain which trends toward the southeast. Geologically, this landform is part of the Eunice Plain, a feature noted for its lack of relief. Local soils invariably belong to the Haplargid-Torrripsamment association. In general, pedons are distinguished by fine loamy sands and sandy-clay loams as well as a dearth of lithic inclusions. Shallow elliptically-shaped deflation basins occur on a sporadic basis as do low hummocks. Drainage outside the investigated area is often of an interior nature; however, primary drainage for the Eunice Plain is provided by Monument Draw.

Floristics

Quercus havardii is the dominant plant throughout the investigated area and often is present in essentially pure stands. Yucca glauca, Artemisia filifolia, Croton pottsii, Hoffmanseggia sp., and Prosopis juliflora round out the overstory. Prosopis averages between .5 and 1 m in height. Principal forbs include Dicranocarpus parvifolius, Shrankia occidentalis, Solanum elaeagnifolium, Portulaca mundula, Euphorbia spp., Cyperus onerosus, Mentzelia humilis, Zinnia acerosa, Eriogonum wrightii, Tradescantia wrightii, and Plantago purshii. Graminae is represented by Andropogon sp., Stipa neomexicana, Aristida sp., Sporobolus spp., Bouteloua erionoda, Bouteloua barbata, and Muhlenbergia porteri.

Cultural Resources

No archaeological sites, or isolated manifestations, were recorded during NMAS' reconnaissance. Although the Eunice Plain has

has been occupied since Paleo-Indian times, no evidence of pre-historic activities was observed during the course of the reconnaissance. Coeval detritus is limited to several tin cans.

Recommendations

NMAS recommends clearance for Amoco's Myers "B" Federal Well No. 35 and its associated access road and suggests that work-related proceed according to existing plans.

South Mattix Unit No. 34

Location

Amoco's proposed location measures 450 X 450 ft and lies at a point 1650 ft from the north line and 2310 ft from the west line of:

Section 22, T24S, R37E, NMPM, Lea County, New Mexico (BLM)

More specifically, it is situated in the:

SE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 22, T24S, R37E, NMPM, Lea County, New Mexico (BLM)

This location is situated on an existing right-of-way.

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

Terrain

The investigated area is marked by a flat plain which is co-extensive with the Eunice Plain. Drainage is via Monument Draw and hence is toward the southeast. Several low hummocks occur in the area averaging 40 cm or less. Soil individuals belong to the Typic Haplargid subgroup. Pedons are composed of fine sandy clay loams and clay loams which occasionally evidence signs of puddling. Peds, while often free of lithic inclusions, do contain caliche cobbles particularly on the northeast. There, inclusions generally average less than 8 cm in diameter.

Floristics

Various and sundry members of the Gramineae dominate the local floral assemblage. Principal plants include Aristida sp., Sporobolus spp., Tridens pulchellus, Stipa neomexicana, and Bouteloua eriopoda. Cactaceae includes Ferocactus sp., Opuntia sp. (platy-opuntia), and Mammillaria sp. Forbs include Solanum elaeagnifolium, Euphorbia spp., Portulaca mundula, Dicranocarpus parvifolius, Kallstroemia parviflora, Palafoxia sphacelata, and Zinnia acerosa.

Cultural Resources

No archaeological sites, or isolated manifestations, were recorded during NMAS' reconnaissance. Although this area undoubtedly has been occupied by man on a transitory basis since Paleo-Indian times, NMAS failed to recover evidence of prehistoric occupation. The complete absence of material cultural remains can be attributed to the character of the landform and the concomitant lack of raw material suitable for tool manufacture. In addition, there is an acute shortage of surface water in the area; consequently, prehistoric man preferred locations near the rims of the scores of Pleistocene-aged playas which pock mark the Eunice Plain.

On the northwest, the area surrounding a windmill and corral is strewn with a plethora of modern detritus. Elsewhere, various and sundry cans (pop and beer), barbed wire, bottles, and a 1955 New Mexico license plate occur on the location.

Recommendations

NMAS recommends clearance for Amoco's South Mattix Unit Well No. 34 and suggests that work-related activities proceed without modification of existing plans.