

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, Texas 79336

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

At surface
1980' FNL X 1980' FEL, Sec. 6, (Unit G, SW/4 of NE/4)

At proposed prod. zone

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

21 miles southeast of Maljamar, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. 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

U. S. GEOLOGICAL SURVEY
14000'17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. ROTARY OR CABLE TOOLS

Rotary

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

3696.7 GR

22. APPROX. DATE WORK WILL START*

6-25-78

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5#	450'	Circulate
12 1/2"	9 5/8"	40#	5000'	Circulate
8 3/4"	5 1/2"	15.5#, 17#	14000'	Tie back to 9 5/8"

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

Mud program 0' - 450' - Native mud and fresh water
450' - 5000' - Commercial mud and brine water to maintain good hole condition
5000' - 12500' - Commercial mud and cut brine water
12500' - 14000' - Commercial mud w/KCL for 6% system and cut brine water.

BOP program attached.
Gas is not dedicated.
Archaeological clearance report attached.

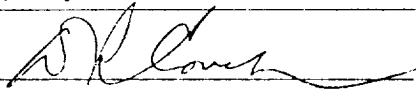
**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

Unless Drilling Operations have
Commenced, this drilling approval
Expires Sept. 20, 1978

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



TITLE

Admin. Analyst (SG)

DATE

5-26-78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

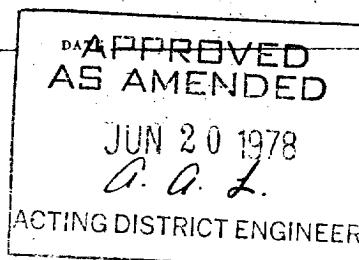
0+5-USGS-H

1-Div

1-Susp

1-RC

*See Instructions On Reverse Side



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

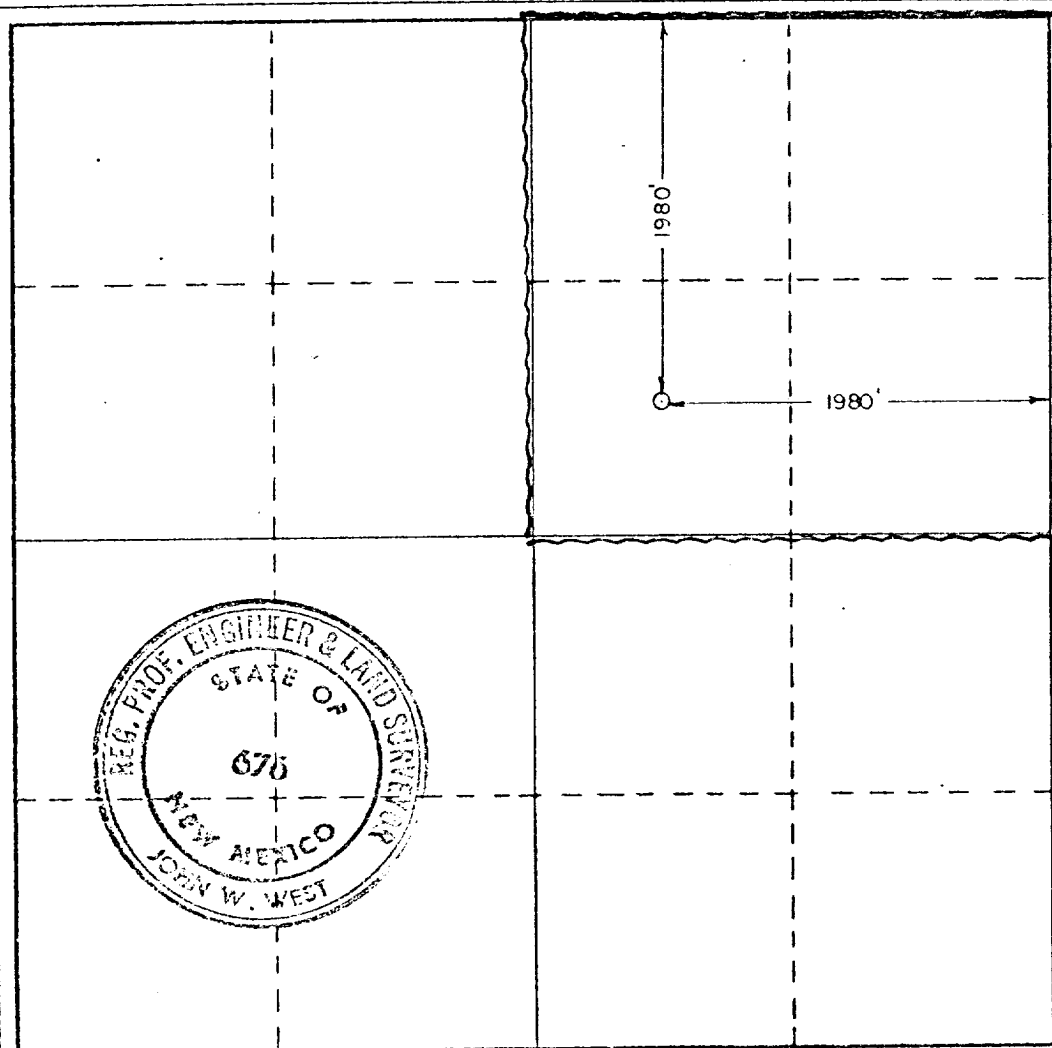
Operator Amoco Production Co.			Lease Nellis Fed.		Well No. 3
Unit Letter G	Section 6	Township 19 South	Range 33 East	County Lea	
Actual Footage Location of Well: 1980 feet from the North line and 1980 feet from the East line					
Ground Level Elev. 3696.7	Producing Formation MORROW	Pool BUFFALO YENN UNDESIGNATED		Dedicated Acreage: 160 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. Buch*
Position **Administrative Analyst (SG)**

Company *Amoco Production Company*
Date *5-26-78*

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.

4/8/78

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

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

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

1. BOP'S TO BE FLUID RATED.
2. BOP'S AND ALL FITTINGS MUST BE IN GOOD CONDITION AND RATED AT 3000 PSI W.P. MINIMUM.
3. EQUIPMENT THROUGH WHICH BIT MUST PASS SHALL BE AT LEAST AS LARGE AS CASING SIZE BEING DRILLED THROUGH.
4. NIPPLE ABOVE BOP'S SHALL BE SAME SIZE AS LAST CASING SET.
5. UPPER KELLY COCK IS REQUIRED AND SHALL BE 3000# W.P. MINIMUM.
6. T. J. W. OR COMPARABLE SAFETY VALVE SHALL BE AVAILABLE ON RIG FLOOR WITH CONNECTION OR SUBS TO FIT ANY TOOL JOINT IN THE STRING. VALVE TO BE FULL BORE 5000# MIN.
7. VALVE NEXT TO SPOOL SHALL BE 4". OTHER EQUIPMENT MAY BE 3" OR 4". ALL CHOKE MANIFOLD EQUIPMENT SHALL BE FLANGED. FLOW LINE FROM MANIFOLD TO BE MINIMUM OF 3" AND STRAIGHT AS POSSIBLE WITH MINIMUM BENDS.
8. FLUID LINES FROM ACCUMULATOR TO BOP'S AND ALL REMOTE CONTROL FLUID LINES SHALL BE STEEL, AND RATED AT OR ABOVE MAXIMUM ACCUMULATOR PRESSURE. LINES SHALL BE ROUTED IN BUNDLES AND ADEQUATELY PROTECTED FROM DAMAGE.
9. USE RAMS IN FOLLOWING POSITIONS:*

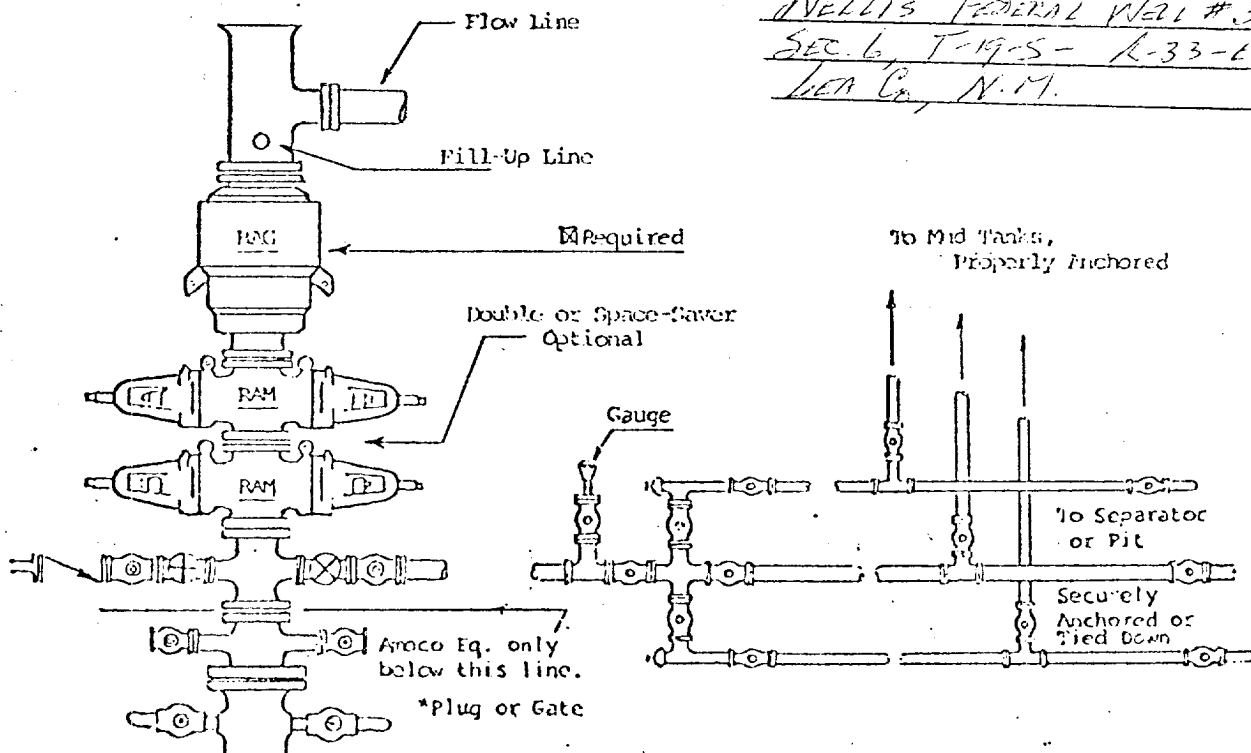
	DRILLING	RUNNING CASING
UPPER RAM	DRILL PIPE	CASING
LOWER RAM	BLIND	BLIND

*AMOCO AREA SUPT. MAY REVERSE LOCATION OF RAMS.

10. CHOKE MANIFOLD, BEYOND SECOND VALVE FROM CROSS MAY BE OPTIONALLY POSITIONED OUTSIDE OF SUBSTRUCTURE.
11. EXTENSIONS AND HAND WHEELS TO BE INSTALLED AND BRACED AT ALL TIMES.
12. TWO INCH (2") LINES AND VALVES ARE PERMITTED ON THE KILL LINE.

NOTE: ALL UNMARKED VALVES MAY BE PLUG OR GATE VALVE, METAL TO METAL SEAL.

AMOCO PRODUCTION COMPANY
NELLIS FEDERAL WELL #3
SEC. 6, T-19-S- R-33-E
LEA CO., N.M.



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

Nellis Federal Well No. 3

Unit G, 1980' FNL X 1980' FEL, Sec 6, T-19-S, R-33-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 1510'

Wolfcamp 10800'

Queen 4120'

Strawn 12130'

Delaware 5500'

Mid Morrow 13200'

Bone spring 7560'

Mis Silic - 14000'

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

Delaware 5000'

Wolfcamp 10800'

Mid Morrow 10800'

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>
450'	13 3/8"	54.5#	K-55	New
5000'	9 5/8"	40#	K-55	New
14000'	5 1/2"	15.5#, 17#	K-55	New

9. Proposed cementing program.

13 3/8" csg - circulate to surface

9 5/8" csg - circulate to surface

5 1/2" csg - Tie back to 9 5/8"

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 450' - Native mud and fresh water.
450' to 5000' - Commercial mud and brine water to maintain good hole conditions.
5000' - 12500' - commercial mud and cut brine water.
12500' to 14000' - commercial mud w/KCL for 6% system and cut brine water.
12. Testing, logging and coring programs to be followed with provisions made for required flexibility.
CNL, FDC, GR W/caliper - 0' to 14000'.
DLL W/Micro SFL GR 0' to 14000' :
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 6-25-78. Complete 7-25-78
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 Nellis Federal WELL NO. 3


LOCATION 1980' FNL X 1980' FEL, Sec 6, T-19-S, R-33-E

POOL Buffalo Penn (Morrow)

COUNTY Lea

The undersigned hereby states that Amoco's representative, Mr. E.E. Pauley, personally contacted Smyer Ranch (Larry Squires) Lovington, NM 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 26, 1978
Date

Proposed Development Plan for Surface Use

Amoco Production Company's Nellis Federal Well No. 3, Unit G, 1980' FNL X 1980' FEL, Section 6, T-19-S, R-33-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 Maljamar, go south on Hiway 33 for 14 miles, turn east on dirt road 5.3 miles, turn north .9 miles east.6 miles, north .6 miles. New lease road will be constructed 2640' north to well location.
2. Planned access roads.
Approx. 2640' new road will be built.
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 pad. See Exhibit D.
5. Location and type of water supply.
Fresh water and brine water will be hauled from the nearest available source by commercial contractor. (I & W Inc. Loco Hills, NM)
6. Source of construction materials. (Contractor-New-Mex)
Caliche will be obtained from an existing pit located approximately 4 miles SW of well. NE/4 of SE/4 Sec. 15.
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 - 210' x 330' 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 - Broad, flat plain, with low sand dunes.
- b. Soil - Sandy w/angular caliche inclusions
- c. Vegetation - Mesquite, oakbrush, yucca, sage brush, gramma grass.
- 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 in this area would be minimal. No known archaeological, historical, or cultural sites exist in the drill or road areas.

LEASE & WELL NUMBER Nellis Federal Well No. 3

LOCATION Unit G, 1980 ' FNL X 1980 ' E L, Sec. 6, T-19-S, R-33-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 26, 1978
DATE

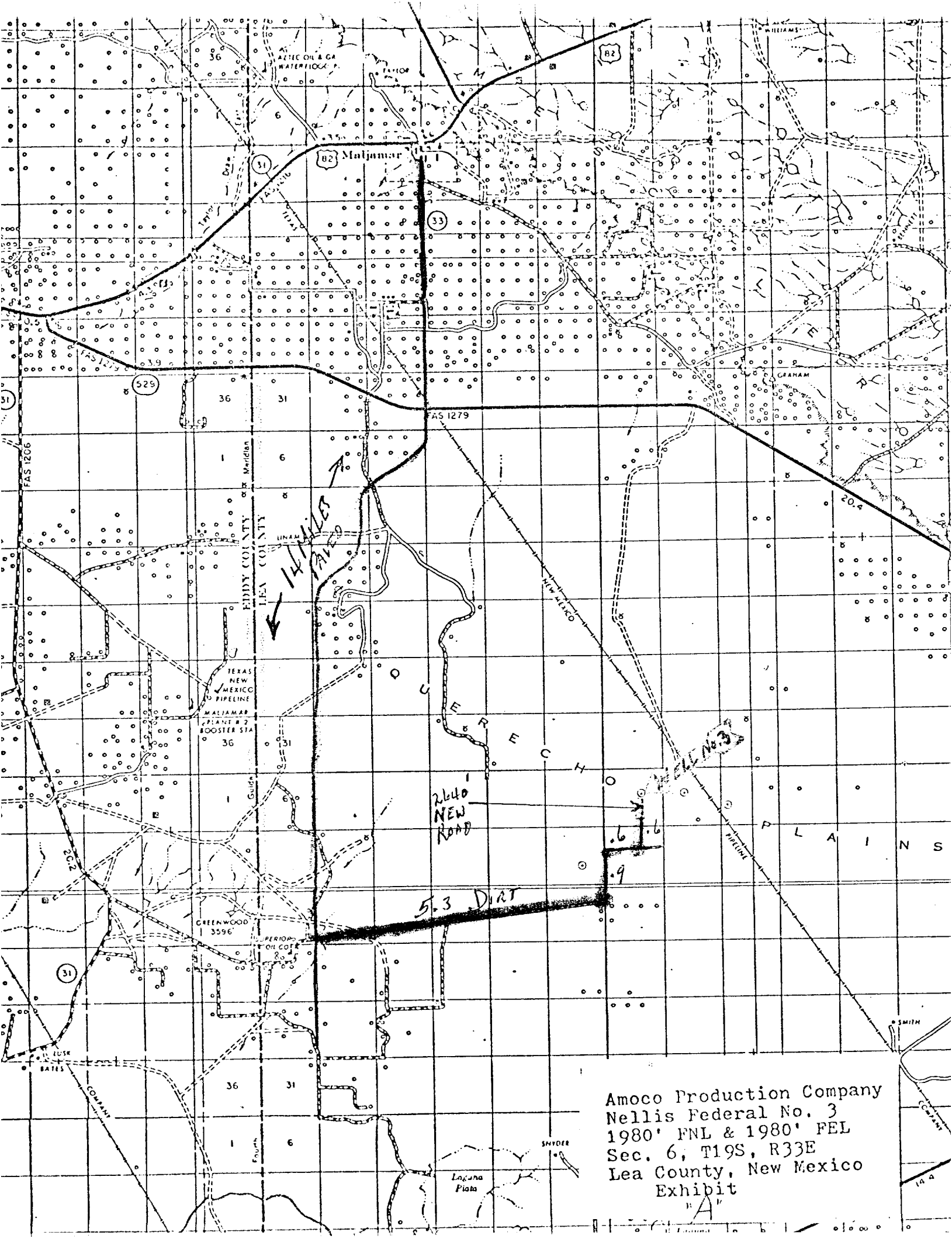
J. H. Hawkins
NAME AND TITLE

Sr. Drilg. Foreman

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



Amoco Production Company
Nellis Federal No. 3
1980' FNL & 1980' FEL
Sec. 6, T19S, R33E
Lea County, New Mexico
Exhibit
"A"

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Amoco Production Company
Nellis Federal No. 3
1980' FNL & 1980' FEL
Sec. 6, T19S, R33E
Lea County, New Mexico
Exhibit

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

A detailed topographic map from the United States Geological Survey. The map shows a grid system with horizontal coordinates ranging from 918 to 930 and vertical coordinates ranging from 415 to 427. A prominent road, labeled "ROAD NO. 3", runs vertically through the center-left portion of the map. To the left of this road, there are several small, irregularly shaped parcels outlined in black. These parcels are labeled with handwritten or stamped text: "NELLIS FED #3", "NELLIS FED #4", "NELLIS FED #5", "NELLIS FED #6", "NELLIS FED #7", "NELLIS FED #8", "NELLIS FED #9", "NELLIS FED #10", "NELLIS FED #11", "NELLIS FED #12", "NELLIS FED #13", "NELLIS FED #14", "NELLIS FED #15", "NELLIS FED #16", "NELLIS FED #17", "NELLIS FED #18", "NELLIS FED #19", "NELLIS FED #20", "NELLIS FED #21", "NELLIS FED #22", "NELLIS FED #23", "NELLIS FED #24", "NELLIS FED #25", "NELLIS FED #26", "NELLIS FED #27", "NELLIS FED #28", "NELLIS FED #29", "NELLIS FED #30", "NELLIS FED #31", "NELLIS FED #32", "NELLIS FED #33", "NELLIS FED #34", "NELLIS FED #35", "NELLIS FED #36", "NELLIS FED #37", "NELLIS FED #38", "NELLIS FED #39", "NELLIS FED #40". Other labels include "BONDURANT #4", "BONDURANT #5", "BONDURANT #6", "BONDURANT #7", "BONDURANT #8", "BONDURANT #9", "BONDURANT #10", "BONDURANT #11", "BONDURANT #12", "BONDURANT #13", "BONDURANT #14", "BONDURANT #15", "BONDURANT #16", "BONDURANT #17", "BONDURANT #18", "BONDURANT #19", "BONDURANT #20", "BONDURANT #21", "BONDURANT #22", "BONDURANT #23", "BONDURANT #24", "BONDURANT #25", "BONDURANT #26", "BONDURANT #27", "BONDURANT #28", "BONDURANT #29", "BONDURANT #30", "BONDURANT #31", "BONDURANT #32", "BONDURANT #33", "BONDURANT #34", "BONDURANT #35", "BONDURANT #36", "BONDURANT #37", "BONDURANT #38", "BONDURANT #39", "BONDURANT #40". The map also shows various contour lines, water bodies, and other geographical features.

Amoco Production Company
Nellis Federal No. 3
1980' FNL & 1980' FEL
Sec. 6, T19S, R33E
Lea County, New Mexico
Exhibit

2

LC065128

N.M.078148

LC069276
ENFIELD
Inverness

LC069276
4510'

N.M.09907

US

13,700

13600 4377

SOWING

DISC
PANAMA
4540

35

36

31

32

33

STATE

STATE

N.M.01177-A

BUFF

US

MANSON
US
4510

NM 14000

LC069276

NM
13835

CARPER
Nellis Fed "S"
GAS Com. #1

CARPER
4795

US

2

STATE

NM
11119

NM 1
0780-A NM12568-A

N.M.077002

N.M.077002

Dand
Fed. #1

LC060549

BUFF

67230

4035

RV UNIT

NM12568

NM0
63530

NM9560-A

N.M.01235-D
Bondurant

NM2843-A

NM2843

N.M.077002

LC060549

HMO25-A

US

PAN AMERICAN
HUDSON
3332

NM2843

NM2843-A

N.M.077002

NM
10780

NM
10780

NM 16357

Amoco Production Company NTO DEEP U

Nellis Federal No. 3
1980' FNL & 1980' FEL
Sec. 6, T19S, R33E
Lea County, New Mexico
Exhibit "C"

16 KING RES
STATE

N.M.0
63530

N.M.0
235-D

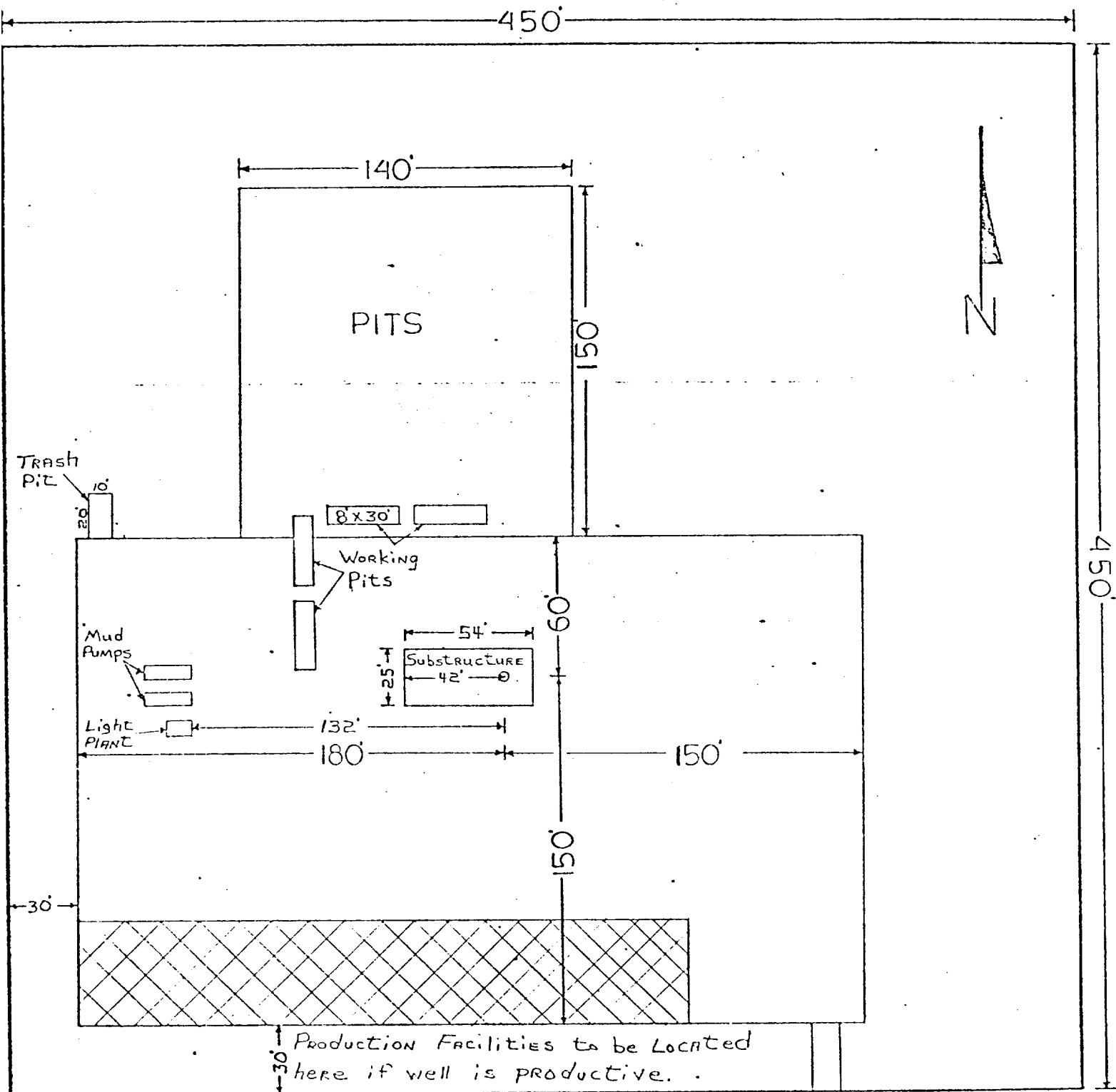
345C
64

STATE

37
8
N.M.O.
25497
3240

DRILL SITE DIMENSIONS

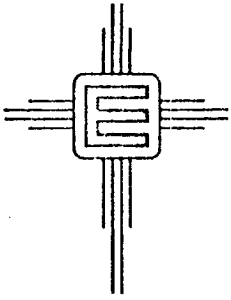
8000' TO 14000'



Amoco Production Company
 NELLIS FEDERAL Well No. 3
 SEC. 6 T-19-S R-33-E
 Lea Co. N.M.

2640' Newborn

EXHIBIT "D"



2 May 1978

Mr. Bob Couch
Amoco Production Company
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 archaeological sites, or isolated manifestations, were recorded during ACA's 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

mct

Enclosure

Archaeological Clearance Report

Amoco Production Company

Bondurant Federal #5
Nellis Federal #3
Nellis Federal "B" Gas Com. #1
Dunn Federal #1

by

Scott C. Schermer

Submitted
by

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

2 May 1978

INTRODUCTION

An archaeological reconnaissance was completed recently by the Agency for Conservation Archaeology (ACA), Eastern New Mexico University, Portales, for Amoco Production Company in Lea County, New Mexico. Investigated areas will be impacted by well locations and associated accesses. This project was administered for Amoco by Mr. Bob Couch, field representative, and for ACA by Dr. J. Loring Haskell, Director - Principal Investigator. The investigation was headed by Scott C. Schermer and was undertaken on 28 April 1978 under excellent weather conditions. This reconnaissance was performed under Federal Antiquities Permit 78-NM-015.

SURVEY TECHNIQUE

Each location was walked in a series of parallel 15 ft wide, overlapping, zigzag transects from north to south and thence south to north. In addition, a strip of land measuring 20 ft on each side was investigated as well. Associated access roads were walked in a close interval, 25 ft wide, zigzag pattern. These techniques combined permitted a maximum of visual examination.

Bondurant Federal #5

LOCATION

This location measures 400 X 400 ft and is situated 1980 ft from the south line and 1980 ft from the east line of the:

SE $\frac{1}{4}$, Section 12, T19S, R32E, NMPM, Lea County, NM (BLM)

More specifically, it lies in the:

NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 12, T19S, R32E, NMPM, Lea County, NM (BLM)

Nellis Federal #3

LOCATION

This location measures 400 X 400 ft and is situated 1980 ft from the north line and 1980 ft from the east line of the:

NE $\frac{1}{4}$, Section 6, T19S, R33E, NMPM, Lea County, NM (BLM)

More specifically, it lies in the:

SW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 6, T19S, R33E, NMPM, Lea County, NM (BLM)

Nellis Federal #3's associated access measures 12 X 2640 ft and will pass through the:

SW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 6, T19S, R33E, NMPM, Lea County, NM (BLM)

NW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 6, T19S, R33E, NMPM, Lea County, NM (BLM)

SW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 6, T19S, R33E, NMPM, Lea County, NM (BLM)

Map Reference: USGS Laguna Gatuna Quadrangle, 15 minute series, 1962.

TERRAIN

Locally, the area is characterized by stabilized dunes and deflation basins. Calcareous sandy clay loams underlie the area as a whole. Pea-sized caliche and quartzite inclusions constitute less than 1% of soil individuals. Local soils belong to the Haplargid-Torripsamment Association.

FLORISTICS

The floral assemblage is dominated by Quercus havardii, Yucca glauca, Artemisia filifolia, Prosopis juliflora, Senecio longilobus, and Cirsium sp. Graminae is represented by Bouteloua sp. and Distichlis stricta. Plant density averages 25 to 30%.

CULTURAL RESOURCES

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

RECOMMENDATIONS

ACA recommends clearance for Nellis Federal #3 and its associated access and suggests that construction proceed without modification of existing plans.

Nellis Federal "B" Gas Com. #1

LOCATION

This location measures 400 X 400 ft and is situated 1980 ft from the north line and 1980 ft from the west line of the:

NW $\frac{1}{4}$, Section 5, T19S, R33E, NMPM, Lea County, NM (BLM)

More specifically, it is situated in the:

SE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 5, T19S, R33E, NMPM, Lea County, NM (BLM)

The proposed access road will measure 12 X 2770 ft and will pass through the:

SW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 5, T19S, R33E, NMPM, Lea County, NM (BLM)

SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 5, T19S, R33E, NMPM, Lea County, NM (BLM)

NE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 5, T19S, R33E, NMPM, Lea County, NM (BLM)

SE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 5, T19S, R33E, NMPM, Lea County, NM (BLM)

Map Reference: USGS Laguna Gatuna Quadrangle, 15 minute series, 1962.

TERRAIN

Topographically, this area is distinguished by stabilized dunes and deflation basins. Areal soils are sandy clay loams and loamy sands which taxonomically belong to the Haplargid-Torripsament Association.

FLORISTICS

The floral community is distinguished by a predominance of Yucca glauca, Gutierrezia sarothrae, Prosopis juliflora, Artemisia filifolia, Quercus havardii, Perezia nana, Senecio longilobus, Bouteloua gracilis, Stipa neomexicana, Sporobolus sp., and Distichlis stricta.

U. S. Geological Survey

HOBBS DISTRICT

Amoco Production Company
No. 3 Nellis Federal
SW $\frac{1}{4}$ NE $\frac{1}{4}$
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. Operator will provide the dirt contractor with a copy of the enclosed Bureau of Land Management "Standard Requirements for all Drilling in Relation to Oil and Gas Activities in the Roswell District" prior to commencing construction of road, pad, or other associated developments.
7. In the event the oil or gas test results in a dry hole, the drill pad and access road will be ripped in accordance with "BLM Roswell District's Ripping Recommendations for Caliche or Compacted Drill Pads and Access Roads". (Reseeding of the affected areas may be required at the discretion of the BLM authorized officer).
8. All ripped surfaces are to be protected from vehicular travel by constructing a dead-end ditch and earthen barricade at the entrance to these ripped areas. The barricade is to be constructed using spoil material from the ditch and should be of sufficient magnitude to discourage vehicle entry.
9. All above ground structures, not subject to applicable conservation and safety requirements, shall be painted to blend with the natural surroundings unless alternate colors for specific equipment are requested and approved. The paint used should be a nonglare, nonreflective, flat, or semi gloss that simulates Fed. Stand. No. 595, color 30318.

10. After setting the 9-5/8" casing string and before drilling into the Pennsylvanian formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.
11. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Pennsylvanian formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
 - (1) A recording pit level indicator to determine pit volume gains and losses.
 - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
 - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.