

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

CO2

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Amoco Production Company

3. ADDRESS OF OPERATOR

P. O. Box 68, Hobbs, New Mexico 88240

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

At surface

1650' FNLX 1650' FEL

At proposed prod. zone

(Unit G, SW/4NE/4)

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

49 miles South of Clayton

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.

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

4703' GL

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	32.30#	700'	Circulate
8-3/4"	7"	20#	2938'	Tie back to 9-5/8"

5. LEASE DESIGNATION AND SERIAL NO.

NM-19514

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Bravo Dome Carbon
Dioxide Gas Unit

8. FARM OR LEASE NAME

Bravo Dome Carbon
Dioxide Gas Unit

9. WELL NO.

1835 181G

10. FIELD AND POOL, OR WILDCAT

Und. Tubb

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

18-18-35

12. COUNTY OR PARISH

Union

13. STATE

NM

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

19. PROPOSED DEPTH

2938'

20. ROTARY OR CABLE TOOLS

Rotary

22. APPROX. DATE WORK WILL START*

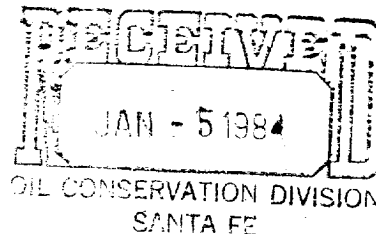
4th quarter-1983

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"This action is subject to administrative
appeal pursuant to 30 CFR 290.

Propose to drill and equip 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 - 700' Native spud mud
700'- TD KCL-Salt water gel-Starch

BOP Diagram attached
Archeaological survey attached
Gas is not dedicated.



D+5, BLM-F 1-HOU R. E. Ogden RM 21.150 1-SUSP 1-PJS 1-Amerada 1-Amerigas
1-Cities Service 1-Conoco 1-CO2 in Action 1-Excelsior 1-Sun. Tex. 1-Exxon
1-Jim Russell, Clayton 1-F. J. Nash, HOU RM 4.206

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

Assist. Admin. Analyst

DATE

11-23-83

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

NMOCC

Santa Fe

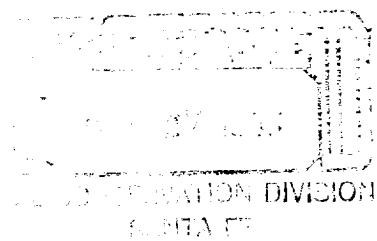
APPROVED

AS AMENDED

DATE

DEC 22 1983

Larry Schuchman
AREA MANAGER
FARMINGTON RESOURCE AREA



NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-12P
Effective 1-1-65

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

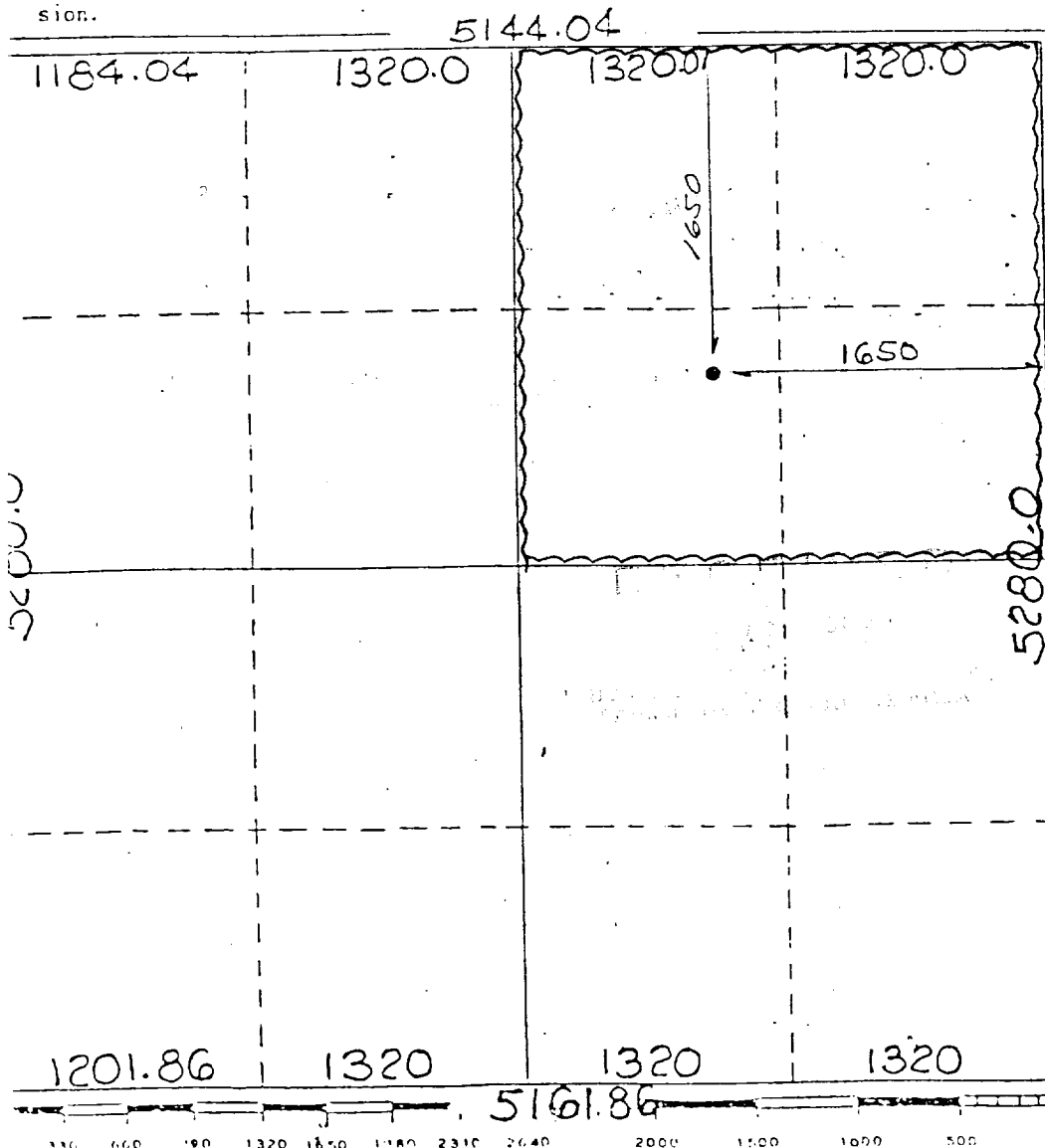
Owner: AMOCO PRODUCTION COMPANY				Lease: _____		Well No.: 1835181G	
Letter: G	Section: 18	Township: T18N	Range: R35E	County: UNION			
a) Footage Location of Well:							
1650 feet from the NORTH line and		1650 feet from the EAST line					
and Level Elev. 4703'	Producing Formation Tubb		Pool Und. Tubb		Dedicated Acreage: 160 Acres		

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

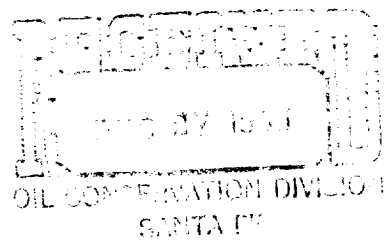
☐ Yes ☐ No If answer is "yes," type of consolidation _____

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.



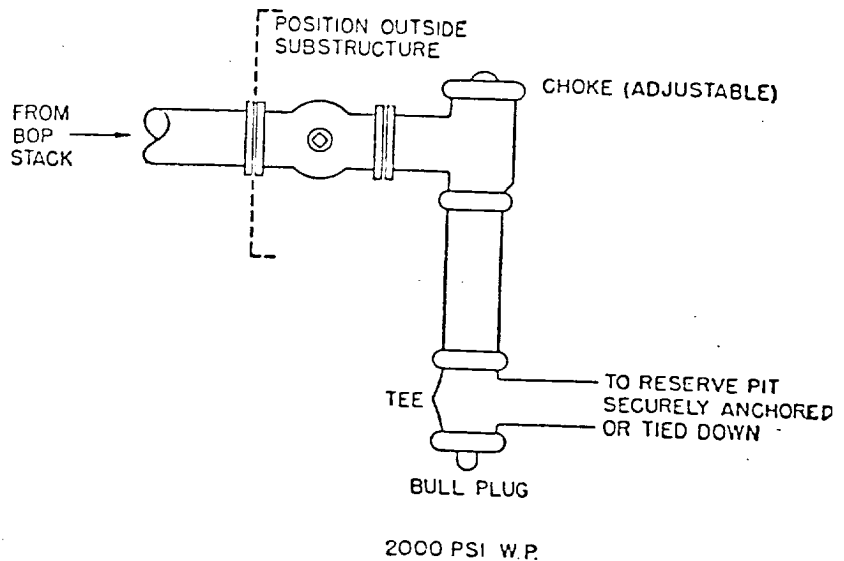
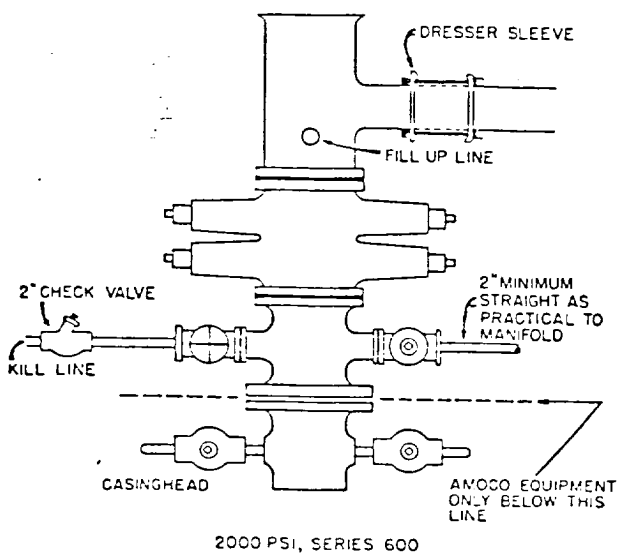
CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Name	<i>Peter J. Seno</i>
Position	Assist. Admin. Analyst
Company	Amoco Production Company
Date	November 23, 1983
I hereby certify that the well location shown on this plat 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.	
N. M. E. S. NO. 5103	
Certified by: N. M. E. S. NO. 5103	



STANDARD 2000 PSI W.P. BOP STACK

1. Blow-out preventers may be manually 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 District Superintendent 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

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.

Tubb 2193'
Basement 2888'

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

Tubb 2193'

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>
	700'	9-5/8"	32.30#	H-40	New
L	2938'	7"	20#	K-55	New

9. Proposed cementing program.

9-5/8" circulate to surface
7" Tieback 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.
 - 0 - 700' Native spud mud
 - 700' -TD KCL-Salt water Gel-Starch
12. Testing, logging and coring programs to be followed with provisions made for required flexibility.
 - 700' - TD DLL-MSFL-GR-Caliper
 - 700' - TD FDC-CNL-GR-Caliper
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.
 - 4th quarter 1983
 - 10 days - duration
15. Other facets of the proposed operation operator wishes to point out for the Geological Survey's consideration of the application.

Proposed Development Plan for Surface Use

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. Go South from Clayton 49 miles on Hwy 18. Turn west on county rd. and go 2 miles. Go south 1 mile and turn west and go 3 miles. Turn North and go .7 mile. Turn west go .3 mile to location

2. Planned access roads.

approximately 10.22 acres of access road is to be built.

3. Location of existing wells.

All existing well 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, & treaters) will be

5. Location and type of water supply.

Fresh & brine water to be hauled by commercial hauler.

6. Source of construction materials.

Caliche pit located in the W/2, Sec. 26, T-18-N, R-34-E

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 - 190' x 265' x 6"
- b. Compacted - Caliche
- c. Surfaced - No
- d. 400' 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 - Sloping basin
- b. Soil- Sandy silt loam
- c. Vegetation- Gramma grasses, prickley pear, sand sage, yucca, poverty tree, broom snakeweed
- d. Surface Use- Grazing
- e. Ponds and Streams - Canadian River Valley, 1.4 miles Northeast of the north Fork of Minneosa Creek.
- f. Water Wells - None
- g. Residences and Building - None
- h. Arroyos, Canyons, etc. - None
- i. Well Sign - Posted at drill site
- j. Open Pits - All pits containing liquid or mud will be fenced
- k. Archaeological Resources - None

12. OPERATOR'S REPRESENTATIVE -

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

H. C. Low, District Drilling Superintendent
P. O. Box 68
Hobbs, NM 88240
Office Phone: (505) 393-1781

LEASE & WELL NUMBER Bravo Dome Carbon Dioxide Gas Unit Well No. 1835 181G

LOCATION 1650' FNL X 1650' FEL, Sec. 18, T-18-N, R-35-E, Union Co. NM

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.

November 23, 1983

DATE

Henry C. Low
NAME (AND TITLE)

District Drilling Superintendent



Amoco Production Company (USA)
P. O. Box 606
Clayton, NM 88415

RE: Bravo Dome Carbon Dioxide Gas Unit
Well No. 1835 181G
Union County, New Mexico

Gentlemen:

This refers to Form 9-331-C, Application to Drill, Deepen or Plugback, and/or Surface Use Plan accompanying this letter. The undersigned hereby states that he has personally notified Planet Cattle Inc. % Joe Whittenburg, the owner of the surface land on which the work is to be conducted, of the nature and extent of the work to be done including construction on the wellsites and pertinent roads and powerlines (if any) thereto.

It has been agreed, that upon abandonment of operations the roads, locations and pits will be rehabilitated according to surface owner requirements.

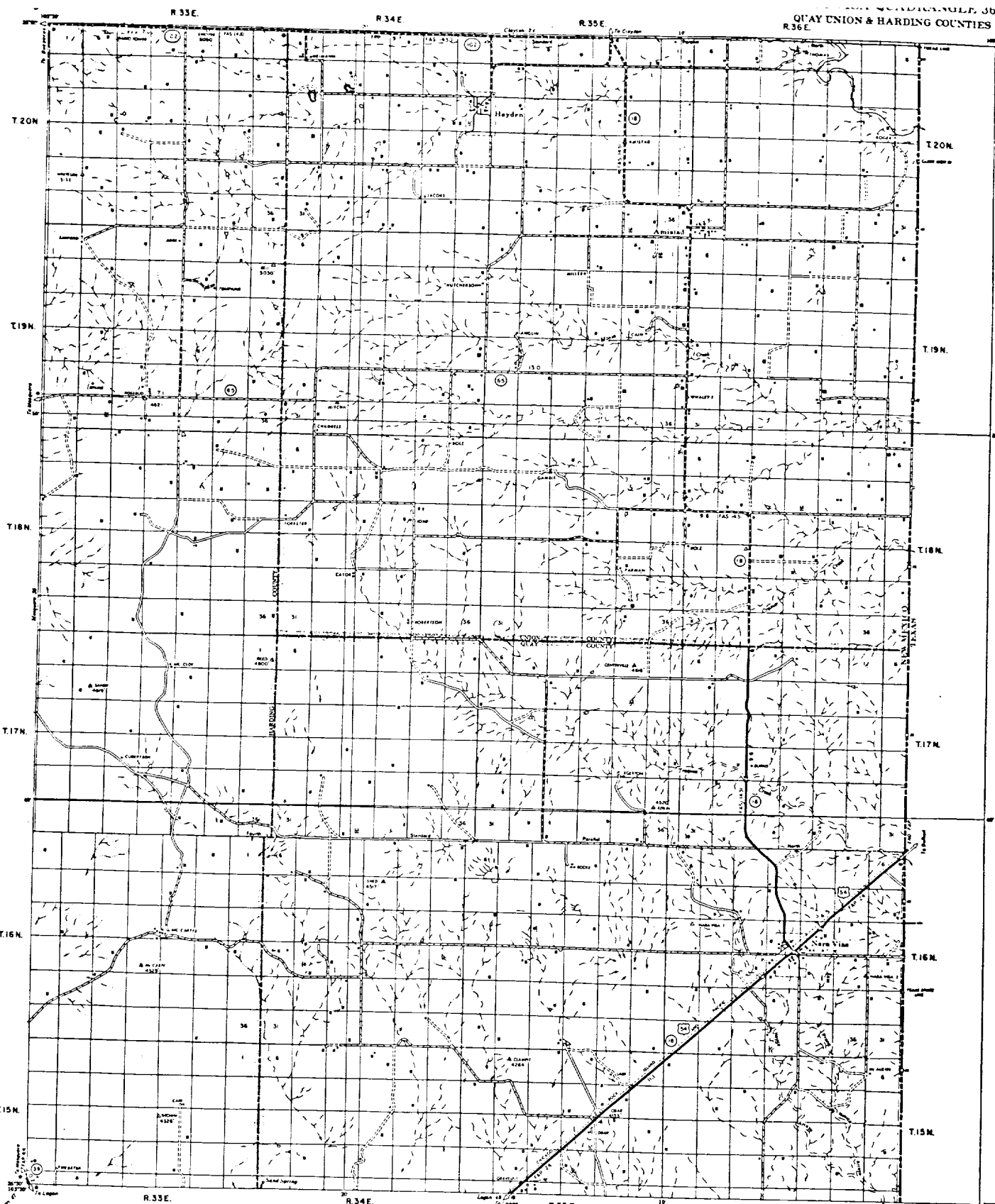
James E. Smith

State of New Mexico
County of Union

Subscribed and sworn to before me this 17th day of November, 1983.

Jim Gooding
Notary Public

My commission expires: 10-10-85

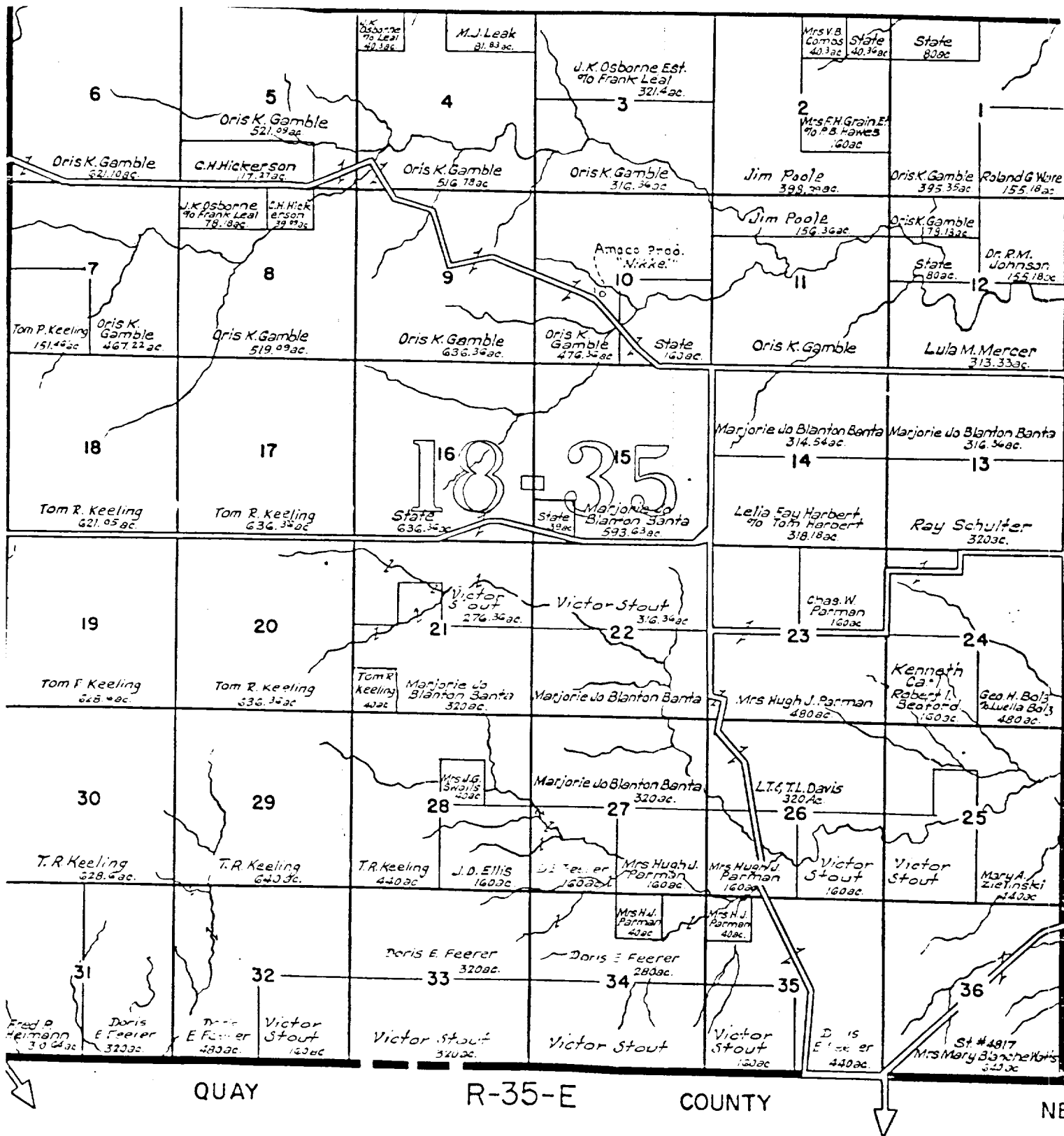


Compiled by U.S. Coast and Geodetic Survey, U.S. Geological Survey, U.S. Forest Service, Bureau of Land Management and Planning Commission-Mapmakers, Inc., Portland, Oregon
Revised 1964 North American Datum

Scale 1 inch = 3 Miles
1 1/2 0 1 2 3 4
STATUTE MILES

DATE OF INVENTORY
HARDING COUNTY 1964
QUAY COUNTY 1963
UNION COUNTY 1964

NARA VISA
QUADRANGLE
36



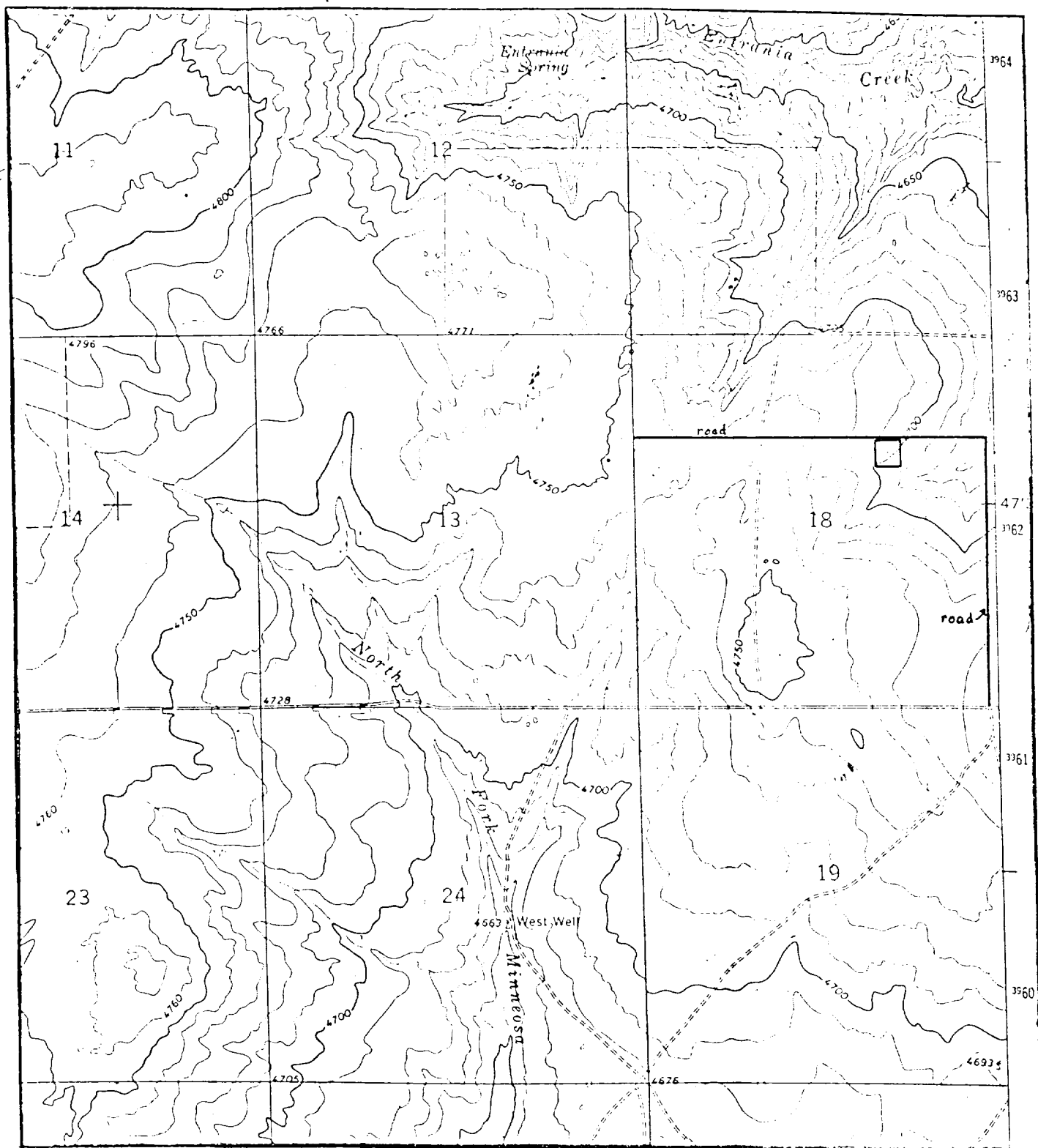
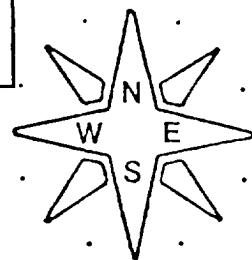


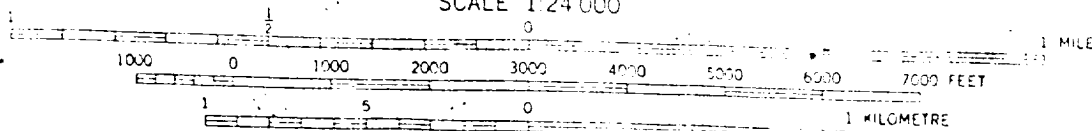
Figure 4: Location of BDCDGU Well #1835-181G and Access Road
 Section 18, T18N R35E, Harding County, NM

Map: USGS Ione Quadrangle, 1966

7.5 MINUTE
 SERIES



SCALE 1:24,000



CELLAR 6x6x6

PIT

200'

140'

90'

(DEEP SAND ONLY)

110'

130'

40'

30'

95'

80'

190'

130'

FOR WELL 8000 FEET OR LESS

400'

A C A

Llano Estacado Center for Advanced
Professional Studies and Research
Eastern New Mexico University
Portales, New Mexico 88130



Archaeological Clearance Report
for

Amoco Production Company

BDCDGU Well #1833-231G and Access Road
BDCDGU Well #1835-181G and Access Road
BDCDGU Well #1835-211F and Access Road

F84-175

by
Terry Fifield

Edited and Submitted by
Mr. Scott Schermer
Acting Director

November 11, 1983

Introduction

An archaeological reconnaissance was recently completed by the Agency for Conservation Archaeology (A.C.A.) at Eastern New Mexico University for Amoco Production Company in Harding County, New Mexico, on land administered by the Bureau of Land Management. The reconnoitered area will be impacted by the construction of 3 well pads and 3 access roads. The project was administered by Jay Smith for Amoco Production Company and Mr. Scott Schermer, Acting Director of ACA. This report was prepared by the Portales office of ACA.

The field work was conducted on November 7, 1983 by Terry Fifield. Excellent field and weather conditions prevailed throughout the course of this reconnaissance. This survey was conducted under Federal Antiquities Permit number 82-NM-375. A search of the National Register has been made and properties within this area are not listed on the Register.

Survey Technique

Visual inspection of the pad was completed by walking a series of parallel transects. Each transect was covered in a tightly spaced zigzag pattern. The access roads were examined as two transects, with tightly spaced zigzag patterns covering the length and breadth. The distance between transects was 25 feet (7.6 meters). This method maximized the opportunity of observing any cultural resources within or near the proposed area of impact.

~~BDCDUGU Well #1833-231G and Access Road~~

Location

The proposed well pad and access road are located 21.5 miles northwest of Nara Visa, New Mexico, near the Canadian River Valley. The pad covers 3.67 acres and measures 400 X 400 feet (121.9 X 121.9 meters) and the access road covers 1.67 acres and measures 50 X 1460 feet (15.2 X 445 meters). They are situated as follows:

Well Pad:

SW 1/4 NE 1/4, Section 23, T18N R33E, NMPM, Harding County, NM (BLM)

Access Road:

SW 1/4 NE 1/4, Section 23, T18N R33E, NMPM, Harding County, NM (BLM)

NW 1/4 NE 1/4, Section 23, T18N R33E, NMPM, Harding County, NM (BLM)

Plat: Figure 1

Map Reference: USGS Rosebud Quadrangle 7.5 minute series, 1966 (figure 2)

Terrain

The proposed well pad and access road are located near the Canadian River Valley, 4.1 miles west of Minneosa Creek. They are situated on an undulating alluvial plain. The local slope is gentle and to the south. Gopher mounds are present throughout the area. The elevation varies from 4750 to 4772 feet (1447.7 to 1454.5 meters). The soil encountered in the area is predominantly a sandy silt loam. Taxonomically it can be classified as a member of the paleustoll-calciorthids-calciustolls association. Lithic inclusions consist of occasional small caliche fragments in gopher mounds near the top of the hill.

Floristics

ACA encountered a dense floral assemblage at this location. The density of the vegetation in the area is approximately 75 percent, consisting primarily of grasses. The dominant species is grama grasses (Bouteloua spp.). Among other species present are purple pricklypear (Opuntia macrocentra), sand sage (Artemisia filifolia), yucca (Yucca glauca), poverty threawn (Aristida divaricata), nightshade (Solanum eleagnifolium) and thistle (Cirsium spp.).

Cultural Resources

ACA did not encounter any archaeological sites or isolated manifestations, either within or near the proposed facilities.

Recommendations

ACA recommends clearance for the proposed well pad and access road and suggests that construction be allowed to proceed as currently planned.

BDCDGU Well #1835-181G and Access Road

Location

The proposed well pad and access road are located 18.7 miles northwest of Nara Visa, New Mexico, near the Canadian River Valley. The pad covers 3.67 acres and measures 400 X 400 feet (121.9 X 121.9 meters) and the access road covers 10.22 acres and measures 50 X 8906 feet (15.2 X 2714.5 meters). They are situated as follows:

Well Pad:

SW 1/4 NE 1/4, Section 18, T18N R35E, NMPM, Harding County, NM (BLM)

Access Road:

SW 1/4 NE 1/4, Section 18, T18N R35E, NMPM, Harding County, NM (BLM)
SE 1/4 NW 1/4, Section 18, T18N R35E, NMPM, Harding County, NM (BLM)
SW 1/4 NE 1/4, Section 18, T18N R35E, NMPM, Harding County, NM (BLM)
SE 1/4 NE 1/4, Section 18, T18N R35E, NMPM, Harding County, NM (BLM)
NE 1/4 SE 1/4, Section 18, T18N R35E, NMPM, Harding County, NM (BLM)
SE 1/4 SE 1/4, Section 18, T18N R35E, NMPM, Harding County, NM (BLM)

Note: The road extends east and west from the pad location.

Plat: Figure 3

Map Reference: USGS Ione Quadrangle 7.5 minute series, 1966 (figure 4)

Terrain

The proposed well pad and access road are located near the Canadian River Valley, 1.4 miles northeast of the north fork of Minneosa Creek. The well pad is situated on the south sloping flank of a small drainage basin. Local slope is gentle and to the southeast. The access road is situated along the northside of a small drainage basin. The corridor turns south, crosses the draw and climbs the north facing slope. The elevation varies from 4668 to 4746 feet (1422.8 to 1446.5 meters). The soil encountered in the area is predominantly a sandy silt loam. Taxonomically it can be classified as a member of the paleustoll-calciorthid-calciustoll association. Lithic inclusions consist of caliche fragments and occasional alluvial pebbles.

Floristics

ACA encountered a dense floral assemblage at this location. The density of the vegetation in the area is approximately 75 percent, consisting primarily of grasses. The dominant species is grama grasses (Bouteloua spp.). Among other species present are purple pricklypear (Opuntia macrocentra), sand sage (Artemisia filifolia), yucca (Yucca glauca), poverty threeawn (Aristida divaricata), nightshade (Solanum eleagnifolium) and broom snakeweed (Gutierrezia sarothrae).

Cultural Resources

ACA did not encounter any archaeological sites or isolated manifestations, either within or near the proposed facilities.

Recommendations

ACA recommends clearance for the proposed well pad and access road and suggests that construction be allowed to proceed as currently planned.

BDCDGU Well #183~~5~~-211F and Access Road

Location

The proposed well pad and access road are located 16.7 miles northwest of Nara Visa, New Mexico, near the Canadian River Valley. The pad covers 3.67 acres and measures 400 X 400 feet (121.9 X 121.9 meters) and the access road covers 3.01 acres and measures 50 X 2620 feet (15.2 X 798.6 meters). They are situated as follows:

Well Pad:

SE 1/4 NW 1/4, Section 21, T18N R35E, NMPM, Harding County, NM (BLM)

Access Road:

SE 1/4 NW 1/4, Section 21, T18N R35E, NMPM, Harding County, NM (BLM)

NE 1/4 SW 1/4, Section 21, T18N R35E, NMPM, Harding County, NM (BLM)

NW 1/4 SW 1/4, Section 21, T18N R35E, NMPM, Harding County, NM (BLM)

Plat: Figure 5

Map Reference: USGS Centerville Corner Quadrangle 7.5 minute series, 1971 (figure 6)

Terrain

The proposed well pad and access road are located near the Canadian River Valley, the pad is 200 feet north of Fullingim Draw and the road crosses the draw. The pad is situated on an alluvial terrace. Local slope is gentle and to the south and east. Gopher mounds are present throughout the pad. The road is situated on both flanks of a small draw. The elevation varies from 4605 to 4634 feet (1403.6 to 1412.4 meters). The soil encountered in the area is predominantly a fine sandy sand. Taxonomically it can be classified as a member of the paleustoll-calciorthid-calciustoll association. Lithic inclusions consist of alluvial gravels and caliche fragments.

Note: The gravels which make up the terrace are predominantly quartzites and schistose metamorphics. Exfoliation along the edges of some schistose cobbles mimics bifacial retouch. However, the nature of the raw materials and their depositional context explain this configuration. No lithic reduction debris was noted.

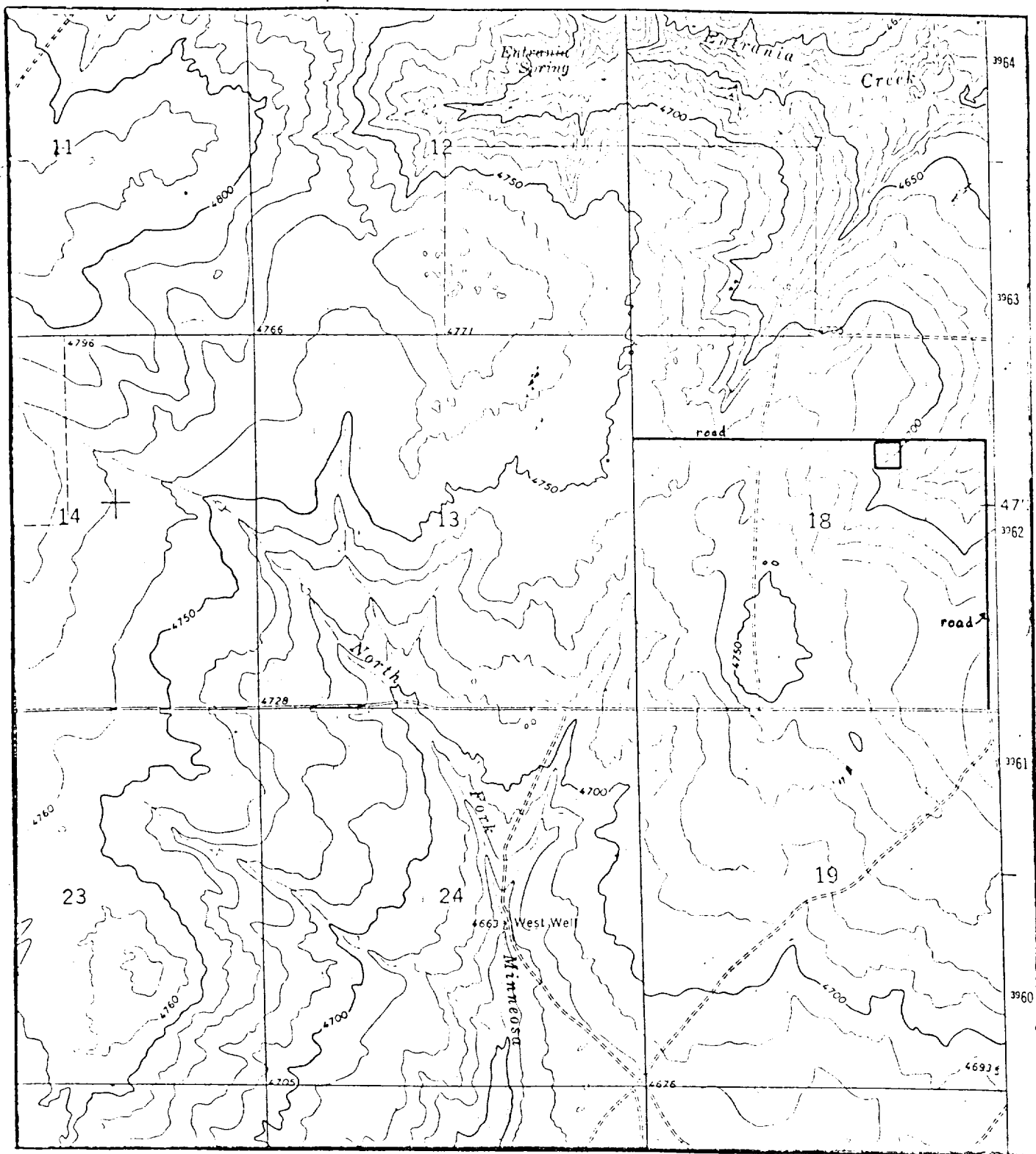


Figure 4: Location of BDCDGU Well #1835-181G and Access Road
 Section 18, T18N R35E, Harding County, NM

Map: USGS Ione Quadrangle, 1966

7.5 MINUTE
 SERIES

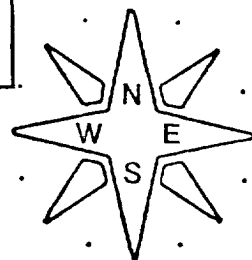
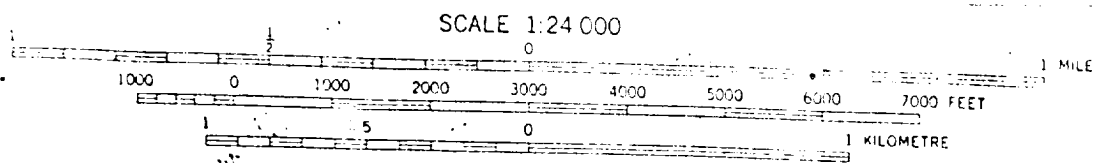


Figure 3
NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-124
Effective 1-1-65

All distances must be from the outer boundaries of the Section

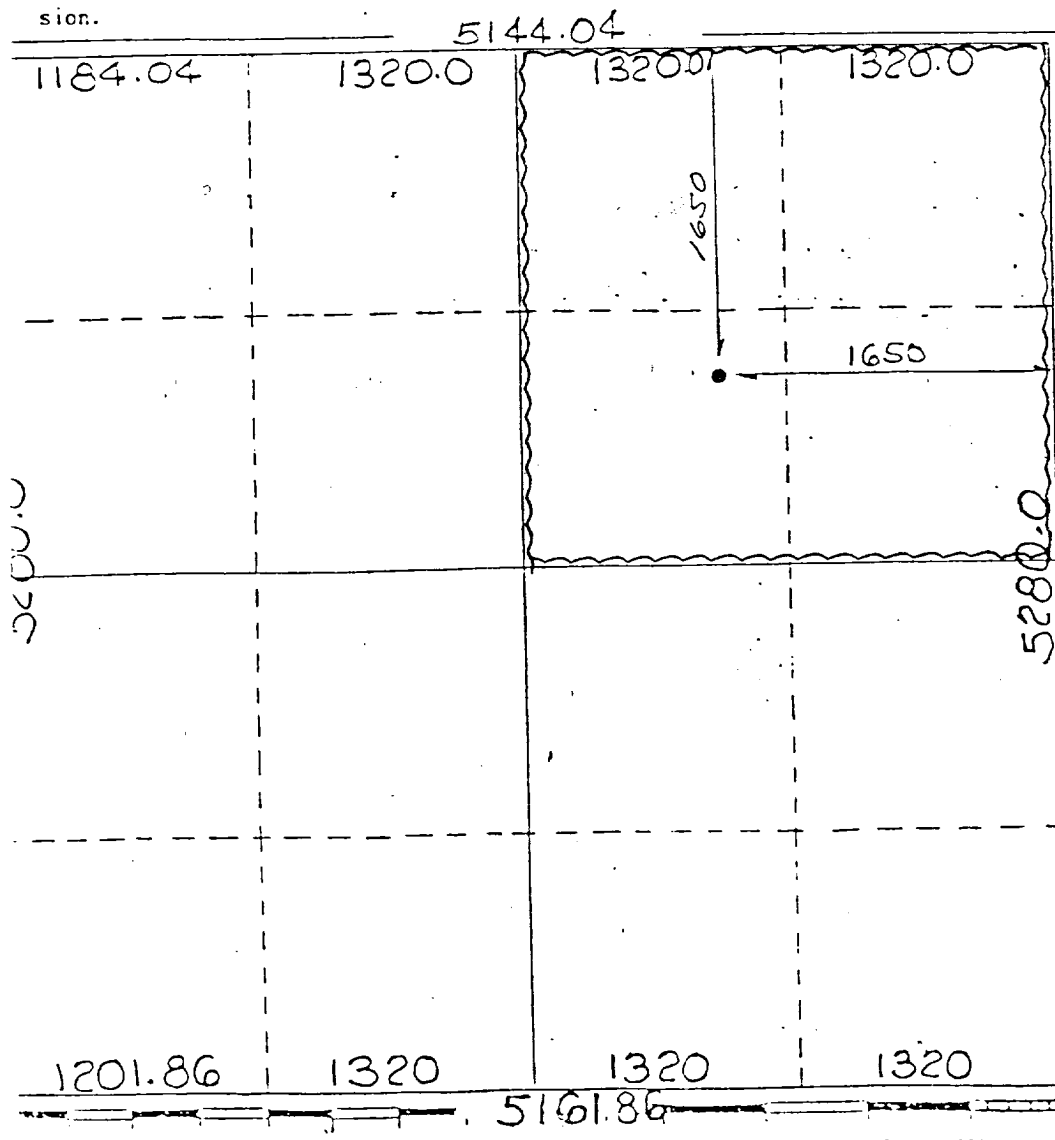
Owner: AMOCO PRODUCTION COMPANY				Lease: _____		Well No. 1835181G	
Letter: G	Section: 18	Township: T18N	Range: R35E	County: UNION			
Well Location of Well:							
1650 feet from the NORTH line and		1650 feet from the EAST line					
Surface Level Elev. 4703'	Producing Formation Tubb		Pool Und. Tubb		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.



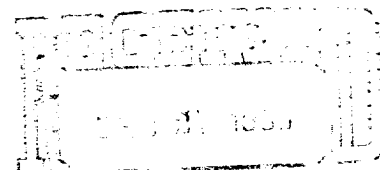
CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name: Peth J. Seno
 Position: Assist. Admin. Analyst
 Company: Amoco Production Company
 Date: November 23, 1983

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.

SEAL OF THE STATE OF NEW MEXICO
 REGISTERED LAND SURVEYOR
 No. 5103
 Certified Professional Engineer
 Date: _____
 Signature: _____
 N.M. LAND SURVEYORS ASSOCIATION
 Certificate No. _____



OIL CONSERVATION DIVISION
SANTA FE