

90-NM-067-235

Laguna Gatuna

Laguna Gatuna NW



Archaeological Clearance Report

for

ANADARKO PRODUCTION COMPANY

Yates "35" Federal Well No. 1 and Access Road

Submitted

by

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

3 February 1990

Permit Number: 14-2920-90-J

Report Number: NMAS 1990-04-F

ABSTRACT

New Mexico Archaeological Services, Inc., representing ANADARKO PRODUCTION COMPANY, undertook a Class III survey of Bureau of Land Management lands scheduled to be impacted by the construction of a drill location and its associated access road. Field work was conducted under sunny, partly cloudy conditions with light southwesterly winds during early- and mid-afternoon. The proposed location will measure 400 X 400 ft (actual area surveyed 4.44 acres). The access road will measure 100 X 7700 ft (actual area surveyed 17.68 acres). Total surveyed acreage 22.12 acres. They will be situated in Sections 35 and 26, T19S, R32E, NMPM, Lea County, New Mexico. Two isolated manifestations (IM) were recorded during this survey. Clearance is suggested for this project.

Introduction

On 1 February 1990, New Mexico Archaeological Services, Inc., (NMAS), Carlsbad, (Permit Number: 14-2920-90-J), undertook for ANADARKO PRODUCTION COMPANY, an archaeological survey of federal land administered by the Bureau of Land Management in Lea County, New Mexico. The reconnoitered area will be impacted by the construction of a drill location and its associated access road. These surveys were undertaken by Dr. Haskell.

Survey Technique

For these investigations, ANADARKO PRODUCTION COMPANY's proposed location was reconnoitered for evidence of man's past activities by walking it in a series of 8.0 m wide, close interval (15° or less), zigzag transects. In addition an added zone extending 20 ft on each side of the staked 400 X 400 ft location, and lying outside the bounds of the proposed work area, was reconnoitered by a similar means. The access road was walked in two, 15 m wide transects. Lath and/or flags are considered to be the center of the proposed road. Methodologically, this procedure served to promote optimal conditions for the visual examination of the area to be impacted by construction-related activities. Field work was conducted under sunny, partly cloudy conditions with light southwesterly winds during early- and mid- afternoon. Ground visibility ranges between 75 and 85%. Field time two hours.

Yates "35" Federal Well No. 1

Location

The proposed location will measure 400 X 400 ft (actual area

surveyed 4.44 acres) on federal land and will be situated 800 ft from the north line and 1650 ft from the east line.

Section 35, T19S, R32E, NMPM, Lea County, NM

Thus it will be situated in the:

NW¼NE¼, Section 35, T19S, R32E, NMPM, Lea County, NM

The associated access road will measure approximately 100 X 7700 ft (actual area surveyed 17.68 acres) and will be situated in the:

NW¼NE¼, Section 26, T19S, R32E, NMPM, Lea County, NM
 NE¼NE¼, Section 26, T19S, R32E, NMPM, Lea County, NM
 SE¼NE¼, Section 26, T19S, R32E, NMPM, Lea County, NM
 NE¼SE¼, Section 26, T19S, R32E, NMPM, Lea County, NM
 SE¼SE¼, Section 26, T19S, R32E, NMPM, Lea County, NM
 NE¼NE¼, Section 35, T19S, R32E, NMPM, Lea County, NM
 NW¼NE¼, Section 35, T19S, R32E, NMPM, Lea County, NM

Map References: USGS LAGUNA GATUNA QUADRANGLE, 7.5 Minute Series, 1984.
 USGS LAGUNA GATUNA NW QUADRANGLE, 7.5 Minute Series, 1984.

Level of Previous Impact

The proposed location is crossed by two aqueducts on the northwest. The access road, consisting of 6800 ft of existing ranch road to be upgraded, crosses two aqueducts, a power line, a gas line and a water line.

Environmental Setting

ANADARKO PRODUCTION COMPANY's proposed location will be situated on a duned landform due north of Laguna Plata. Overlain by a thick aeolian deposit of Holocene and Pleistocene age, the coeval surface is marked by coppice dunes which range up to 6.0 m in height on the south. To the north, dune development is minor, ranging between 0.70 and 1.50 m in height. Deflation basins are uniformly closed and include hemispheric- and crescentic-types. Surficial deposits are made up of loose, non-calcareous, coarse-

grained, sandy loams and loamy sands. Sandy clay loams and clay loams occur to the northeast where lacustrine sediments outcrop. Soil individuals fall within the Typic Torripsamment- and Typic Haplargid- subgroups. Surficial deposits are subject to aeolian processes. Calcareous gravels, along with occasional cherts of gravel size, occur on deflated surfaces. Drainage is internal. Nearest water, seeps and springs, is at Laguna Plata. 1½ miles to the south. Elevation is 3565 ft. Slope is 0.50°. Aspect is multiple (360°).

The scrub formation is made up of plains yucca, shinners oak, sand sage, mesquite, Torrey joint-fir, Hartweg evening-primrose, poverty tree, fluff grass, sand dropseed, mesa dropseed, New Mexico feather grass, big bluestem, sand bluestem, sand muhly, plains brittlegrass and sand bur.

Cultural Resources

Prefield: 29 January 1990, Section 35, (one archaeological site), Section 26, T19S, R32E, (no archaeological sites), Arita K. Slate.

Section 35

ENM 10020 is situated within 450 ft of the proposed location (This site has been collected.)

During the course of this survey, two isolated manifestations (IM) were recorded.

IM 1, consisting of a very light scatter of fire-cracked caliche (approximately ten pieces in 9 X 9 square meter area), is situated in the center of the existing lease road between the two aqueducts. There is no evidence of buried remains. Associated plants include sand sage, plains yucca, broom snakeweed,

big bluestem and sand bur. It is situated in the:

SE¼SW¼SE¼SE¼, Section 26, T19S, R32E, NMPM, Lea County, NM

Map Reference: USGS LAGUNA GATUNA QUADRANGLE, 7.5 Minute Series, 1984.

IM 2, consisting of one, yellowish-brown, granular, quartzite, chopper, 80 X 78 X 47 mm, is situated on a partially denuded surface, 25 ft east of the center of the ranch road at a point 1000 ft north of where the road crosses the aqueduct. Resting on a semi-consolidated, aeolian surface, there is no evidence of buried remains. Associated plants include mesquite, shinnery oak, broom snakeweed, leather-leaf croton, poverty threeawn and mesa dropseed. It is situated in the:

NE¼NW¼SE¼SE¼, Section 26, T19S, R32E, NMPM, Lea County, NM

Map Reference: USGS LAGUNA GATUNA NW QUADRANGLE, 7.5 Minute Series, 1984.

Land usage was locally intense with economic concerns focusing on hunting and gathering. Areal archaeological sites, small and nucleated, are of the special activities zone type. Temporally, most usage occurred during Late Archaic- and Eastern Jornada Mogollon times.

Recommendations

NMAS recommends clearance for ANADARKO PRODUCTION COMPANY's proposed Yates "35" Federal Well No. 1 and its access road and suggests that work-related activities proceed in accordance with company plans (Fig. 1). Clearance, of course, is granted by the Bureau of Land Management. If additional cultural resources are encountered during construction, the BLM and NMAS should be notified immediately. Duned settings are notorious for coverign and uncovering cultural properties.

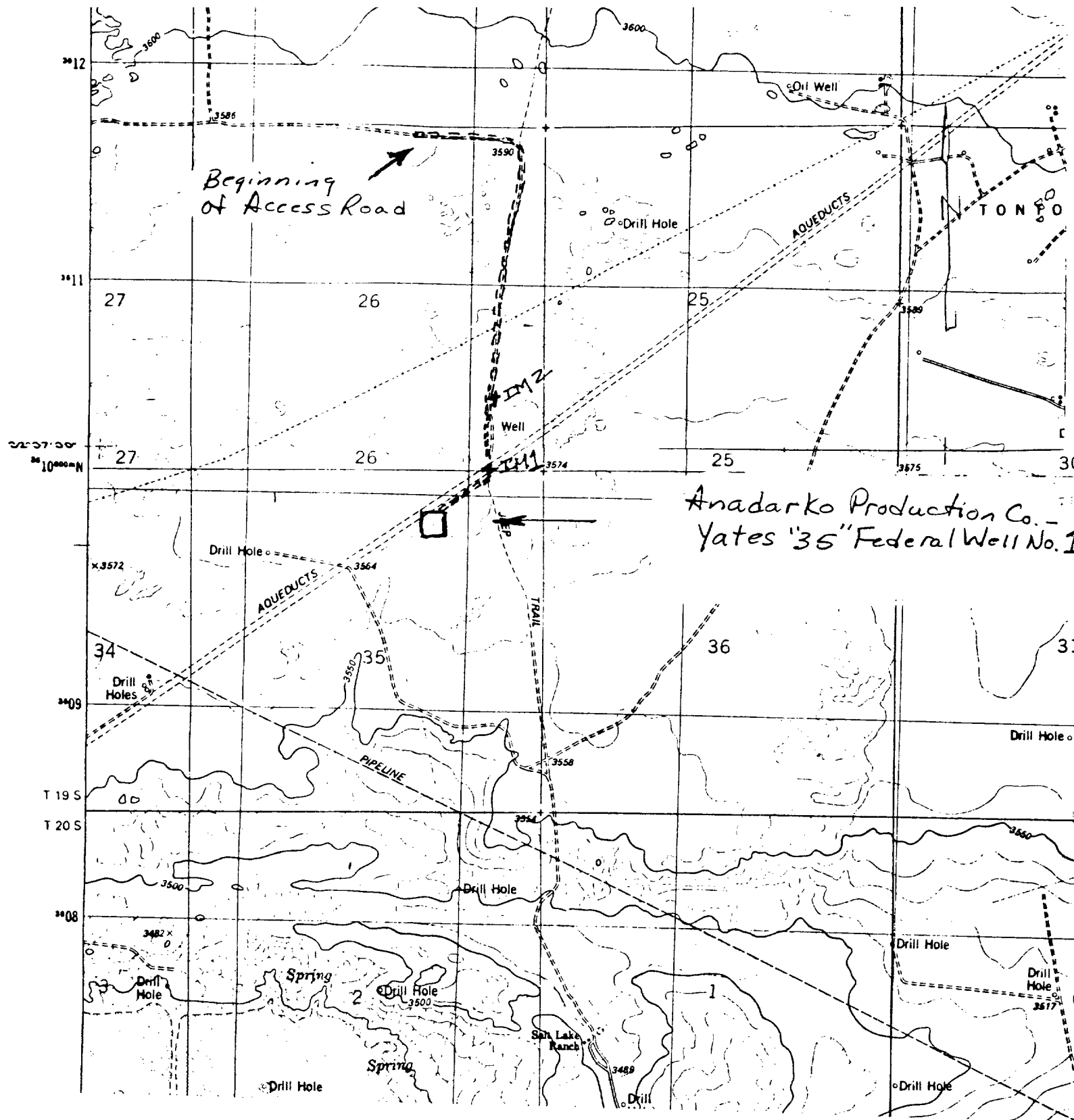


Fig. 1. USGS LAGUNA GATUNA QUADRANGLE, 7.5 Minute Series, 1:24,000, 1984 and USGS LAGUNA GATUNA NW QUADRANGLE, 7.5 Minute Series, 1:24,000, 1984, showing ANADARKO PRODUCTION COMPANY's proposed Yates "35" Federal Well No. 1, 800 FNL, 1650 FEL, and access road Sections 35 and 26, T19S, R32E, NMPM, Lea County, NM

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator ANADARKO PETROLEUM CORP.			Lease YATES "35" FEDERAL		Well No. 1
Unit Letter B	Section 35	Township 19 SOUTH	Range 32 EAST	County NMPM LEA	
Actual Footage Location of Well: 800 feet from the NORTH line and 1650 feet from the EAST line					
Ground level Elev. 3565.9	Producing Formation BS LM/ DELAWARE		Pool WILDCAT	Dedicated Acreage: 40 Acres	

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

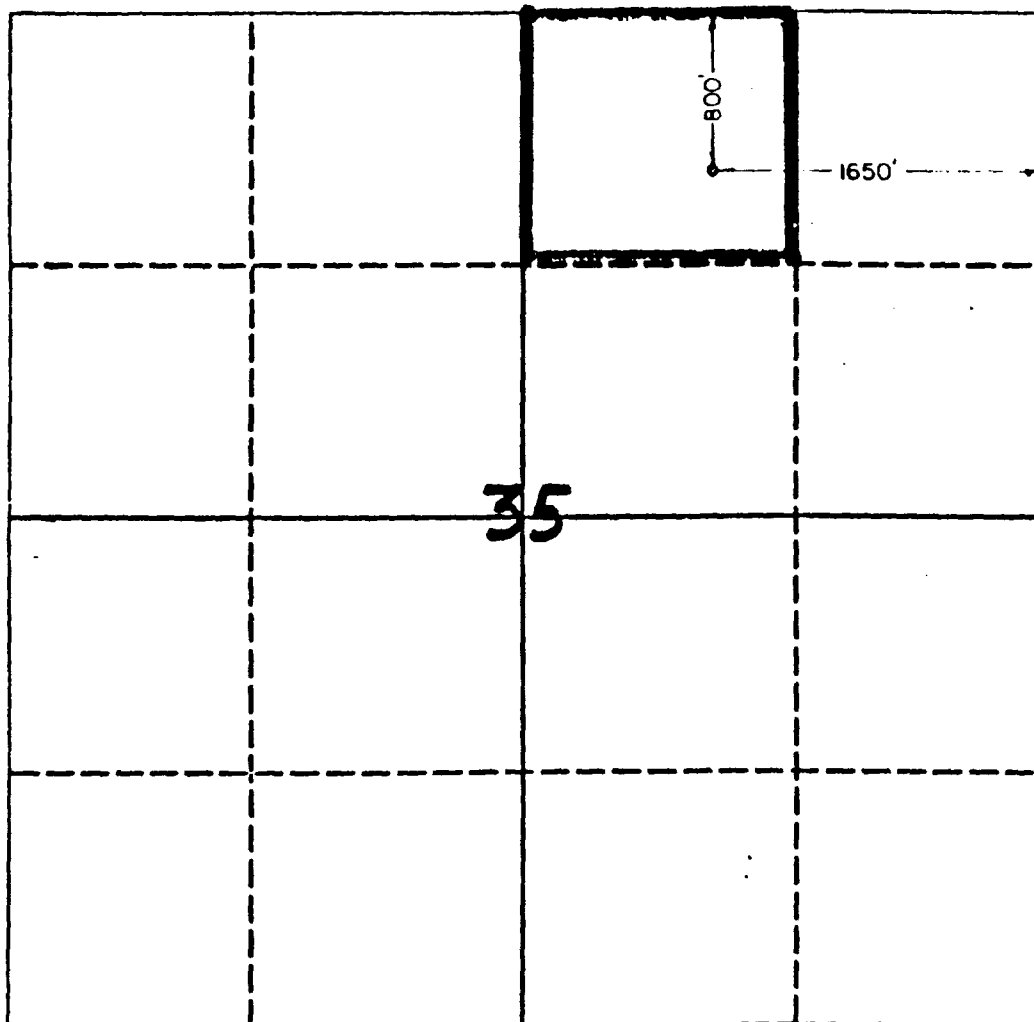
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest 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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature *Jerry E. Buckles*
Printed Name **Jerry E. Buckles**
Position **Area Supervisor**
Company **Anadarko Petro. Corp.**
Date **February 1, 1990**

SURVEYOR CERTIFICATION

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

1/29/90

Signature & Seal of Professional Surveyor

Certificate No.

3648