

NSL-1459

November 12, 1981

Joe D. Ramey, Director New Mexico Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87501

Dear Mr. Ramey:

Subject: Mesa Petroleum Co.

Alkali Federal #7 2280 FNL & 1680' FEL Sec 22, T5S, R25E

Chaves County, New Mexico

under Abo Gos NS 10 9 10 mm.

Application is hereby made for administrative approval of an unorthodox location for subject well due to the presence of archaeological material and topographical constraints at the possible orthodox locations in the northeast quarter 160 acre proration unit to be assigned to this well.

Exhibit I is an area land map showing offset operators, Exhibit II is the form ClO2 showing mineral ownership, Exhibit III is the archaeological report outlining the necessity for moving the location as does Exhibit IV which is a topographic map of the area.

Offset Operators/Lease Holders have been provided a copy of this letter by <a href="Mail">Certified</a> <a href="Mail">Mail</a>.

Expeditions handling of this request and issuance of appropriate administrative order is appreciated.

Yours very truly,

Mesa Petroleum Co.

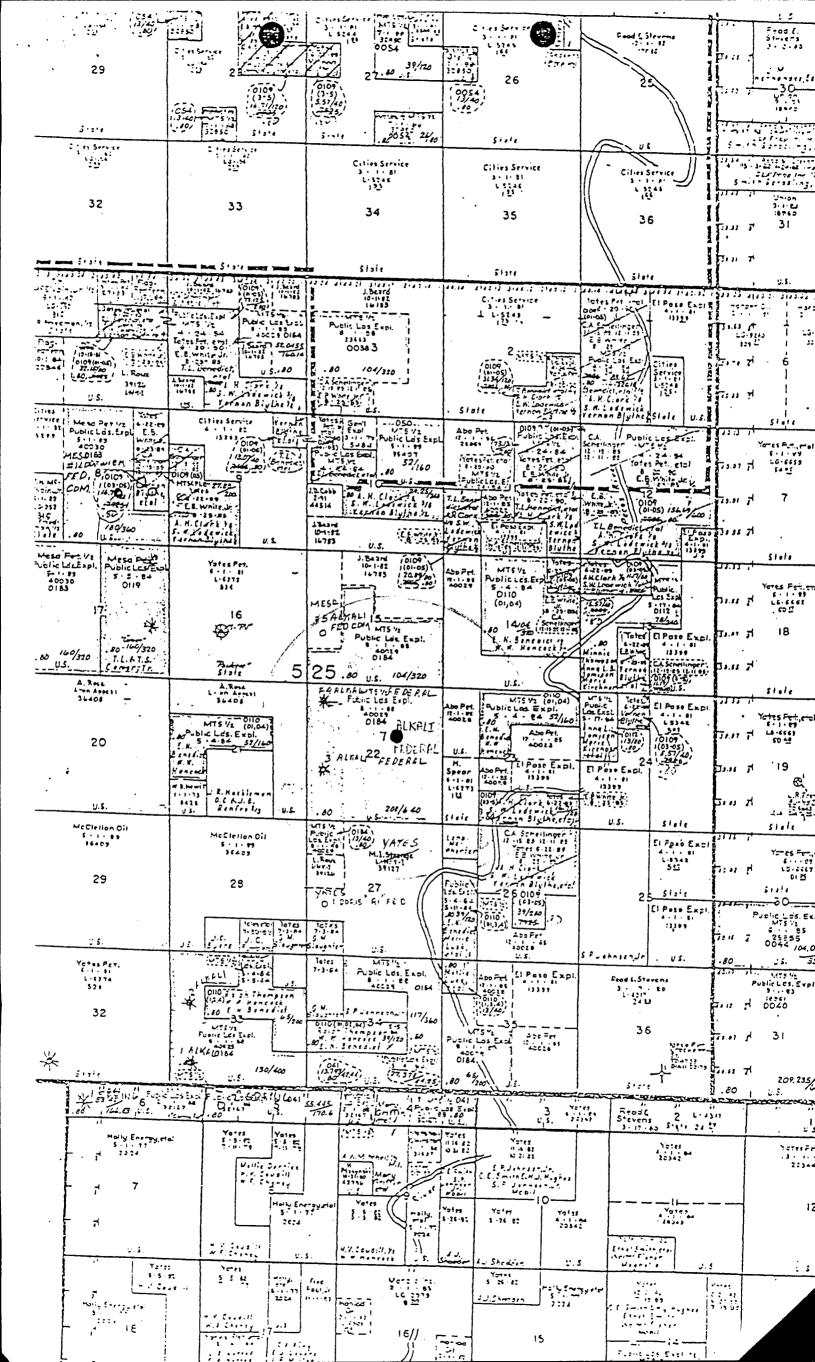
R.E. Ma

R.E. Mathis

Regulatory Coordinator Permian Basin Division

Attachments (Exhibits I,II,III,IV)

xc: ABO PET, M. SPEAR, PLE, MTS, YATES PET



STATE OF NEW MEXICO P. O. DOX 2088 ENGY AND MINERALS DEPARTMENT SANTA FE, NEW MEXICO 87501 All distances must be from the outer houndaries of the Secti 0100 Well No. Alkali Federa⊾ Mesa Petroleum Co. Hange Leller County Township Section G 22 5 South 25 East S.Chaves al l'astuge Location of Well; 2280 test from the 1680 North ' East line frot from the line, and nd Level Clay. Dedicated Acreage: Producing Formation 3696 UNDESIGNATES NE 4 ABO 160 Acres . Outline the acrenge dedicated to the subject well by colored pencil or hachure marks on the plat below. 1. 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? 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 Division. CERTIFICATION I hereby certify that the information con-MESA toined herein Is true and complete to the ETAL NM-40029 Name Position REGUL Company MESA PETROLEUM Date 1680' I hereby certify that the well location shown on this plut was plotted from field of octual surveys made by me or Sec. 22, T.5 S., R.25 E., N.M.P.M. der my supervision, and that the same Is true and correct to the best of my knowledge and belief. JAQUES

6290

# Archaeological Clearance Report

for

MESA PETROLEUM CO.

Alkali Federal Well No. 7

Prepared

Ву

John C. Haight Research Assistant

Submitted

Ву

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

2 November 1981

Permit No. 81-NM-306

#### **ABSTRACT**

New Mexico Archaeological Services, Inc., representing MESA PETROLEUM CO., Midland, undertook an archaeological reconnaissance of Bureau of Land Management lands scheduled to be impacted by the construction of a drill location and its associated access road. The investigated areas are situated in Section 22, T5S, R25E, NMPM, Chaves County, New Mexico. Two archaeological sites, NMAS 5208 and NMAS 5209, and eight isolated cultural resources(CR) were recorded during the course of this reconnaissance. NMAS is suggesting clearance for MESA PETROLEUM's proposed work provided the archaeological sites are avoided.

## Introduction

On 26 October 1981, New Mexico Archaeological Services, Inc., (NMAS), Carlsbad, undertook for MESA PETROLEUM CO., Midland, an archaeological reconnaissance of federal lands administered by the Bureau of Land Management in Chaves County, New Mexico. The reconnoitered area will be impacted by the construction of a drill location and its associated access road. This project was advanced by Mr. Lloyd Reed, Regulatory Agent, MESA PETROLEUM CO., Roswell, and administered by Dr. J. Loring Haskell, Principal Investigator, NMAS, Inc. This reconnaissance was undertaken by Mr. John C. Haight, Research Assistant, NMAS.

### Survey Technique

For this investigation, MESA PETROLEUM CO.'s proposed location was reconnoitered for evidence of man's past activities by walking it in a seris of 25 ft wide, close interval (15° or less), zigzag transects. In addition an added zone embracing to 20 ft on each side of the staked 400 X 400 ft location, and hence lying outside the bounds of the proposed work area, was reconnoitered by a similar means. As for the access road, it was walked in two 25 ft wide transects. Methodologically, this procedure served to promote optimal conditions for the visual examination of areas to be impacted by construction-related activities.

### Alkali Federal Well No. 7

### Location

The proposed location will measure 400 X 400 ft on federal lands and will be situated 2180 ft from the north line and 1780 ft from the east line of:

Section 22, T5S, R25E, NMPM, Chaves County, NM
Thus it will be situated in the:

SW\(\frac{1}{2}\), Section 22, T5S, R25E, NMPM, Chaves County, NM

The associated access road will measure approximately 20 X 3500 ft and will be situated in the:

NW\(\frac{1}{2}\), Section 22, T5S, R25E, NMPM, Chaves County, NM SW\(\frac{1}{2}\), Section 22, T5S, R25E, NMPM, Chaves County, NM SE\(\frac{1}{2}\), Section 22, T5S, R25E, NMPM, Chaves County, NM SW\(\frac{1}{2}\), Section 22, T5S, R25E, NMPM, Chaves County, NM

Map Reference: USGS COTTONWOOD DRAW QAUDRANGLE, 7.5 Minute Series, 1967. Terrain

MESA PETROLEUM's proposed location will be situated on a gently sloping plain which is broken by limestone and gypsum eminences on the north and west. AReal sheetwash is heavy with drainage being to the east and tributary to Cocklebur Draw. Soil individuals are composed of moderately-compacted, calcareous, silt loams and sandy clay loams. The coeval surface is marked by a scree of quartzite, chert, and limestone cobbles and gravels. Pedons belong to the Typic Palerothid and Typic Gypsiorthid subgroups.

Areal soils host a sparse overstory of <u>Prosopis juliflora</u>, <u>Yucca glauca</u>, <u>Condalia ericoides</u>, and <u>Acacia greggii</u>. Attendent forbs include <u>Gutierrezia sarothrae</u>, <u>Coldenia canescens</u>, <u>Senecio longilobus</u>, <u>Croton sp.</u>, and <u>Circium sp.</u> The Gramineae, represented by <u>Hilaria mutica</u>, <u>Bouteloua spp.</u>, <u>Scleropogon brevifolius</u>, <u>Tridens pulchellus</u>, and <u>Muhlenbergia porteri</u>, is the dominant component of the floral community.

### Cultural Resources

Two archaeological sites, NMAS 5208 and NMAS 5209, and eight isolated cultural resources were recorded during the course of this reconnaissance. CR 1 consists of a quartzite core at a point approximately 1900 ft west of the location on the proposed access road. It is situated in the:

NW\(\frac{1}{2}\)NW\(\frac{1}{2}\), Section 22, T5S, R25E, NMPM, Chaves County, NM UTM: Zone 13, N3,746,600; E563,980

Map Reference: USGS COTTONWOOD DRAW QUADRANGLE, 7.5 Minute Series, 1967.

CR 2 consists of a quartzite biface at a point approximately 1400 ft west of the location on the proposed access road. It is situated in the: SW\(\frac{1}{2}\)NE\(\frac{1}{2}\)SE\(\frac{1}{2}\)NW\(\frac{1}{2}\), Section 22, T5S, R25E, NMPM, Chaves County, NM

UTM: Zone 13, N3,746,570; E564,140

Map Reference: USGS COTTONWOOD DRAW QUADRANGLE, 7.5 Minute Series, 1967.

CR 3 consists of a quartzite primary decortication flake and two quartzite cores at a point approximately 1300 ft west of the location on the proposed access road. It is situated in the:

SW\(\frac{1}{2}\) Section 22, T5S, R25E, NMPM, Chaves County, NM UTM: Zone 13, N3,746,560; E564,180

Map Reference: USGS COTTONWOOD DRAW QUADRANGLE, 7.5 Minute Series, 1967.

CR 4 consists of a chert core at a point approximately 1200 ft west of the location and 15 ft south of the proposed access road. It is situated in the:

SE\he\setion 22, T5S, R25E, NMPM, Chaves County, NM UTM: Zone 13, N3,746,540; E564,210

Map Reference: USGS COTTONWOOD DRAW QUADRANGLE, 7.5 Minute Series, 1967.

CR 5 consists of a chert secondary decortication flake and two quartzite primary decortication flakes at a point approximately 100 ft west of the location on the proposed access road. It is situated in the:

SE\he\setion 22, T5S, R25E, NMPM, Chaves County, NM UTM: Zone 13, N3,746,560; E564,240

Map Reference: USGS COTTONWOOD DRAW QUADRANGLE, 7.5 Minute Series, 1967.

CR 6 consists of two quartzite primary decortication flakes and one chert primary decortication flake at a point approximately 700 ft west of the location on the proposed access road. It is situated in the:

SW\(\frac{1}{2}\), Section 22, T5S, R25E, NMPM, Chaves County, NM UTM: Zone 13, N3,746,540; E564,350

Map Reference: USGS COTTONWOOD DRAW QUADRANGLE, 7.5 Minute Series, 1967.

CR 7 consists of a quartzite core at a point approximately 500 ft west of the location on the proposed access road. It is situated in the:

SEኒNWኒSWኒNEኒ, Section 22, T5S, R25E, NMPM, Chaves County, NM

UTM: Zone 13, N3,746,510; E564,400

Map Reference: USGS COTTONWOOD DRAW QUADRANGLE, 7.5 Minute Series, 1967.

CR 8 consists of four quartzite cores and one granite primary decortication flake at a point approximately 100 ft west of the location on the proposed access road. It is situated in the:

NW\(\frac{1}{3}\)Section 22, T5S, R25E, NMPM, Chaves County, NM UTM: Zone 13, N3,746,480; E564,540

Map Reference: USGS COTTONWOOD DRAW QUADRANGLE, 7.5 Minute Series, 1967.

Albeit referred to as isolated cultural occurrences (CR), recorded cultural properties collectively constitute a very light scatter. Criteria presently employed by NMAS, pertaining to site taxonomy, precludes the assignment of these remains to either of NMAS' two minimal types viz., the occupation zone or the task locus. (See NMAS' difinitions at the end of this report.)

NMAS 5208

Map Reference: USGS COTTONWOOD DRAW QUADRANGLE, 7.5 Minute Series, 1967.

Ownership: Bureau of Land Management Administration

Dimension of Resources: 15 X 15 m

Typological Designation: Task Locus

Temporality: Unknown

Nature of Cultural Resources: NMAS 5208, a small task locus, is situated on the north-facing slope of a linear-shaped projection of the ridge. The site overlooks a small drainage to the north. Resources consist of a light concentration of quartzite cores, chert and quartzite primary and secondary decortication flakes, and chert and quartzite spalls. This site has been termed a task locus owing to the concentration of cultural detritus. Temporal and cultural parameters cannot be established because of the absence of diagnosite artifacts.

Further investigation of this site should yield valuable imformation relating to the site's function and techniques of stone-tool manufacture. This should further our understanding of areal archaeology and the composition of task loci.

NMAS 5209

Location: NE $\frac{1}{2}$ SW $\frac{1}{2}$ SW $\frac{1}{2}$ NE $\frac{1}{2}$ , Section 22, T5S, R25E, NMPM, Chaves County, NM UTM: Zone 13, N3,746,410; E564,490

Map Reference: USGS COTTONWOOD DRAW QUADRANGLE, 7.5 Minute Series, 1967.

Ownership: Bureau of Land Management Administration

Dimension of Resources: 122 X 122 m

Typological Desingation: Task Locus

Temporality: Unknown

Nature of Cultural Resources: NMAS 5209, a task locus, is situated on a saddle-like feature as well as the crest of a locally prominent eminence which overlooks Cocklebur Draw to the east. Overall, this

area is subject to a high level of ephemeral sheetwash. Resources consist of small concentrations of chert and quartzite primary and secondary decortication flakes, spalls of these materials, quartzite and chert cores, quartzite hammerstones, amorphous scatters of burned-and fire-cracked limestone cobbles and gravels, and a cairn-like feature built of limestone slabs. This feature, situated on a small knoll, measures 2 m in diameter. Its walls have uniformly slumped toward the west. Features similar to this one are known elsewhere in the immediate vicinity viz., NMAS 5151. While direct associations are lacking, they are thought to have been used for storage purposes. Temporality and authorship are a moot point; however, to the south, they occur in Jornada Mogollon (A.D. 950-1350) contexts.

Further investigation of this site should help to illuminate the nature of flaked-tool manufacture as well as the function of the cairn-like feature.

# Recommendations

NMAS is <u>suggesting</u> clearance for MESA PETROLEUM's proposed location provided the <u>archaeological</u> sites are avoided. NMAS 5208 is situated approximately 50 ft east of the proposed access road and hence will not be impacted by construction-related activities (Fig. 1). As for NMAS 5209, the proposed location will impact the site at its southwest corner. To avoid the site, NMAS <u>suggests</u> that the location be shifted 100 ft south and 100 ft east, i.e., 2280 FNL and 1680 FEL, Section 22, T5S, R25E (Fig. 1). MESA is amenable to the proposed change. 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. <u>Archaeologically sensitive areas are to be avoided by men</u> and materiel.

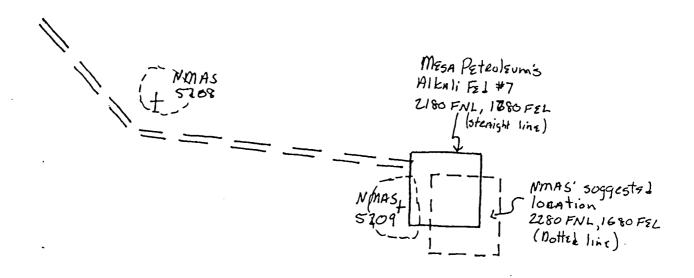


Fig. 1 Schematic representation showing MESA PETROLEUM's Alkali Federal Well No. 7 (2180 FNL and 1780 FEL) and its access road vis a vis NMAS 5208 and NMAS 5209. NMAS suggests that the proposed location be shifted 100 ft south and 100 ft east, i.e., 2280 FNL and 1680 FEL, Section 22, T5S, R25E, (broken line) in order to avoid NMAS 5209.

