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Form approved.
Budget Bureau No. 42-R1425

ULATED STATES
DEPARTMENT OF THE INTERIOR

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FEB ? 9 1830
U.S. GEULUGICAL SUNVEY
ARTESIA, NEW MEXICO

GHINOT DE DICHIELS.

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.

810 yeb Sun	TITLE_	President	DATE 2/25/80
(This space for Federal or State office use)		3.73	S. 3 (2)
PERMIT NO.		APPROVAL DATE	e e grande
APPROVED BY	TITLE		DATE

## MEXICO OIL CONSERVATION COMMIS N WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Supersedes C-128 Effective 1-1-85

Pennzoil Federal 1 Boyd Operating Co. Fector a≠ 9 South Chaves teet transing East Wolfcamp Undesignated **37**33.3 butine 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 ownership dated by communitization, unitization, force-pooling, etc? If answer is "no," list the owners and tract descriptions which have actually beer consolidated. (Links SUREY this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated the ARTISALIZATION, unities forced-pooling, or otherwise for until a non-standard unit, eliminating such interests. No allowable will be assigned to the well until all interests have been consolidated the ARTISTALIATION, unitization, forced-pooling, or otherwise for until a non-standard unit, eliminating such interests, has been approved by the Commis-CERTIFICATION sert ty that the information con-T. M. Boyd President Boyd Operating Company 2/25/80 660<sup>1</sup>

1320 1680



## United States Department of the Interior

GEOLOGICAL SURVEY
P. O. Drawer U
Artesia, New Mexico 88210

MAR 17 1980

O. C. D.

March ARTS, 1985 CE

Boyd Operating Company
P. O. Box 1756
Roswell, New Mexico 88201

Gentlemen:

BOYD OPERATING COMPANY
Pennzoil Fed No. 1
2145 FSL 660 FEL Sec. 18 T.9S R.26E
Chaves County Lease No. NM 14294

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 5,700 feet to test the Wolfcamp is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

- 1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
- 2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
- 3. All access roads will be limited to a 12 foot wide driving surface, excluding turnarounds. Surface disturbance associated with road construction will be limited to 20 feet in width.
- 4. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should not be less than 8" x 5" in size and each page should identify the well.
- 5. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
- 6. Before drilling below the 8-5/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
- 7. A kelly cock will be installed and maintained in operable condition.

- 8. After setting the 8-5/8" casing string and before drilling into the Wolfcamp 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.
- 9. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp 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.
- 10. Notify the Survey by telephone 24 hours prior to spudding well.
- 11. Cement behind the 13-3/8" casing must be circulated.
- 12. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

George H. Stewart Acting District Engineer

## FECEIVED

#### SURFACE USE

FEB 2 9 1980

#### AND OPERATIONS PLAN

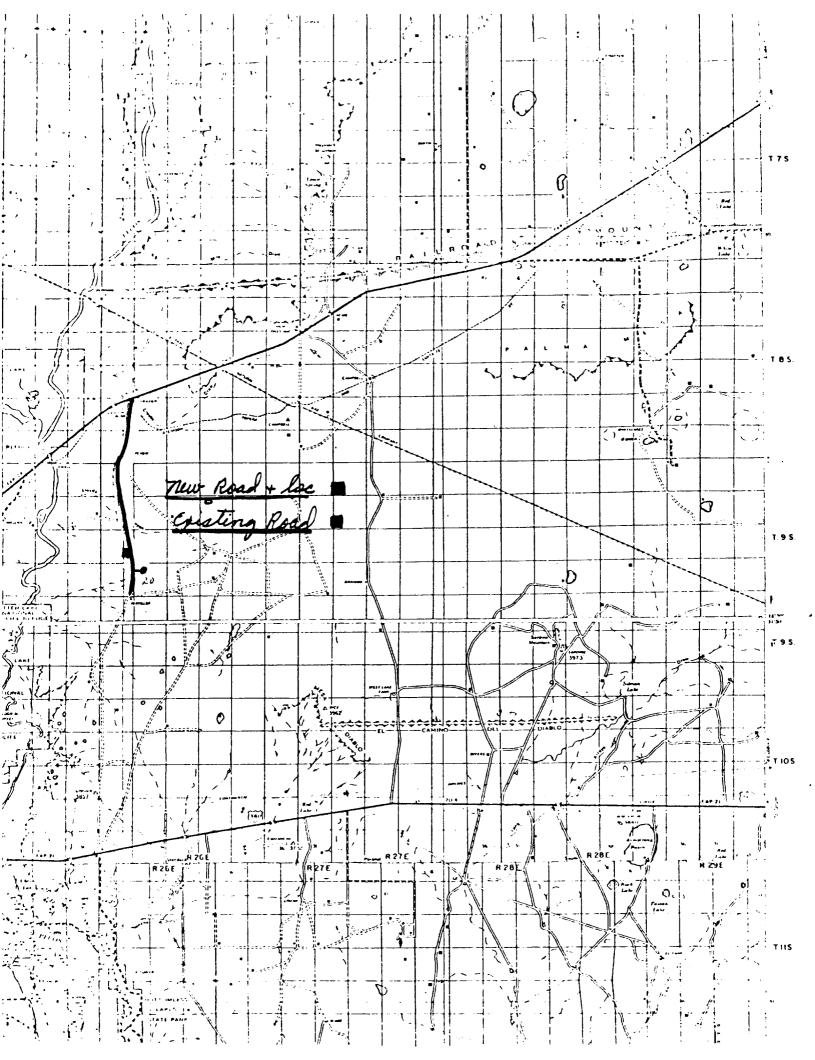
U.S. GEOLUGICAL SURVEY ARTESIA, NEW MEXICO

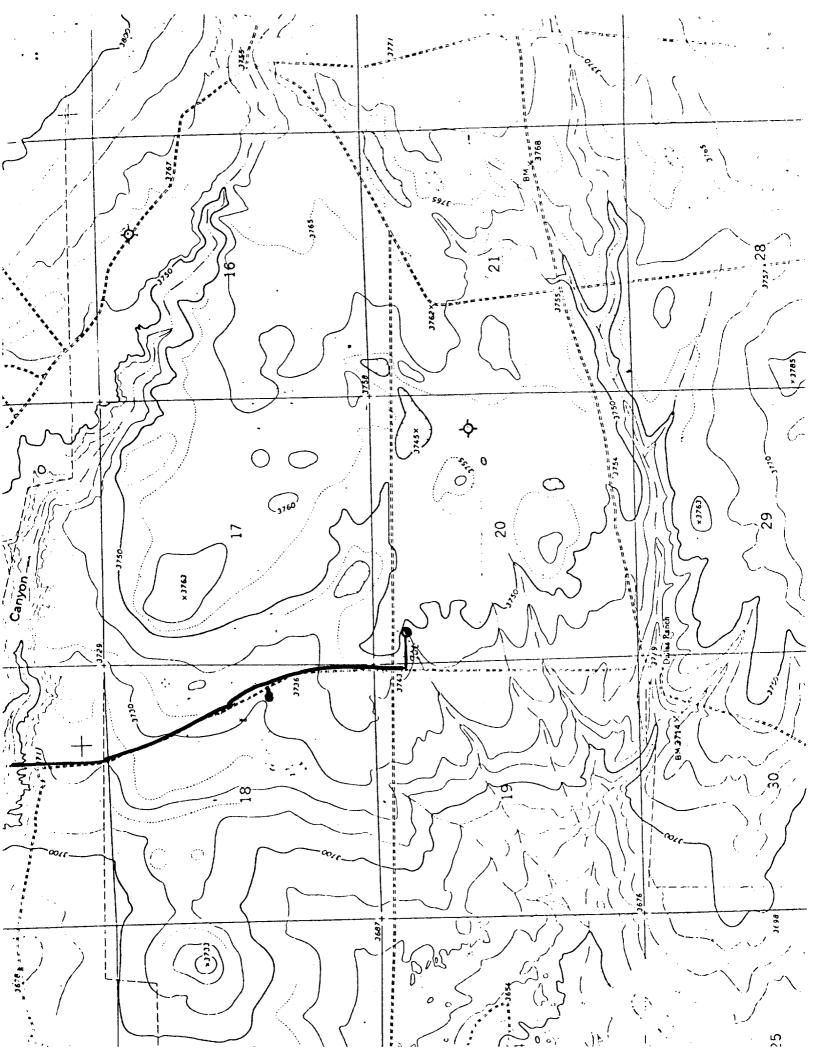
WEI	LL NAME: Pennzoil Federal #1
LOC	CATION: 2145' FNL, 660 FEL Sec. 18, T9S, R26E
1.	Existing Roads: Improved caliche lease road approximately 500'
	east of location.
2.	Planned Access Roads: Build 6" thick, 12' wide watered and compacted
۷.	road to south east corner of location.
	Location of Existing Wells: Wells in Section 3, 10, 20 and 31 of T9S,
3.	R26E.
4. Gat	Location of Tank Batteries, Production Facilities, and Production, thering, and Service Lines: If well is a producer, production equipment
wi	ll be on the southwest corner of location pad. All lines will stay on
pa	d.
<u></u>	
5.	Location and Type of Water Supply (rivers, creeks, lakes, ponds, wells) Water will be trucked from Roswell, approximately 22 miles.
6.	Source of Construction Materials: From Mr. David McRae, surface owne
	in Section 6, T9S, R26E NMPM
7.	Methods of Handling Waste Disposal: Dig 5' deep pit on northeast
, •	corner of location, reserve pit and working pits for drilling fluid
	and cuttings.

8.	Ancilliary Facilities: None
9.	Well Site Layout: Exhibit "A"
10.	Plans for Restoration of the Surface: When well is completed all pits will be closed and cleaned up. If plugged and abandoned, pits will be closed, road and location will be ripped and marker set.
	pits will be elebed, lett the
11.	Other Information: Location is on gentle slope, sandy soil with mesquite and native grass.
12.	Lessee's or Operator's Representative:
	Business Phone:  623-6044  Home Phone:
13.	Certification:
_	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 Boyd Operating Company, and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.  2/25/80  Date  Company Representative
	President
	Title

BOYD OPERATING COMPANY PENNZOIL FEDERAL #1 2145 FNL, 660 FEL, T9S, R26E, Sec. 18 Chaves County, New Mexico

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1717 W. Second St.

Phone 623-2432

Roswell, New Mexico 88201

Suggested Drilling Fluid Program

June 13, 1979

RECENTED

JUN 28 1070

U.S. HEPLICHOAL SURVEY
ANTEGIA, HER HE SEED

Boyd Operating Co. Drawer I Artesia, N. M. 88210

Dear Mr. Morgan;

Thank you for the opportunity to be of service to you and Boyd Operating Co.

The following is our proposed drilling fluid program for your "Blakemore Federal #1" to be drilled in Section 20, T-9-S, R-26-E, Chaves County, New Mexico.

Surface: 300' of 13 3/8"

We suggest spudding with a gel lime slurry having 32 to  $34 \, \mathrm{Sec./1000^{\,cc}}$  viscosity. This fluid should be adequate to drill to casing point.

No trouble is anticipated in this interval.

<u>Intermediate</u>: <del>1,20</del>0' of 8 5/8"

We suggest drilling this interval with native mud and maintaining a stable 33 to 35 Sec./ $1000^{\text{CC}}$  viscosity.

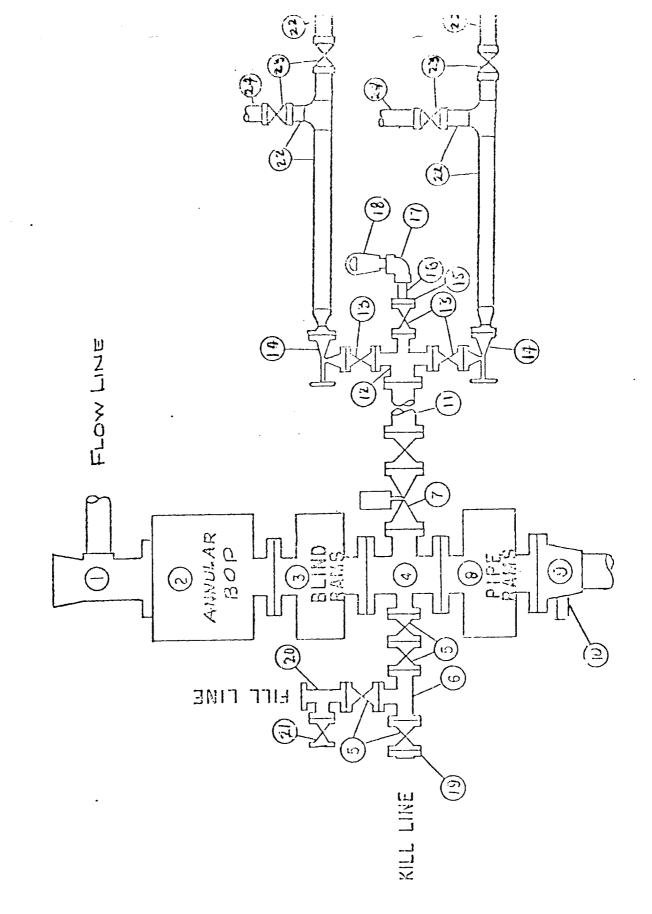
It is very important to maintain a stable viscosity to minimize hole trouble. This fluid should be adequate to drill to casing point.

Production: 5,000' of 5 1/2"

We suggest drilling out from under the intermediate casing with water and using Jet Jel to keep the water clean. This fluid should be adequate to drill to 5,000' or 150' above the Abo formation.

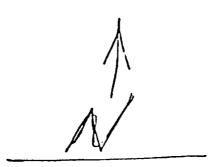
At this point we suggest raising the viscosity to 38 to  $40 \, \mathrm{Sec./1000^{\circ}}$  and adding 3 to 4% oil to help stablilize the hole. This fluid should be adequate to drill to  $5,800^{\circ}$ , where we suggest adding starch to lower the fluid loss to  $10 \, \mathrm{to} \, 15^{\circ}$ .

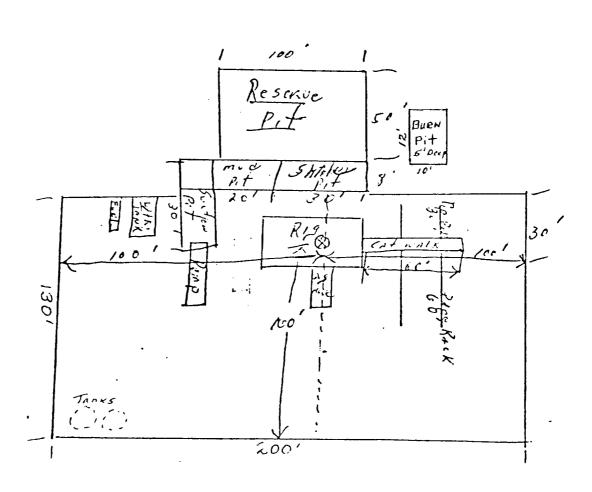
BLOWOUT PREVENTER SPECIFICATION



# Ris 4/ Locution bound 7.4 Specs,

EXHIBIT - A





Shaffer 10" Series 900 Type B B.O.P. with  $4\frac{1}{2}$ " pipe rams and blanks. Hydraulic operated 6,000# test, 3,000# WOP.

## K DRILLING CO., INC. EQUIPMENT DESCRIPTION

All equipment should be at least 3,000 psi WP or higher unless otherwise specified.

- 1. Bell nipple.
- 2. Hydril bag type preventer
- 3. Ram type pressure operated blowout preventer with blind rams.
- 4. Flanged spool with one 3-inch and one 2-inch (minimum) outlet.
- 5. 2-inch (minimum) flanged plug or gate valve.
- 6. 2-inch by 2-inch by 2-inch (minimum) flanged tee.
- 7. 3-inch gate valve.
- 8. Ram type pressure operated blowout preventer with pipe rams.
- 9. Flanged type casing head with one side outlet.
- 10. 2-inch threaded (or flanged) plug or gate valve. Flanged on 5000# WP, threaded on 3000# WP or less.
- 11. 3-inch flanged spacer spool.
- 12. 3-inch by 2-inch by 2-inch by 2-inch flanged cross.
- 13. 2-inch flanged plug or gate valve.
- 14. 2-inch flanged adjustable choke.
- 15. 2-inch threaded flange.
- 16. 2-inch XXH nipple.
- 17. 2-inch forged steel 90°Ell.
- 18. Cameron (or equal.) threaded pressure gage.
- 19. Threaded flange.
- 20. 2-inch flanged tee.
- 21. 2-inch flanged plug or gate valve.
- 22. 2½-inch pipe, 300' to pit, anchored.
- 23. 2½-inch SE valve.
- 24. 2; -inch line to steel pit or separator.

#### NOTES:

- 1. Items 3, 4 and 8 may be replaced with double ram type preventer with side outlets between the rams.
- 2. The two valves next to the stack on the fill and kill line to be closed unless drill string is being pulled.
- 3. Kill line is for emergency use only. This connection shall not be used for filling.
- 4. Replacement pipe rams and blind rams shall be on location at all times.
- 5. Only type U, LSW and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.
- Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.

#### ARCHAEOLOGICAL CLEARANCE REPORT

for

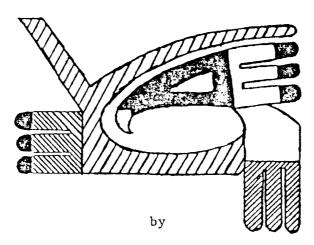
BOYD OPERATION COMPANY

RECEIVED

Penzoil Federal No. 1

80-197

MAR 1 0 1980 U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO



Rodrick MacLennan

Edited and Submitted by

Scott C. Schermer
Acting Director
AGENCY FOR CONSERVATION ARCHAEOLOGY

Llano Estacado Center for Advanced Professional Studies and Research

Eastern New Mexico University Portales, New Mexico 88130

March 5, 1980

#### INTRODUCTION

An archaeological reconnaissance was recently completed by the Agency for Conservation Archaeology, Eastern New Mexico University, Portales, New Mexico, for Boyd Operation Company in Chaves County, New Mexico. The reconnoitered area will be impacted by the construction of a well pad. The project was administered jointly by Mr. Tom Boyd of Boyd Operation Company and Scott C. Schermer, Acting Director, Agency for Conservation Archaeology. This report was prepared by the Roswell Office of ACA, Rodrick MacLennan, Manager.

The field work was conducted on March 4, 1980 by Rodrick MacLennan. Windy but clear field and weather conditions prevailed throughout the course of this reconnaissance. This survey was completed under Federal Antiquity Permit No. 79-NM-049. 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 well pad was accomplished by walking a series of parallel transects. Each transect was covered in a tightly spaced zigzag pattern. The distance between transects was 25 feet. This method maximized the opportunity of observing any cultural resources either within or near the proposed area of impact.

#### Penzoil Federal No. 1

#### Location

The proposed well pad is located 5 miles south of Frazier, New Mexico, in the Pecos River Valley. The pad measures  $400 \times 400$  feet and is situated as follows:

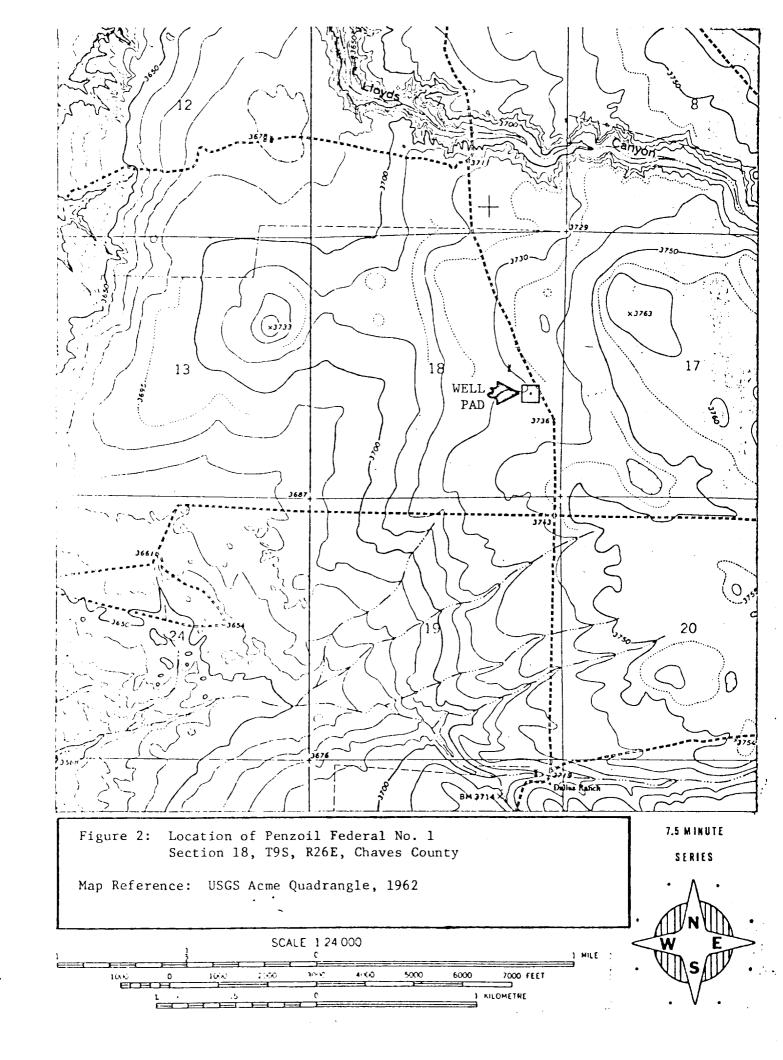
NE4SE4, Section 18, T9S, R26E, NMPM, Chaves County, New Mexico (BLM Mineral)

Map Reference: USGS Acme Quadrangle, 7.5 minute series, 1962 (see Figures 1 & 2).

#### Terrain

The proposed well pad facility is located in the Pecos River Valley and is 1 mile south of Lloyds Canyon. The pad is situated on a flat, first river terrace of the Pecos River. The elevation in the area is approximately 3733 feet.

The soils encountered in the area are predominantly sandy loam. Lithic inclusions within this soil consists of caliche fragments, making up about 7% of the soil content. Taxonomically, this soil can be classified as a member of the Gypsiorthid-Torriorthent-Gypsum Land association.



#### Floristics

The Agency for Conservation Archaeology encountered a sparse floral assemblage in this vicinity. The density of the vegetation in the area is approximately 10 percent, consisting primarily of shrubs. Among the species present are: mesquite (Prosopis juliflora), black grama (Bouteloua eriopoda), blue grama (Bouteloua gracilis), buffalograss (Buchloe dactyloides), hairy grama (Bouteloua hirsuta), little bluestem (Andropogon scoparis), ring muhly (Muhlenbergia torreyi), sideoats grama (Bouteloua curtipendula), and tabosa (Hilaria mutica).

#### Cultural Resources

During the course of this reconnaissance, the Agency for Conservation Archaeology did not encounter any archaeological sites or isolated manifestations either within or near the proposed facility. A review of ACA's site files and the National Register did not show any properties listed for this location.

#### Recommendations

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