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*See Instructions On Reverse Side

NE IEXICO OIL CONSERVATION COMMISSIC WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C -102 Supersedes C-128 Effective 1-1-65

	AI	l distances must be	from the outer boundaries of	the Section.		
Operator			Lease		Well No.	
Dyches and Unit Letter Sect			Castile Fed		1	
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(U.S.	CT_31 1979 CT_31 1979 GEOLOGICAL SURV ESIA, NEW MEXICO		PROFESSIONAL 2310'	tained he best of m Name Partner Position <u>Duches</u> Company Date <u>1 hereby</u> shown on notes of under my	CERTIFICATION certify that the informative rein is true and comple y knowledge and belief. Dynamic Grand Dynamic Grand S MAINSSON 19 certify that the well this plat was platted fr actual surveys made by supervision, and that the nd correct to the best	location field when or the same





United States Department of the Interior

 $C_{\rm e} > 1.0010 {\rm AU} {\rm SURVES}$

D. O. Drawer U Artesia, New Mexico 88210 NOV J 9 1979

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D. D. C. ARTERIA, OFFICE

November 16, 1979

Dyches & Adkisson P. O. Box 8425 Midland, Texas 79703 DYCHES & ADKISSON Castile Federal No. 1 2310 FSL 2310 FEL Sec. 29 T.26S R.27E Eddy County Lease No. NM 22998

Gentlemen:

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 900 feet to test the Castile Lime formation 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 GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL LEASES, dated July 1, 1978.
- Prior to commencing construction of read, pad, or other associated developments, operator will provide the dirt contractor with a copy of the SURFACE USE PLAN and this approval including the GENERAL REQUIREMENTS.
- 3. Submit a Daily Report of Operations from spud date until the Well Completion Report (form 9-330) is filed. The progress report should be not less than 8" x 5" in size and each page should identify the well.
- 4. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Requirements. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
- 5. Cement behind the 4-1/2" casing must be circulated.
- 6. 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 THOMAS DYCHES Independent Oil Producer P.O. Box 8425 Midland, Texas 79703 915/697-5457

Application for Drilling

Dyches & Adkisson No. 1 Castile Federal 2310' FSL & 2310' FEL Township 26 South, Range 27 East, N.M.P.M. Section 29 Eddy County, New Mexico

In conjunction with Form 9-331C, Application for Permit to Drill subject well, Dyches & Adkisson of Midland, Texas, submits the following ten (10) items of pertinent information in accordance with United States Geological Survey requirements:

1. The geologic surface formation is Permian.

2. Estimated tops of geologic markers are as follows:

Surface 65'	- Brown shale Anhydrite
100'	Brown shale
115'	Anhydrite
690'	Broken anhydrite
750 '	Anhydrite & lime
870'	Brown lime (Castile lime)

3. The estimated depths at which anticipated water, oil, and/or gas formations are expected to be encountered:

Based on history of abandoned wells in the area, oil and small amounts of water should be encountered at approximately 870'. The well will be produced from this zone, the Castile lime.

4. Proposed Casing Program:

4 1/2", 9.50#/ft. New or acceptable used casing will be run and cemented with Class "C" neat cement from surface to TD of 900'.

5. Pressure Control Equipment:

Because total depth (900^{*}) is above the level at which surface pipe would normally be set & blow out preventer installed and no pressures or water were encountered in the nearby abandoned wells, blow out equipment would be superfluous. For air drilling, a conductor pipe with valve will be set for any pressure control.

6. Mud Program:

Well will be drilled by rotary-air rig.

7. Auxiliary Equipment:

Ingersoll Rand T-4 rotary-air drilling rig owned and operated by Yucca Drilling Company, Artesia, New Mexico.

8. Testing, Logging, & Coring Program:

Gamma ray compensated neutron log from surface to 900' TD.

- 9. No abnormal pressures or temperatures are anticipated.
- 10. Anticipated starting date:

November 12, 1979 (or before)

Surface Use Plan



Dyches & Adkisson No. 1 Castile Federal Lease No. NM-22998 2310' FSL & 2310' FEL Township 26 South, Range 27 East, N.M.P.M. Section 29 Eddy County, New Mexico

This plan is submitted by the operators, Dyches & Adkisson of Midland, Texas, along with the application for permit to drill a 900' test on the above described location. The following information describes all intent with regard to location of proposed well, construction activities, operations, surface disturbance, and rehabilitation of surface after well completion.

- 1. Existing Roads:
 - A. Exhibit "A" is a map showing the location of the proposed well and existing roads in a one mile radius.
- 2. Planned Access Roads:
 - A. Access within 2 miles of well site will be by an existing pipe line road.
 - B. No culverts, cattle guards or gates will be installed.
 - C. Ranch road serving as access from pipe line road to drill site will be improved only slightly to accomodate movement of equipment and personnel. No additional dirt or caliche work will be done.

3. Location of Existing wells:

- A. No existing, producing wells lie within a two mile radius. Abandoned & plugged wells are shown on Exhibit "A".
- 4. Location of Existing and/or Proposed Facilities:
 - A. Exhibit "B" outlines location of production equipment if well is commercial. Flowline & tank battery will be located on well site & no additional surface disturbance will be required.

5. Location & Type of Water Supply:

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A. Well will be drilled by a rotary/air rig thereby requiring very little water. Minimum amounts of water will be transported by Yucca Drilling Company. Any additional water required for well completion will be transported by truck.

- 6. Source of Construction Materials:
 - A. No materials will be required.
- 7. Methods of Handling Waste Disposal:
 - A. Drill cuttings will be disposed of in drilling pit. See Exhibit "B".
 - B. Fluids will be allowed to evaporate in drilling pit; pit will be buried upon completion.
 - C. Any water produced from well will be placed in drilling pit; oil produced will be stored in tanks until sold.
 - D. Laws & regulations pertaining to human waste will be complied with.
 - E. All trash, garbage, junk, and debries will be properly contained & removed.

8. Auxiliary Facilities:

A. None required.

9. Well Site Layout:

- A. Exhibit "B" shows relative location & dimensions of well site, cuttings pit, & major components of drilling equipment.
- B. Because an abandoned well site is being used, only minimal improvement will be required.
- C. Pad & pit area stated & flagged as outlined in Exhibit "B".

10. Plans for Restoration of Surface:

- A. After completion of drilling and/or completion of operations, all equipment and other material not needed for operations will be removed. Pits will be filled, location cleaned to leave well site aesthetically pleasing as possible.
- B. Any pits containing fluids will be fenced until they are filled.
- C. Any special revegetation requirement of Surface Management Agency will be complied with and accomplished as expecitiously as feasible.

11. Other Information:

- A. Land surface is relatively flat and smooth. Elevation is 3190' at well site. No gullies, washes, or depressions in immediate area.
- B. Soil: Sand red clay underlain by caliche.

Flora and Fauna:

A. Vegetative cover is relatively spare consisting mainly of broom weed and perenial native range. Grass dotted with mesquite. Wildlife is typical of semi-arid desert in New Mexico; rabbits, rodents, reptiles, dove, quail and occasional coyote.

Ponds and Streams:

A. None in area.

Residence and Other Structures:

A. No occupied structures in 3 mile radius.

Land Use:

A. Grazing.

Surface Ownership:

A. Well site is on Federal surface. Existing roads on State and Bureau of Land Management land. The access route to well site in Bureau of Land Management surface.

12. Operator's Representative:

The field representatives responsible for assuring compliance with approved surface use and operations plan are as follows:

Tom D. Dyches Chas. A. Adkisson P.O. Box 8425 Midland, Texas 79703 Phone: 915-697-5457

13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 Dyches & Adkisson and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date: 10/31/29

DYCHES & ADKISSON

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Archaeological Clearance Report

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U.S. Geological Survey Artesia, New Mexico

for

Dyches and Adkisson

Castile Federal Well No. 1 Modifications to Existing Lease Roads

Prepared

By

Dr. J. Loring Haskell

Submitted

Вy

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

25 October 1979

Permit No. 79-NM-166

Introduction

On 24 October 1979, New Mexico Archaeological Services, Inc., (NMAS), Carlsbad, undertook for Dyches and Adkisson, Midland, an archaeological reconnaissance of federal lands administered by the Bureau of Land Management in Eddy County, New Mexico. Reconnoitered areas will be impacted by the construction of a drill location and modifications to existing lease roads. This project was advanced by Mr. Tom Dyches, Operator, Dyches and Adkisson, and expedited by Dr. J. Loring Haskell, Principal Investigator, NMAS, Inc.

Survey Technique

For this investigation, Dyches and Adkisson's proposed location was reconnoitered for evidence of man's past activities by walking it in a series of 20 ft wide, close interval (15° or less), zigzag transects. In addition, an added zone embracing 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 were the existing lease roads. Methodologically, this procedure served to promote optimal conditions for the visual examination of areas to be impacted by construction-related activities.

Castile Federal Well No. 1

Location

The proposed location will measure 400 X 400 ft on federal lands and will be situated 2310 ft from the south line and 2310 ft from the east line of:

Section 29, T26S, R27E, NMPM, Eddy County, NM

Thus it will be situated in the:

NW\2SE\2, Section 29, T26S, R27E, NMPM, Eddy County, NM

It is situated on an existing lease road. Map Reference: USGS MALAGA QUADRANGLE, 15 Minute Series. 1945. Terrain

The proposed location is situated on a low, north-south oriented ridge overlooking Owl Draw on the south. This landform is demarcated on the north by a prominent eminence and on the south by the Rustler Hills. Drainage is toward the east and south and hence is into Owl Draw. To the west, the Guadalupe Mountains crenulate the horizon. Locally, soil individuals are fine-grained, gypsiferous, silty loams, and silty clay loams belonging to the Typic Gypsiorthid and Calcic Gypsiorthid subgroups and several of their intergrades. Chert, sandstone, limestone, and gypsum inclusions occur with increasing frequency as the ridge is ascended.

Floristics

Principal occupants making up the local floral overstory include: Yucca elata, Larrea tridentata, Acacia constricta, Prosopis juliflora, and infrequent <u>Rhus macrophylla</u> and <u>Koeberlina spinosa</u>. Commonly observed denizens of gypsiferous soils include: <u>Coldenia canescens</u>, <u>Haploesthes greggii</u>, <u>Nerisyrenia linearfolia</u>, <u>Psilostrophe</u> sp., and <u>Bouteloua breviseta</u>. More argillaceous soils support <u>Circium</u> sp., <u>Clematis sp., Perezia nana, Opuntia leptocaulis</u>, and <u>Opuntia</u> <u>macrocentra</u>. Frequent grasses of these soils include: <u>Tridens</u> <u>pulchellus</u>, <u>Scleropogon brevifoluis</u>, <u>Aristida</u> sp., <u>Sporobolus spp</u>.

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Map Reference: USGS MALAGA QUADRANGLE, 15 Minute Series, 1945. Terrain

Areal terrain is marked by a series of low, gernerally northsouth oriented ridges separated by broad, shallow draws which are tributary to the Owl drainage system on the south. In addition, small rills and gullies commonly braid the coeval landform. Attendant soil individuals belong to the Typic Gypsiorthid and Calcic Gypsiorthid subgroups. Peds typically consist of fine-grained silty clay loams and clay loams containing gypsum, sandstone, chert, and limestone inclusions. Ridges typically are mantled by a scree of limestone cobbles and gravels of a highly westhered nature. Puddling and scaling are characteristic of more argillaceous peds. <u>Floristics</u>

Key elements of the local floral overstory include: <u>Tamarish</u> sp., <u>Prosopis juliflora</u>, <u>Rhus macrophylla</u>, <u>Yucca elata</u>, and <u>Larrea</u> <u>tridentata</u>. <u>Brickellia</u> sp., and <u>Clematis</u> sp. are frequent denizens of bottomlands. Forbs include: <u>Circium</u> sp., <u>Euphorbia</u> spp., <u>Ctyptantha</u> sp., <u>Coldenia canescens</u>, <u>Nerisyrenia linearfolia</u>, and <u>Haploesthes greggii</u>. Commonly observed grasses include: <u>Bouteloua</u> <u>brevesita</u>, <u>Sporobolus airoides</u>, <u>Sporobolus</u> sp., <u>Aristida longiseta</u>, 4

and <u>Tridens pulchellus</u>. Cacti are limited to <u>Opuntia leptocaulis</u> and <u>Opuntia macrocentra</u>.

Cultural Resources

No archaeological sites or isolated manifestations were recorded during this reconnaissance. Their absence is due to the nature of the associated landform with its lack of lithic material, water, and cover. In the past, small social units engaged in huntingand hunting-related tasks visited this area on a sporadic basis. Activities of this type, however, were short lived. Occupancy probably dates back to Archaic times and lasted until well into the nineteenth century A.D., i.e., until the confinment of the native peoples to reservations.

Recommendations

NMAS recommends clearance for the proposed modifications to the existing lease roads and suggests that work-related activities proceed in accordance with company plans.