#### COPY TO O. C. C.

SUBMIT IN TRIPLICATE.

Form approved. Budget Bureau No. 42-R1425.

### **UNITED STATES**

(Other instructions on	Budget Bureau No. 42-R14						
reverse side)	30-039-2198						

	DEPARTMEN'	T OF THE INTE	RIOR		5. LEASE DESIGNATION AND SERIAL NO.
APPLICATIO	6. IF INDIAN, ALLOTTEE OR TRIBE NAME				
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_	RILL 💢	DEEPEN 🗌	PLUG BA	CK 🗌	7. UNIT AGREEMENT NAME
	SAS		SINGLE MULTIP	יו. מוזי	
2. NAME OF OPERATOR	VELL OTHER		ZONE MULTIP		S. FARM OR LEASE NAME
3. ADDRESS OF OPERATOR	OIL COMPANY	<u> </u>	Mar Military and		9. WELL NO.
P.O. Box 46		IM good	30.30		10. FIELD AND POOL, OR WILDCAT
4. LOCATION OF WELL (F	Report location clearly and	N. V. 8824 I in accordance with any	State requirements	<b>_</b>	
+ 2310' FNL	£ 990' FEL			\	11. SEC., T., B., M., OR BLR.
At proposed prod. zon			FEC 2 8 1978	1	AND SURVEY OR AREA
SAME		į.			SEC 31. T. 25N RAW.
14. DISTANCE IN MILES	AND DIRECTION FROM NEA	REST TOWN OR POST OFF			12. COUNTY OR PARISH 13. STATE
15. DISTANCE FROM PROP	OSED*	116	DIST. 3	1 37 m	KIO ARRIBA N.M.
LOCATION TO NEARES PROPERTY OR LEASE	T Line, ft.	10.		17 No. 0	OF ACRES ASSIGNED HIS WELL
(Also to nearest dri 18. DISTANCE FROM PROI	POSED LOCATION*	19.	2560 PROPOSED DEPTH	20. ROTA	NY OR CABLE TOOLS
TO NEAREST WELL, I OR APPLIED FOR, ON TH	ORILLING, COMPLETED,		8∞°		
21. ELEVATIONS (Show wh	ether DF, RT, GR, etc.)		0000	1 207	22. APPROX. DATE WORK WILL START*
6892' GL					12-15-78
23.	I	PROPOSED CASING AN	D CEMENTING PROGRA	м	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH		QUANTITY OF CEMENT
121/4"	8 % "	24*	1000	550 s	
778	51/2 "	15.54 /17	6300' / 1320'	800 31	`
a Gollup - bee attack	pakota oil wo Inment for 10 p ed for 13 pt. s	zll. wint well pla	~	,	DEC 22 1978 U. S. GEOLOGICAL SURVEY HOBBS, NEW MEXICO
preventer program, if any 24.	drill or deepen directiona	lly, give pertinent data	plug back, give data on pron subsurface locations an MINISTRATIVE SUPERVISE APPROVAL DATE	d measured	and true vertical depths. Give blowout
CONDITIONS OF APPROVA	al, IF ANY: oh Frank	TITLE			DEC 2 7 1978

FILE RELEASE FOLDER

A38 MJL

\*See Instructions On Reverse Side

U. S. GEGLOGICAL SHINEY DURANGO, COLO.

#### NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

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

All distances must be from the outer boundaries of the Section. querator Well 125. CONTINENTAL OIL COMPANY JICARILLA 30 Unit Letter Township County H 25N 4 5W RIO ARRIBA Actual Footage Location of Well: 2310 feet from the North line and feet from the Ground Level Elev. Producing Formation Dedicated Acresses 6892 Gallup Dakota West Lindrtih Gallup Dakota 1. Outline 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 owners been consoli-DEC 28 1978 dated by communitization, unitization, force-pooling, etc? If answer is "yes," type of consolidation it CON. COM. If answer is "no." list the owners and tract descriptions which have actually b n 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 Commis-CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Sec 31 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. DEC 2 7 1978 U. S. GEOLOGICAL SURVEY DURANGO, COLO. 3950

660

1320 1653

1480 2310 2640

2000

#### ATTACHMENT TO FORM 9-331 C APPLICATION FOR PERMIT TO DRILL

Continental Oil Company
Jicarilla 28 No. 17 and Jicarilla 30 Nos. 13, 14, and 15
T-25N, R-4W
Rio Arriba County, New Mexico

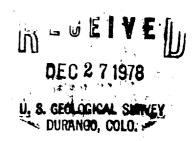
- 1. The geologic name of the surface formation is Quaternary Sand.
- 2. The estimated tops of important geologic markers are shown on the attached Proposed Well Plan.
- 3. The estimated depths at which anticipated water, oil, gas or other mineral-bearing formations to be encountered are shown on attached Proposed Well Plan.
- 4. The proposed casing program is as follows:

(See Proposed Well Plan Outlines)

- 5. A drawing of an API Series 900 Blowout Preventer Specification is attached. Pipe rams and blinds will be checked to 1,000 PSI for 30 minutes when BOP is installed. BOP will be checked when casing string is set and operated daily for checks.
- 6. The proposed mud program is as follows:

(See Proposed Well Plan Outlines)

- 7. The auxiliary equipment to be used is:
  - (1) kelly cocks
  - (2) floats at the bit
- 8. It is proposed to run SP-IES log from TD to approximately (See Proposed Well Plan Outlines) and GR CAL CNL FDC PDC logs at selected intervals.
- 9. No abnormal pressure or temperatures are expected to be encountered in this well.
- 10. The anticipated starting date for the first well is November 15, 1978 with a duration date of approximately 21 days for each well.



WELL NAME: Jicarilla 30#14

COUNTY: Pio Arriba

LOCATION: 2310 FNL 4990 FEL

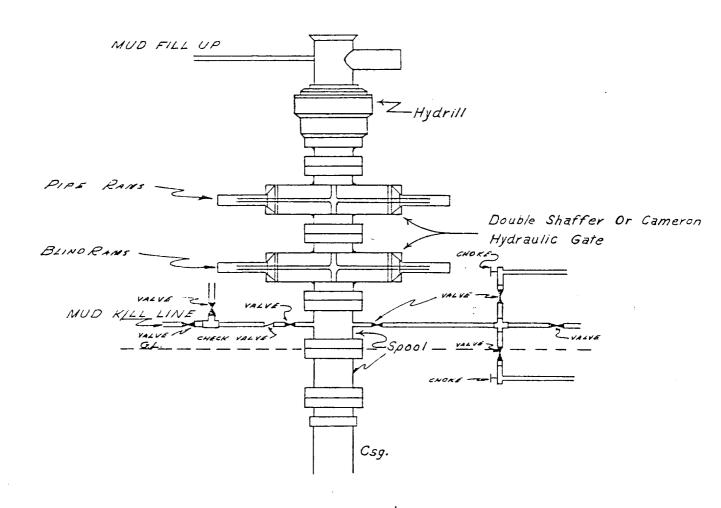
STATE: NM

Sec. 31, T25N, R4W

EST. 6906 KB EST. 6892GL

DEPTH		FORMATION	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE	CASING		S E N	110H RE NT	MUD	
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#6	99	- Chacra ss,	3880		٠	·					-
50	<del>23</del> -	-Mesa Verdess,	4670 LOST CIRCULATION ZONE			·					-
		-Mancossh,	5320	SP-IES TD-2800'							· · · · · · · · · · · · · · · · · · ·
65	90	+020		Z" \$ 5" GR-CAL-FDC	•						
		-Gallup ss,	63 <b>4</b> 0	Selected Intervals (TD-2800)		į	Ñ =	; E.I	<b>V E</b> [		<b>-</b>
70		-Dakota ss. -Jss. 7370 Mss 7470 -TD 7620	7230	2" \$ 5"	778	5/2 ·	DEC S GEO DUR	2719 463281 1497, 30		70	FRESH WATER GEL. LOW SOLIDS)

#### CONTINENTAL CIL COMPANY Blow-out Preventer Specifications



API SERIES 900

NOTE:

Manual and Hydraulic controls with closing unit no less than 75' from well head. Remote controls on rig floor.

DUE TO SUBSTRUCTURE CLEARANCE, HYDRILL MAY OR MAY NOT BE USED.



U. S. GEOLOGICAL SURVEY
DURANGO, COLO.

# SURFACE USE PLAN Continental Oil Company Jicarilla 28 No. 17 and Jicarilla 30 Nos. 13, 14, and 15 T-25N, R-4W Rio Arriba County, New Mexico

The plan is to accompany "Application for Permit to Drill" the subject well. The following is a discussion of pertinent information concerning possible effect which the proposed drilling of the well may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and sub-contractors will be aware of all items of this plan.

#### 1. Existing Roads

A. The proposed well sites are as follows: Jicarilla 28 No. 17 1830' FWL and 450' F

Jicarilla 28 No. 17

Jicarilla 30 No. 13

450' FSL and 450' FSL of Section 28

450' FSL and 990' FEL of Section 31

2310' FNL and 990' FEL of Section 31

Jicarilla 30 No. 15

2070' FNL and 1980' FWL of Section 32

- B. Exhibit "A" is a portion of a Jicarilla 28 and Jicarilla 30 lease map showing existing roads and proposed new road and location.
- C. Access Roads are shown on Exhibits "A" and "B".

#### 2. Planned Access Roads

Refer to the attached archaeological report.

#### 3. Location of Existing Wells

See Exhibit "A"

#### 4. Location of Existing and/or Proposed Facilities

- A. Tank Batteries: Two 400 bbl. tank and a production unit will be located on each well site.
- B. Rehabilitation: Pits will be backfilled and leveled as soon as practical to original condition. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from locations. Rehabilitation of the surface is planned to be completed within 45 days from commencement.

#### 5. Water Supply

The supply of water will be hauled from Largo Wash. (See Exhibit "C")

#### 6. Source of Construction Materials

Not applicable. Drilling pad to be compacted.



#### 7. Methods for Handling Waste Disposal

Waste Disposal: Well cuttings will be disposed in reserve pit. Trash pit is shown on "Rig Layout", Exhibit "D". All detrimental waste will be buried with a minimum of 24" of dirt. See Exhibit "D" for location of pits.

#### 8. <u>Ancillary Facilities</u>

None

#### 9. Well Site Layout

Exhibit "D" shows the relative location and dimensions of the well pad, mud pit, reserve pit, trash barrel, etc.

#### 10. Plans for Restoration of Surface

Pits will be backfilled and leveled as soon as practical to original condition. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location. Surface will be leveled and properly conditioned as required by USGS after consulting with proper surface managing agency.

#### 11. Other Information

- A. Terrain: "A" through "C" refer to the attached archaeological report.
- B. Soil: Sandy loam
- C. Vegetation: Primarily sage, blue grama, occasional pinyon and Juniper, and various flowering herbs.
- D. Surface Use: Suitable for grazing
- E. Ponds and Streams: None within one mile
- F. Water Wells: None within one mile
- G. Residences and Buildings: None within one mile
- H. Arroyos, Canyons, Etc.: See attached topographic map, Exhibit "B".
- I. Well Sign: Sign identifying and locating well will be maintained at drill site with the spudding of the well.
- J. Open Pits: All pits containing mud or other liquids will be fenced.
- K. Archaeological Resources: None observed.



#### 12. Operator's Representative

Field personnel who can be contacted concerning compliance of this Surface Use Plan are as follows:

#### PRODUCTION AND DRILLING

B. E. Anderson
Petroleum Center Building
Room 215
501 Airport Drive
Farmington, New Mexico
Phone: (505) 327-9557

L. P. Thompson 1001 North Turner Hobbs, New Mexico 88240 Phone: (505) 393-4141

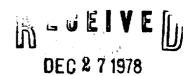
E. L. Oshlo 1001 North Turner Hobbs, New Mexico 88240 Phone: (505) 393-4141

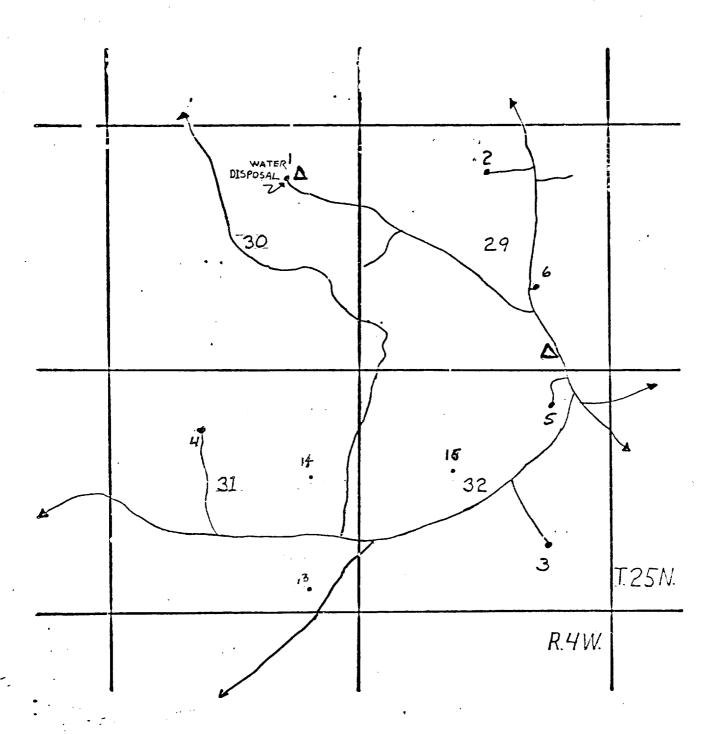
#### 13. Certification

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 Continental Oil Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

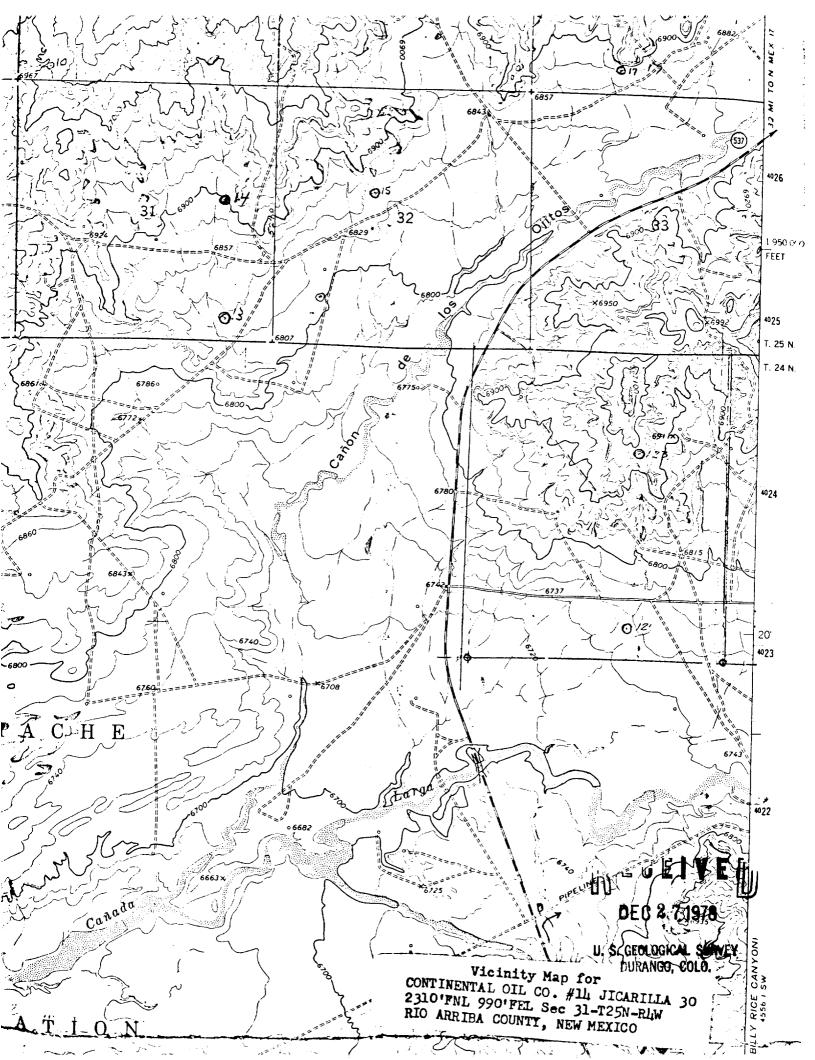
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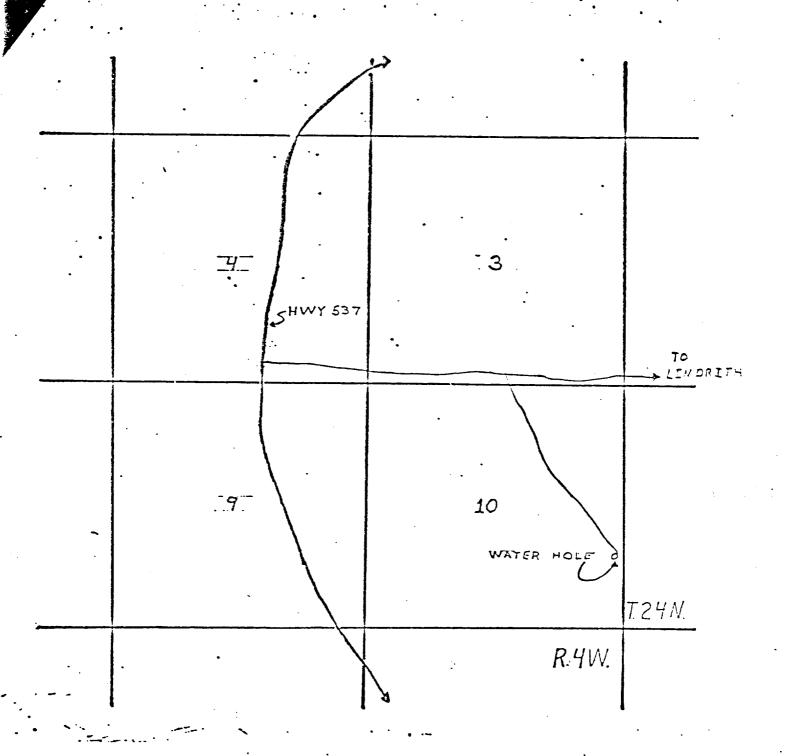
bnp





# CONOCO PRODUCTION DEPT. HOBBS DIV. JICARILLA "30" LEASE LEGEND CONOCO WELL TANK BATTERY LEASE ROAD HWY. DURANGO, COLO. CONOCO LEASE LEASE LEASE CHAVEZ





CONOCO

PRODUCTION DEPT. HOBBS DIV.

LARGO WATER VEOLE

LEGEND

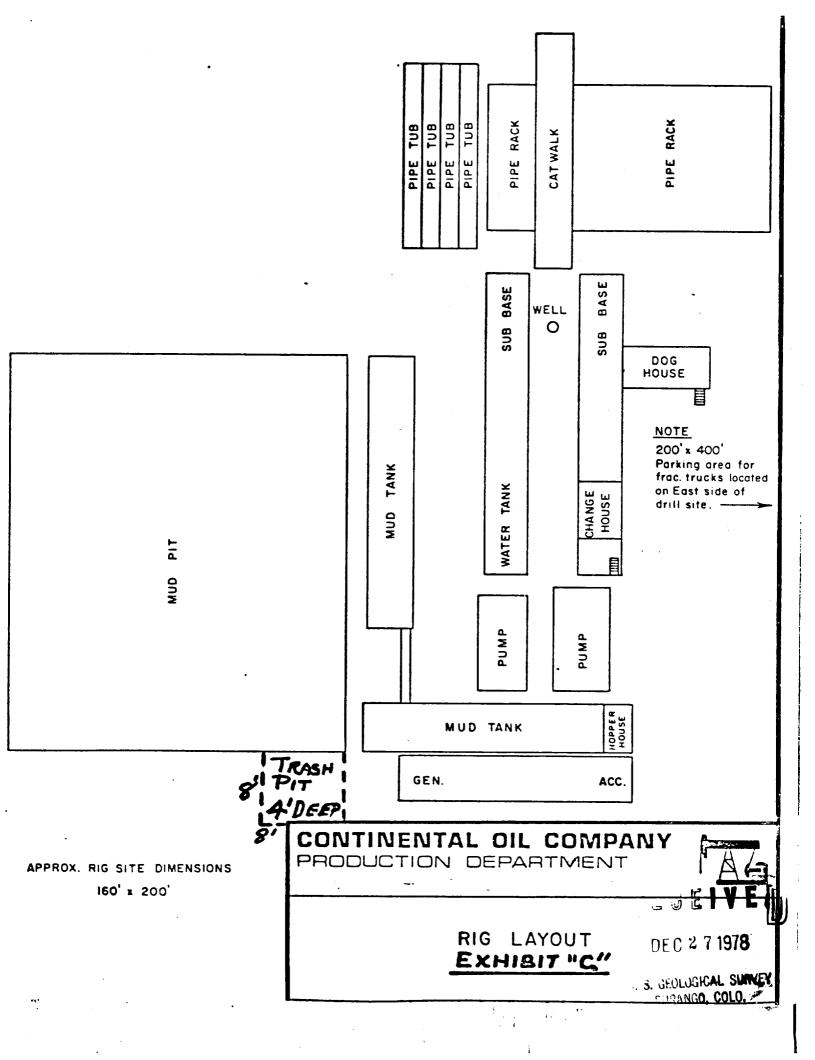
CONOCO WELL

TANK BATTERY'S. GEOLOGICAL SURVEY

LEASE ROAD DURANGO, COLO.

NTS

CHAVET



Permit:Tribal Comcil Resolution Feb. 2,1978. Jicarilla Apache Tribe.

Archaeological Clearance Survey Report

for

Continental Oil Company

#### Well Locations

Jicarilla 30-137
Jicarilla 30-147
Jicarilla 30-157
Jicarilla 30-157

ACV Jicarilla 28-17

AXI Apache N-19

AXI Apache N-18

AXI Apache N-16

AXI Apache N-17

AXI Apache J-33

Prepared by John B. Schooley

Submitted by Meade F. Kemrer, PhD. Principal Investigator

M-GEINE

DIVISION OF CONSERVATION ARCHAEOLOGY DEC 2 7 1978

U. S. GEOLOGICAL SURVEY
DURANGO, COLO,

Contributions to Anthropology Series, No.84 San Juan County Archaeological Research Center and Library

#### Abstract

An archaeological clearance survey was performed on August 22, 1978 for Continental Oil Company by the Division of Conservation Archaeology of the San Juan County Archaeological Research Center and Library. The survey involved nine well pads and associated access roads on lands under the jurisdiction of the Jicarilla Apache Tribe.

Since the cultural resources found are not to be directly or indirectly impacted by the proposed construction, archaeological clearance has been recommended for all areas.



#### Introduction

The Division of Conservation Archaeology of the San Juan County Archaeological Research Center and Library has completed an archaeological clearance survey for Continental Oil Company, on lands under the jurisdiction of the Jicarilla Apache Tribe. The lands are to be impacted by the construction of nine well pads and associated access roads.

The survey was initiated at the request of Mr. Joe McKinney of Achison Construction Company, Incorporated, on August 18, 1978. It was administered by Mr. B.E. Anderson of Continental Oil Company and by Dr. Meade Kemrer of the Division of Conservation Archaeology.

Legislation enacted by the Congress of the United States requires compliance with laws designed to protect archaeological resources. Laws such as the National Environmental Policy Act of 1969 (PL 91-852) and Executive Order No.11593 entitled "Protection and Enhancement of the Cultural Environment" prevent enterprises which might result in the destruction or alteration of cultural resources. Federal and State governments and the professional scientific community have come to realize that the material remains of a prior culture are a limited, non-renewable part of the environment. As such, the State of New Mexico has enacted legislation regulating archaeological resources. The Cultural Properties Act is analogous in content to the National Historic Preservation Act of 1966 (PL 89-665), which provides for preservation of significant archaeological sites.

The field work was performed by John Schooley, assistant archaeologist, of the Division of Conservation Archaeology on August 22, 1978, under the provisions of a Jicarilla Tribal Council Resolution passed on February 2, 1978. Also present in the field were: Mr. Joe McKinney of Achinson Construction; Mr. B.E. Anderson of Continental Oil Company; and Mr. Fred Kerr and Rich Weaver of Kerr Land Surveying.

#### Field Procedures

The requested archaeological clearance survey of the proposed well pads and access roads was inspected on foot and the area was covered in a criss-cross fashion. In addition to the search for historic /prehistoric artifacts and features, information pertaining to the environmental setting was described.

#### Survey

The requested archaeological survey involved nine well pads and associated access roads on lands under the jurisdiction of the Jicarilla Apache Tribe. For specific details of location, please see the attached topographic maps and the paragraph descriptions below.

DEC 2 7 1978

DURANGO, COLO.

DEC 2 7 1978

#### Jicarilla 30-13

U. S. GEOLOGICAL SURVEY 🛰 DURANGO, COLO. 🗻

Degal Description: 450' F/SL, 990' F/EL, Section 31, T 25N, R W, N.M. M., Rio Arriba County, New Mexico.

Map Source: U.S.G.S. 7.5' Otero Store Quadrangle.

Area Surveyed: 300'x 200' (well pad), 900'x 20 (access road).

Land Jurisdiction: Jicarilla Apache Tribe.

Description: The proposed well pad is located in a valley bottom. The terrain is flat with a 2° slope to the southwest. The soil is a sandy loam, approximately 60% exposed. The vegetation consists of sagebrush (Artemisia tridentata), blue grama (Bouteloua gracilis), prickly pear (Opuntia spp.) and various hebs and grasses. There is evidence of cattle grazing. The proposed access road originates from an existing road and proceeds west approximately 900 feet.

Cultural Materials: No cultural materials were noted

Recommendations: Archaeological clearance is recommended.

#### Jicarilla 30-#14

Legal Description: 2310' F/NL, 990' F/EL, Section 31, T 25N, R 4W, N.M.P.M., Rio Arriba County, New Mexico.

Map Source: U.S.G.S. 7.5' Otero Store Quadrangle.

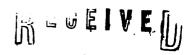
Area Surveyed: 300'x 200' (well pad), 1000'x 20' (access road).

Land Jurisdiction: Jicarilla Apache Tribe.

Description: The proposed well pad is located on the western slope of a hillside. The terrain has an open exposure and a 5° slope. The soil is a sandy loam with approximately 40% exposure. The vegetation is primarily tumbleweed (Salsola kali) with sagebrush, blue grama, and various grasses and herbs. A pinyon grove covers the hilltop immediately east of the well location. Grazing is evident. The access road proceeds northwest from an existing road approximately 800 feet.

Cultural Materials: A brown quartzite flake 50mm x 20mm x 10mm and two small white chalcedony waste flakes were noted in small erosional gullies which transect the access road approximately 400 feet southeast of the proposed pad. Upon extensive search of the area upland of the proposed access road, no site was located.

Cultural Significance: These artifacts appear to be derived from downslope washing from a site not in the area of the proposed construction.



DEC 2 7 1978

Recommendations: Archaeological clearance is recommended.

#### Jicarilla 30-#15

U. S. GEOLOGICAL SURVEY DURANGO, COLO.

Legal Description: 2070' F/NL, 1980' F/WL, Section 32, T 25N, R 4W, N.M.P.M., Rio Arriba County, New Mexico.

Map Source: U.S.G.S. 7.5' Otero Store Quadrangle.

Area Surveyed: 300'x 200' (well pad), 800'x 20' (access road).

Land Jurisdiction: Jicarilla Apache Tribe:

Description: The proposed well pad is located on an alluvial fan abutting a sandstone escarpment immediately north of the proposed well location. The soil is a sandy loam, approximately 50% exposed. There are numerous small erosional gullies draining south. The vegetation is sagebrush, blue grama, and various flowering herbs. Grazing is in evidence. The access road proceeds north from an existing road approximately 800 feet.

Cultural materials: On the sandstone face of the escarpment 200 feet north of the well pad location, there are numerous historic petroglyphs of names, places, and dates, eg. "Slavio Lucero, Del Governador, New Mexico, March 19, 1927." The names are both Hispanic and Anglo. The dates range from 1907 to the present.

Recommendations: Since the petroglyphs will not be affected by the proposed construction, archaeological clearance is recommended.

#### Jicarilla 28-#17

Legal Description: 1830' F/WL, 450' F/SL, Section 28, T 24N, R 4W, N.M.P.M., Rio Arriba County. New Mexico.

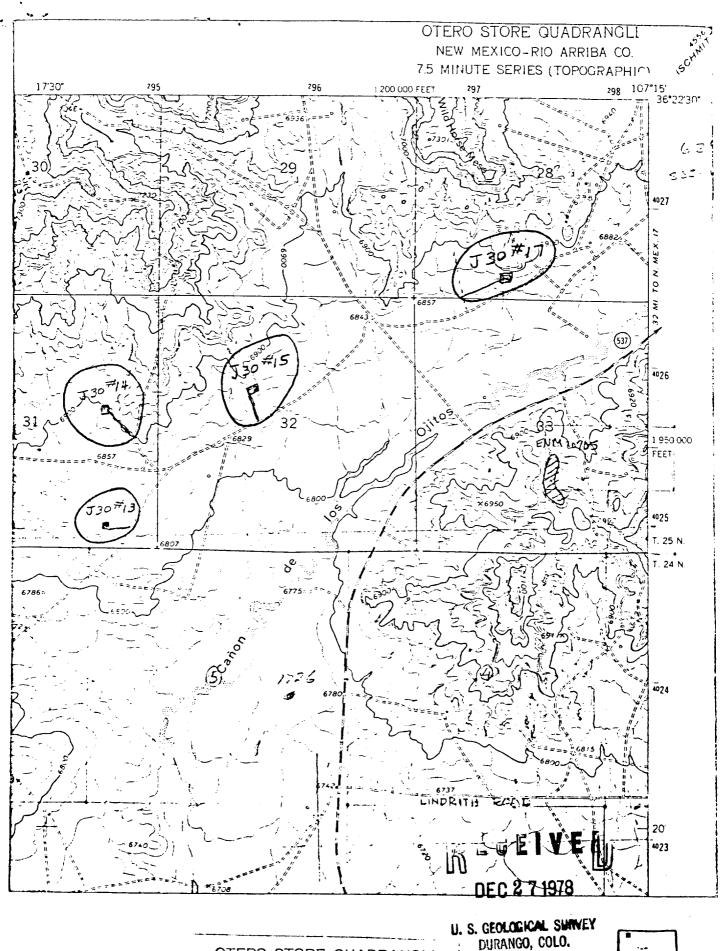
Map Source: U.S.G.S. 7.5' Otero Store Quadrangle.

Area Surveyed: 300'x 200' (well pad), 800'x 20' (access road).

Land Jurisdiction: Jicarilla Apache Tribe.

Description: The proposed well pad is located on an alluvial fan with a 10° slope to the south. A sandstone escarpment with eroding clay shale hills lies immediately north of the location. The soil is a sandy loam, approximately 50% exposed. The vegetation is primarily sage, blue grama, occasional pinyon (Pinus edulis) and juniper (Juniperus spp.), and various flowering herbs. There is evidence of grazing.

Cultural Resources: One small chalcedony waste flake was noted. Upon an extensive search of the area no further cultural artifacts were found.



OTERO STORE QUADRANGLI NEW MEXICO-RIO ARRIBA CO. 7.5 MINUTE SERIES (TOPOGRAPHIC) NEW MEXICO

## UNITED STATES

UNITED STATES	5. LEASE
DEPARTMENT OF THE INTERIOR	,
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
	JICARILLA APACHE
SUNDRY NOTICES AND REPORTS ON WELLS	7. UNIT AGREEMENT NAME
(Do not use this form for proposals to drill or to deepen or plug back to a different	TO STATE OF THE PARTY OF THE PA
reservoir. Use Form 9-331-C for such proposals.)	8. FARM OR LEASE NAME
1. oil G gas G	LICARILLA 30
well well other	9. WELL NO.
2. NAME OF OPERATOR	
CONTINENTAL OIL COMPANY	10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR	W. LINDRITH GALLIP DAKOTA
P. O. Box 460, Hobbs, N.M. 88240	11. SEC., T., R., M., OR BLK. AND SURVEY OR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	AREA
below.)	SEC. 31 T25KI R4W
AT SURFACE: 2310' FNL + 990' FEL	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL: AT TOTAL DEPTH:	RIO SERIBA N.M.
	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)
RECHEST FOR APPROVAL TO: SURGEOUENT PERCET OF	6892'6R
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF: $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	
FRACTURE TREAT	
SHOOT OR ACIDIZE	
REPAIR WELL	(NOTE: Report results of multiple completion or zone
PULL OR ALTER CASING 🔛	change on Form 9-330.)
MULTIPLE COMPLETE	
CHANGE ZONES	
(other)	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state including estimated date of starting any proposed work. If well is dimeasured and true vertical depths for all markers and zones pertinent	rectionally drilled give subsurface leastings and
IT is proposed to change the c "APPLICATION TO DRILL" SUBJECT Wall FRO	asing PLAN ON THE
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	OIL CON 1979
	- DIST COM.
Subsurface Safety Valve: Manu. and Type	Set @ Ft.
18. I hereby certify that the foregoing is true and correct	
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(This space for Federal or State offic	e use)
APPROVED BYTITLE	TINE IS
CONDITIONS OF APPROVAL, IF ANY:	DATE LO COLLETTE STATE OF THE S
USGS DURANGO 5	
BEA	JAN-157020
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*See Instructions on Reverse Si	