SUBMIT IN TRIPLICATE*

(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR

30	-039-21911	
. LEASE	DESIGNATION AND SERIAL NO.	•

	GEOLOGICAL SURV	EY		Jicarilla Contract 124
APPLICATION FOR F	PERMIT TO DRILL,	DEEPEN, OR	PLUG BACK	6. 1F INDIAN, ALLOTTEE OR TRIBE NAME
1a. TYPE OF WORK DRILL X	DEEPEN	☐ PL	.UG BACK 🗆	Jicarilla Apache 7. UNIT AGREEMENT NAME
OIL GAS WELL Y	OTHER	SINGLE ZONE	MULTIPLE ZONE	S. FARM OR LEASE NAME
2. NAME OF OPERATOR				Jicarilla Apache Tribal
AMOCO PRODUCTION CO				9. WELL NO. 1
501 Airport Drive, 4. LOCATION OF WELL (Report location At surface 1850' FSL & 790' FV			7401 ents.*)	Lindrith Gal-Dakota West 11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA
At proposed prod. zone	,		•	NW/4 SW/4 Section 23
Same 14. DISTANCE IN MILES AND DIRECTION	N FROM NEAREST TOWN OR POS	T OFFICE*		T-25-N, R-4-W 12. COUNTY OR PARISH 13. STATE
29.4 Northeast of (Rio Arriba New Mexico
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST	790 '	16. NO. OF ACRES I	N LEASE 17. NO	OF ACRES ASSIGNED THIS WELL
PROPERTY OB LEASE LINE, FT. (Also to nearest drlg. unit line, i	fany)	2560.0 19. PROPOSED DEPTI	20. RO	160 TARY OB CABLE TOOLS
18. DISTANCE FROM PROPOSED LOCATI TO NEAREST WELL, DRILLING, COM OR APPLIED FOR, ON THIS LEASE, FT.	PLETED, First new well	7955		
21. ELEVATIONS (Show whether DF, RT	, GR, etc.)	1,333		Rotary 22. APPROX. DATE WORK WILL START
7002 ' GL				As soon as permitted—
23.	PROPOSED CASI	NG AND CEMENTIN	IG PROGRAM	· · · · · · · · · · · · · · · · · · ·
	CASING WEIGHT PER P		DEPTH	QUANTITY OF CEMENT
12-1/4" 8-5/8 7-7/8" 4-1/2		7955'		210
1-110 4-112				
		I	į į	
			<u> </u>	
be based on open ho	th a low solids not ble logs. Gas from information requi	n-dispersed m n this well i ired by NTL-6	ud system. s dedicated for the ar	completions. The well completion design will to Gas Company of New Lication to drill and EP 18 1978 CON. COM. DIST. 3
IN ABOVE SPACE DESCRIBE PROPOSED I zone. If proposal is to drill or deep preventer program, if any. 24.	PROGRAM: If proposal is to dee oen directionally, give pertinen	pen or plug back, giv it data on subsurface	e data on present pi locations and measu	roductive some and proposed new productive ared and true vertical depths. Give blowout
SIGNED	The Tr	TLE AREA E	NGINEER	DATE Sept. 13, 1978
(This space for Federal or State	office use)		····	
PERMIT NO.		APPROVAL DA	TE	
			4	
CONDITIONS OF APPROVAL, IF ANY:	TI	TLE	1	Programme Bridge
A Snock				SEP 14 1078

All distances must be from the outer boundaries of the Section Well Ho. 1 / 350 ; erator JICARILLA APACHE TRIBAL 124 AMOCO PRODUCTION COMPANY County Township Unit Letter RIO ARRIBA 25N ΠM Actual Footage Location of Well: 790 West South 1850 feet from the line and feet from the Dedicated Acreage: ext Ground Level Elev. Producing Formation 160 Lindrith Gallup-Dakota West Gallup-Dakota 7002 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 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 Commission. CERTIFICATION I hereby certify that the information contoined herein is true and complete to the best of my knowledge and belief. KRUPKA Prisition AREA ENGINEER Cemu any AMOCO PRODUCTION COMPANY SEPTEMBER 1, 1978 Sac I hereby certify that the well location shown on this plat was platted from field notes of actual surveys made by me or 7901 under my supervision, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed August Prince | Pri 2000 1600 1320 1660 1980 2310 1640

SUPPLEMENTAL INFORMATION TO FORM 9-331C REQUIRED BY NTL-6

Jicarilla Apache Tribal 124 No. 1 1850' FSL & 790' FWL, Section 23, T25N, R4W Rio Arriba County, New Mexico

The geologic name of the surface formation is the Tertiary San Jose.

The estimated tops of important geological formations bearing hydrocarbons are:

FORMATION	DEPTH	ELEVATION
Pictured Cliffs	3407'	3608'
Mesaverde	5039 '	+1976 '
Gallup	6693 '	+ 322'
Dakota	7565 '	- 550 '

TD 7955'

Estimated KB elevation is 7015'.

The casing program to be used will include all new casing:

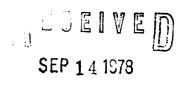
EST. DEPTH	CSG. SIZE	WEIGHT	HOLE SIZE	SACKS CEMENT - TYPE
300 ' 7955'	8-5/8" 4-1/2"	32# 11.6#	12-1/4" 7-7/8"	210 Class "B" 2% CaCl ₂ . 1400 Class "B" 6% Gel, 2# Med. Tuf Plug/sx. 150 Class "B" Neat

Amoco's standard blowout prevention will be employed; see attached drawing of our blowout preventer design.

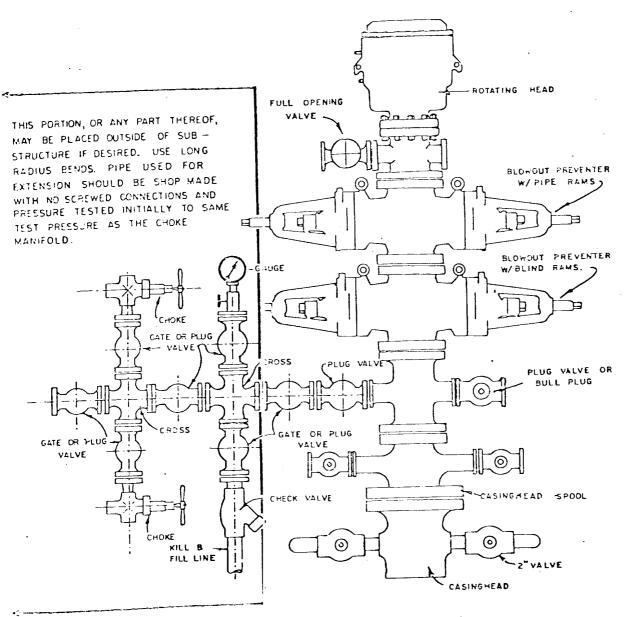
Amoco will run an Induction Electric Survey from TD to 5500' and a Density-Gamma Ray Log from TD to 5500'. No cores or drill stem tests will be taken.

In the past, drilling in this area has shown that no abnormal pressures, temperatures, nor hydrogen sulfide gas will be encountered.

We will start operations as soon as well is permitted, and a three-week operation is anticipated.



U. 8. GETLOGICAL SURVEY



BLOWOUT PREVENTER HOOKUP

EXHIBIT D-4
OCTOBER 16,1969



SEP 1 4 1978

U. D. COPTERGIOAL SURVEY

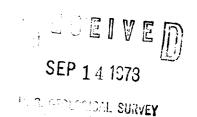
MULTI-POINT SURFACE USE PLAN

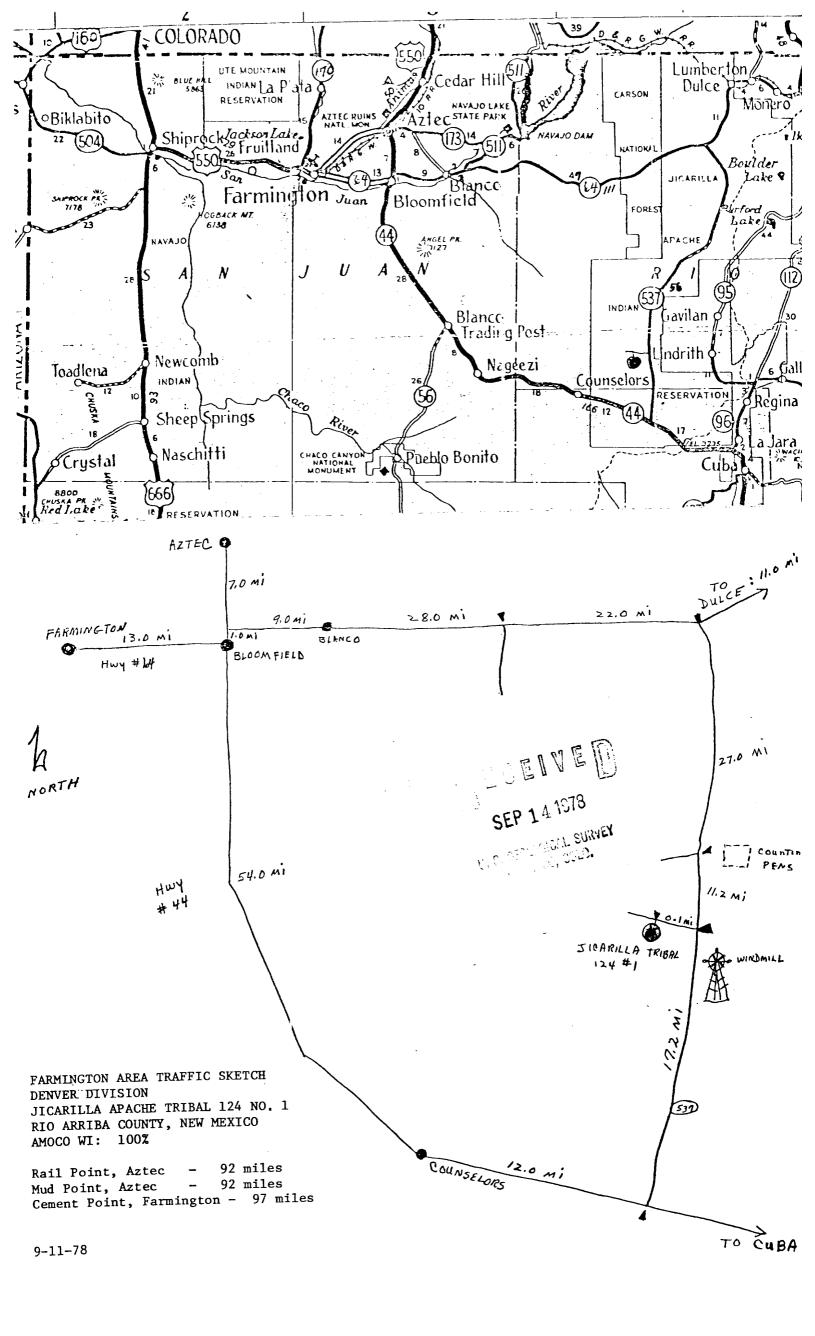
JECARILLA APACHE TRIBAL 124 NO. 1 1850' FSL & 790' FWL, SECTION 23, T25N, R4W RIO ARRIBA COUNTY, NEW MEXICO

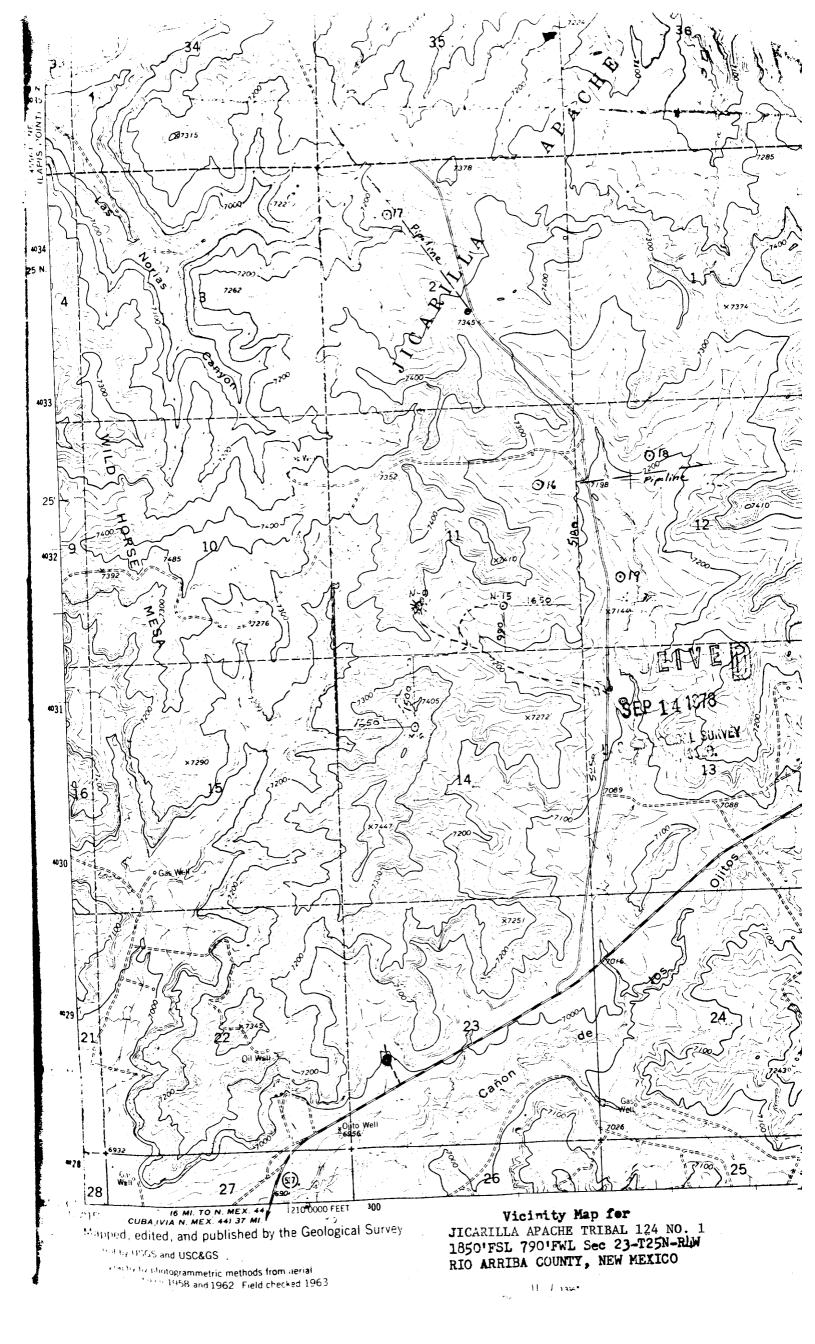
- 1. The attached roal map and sketch show the proposed route to the location and distances from towns.
- 2. No new access road will be built; well site is located one-tenth of a mile off Highway #537.
- 3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the vicinity map.
- 4. There are no storage tanks or gathering line facilities located within a one-mile radius of the proposed well.
- 5. Water will be hauled from the Cottonwood Water Hole on Largo Wash which is located approximately 6 miles from well site.
- 6. No construction material will be hauled in for this location.
- 7. A 75' X 75' pit will be built on location to hold all drilling waste. Upon completion of well, all waste and liquid will be pumped out and fluids will be bladed into roads.
- 8. There are neither airstrips nor camps in the vicinity.
- 9. The well site layout, reserve, burn and trash pits are shown on the attached Drill Site Specification Sheet. Well site located in flat area. No cuts necessary.
- 10. Restoration of the surface will be accomplished by cleaning up and leveling upon completion of the well Drainage ditches will be built to handle run-off. Reseeding of the site will be carried out as detailed in the attached Seeding Plan.
- 11. The general topography is a flat area with soil consisting of sandy loam, with vegetation of sagebrush and native grasses.

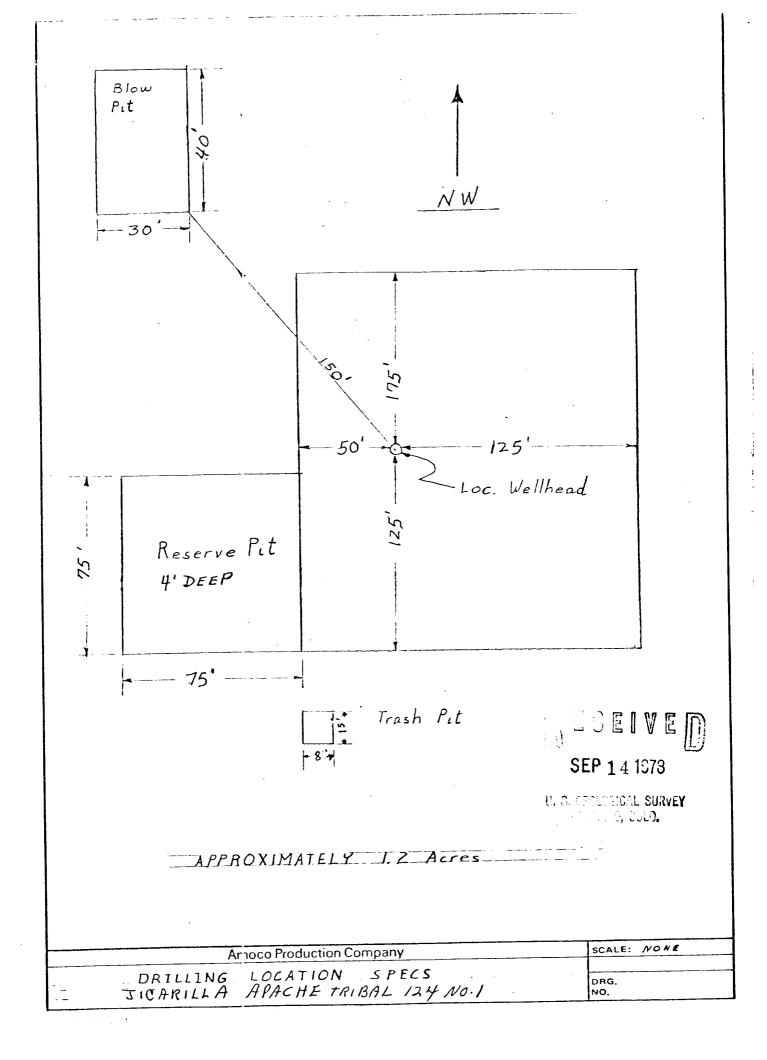
Representatives of the U. S. Geological Survey's Durango Office and Jicarilla Tribe's Dulce Office will inspect the site with Amoco personnel. Cultural resources inspection will be conducted by an Archaeologist from San Juan College or Salmon Ruins.

12. A Certification Statement by Amoco's representative is included.









SEEDING PLAN

1. TIME:

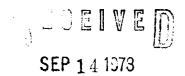
All seeding will take place between July 1 and September 15.

2. EQUIPMENT:

Seeding will be cone with a disc-type drill with two boxes for various seed sizes. The drill rows will be eight to ten inches apart. The seed will be planted not less than one-half inch deep or more than one inch deep. The seeder will be followed with a drag, packer, or roller to insure uniform coverage of the seed, and adequate compaction. Drilling will be done on the contour where possible, not up and down the slope. Where slopes are too steep for contour drilling, a "cyclone" hand seeder or similar broadcast seeder will be used. Seed will then be covered to the depth described above by whatever means is practical.

3. SPECIES TO BE PLANTED IN POUNDS PURE-LIVE-SEED PER ACRE:

CRESTED WHEATGRASS	0.71 lbs.
RUSSIAN WILL RYE	0.86 lbs.
ORCHARD GRASS	0.298 lbs
PERENNIAL RYE GRASS	0.57 lbs.
WESTERN WHEAT GRASS	1.43 lbs.
SMOOTH BROME	1.14 lbs.
INTERMEDIATE WHEAT	0.91 lbs.
PUBESCENT WHEAT GRASS	1.09 lbs.



JICARILLA APACHE TRIBAL 124 NO. 1 1850' FSL & 790' FWL, SECTION 23, T25N, R4W RIO ARRIBA COUNTY, NEW MEXICO

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 be best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by <u>AMOCO PRODUCTION</u>

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

September 15, 1978

Date

Area Supt.

Name and Titl

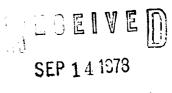
Amoco Production Company's Representative:

L. O. Speer, Jr.

Phone: Office: 505-325-8841; Home: 505-325-3247

Address: 501 Airport: Drive

Farmington, NM 87401



U. C. CECHOSICAL SURVEY