

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. TYPE OF WELL
OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
AMOCO PRODUCTION COMPANY

3. ADDRESS OF OPERATOR
501 Airport Drive, Farmington, New Mexico 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
1670' FSL & 1645' FWL, Section 31, T-26-N, R-5-W
At proposed prod. zone
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
24 miles northwest of Counselors, New Mexico

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) **1645'**

16. NO. OF ACRES IN LEASE
2477.56

17. NO. OF ACRES ASSIGNED
TO THIS WELL **319**

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. **2550'**

19. PROPOSED DEPTH
7440'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6638' GL

22. APPROX. DATE WORK WILL START*
As soon as permitted

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	300'	300 sx
7-7/8"	4-1/2"	10.5#	7440'	1851 sx

The above well is being drilled to further develop the Basin Dakota Field. The well will be drilled with a low solids non-dispersed mud system. Completion design will be based on open hole logs. Copy of all logs will be filed upon completion. The gas from this well is dedicated to Northwest Pipeline.

Additional information required by NTL-6 for the application to drill and a Multi-Point Surface Use Plan are attached.

This application to drill an Infill Basin Dakota well is pursuant to Order No. R-1670-V approved by the NMOCC on May 22, 1979. This well will qualify under Section 163 of the Natural Gas Policy Act under Order No. R-1670-V. Attached is a copy of subject order and the U. S. Department of the Interior letter of February 22, 1979.

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.

24. SIGNED B. E. Lachul TITLE District Engineer DATE May 31, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY: ok Smith

*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY
DALLAS, TEXAS

30-039-22088

5. LEASE DESIGNATION AND SERIAL NO.
Jicarilla Contract 155

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Jicarilla Apache

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Jicarilla Contract 155

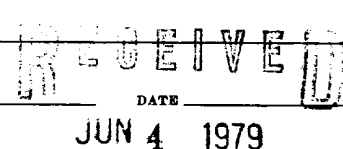
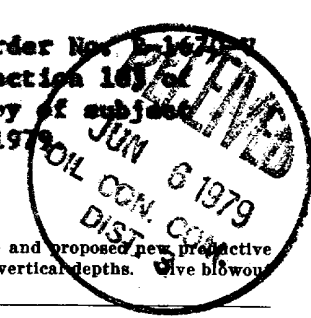
9. WELL NO.
22K

10. FIELD AND POOL, OR WILDCAT
Basin Dakota

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA
**NE/4 SW/4 Section 31,
T-26-N, R-5-W**

12. COUNTY OR PARISH
Rio Arriba

13. STATE
New Mexico



Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-107
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

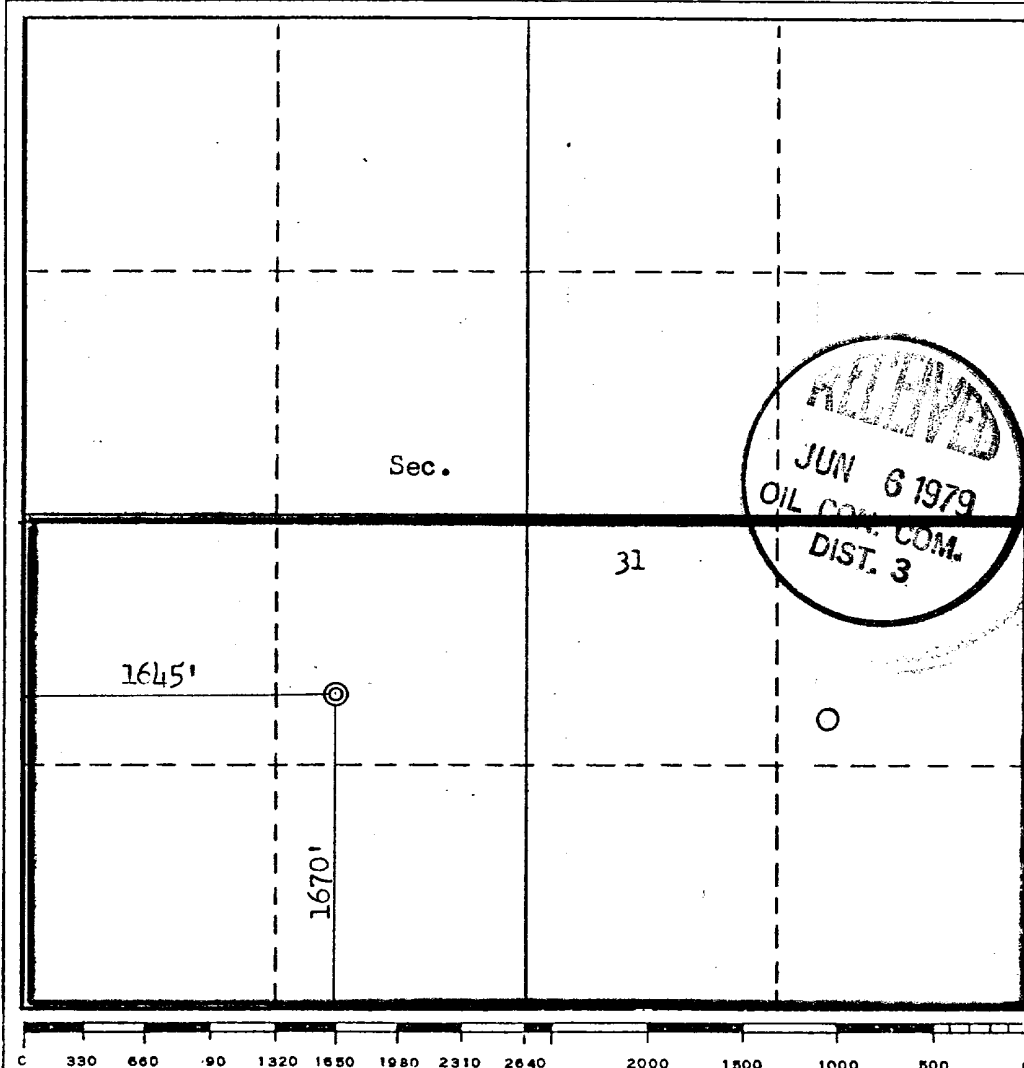
Operator AMOCO PRODUCTION COMPANY			Lease JICARILLA CONTRACT 155			Well No. 22E		
Unit Letter K	Section 31	Township 26N		Range 5W	County Rio Arriba			
Actual Footage Location of Well: 1670 feet from the South line and 1645 feet from the West line								
Ground Level Elev. 6638		Producing Formation Dakota			Pool Basin Dakota		Dedicated Acreage: 319 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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?

☐ Yes ☐ No 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 contained herein is true and complete to the best of my knowledge and belief.

B. E. Fackrell

Name

B. E. FACKRELL

Position

DISTRICT ENGINEER

Company

AMOCO PRODUCTION COMPANY

Date

MAY 10, 1979

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.

Date Surveyed

May 4, 1979

Registered Professional Engineer
and/or Land Surveyor*Fred B. Kerr, Jr.*

Certificate No. 3950

FRED B. KERR, JR.

SUPPLEMENTAL INFORMATION TO FORM 9-331C
 REQUIRED BY NTL-6
 JICARILLA CONTRACT 155 NO. 22E
 1670' FSL & 1645' FWL, SECTION 31, T26N, R5W
 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:

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Pictured Cliffs	2900'	+3738'
Mesaverde	5120'	+1518'
Dakota	7000'	- 362'
TD	7440'	- 802'

Estimated KB Elevation: 6651'.

<u>Est. Depth</u>	<u>Csg. Size</u>	<u>Weight</u>	<u>Hole Size</u>	<u>Sacks Cement - Type</u>
300'	8-5/8"	24#	12-1/4"	300 sx - Class "B" Neat
7440'	4-1/2"	10.5#	7-7/8"	1651 sx - Class "B" 50:50 Poz
				200 sx - Class "B" Neat

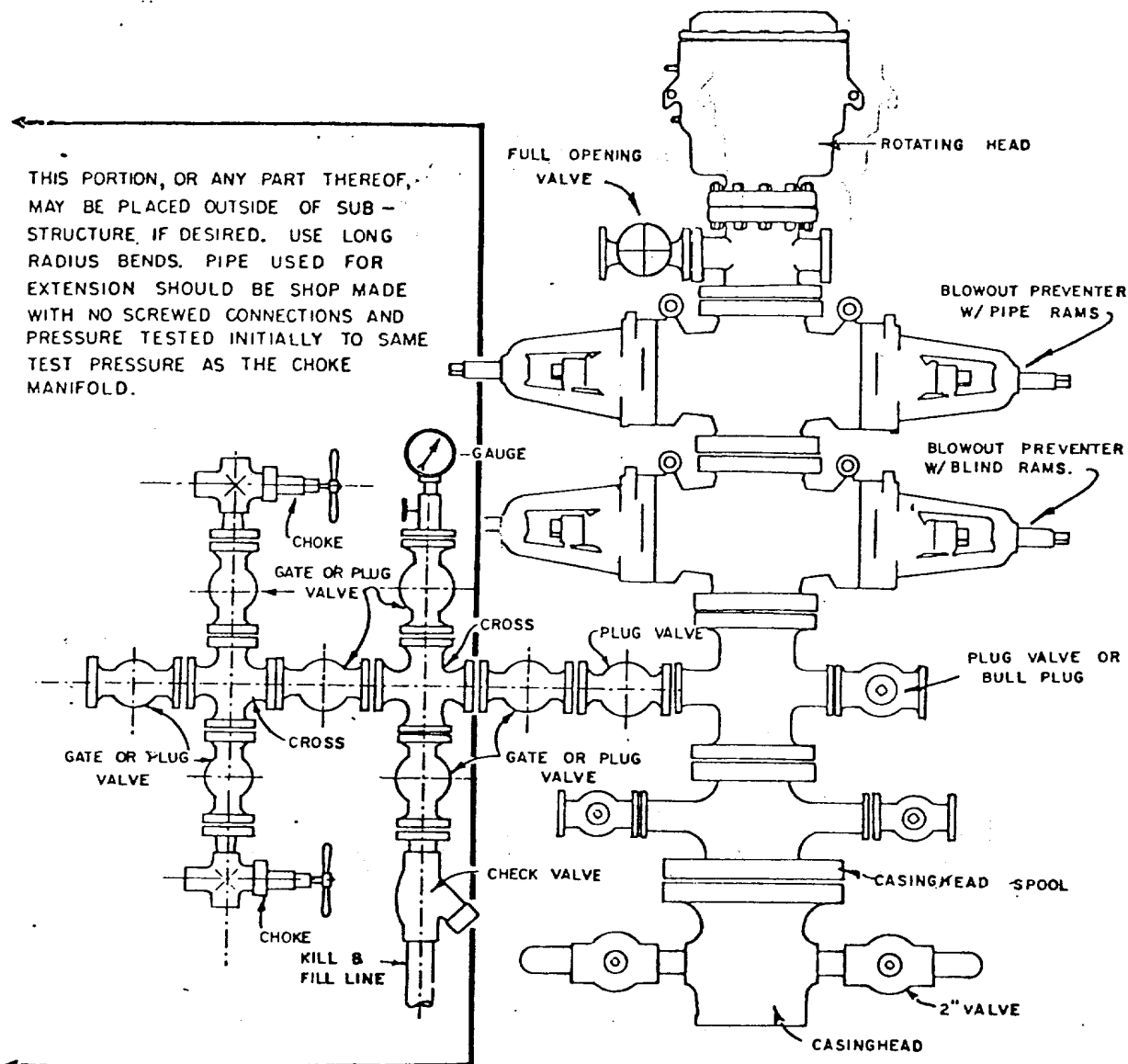
Amoco's standard blowout prevention will be employed; see attached drawing of our blowout preventer design.

Drilling fluid to TD will be a low solids non-dispersed mud system.

Amoco plans to run the following logs: Induction-Electric and Density-Gamma Ray from TD to 300'; Induction and Density from TD to 300'. 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.

THIS PORTION, OR ANY PART THEREOF, MAY BE PLACED OUTSIDE OF SUB-STRUCTURE, IF DESIRED. USE LONG RADIUS BENDS. PIPE USED FOR EXTENSION SHOULD BE SHOP MADE WITH NO SCREWED CONNECTIONS AND PRESSURE TESTED INITIALLY TO SAME TEST PRESSURE AS THE CHOKE MANIFOLD.



BLOWOUT PREVENTER HOOKUP

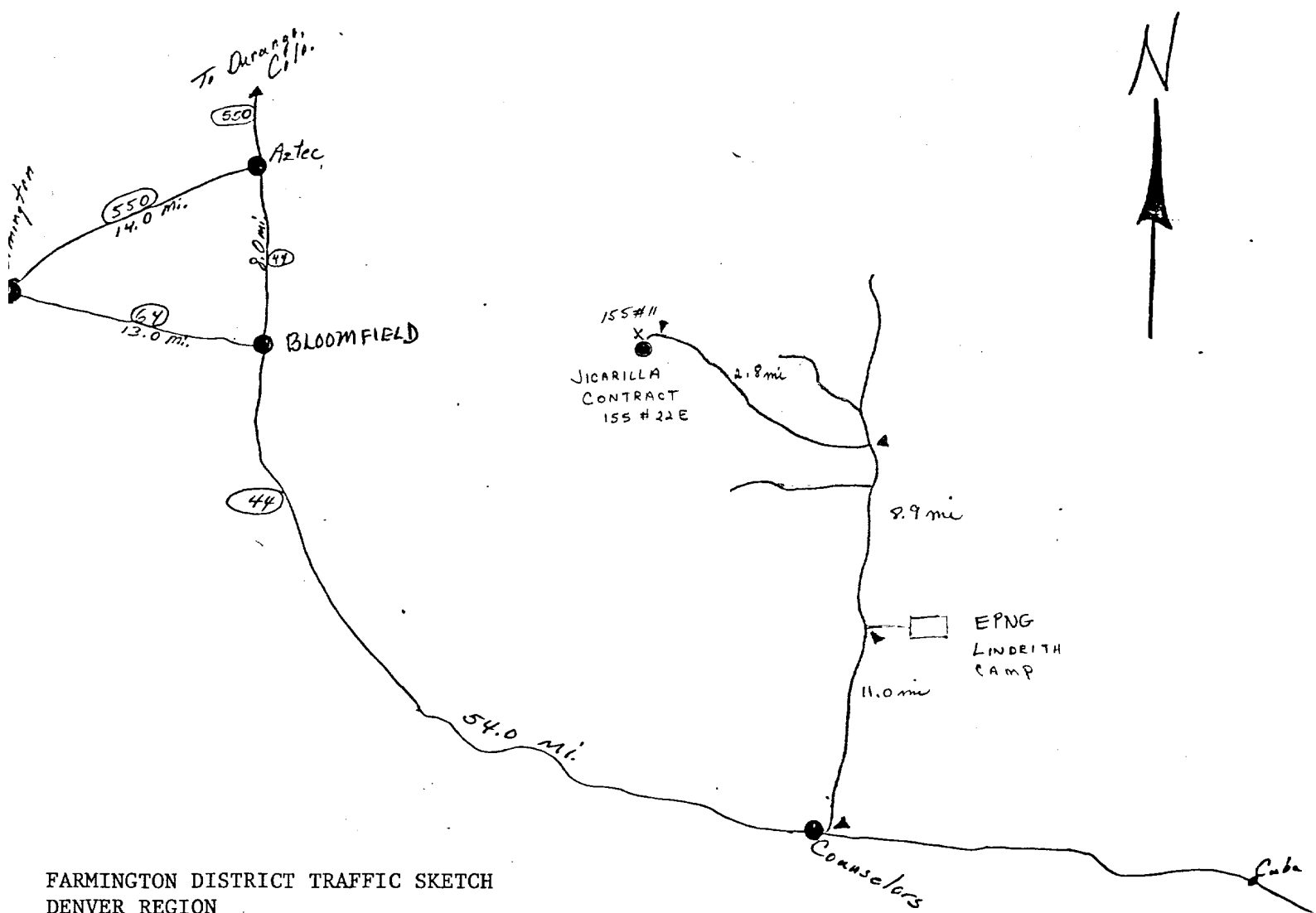
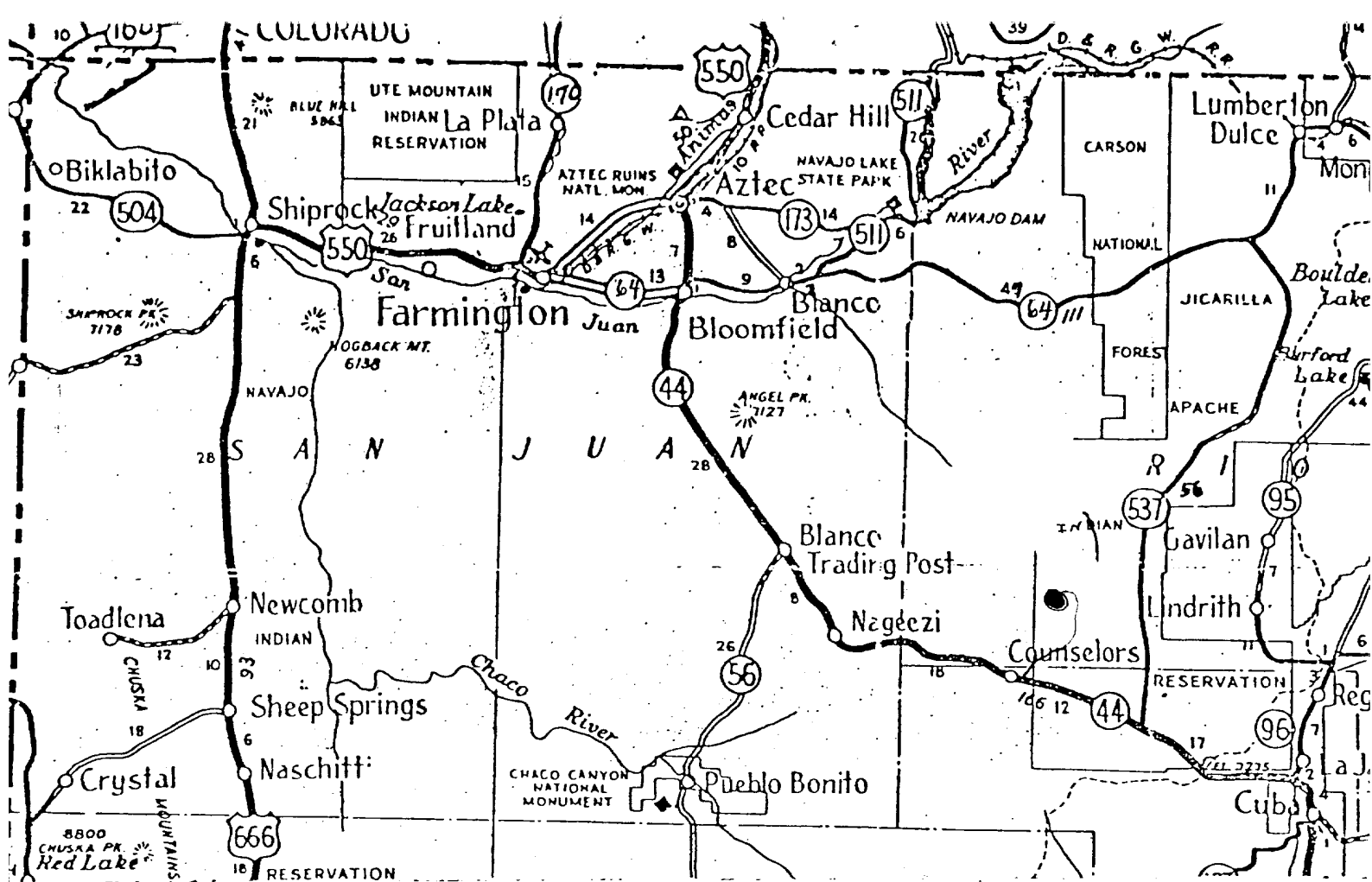
MULTI-POINT SURFACE USE PLAN

JICARILLA CONTRACT 155 NO. 22E
1670' FSL & 1645' FWL, SECTION 31, T26N, R5W
RIO ARriba COUNTY, NEW MEXICO

1. The attached road map and sketch show the proposed route to the location and distances from towns.
2. No new access road will be required as existing roads will be used.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the vicinity map.
4. There is a 380-barrel tank nearby and the location is 200 feet east of the pipeline.
5. Water will be hauled by truck from Tapacito Wash.
6. No construction materials will be hauled in for this location.
7. A 150' x 150' pit will be built on location to hold all drilling waste. Upon completion of the 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. A 4-foot cut will be made on the east side of the well site.
10. Restoration of the surface will be accomplished by cleaning up and leveling upon completion of the well. Drilling mud will be hauled away and the reserve pit back filled. Reseeding of the site will be carried out as detailed in the attached seeding plan.
11. The general topography is a rolling mesa of sandy, clay-type loam soil with native vegetation of sagebrush, rabbitbrush, snakeweed, Indian ricegrass and pinon and juniper trees.

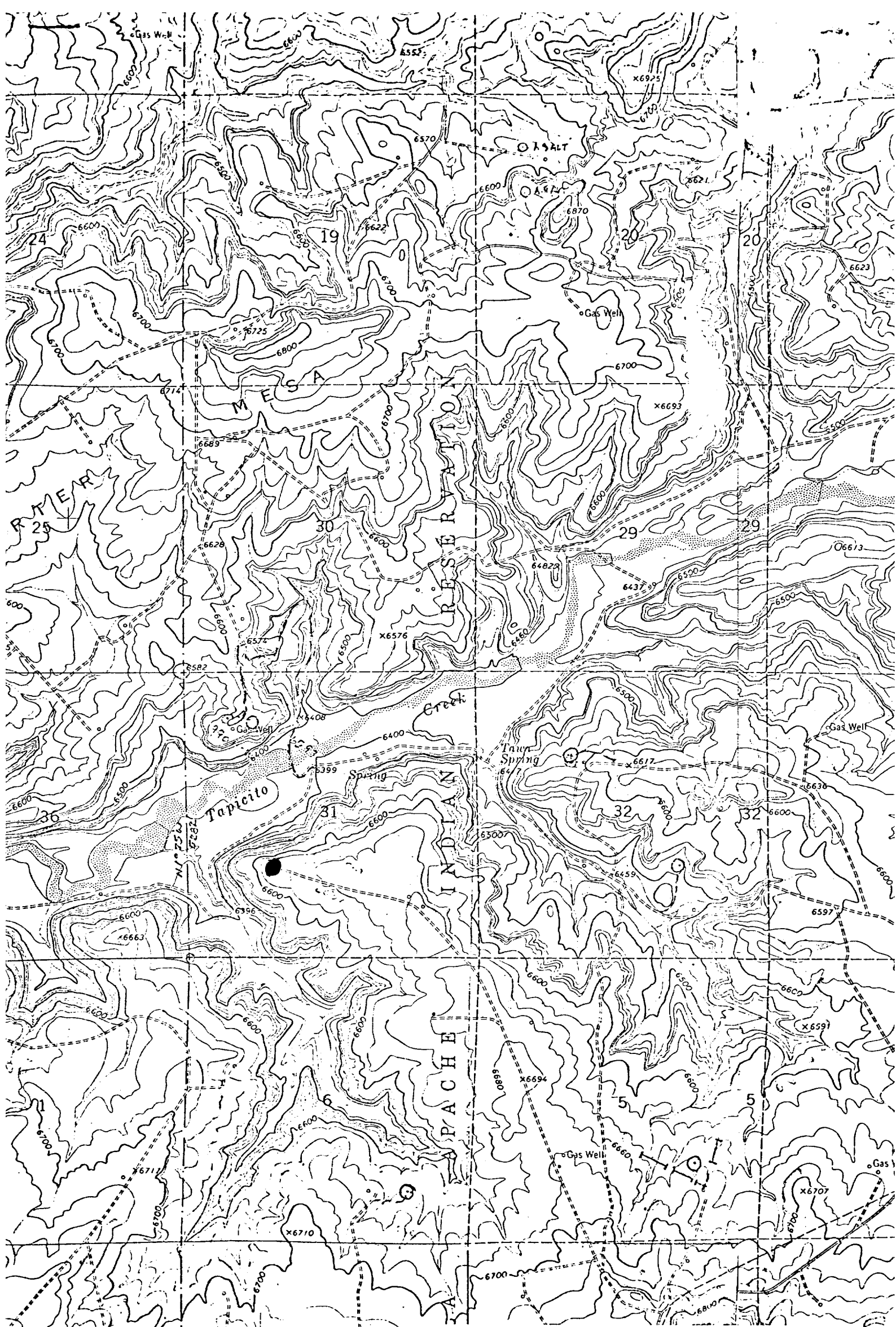
Representatives of the U. S. Geological Survey's Durango Office (Don Englishman) and the Jicarilla Tribe's Dulce Office (Gary Vicenti) inspected the site with Amoco personnel. Cultural resources inspection was conducted by Terry Knight, Archaeologist from San Juan College.

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

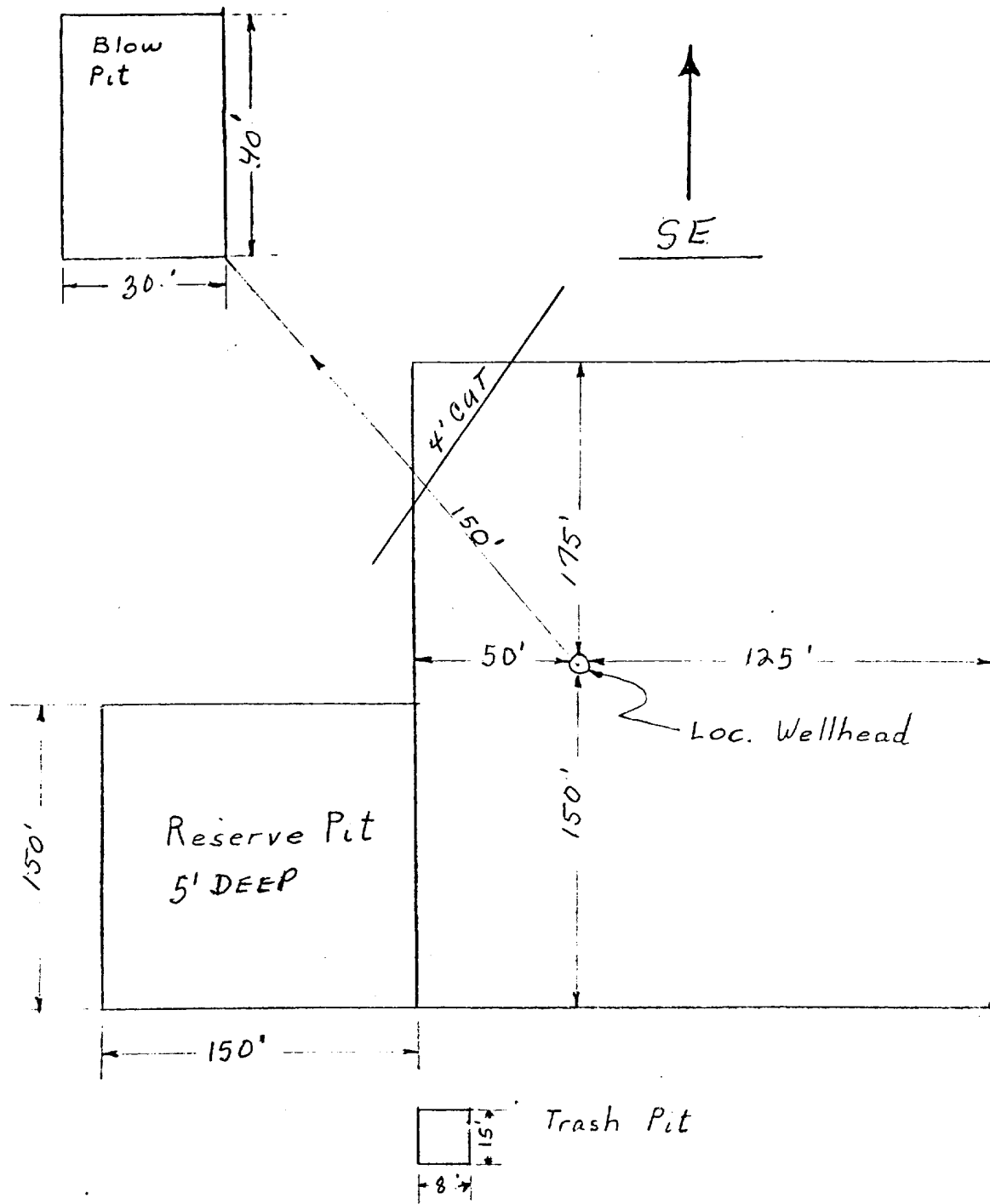


FARMINGTON DISTRICT TRAFFIC SKETCH
 DENVER REGION
 JICARILLA CONTRACT 155 NO. 22E
 RIO ARriba COUNTY, NEW MEXICO
 AMOCO WI: 100%

Rail Point, Aztec - 85 miles
 Mud Point, Aztec - 85 miles
 Cement Point, Farmington - 90 miles



Vicinity Map for
AMOCO PRODUCTION CO. JICARILLA CONTRACT 155 #22E
1670'FSL 1645'FWL Sec 31-T26N-R5W
RIO ARRIBA COUNTY, NEW MEXICO



--- APPROXIMATELY 1.2 Acres

Amoco Production Company	SCALE: NONE
DRILLING LOCATION SPECS	
JICARILLA CONTRACT 155 NO, 22E	DRG. NO.

SEEDING PLAN

1. TIME:

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

2. EQUIPMENT:

Seeding will be done 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	0.7 lbs.
RUSSIAN WILD 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 CONTRACT 155 NO. 22E
1670' FSL & 1645' FWL, SECTION 31, T26N, R5W
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 AMOCO PRODUCTION
COMPANY and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

May 31, 1979

Date

R. W. Schroeder District Supt.
Name and Title

Amoco Production Company's Representative:

R. W. Schroeder

Phone: Office: 505-325-8841; Home: 505-325-6164

Address: 501 Airport Drive
Farmington, NM 87401