

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-22086

5. LEASE DESIGNATION AND SERIAL NO.
Jicarilla Contract 147
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Jicarilla Apache Tribal
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME
Jicarilla Contract 147
9. WELL NO.
3E
10. FIELD AND POOL, OR WILDCAT
Basin Dakota
11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA
SE/4, SE/4, Section 6,
T-25-N, R-5-W
12. COUNTY OR PARISH
Rio Arriba
13. STATE
NM

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

970' FSL & 1140' FEL, SECTION 6, T25N, R-5W

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

21.5 miles NW of Counselors, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)

970'

16. NO. OF ACRES IN LEASE

2555.20

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

3200'

19. PROPOSED DEPTH

7500'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320E/319.67

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#	7500'	1865 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 completions. The gas from this well is dedicated to Gas Company of New Mexico.

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 103 of the Natural Gas Policy Act under Order No. R-1670-V. Attached is a copy of sub 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. Jackall

TITLE District Engineer

DATE June 1, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

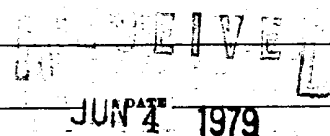
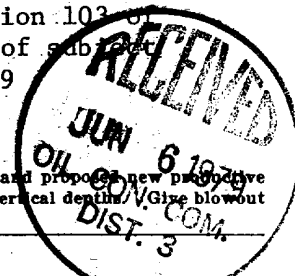
TITLE

CONDITIONS OF APPROVAL, IF ANY:

oh 3 inch

*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY



St. Louis

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

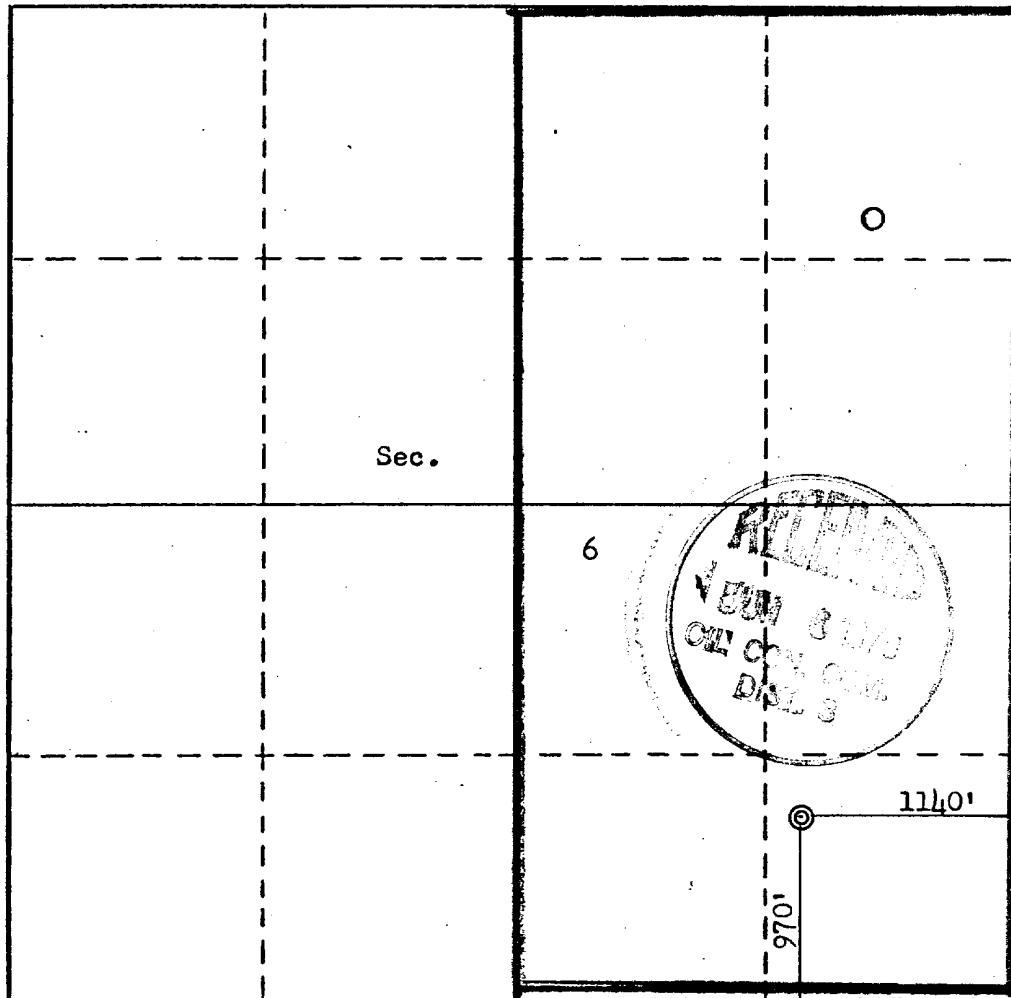
Operator AMOCO PRODUCTION COMPANY			Lease JICARILLA CONTRACT 147		Well No. 3E
Unit Letter P	Section 6	Township 25N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 970 feet from the South line and 1140 feet from the East line					
Ground Level Elev. 6638	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: 320 319.69 Acres

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?

☐ 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

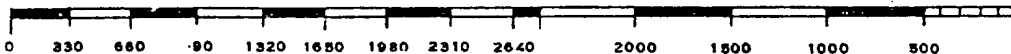
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

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 10, 1979
Registered Professional Engineer and/or Land Surveyor <i>Fred B. Kerr, Jr.</i> Fred B. Kerr, Jr.
Certificate No. 3950



SUPPLEMENTAL INFORMATION TO FORM 9-331-C
 REQUIRED BY NTL-6
 JICARILLA CONTRACT 147 NO. 3E
 970' FSL & 1140' FEL, SECTION 6, T25N, 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'	+3751'
Mesaverde	4600'	+2051'
Dakota	7250'	- 599'
TD	7500'	- 849'

Estimated KB Elevations: 6651'

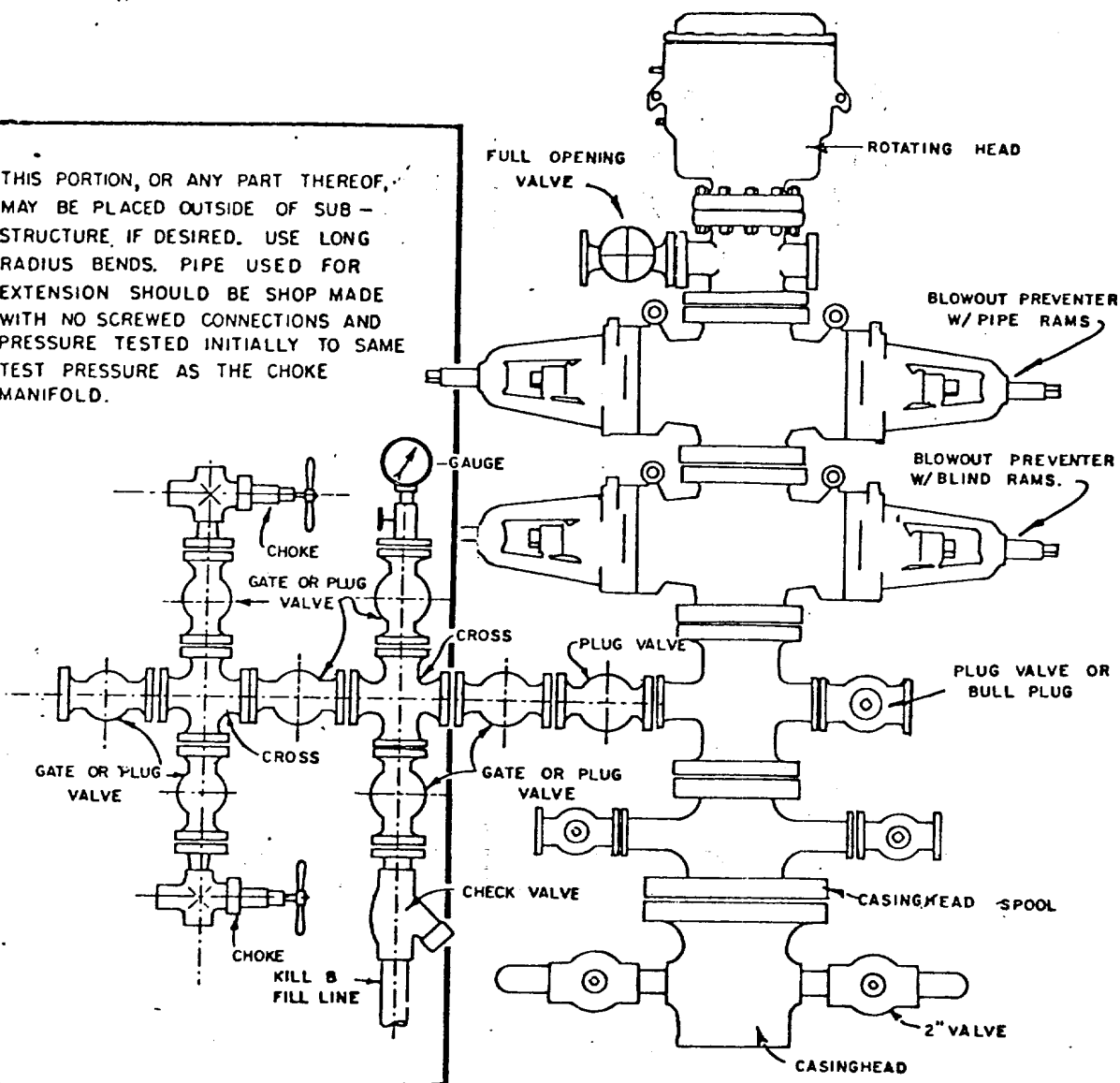
<u>EST. DEPTH</u>	<u>CSG. SIZE</u>	<u>WEIGHT</u>	<u>HOLE SIZE</u>	<u>SACKS CEMENT</u> - <u>TYPE</u>
300'	8-5/8"	24#	12-1/4"	300 sx Class "B" Neat
7500'	4-1/2"	10.5#	7-7/8"	1665 sx Class "B" 50:50 Poz 6% gel 200 sx Class "B" Neat

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

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.



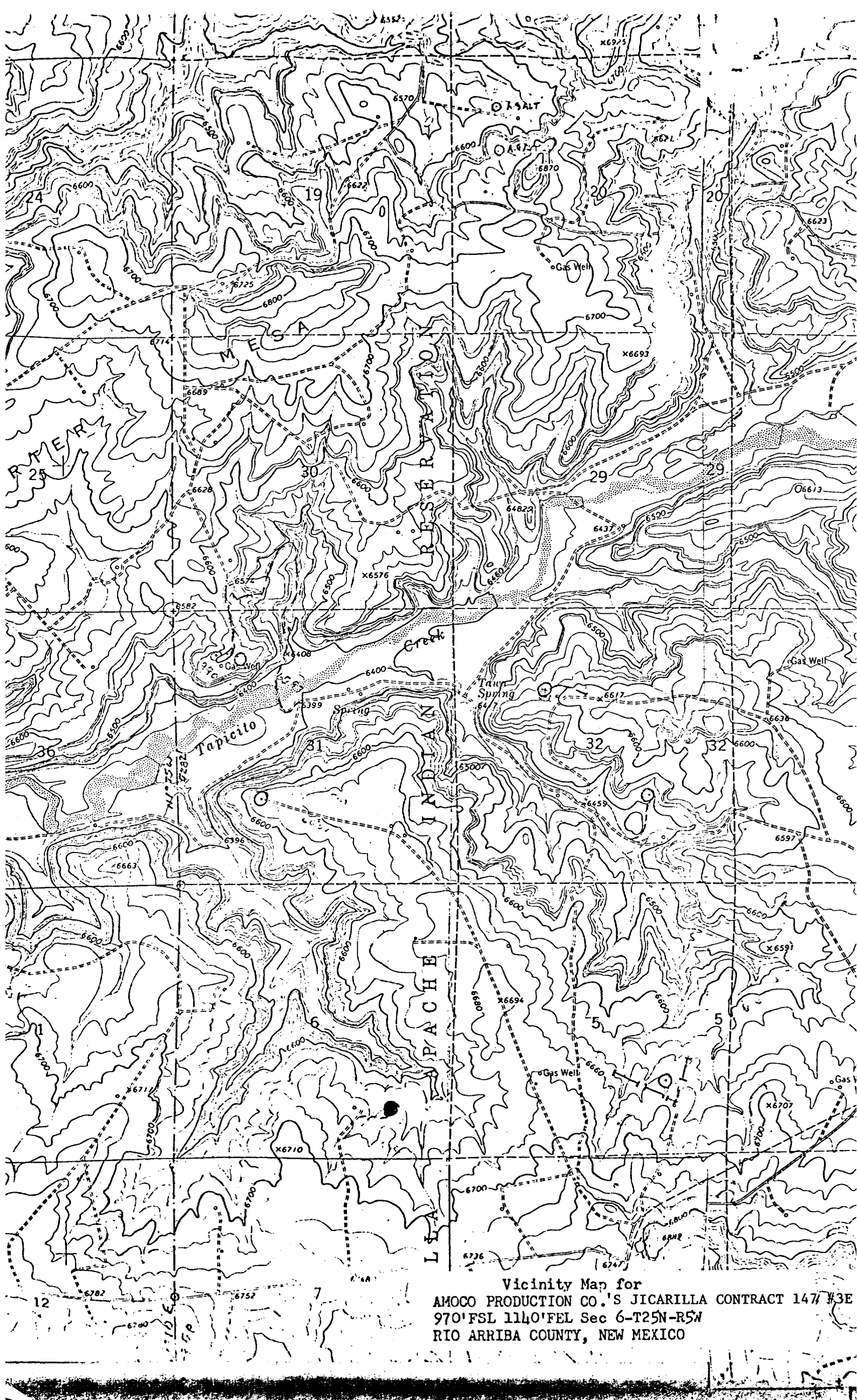
BLOWOUT PREVENTER HOOKUP

EXHIBIT D-4
OCTOBER 16, 1969

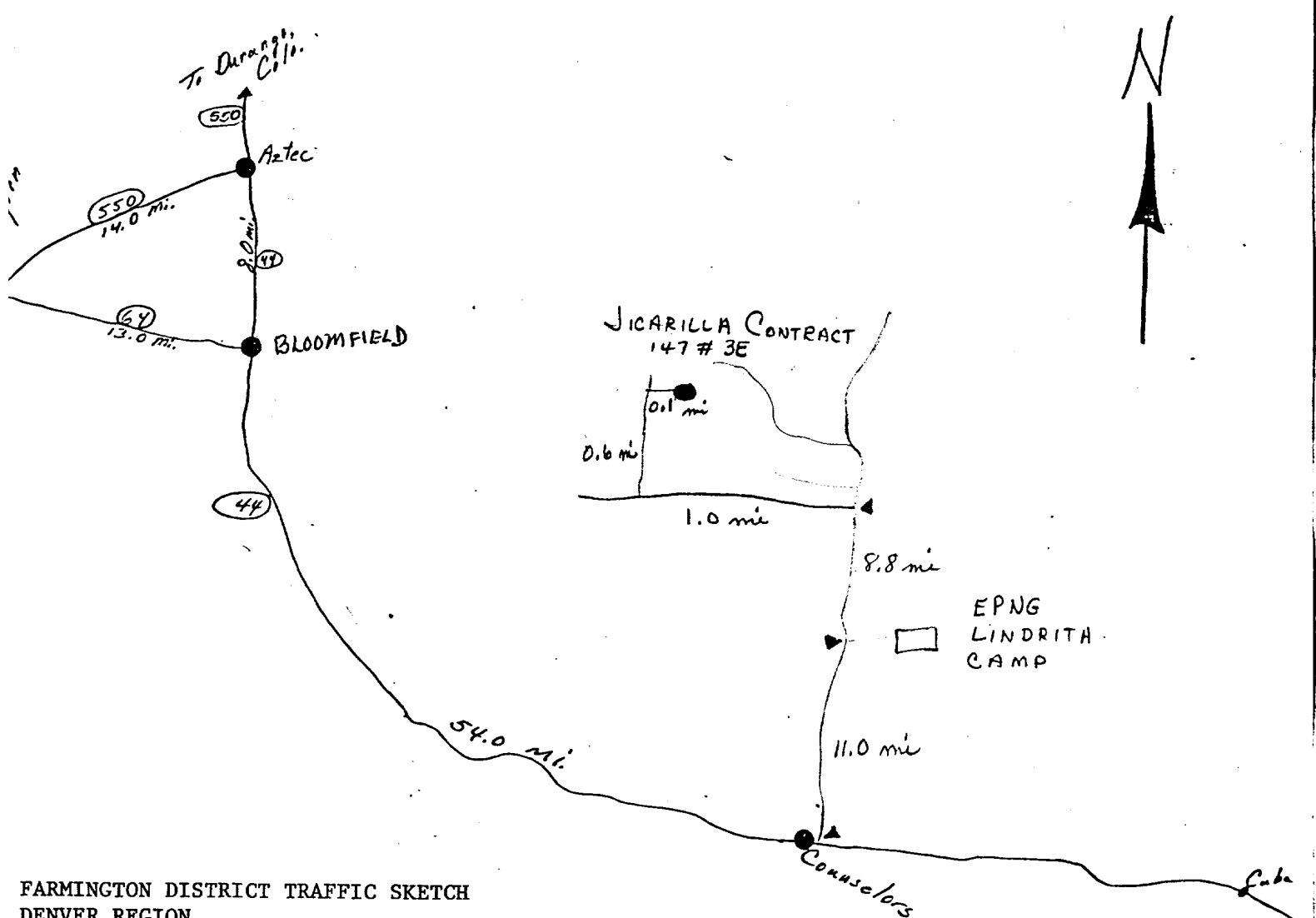
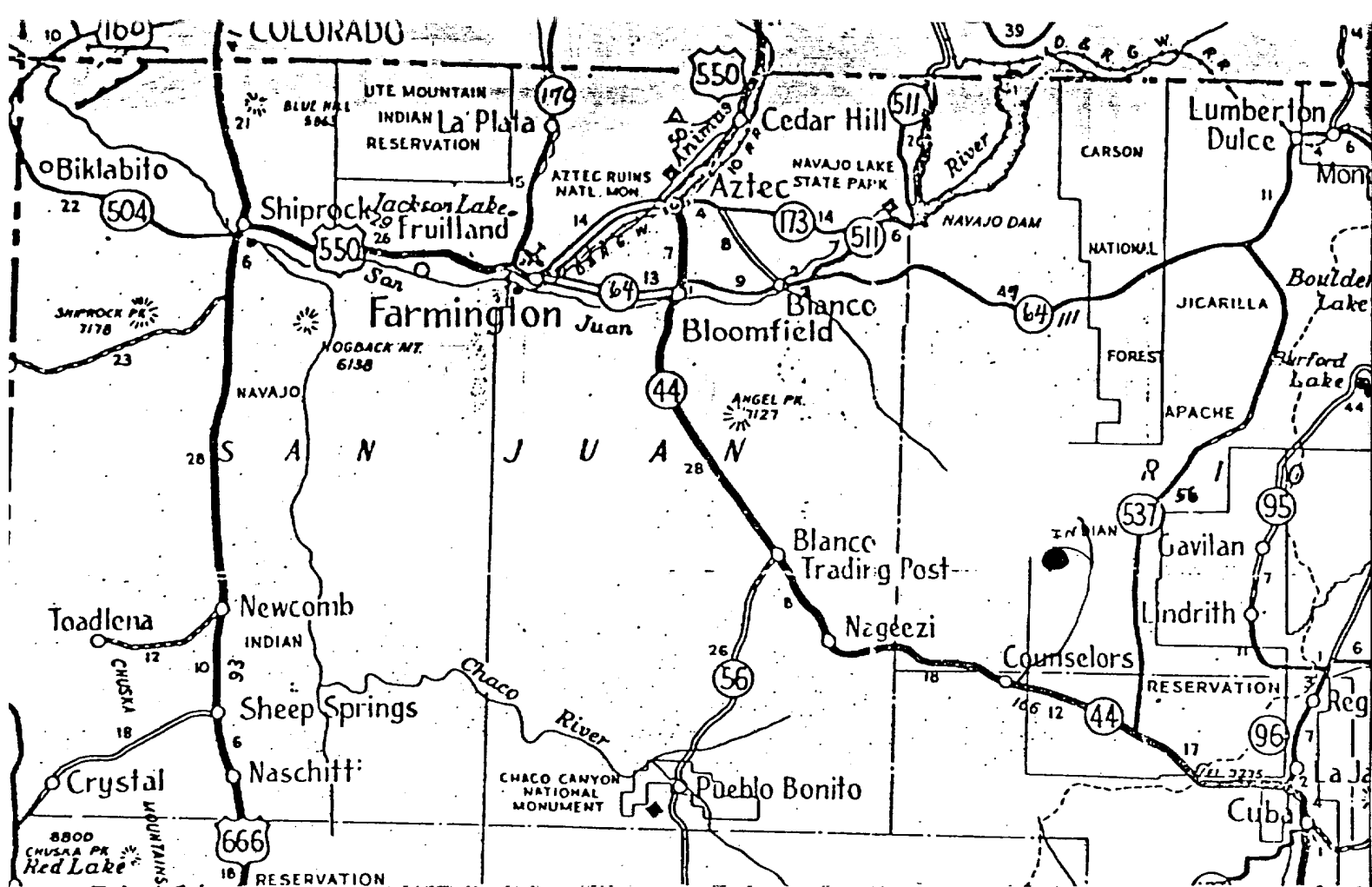
MULTI-POINT SURFACE USE PLAN
JICARILLA CONTRACT 147 NO. 3E
970' FSL & 1140' FEL, SECTION 6, T-25-N, R-5-W
RIO ARriba COUNTY, NEW MEXICO

1. The attached road map and sketch show the proposed route to the location and distances from towns.
 2. Approximately one-tenth of a mile of new road will have to be built on the south side of the location.
 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 tank on Continental's lease located nearby and a pipeline tie-in is located 500' west of the location.
 5. Water will be hauled approximately 6 miles from water holes on Tapacito Creek.
 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 well, all waste and liquids 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 6-foot cut will be made on the east side of the location.
 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 broken mesa top of sandy clay-type loam with vegetation of sagebrush, various native grasses, cacti 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.

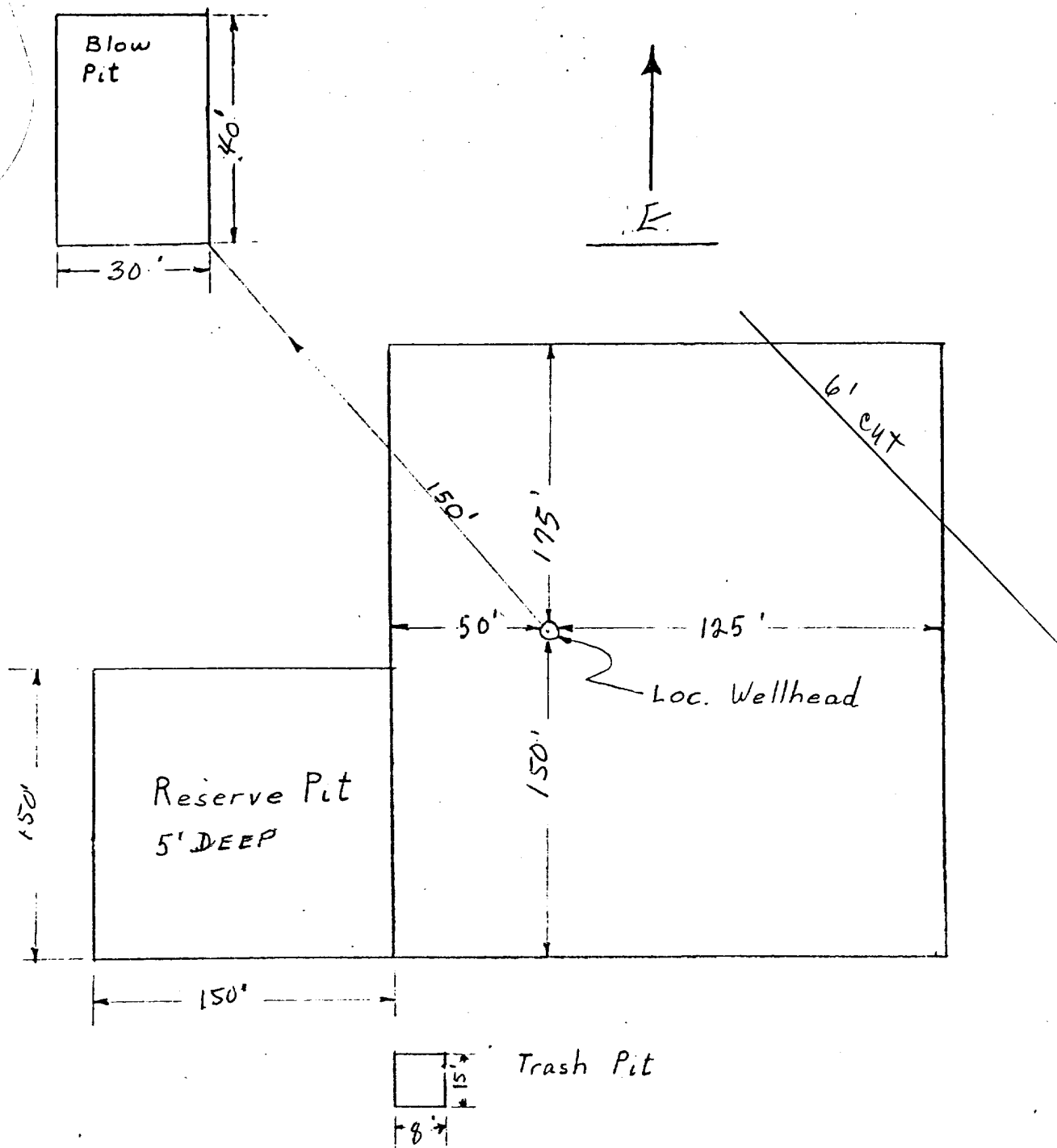


Vicinity Map for
AMOCO PRODUCTION CO.'S JICARILLA CONTRACT 147/ #3E
970'FSL 1140'FEL Sec 6-T25N-R5W
RIO ARRIBA COUNTY, NEW MEXICO



FARMINGTON DISTRICT TRAFFIC SKETCH
 DENVER REGION
 JICARILLA CONTRACT 147 NO. 3E
 RIO ARriba COUNTY, NEW MEXICO
 AMOCO WI: 100%

Rail Point, Aztec - 84 miles
 Mud Point, Aztec - 84 miles
 Cement Point, Farmington - 89 miles



APPROXIMATELY 1.2 Acres

Amoco Production Company		SCALE: NONE
DRILLING LOCATION SPECS		
JICARILLA CONTRACT 147 NO. 3E		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.

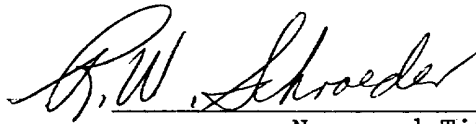
JICARILLA CONTRACT 147 NO. 3E
970' FSL & 1140' FEL, SECTION 6, T-25-N, R-5-W
RIO ARriba COUNTY, NEW MEXICO

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



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