

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY30-045-23588  
5. LEASE DESIGNATION AND SERIAL NO.  
**87-081239**

## 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

**1100' FWL & 990' FWL, Section 15, T-30-N, R-12-W**

At proposed prod. zone

**Same**

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

**1-1/2 mile north of Flora Vista, New Mexico**

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)**990'**

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.**None**

## 16. NO. OF ACRES IN LEASE

**2442.59**

## 19. PROPOSED DEPTH

**4700'**

## 17. NO. OF ACRES ASSIGNED

TO THIS WELL  
**320**

## 20. ROTARY OR CABLE TOOLS

**Rotary**

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

**5701' GL**

## 22. APPROX. DATE WORK WILL START\*

**As soon as permitted**

## 23.

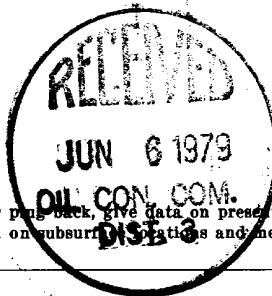
## PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|--------------------|
| 12-1/4"      | 9-5/8"         | 36#             | 300'          | 240 SK             |
| 8-3/4"       | 7"             | 25#             | 2250'         | 620 SK             |
| 6-1/4"       | 4-1/2"         | 10.5#           | 2100-4700'    | 340 SK             |

Amoco proposes to drill the above well to test Fruitland, Pictured Cliffs and Mesaverde formations. The well will be drilled with a low solids non-dispersed mud system. Completion design will be based on open hole logs.

The gas from this well is not committed to a purchaser.

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



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 geology and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

**B. E. Jacob**

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:

\*See Instructions On Reverse Side

**NMOCE**

## 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-102  
Revised 10-1-78

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

|   |                                  |                               |                                 |                    |               |
|---|----------------------------------|-------------------------------|---------------------------------|--------------------|---------------|
| Operator<br>AMOCO PRODUCTION COMPANY  |                                  |                               | Lease<br>JOHNSON GAS COM "E"    |                    | Well No.<br>1 |
| Unit Letter<br>D  | Section<br>15                    | Township<br>30N               | Range<br>12W                    | County<br>San Juan |               |
| Actual Footage Location of Well:<br>1100 feet from the North line and 990 feet from the West line |                                  |                               |                                 |                    |               |
| Ground Level Elev.<br>5701  | Producing Formation<br>Mesaverde | Pool<br>Flora Vista Mesaverde | Dedicated Acreage:<br>320 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.

|  |   |  |
|--|---|--|
|  | <b>CERTIFICATION</b><br><br>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.<br><i>B. E. Fackrell</i>  |  |
|  | Name<br>B. E. FACKRELL<br><br>Position<br>DISTRICT ENGINEER<br><br>Company<br>AMOCO PRODUCTION COMPANY<br><br>Date<br>MAY 22, 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.<br><br><br>Date Surveyed<br>May 26, 1979<br>Registered Professional Engineer and/or Land Surveyor<br><i>Fred B. Kerr Jr.</i><br>Fred B. Kerr Jr.<br>Certificate No. 3950<br>KERR, JR. |  |
|  | 0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0   |  |



SUPPLEMENTAL INFORMATION TO FORM 9-331C  
 REQUIRED BY NTL-6  
 JOHNSON GAS COM "E" NO. 1  
 1100' FNL & 990' FWL, SECTION 15, T-30-N, R-12-W  
 SAN JUAN 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> |
|------------------|--------------|------------------|
| Fruitland        | 1714'        | +4000'           |
| Pictured Cliffs  | 1964'        | +3750'           |
| Mesaverde        | 3444'        | +2270'           |
| TD               | 4700'        | +1014'           |

Estimated KB elevation is 5714'.

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

| <u>EST DEPTH</u> | <u>CSG. SIZE</u> | <u>WEIGHT</u> | <u>HOLE SIZE</u> | <u>SACKS CEMENT</u>                   | <u>-</u> | <u>TYPE</u> |
|------------------|------------------|---------------|------------------|---------------------------------------|----------|-------------|
| 300'             | 9-5/8"           | 36#           | 12-1/4"          | 240 sx Class "B" 2% CaCl <sub>2</sub> |          |             |
| 2250'            | 7"               | 23#           | 8-3/4"           | 620 sx Class "B" 6% Gel, 2#           |          |             |
|                  |                  |               |                  | Med. Tuf Plug/sx.                     |          |             |
| 2100-4700'       | 4-1/2"           | 10.5#         | 6-1/4"           | 240 sx Class "B" 6% Gel, 2#           |          |             |
|                  |                  |               |                  | Med. Tuf Plug/sx.                     |          |             |
|                  |                  |               |                  | 100 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.

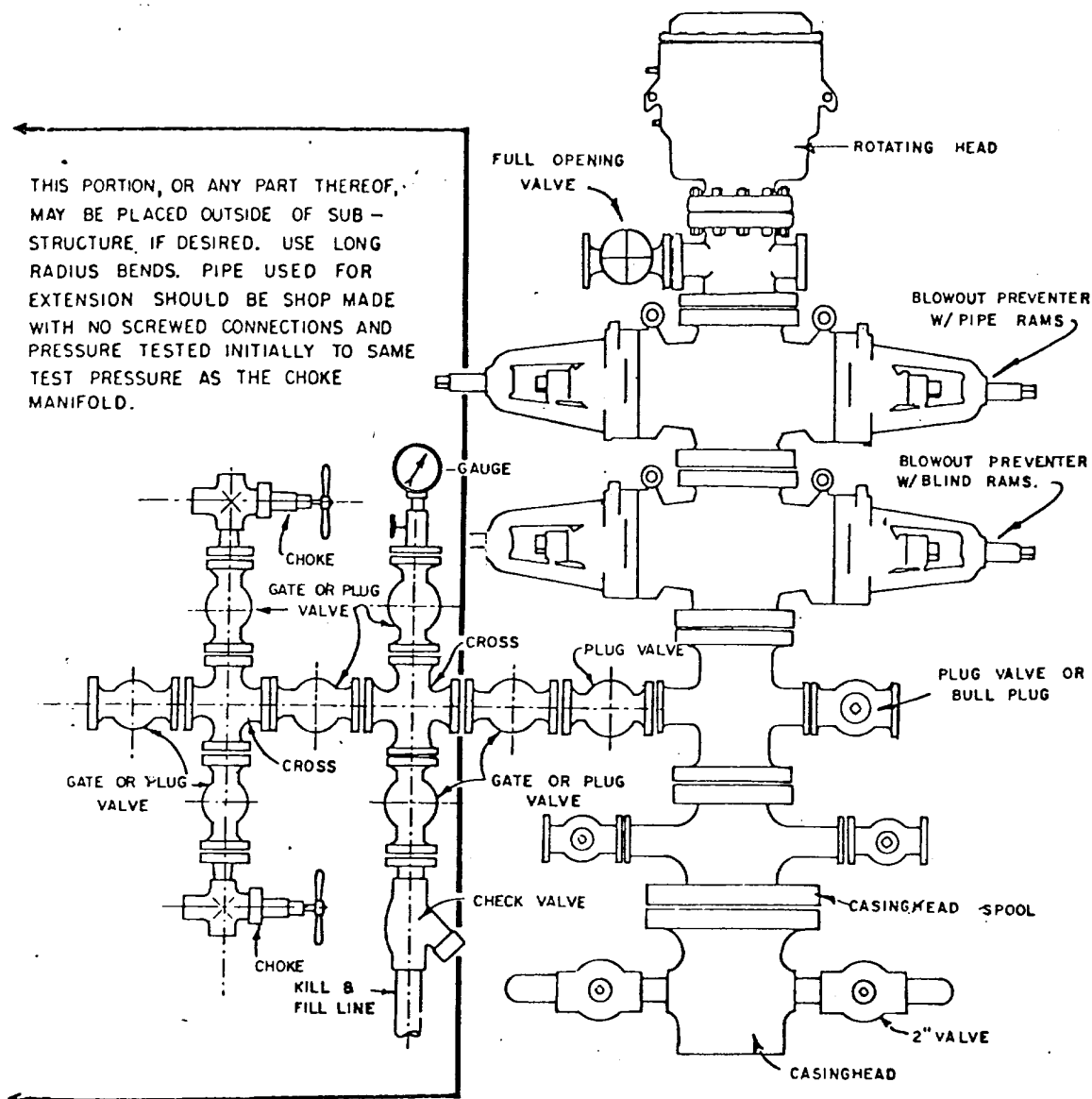
Amoco will run an Induction Electric Survey from TD to 300' and a Density-Gamma Ray Log from TD to 300'. No cores or drill stem tests will be taken.

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

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



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

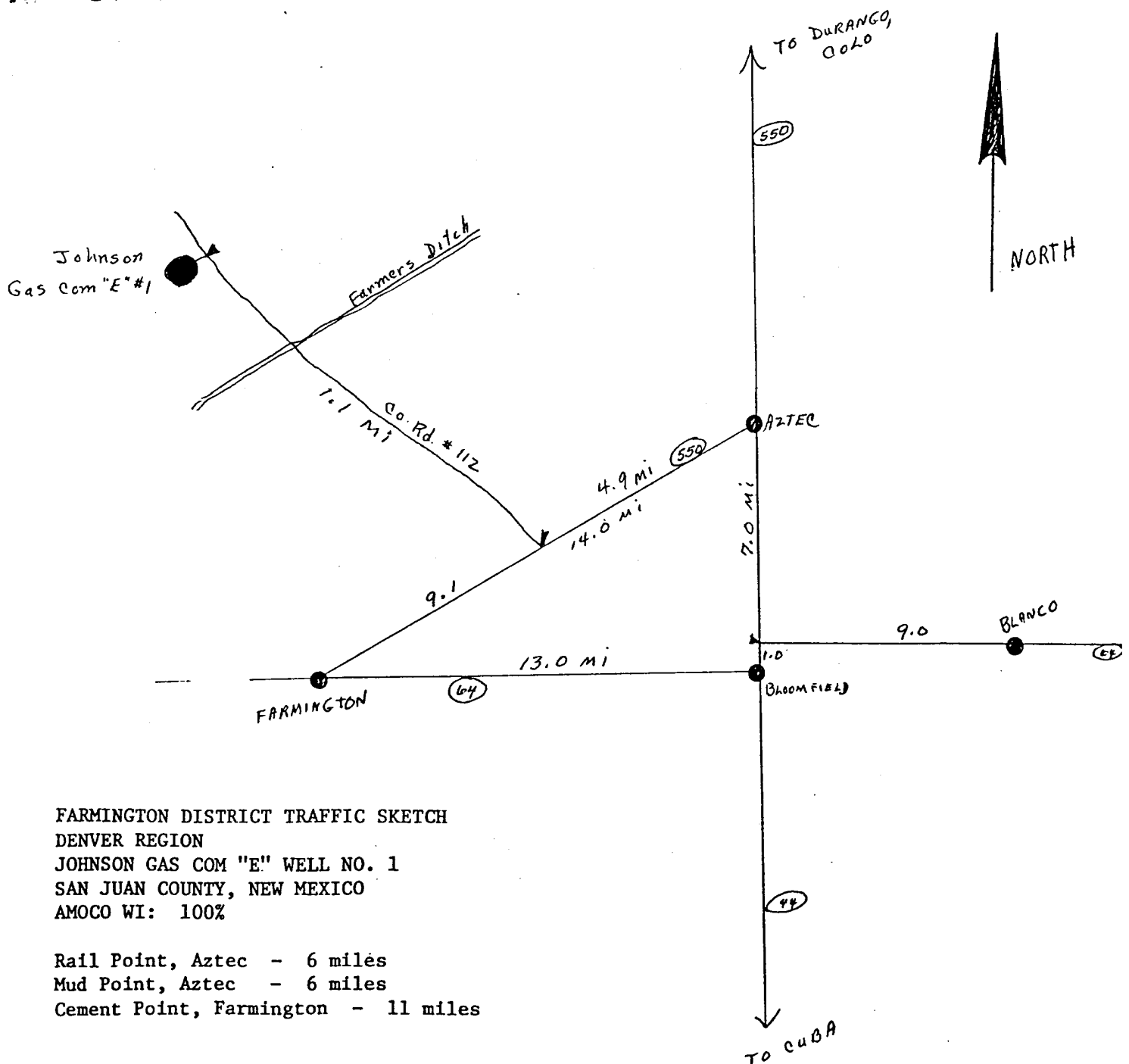
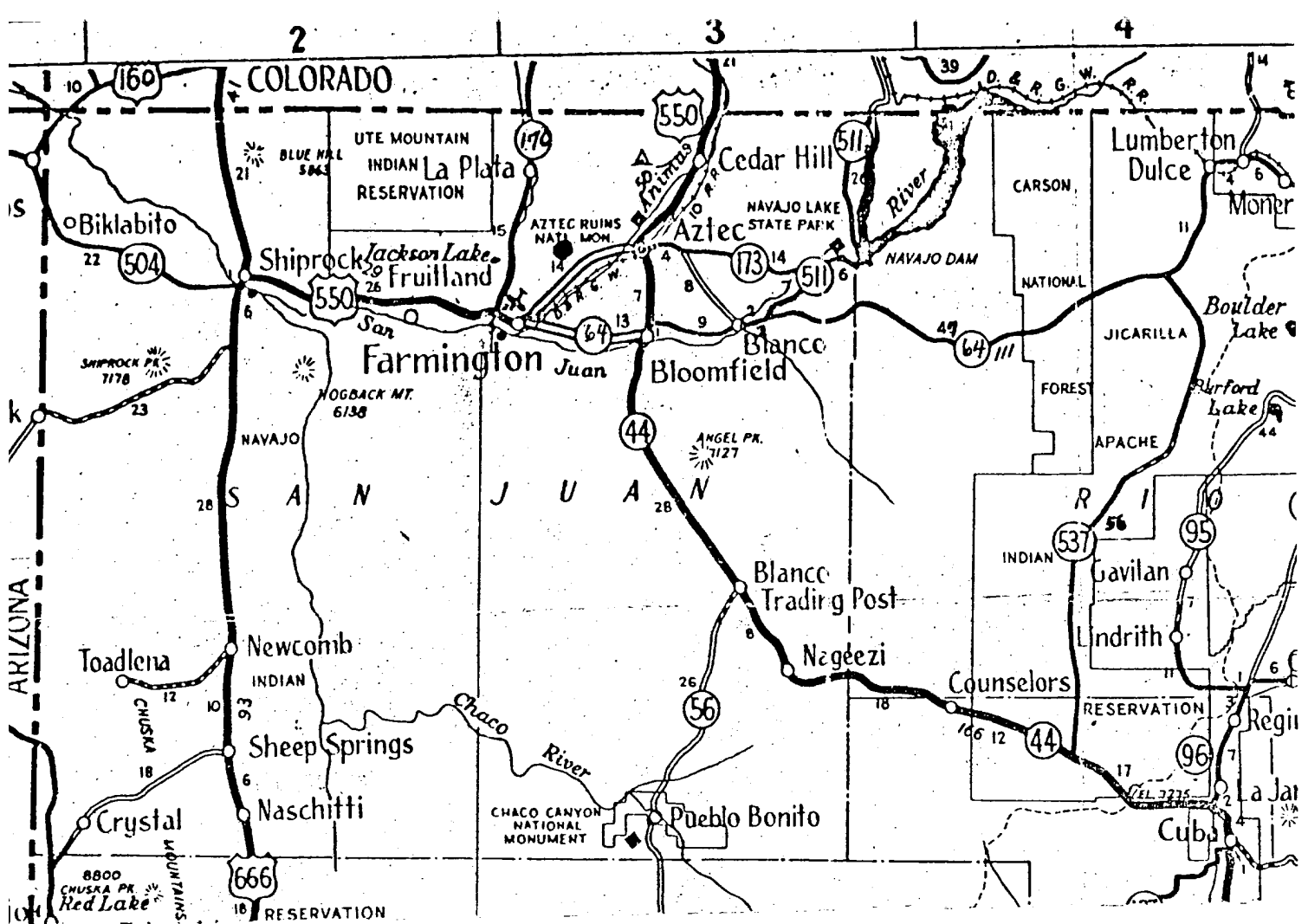
JOHNSON GAS COM "E" NO. 1  
1100' FNL & 990' FWL, SECTION 15, T30N, R12W  
SAN JUAN COUNTY, NEW MEXICO

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 road will be built off County Road No. 112. A culvert will also be installed.
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 located approximately 4500' away.
5. Water will be hauled from Farmer's Ditch one-fourth mile south of the location.
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 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 6-foot cut will be made on the west side.
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 sandy slope with native grasses and cedar trees.

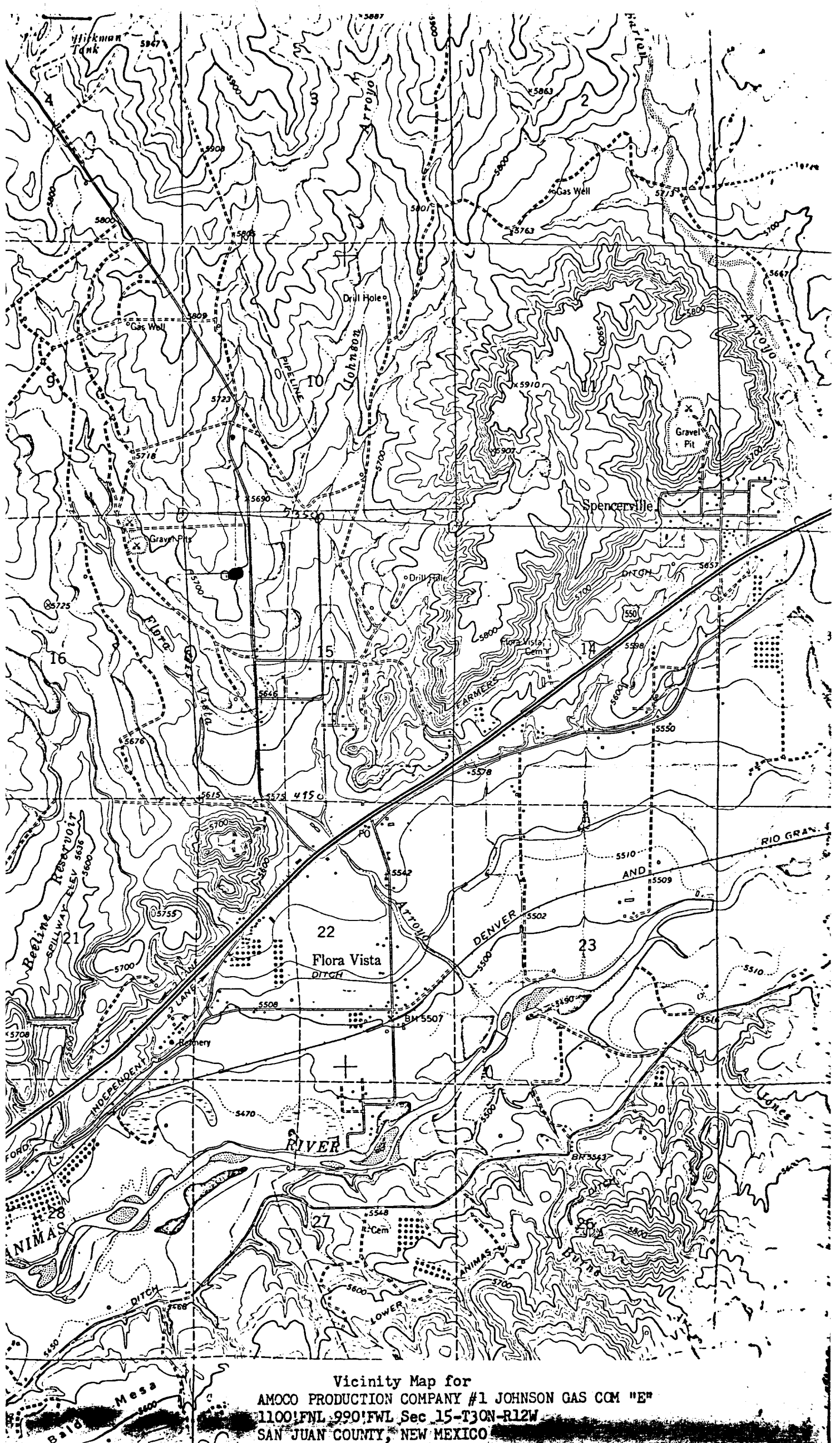
Representatives of the U. S. Geological Survey's Farmington Office (Brandt Dickey) and the Bureau of Land Management's Farmington Office (Russel Pigors) inspected the site with Amoco personnel. Cultural resources inspection was conducted by John Frizzell, Archaeologist from San Juan College.

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



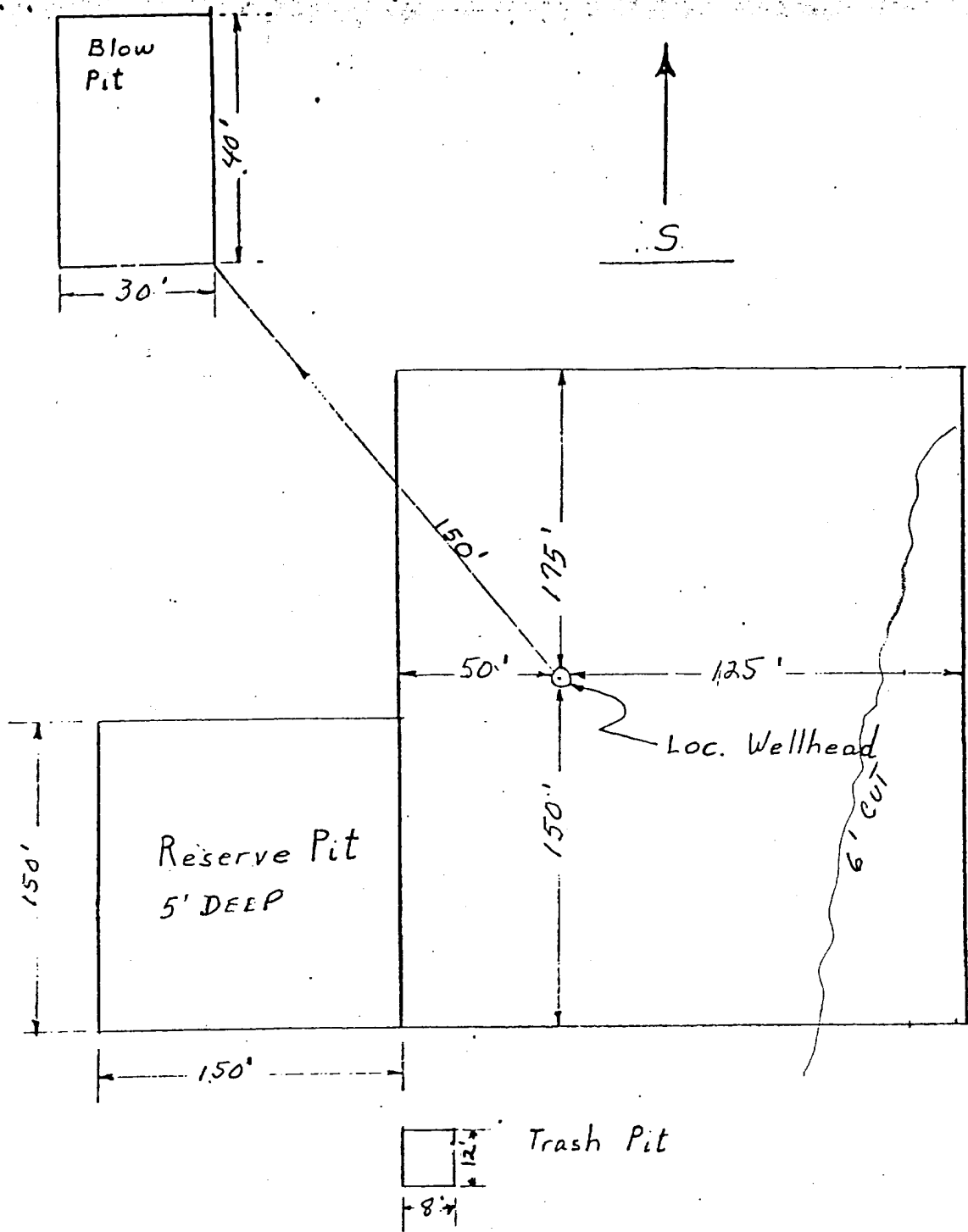






Vicinity Map for  
AMOCO PRODUCTION COMPANY #1 JOHNSON GAS COM "E"  
1100'FNL 990'FWL Sec 15-T30N-R12W  
SAN JUAN COUNTY, NEW MEXICO





APPROXIMATELY 1.2 Acres

|  |             |
|--|-------------|
| Amoco Production Company                             | SCALE: NONE |
| DRILLING LOCATION SPECS<br>JOHNSON GAS COM "E" NO. 1 | DRG.<br>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.  |



JOHNSON GAS COM "E" NO. 1  
1100' FNL & 990' FWL, SECTION 15, T30N, R12W  
SAN JUAN 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

