

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)

30-045-27799  
Form approved.  
Budget Bureau No. 1004-0136  
Expires August 31, 1985

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 Water Disposal

SINGLE  
ZONE ☐

MULTIPLE  
ZONE ☒

2. NAME OF OPERATOR

Amoco Production Company ATTN: J.L. Hampton

3. ADDRESS OF OPERATOR

P. O. Box 800 Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface 1270' FNL, 1580' FZL  
At proposed prod. zone

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

13.28 miles to Aztec, New Mexico

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any) 1220'

16. NO. OF ACRES IN LEASE

N/A

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

N/A

18. DISTANCE FROM PROPOSED LOCATION\*

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

19. PROPOSED DEPTH

8840' TD

20. ROTARY OR CABLE TOOLS

Rotary

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

5956' GR

22. APPROX. DATE WORK WILL START\*

As soon as approved

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	20"	94#	500' 250	Cement to surface 640 SX
17 1/2"	13 3/8"	54.5, 61., 68.0	2000' 300	Cement to surface 1700 SX
12 1/4"	9 5/8"	36#, 40#	5400'	Cement to liner top 900 SX
8 1/2"	7"	23#, 25#	8840' (TD)	Cement 500' into liner 600 SX

See attached summary for detailed mud and casing program "Drilling and Completion Program"

Notice of Staking was submitted 7/25/89

Lease Description: T30N, R9W  
NE/4, W/2, SE/4

RECEIVED  
MAY 07 1990  
OIL CON. DIV.  
DIST. 3

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 J.L. Hampton/CUB

TITLE Sr. Staff Admin. Supv.

DATE 9/18/89

(This space for Federal or State office use)

APPROVED  
AS AMENDED

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

C-104 SWD-376  
Hold For SWD Approval  
(E)

MAY 03 1990  
AREA MANAGER

\*See Instructions On Reverse Side

0371231  
UNITED STATES  
NAVY  
OFFICE OF THE  
JUDGE ADVOCATE GENERAL  
WASHINGTON, D. C.

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

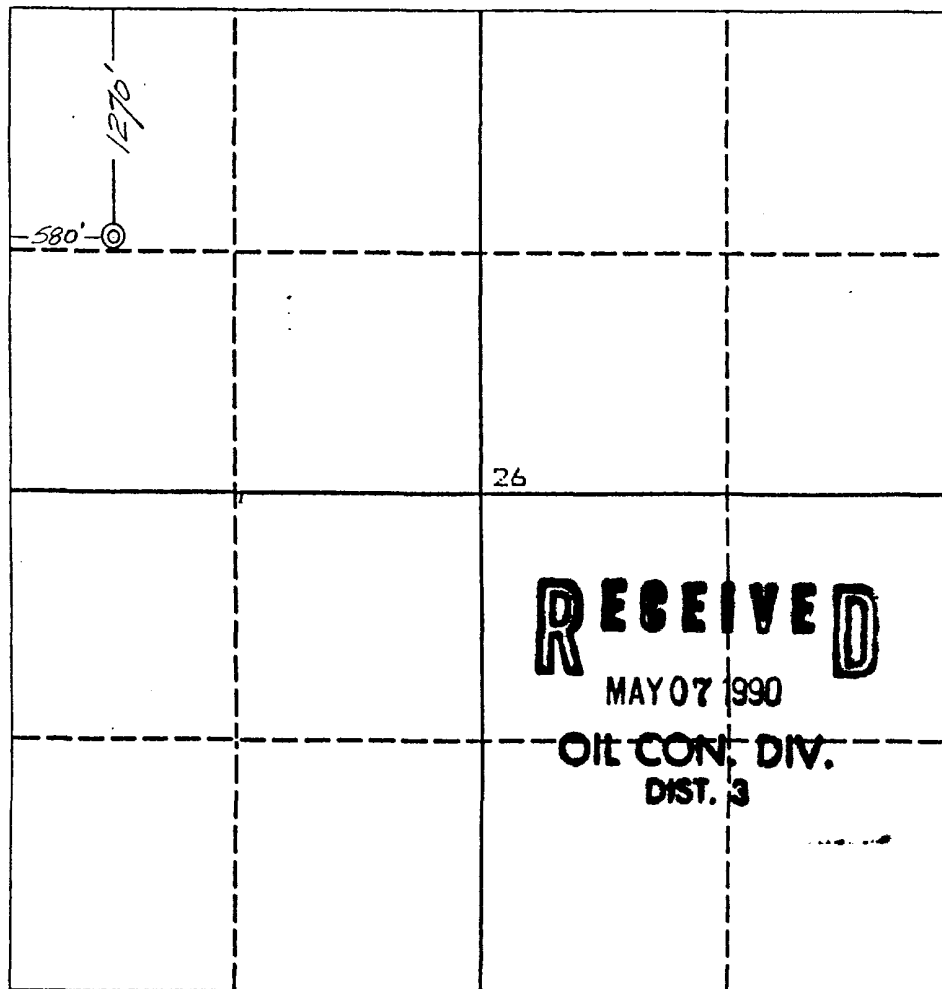
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>AMOCO PRODUCTION COMPANY</b>			Lease <b>E. E. ELLIOTT SWD</b>		Well No. <b># 1</b>
Unit Letter <b>D</b>	Section <b>26</b>	Township <b>30 NORTH</b>	Range <b>9 WEST</b>	County <b>SAN JUAN</b>	
Actual Footage Location of Well: <b>1270</b> feet from the <b>NORTH</b> line and <b>580</b> feet from the <b>WEST</b> line					
Ground level Elev. <b>5956</b>	Producing Formation <b>Morrison</b>		Pool <b>Entrada Undesignated</b>		Dedicated Acreage:  Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest 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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature  
**G. L. Hampton**  
Printed Name  
**J. L. Hampton**  
Position  
**SR. Staff Admin. Supr.**  
Company  
**Amoco Production Co.**  
Date  
**3/13/90**

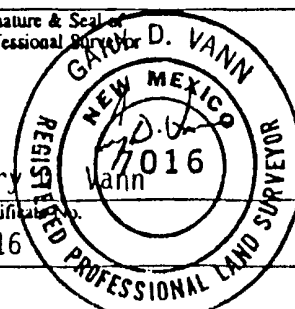
SURVEYOR CERTIFICATION

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  
**March 5, 1990**

Signature & Seal of  
Professional Surveyor  
**GARY D. VANN**  
**7016**

Gary  
Certification  
**7016**



0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

**Amoco Production Company**  
**DRILLING AND COMPLETION PROGRAM**

San Juan O.C.

*Revised*

LEASE E. E. Elliot SWD WELL NO. 1 FILE NO. WF  
COUNTY San Juan LOCATION Sec. 27-T30N-R9W DATE 2/06/90  
FIELD New Mexico 30-8

OBJECT: Develop disposal well to accomodate produced water from surrounding Coal Degas wells.

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKERS		
Type Tools	Depth Interval	Estimated Elevation	5950' GL	
Rotary	0-TD			
		Marker	Depth	Elevation
		Ojo Alamo	1500	4450
		Kirtland	1630	4320
		Fruitland	2375	3575
		Picture Cliff	2700	3250
		Lewis Shale	2870	3080
		Mesaverde	4270	1680
		Mancos	5361	589
		Gallup	6044	-94
		Dakota	7062	-1112
		Morrison	7311	-1361
		Entrada	8159	-2209
		Total Depth	8509	-2559
		*Possible Pay	#Probable Completion Interval	
		DRILL CUTTING SAMPLES	DRILLING TIME	
		Frequency	Depth Interval	Frequency
		10'		Geolograph
				0-TD
		Remarks:		
		None		
		SPECIAL TESTS		
Type	Depth Interval, Etc.	Remarks:		
DIL/SP/GR	20"-TD	Mudloggers		
CNL/FDC/GR/Cal	20"-TD			
Long Space Sonic w/full wave form recorder	20"-TD			
Microlog	Base of Liner-TD			
		Remarks:		
		Run injectivity and step rate tests on Morrison, Bluffs and Entrada Formations		

MUD PROGRAM					
Approximate Interval	Type Mud	Weight #/GAL.	Viscosity Sec. API	W.I. CC/30M	Other Specifications
0-250	spud				
250-3000'	lsnd	8.9-11.0			
3000'-5400'	Air/Air Mist	-----			Sufficient to clean hole and maintain hole conditions for logs.
5400'-7000	Air/Air Mist	-----			Maintain air rates to clean hole
7000-TD	lsnd	8.6-8.9			Maintain air rates to clean hole
Remarks: sufficient to clean hole and maintain hole conditions for logs.					

CASING PROGRAM						
Casing String	Est. Depth	Casing Size*	Hole Size*	Sx. Cement	Type Cement	Description of Landing Point, Etc.
Conductor	250	20	26	to sfc	**	
Surface	3000	13 3/8	17 1/2	To sfc	**	
Intermediate	5400	9 5/8	12 1/4	To liner top	**	
Oil String	TD	7"	8 1/2	500' into liner	**	
Liner Casing						
Remarks: ** to be desinged by Operations Center Drilling Engineer						
*** Cover all potential injection zones with cement.						

\*Normal, the tubular goods allocation letter specifies casing sizes to be used. Hole sizes will be governed by contract.

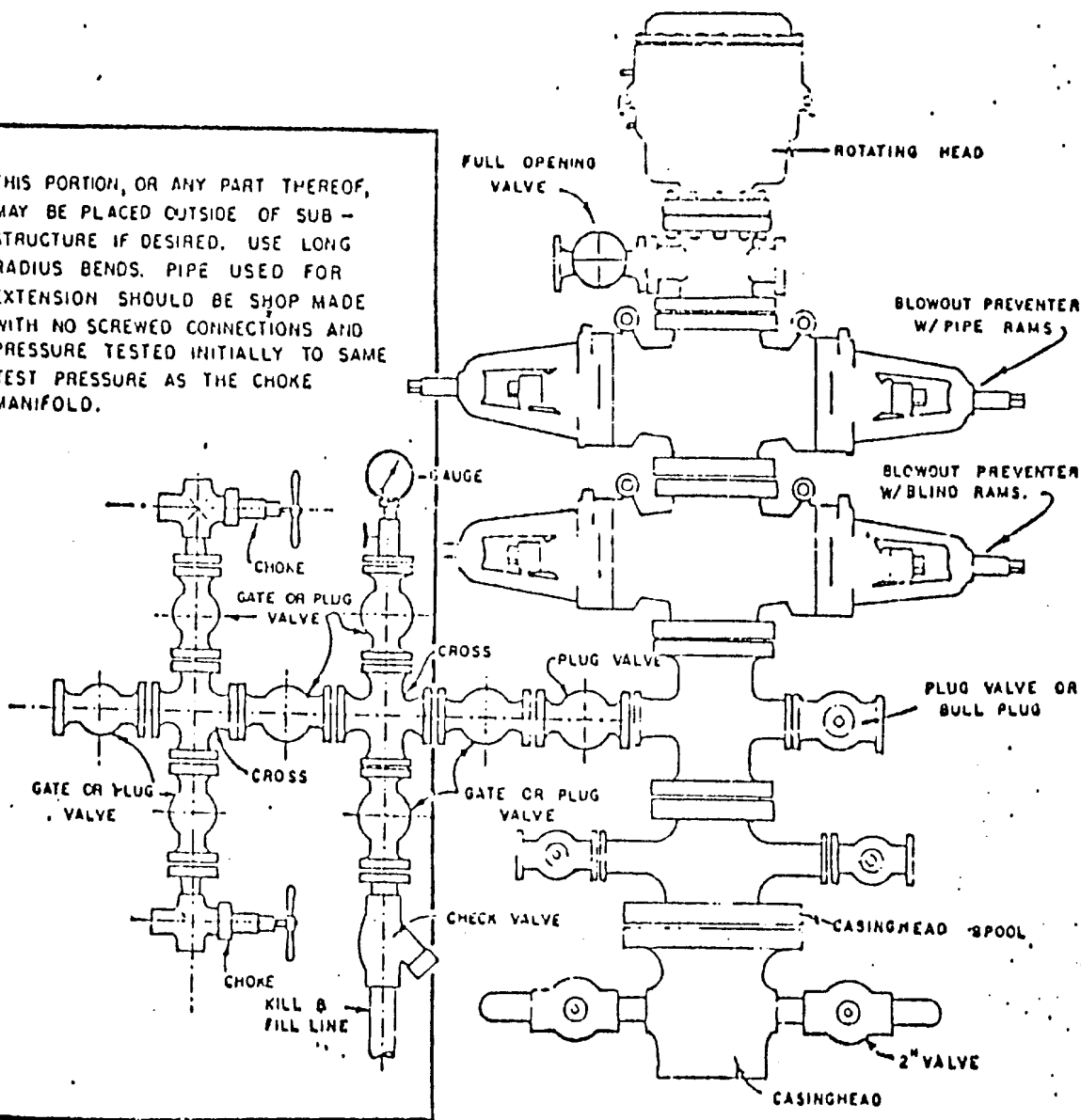
CORING PROGRAM	
None	

COMPLETION PROGRAM	
To be designed by Division Coal Degas group	

GENERAL REMARKS	

Prepared By J. R. Davidson/B. S. Bell	Approved:	Approved:
H. Terbest		
FORM 46 Elliot.swd disk 60	For Producing Department	For Exploration Department

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

AMOCO PRODUCTION COMPANY

APD Series # 900

EXHIBIT D-4  
OCTOBER 16, 1961

Operation of BOP by closing both pipe and blind rams will be tested each trip or, on long bit runs, pipe rams will be closed once each 24 hours.

# Drill Out BOPE 6" 3000 psi BOPE

NOTE: 2 - 4" outlets on mud cross  
secondary bleed line will not  
be equipped with Reagan Preventer.

An 8 Station, 250 gal., 3000 psi  
accumulator will be required.  
Air and electric power.

Eqpt Ht.	
Tbghd	20 7/8"
LWS double	27 5/8"
Spool	17"
LWS double	27 5/8"
Striphead	20"
	113 1/8"

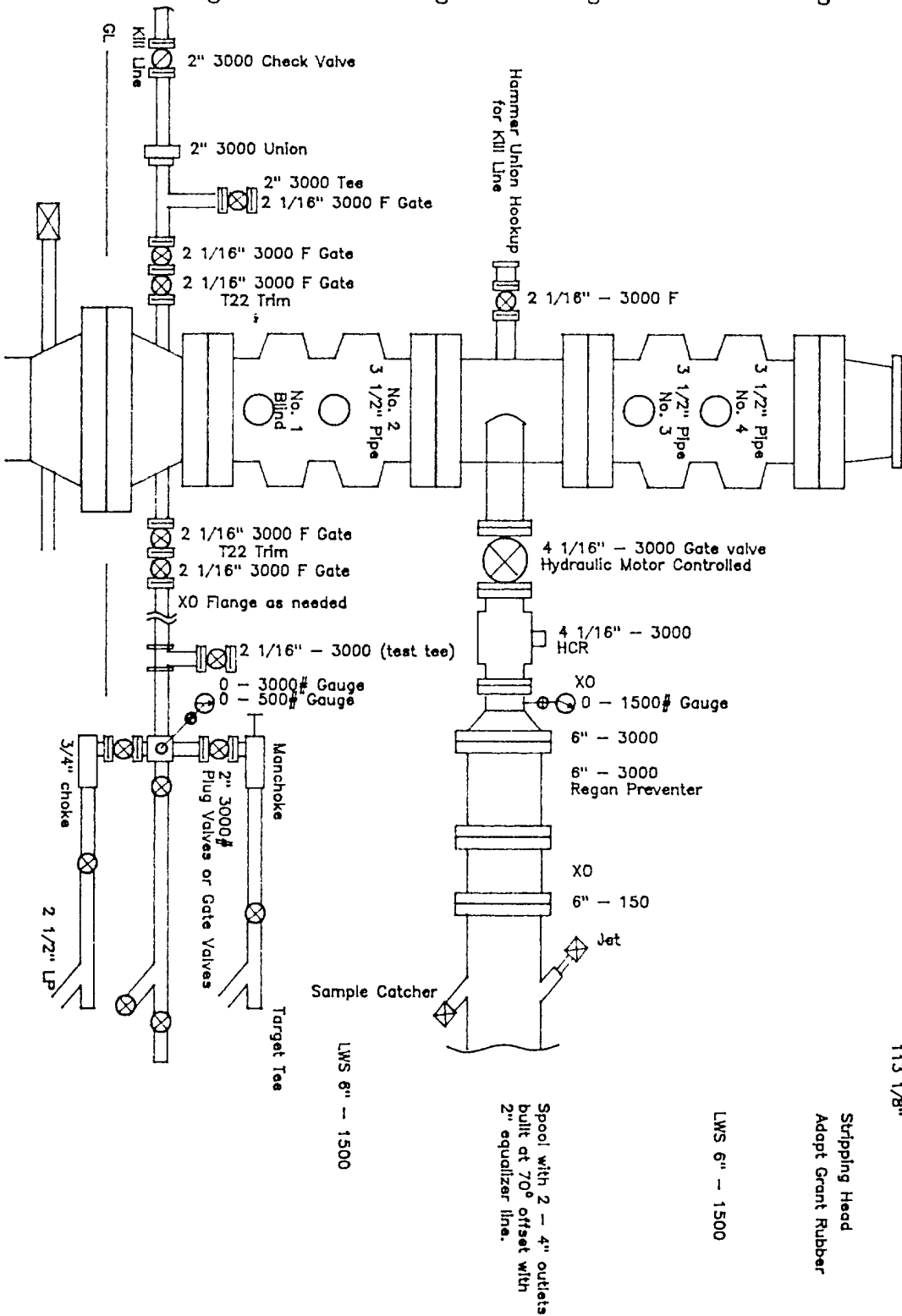
7 1/16" - 3000

7 1/16" - 3000

7 1/16" - 3000

7 1/16" - 3000

11" - 3000



Per your request Amoco Production Company is submitting a revision to our Blow Out Preventer Equipment previously provided. We intend to utilize 3000psi equipment that satisfies the Onshore Order #2. The following equipment will comprise the 3000psi systems:

1. Annular Preventer.
2. Double Ram (Blind and Pipe).
3. Drilling Spool with 2 side outlets of 3" minimum diameter.
4. Kill Line.
5. At least 2 choke line valves (3" minimum).
6. 3 inch diameter choke line.
7. 2 Kill line valves (2-inch minimum).
8. 2 chokes.
9. Pressure gauge on chokes.
10. Upper Kelly Cock valve with handle available.
11. Safety valve and subs to fit all drill string connections.
12. All BOPE connections will be flanged, welded, or clamped.
13. Fill up line above the uppermost preventor.

# INJECTION WELL DATA SHEET

Amoco Production Co.		E. E. Elliott	
Operator		Lease	
1	1220' FNL X 1520' FEL	27	30 North 9 West
Well No.	Footage Location	Section	Township Range
San Juan County, New Mexico			

## Schematic

## Tabular Data

### Surface Casing

Size 20" Cemented with 640 sx.

TOC surface feet determined by circulation

Hole size 26"

### Intermediate Casing

Size 13 3/8" Cemented with 1700 sx.

TOC surface feet determined by circulation

Hole size 17 1/2"

### Long String

Size 7" Cemented with 600 sx.

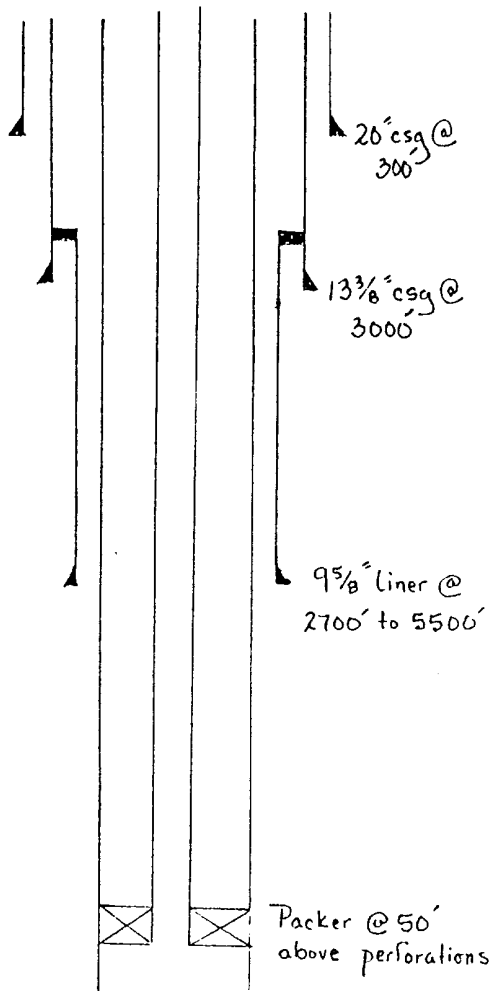
TOC 5000 feet determined by bond log

Hole size 8 3/4"

Total depth 8840'

Injection interval  
(will perforate selected intervals)

7400 feet to 8400 feet



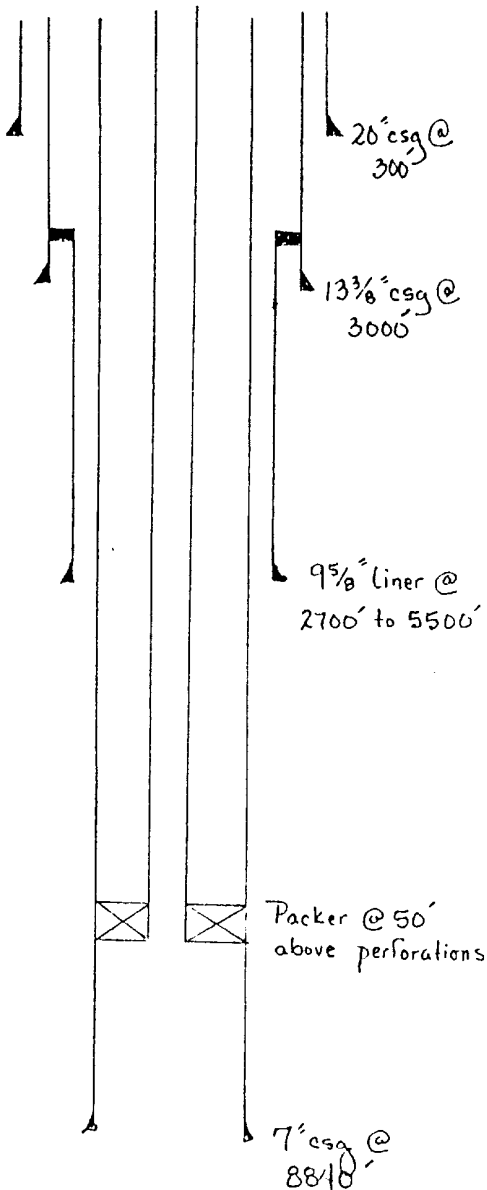


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Amoco Production Co.		E. E. Elliott	
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San Juan County, New Mexico			9 West
Range			

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Size 7" Cemented with 600 sx.TOC 5000 feet determined by bond logHole size 8 3/4"Total depth 8840'

## Injection interval

(will perforate selected intervals)

7400 feet to 8400 feet

## Liner

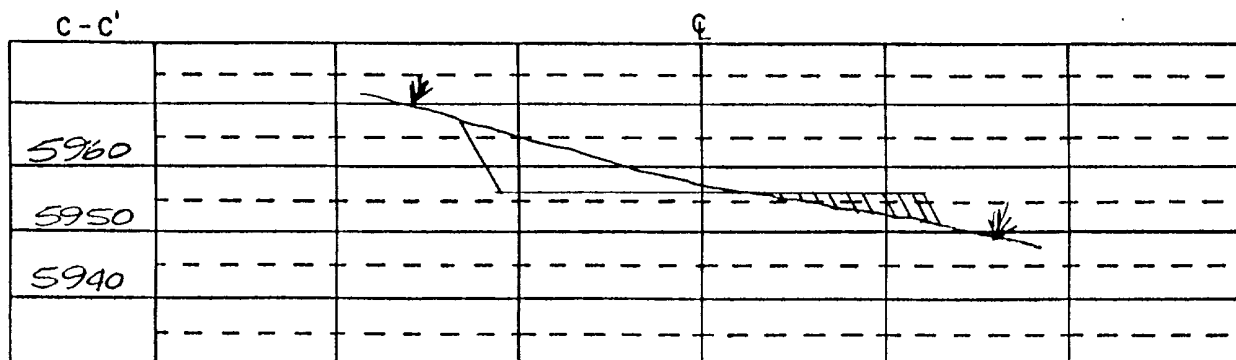
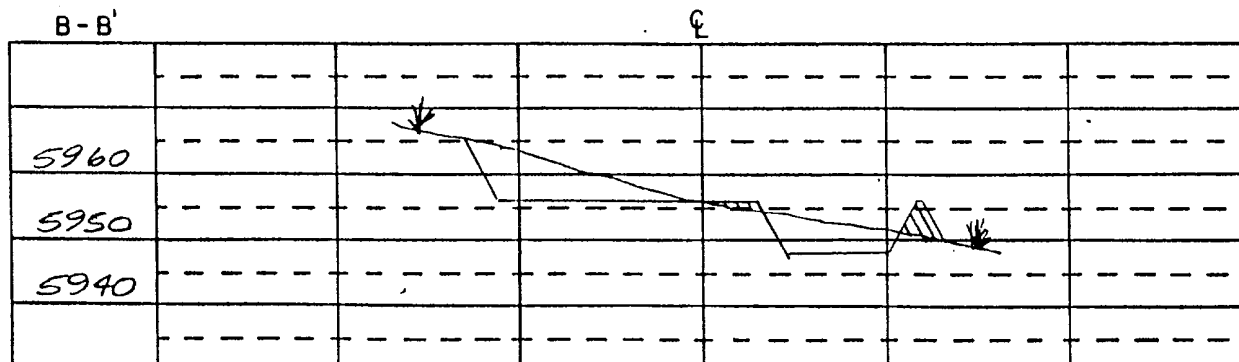
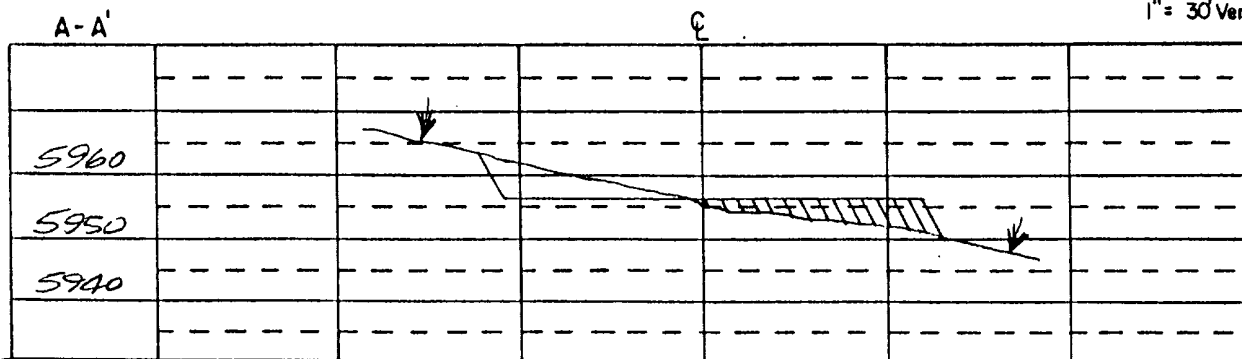
Size 9 5/8" Cemented with 900 sx.TOC 2700 feet determined by circulationHole size 12 1/4"Total depth 2700' - 5500'Tubing size 3 1/2" lined with \_\_\_\_\_ set in a \_\_\_\_\_ (material)(brand and model) \_\_\_\_\_ packer at 7350 (approx.) feet  
(or describe any other casing-tubing seal).

## Other Data

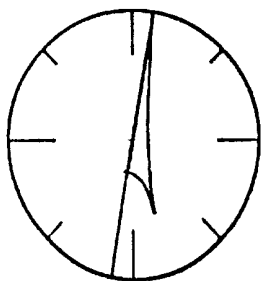
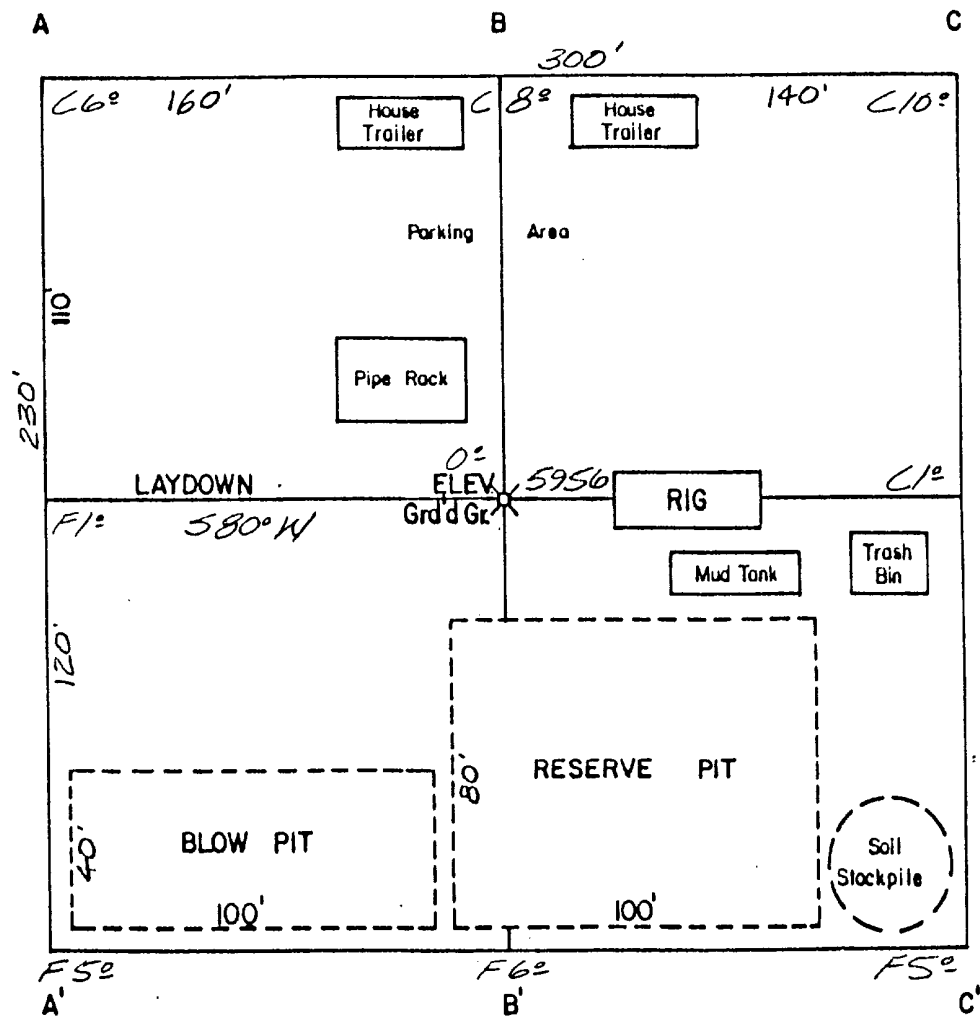
- Name of the injection formations Morrison, Bluff and Entrada
- Name of Field or Pool (if applicable) NA
- Is this a new well drilled for injection? ☒ Yes ☐ No  
If no, for what purpose was the well originally drilled? \_\_\_\_\_
- Has the well ever been perforated in any other zone(s)? List all such intervals and give plugging detail (sacks or cement or bridge plug(s) used). No.
- Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area.  
2260' Fruitland; 2660' Pictured Cliffs; 4290' Mesaverde; 6970' Dakota

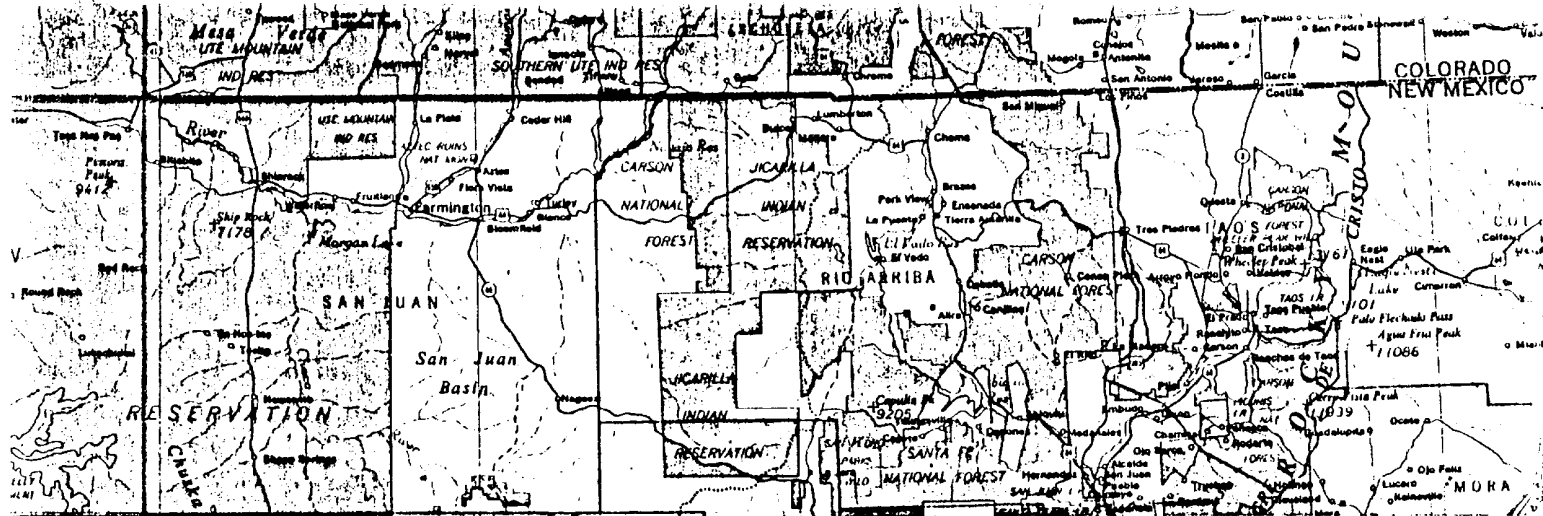
AMOCO PRODUCTION COMPANY  
 E. E. ELLIOTT SWD # 1  
 1270' F/NL 580' F/WL  
 SEC. 26, T30N, R9W, NMPM  
 SAN JUAN COUNTY, NEW MEXICO

SCALE: 1" = 100' Horiz.  
 1" = 30' Vert.

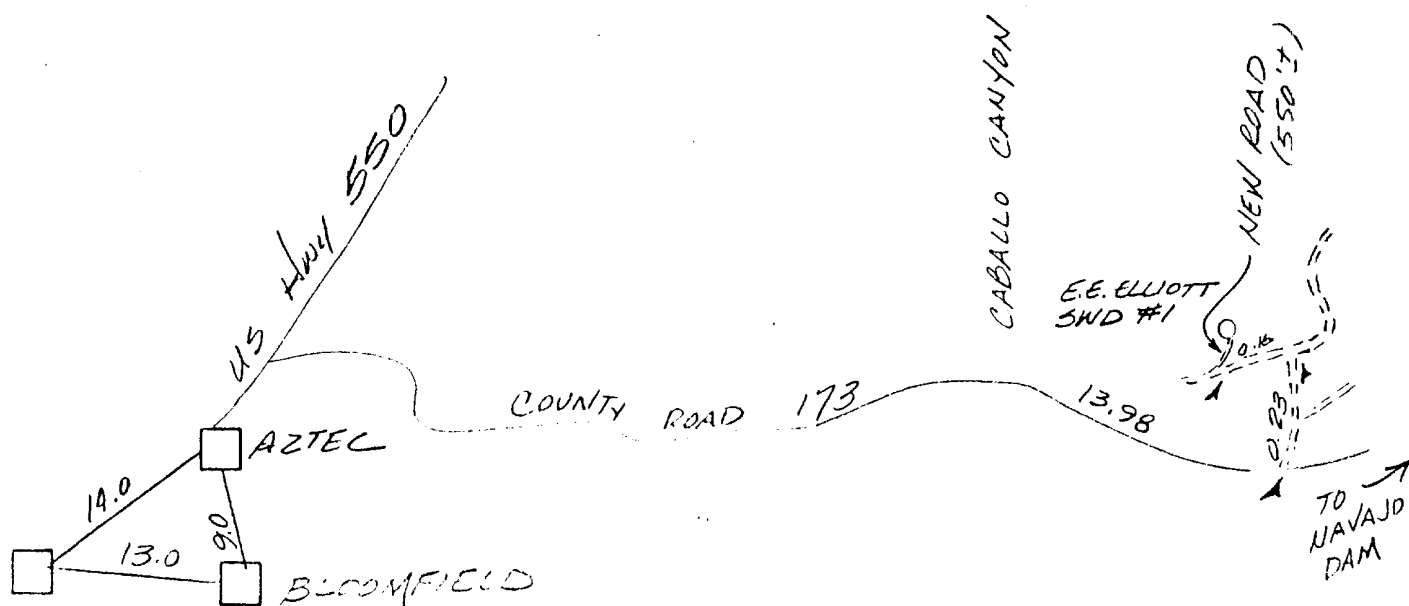


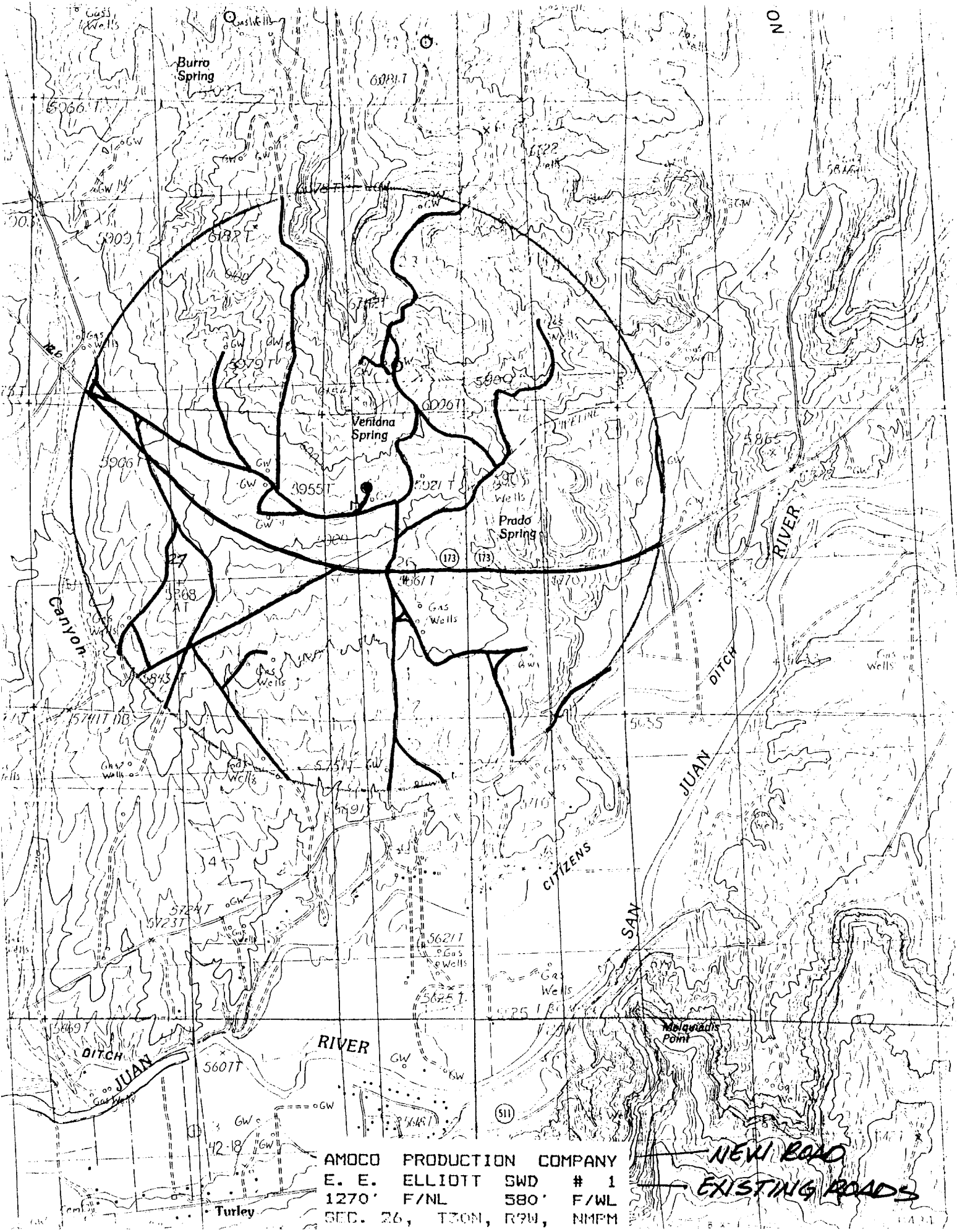
AMOCO PRODUCTION COMPANY  
 E. E. ELLIOTT SWD # 1  
 1270' F/NL 580' F/WL  
 SEC. 26, T30N, R9W, NMPM  
 SAN JUAN COUNTY, NEW MEXICO





E. E. ELLIOTT SWD # 1  
 1270' F/NL 580' F/WL  
 SEC. 26, T30N, R9W, NMPM  
 RAIL POINT:  
 MUD POINT:  
 CEMENT POINT:





Disposal Well  
New Mexico Multipoint Requirements

1. Existing Roads

- A. The proposed location is staked as shown on the Certified Plat.
- B. Route and distance from nearest town is identified on the form 3160-3, item #14.
- C. Access road(s) to location are identified on Exhibits A and B.
- D. Not applicable unless exploratory well.
- E. All existing roads within a 1-mile radius of the well site are shown on Exhibit C.
- F. Improvement and/or maintenance of existing roads may be done as deemed necessary for Amoco's operations, or as required by the surface management agency.

2. Access Roads

- A. Width 18'
- B. Maximum grades 2%
- C. Turnouts
- D. Drainage will be used as required.
- E. Size and location of culverts, if needed, will be determined at the onsite inspection or during construction.
- F. Surfacing materials may be applied to the proposed road and/or location if conditions merit it.
- G. Gates and/or cattle guards will be installed at fence crossings if deemed necessary by the land owner or the surface management agency.
- H. The proposed new access road is center-line flagged if applicable.

3. Location of Existing Wells

- A. - H. All existing wells to the best of our knowledge are identified on Exhibit D (9 section plat).

4. Location of Existing and/or Proposed Facilities

- A. All existing facilities owned or controlled by Amoco are shown on Exhibits E and F.
- B. If this proposed well is productive, Amoco will own or have control of these facilities on location: storage tanks, wellhead, production unit, and if applicable, a pump jack and/or compressor. Also there will be buried production lines from the wellhead to the production unit and/or the storage tanks. Amoco will submit a Sundry Notice when off-pad plans are finalized.
- C. Rehabilitation, whether the well is productive or not, will be made on all unused areas in accordance with surface owner or manager approval.

5. Location and Type of Water Supply

Water will be obtained from a privately permitted water source secured through a contract water hauling company. It will be hauled in vacuum trucks via the access road (Exhibit A.) The appropriate permits for this activity have been obtained by the water transporter.

6. Source of Construction Materials

- A. - D. No off-site materials will be needed to build the proposed location or access road.

7. Methods of Handling Waste Disposal

- A. Cuttings, drilling fluids, and produced fluids will be contained in the reserve pit and be allowed to evaporate. The reserve pit will be fenced on 3 sides and the 4th side will be fenced upon removal of the rig. The pits will be allowed to sit for 90 days and then pulled as required by NTL-2B. Produced water will be disposed of at an approved injection well or an evaporation site. Sanitary facilities and a steel mesh portable trash container will remain on location throughout drilling operations and will then be removed to a designated disposal area. The well site will be properly cleaned up upon removal of the rig.

8. Ancillary Facilities

- A. To the best of our knowledge, no ancillary facilities will be needed at this time.

9. Well Site Layout

- A. - C. Cross-sections etc. - see Exhibit E. Exact location of rig related equipment will be determined when Amoco contracts a drilling rig; however, all this equipment will be contained on location. The location diagram reflects actual area of well pad. Total disturbed area will vary due to cut and fill slopes.

- D. Reserve pit(s)    unlined \_\_\_\_\_  
                             lined          ✓       (8-10 mil reinforced plastic, size sufficient to cover pit area and fit underneath a rig tank)

10. Plans for Restoration of Surface

- A. Restoration of the surface will be conducted after the reserve pit has dried. The pit will then be cleaned up and back filled and the entire disturbed area will be recontoured. The topsoil stockpile will then be uniformly placed over this area and reseeding of the site will be carried out as instructed by the appropriate management agency. Methods to protect against erosion will be employed. After final abandonment, additional restoration efforts will be applied.

11. Surface Ownership

- A. The surface owner is BLM.

12. Other Information

- A. General Description
1. Archeological clearance, topography, soil character, and flora and fauna are detailed in the archeologist's report forwarded by an approved contract archeologist to the appropriate management agency.
  2. Land uses include recreation, grazing and oil and gas development.

13. Operator's Representative and Certification

Amoco Production Company  
P.M. Harris  
Region Drilling Supt.  
P. O. Box 800  
Denver, Colorado 80201 (303) 830-4207

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

Date

9/18/89

Richard Harris  
P. M. Harris, Regional Drilling Supt.