

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐MAY 24 1983  
PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒OTHER ☐OIL CON. DIV. ☐

## 2. NAME OF OPERATOR

Amoco Production Company

DIST. 3

## 3. ADDRESS OF OPERATOR

501 Airport Dr., Farmington, NM 87401

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

At surface

1850' FSL x 980' FWL

At proposed prod. zone

Same

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

6-7/8 miles SE of Farmington, NM

## 15. DISTANCE FROM PROPOSED\*

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

980'

## 16. NO. OF ACRES ASSIGNED

1207.18

## 17. NO. OF ACRES ASSIGNED

TO THIS WELL

320 W 304

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

2000'

## 19. PROPOSED DEPTH\*

6110'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

5728' GL

## DRILLING OPERATIONS AUTHORIZED ARE

## SUBJECT TO COMPLIANCE WITH ATTACHED

## "GENERAL REQUIREMENTS"

## PROPOSED CASING AND CEMENTING PROGRAM

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

as soon as permitted

## 23.

This action is subject to administrative  
appeal pursuant to 30 CFR 290.

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" (new)	24# K-55	300'	360 cu ft class B w/2% CaCl2-circ
7-7/8"	4-1/2" (new)	10.5# K-55	6110'	Stage 1-531 cu ft class B w/50:50 poz, 6% gel, 2# med tuf plug/sx, and 0.8% FLA. Tail in w/118 cu ft class B neat-circ. Stage 2-1960 cu ft class B w/65:35 poz, 6% gel, 2# med tuf plug/sx, and 0.8% FLA. Tail in w/118 cu ft class B neat-circ.

Amoco proposes to drill the above well to further develop the Basin Dakota reservoir. The well will be drill to the surface casing point using native mud. The well will then be drilled to TD with a low solids nondispersed mud system. Completion design will be based on open hole logs. Copies of all logs will be filed upon completion. Amoco's standard blowout prevention will be employed; see attached drawing for blowout preventer design.

DV tool set at 3905'.

Upon completion the well location will be cleaned and the reserve pit filled and leveled.

Gas produced from this well is dedicated to El Paso Natural Gas Company under contract No. 56742.

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 prevention program, if any.

24.

SIGNED

TITLE District Engineer

DATE 5-5-83

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

NWL 496

APPROVED  
AS AMENDED

DATE

MAY 23 1983

JAMES F. SIMS  
DISTRICT ENGINEER

NMOCE

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

Operator <b>AMOCO PRODUCTION COMPANY</b>			Lease <b>GALLEGOS CANYON UNIT</b>		Well No. <b>159E</b>
Unit Letter <b>L</b>	Section <b>31</b>	Township <b>28N</b>	Range <b>12W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1850</b> feet from the <b>South</b> line and <b>980</b> feet from the <b>West</b> line Ground Level Elev. <b>5728</b> Producing Formation <b>Dakota</b> Pool <b>Basin Dakota</b> Dedicated Acreage: <b>304</b> 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 unitization

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.

		Amoco WI 52% <b>RECEIVED</b> MAY 6 1983 OIL CON. DIV. DIST. 3
		<b>RECEIVED</b> MAY 6 1983 U. S. GEOLOGICAL SURVEY FARMINGTON, N. M.

Scale: 1"=1000'

<b>CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. <u>Dale H. Shoemaker</u> Name <b>Dale H. Shoemaker</b> Position <b>District Engineer</b> Company <b>Amoco Production Company</b> Date <b>5-5-83</b>	
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 <b>December 9, 1980</b> Registered Professional Engineer and Land Surveyor <u>Fred B. Kerr Jr.</u> <b>Fred B. Kerr Jr.</b> Certificate No. <b>3950</b>	

SUPPLEMENTAL INFORMATION TO FORM 9-331C

GALLEGOS CANYON UNIT NO. 159E  
1850' FSL & 980 FWL, SECTION 31, T28N, R12W  
SAN JUAN COUNTY, NEW MEXICO

The geologic name of the surface formation is the Tertiary Nacimiento.

Estimated tops of important geologic markers and potential water, oil, or gas bearing formations:

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Ojo Alamo	50 '	5691 '
Kirtland	100 '	5641 '
Fruitland	250 '	5491 '
Pictured Cliffs	1310 '	4431 '
Chacra (if present)	'	'
Mesaverde [ Cliff House	2216 '	3525 '
[ Point Lookout	3755 '	1986 '
Gallup	4920 '	821 '
Dakota	5930 '	- 189 '
TD	6110 '	- 369 '

Estimated KB elevation: 5741 '

Drilling fluid to TD will be a fresh water, low solids non-dispersed mud system. Open hole logging program will include logs from TD to top of Mesaverde formation:

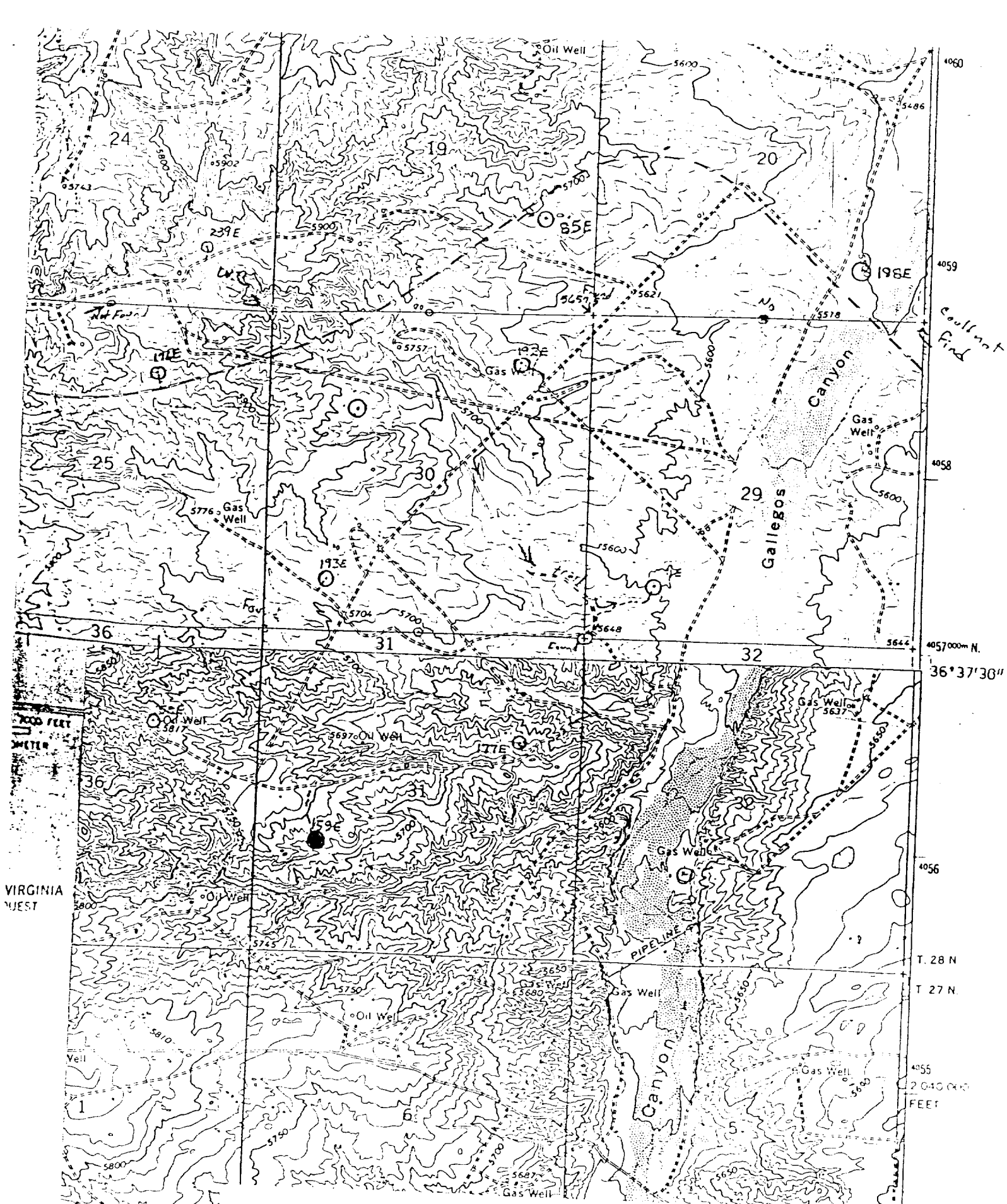
SP-DIL-SPL-GR log and FDC-CNL-GR-Caliper log.  
Mudlogged from TD to BSC

Completion design will be based on these logs. No cores or drill stem tests will be taken.

Operations will commence when permitted and last approximately 3 weeks.

Amoco's standard blowout prevention will be employed (see attached drawing).

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



Vicinity Map for  
AMOCO PRODUCTION CO. #159E GALLEGOS CANYON UNIT  
1850' FSL 930' FWL Sec. 31-T28N-R12W  
SAN JUAN COUNTY, NEW MEXICO