

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

800' FSL & 795' FSL, Section 3, T-29-N, R-9-W

At proposed prod. zone

Same

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

3 miles northeast of Blanco, New Mexico

15. DISTANCE FROM PROPOSED*

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

795'

18. DISTANCE FROM PROPOSED LOCATION*

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

2956'

16. NO. OF ACRES IN LEASE

323.4

19. PROPOSED DEPTH

5500'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

323.4

20. ROTARY OR CABLE TOOLS

Rotary

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

6357' GL,

22. APPROX. DATE WORK WILL START*

January, 1977

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"	29.3#	250'	280 sz
8-3/4"	7"	17#	3375'	590 sz
6-1/4"	4-1/2"	9.5#	5500'	275 sz

The above referenced well is being drilled to further develop the Masaverde reservoir. The well will be drilled to 3375' with water and Benox as the circulating media. From 3375' to 5500' the well will be gas drilled. Completion design will be based on open hole logs. The acreage is dedicated to El Paso Natural Gas Company. Attached is the Development Plan required by NTL-6.



DEC 22 1976

U. S. GEOLOGICAL SURVEY

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

TITLE

Area Engineer

DATE

December 22, 1976

(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

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.



NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

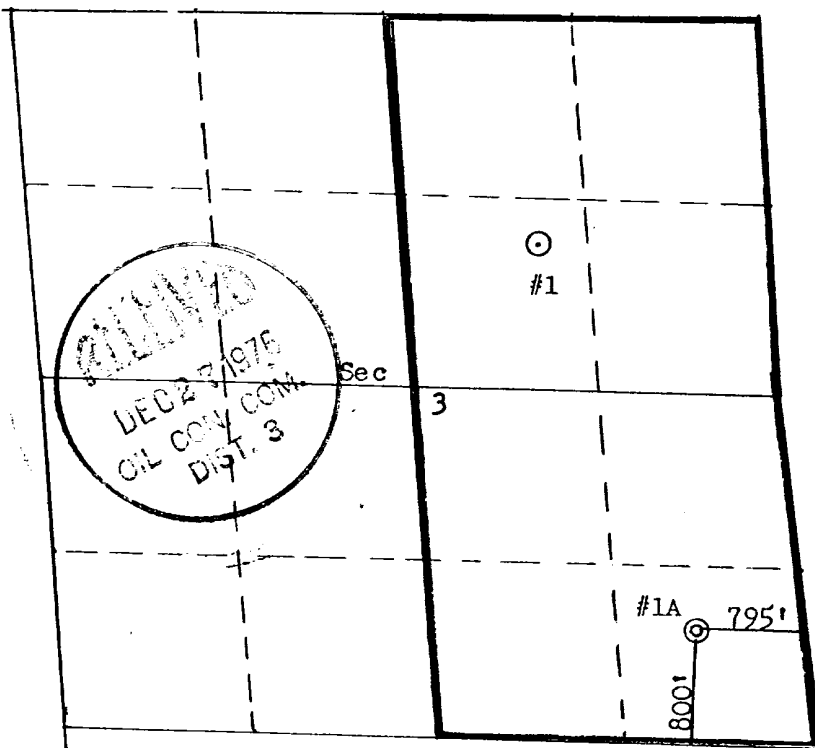
Operator Amoco Production Company			Lease Chavez Gas Com A		Well No. 1A
Unit Letter P	Section 3	Township 29N	Range 9W	County San Juan	
Actual Footage Location of Well: 800 feet from the South line and 795 feet from the East line					
Ground Level Elev: 6357	Producing Formation Mesa Verde		Pool Blanco Mesaverde		Dedicated Acreage: 320 E/323: 40 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.

Name
H. D. Montgomery
Position
Area Engineer
Company
AMOCO PRODUCTION COMPANY
Date
December 22, 1976

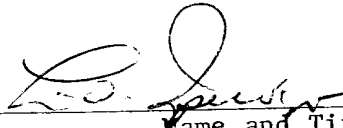
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
December 13, 1976
Registered Professional Engineer and Land Surveyor
Fred B. Kerr Jr.
Certificate No.
3950

CHAVEZ GAS COM "A" NO. 1A
SE/4 SECTION 3, T29N, R9W
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 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.

December 22, 1976
Date

 Area Supt.
Name and Title

DEVELOPMENT PLAN
CHAVEZ GAS COM "A" NO. 1A
800' FSL & 795' FEL, SECTION 3, T-29-N, R-9-W
SAN JUAN COUNTY, NEW MEXICO

The proposed well pad and access road will be constructed on an existing graded road and old well pad of a permanently abandoned Pictured Cliffs well. The pad will be enlarged. The terrain of the undisturbed areas is broken and hilly. Drainage is to the north by erosional gullies and sheet wash. The principal vegetation is juniper, pinon, rabbitbrush, snakeweed, Mormon tea, big sagebrush, bitterbrush, mountain mahogany, narrow leaf yucca and various herbs. The soil is a light brown sandy clay loam. The geological name of the surface formation is Nacimiento. No construction materials will be used for building the location; dirt will be leveled at the wellsite. No location cut will be required. Verbal approval of the drill site has been obtained from Mr. Bob Moores, BLM; Mr. Don Miller, USGS, Mr. M. L. Seelinger, USGS; and Mrs. Nancy S. Hewett, Archaeologist.

Arrangements are being made to haul water from an El Paso Natural Gas Company water hole, approximately 3 miles. Drilling fluid to 3375' will be water and Benex and the well be gas drilled from 3375' to TD (5500'). Upon completion the location will be cleaned up and leveled. Drilling mud and water will be hauled away and the reserve pit backfilled. Attached is the BLM seeding plan to be followed for this well. In addition, all surface equipment will be painted green so as to follow BLM requirements.

There are neither airstrips nor camps in the vicinity.

The estimated tops of important geological formations bearing hydrocarbons are:

<u>Formation</u>	<u>Depth</u>	<u>Elevation</u>
Pictured Cliffs	2975'	+3395'
Cliffhouse	4580'	+1790'
Menefee	4770'	+1600'
Point Lookout	5200'	+1020'

Estimated KB elevation: 6370'.

<u>Est. Depth</u>	<u>Casing Size</u>	<u>Weight</u>	<u>Hole Size</u>	<u>Sacks Cement - Type</u>
250'	9-5/8"	29.3#	12-1/4"	250 - Class "B", 2% CaCl ₂ .
3375'	7"	17#	8-3/4"	550 - Class "B", 6% Gel, 2# Med. Tuf Plug/sx.
				50 - Class "B", 2% CaCl ₂ .
3175-5500'	4-1/2"	9.5#	6-1/4"	200 - Class "B", 50:50 Poz, 6% Gel, 2# med. Tuf Plug/sx, 0.2% friction reducer.
				75 - Class "B", 50:50 Poz, 6% Gel.

Amoco's standard blowout prevention will be employed, see attached drawing for blowout preventer design.

Amoco plans to run the following logs from TD to 3375': Induction-Electric, Density-Gamma Ray. No cores or Drill Stem Tests will be taken.

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

Our proposed starting date is January 1, 1977, and a three-week operation is anticipated.

BLM SEEDING REQUIREMENTS
IN THE FARMINGTON RESOURCE AREA

1. SEED MIXTURE 2

2. TIME:

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

3. 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.

4. SPECIES TO BE PLANTED IN POUNDS PURE-LIVE-SEED PER ACRE:

CRESTED WHEATGRASS (Agropyron desertorum) - $3\frac{1}{4}$ lbs.

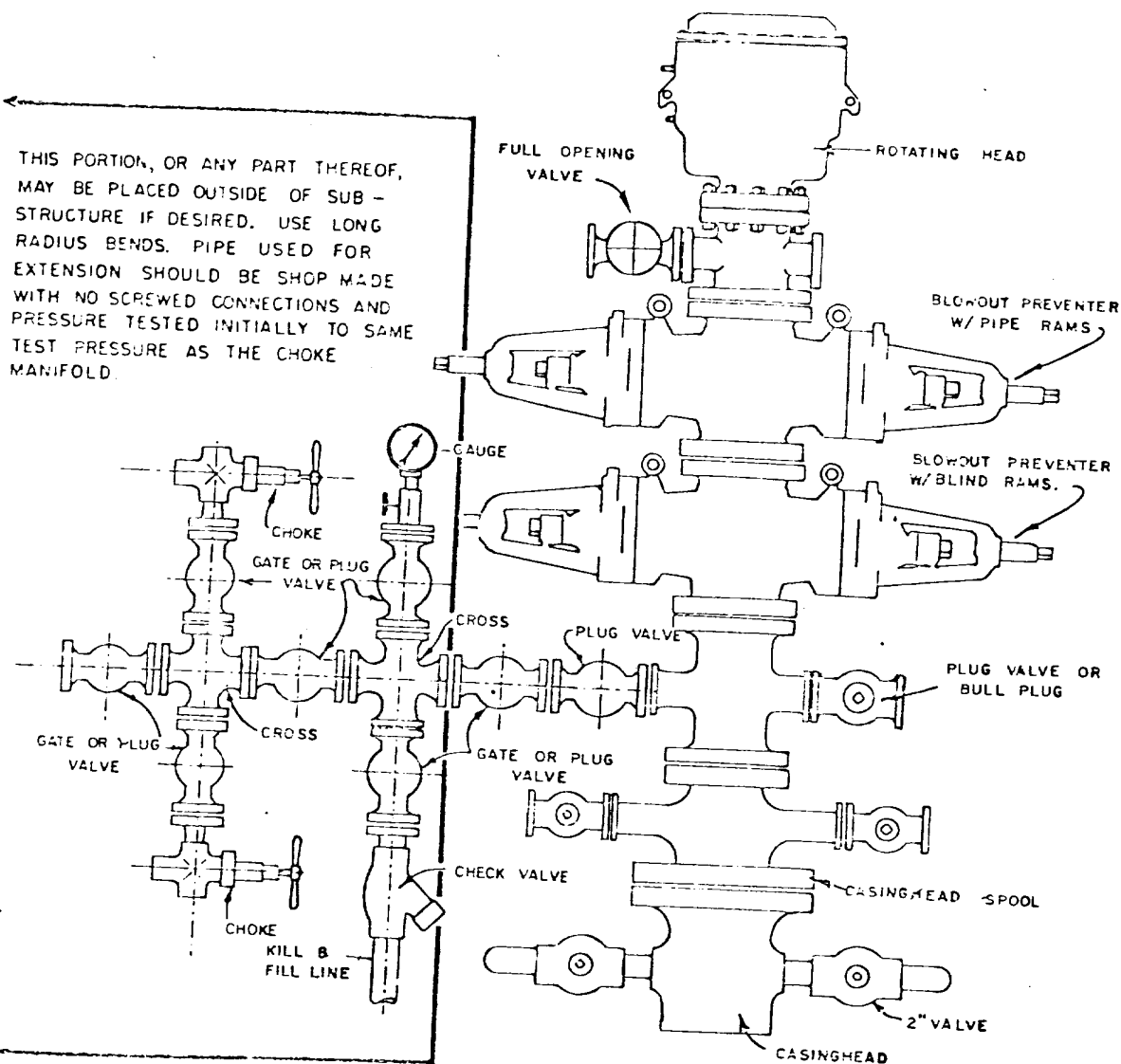
FOURWING SALTBUSH (dewinged) (Atriplex canescens) - $\frac{1}{2}$ lb.

SAND DROPSEED (Sporobolus cryptandrus) - $\frac{3}{4}$ lb.

WINTERFAT (Eurotia lanata) - $\frac{1}{2}$ lb.

ALKALI SACATON (Sporobolus airoides) - $\frac{3}{4}$ lb.

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.



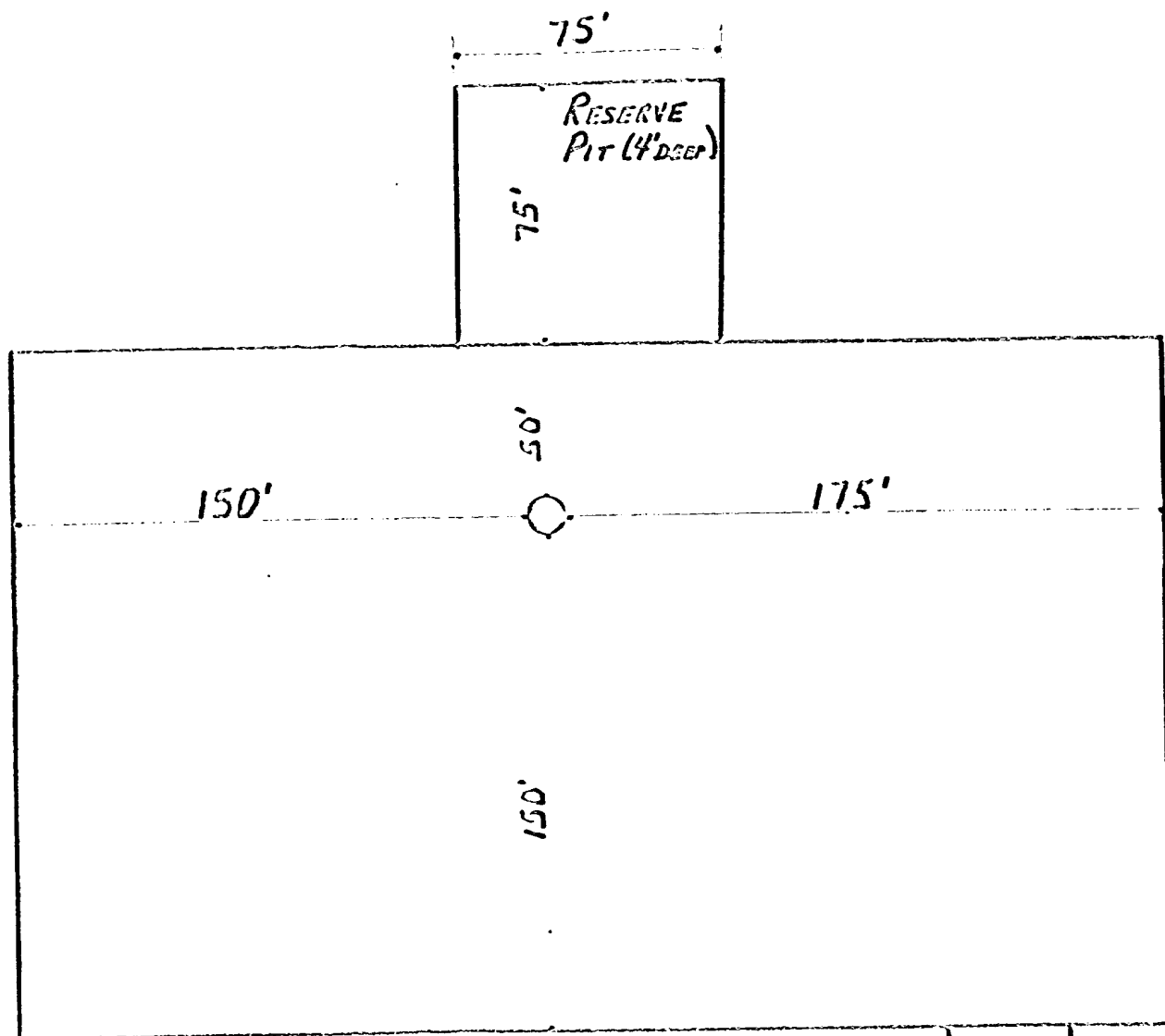
BLOWOUT PREVENTER HOOKUP

LOCATION DIAGRAM

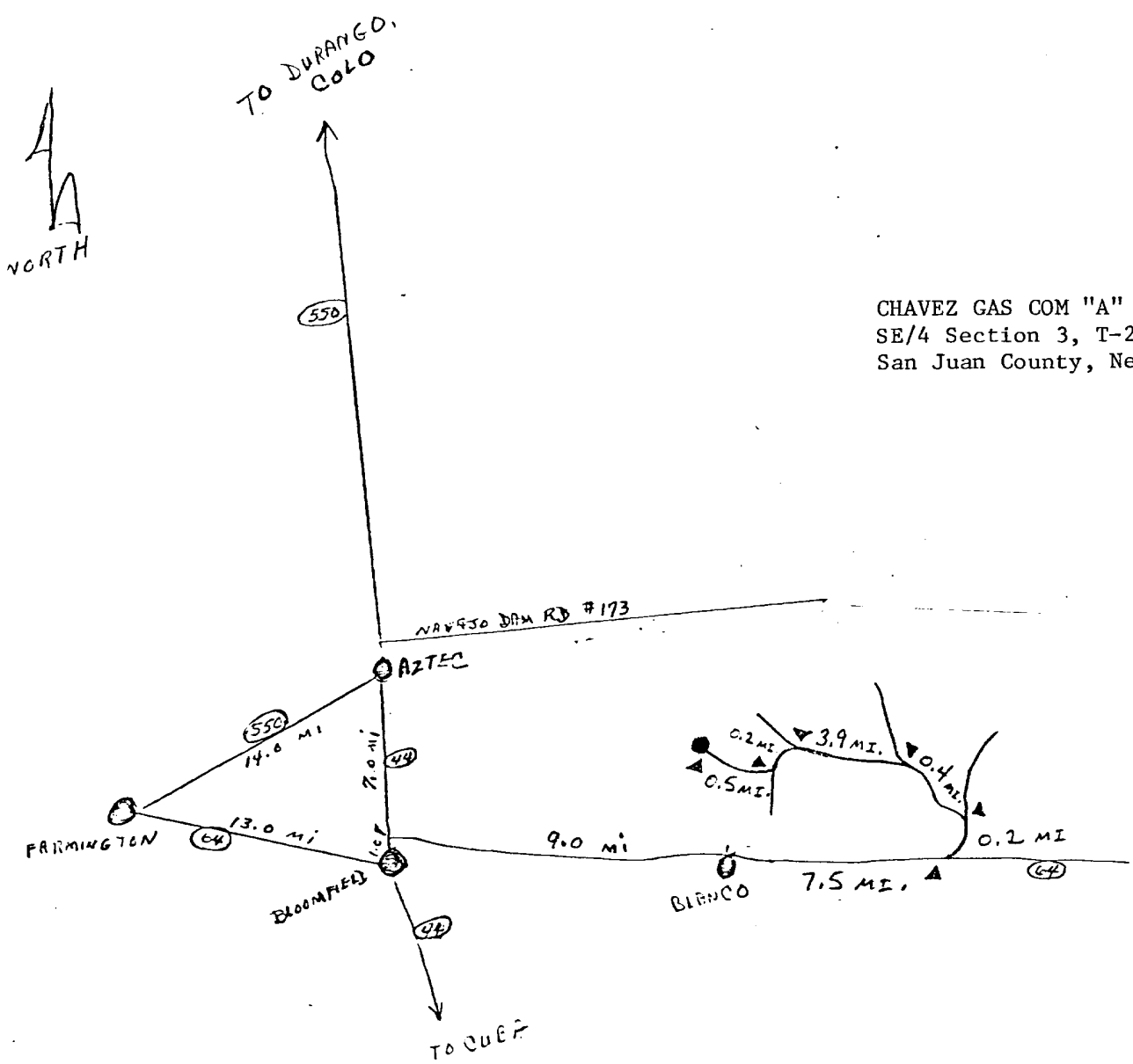
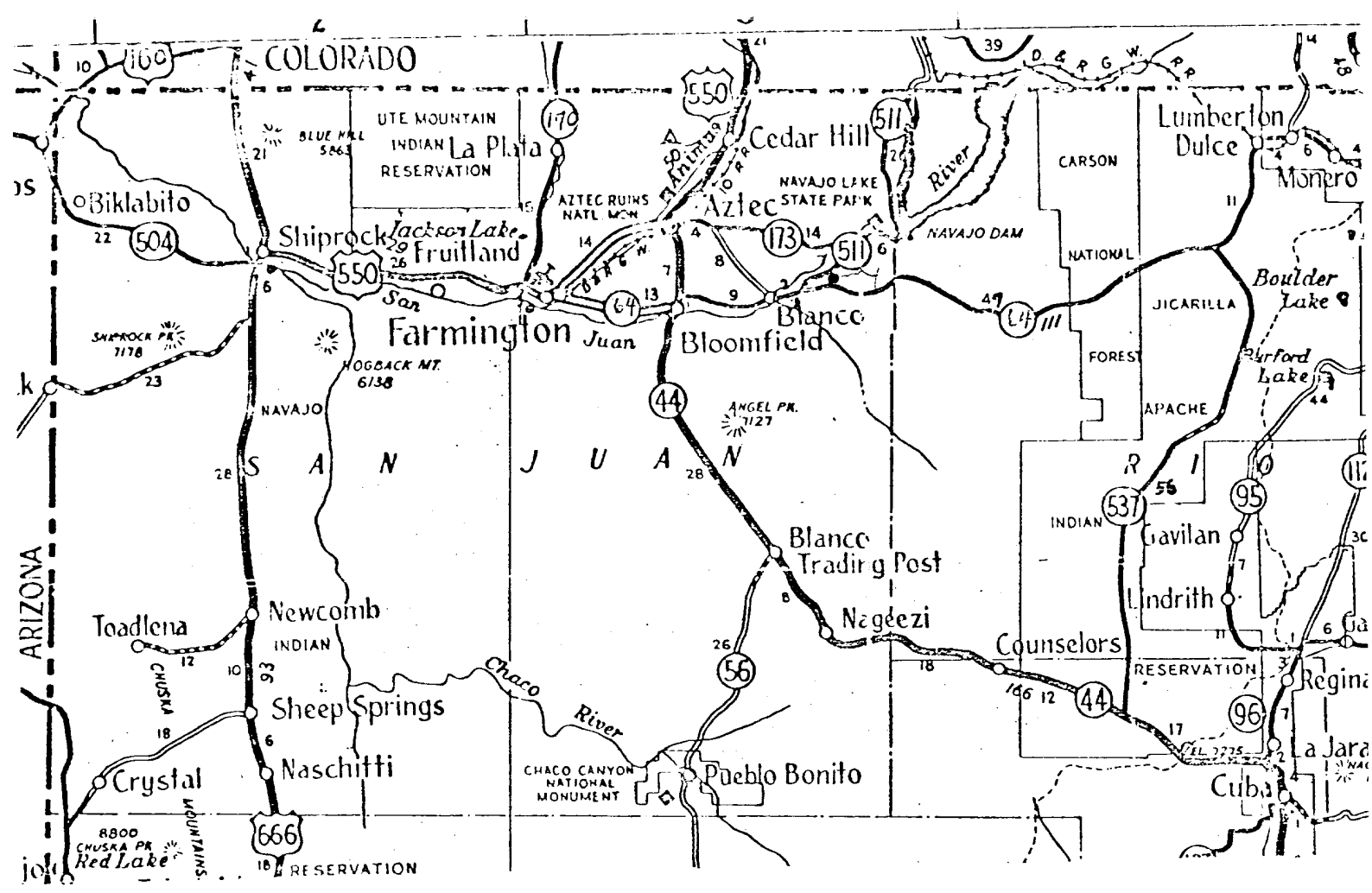
CUMBER GAS CO. A 1.0 1A

800 FSL, 795 FEL, (SE/4 SE/4)

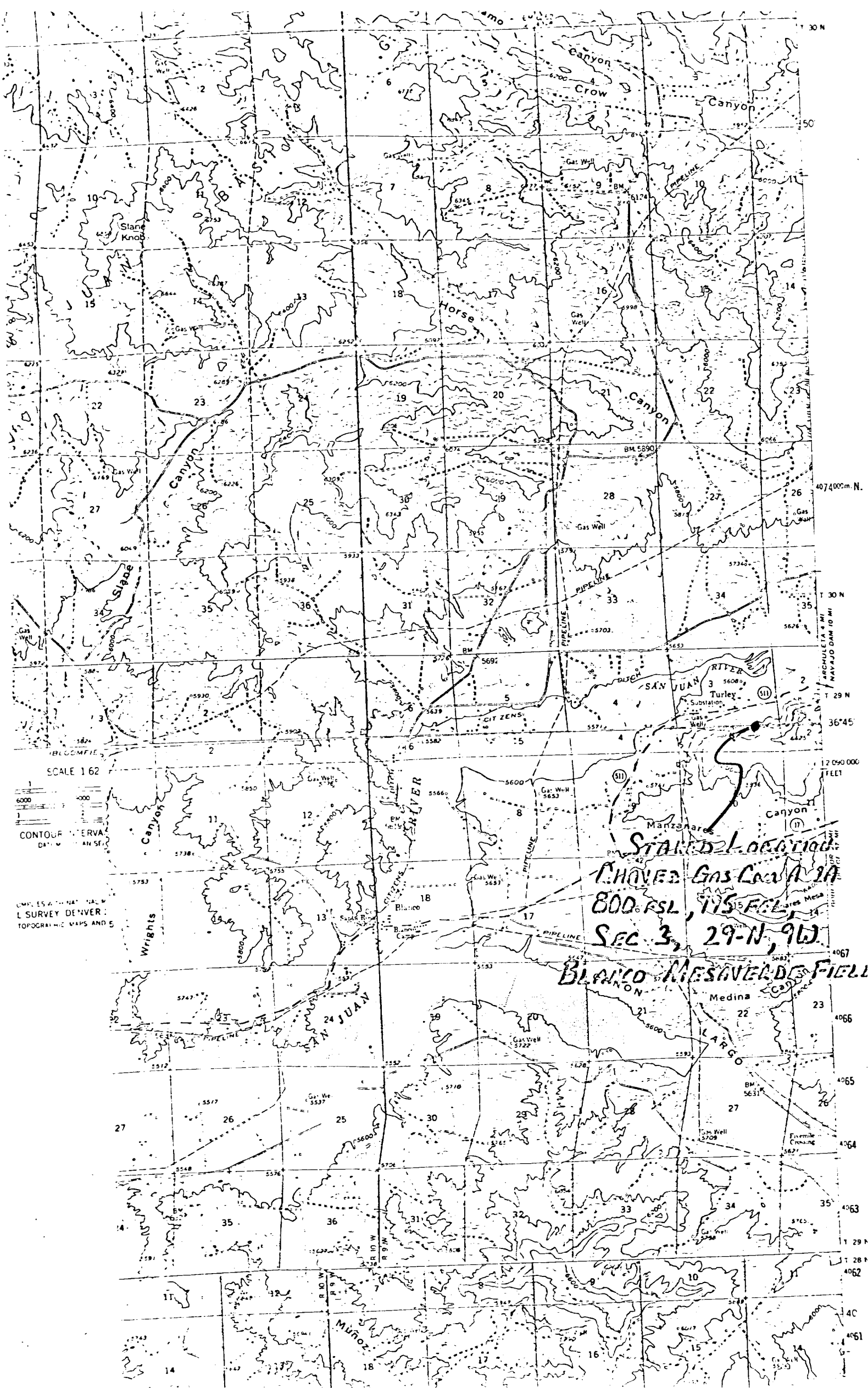
SECTION 3, T-29-N, R-9-W



EXISTING ROAD



CHAVEZ GAS COM "A" NO. 1A
 SE/4 Section 3, T-29-N, R-9-W
 San Juan County, New Mexico



SCALE 1:62

CONTOUR INTERVAL
DASHED LINE
SOLID LINE

CONFORMS WITH NATIONAL
SURVEY DENVER
TOPOGRAPHIC MAPS AND

Staked Location
Chover Gas Loc A 1A
800' RSL, 115' FCL
SEC 3, 29-N, 9-W
Blanco Mesaviejo Field

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.

87 076337

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Chaves Gas Com "A"

9. WELL NO.

1A

10. FIELD AND POOL, OR WILDCAT

Blanco Mesaverde

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

**SE/4 SE/4 Section 3,
T-29-N, R-9-W**

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

1. OIL ☐ GAS ☒ OTHER ☐
WELL WELL

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.*
See also space 17 below.)
At surface

800' FSL & 795' VKL, Section 3, T-29-N, R-9-W

14. PERMIT NO.

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

6357' GL

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

(Other) ☐

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

ABANDON* ☐

CHANGE PLANS ☐

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐

FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☐

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENT* ☐

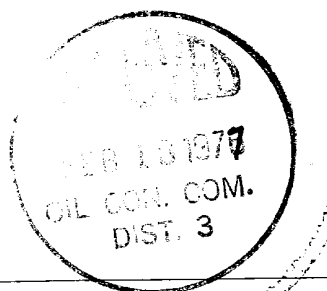
Spud & set casing

X

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

A 12-1/4" hole was spud 1-7-77 and drilled to 265'. Set 9-5/8" casing at 263' with 280 sacks Class "B" cement with 2X CaCl₂ on 1-8-77. Cement circulated. Waited on cement to set and tested blowout preventer, casing and manifold with 500 psi OK. Reduced hole to 8-9/4" and continued drilling to 3375'. Set 7" casing at 3375'. Pumped in 20 barrels water, 20 gallons Mud Clean and 4 gallons D-19 ahead of 550 sacks Class "B" cement with 6X Gal, 2 pounds medium Tuf Plug. Followed with 50 sacks Class "B" Heat on 1-14-77. Cement did not circulate. Waited on cement to set and pressured up to 600 psi OK. Reduced hole to 6-1/4" and drilled to TD 3500'. Ran 4-1/2" liner from 3167-3500'. Pumped in 20 barrels water, 20 gallons Mud Clean, 4 gallons D-19 ahead of 200 sacks Class "B" cement, 50:50 Poz, 6X Gal, 2 pounds medium Tuf Plug per sack, 0.2X friction reducer followed with 75 sacks Class "B" cement with 50:50 Poz, 6X Gal on 1-17-77. Cement circulated.



FEB 17 1977

18. I hereby certify that the foregoing is true and correct

SIGNED

E. E. Svoboda

TITLE

Area Adm. Supvr.

DATE

2-16-77

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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 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 17: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYSUBMIT IN TRIPPLICATE*
(Other instructions on re-
verse side)Form approved.
Budget Bureau No. 42-R1424

5. LEASE DESIGNATION AND SERIAL NO.

87 076337

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Chavez Gas Com "A"

9. WELL NO.

1A

10. FIELD AND POOL, OR WILDCAT

Blanco Masoverde

11. SEC., T., R., M., OR BLK. AND
SURVEY OR AREASE/4 SW/4 Section 3,
T-29-N, R-9-W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

1.

OIL ☐ GAS ☒ OTHER ☐
WELL

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.*
See also space 17 below.)
At surface

800' FSL & 795' FEL, Section 3, T-29-N, R-9-W

14. PERMIT NO.

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

6357' GL

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) **Perf**

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well
Completion or Recompletion Report and Log form.)17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones perti-
nent to this work.)*

1-21-77 moved in service unit. Circulated hole with 12 KCl water and pressure tested casing with 3000 psi OK. Spotted 300 gallons 15% HCl. Perforated 5102-06, 5126-38, 5154-36, 5160-66, 5174-82, 5216-20, 5224-42, 5252-88, 5300-11, 5328-34 and 5354-59 with 1 SFF. Fraced with 6,710 gallon pad frac fluid containing 1% KCl, 1 gallon frac flow surfactant per 1000 gallons water and 20 pounds WG-6 per 1000 gallons water; 107,400 pounds 20-40 sand, 26,800 pounds 10-20 sand in 67,100 gallons frac fluid. After 22,000 gallons dropped 20 balls, pressure increased from 1900-2100; after 30,000 gallons dropped 20 balls, pressure increased 2050-2200; after 37,800 gallons dropped 10 balls and pressure increased from 2200-2250; after 44,800 gallons dropped 10 balls and pressure increased from 2250-2300. Flushed with BHP 0 and maximum treating pressure 2400, minimum treating pressure 1900, average treating pressure 2200 psi. AIR 128 BPM. Set bridge plug at 5050' and pressure tested with 3000 psi OK. Perforated 4609-33, 4648-64, 4668-77, 4681-93, 4706-08, 4712-16, 4731-76, 4828-36, 4876-80, 4900-04, 4916-22, 4932-40, 4964-72 and 5008-20 with 1 SFF. Fraced with 8,910 gallon pad frac fluid, additives as above, 142,600 pounds 20-40 sand, 35,600 pounds 10-20 sand and 89,100 gallons frac fluid. After 28,000 gallons dropped 20 balls, pressure increased 2300-2350, after 34,500 gallons dropped 20 balls and pressure increased from 2350-2400. Flushed. BHP 3000 and maximum treating pressure 2600, minimum treating pressure 2300, average treating pressure 2400 psi. AIR 120 BPM. Cleaned out to top of bridge plug at 5050', drilled bridge plug and cleaned out well to FWD 5454'. Landed 2-3/8" tubing at 5359'.

18. I hereby certify that the foregoing is true and correct

SIGNED

E. E. Prohoda

TITLE

Area Adm. Supvr.

DATE

2-16-77

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

FEB 17 1977

FEB 18 1977
OIL COLL. COM.

*See Instructions on Reverse Side.

Instructions

General: This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law 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.

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NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 2-2-77																																																																																																	
Company AMOCO PRODUCTION COMPANY				Connection El Paso Natural Gas Company																																																																																																			
Pool Blanco				Formation Mesaverde				Unit																																																																																															
Completion Date 1-26-77		Total Depth 5504		Plug Back TD 5454		Elevation 6357 GL		Farm or Lease Name Chavez Gas Com "A"																																																																																															
Csg. Size 7.000	Wt. 20	d 6.456	Set At 3375	Perforations: From 4609 To 5359		Well No. 1-A																																																																																																	
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 5359	Perforations: From Open To Ended		Unit Sec. Twp. Rge. P 3 29 9																																																																																																	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple						Packer Set At None		County San Juan																																																																																															
Producing Thru Tbg.		Reservoir Temp. °F @		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico																																																																																															
L	H	Gg	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps																																																																																															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="6">FLOW DATA</th> <th colspan="2">TUBING DATA</th> <th colspan="2">CASING DATA</th> <th rowspan="2">Duration of Flow</th> </tr> <tr> <th>NO.</th> <th>Prover Line Size</th> <th>X</th> <th>Orifice Size</th> <th>Press. p.s.i.g.</th> <th>Diff. hw</th> <th>Temp. °F</th> <th>Press. p.s.i.g.</th> <th>Temp. °F</th> <th>Press. p.s.i.g.</th> <th>Temp. °F</th> </tr> <tr> <td>SI</td> <td>7 days</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>465</td> <td></td> <td>544</td> <td></td> <td></td> </tr> <tr> <td>1.</td> <td>2.375"</td> <td></td> <td>0.375</td> <td></td> <td></td> <td></td> <td>140</td> <td>60°</td> <td>510</td> <td></td> <td>3 Hrs.</td> </tr> <tr><td>2.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>5.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>										FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	SI	7 days						465		544			1.	2.375"		0.375				140	60°	510		3 Hrs.	2.												3.												4.												5.											
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RATE OF FLOW CALCULATIONS																																																																																																							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd																																																																																																
1	12.365		152	1.000	.9608	1.015	1833																																																																																																
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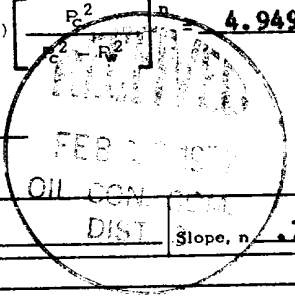
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 556	P _c ² 309,136			
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		522	272,484	36,652
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \underline{8.4344}$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{4.9492}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{9072}$



Absolute Open Flow 9072 Mcfd @ 15.025		Angle of Slope θ .75
Remarks: 4.500" liner set at 3167-5500'		
Approved By Commission:	Conducted By: T. M. Oliver	Calculated By: Oliver/Cordill
	Checked By: H. D. Montgomery	

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____						7. UNIT AGREEMENT NAME _____	
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other _____						8. FARM OR LEASE NAME Chavez Gas Com "A"	
2. NAME OF OPERATOR AMOCO PRODUCTION COMPANY						9. WELL NO. 1A	
3. ADDRESS OF OPERATOR 501 Airport Drive, Farmington, New Mexico 87401						10. FIELD AND POOL, OR WILDCAT Blanco Mesaverte	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 800' FSL & 795' FSL, Section 3, T-29-N, R-9-W At top prod. interval reported below same At total depth same						11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA SE/4 Section 3, T-29-N, R-9-W	
14. PERMIT NO. _____				DATE ISSUED _____		12. COUNTY OR PARISH San Juan	
						13. STATE New Mexico	
15. DATE SPUDDED 1-7-77		16. DATE T.D. REACHED 1-17-77		17. DATE COMPL. (Ready to prod.) 1-26-77		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 6370' KB	
19. ELEV. CASINGHEAD 6357'							
20. TOTAL DEPTH, MD & TVD 5504'		21. PLUG, BACK T.D., MD & TVD 5454'		22. IF MULTIPLE COMPL., HOW MANY* →		23. INTERVALS DRILLED BY 0-TD	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* Mesaverte 4609-5359'						25. WAS DIRECTIONAL SURVEY MADE No	
26. TYPE ELECTRIC AND OTHER LOGS RUN Gamma-Induction, Compensated Density, Gamma Ray Correlation						27. WAS WELL CORED No	
28. CASING RECORD (Report all strings set in well)							
CASING SIZE		WEIGHT, LB./FT.		DEPTH SET (MD)		HOLE SIZE	
9-5/8"		32.3#		263'		12-1/4"	
7"		20#		3375'		8-3/4"	
29. LINER RECORD				30. TUBING RECORD			
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*	
4-1/2"		3175'		5500'		275	
31. PERFORATION RECORD (Interval, size and number) 4609-33', 4648-64, 4668-77, 4681-93, 4706-08, 4712-16, 4731-76, 4828-35, 4876-80, 4900-04, 4916-22, 4932-40, 4964-72, 5008-20, 5102-06, 5126-38, 5154-56, 5160-64, 5224-42, 5252-88, 5300-11, 5328-34, 5354-59 x 1 SP7		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.		DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
				4609-5020' - 178,200# gm & 89,100 gal. frac fluid			
				5102-5359' - 134,200# gm & 67,100 gal. frac fluid			
33. PRODUCTION							
DATE FIRST PRODUCTION 1-26-77		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing				WELL STATUS (Producing or shut-in) SI	
DATE OF TEST 1-26-77		HOURS TESTED 3		CHOKE SIZE 3/4		PROD'N. FOR TEST PERIOD →	
FLOW. TUBING PRESS. 140		CASING PRESSURE 510		CALCULATED 24-HOUR RATE →		OIL—BBL. 1833	
						GAS—MCF. 229	
						WATER—BBL. 0	
						GAS-OIL RATIO 1833	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold							
35. LIST OF ATTACHMENTS							
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.							
SIGNED <i>[Signature]</i>		TITLE Area Adm. Supvr.				DATE 2-16-77	

*** (See Instructions and Spaces for Additional Data on Reverse Side)**

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency 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. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

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 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. **Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES			38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Cliffhouse	4604'	4786'				
Mamefee	4786'	5214'				
Point Lookout	5214'	5386'				