

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

30-045-25719

Form C-101  
Revised 10-1-78

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DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

5A. Indicate Type of Lease  
STATE ☒ FEE ☐

5. State Oil & Gas Lease No.  
E-7122

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  
ARCO Oil and Gas Company, Division of Atlantic Richfield Company

3. Address of Operator  
P.O. Box 5540, Denver, Colorado 80217

4. Location of Well  
UNIT LETTER D LOCATED 820 FEET FROM THE North LINE  
AND 656 FEET FROM THE West LINE OF SEC. 36 TWP. 29N RGE. 11W NMPM

7. Unit Agreement Name  
---

8. Farm or Lease Name  
ARCO State

9. Well No.  
102

10. Field and Pool, or Wildcat  
Undesignated Gallup

12. County  
San Juan

19. Proposed Depth  
6000'

19A. Formation  
Gallup

20. Rotary or C.T.  
Rotary

21. Elevations (Show whether DE, RT, etc.)  
5676' GL

21A. Kind & Status Plug. Bond  
Statewide

21B. Drilling Contractor  
Unknown at this time

22. Approx. Date Work will start  
June, 1983

23. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4"	8-5/8"	24#	+ 500'	365 sx	Surface
7-7/8"	4-1/2"	11.6#	T.D.	1325 sx	Surface
				1st stage	3217'
				Stage tool	3117'
				2nd stage	Surface

APPROVAL DATE November 23, 1983  
UNLESS OTHERWISE COMMENCED.  
SPUD NOTICE MUST BE SUBMITTED  
WITHIN 10 DAYS.

Propose to drill well to sufficient depth to test the Gallup formation, setting surface casing and if productive, setting production casing. If Gallup formation is productive, will perforate, test and treat, if necessary

Attached are: Certified Location Plat  
Drilling Plan  
BOP schematic  
Location Layout and Cut and Fill Diagrams  
Topographic and Lease Maps

RECEIVED  
MAY 23 1983  
CON. DIV.  
DIST. 3

ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

Signed W. A. Walther, Jr. Title Operations Manager Date 5-18-83  
(This space for State Use)

APPROVED BY Frank J. Chang TITLE Manager DATE MAY 18 1983  
CONDITIONS OF APPROVAL, IF ANY:

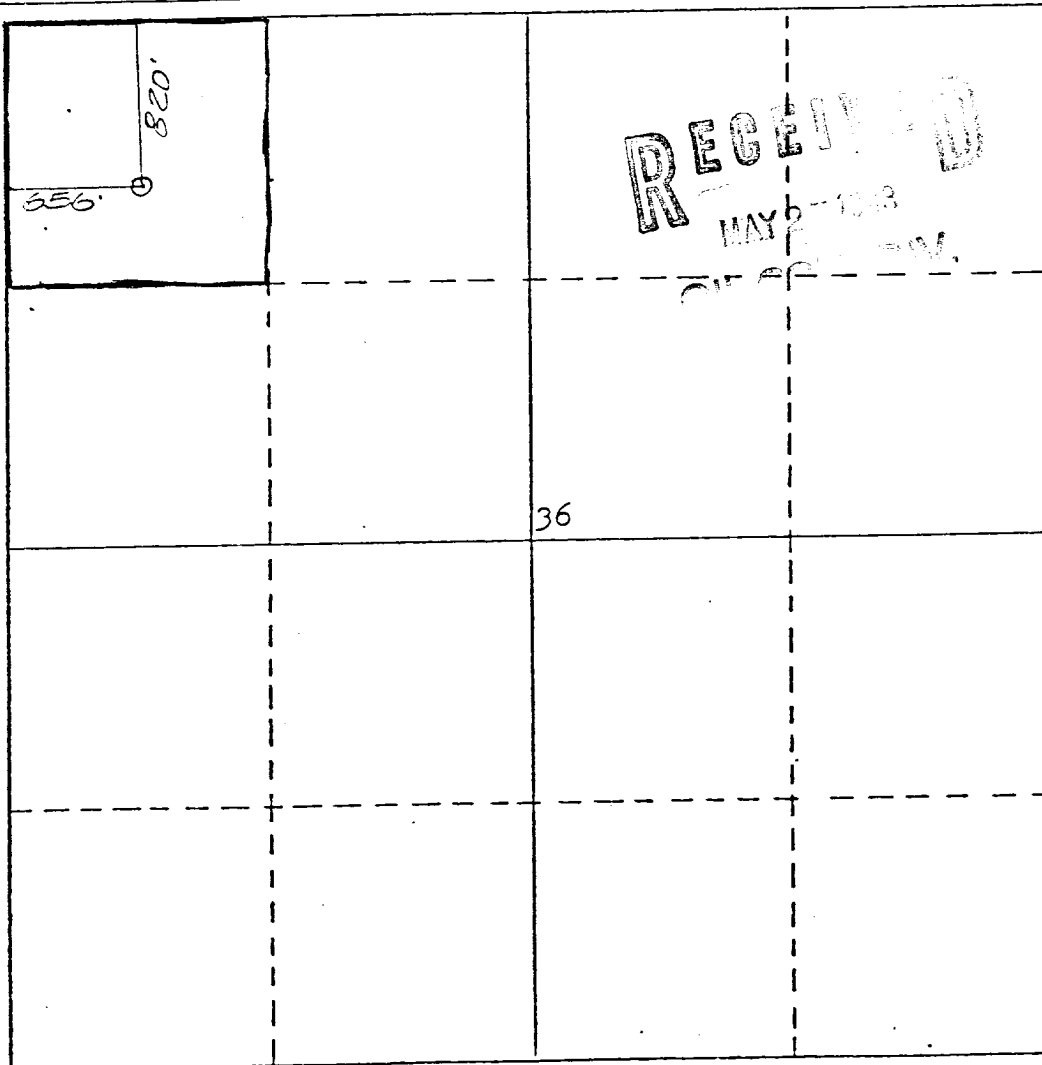
All distances must be from the outer boundaries of the Section.

Operator ARCO OIL & GAS COMPANY			Lease STATE		Well No. 102
Unit Letter D	Section 36	Township 29 NORTH	Range 11 WEST	County SAN JUAN	
Actual Footage Location of Well: 820 feet from the NORTH line and 656 feet from the WEST line					
Ground Level Elev. 5676	Producing Formation Gallup	Pool Undesignated Gallup		Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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? NA
- ☐ Yes ☐ No If answer is "yes," type of consolidation NA

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 Division.



CERTIFICATION

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

Name W.A. Walther, Jr.  
Position Operations Manager  
Div of Atlantic Richfield Company

Date May 18, 1983

Date

I hereby certify that the well location shown on this plat is correct and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed May 4, 1983  
Registered Professional Engineer and/or Land Surveyor

Michael Daly  
Certificate No.

5992

# General Purpose Worksheet

Subject

BOPE SCHEMATIC

ARCO STATE #102

Page No.

Of

By

Date

File

Grant  
Type 7068  
Rotating  
Head

F.E. Diverter Line

Hydril  
Type GK  
Annular  
Series 900  
3000 psi W.P.- 6000 psi T.

## Abbreviations:

W.P. Working Pressure  
T. Test  
L.P. Line Pipe  
F.E. Flanged End  
S.E. Screw End  
F.O. Full Opening

Double Ram Preventer  
Series 900  
3000 psi W.P.  
6000 psi T.

Blind rams

Pipe rams

F.E. Kill line

F.O. F.E. Gate Valve

F.E. Check valve

F.O. F.E. Gate Valve

F.E. Choke Line

F.E. Positive Choke

F.O. F.E. Gate Valve

F.E. Pressure Gauge

F.O. F.E. Gate Valve

F.E. Adjustable Choke

2" S.E. BullPlug

9" 3000 psi Slip-on  
Weld-on casing head  
for 8-5/8" OD  
surface casing with  
2 S.E. outlets

2" S.E. F.O. Gate Valve

NOTE: All choke and kill manifold valves and lines will be 2" L.P. or larger and 3000 psi W.P., 6000 psi (minimum)

## TEN POINT DRILLING PLAN

Attach to APD Form 9-331-C  
ARCO Oil and Gas Company  
ARCO STATE #102  
NW NW Section 36-29N-11W  
San Juan County, New Mexico

1. Surface Geological Formation: Nacimiento

2. Estimated Tops of Geological Markers:

Ojo Alamo	- 626'	Cliff House	- 3399'
Kirtland	- 764'	Menefee	- 3416'
Fruitland	- 1614'	Point Lookout	- 4160'
Pictured Cliffs	- 1811'	Upper Mancos	- 4521'
Lewis	- 1891'	Gallup	- 5383'
Chacra	- 2983'	Lower Mancos	- 5914'

3. Estimated Tops of Possible Water, Oil, Gas or Minerals:

Ojo Alamo	- 626'	(Water)
Fruitland	- 1614'	(Gas & Water)
Pictured Cliffs	- 1811'	(Gas & Water)
Chacra	- 2983'	(Gas, Oil & Water)
Cliff House	- 3399'	(Gas)
Menefee	- 3416'	(Gas)
Point Lookout	- 4160'	(Gas)
Gallup	- 5383'	(Oil & Gas)

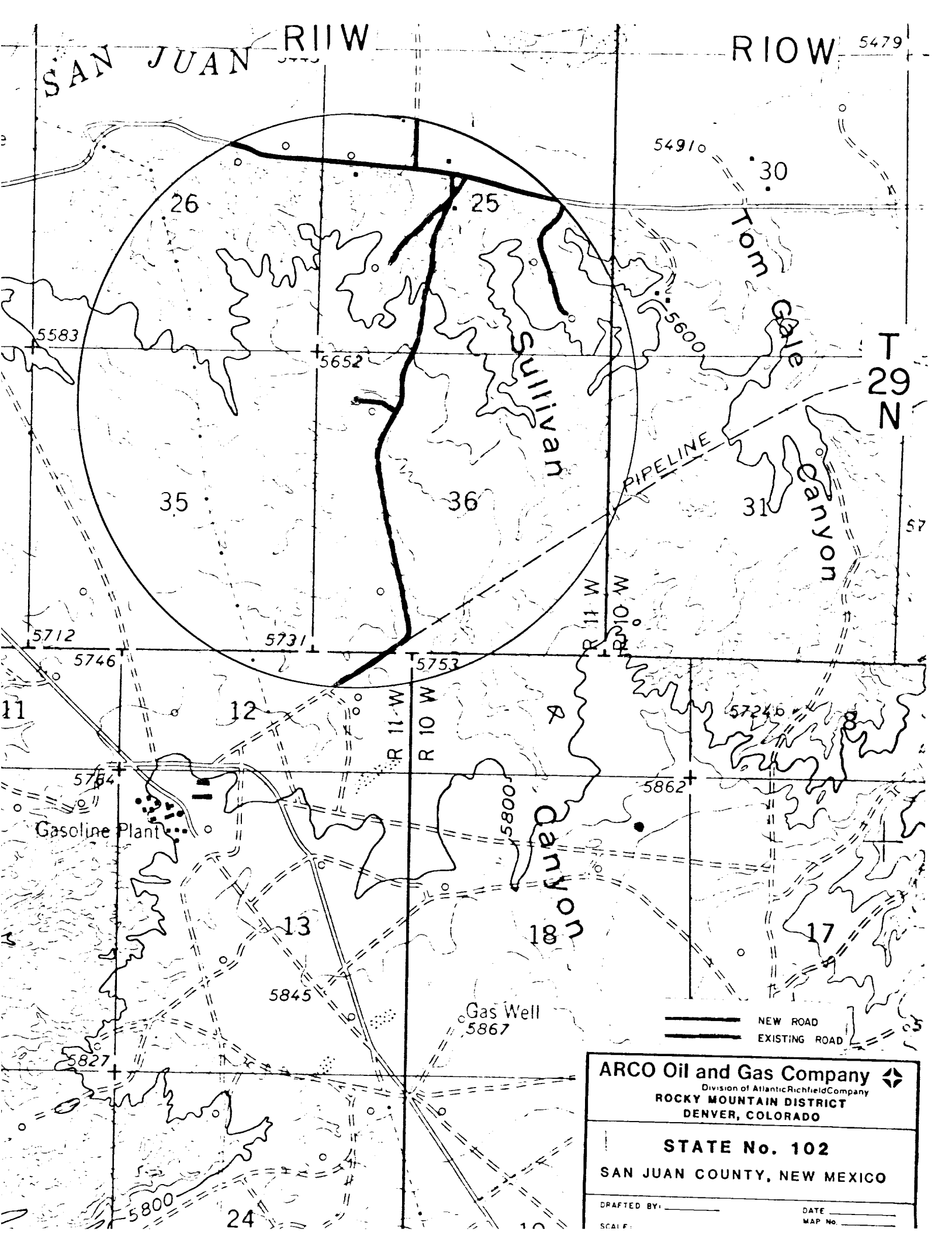
4. Proposed Casing Program:


<u>Casing</u>	<u>Hole Size</u>	<u>Interval</u>	<u>Section Length</u>	<u>Size OD</u>	<u>Weight Grade and Joint</u>	<u>New Used</u>
Conductor	---	---	----	----	----	----
Surface	12-1/4"	0- 520'	520'	8-5/8"	24#, K-55, STC	New
Intermediate	---	---	----	----	----	----
Production	7-7/8"	0-6000'	6000'	4-1/2"	11.6#, N-80, LTC	New
Liner	---	---	----	----	----	----

### Cement Program

Intermediate -----

Surface Cement to surface with 100% Volumetric excess with an estimated 365 sx Class "B" with 2% CaCl<sub>2</sub> + 1/4#/sx Flocele (yield 1.18 cu ft/sx).



<b>ARCO Oil and Gas Company</b> 	
Division of Atlantic Richfield Company	
ROCKY MOUNTAIN DISTRICT	
DENVER, COLORADO	
<b>STATE No. 102</b>	
<b>SAN JUAN COUNTY, NEW MEXICO</b>	
DRAFTED BY: _____	DATE _____
SCALE: _____	MAP No. _____