

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-734

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

Horseshoe Gallup

8. FARM OR LEASE NAME

Horseshoe Gallup Unit

9. WELL NO.

299

10. FIELD AND POOL, OR WILDCAT

Horseshoe Gallup

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

30-31N-16W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

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 (Report location clearly and in accordance with any State requirements.)

At surface

100' FSL & 1310' FEL Unit P

At proposed prod. zone

Approx the same

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

Shiprock, New Mexico approximately 10 miles northeast

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)4713' to lease line
9647' to unit
boundary

16. NO. OF ACRES IN LEASE

2685? 2760

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

858'

19. PROPOSED DEPTH

1275'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40 NA UNIT joint w/ 5

20. ROTARY OR CABLE TOOLS

Rotary

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

5452' GR SUBJECT TO COMPLIANCE WITH ATTACHE

22. APPROX. DATE WORK WILL START*

When appr'd app'l rec'd

23. "GENERAL REQUIREMENTS"

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48.0#	30'	57 sx (67.26 cu.ft.) C1 "B" + ad
12-1/4"	8-5/8"	24.0#	140'	105 sx (123.9 cu.ft.) C1 "B" + ad
7-7/8"	5-1/2"	14.0#	1275' or 200' below top of Gallup Sand	220 sx (377.05 cu.ft.) C1 "B" + ad

Propose to drill well to sufficient depth to test the Gallup formation, setting surface and intermediate casing as above. Logging and setting production casing, perforate, test and treat if necessary, and fracture as required. Will apply to permit this well as a water injection well if it is not an economically productive oil well.

Pursuant to NTL-6, attached are: Certified Location Plat
Drilling Plan with attachments
Surface Use and Operations Plan with attachments

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


W. A. Walther, Jr.

TITLE Operations Manager

DATE March 21, 1983

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

APPROVED
AS AMENDED

MAY 16 1983

JAMES F. SIMS

DISTRICT ENGINEER

Acting Area Manager

MAY 16 1983

OIL CONSERVATION DIVISION

P. O. BOX 2088

Form C-107
Revised 10-1-STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87501

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

Operator ARCO OIL & GAS COMPANY			Lease HORSESHOE GALLUP UNIT B		Well No. 299
Unit Letter P	Section 30	Township 31N	Range 16W	County San Juan	
Actual Footage Location of Well: 100 feet from the South line and 1310 feet from the East line					
Ground Level Elev. 5452	Producing Formation Gallup Sand		Pool Gallup	Dedicated Acreage: 40 NA UNIT 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.

Sec.		30		100'		1310'	

Scale: 1"=1000'

CERTIFICATION

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

W. A. Walther, Jr.
Name W. A. Walther, Jr.
Operations Manager
Position ARCO Oil and Gas Company
Division of Atlantic Richfield
Company
March 17, 1983
Date

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
February 18, 1983
Registered Professional Engineer
and Land Surveyor
Fred B. Kerr Jr.
Fred B. Kerr Jr.
Certificate No. 4822
3950

TEN POINT DRILLING PLAN

Attach to APD Form 9-331-C
ARCO Oil and Gas Company
Horseshoe Gallup Unit "B" #299
Section 30-31N-16W
San Juan County, New Mexico

1. Surface Geological Formation: Upper Mancos Shale
2. Estimated Tops of Geological Markers: Gallup Sand - 1072'
3. Estimated Tops of Possible Water, Oil, Gas or Minerals:

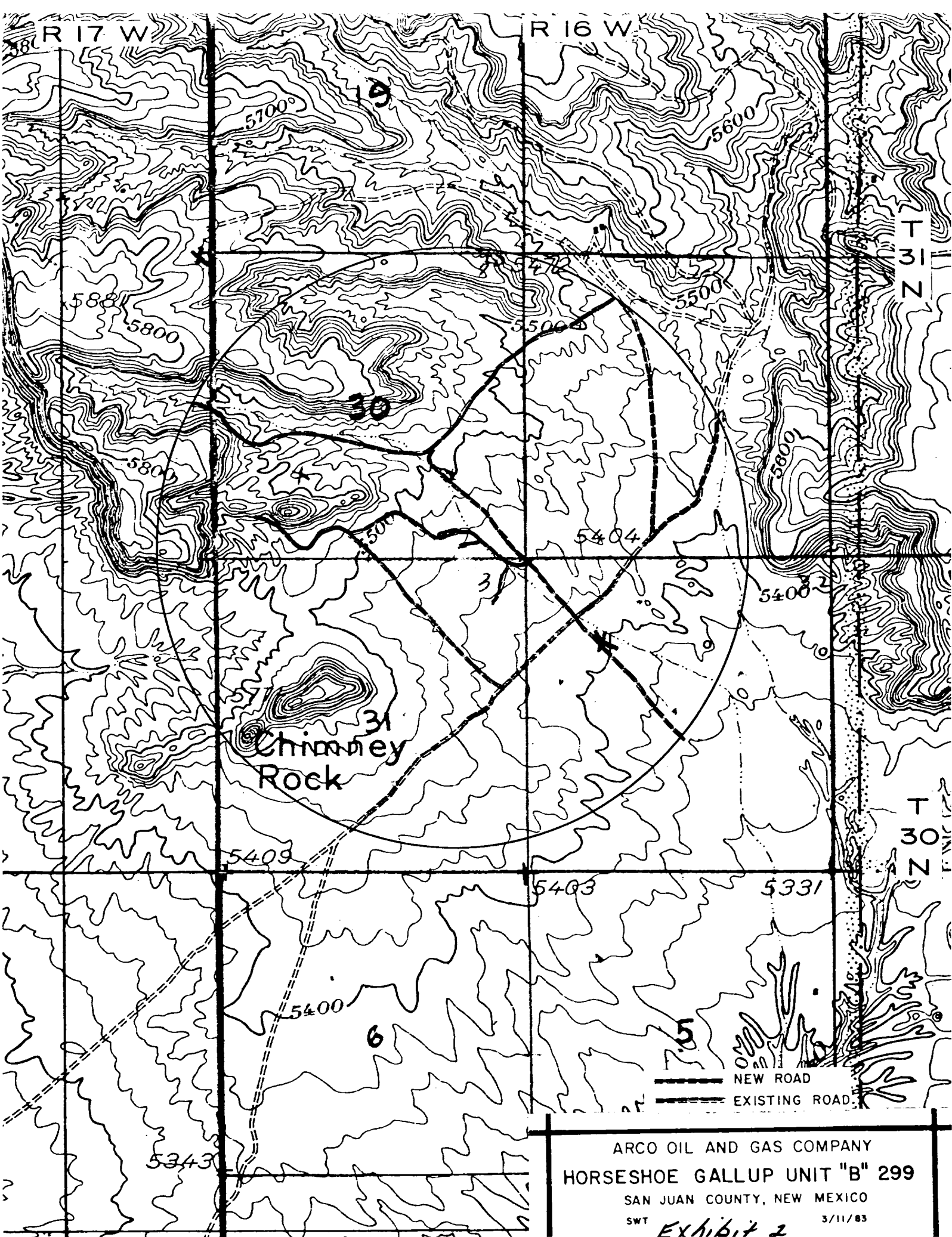
Upper Mancos Shale Sands - 0-1072' Water
Gallup Sand - 1072' Oil and/or Water

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	17-1/2"	0- 30'	30'	13-3/8"	48#,H-40,STC	New or Used
Surface	12-1/4"	30- 140'	110'	8-5/8"	24#,K-55,STC	New
Intermediate		---- None ----				
Production	7-7/8"	140-1275' or +200' below top of Gallup Sd	1135'	5-1/2"	14#,K-55,STC	New
Liner		---- None ----				

Cement Program:

Conductor	Cement w/57 sx Cl "B" + 3% CaCl ₂ . Yield = 1.18 cu ft/sx. Cement w/100% volumetric excess.
Surface	Cement w/105 sx Cl "B" + 2% CaCl ₂ + 1/4#/sx Flocele. Yield = 1.18 cu ft/sx. Cement w/100% open hole volumetric excess.
Intermediate	None
Production	Cement w/10 bbls mud flush (or 200' annular column) foll'd w/145 sx Cl "B" + 12-1/2#/sx Gilsonite + 6% gel + 3/4% CFR-2 (top slurry @ surface). Yield = 1.99 cu ft/sx, foll'd w/75 sx Cl "B" + 1/4#/sx Flocele + 2% CaCl ₂ . Yield = 1.18 cu ft/sx. Use calipered hole ID to calculate lead and tail slurry volumes.



ARCO OIL AND GAS COMPANY
HORSESHOE GALLUP UNIT "B" 299

SAN JUAN COUNTY, NEW MEXICO

SWT

Exhibit 2

3/11/83