

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

Atlantic Richfield Company

## 3. ADDRESS OF OPERATOR

501 Lincoln Tower Bldg., 1660 Lincoln St., Denver, Colo. 80203

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

At surface

Unit 'G' - 2605' f/North &amp; 2580' f/East lines Sec. 32

At proposed prod. zone

Same

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

Approx. 3 miles East and 7 miles NE f/Shilprock, New Mexico

15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)2580' f/Sec 32 line  
2675' f/Tr. 5 line16. NO. OF ACRES IN LEASE  
Tr. 12

2644.14

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40 Acres

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.Approx 747'  
SW f/Well #43

## 19. PROPOSED DEPTH

1300'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

5356' Ground Level, Ungraded

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

6-28-74

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11-1/2"	7-5/8"	26.4#	150'	150 sx (cement to surface)
6-3/4"	4-1/2"	10.5# & 11.6#	T.D.	250 sx

Propose to drill well to depth sufficient to test the Gallup formation. Est. top of Upper Gallup @ 1080'. Will set 7-5/8" surface casing w/sufficient cement to circulate to surface; will drill 6-3/4" hole to T.D. and log; If productive, set 4-1/2" production casing and cement w/sufficient cement to protect all zones. Productive zones will be perforated, treated if necessary, and well completed.

Re: New Mexico Oil Conservation Commission Order No. R-2210-A

Attachments: Certified Location Plat, Development Plan for Surface Use w/4 attach., and 7 Point Drilling Plan



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

Dist. Prod. &amp; Drlg. Supt.

DATE

5-29-74

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

MAY 31 1974

\*See Instructions On Reverse Side

U.S. GEOLOGICAL SURVEY

## 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.

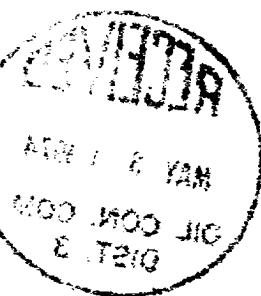
**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**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.

U.S. GOVERNMENT PRINTING OFFICE : 1963-O-711-396  
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NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-128  
Supersedes O-128  
Effective 1-1-67

All distances must be from the outer boundaries of the Section

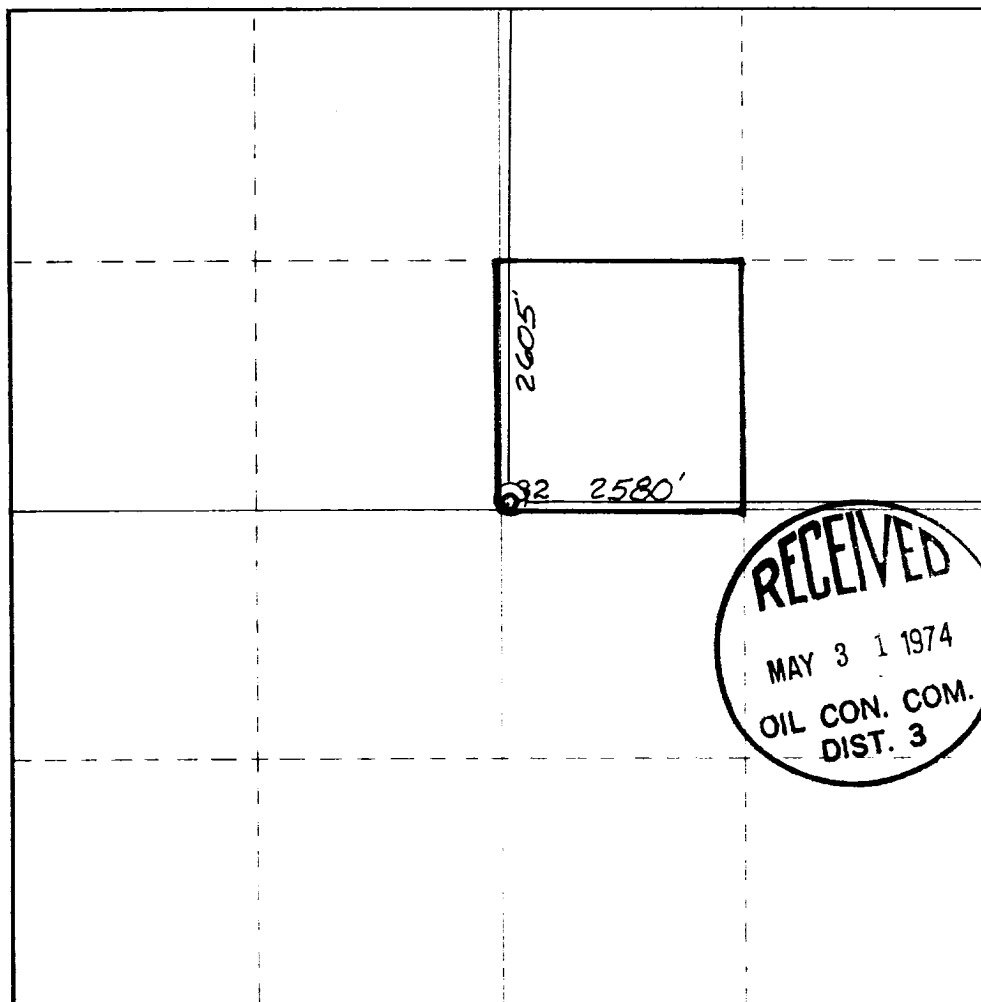
THE ATLANTIC RICHFIELD COMPANY			HORSESHOE GALLUP UNIT		285
Section	County	Township	Range	County	
G	32	31 NORTH	16 WEST	SAN JUAN	
Amount of Acreage Dedicated to Well:					
2605	feet from the	NORTH	2580	feet from the	EAST
Ground Level Elev.	Formation		Pool	Dedicated Acreage	
5356	Gallup - Oil		Horseshoe Gallup	10	

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 communization, 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 communization, 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.

*W. A. Walther, Jr.*  
W. A. Walther, Jr.

Dist. Prod. & Drfg. Supt.

Atlantic Richfield Company

May 29, 1974

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.

8 April 1974

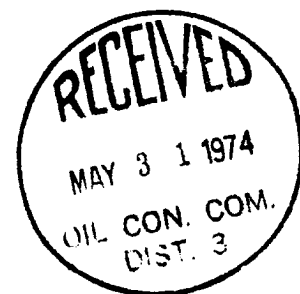
*James P. Leese*  
James P. Leese

1463

7 POINT DRILLING PLAN

Horseshoe Gallup Unit - Well # 285

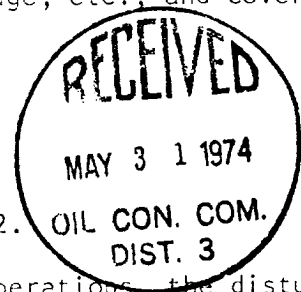
1. Surface Casing: 7-5/8" OD, 26.4#, K-55, LT&C, SH, 150'
2. Casing Head: 7-5/8" x 10", Ser. 600 (2000# WP, 4000# T) Oct C-22, or equivalent. 4-1/2" ID outlet. 11-2000# WP valve
3. Intermediate Casing: None
4. Blowout Preventers: Type - Ram Type  
Series - Ser. 600 (2000# WP, 4000# T) or greater  
No. of Rams - Two; one blind ram and one pipe ram for 4-1/2" OD drill pipe. No other size drill pipe is anticipated to be used.  
Manufacturer - Cameron or Shaffer, hydraulic operated  
Fill, kill and choke line will be 2000# WP, or greater, connected below rams on BOP  
Blowout Equipment will be pressure tested to 800 psi before drilling out of casing and operational check will be made daily
5. Auxilliary Equipment: Kelly cock  
Drilling Head - Shaffer Type 50, or equivalent  
Sub with full opening valve on floor for use when Kelly not in hole
6. Anticipated Bottom Hole or Maximum Expected Pressure: 800#
7. Drilling Fluid: Surface - Water & gel w/lime to maintain clean hole for running casing  
Below Surface - Water w/necessary gel and chemicals to maintain drillable hole. 9.0 $\pm$  ppg, viscosity as required, 10 $\pm$  water loss, LCM if required

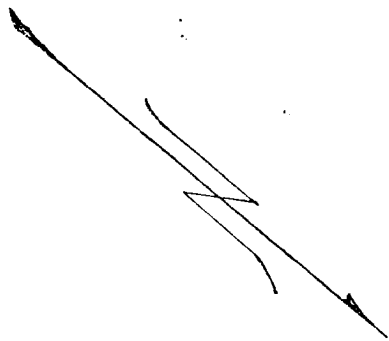


12 POINT - DEVELOPMENT PLAN FOR SURFACE USE

Horseshoe Gallup Unit - Well # 285

1. Existing Roads: Attached are the Chimney Rock (1934), Heifer Point (1963) and Waterflow (1963) topographic maps, and a Unit Area "Road Detail" map.
2. Planned Access Roads: The main access road extends northeastward from a "turn-off" from Highway 550, approximately 3 miles east from Shiprock, New Mexico. This road is marked in "red" on the attached Chimney Rock topographic map to the south line of Section 31-31N-16W. From this point, please refer to the attached "Road Detail". Road construction will be kept to a minimum and will consist of only roads from existing lease roads to the proposed location. Roads to be constructed are highlighted in "yellow" on the "Road Detail" map.
3. Existing Wells: All known wells are shown on both the "Road Detail" and "Line Detail" maps.
4. Lateral Roads to Well Locations: Lateral roads from existing lease roads to proposed locations are shown on the "Road Detail" map, highlighted in "yellow".
5. Location of Tank Batteries and Flow Lines: The attached "Line Detail" map shows the location of existing tank batteries, flow lines and injection lines. Proposed location and flow lines are marked in "yellow".
6. Location and Type of Water Supply: Water supply for drilling will be from Water Supply Well #2-W (Green on "Line Detail" map). Water for cementing operations will be from ditch at turnoff of access road from Highway 550 (Green on topography map).
7. Methods for Handling Waste Disposal: Cuttings to be disposed of in reserve pit, a burn pit to be used for disposal of trash, garbage, etc., and covered on cleanup of location.
8. Location of Camps: None.
9. Location of Airstrips: None.
10. Rig Layout: Per the attached drawing. Also see No. 12.
11. Restoration of Surface: Upon completion of drilling operations, the disturbed surface area will be restored as near as practical to its original contours. If sufficient top soil is encountered, it will be stockpiled for restoration of surface. Restoration will be to the satisfaction of the United States Geological Survey.
12. The location is relatively flat with only a very slight slope from NW to SE. Very little dirt work will be required on this location. Though the surface is not rocky, native grasses are very sparse, no trees. The surrounding area is comparable and any disturbance to wildlife will be only temporary. With the restoration of surface, surface damage will be minimal.





Hess  
Road

