

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF 078477	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME ---	
2. NAME OF OPERATOR ARCO Oil & Gas Oil, a Division of Atlantic Richfield Company		7. UNIT AGREEMENT NAME ---	
3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217		8. FARM OR LEASE NAME ---	
4. LOCATION OF WELL (Report location clearly and in accordance with app. State requirements.) At surface 1660' FNL & 1770' FEL (SW NE) At proposed prod. zone Approximately the same		9. WELL NO. Crow Mesa #2	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE Approx. 33.0 miles SE of Blanco, New Mexico		10. FIELD AND POOL, OR WILDCAT Wildcat Sulby Area Sh	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any) 870'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SW NE Sec 19-25N-7W	
16. NO. OF ACRES IN LEASE 2400.63		12. COUNTY OR PARISH 13. STATE Rio Arriba New Mexico	
17. DISTANCE FROM PROPOSED* LOCATION TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 700'		17. NO. OF ACRES ASSIGNED TO THIS WELL Not Assigned 40 1/370	
18. PROPOSED DEPTH 6905'		20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) GR 6500'		22. APPROX. DATE WORK WILL START* 12/1/83	
23. PROPOSED PROGRAM "GENERAL REQUIREMENTS" DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS" PROGRAM			
This action is subject to administrative appeal pursuant to 30 CFR 290.			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
12-1/4"	8-5/8"	24.0#, K-55, STC	500'
7-7/8"	5-1/2"	17.0#, N-80, LTC	6905'
		Approx. 350 sx cmt to surface 1st stage approx. 390 sx 2nd stage approx 340 sx to surf.	

## Exhibits Attached

- "A" Certified Location Plat
- "B" BOP Diagram
- "C" Access to Location
- "D" Rig Layout
- "E" Drillpad layout with Cuts & Fills
- "F" Cultural Resource Report

Lease SF 078477 contains 2400.63 acres as follows:  
T25N-R7W, Rio Arriba County, New Mexico  
Sec. 8 SW1/4, SW1/4  
Sec. 17 W1/2, W1/2 E1/2, SE1/4 NE1/4  
Sec. 18 All  
Sec. 19 E1/2, SW1/4  
Sec. 20 All

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.  
(This space for Federal or State office use)

TITLE Operations Manager

PERMIT NO.

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:

TITLE

DEC 1 - 1983

OIL CON. DIV.  
DIST. 3

NMOC

DATE 11/14/83
APPROVED
AS AMENDED
DATE NOV 29 1983
AREA MANAGER
FARMINGTON RESOURCE AREA

# WELL LOCATION AND ACREAGE DEDICATION PLAT

Supersedes 1-1-77  
Effective 1-1-77

EXHIBIT "A"

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

Lessor <b>Arco Oil &amp; Gas</b>		Lease <b>SF 078477</b>		Well No. <b>Crow Mesa #2</b>	
Section <b>19</b>	Township <b>25N</b>	Range <b>7W</b>	County <b>Rio Arriba County</b>		
Actual Footage Location of Well: <b>1660</b> feet from the <b>North</b> line and <b>1770</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6500'</b>	Producing Formation <b>Gallup-Dakota</b>	Pool <b>Wildcat</b>	Dedicated Acreage: <b>320 N/2 19</b>		

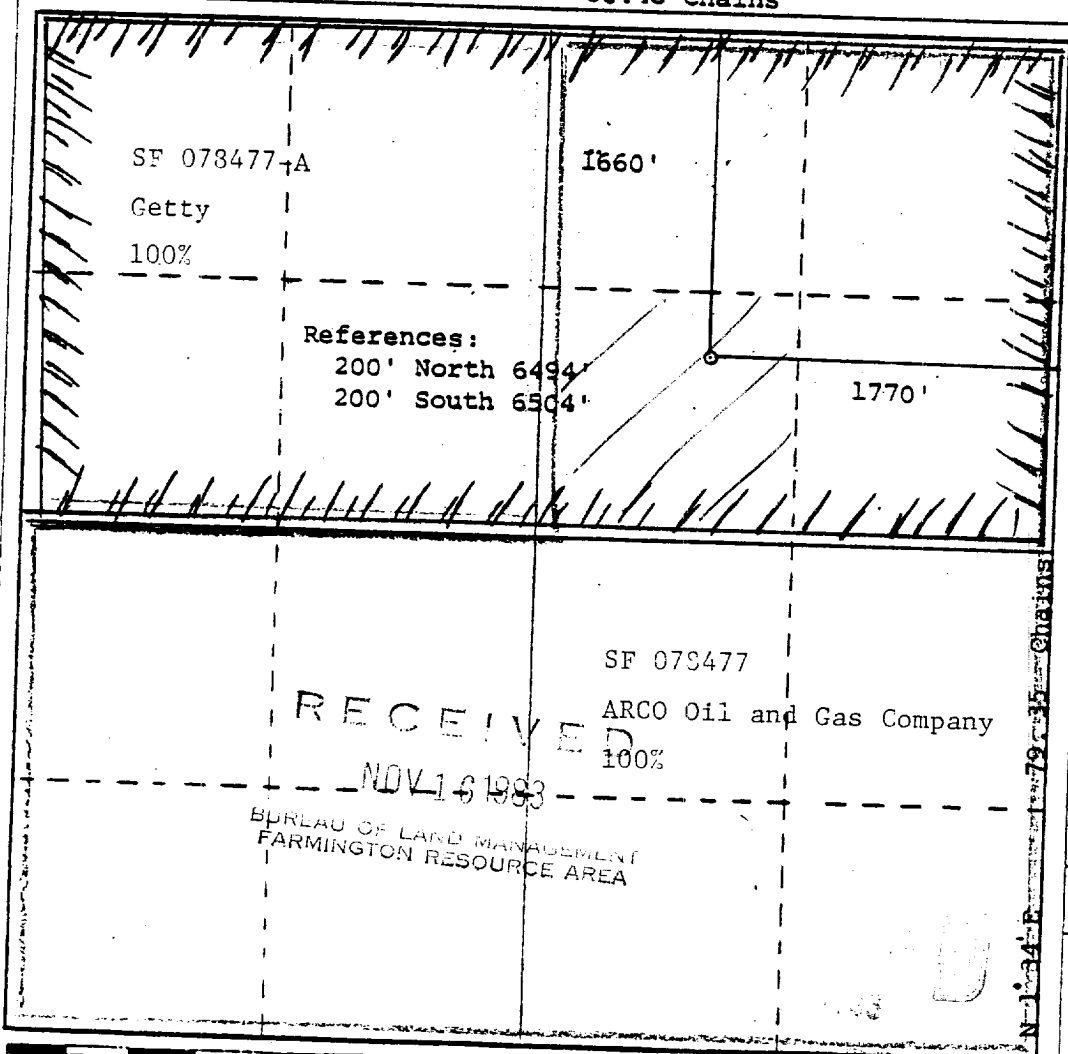
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is 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 Communitization

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.

**N 88° 45' W 80.48 Chains**



## 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  
Company ARCO Oil and Gas Company  
Date 11-14-83

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 Nov 14 1983  
Registered Professional Engineer and/or Land Surveyor  
#6844

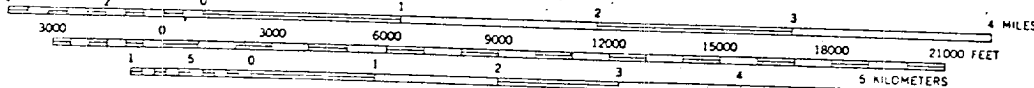
Certificate No.

SURVEY OF CULTURAL RESOURCES  
FOR ARCO OIL AND GAS COMPANY'S  
PROPOSED CROW MESA NO. 2 WELL SITE

EXHIBIT "F"



SCALE 1:62500



CONTOUR INTERVAL 40 FEET  
DATUM IS MEAN SEA LEVEL

Area surveyed for cultural resources

NAGEEZI, N. MEX.

15-15-WIC730/15

1959