

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 811 S. 1st Street, Artesia, NM 88210-2834
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

Form C-101
 Revised October 18, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 6 Copies
 Fee Lease - 5 Copies

AMENDED REPORT

RECEIVED
 JUN 1998
 OGD - 1000

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUG BACK, OR ADD A ZONE

¹ Operator name and Address ARCO PERMIAN P.O. BOX 1610 MIDLAND, TX 79702		² OGRID Number 000990
		³ API Number 30-0 15-21745
⁴ Property Code 22954	⁵ Property Name WASHINGTON "33" STATE	
		⁶ Well No. 18

⁷ Surface Location									
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
J	33	17S	28E		1550	SOUTH	2511	EAST	EDDY

⁸ Proposed Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County

⁹ Proposed Pool 1 ARTESIA (O-G-SA) 323c	¹⁰ Proposed Pool 2
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¹¹ Work Type Code R PB	¹² Well Type Code 0	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 3662'
¹⁶ Multiple NO	¹⁷ Proposed Depth 3200	¹⁸ Formation SAN ANDRES	¹⁹ Contractor	²⁰ Spud Date 7/98

²¹ Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
11	8-5/8	24#	550'	200	SURE
7-7/8	5-1/2	14 & 15.5	6404'	1625	SURE

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary

ORIGINALLY DRILLED AND COMPLETED AS THE EMPIRE ABO UNIT G-312 IN 1976. TD @ 6404'. TESTED ABO FROM PERFS @ 6074'-6291'. WELL IS CURRENTLY PUMPING FROM A HORIZONTAL DRAIN HOLE FROM 6238'-6285'. PROPOSE TO ABANDON THE ABO AND TEST THE GRAYBURG, QUEEN AND SAN ANDRES. SET CIBP @ 6050' W/35' CEMENT ON TOP. RUN CNL GAMMA RAY CL AND PERF AS INDICATED BY LOG. TEST AND FRAC AS NEEDED.

NSL-4060 6-19-98

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Elizabeth A. Casbeer</i> Printed name: ELIZABETH A. CASBEER Title: REG./COMP. ANALYST	OIL CONSERVATION DIVISION	
	Approved by: <i>Jim W. [Signature]</i> B6A	
	Title: <i>District Supervisor</i>	
	Approval Date: 7-6-98	Expiration Date: 7-6-99

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Dept

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer ED, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-21745	Pool Code	Pool Name ARTESIA (Q-3-SA)
Property Code 22954	Property Name WASHINGTON 33 STATE	Well Number 18
OGRID No. 000990	Operator Name ARCO PERMIAN	Elevation 3662'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	33	17 S	28 E		1550	SOUTH	2511	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres 40	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Elizabeth A. Casbeer</i> Signature</p> <p>ELIZABETH A. CASBEER Printed Name</p> <p>REG/COMP. Title</p> <p>5/20/98 Date</p>	
	<p>SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p>MARCH 3, 1998</p>	
	<p>Date Surveyed _____ DMCC</p> <p>Signature _____ Seal of Professional Surveyor</p> <p>RONALD J. EDISON Professional Surveyor NEW MEXICO 3239 88-11-0325 5-4-98</p>	
	<p>Certificate No. RONALD J. EDISON 3239 GARY EDISON 12641 MCDONALD 12185</p>	



ARCO Permian
600 North Marienfeld
Midland TX 79701-4373
Post Office Box 1610
Midland TX 79702-1610
Telephone 915 688 5570

Elizabeth A. Casbeer
Regulatory/Compliance Analyst

May 20, 1998

Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Gentlemen:

Under the provisions of NMOCD Rule 104.F(d), ARCO Permian requests administrative approval for unorthodox location for its Washington "33" State #18, a recompletion of a previously drilled well in the Empire Abo Unit, to the Artesia (Queen-Grayburg-San Andres) Field. The location of this well, formerly known as the EAU #G-312 is 1550'FSL and 2511'FEL of Section 33, T17S, R28E, Eddy County, New Mexico. This well is an unorthodox location.

As required, we are submitting a plat showing the subject 40-acre spacing unit with the unorthodox location and other supporting attachments. Since this unorthodox location is completely surrounded by other ARCO tracts in the same lease, there will be no impact on any other party.

Should you have any questions, please do not hesitate to call me at 915-688-5570 or Dave Pearcy at 915-688-5355. Thank you for your assistance in this matter.

Sincerely,

Elizabeth A. Casbeer
Regulatory/Compliance Analyst

EAC:lc

cc: NMOCD, Artesia, New Mexico

Enclosures

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
- [DD-Directional Drilling] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Directional Drilling

- NSL NSP DD SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

- DHC CTB PLC PC OLS OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery

- WFX PMX SWD IPI EOR PPR

[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] Working, Royalty or Overriding Royalty Interest Owners

[B] Offset Operators, Leaseholders or Surface Owner

[C] Application is One Which Requires Published Legal Notice

[D] Notification and/or Concurrent Approval by BLM or SLO

U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

ELIZABETH A. CASHEE
Print or Type Name

Elizabeth A. Cashee
Signature

RES/COMP.
Title

5/20/98
Date

**Geologic and Engineering Discussion for Washington "33" State #18
Unit J of Section 33, T17S, R28E, Eddy County, New Mexico**

ARCO Permian requests administrative approval for unorthodox location for Washington 33 State #18 in the Artesia (Q-G-SA) Field, as a recompletion of a well drilled to a deeper horizon. This wellbore is required for geologic reasons, and will be simultaneously dedicated along with #17 to Unit Letter J of Section 33.

ARCO will require 2 strategically spaced wellspots in each 40-acre tract to recover reserves in the Artesia pool. Our well pattern dictates a wellbore in the NE quadrant and SW quadrant of each 40 acres, and recompletion of these Empire (Abo) wellbores, which are 1117 ft. apart, will prevent wasteful drilling expense.

At a future date, we anticipate a waterflood could be initiated to effectively sweep both dolomite and sand reservoirs. Optimum results can only be achieved with good spacing of the primary wells. Core results show the Queen-Grayburg-San Andres "sand" pays should yield 130 MBO per 40 acres, but the modest 35 MBO recovered from "sand" well on and surrounding our lease indicates that 10-20 acre drainage for these pays is reasonable.

We have therefore determined that two wells per 40 acres, with 700 ft. minimum between wells, will effectively drain this reservoir and protect correlative rights. Where inexpensive recompletions are available, 500 ft between wells will avoid wasteful drilling. "Ten-acre" locations in the same half of any 40-acre unit should be avoided until waterflood startup. With current technology, the drainage radius for these San Andres wells is probably 10 acres, so we do not expect to be affecting any offset owner's correlative rights with these unorthodox locations.