

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

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, 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 30-015-22822
⁴ Property Code 22954	⁵ Property Name WASHINGTON "33" STATE	⁶ Well No. 15

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
I	33	17S	28E		2250	SOUTH	235	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)					¹⁰ Proposed Pool 2 3230				

¹¹ Work Type Code PB	¹² Well Type Code O	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 X-PERT	²⁰ Spud Date 3/1/79

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#	775	700	SURF.
7-7/8	5-1/2	15.5	6370	1500	SURF.

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-324 IN 1979.
TD @ 6370'. TESTED ABO @ 6252-6262'. PERFS @ 6002-6206' ADDED IN 1996.
PERF 6002-6262 SQUEEZE AND ADD PERFS 5725-5782' TESTED IN 1998. PROPOSED
TO ABANDON THE ABO AND TEST THE QUEEN, GRAYBURG AND SAN ANDRES. DUMP 35'
CEMENT ON CIBP @ 5675'. RUN CNL, GAMMA RAY, AND PERF THE Q-G-SA AS
INDICATED BY LOG AND FRAC.

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: Laurie Cherry	OIL CONSERVATION DIVISION	
Printed name: LAURIE CHERRY	Approved by: [Signature] PBA	Title: District Supervisor
Title: REG./COMP. ASST.	Approval Date: 7-7-98	Expiration Date: 7-7-99

DISTRICT II
P.O. Drawer DD, 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 30-015-22822	Pool Code	Pool Name ARTESIA (Q-Q-SA)
Property Code 22954	Property Name WASHINGTON 33 STATE	Well Number 15
OGRID No. 000990	Operator Name ARCO PERMIAN	Elevation 3662

Surface Location

UL or lot No. I	Section 33	Township 17 S	Range 28 E	Lot Idn	Feet from the 2250	North/South line SOUTH	Feet from the 235	East/West line EAST	County 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.						

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

				OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Laurie Cherry Signature LAURIE CHERRY Printed Name REG. COMPT. ASST. Title 6-16-98 Date	
SURVEYOR CERTIFICATION 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. MARCH 3, 1998 Date Surveyed RONALD J. EDISON Signature Professional Surveyor Title 2335 New Mexico 5-4-98 State No. 12641 Certified Professional 12185					

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.

LAURIE CHERRY
 Print or Type Name

Laurie Cherry
 Signature

Res/Comp. Asst.
 Title

6/16/98
 Date



ARCO Permian
600 North Marienfeld
Midland TX 79701-4373
PO Box 1610
Midland TX 79702-1610
Telephone 915 688 5200

June 16, 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 #15, a recompletion of a previously drilled well in the Empire Abo Unit, to the Artesia (Queen-Grayburg-San Andres) Field. The location for this well, formerly known as the EAU #G-324 is 235'FEL and 2250'FSL of Section 33, T17S, R28E, Eddy County, New Mexico. This well was drilled at an approved unorthodox location for the original horizon.

As required, we are submitting a plat showing the subject 40-acre spacing unit with the unorthodox location, a map identifying the adjoining and diagonal encroached-upon leases and wells, and a list of affected parties.

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

Sincerely,

Laurie Cherry
Regulatory/Compliance Assistant

:lc

cc: NMOCD, Artesia, New Mexico

Enclosures



ARCO Permian
600 N. Main Street
Midland, TX 79701
Phone (806) 681-1111
Telex 155555 ARCO
Cable 155555 ARCO

June 16, 1998

CERTIFIED RETURN RECEIPT MAIL

Marbob Energy Corp.
P. O. Box 227
Artesia, New Mexico 88211

Ladies and Gentlemen:

This letter will serve as notice that ARCO Permian has requested administrative approval from the NMOCDD for an unorthodox location for Washington "33" State 15 under Rule 104.F. (3), due to geological conditions. It is a recompletion of a previously drilled well in the Empire Abo Unit, to the Artesia (Queen-Grayburg-San Andres) Field. The location for this well, formerly known as the EAU #G 324 is 235' FEL and 2250' FSL of Section 33, T17S, R28E, Eddy County, New Mexico.

Should your company have any objection, it must be filed in writing within twenty (20) days from the date of this notice. The Division Director may approve the unorthodox location if no objection to the unorthodox location has been made within 20 days after the application has been received.

Sincerely,

Laurie Cherry
Regulatory/Compliance Assistant

:lc

Enclosures



ARCO Permian
100 N. Main Street
Midland, TX 79701
Post Office Box 1010
Midland, TX 79701
Telephone 409/691-6100

June 16, 1998

CERTIFIED RETURN RECEIPT MAIL

Lauretta M. Phillips Estate
C/o Leahy & Sheldon Trust
P. O. Box 539
Los Olivos, California 93441

Ladies and Gentlemen:

This letter will serve as notice that ARCO Permian has requested administrative approval from the NMOCDD for an unorthodox location for Washington "33" State 15 under Rule 104.F. (3), due to geological conditions. It is a recompletion of a previously drilled well in the Empire Abo Unit, to the Artesia (Queen-Grayburg-San Andres) Field. The location for this well, formerly known as the EAU #G 324 is 235' FEL and 2250' FSL of Section 33, T17S, R28E, Eddy County, New Mexico.

Should your company have any objection, it must be filed in writing within twenty (20) days from the date of this notice. The Division Director may approve the unorthodox location if no objection to the unorthodox location has been made within 20 days after the application has been received.

Sincerely,

Laurie Cherry
Regulatory/Compliance Assistant

:lc

Enclosures

**OFFSET OPERATORS
WASHINGTON "33" STATE #15**

**Lauretta M. Phillips Estate
C/o Leahy & Sheldon Trust
P. O. Box 539
Los Olivos, California 93441**

**Marbob Energy Corp.
P. O. Box 227
Artesia, New Mexico 88211**

**Geologic and Engineering Discussion for Washington 33 State #15
Unit I of Section 33, T17S, R28E, Eddy County, New Mexico**

ARCO Permian requests administrative approval for unorthodox location for Washington 33 State #15 and #16 in the Artesia (Q-G-SA) Field, both as recompletions of wells drilled to a deeper horizon. Both wellbores are required for geologic reasons, and will be simultaneously dedicated to Unit Letter I of Section 33.

ARCO will require 2 strategically spaced wellspots in each 40-acre tract to recover reserves in the Artesia pool. Wherever possible, our well pattern dictates a wellbore in the NE quadrant and SW quadrant of each 40 acres. Recompletion of these Empire (Abo) wellbores, which are 882 ft. apart, will prevent wasteful drilling .

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" wells on and surrounding our lease indicates that 10-20 acre drainage for these pays is reasonable.

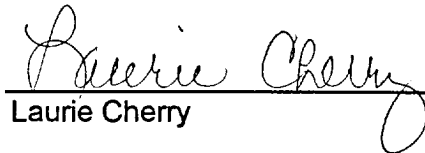
We have therefore determined that two wells per 40 acres, with 700 ft. minimum between wells, will effectively drain this reservoir and protect correlative rights. Where inexpensive recompletions are available, 550 ft. between wells will avoid wasteful drilling. "Ten-acre" locations in the same half 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.

STATE OF TEXAS

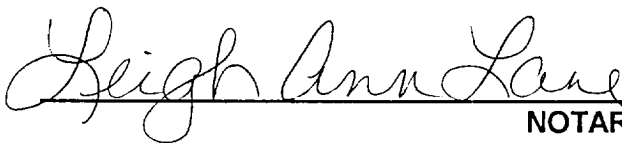
COUNTY OF MIDLAND

BEFORE ME, the undersigned authority on this day personally appeared Laurie Cherry, a Regulatory Compliance Assistant with ARCO Permian, who being by me duly sworn, deposes and states that the persons listed on the foregoing attached list has been sent a copy on June 16, 1998, Oil Conservation Division Form C-101 (and supporting documentation) entitled, "Application For Permit to Drill or Deepen" for the Washington "33" State #15.

ARCO Permian


Laurie Cherry

SUBSCRIBED AND SWORN TO before me on June 16, 1998, to certify which witness my hand and seal of office.



NOTARY PUBLIC, STATE OF TEXAS



LEIGH ANN LANE

Notary Public, State of Texas

My Commission Expires: 12-12-2000

Section 33 (below)

T17S R28E

27

29
KERSEY
CO.

Mark F...
MACK CHASE

CONOCO
FINA

Arco, et al

MARBOB
Penroe
(1-650 11 11)

MARBOB TO
ALTURA 3500'

KERSEY
E

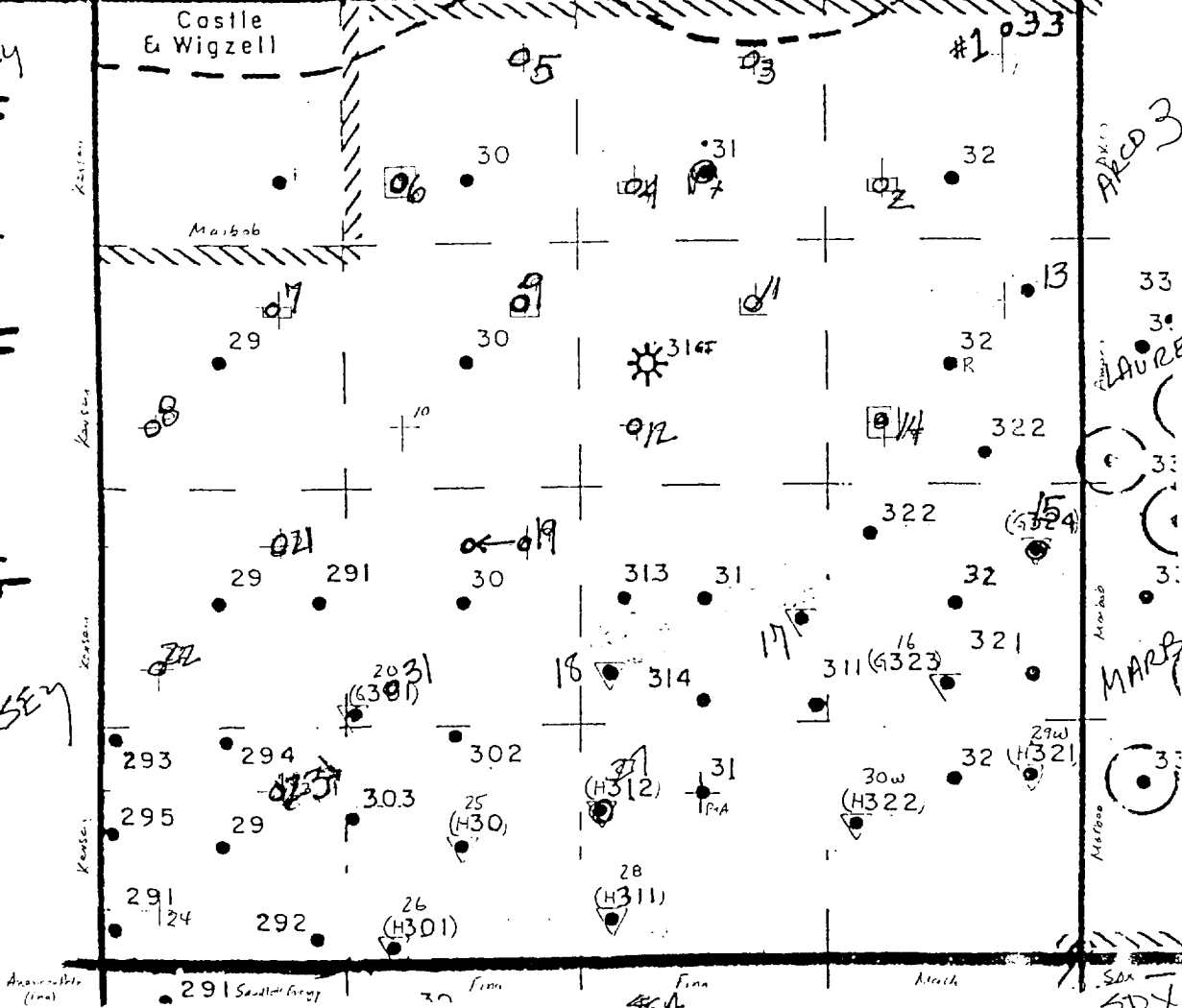
32

F

G

KERSEY

H



0 330 660'

1" = 1000'
660

- ▽ San Andres recomplete candidates
- + San Andres Localities
- Primary Yaso Locations
- R Recomplete alternative in Yaso
- Possible/contingent Yaso TD

2BP 2/19/79

