

6/22/98 | 7/13/98 | MS | M | NSL

ABOVE THIS LINE FOR DIVISION USE ONLY

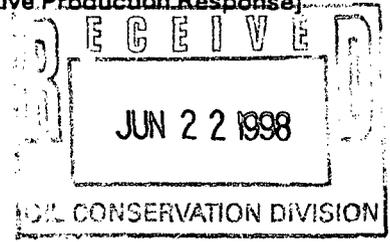
NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

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

] 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

REG/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 #29, 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 #H-321 is 1050'FSL and 250'FEL 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 Pearcy 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

**Geologic and Engineering Discussion for Washington 33 State #29
Unit P of Section 33, T17S, R28E, Eddy County, New Mexico**

ARCO Permian requests administrative approval for unorthodox location for Washington 33 State #29 and #30 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 P 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 949 ft. apart, will prevent wasteful drilling, even though #30 is "off-patterns".

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 will effectively drain this reservoir and protect correlative rights. Where inexpensive recompletions are available, 700 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.

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

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

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		² OGRID Number	
ARCO PERMIAN P.O. BOX 1610 MIDLAND, TX 79702		000990	
		³ API Number	
		30-0 15-22417	
⁴ Property Code	⁵ Property Name		⁶ Well No.
22954	WASHINGTON "33" STATE		29

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
P	33	17S	28E		1050	SOUTH	250	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

¹⁰ Proposed Pool 2

ARTESIA (Q-G-SA)

¹¹ Work Type Code	¹² Well Type Code	¹³ Cable/Rotary	¹⁴ Lease Type Code	¹⁵ Ground Level Elevation
R	0	R	S	3659
¹⁶ Multiple	¹⁷ Proposed Depth	¹⁸ Formation	¹⁹ Contractor	²⁰ Spud Date
NO	3200	SAN ANDRES	HONDO	3-22-78

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#	600	300	SURF.
7-7/8	5-1/2	15.5	6378	1080	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 H-321 IN 1978.
TD @ 6378'. TESTED ABO @ 6140-6250'. TA'D W/CIBP @ 6144' 1-11-96. PROPOSE
TO DUMP 35' CEMENT ON CIBP @ 6144', RUN CNL-GAMMA RAY-CCL AND PRF SAN ANDRES
AS INDICATED BY LOG. TEST AND FRAC AS NEEDED.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: *Laurie Cherry*
Printed name: LAURIE CHERRY

Title: REG./COMP. ASST.

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

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

State of New Mexico

Form C-102

Energy, Minerals and Natural Resources Department

Revised February 10, 1994
Submit to Appropriate District Office

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

State Lease - 4 Copies
Fee Lease - 3 Copies

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

OIL CONSERVATION DIVISION

P.O. Box 2088

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

Santa Fe, New Mexico 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-22417	Pool Code	Pool Name ARTESIA (Q-G-SA)
Property Code 22954	Property Name WASHINGTON 33 STATE	Well Number 29
OGRID No. 000990	Operator Name ARCO PERMIAN	Elevation 3659

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	33	17 S	28 E		1050	SOUTH	250	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

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<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 _____ Professional Surveyor</p> <p>RONALD J. EDSON 3239 12641 5-4-98 12185</p>																																			
<p>Certificate No. _____</p> <p>RONALD J. EDSON 3239 12641 5-4-98 12185</p>																																			

**OFFSET OPERATORS
WASHINGTON "33" STATE #29**

**SDX Resources, Inc.
P. O. Box 5061
Midland, Texas 79704**

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

**Mack Chase, Trustee
P. O. Box 1767
Artesia, New Mexico 88211**

**Bulldog Energy Corp.
P. O. Box 668
Artesia, New Mexico 88210**

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 #29.

ARCO Permian



Laurie Cherry

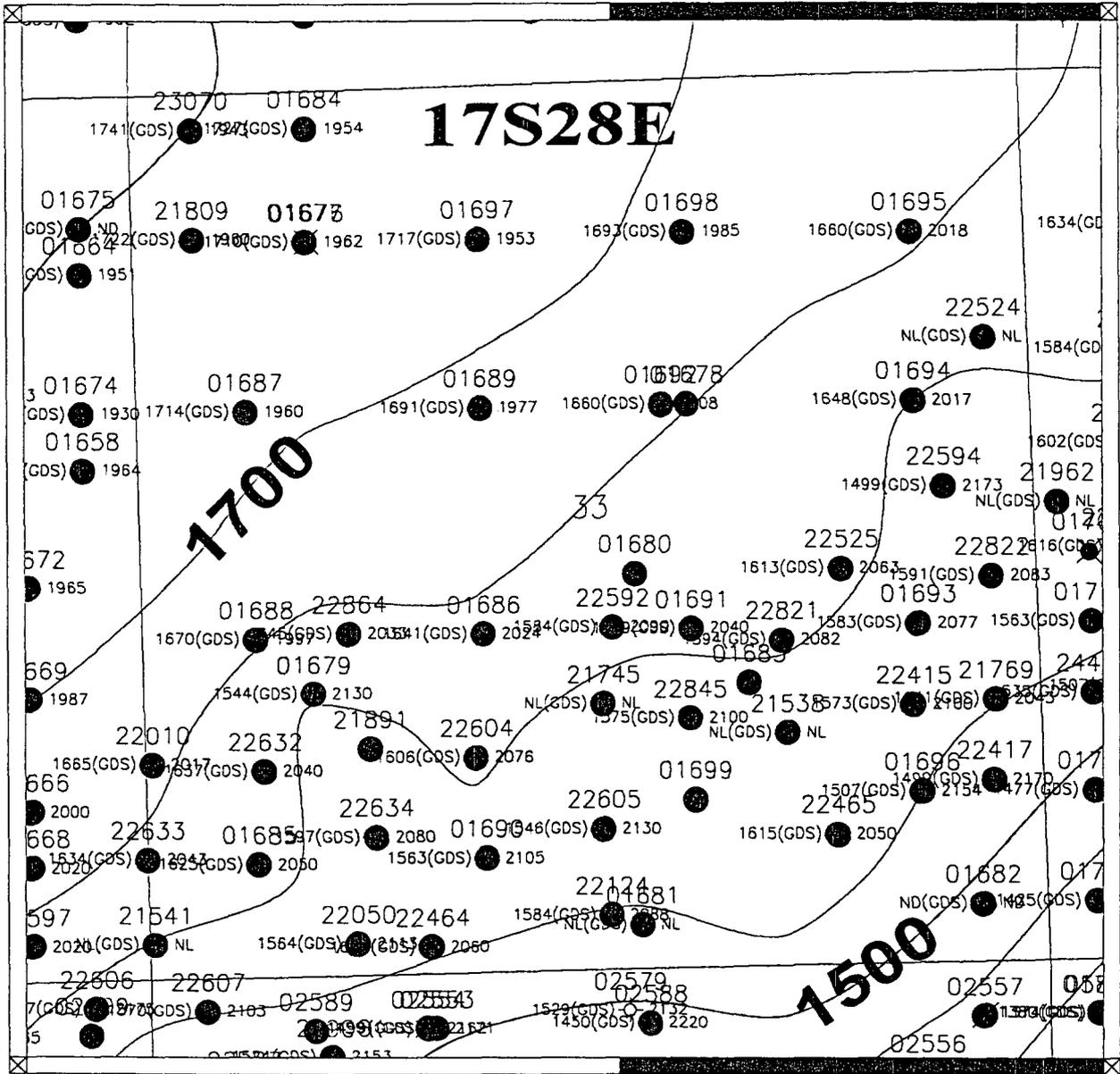
SUBSCRIBED AND SWORN TO before me on June 16, 1998, to certify which witness my hand and seal of office.



NOTARY PUBLIC, STATE OF TEXAS

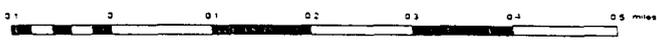


LEIGH ANN LANE
Notary Public, State of Texas
My Commission Expires: 12-12-2000



ARCO PERMIAN		
EDDY CO NM EMPIRE ABO SNDR STRUCTURE C.I.: 50		
DPEARCY	EDDY CO OILJ	42/88
OLMENEZ	Scale 1:12000	EMPIRE1A

Scale 1:12000.



Section 33 (below)

T17S R28E

27

29
KERSEY
CO.

Mark Finna
MACK CHASE

Marion
CONOCO
FINA

Derry
ARCO, et al

MARBOB
Pen-roc
(4-650 n. 10')

MARBOB TO 3500'
ALTURA

(Sec. 28)

KERSEY
E

Castle
& Wigzell

#1 33

32

Marbob

ARCO 34

F

33
LAURETTA
(PHILLIPS)

G

MARBOB

KERSEY

H

Anson & Bels
(line)

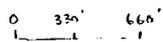
291 Sealed Geog

30 Fina

Fina
304

Mack

Sax
SDX



1" = 1000'
660

- ▽ San Andres recomplete candidates
- + San Andres locations
- Primary Yesso Locations
- R Recomplete alternative in Yesso
- ⊕ Possible / continued Yesso TB

JBP 2/19/78