

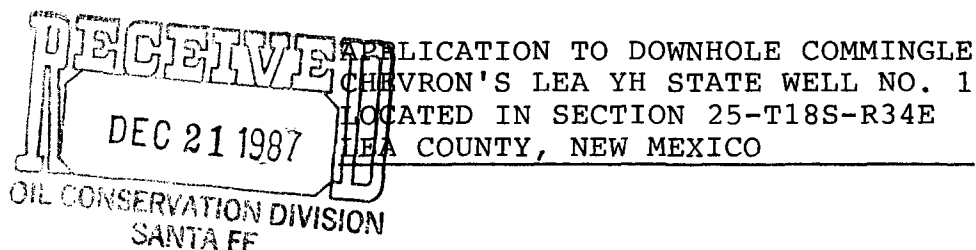


*Release Date
January 15, 1988*

Chevron U.S.A. Inc.
P.O. Box 670, Hobbs, NM 88240

R. C. Anderson
Division Manager
Production Department
Hobbs Division

December 8, 1987



William J. LeMay
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Pursuant to the provisions of Statewide Rule 303-C, Chevron U.S.A. Inc. respectfully requests administrative approval to commingle production within the wellbore from the Airstrip Bone Springs & Wolfcamp Pools of the subject well. A recent workover on the subject well found the reservoir pressures of the Bone Springs and Wolfcamp zones to be very similar. Due to the low reservoir pressures seen, a dual completion with packers would not be practical or economical. Fluid compatibility tests have shown the oils/waters from these zones to be compatible. Based on the compatibility of these reservoirs, we propose to downhole commingle the Bone Springs and Wolfcamp.

Enclosed is pertinent data supporting this application as outlined in Rule No. 303-C. If additional information is necessary, please contact Rick Mitchell at (505) 393-4121.

Yours very truly,

J. G. M. Anderson
for R. C. ANDERSON

RKM/cjw

Attachments

cc: J. T. Sexton
District 1 Supervisor
Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

1. Operator: Chevron U.S.A. Inc., P.O. Box 670, Hobbs, N.M. 88240
2. Lease, Well, and Location: Lea YH State Well No. 1, 760' FSL and 1980' FEL of Section 25-T18S-R34E, Lea County, N.M.
3. Producing Zones: Bone Springs and Wolfcamp
4. Decline Curve: The Wolfcamp is expected to decline at 30% per year after an IP of 43 BOPD with 10 MCFGPD. The Bone Springs is expected to decline at 19% per year after an IP of 11 BOPD with 5 MCFGPD.
5. Bottom Hole Pressure: Wolfcamp calculated BHP of 274 psi at depth of 10,734' Bone Springs BHP measured 55 psi at depth of 10,238'.
6. Fluid Characteristics: The Wolfcamp and Bone Springs are proposed to be surface commingled at the battery under Commingling Order PC489. To date there has been no evidence of fluid incompatibility.
7. Well History: Attached with Wellbore Schematic
8. Value of Commingled Fluids: The Wolfcamp and Bone Springs are proposed to be surface commingled on the subject lease. Surface commingling permits are currently pending approval by the NMOCD and Public Land Department.
9. Current Production: Wolfcamp tested 43 BOPD, 24 BWPD, and 10 MCFGPD, in November of 1987. The Bone Springs tested 11 BOPD, 6 BWPD, and 5 MCFGPD in November of 1987.
10. Recommended Oil and Gas Allotments:

<u>Wolfcamp</u>	<u>Bone Springs</u>
80% OIL	20%
67% GAS	33%
11. Ownership and Royalty Interests: Ownership of the two pools to be commingled is common and correlative rights will not be violated.
12. Future Secondary Operations: Commingling will not jeopardize the efficiency of future secondary recovery operations in either zone.
13. Production Methods: The commingled production will be pumped and the fluid level monitored to maintain a pumped off condition and eliminate the possibility of cross flow between reservoirs.
14. Copies of this application have been furnished to all offset operators by certified mail.

Offset Operators

Amoco Production Company
205 E. Bender Blvd.
Hobbs, NM 88240

Bass Enterprises
201 Main St.
Fort Worth, TX 76102

Mobil Producing Texas & New Mexico Inc.
901 E. Bender Blvd.
Hobbs, NM 88240

Texaco, Inc.
Broadmoor Bldg.
Hobbs, NM 88240

Certified Mail - Return Receipt Requested

MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
 Supervisor C-12
 Effective 1-1-65

All distances must be from the outer boundaries of the Section

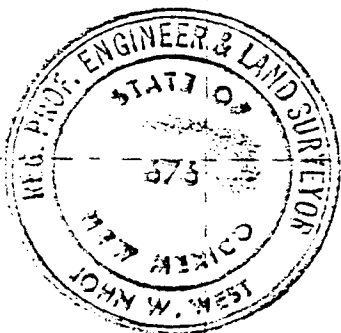
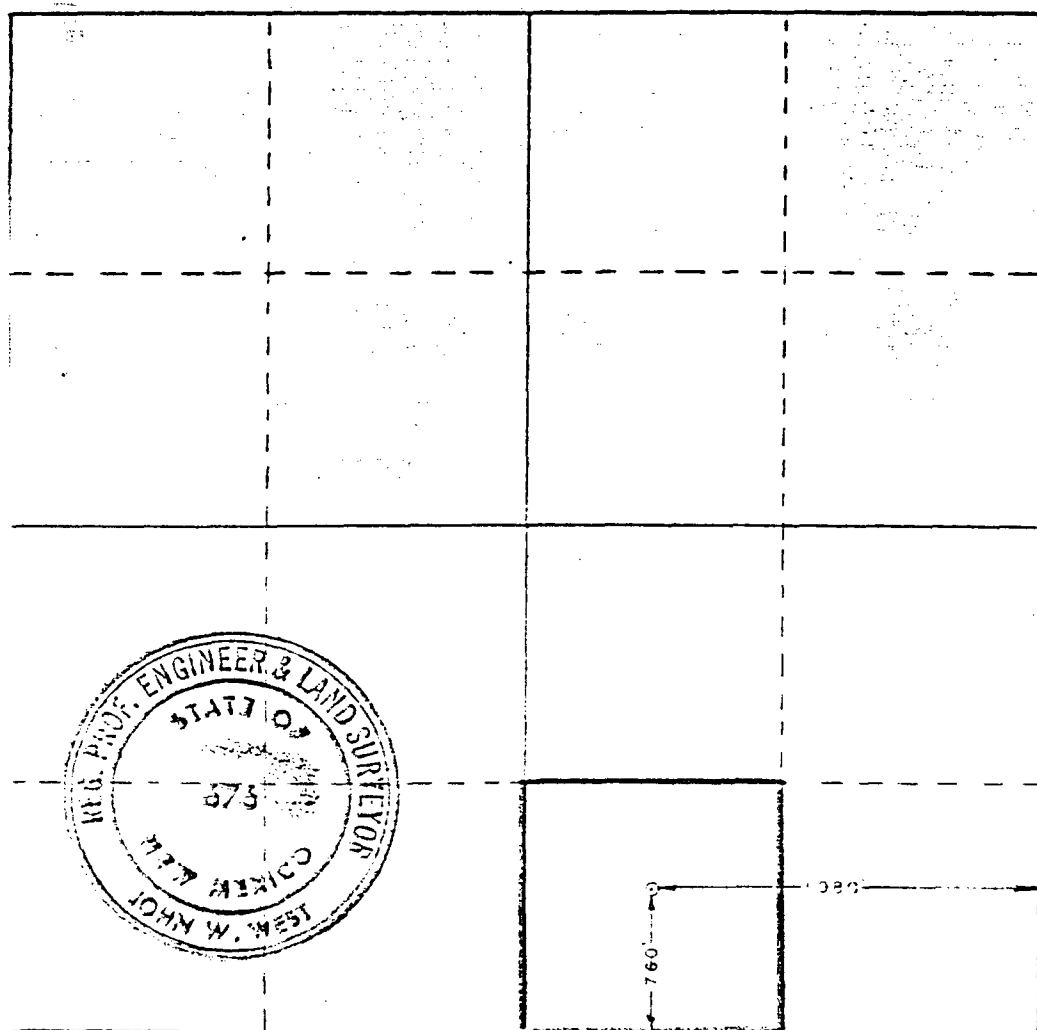
Operator Gulf Oil Corp.			Lease Lea Y H State			Well No. 1		
Unit Letter O	Section 25	Township 18 South	Range 34 East	County Lea				
Actual Well Location of Well:								
760		feet from the South		line and 1980		feet from the East		line
Drum Level Elev. 3948.5		Producing Formation Wolfcamp / Box Springs			Pool Airstrip - Box Springs Airstrip - Wolfcamp -		Dedicated Acreage: 40 Acres	

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

(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.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

R. C. Anderson

Name

R. C. ANDERSON

Position

Area Production Manager

Company

GULF OIL CORPORATION

Date

10-09-78

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

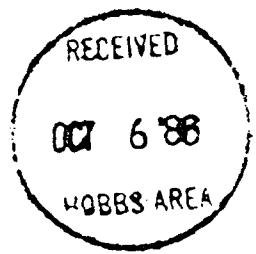
September 28, 1978

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. **John W. West** **678**

Ronald J. Eldon **3239**



THE PERMIAN CORPORATION

1509 W. WALL P. O. BOX 3119
MIDLAND, TEXAS 79702

915-683-4711

October 3, 1986

Mr. R. C. Anderson
Chevron U.S.A. Inc.
P.O. Box 670
Hobbs, New Mexico 88240

RE: Chevron Operated Leas YH State
Lease, Lea County, New Mexico
Permian No. 562254

Gentlemen:

This will confirm my conversation with Beryl Ragsdale in Chevron's Midland office in which she advised Permian that Chevron will commingle Wolfcamp and Bone Springs production on the above referenced lease in the Airstrip field, Lea County, New Mexico. Please note your records that Permian will continue to purchase this crude oil under the same Permian Lease Number as listed above, which is No. 562254.

Yours very truly,

THE PERMIAN CORPORATION

Steve Whiteside
Steve Whiteside

/lh

cc:

Ms. Beryle Ragsdale
Chevron U.S.A. Inc.
P.O. Box 1150
Midland, TX 79702

HOBBS DIVISION				
REC'D	COPY	DISCUSSION	HANDLE	INITIALS
X			CHG MGR	RCR by CLM
			CHG DRG MGR	
X			CHG PTL EN	STAA
			CHG REV LGS	
X			CHG SUPPLY M	CLM
			CHG SUPPLY T	
			CHG CAC EN	
			CHG GSENG	
			CHG COORD	
			SATEY CUSRD	
X			PERMIN ASST	DC
X			DC	DC
			FILE	Leave File



WELL DATA SHEET

LEASE Lea YH State WELL NO. 1 FIELD Airstrip Bone Springs/Wolfcamp DATE 12/2/87
LOCATION 760 FEET FROM S LINE AND 1980 FEET FROM E LINE
SECTION 25 BLOCK T185 SURVEY R34E COUNTY Lea STATE Nm

GE: 3949
KDB to GE 17
DF to GE 16

1134 " OD- Surf.
Pipe set @ 388
w/ 460 sx cmt.
Circ? Yes

858 " OD
STC Thd Gr. 800
28#32 Csg set at
3897 w/ 1050 sx
Cmt. Circ? Yes
TOC at - by TS

9000-9002 9050-56 } 2 SPF Bone
9004-18 9070-80 } 90 holes Springs
9023-32
9042-46

9199-9201 9294-96 9364-66 } 2 SPF Bone
9204-08 9312-14 9373-75 } 53 holes Springs
9214-16 9329-31 9381-83
9272-74 9339-41 9390-92
9287-89 9351-53

9640-45 9924-26 10200-205 } Bone Springs
9654-67 9942-56 10209-211 } 2 SPF
9690-9700 9964-66 10214-10280 } 164 holes
9856-58 9952-56 10236-35
9856-9910 9955-2010

10401-03 }
10625-27 } Airstrip Wolfcamp
10656-58 } w/ 2 SPF
10667-69 }
10670-50 } 32 holes total.
10698-92
10703-25
10732-34

5 1/2 " OD LTC
Thd, Gr K55 IN60
17#155 Csg set @
10770 w/ 700 sx
Cmt. Circ? No
TOC @ 7800 by TS

Date Completed 3/23/79

Initial Formation
FROM: 9329 TO 9392 GOR
Initial: Production X 408 bopd - - bw
Or: Injection - bwpd at - p

Completion Data:
Perfed Wolfcamp 10601-10734, Acidized w/ 7200 gal 20% HCL
Swabbed 26 BO + 39 BW in 12 hrs
Set CIBP @ 10500 + 35' cmt on top

Perfed Bone Springs 9329-92, Acidized w/ 7000 gal
IP'd - 408 BO DD - No Wtr.

Subsequent Workover or Reconditioning:
11-79 Set P.E. Well Pumped 255 BO + 22 BW

9-84 Perfed Bone Springs 9199-9314, Acidized w/ 4000 gal
20% HCL - tested @ 14 BO + 08 BW + 214 mcf PD

11-87 Perfed Bone Springs 9640-10238, Acidized w/ 7000 gal
20% HCL.

Acidized Bone Springs Perfs 9199-9392 w/ 4000 gal
20% HCL

Perfed Bone Springs 9000-9080, Acidized w/ 5000 gal
20% HCL

Tested Bone Springs 10730, 58 BW (swab)

C/O CIBP d cmt @ 10500, Acidized Wolfcamp perfs
2550 gal 20% HCL. swabbed back.

Bone Springs & Wolfcamp tested @ 54 BO + 30 BW + 35
mcf PD.

Present Inj. - bwpd @ - psi
date -

Present Prod. X 54 bopd 30 bwpd
date 11/87
GAS 15 MCFPD

Remarks or Additional Data:

To _____ 12/2/ 1987

From _____

Subject: Lea YH State #1 Drunkhole Comingle Our File: _____

Bottom Hole Pressure Calculations - Bone Springs & Wolfcamp Your File: _____

Wolfcamp $P_{\text{res}} = P_{\text{csq}} + P_{\text{g.c.}} + P_{\text{f.c.}}$

$$P_{\text{csq}} = 5 \text{ psi (measured)}$$

$$SG_{\text{gas}} = 1.1431 \text{ (from analysis)}$$

$$G_{\text{grad}} = 1.1431 \times 1.2929 \text{ gm/l} \times .008345 \text{ \#gal/gm/l} \times .052$$

$$G_{\text{grad}} = .0006 \text{ psi/ft}$$

$$P_{\text{g.c.}} = .0006 \text{ psi/ft} \times 10140 \text{ ft}$$

$$P_{\text{g.c.}} = 6 \text{ psi}$$

$$SG_{\text{oil mix}} = 8.56 \text{ \#gal} - \text{from measurement}$$

$$P_{\text{oil mix}} = (.052)(8.56)(10734 - 10140)$$

$$= 264 \text{ psi}$$

$$P_{\text{res (Wolfcamp)}} = 5 + 5 + 264 = \underline{\underline{274 \text{ psi}}}$$

Bone Springs

$$P_{\text{csq}} = 5 \text{ psi}$$

$$P_{\text{g.c.}} = (6006 \text{ psi/ft})(10140 \text{ ft})$$

$$= 6 \text{ psi}$$

$$P_{\text{oil mix}} = (.052)(8.56)(10238 - 10140)$$

$$= 44 \text{ psi}$$

$$P_{\text{res (Bone Springs)}} = 5 + 6 + 44 = \underline{\underline{55 \text{ psi}}}$$

Cont'l
White
E-4900
Caden

Forest
S1-Cont'l
0 10 800
DAIL 5-02

HNG Oil
2-1-87
L-0-4032
20787

Mesa Pet
C12545
DAIL 16-76

Cont'l
White
E-5014
CONOCO STATE
JOPERL
DAIL 5-02

(Anadarko)
H&P
E-1632
Conoco
DIR
Conoco
E-11732

HNG Oil & No. Nat. Gas
3-1-00
PERC. UOSP
SUBORDINATE

Amoco
F.U.
1/10/83
1/10/83
1/10/83

SEE WELLBORE DIAG.
PRODUCTION DATA
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5/19 UOSP
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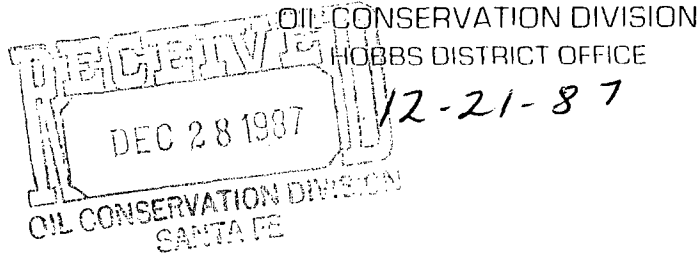
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Cont'l
White
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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

GARREY CARRUTHERS
GOVERNOR



POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC _____
DHC X _____
NSL _____
NSP _____
SWD _____
WFX _____
PMX _____

Gentlemen:

I have examined the application for the:

Chevron USA Inc. Lease # State #1-0 25-18-34
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Supervisor, District 1

/ed