

Shell Oil Company



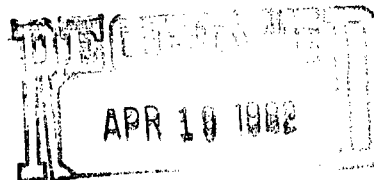
April 16, 1982

P.O. Box 991
Houston, Texas 77001

State of New Mexico
Energy and Minerals Department
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

SUBJECT: APPLICATION TO DOWNHOLE COMMINGLE
SHELL - LIVINGSTON WELL NO. 13
3330 FNL AND 467 FEL, UNIT LETTER I
SECTION 4, T-21-S, R-37-E
BLINEBRY OIL AND GAS POOL
LEA COUNTY, NEW MEXICO



Shell Oil Company respectfully requests administrative approval under the provisions of Rule 303-C, to commingle within the wellbore production from the Drinkard and Blinebry Oil and Gas Pools in the subject well. The subject well is currently being produced with the Blinebry zone flowing up a string of 2 3/8" tubing. The Drinkard zone was opened and tested in June 1981 before being isolated with a retrievable bridge plug in August 1981. Administrative approval to dually complete the Drinkard and Blinebry Oil and Gas Pools was granted June 26, 1981 (MC-2865). However, now with the indicated marginal production, installation of dual equipment cannot be justified. In the interest of conservation and prevention of waste, we now propose to downhole commingle the production from the Blinebry and Drinkard pools in Shell-Livingston No. 13.

An exception to Rule 303-C has previously been granted to the following wells:
Livingston No. 8 - located in Unit Letter N, 2308 FWL, 2970 FSL, Section 3, T-21-S, R-37-E. (DHC-104 dated February 6, 1972), and,
Livingston No. 10 - located in Unit Letter P, 3200 FSL, 660 FEL, Section 4, T-21-S, R-37-E. (DHC-68 dated September 29, 1970).
Livingston No. 8 and No. 10 produce from the same zones as No. 13 and No. 10 is a direct offset.

This well qualifies for administrative approval in accordance with Statewide Rule 303, paragraph C; and in support thereof, the following facts are submitted:

1. The attached plat shows the Livingston Lease.
2. The latest tests are as follows:

Blinebry: 2-02-82 6 BOPD, 3 BWPD, 91 MCFGPD. Perforations: 5637' - 5993'.

Drinkard: 8-10-81 2 BOPD, 13 BWPD, GTSTM. Perforations: 6531' - 6809'.
(Currently isolated below RBP @6080'.)

April 16, 1982

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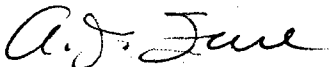
3. Neither zone produces more water than the combined oil limit as determined in Rule 303, Paragraph C, (d).
4. Shell Oil Company has commingled these fluids at the surface and has encountered no incompatibility problems; therefore, no reservoir damage will result from downhole commingling.
5. Surface commingling resulted in no reduction of oil value; therefore, downhole commingling will not reduce oil value. (PC-47, March 5, 1968)
6. The ownership of both zones to be commingled is common.
7. A resume of the well's completion history is attached.
8. The bottom hole pressures are:
Blinebry: 72 hr SI - 407 psig.
Drinkard: Fluid level - 788 psig.
We do not anticipate cross flow of fluids since the well will be maintained at pumped off conditions.
9. Commingling will not jeopardize the efficiency of future secondary operations in either zone.
10. Copies of this application have been furnished to all offset operators by certified mail.
11. Recommended oil and gas allotments would be as follows:

<u>Drinkard</u>		<u>Blinebry</u>
25%	Oil	75%
0	Gas	100%

Other supporting data attached is C-116 for each zone and a schematic of the present and proposed downhole configuration.

If additional information is required, please advise.

Yours very truly,



A. J. Fore
Supervisor Regulatory and Permitting
Mid-Continent Division

DMB/dmb

Attachments

cc: State of New Mexico
Energy & Minerals Department
Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88240

Welton D. Moore
New Mexico Production Unit

SHELL - LIVINGSTON NO. 13
(OFFSET OPERATORS)

GULF OIL COMPANY
P. O. BOX 1150
MIDLAND, TEXAS 79702

TEXACO OIL COMPANY
P. O. BOX 728
HOBBS, NEW MEXICO 88240

CONOCO OIL COMPANY
P. O. BOX 460
HOBBS, NEW MEXICO 88240

AMOCO OIL CORPORATION
P. O. BOX 68
HOBBS, NEW MEXICO 88240

M. R. ANTWEIL
P. O. BOX 2010
HOBBS, NEW MEXICO 88240

P26 8680285

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED —
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO	
M. R. ANTWEIL	
STREET AND NO.	
P. O. BOX 2010	
P.O., STATE AND ZIP CODE	
HOBBS, NM 88240	
POSTAGE \$	
CONSULT POSTMASTER FOR FEES	
CERTIFIED FEE	
SPECIAL DELIVERY	
RESTRICTED DELIVERY	
SHOW TO WHOM AND DATE DELIVERED	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	
RETURN RECEIPT SERVICE	
OPTIONAL SERVICES	
TOTAL POSTAGE AND FEES \$	
POSTMARK OR DATE	
D. M. BRANFORD	
WCK 4435	
APRIL 16, 1982	

PS Form 3800, Apr. 1976

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MAIL

P26 8680284

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(See Reverse)

SENT TO	
AMOCO OIL CORP.	
STREET AND NO.	
P. O. BOX 68	
P.O., STATE AND ZIP CODE	
HOBBS, NM 88240	
POSTAGE \$	
CONSULT POSTMASTER FOR FEES	
CERTIFIED FEE	
SPECIAL DELIVERY	
RESTRICTED DELIVERY	
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OPTIONAL SERVICES	
TOTAL POSTAGE AND FEES \$	
POSTMARK OR DATE	
D. M. BRANFORD	
WCK 4435	
APRIL 16, 1982	

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SENT TO	
TEXACO, INC.	
STREET AND NO.	
P. O. BOX 728	
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HOBBS, NM 88240	
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SENT TO	
GULF OIL COMPANY	
STREET AND NO.	
P. O. BOX 1150	
P.O., STATE AND ZIP CODE	
MIDLAND, TEXAS 79702	
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(See Reverse)

SENT TO	
CONOCO OIL COMPANY	
STREET AND NO.	
P. O. BOX 460	
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RESTRICTED DELIVERY	
SHOW TO WHOM AND DATE DELIVERED	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	
RETURN RECEIPT SERVICE	
OPTIONAL SERVICES	
TOTAL POSTAGE AND FEES \$	
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WCK 4435	
APRIL 16, 1982	

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MAIL

COMPLETION HISTORY
LIVINGSTON NO. 13

10-9-80 thru 11-4-81: Drilled to Total Depth of 8156'.

11-18-80 thru 5-20-81: Opened and tested Fusselman zone. Determined Fusselman to be uneconomical to produce. Set CIBP @6890' with 35' cement.

6-1-81 thru 6-3-81: Perforated Drinkard zone 6831' - 6809' (37 holes). Acid treated with 4900 gals 15% NEA. Fracture treated with 11,750 gals gelled 2% KCl + 7750# 20-40 mesh sand before screening out.

7-21-81 thru 7-22-81: Re-perforated Drinkard zone 6530' - 6809' (37 holes). Acid frac'd with 15,000 gals gelled acid plus 15,000 gals gelled wtr pad.

8-10-81: Drinkard pumped 2 BO + 13 BW + GTSTM.

8-30-81: Set RBP above Drinkard @6080'.

9-1-81 thru 9-2-81: Perforated Blinbry zone 5647' - 5993' (52 holes). Acid treated with 8,000 gals 15% NEA. Fracture treated with 45,000 gals gelled water plus 35,000# 20-40 mesh sand.

2-1-81: 5 BO + 3 BW + 91 MCFG.

Operator		Pool		County										
Shell Oil Company		Drinkard		Lea										
Address		TYPE OF TEST - (X)		Scheduled <input type="checkbox"/> Completion <input type="checkbox"/>		Special <input checked="" type="checkbox"/>								
P. O. Box 576, Houston, TX 77001														
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW. ABLE	TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BB	
		U	S	T						A	WATER BBL'S	GRAV. OIL		OIL BBL'S
Livingston	13	I	4	21	37	8-10-81	P	35.0	24	13	38.2	2	0	0
Abose is a 24 hour productivity test preparatory to downhole comingled with the Brinebry zone.														

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowable when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.68.

Report casing pressure in flow of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the District Office of the New Mexico Oil Conservation Division in accordance with Rule 201 and appropriate pool rules.

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

C. M. Amann C. M. Amann
(Signature)

Sec. Supv. Oil Accounting

4/13/82

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with Rule 303 and appropriate pool rules.

A1132102

BEFORE

LIVINGSTON NO. 13
DRINKARD FIELD
LEA COUNTY, NM

ELEV = 3465' (DF)

2 3/8" TBG
@ 6024'

13 3/8" CSG @ 1190'

9 5/8" CSG @ 3500'

5637' - 5993' } BLINE BRY ZONE

RBP @ 6080'

6531' - 6809' } DRINKARD ZONE

CIBP @ 7350' + 2 3/4 x 3/4 cmt

7417' - 7426'

CIBP @ 7565' + 2 3/4 x 3/4 cmt

7592' - 7623'

FUSSELMAN
ZONE

8042'

7" CSG @ 8153'

TD @ 8156'

AFTER

LIVINGSTON NO. 13
DRINKARD FIELD
LEA COUNTY, NM

ELEV = 3465' (DF)

2 3/8" TBG
@ 6024'

13 3/8" CSG @ 1190'

9 5/8" CSG @ 3500'

5637' - 5993' } BLINE BRY ZONE

6531' - 6809' } DRINKARD ZONE

CIBP @ 7350' + 2 sxs cmt

7417' - 7426'

CIBP @ 7565' + 2 sxs cmt

7592' - 7623'

FUSSELMAN
ZONE

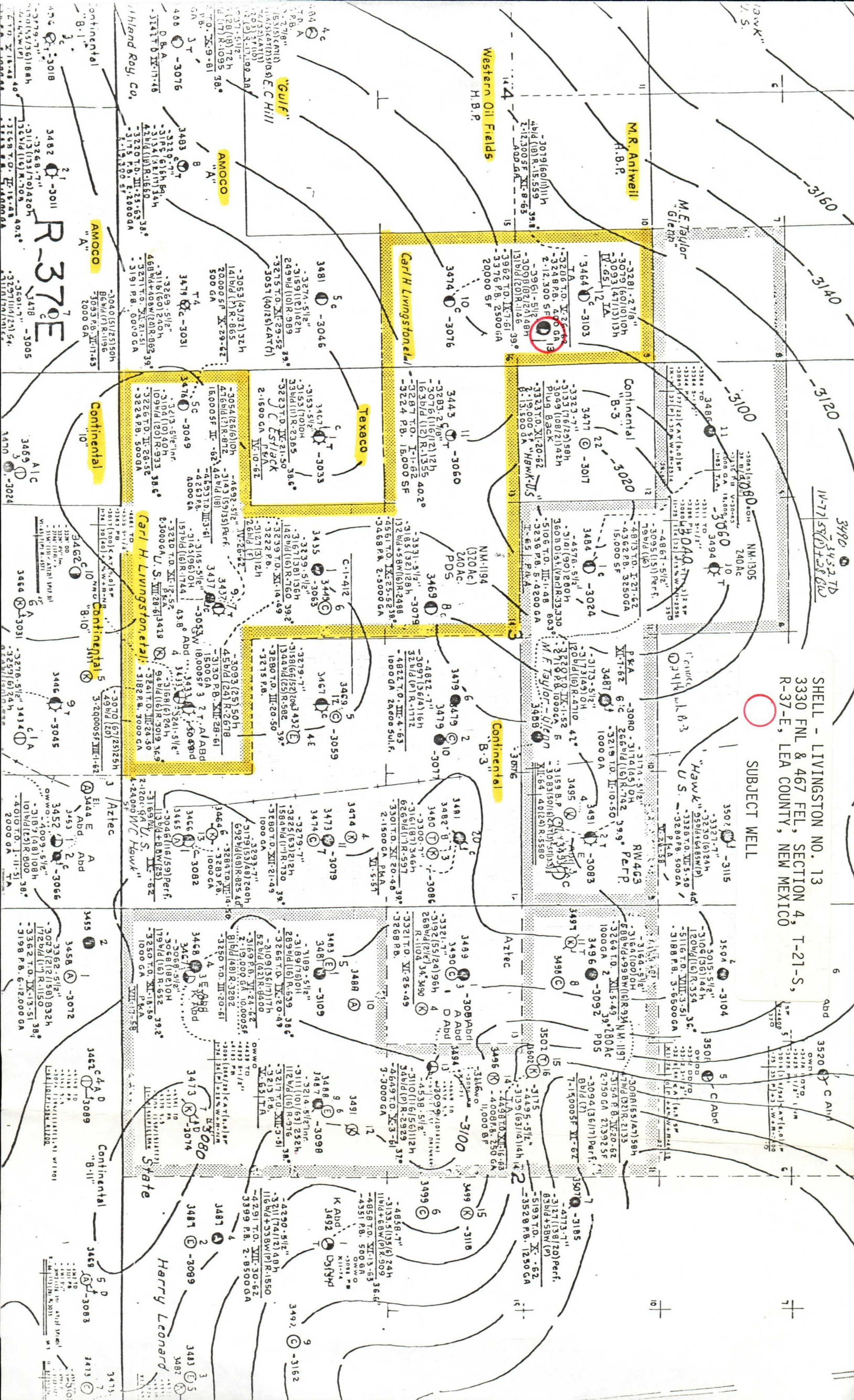
8042'

7" CSG @ 8153'

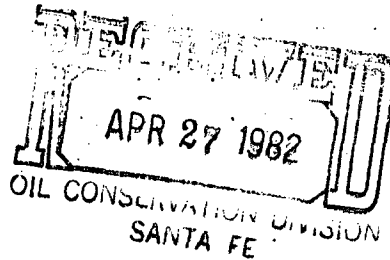
TD @ 8156'

SHELL - LIVINGSTON NO. 13
3330 FNL & 467 FEL, SECTION 4, T-21-S,
R-37-E, LEA COUNTY, NEW MEXICO

SUBJECT WELL



OIL CONSERVATION DIVISION
DISTRICT I



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

DATE April 21, 1982

RE: Proposed MC _____
Proposed DHC X _____
Proposed NSL _____
Proposed NSP _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

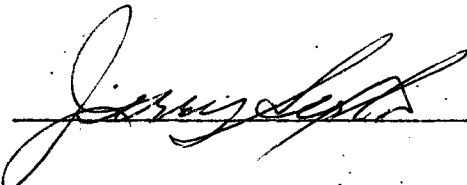
I have examined the application for the:

Shell Oil Company Livingston No. 13-I 4-21-37
Operator Lease and Well No. Unit, S - T - R

and my recommendations are as follows:

O.K.-----J.S.

Yours very truly,


/mc

