

Shell Western E&P Inc.

A Subsidiary of Shell Oil Company



November 6, 1984

P.O. Box 991
Houston, TX 77001

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

Gentlemen:

SUBJECT: APPLICATION TO DOWNHOLE COMMINGLE
SHELL - LIVINGSTON WELL NO. 9
915 FSL AND 2208 FWL, UNIT LETTER V
SECTION 3, T-21-S, R-37-E
BLINEBRY OIL & GAS AND DRINKARD POOLS
LEA COUNTY, NEW MEXICO

Pursuant to the provisions of Rule 303-C, Shell Western E&P Inc. respectfully requests administrative approval to commingle production within the wellbore from the Drinkard and Blinebry Oil and Gas Pools in the subject well. Livingston No. 9 was drilled and dually completed in the subject pools in 1952. The Drinkard zone was plugged off in 1961 and the well has since singly produced from the Blinebry zone. With the indicated marginal production, reinstallation 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 Drinkard and Blinebry Oil and Gas Pools in the subject well.

An exception to Rule 303-C has previously been granted for the following wells:
Livingston No. 8 - located in Unit Letter N, 2970 FSL, 2308 FWL, Section 3, T-21-S, R-37-E. (DHC-104 dated February 6, 1972);
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. 13 - located in Unit Letter I, 3300 FNL, 467 FEL, Section 4, T-21-S, R-37-E. (DHC-361 dated May 17, 1982).

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

1. The attached plat indicates the Livingston lease.
2. The latest tests are as follows:
Blinebry: (8-12-84) 6 BO + 1 BW + 324 MCFG
Drinkard: (10-30-84) 4 BO + 0 BW + 0 MCFG
3. Neither zone produces more water than the combined oil limit as determined in Rule 303-C, Section 1, paragraph (1).

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4. Shell Western E&P Inc. 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 at common datum of 6584' are:
Blinebry: 447 psig (65 hrs SI)
Drinkard: 390 psig (24 hrs SI)
 We do not anticipate crossflow 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>Blinebry</u>		<u>Drinkard</u>
60%	Oil	40%
100%	Gas	0%

Other supporting data attached are C-116 for each zone, a schematic of the present and proposed downhole configuration, and a production decline curve for the Blinebry zone.

If additional information is required, please advise.

Yours very truly,

A. J. Fore

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

JMW

Attachments

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

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SHELL LIVINGSTON #9
COMPLETION HISTORY

10/13/52- 11/10/52	Drilled to a total depth of 6659'
11/11/52	Completed in Drinkard 6584-6659 open hole
12/19/52	Completed in the Blinebry 5558-5760 and produced as a dual Blinebry/Drinkard well.
7/28/61	Dropped Baker seal into Model "D" packer at 6506' and capped with 2 sx cement. Produced Blinebry zone singly.
8/12/84	Blinebry - 6 BO + 1 BW + 324 MCFG.
10/84	Washed over Baker Model "D" packer and pushed to TD @ 6650. Acid treated Drinkard 6584-6659 w/5100 g 15% NEA.
	Well pumped from combined Drinkard/Blinebry perfs.

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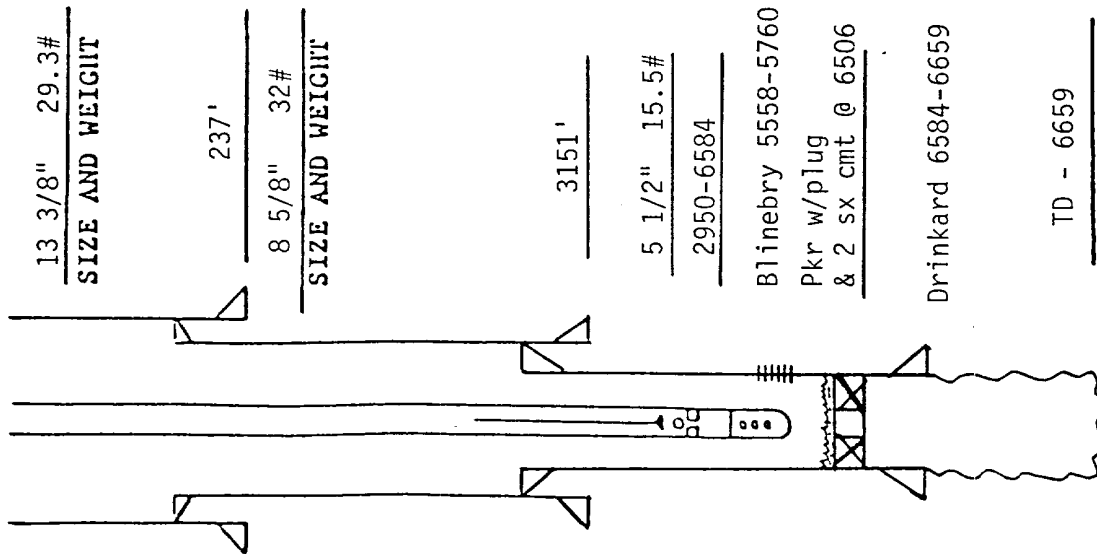
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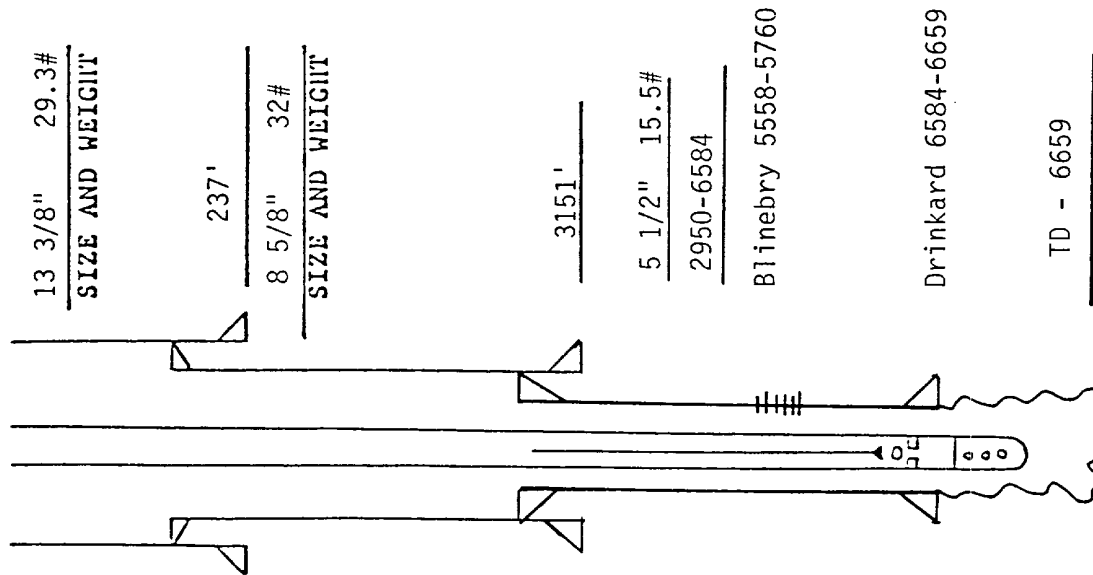
MECHANICAL CONFIGURATION

WELL Livingston #9
 FIELD Drinkard
 DATE 11/84

PRESENT



PROPOSED



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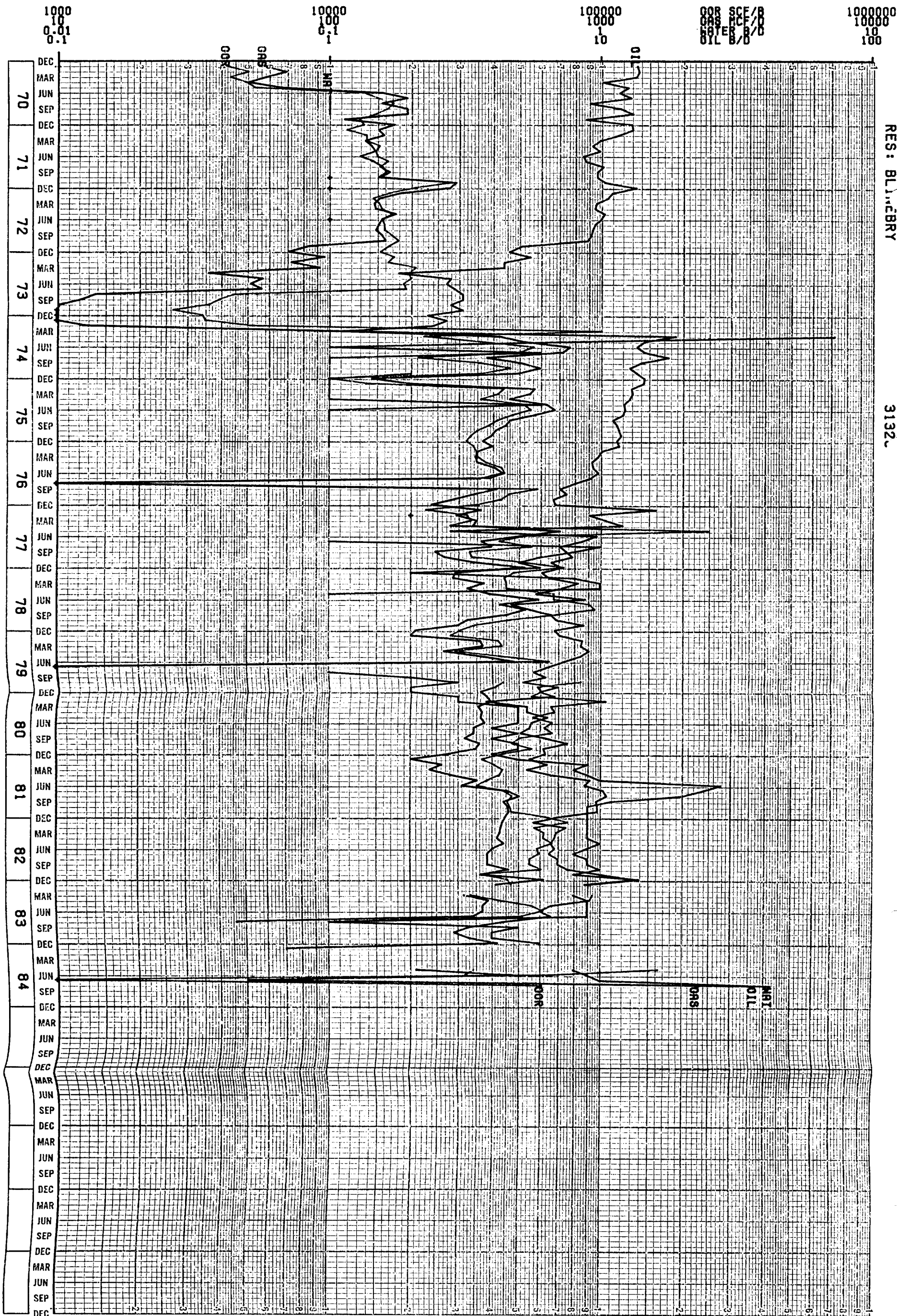
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REC'D
ADJUTANT GENERAL

LSE: LIY'NOSTON
RES: BLINCBRY

3064' MLL: 9
3132.

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

SANTA FE, NEW MEXICO 87301

FORM 6-116

Revised 10-1-78

GAS-OIL RATIO TESTS

LEASE NAME		WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW. ABLE	TESTING PERIOD	PROD. DURING TEST				Special	
			U	S	T						WATER BBL.	GRAV. OIL	OIL BBL.	GAS MCF.	GAS - OIL RATIO CU.FT/D.	
LIVINGSTON		9	V	3	21-S 37-E	10-30-84	P	30		24	1	36.3	10	300	30,000	
						BLINEBRY DRINKARD	60% 40%		6 BOPD 4 BOPD 10 BOPD							
						BLINEBRY DRINKARD	100% 0% 100%		300 MCF/D 0 MCF/D 300 MCF/D							

No well will be assigned an allowable greater than the amount of oil produced on the offset 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 tested by more than 33 percent. Operator is encouraged to take advantage of this 33 percent tolerance in order that well can be assigned a more allowable when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 14.7 psia and a temperature of 60° F. Specific gravity base is 0.60.

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

Well operator and one copy of this report to the district office of the New Mexico Oil Conservation Division in accordance with 301 and appropriate Pool Rules.

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

[Signature]

(Signature)

SUPERVISOR REG. & PERMITTING

(722)

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OFFSET OPERATORS

SHELL - LIVINGSTON LEASE

AMOCO PRODUCTION CO.
P. O. BOX 3092
HOUSTON, TEXAS 77253

ANTWEIL OIL CO.
P. O. BOX 2010
HOBBS, NEW MEXICO 88240

*BRAVO ENERGY INC.
P. O. BOX 1919
HOBBS, NEW MEXICO 88240

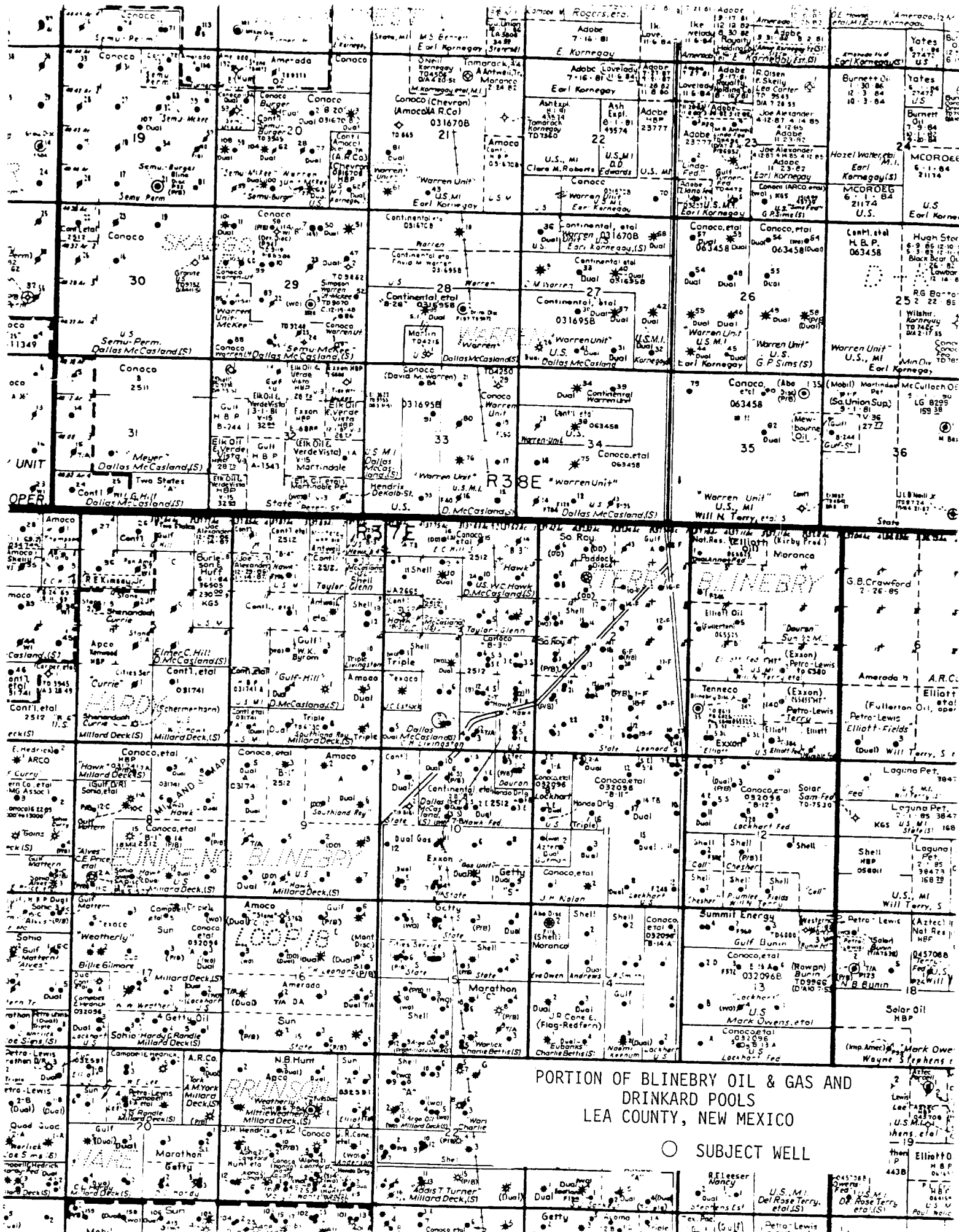
CONOCO INC.
P. O. BOX 2197
HOUSTON, TEXAS 77252

*SOUTHLAND ROYALTY CO. (FORMERLY AZTEC OIL & GAS)
21 DESTA DR.
MIDLAND, TEXAS 79701

**SUMMIT ENERGY INC.
112 N 1ST
ARTESIA, NEW MEXICO 88210

TEXACO USA
P. O. BOX 52332
HOUSTON, TEXAS 77052

*BOTH OPERATORS OF "DAURON" LEASE AS PER OIL PRORATION ORDER.
**PRESENT OPERATOR OF "GULF HILL" LEASE AS PER OIL PRORATION ORDER.
FORMER OPERATOR: GULF OIL CORP.



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