

Mobil Oil Corporation

P. O. BOX 633
MIDLAND, TEXAS 79701

December 18, 1973

New Mexico Oil Conservation Commission (2)
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

DOWNHOLE COMMINGLING
MOBIL OIL CORPORATION'S
STEPHENS ESTATE, WELL #1
DRINKARD & WANTZ ABO POOLS
LEA COUNTY, NEW MEXICO

Gentlemen:

Mobil Oil Corporation respectfully requests exception to Rule 303-A to permit commingling of production from the Drinkard and Wantz Abo Pools in the wellbore of the subject well. The ownership of these two zones, including working and royalty interests, is common. This well is located in Unit L, Sec. 24, T-21-S, R-37-E, Lea County, New Mexico.

Stephens Estate, Well #1 was originally completed in the Abo formation in 1952. The Abo was plugged off in 1964 and this well was dually completed in the Blinebry and Drinkard Pools. Mobil proposes to abandon the Blinebry, recomplete in the Abo and commingle production from the Abo and Drinkard downhole.

In support of this request the following items are submitted in duplicate:

1. Exhibit "A" - Data Sheet showing the well location, completion intervals, productivity test summary, bottom-hole pressures and fluid characteristics.
2. Form C-116 - Gas-Oil Ratio Test (Drinkard only).
3. Exhibit "B" - Computations showing value of the crude before and after commingling.
4. Performance Curve - Drinkard Pool.
5. Performance Curve - Abo Pool to April 1964.
6. Proposed Wellbore sketch.
7. Offset Operators Address List.
8. Plat of the Stephens Estate Lease showing offset operators.

Because the subject well has not produced from the Abo since April 1964, information involving this zone subsequent to this date has been estimated.

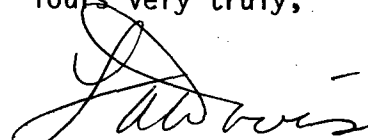
It is Mobil's opinion that this commingling will not jeopardize the efficiency of any secondary recovery operations in either of these two pools. Also approval of this application will permit recovery of additional hydrocarbons that would otherwise be left in place. As shown on Attachment #1, there is little difference in the estimated bottom-hole pressures between these two zones; therefore, no cross-flow problems are anticipated.

As shown on Attachment #1, it is estimated that production from the commingled zones will not exceed the 50 barrels of oil per day limit as set forth in Rule 303 (C)(b). It is requested that the daily limit for the maximum amount of gas which may be produced from the commingled zones in the subject well, be set at the top casinghead gas limit of the Wantz Abo Pool.

Allocation of production between the two zones in this application will be determined by subtraction method after the wellbore has been opened to the Abo.

By copy of this letter and attachments 7 and 8, the offset operators are being notified of this application and requested to waive objection to its approval.

Yours very truly,



L. A. Davis
Area Operations Engineer

ADBond/cs
Attachments

cc: District 1, w/attach.
Offset Operators, w/attach.

EXHIBIT "A"
DATA SHEET

MOBIL OIL CORPORATION
P. O. BOX 633
MIDLAND, TEXAS 79701

APPLICATION FOR EXCEPTION TO RULE 303(a) OF NEW MEXICO OIL CONSERVATION
COMMISSION'S RULES & REGULATIONS ALLOWING DOWNHOLE COMMINGLING OF DUALY
COMPLETED OIL WELLS BY ADMINISTRATIVE PROCEDURE (ORDER NO. R-3845)

1. Lease Name Stephens Estate
2. Well No. 1
3. Well Location: Unit L, 1980 feet from South line, 660
feet from West line of Section 24, Township 21S Range 37E,
Lea County, New Mexico
4. Upper Zone Drinkard
5. Completion Interval 6514' - 6718'
6. Lower Zone Wantz Abo
7. Completion Interval 6914' - 7198'
8. Dual Completion Authorized by Commission Order No. _____
9. Current Productivity Test Summary (Form C-116 attached)

	<u>Drinkard</u> (Upper Zone)	<u>Wantz Abo</u> (Lower Zone)
Producing Method	<u>F</u>	
Oil	<u>1 BOPD</u>	<u>25 BOPD (est.)</u>
Gas	<u>60.4 MCF/da</u>	<u>100 MCF/da (est.)</u>
Water	<u>1 BWPD</u>	<u>0</u>
GOR	<u>60,370</u>	<u>4000 (est.)</u>
GOR Limit	<u>2000:1</u>	<u>2000:1</u>

10. Bottom-hole Pressure of Upper Zone 670 psi (est.)
11. Bottom-hole Pressure of Lower Zone 700 psi (est.)
12. Fluid Characteristics of Each Zone Both zones produce an intermediate
sweet type crude.

By: _____
Date: _____

**NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS**

C-116
Revised 1-1-65

Operator Mobil Oil Corporation		Pool Drinkard		County Lea											
Address Box 633, Midland, Texas 79701		TYPE OF TEST - (X)		Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>											
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	SIZE	TBG. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT./BBL.		
		U	S	T						R	WATER BBLs.	GRAV. OIL		OIL BBLs.	GAS M.C.F.
Stephens Estate	1	L	24	21S	37E	11-23-73	24/64	220	93	24	1	37.8	1	60.3	60,370

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 allowables when authorized by the Commission.

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 0.60.

Report casing pressure in lieu 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 Commission in accordance with Rule 301 and appropriate pool rules.

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

Christine P. Tucker
(Signature)

Authorized Agent
(Title)

12-11-73
(Date)

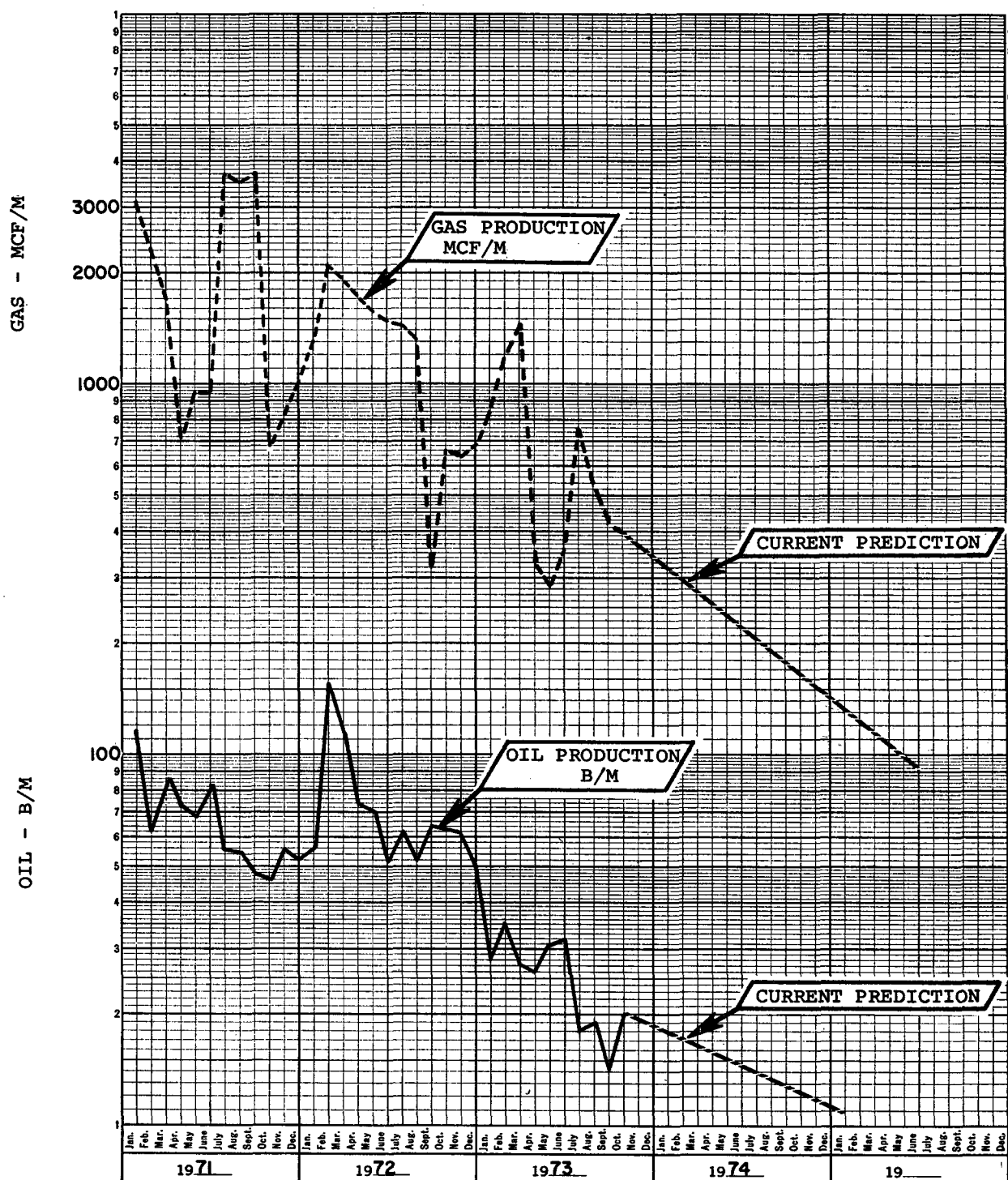
EXHIBIT "B"
MOBIL OIL CORPORATION
P. O. BOX 633
MIDLAND, TEXAS 79701
COMPUTATION OF RELATIVE
VALUES OF THE HYDROCARBON
PRODUCTIVE BEFORE AND
AFTER DOWNHOLE COMMINGLING
(STATEWIDE RULE 303-C-2-h)

LEASE AND WELL NUMBER	Stephens Estate #1		
	<u>UPPER POOL</u>	<u>LOWER POOL</u>	<u>COMMINGLED</u>
POOL NAME	<u>Drinkard</u>	<u>Wantz Abo</u>	
GRAVITY, API	<u>37.8°</u>	<u>40.1°</u>	<u>40.0°</u>
SELLING PRICE /BBL.	<u>4.25</u>	<u>4.31</u>	<u>4.31</u>
DAILY PRODUCTION /BBL.	<u>1</u>	<u>0</u>	<u>26</u>
DAILY INCOME	<u>\$4.25</u>	<u>0</u>	<u>112.06</u>
TOTAL DAILY INCOME(POOLS SEPARATED)	\$ <u>4.25</u>		

Net difference realized from downhole commingling based on current well test =
\$107.81 /day---gain or loss.

REMARKS: The Wantz Abo formation has not produced in this well since it was
isolated in 1963 in order to gain Blinebry production. It is estimated to
return to production at an initial production rate of 25 BOPD.

By:



Mobil Oil Corporation

Midland Producing Area
Midland, Texas

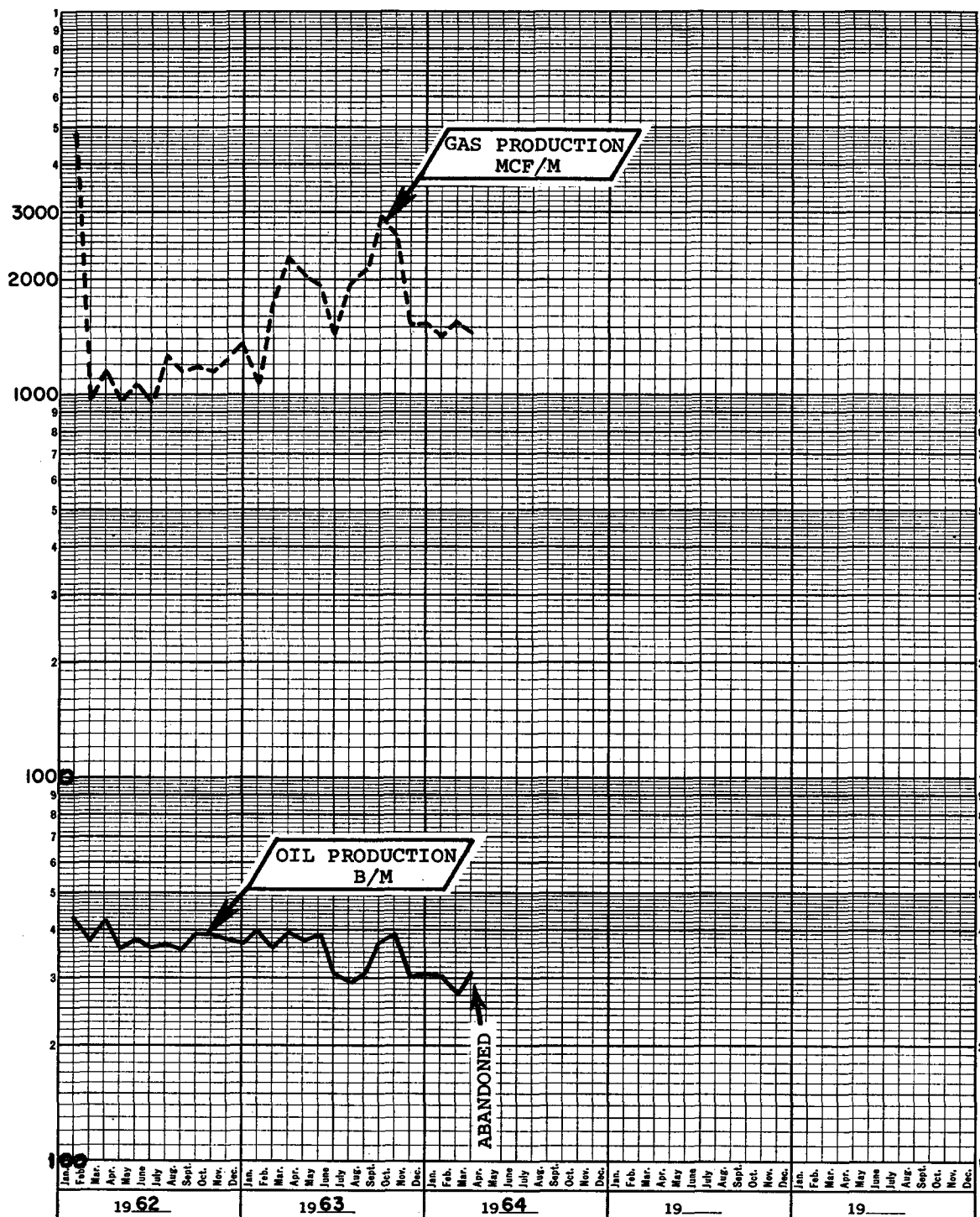
PERFORMANCE CURVES
STEPHENS ESTATE #1
UNIT L, SEC. 24, T-21-S, R-37-E
LEA COUNTY, NEW MEXICO

DRINKARD POOL

Scale

Date 11-11-73
Drawn E.C.M.
Checked JWS
Approved
Revised

GAS - MCF/M



Mobil Oil Corporation

Midland Producing Area
Midland, Texas

PERFORMANCE CURVES
STEPHENS ESTATE #1

UNIT L, SEC. 24, T-21-S, R-37-E
LEA COUNTY, NEW MEXICO

WANTZ ABO POOL

Scale

Date 12-11-75

Drawn E.C.M.

Checked JWS

Approved

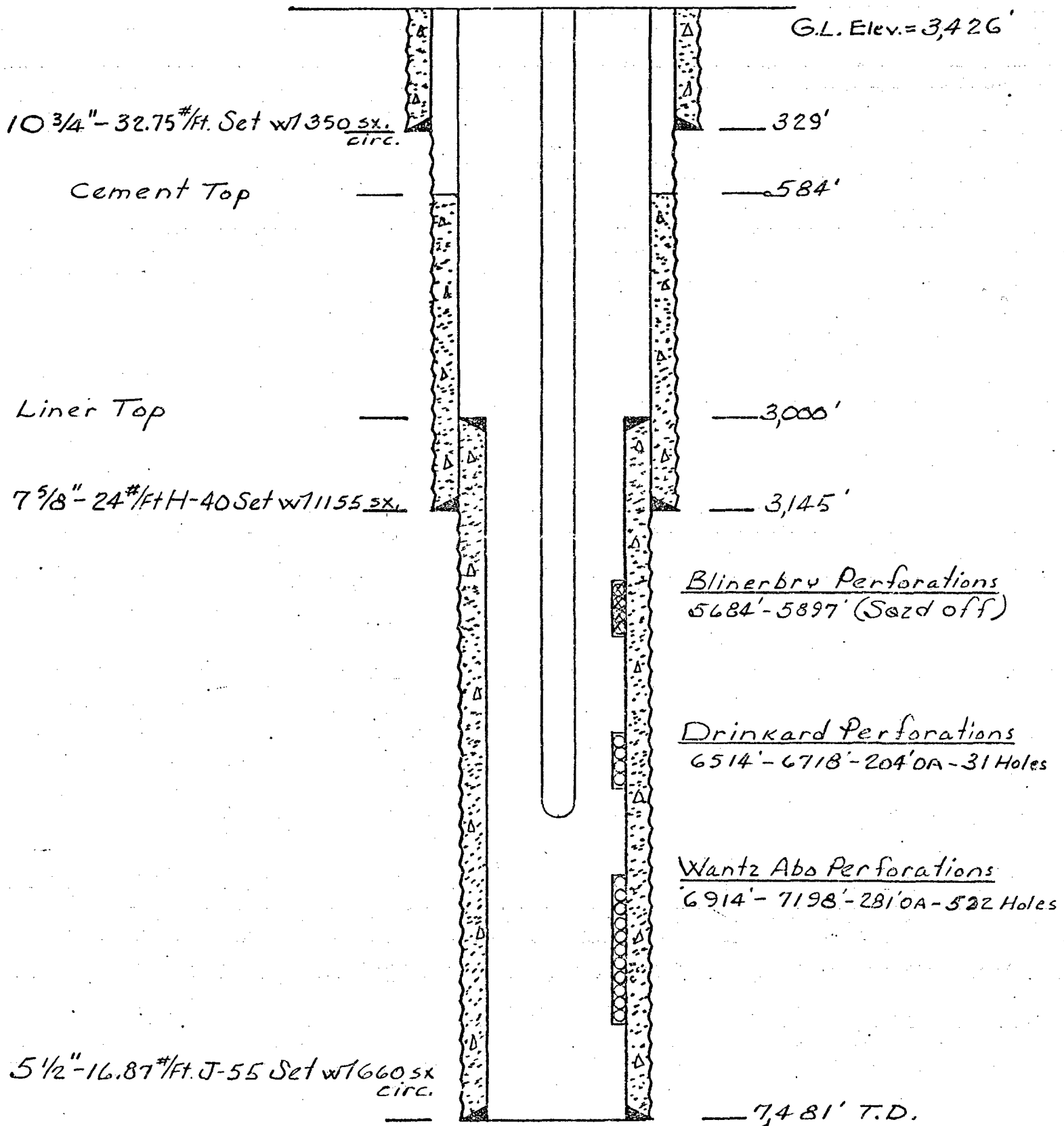
Revised

Diagrammatic Well Sketch

Stephens Estate Well No. 1

Drinkard & Wantz Abo Pools

Lea County, New Mexico



MOBIL OIL CORPORATION'S
STEPHENS ESTATE LEASE
DRINKARD & WANTZ ABO POOLS
LEA COUNTY, NEW MEXICO

OFFSET OPERATORS

Address List

Acoma Oil Corporation
812 Continental Life Bldg.
Fort Worth, Texas 76102

Atlantic Richfield Co.
P. O. Box 1610
Midland, Texas 79701

Capataz Corporation
Wall Towers West
Midland, Texas 79701

Gulf Oil Corporation
P. O. Box 1150
Midland, Texas 79701

Imperial American Management Co.
507 Midland Savings Bldg.
Midland, Texas 79701

Texas Pacific Oil Co., Inc.
P. O. Box 4067
Midland, Texas 79701

Continental Oil Co. ● ² <i>Lockhart B-14-A</i>	Continental Oil Co. ● ¹ ● ⁵ <i>Lockhart-Fed. "B-13-A"</i>		
Mobil ★ <i>D. A. Williamson</i>	Gulf Oil Corp. ★ ● ³	Continental	L. E. Elliott
Atlantic ● ³ <i>Roy Barton</i>	W. M. Stephens		U. S. A.
Atlantic ★ ³ <i>S. J. Sarkeys</i>	Mobil Rts-Below 7400' Capataz ● ¹ <i>N. Stephens</i> Stephens Estate	Continental ● LOC. OR DRUG. WELL ● ABANDONED LOC. ★ DRY & ABANDONED ● OIL WELL ● ABD. OIL WELL ★ GAS WELL ★ ABD. GAS WELL ● S.W. DISPOSAL WELL ● GAS INPUT WELL ● WATER INPUT WELL <i>J. W. Owens</i>	Imperial Amer <i>U. S. A.</i>
Acoma <i>S. J. Sarkeys</i>	Tex. Pacific ★ ² <i>S. J. Sarkeys</i>	Imperial Amer ● ¹ <i>W. V. Jones</i>	Gulf <i>W. V. Jones</i>

Reserve 200' Permit depth _____

Special instructions _____

Date work is commenced _____, 19____ Supt. _____

Location approved by _____ Location made by _____

THE STATE OF TEXAS
COUNTY OF MIDLAND

I hereby certify that this plat truly represents conditions as they actually exist on this lease; that said plat which is drawn to the scale indicated hereon, is to the best of my knowledge true and correct; that it accurately shows said lease with all wells on same; that number and locations of said wells are as indicated hereon; and that this plat correctly reflects all pertinent and required data.

Mobil Oil Corporation
Midland Producing Area
Midland Texas

LEASE Stephens Estate
DISTRICT _____ LEASE NO. NM-635-B
LOCATION MADE _____ 19____ WELL NO. _____
TOTAL ACRES IN LEASE 80 ACRES COVERED BY PLAT 80
DESCRIPTION W 1/2 SW 1/4 Of Sec. 24, T21S, R 37 E

Lea _____ COUNTY New Mexico

DRAWN A. D. Bond
SCALE 1"=1000'

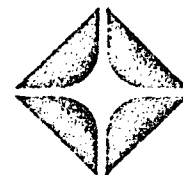
DATE 2-7-58
FILE NO. 28

FIELD Wantz ABO

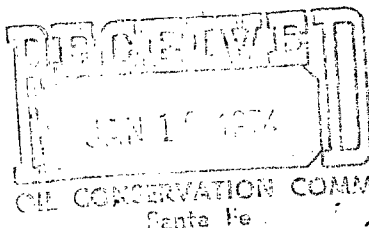
Atlantic Richfield Company

Mid-Continent Crude Oil Supply
Post Office Box 2819
Dallas, Texas 75221
Telephone 214 651-5270

E. J. Henry, Jr.
Manager



January 4, 1974



Mr. T. N. Ludlum
Mobil Oil Corporation
P. O. Box 633
Midland, Texas 79701

Re: 94-508-1280-28
Mobil Oil Corporation
Stephens Estate #1
Lea County, New Mexico
Downhole Commingling Application
Texas-New Mexico Pipe Line #55865

Dear Mr. Ludlum:

This is to advise you that Atlantic Richfield Company will be happy to continue purchasing the commingled production from the subject lease. We understand from your letter of December 12, 1973, that the lease will be commingled from the Drinkard and Wantz Abo zones.

If we can be of further assistance, please advise.

Very truly yours,

C. G. Sells

CGS:nm

cc: Mr. Warren Humphries - Wichita Falls

Mr. Miller Price
Texas-New Mexico Pipe Line Company
P. O. Box 1510
Midland, Texas 79701

*Two (2) copies to N. M. Occ. in
Santa Fe.*

*1-7-74
ASTB*

RECEIVED
JAN 7 1974
MIDLAND
CRUDE OIL DEPT.