February 17, 1971

New Mexico Oil Conservation Commission P. 0. Box 2088 Santa Fe, New Mexico 87501

:2:

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

Request for Exception to Rule 303-A Re: Down-Hole Commingling - per Rule 303-C McCallister Lease, Well No. 1 Drinkard and Wantz Abo Rools Lea County, New Mexico

DHC-80 New April 12

Gentlemen:

Imperial-American Management Company respectfully requests administrative approval under the provisions of Order No. R-3845 to commingle, in the well bore, oil production from the Drinkard Pool and the Wantz Abo Pool which are dually completed in our McCallister, No. 1 well located in Unit C, Section 7, T-22-S, R-38-E, Lea County, New Mexico. This dual completion was permitted by Order No. R-3719, dated April 1, 1969.

Imperial-American Management Company

We believe that this well qualifies for administrative approval of down-hole commingling under the Provisions of Rule 303-C. Both zones are classified as oil zones. The deepest perforation in the lower zone is at 7240' in this well. We attach Form C-116 which indicates that the production rates for both oil and water fall within the Nimits specified by Rule 303-C. We also attach copies of our production decline curve for each zone. Both zones are presently being artificially lifted by rod pumps; therefore, a rod pump will be utilized after commingling.

We have had water samples collected from each zone and have had these samples checked for compatability by Baroid. Copies of their reports are attached. The reports indicate there will not be an instability problem caused by mixing these waters.

We also attach a data sheet on which we have indicated our estimates of the current bottom hole pressures of these zones and a calculation showing that the commingled production will not have less value than the individual streams sold separately.

507 Midland Savings Building - Midland, Texas 79701 - 915-684-8241 Cable Address - IMPAM

New Mexico Oil Conservation Commission Attention: Mr. H. L. Porter, Jr. Re: <u>Request for Exception to Rule 303-A</u> McCallister Lease, Well No. 1 Drinkard and Wantz Abo Pools Lea County, New Mexico

Page 2

Ownership of the production from both zones to be commingled is common as to royalty, overriding royalty, and working interests.

This lease is on fee property. A copy of this application is being submitted to each offset operator shown on the attached list.

Very truly yours,

IMPERIAL-AMERICAN MANAGEMENT COMPANY

DKR:1b Attachments

507 Midland Savings Building Midland, Texas 79701 - 915-684-8241 Cable Address IMPAM

LIST OF OFFSET OPERATORS

Imperial-American Management Company McCallister Lease Lea County, New Mexico

Sohio Petroleum P. 0. Box 3167 Midland, Texas 79701

Burleson & Huff Central Building Midland, Texas 79701

DATA SHEET

Request for Down-Hole Commingling Imperial-American Management Company McCallister Well No. 1

I. Estimated Bottom Hole Pressure

A. Drinkard Pool Completion

Unable to obtain a satisfactory sonic fluid level. Zone pumps off, permitting only 10-15% pump efficiency. Estimated Operating BHP - 200 psi Estimated Static BHP - 600 psi

B. Wantz Abo Pool Completion

Lower zone, cannot obtain sonic fluid level. Pressure low enough to limit pump efficiency to 50%. Estimated Operating BHP - 300 psi Estimated Static BHP - 800 psi

II. Value of Commingled Production

Oil from both the Drinkard and Wantz Abo is being sold to The Permian Corporation by truck. The price is based on Atlantic Richfield's posting for West Texas-New Mexico intermediate grade crude, with a top price of \$3.56/bbl. for 40 deg. API and a 2¢/degree price differential for each degree below 40 deg. API.

The Drinkard zone oil normally was 37.5 deg. API with a price of \$3.50/bbl. The Wantz Abo oil normally runs 38.5 deg. API with a price of \$3.52/bbl. At the current rates of production, the gravity of the mixture should be at least 38 deg. API and receive a price of \$3.52/bbl.

Drinkard - Avg. price \$3.50/bbl. X 4 BOPD equals \$ 14.00/day Wantz Abo - Avg. price \$3.52/bbl. X 36 BOPD equals <u>126.72</u>/day \$140.72/day

Mixture - Avg. price \$3.52/bbl. X 40 BOPD equals

\$140.80/day

No loss in value of product should result from commingling these zones in the well bore.

Davil K. Romey

•	•	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.	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.		· · · · · · · · · · · · · · · · · · ·					McCallister	WANTZ ABO POOL	McCallister	DRINKARD POOL			Address 507 Midland Savings Bldg.,	Operator Imperial-American Management	
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NEW MEXICO OIL CONSERVATION COMMISSION

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BAROID DIVISION NATIONAL LEAD COMPANY P. O. BOX 311 MIDLAND, TEXAS 79701

March 11, 1971

Mr. Darrol K. Ramey Imperial American Management 507 Midland Savings Building Midland, Texas 79701

Dear Sir:

A compatibility analysis of your McAlister No. 1 and Federal GPS No. 1 produced waters reveals that comingling can be accomplished without compatibility problems.

Please do not hesitate to call if we may be of any further service.

Yours very truly,

Guy W. Hogue Supervisor BAROID TREATING CHEMICALS West Texas Area

GWH/ed Enc.

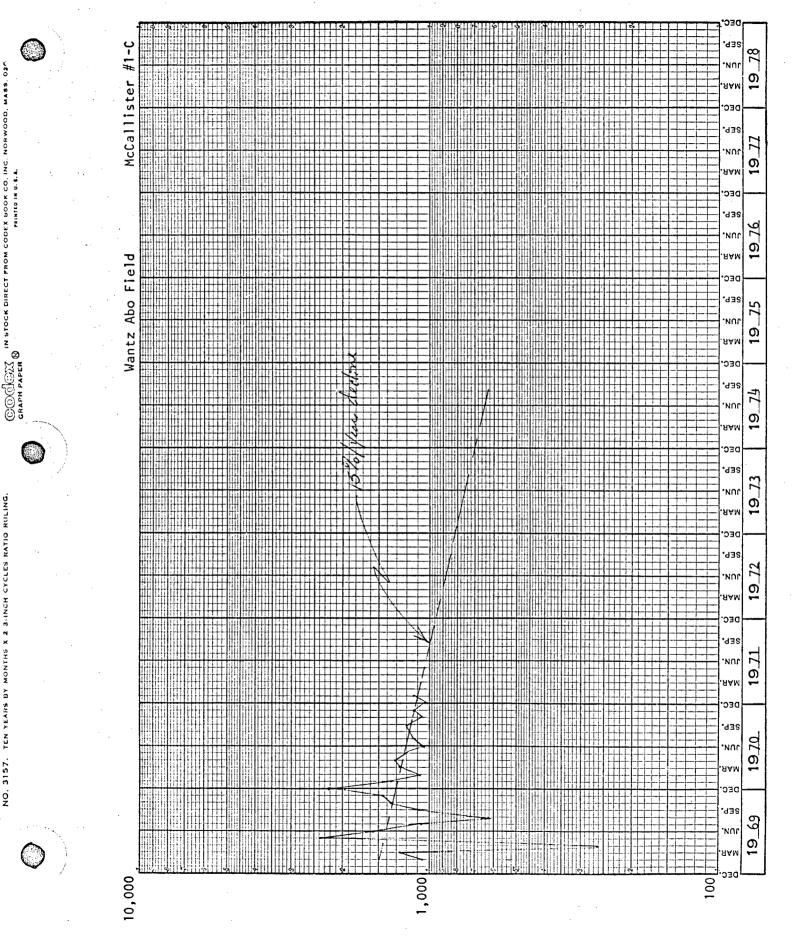
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DATA SHEET

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Me/l	McAlister		GPS							
Total Hardness		610		600						
Calcium		424		562						
Magnesium		186		38						
Chlorides	29	000	37	000						
Bicarbonates		2.7		5.9						
Sulfides		2.0		2.1						
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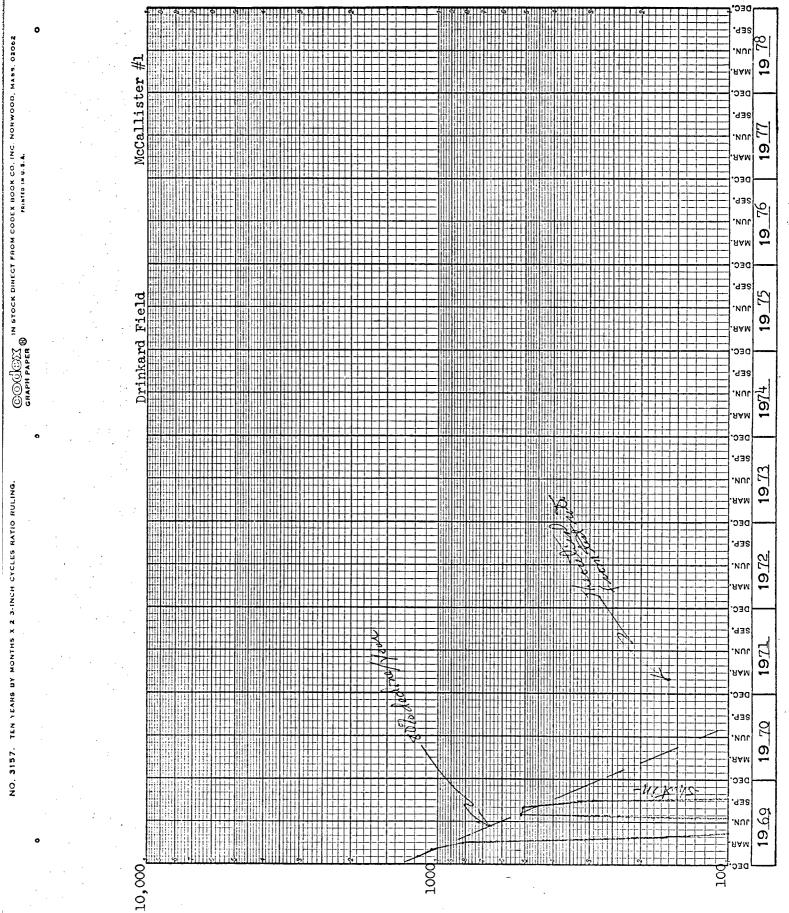
RATIO RULING.

CYCLES

TEN YEARS

NO. 3157.

Production BOPM



Production - BOPM

Ϋ́ TEN YEARS