

4202

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY



2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

November 28, 1994

Merit Energy Company
12222 Merit Drive, Suite 1500
Dallas, Texas 75251

Attn: Ms. Sheryl J. Carruth

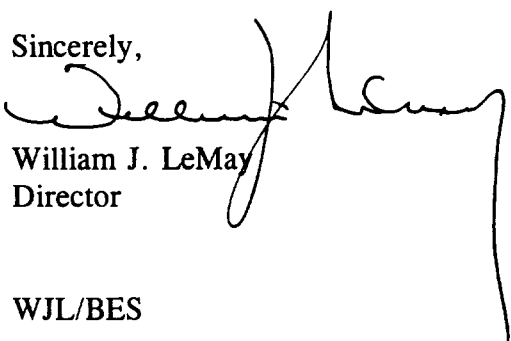
AMENDMENT OF DIVISION ORDER R-3823

Dear Ms. Carruth,

Reference is made to your recent request to add perforations, thus extending the injection interval in your Langlie Mattix Queen Unit No.17, permitted by Division Order R-3823. Additional perforations are proposed from 3250 feet to 3330 feet. All other provisions of said order will remain in full force and effect.

Division Order R-3823 is hereby amended to include the above specifications.

Sincerely,


William J. LeMay
Director

WJL/BES

cc: Oil Conservation Division - Hobbs
Case File No.4202

DEC 05 1994

MERIT ENERGY COMPANY

12222 Merit Drive, Suite 1500
Dallas, Texas 75251
(214) 701-8377
(214) 960-1252 Fax

October 14, 1994

Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

Attn: David Catanach

Re: Langlie Mattix Queen Unit #17
Langlie Mattix 7 Rivers Queen Pool
Order No.: R-3823
Case File: 4202

Dear Mr. Catanach:

As a follow up to our telephone conversation dated today, please be advised that Merit Energy plans to add additional perforations in the above captioned well. Per Paul Kaultz with District I, the additional perforations will fall in the existing pool. For your convenience and information, I have attached a copy of the procedure.

If you have any questions or require additional information, please contact me at (214) 701-8377.

Sincerely,



Sheryl J. Carruth
Regulatory Manager

SJC:s

Attachments

DEC 05 '94

WORKOVER PROCEDURE
LANGLIE MATTIX #17
LANGLIE MATTIX UNIT
LEA COUNTY, NEW MEXICO

BACKGROUND: THE LANGLEIE MATIX #17 IS AN INJECTOR WITH LOW INJECTIVITY. IT IS RECOMMENDED TO ADD PAY TO CORRESPOND TO OFFSET PRODUCERS AND ACIDIZE ALL PAY TO IMPROVE INJECTIVITY.

CASING: 3 1/2", 9.3#, C-75. COLLAPSE @ 10040#, BURST @ 9520#.
TUBING: 1.9", 2.9#, J-55. COLLAPSE @ 7750#, BURST @ 7350#.

PROCEDURE:

1. MIRU WSU. NU CLASS III BOP'S. RIH W/2 3/4" BIT AND 3 1/2" SCRAPER AND CLEANOUT TO 3500'. CIRCULATE CLEAN & POOH WITH BIT & SCRAPER.
2. RU WIRELINE AND RIH WITH TUBING GUN W/GAMMA RAY. CORRELATE DEPTHS TO THE WESTERN ATLAS ACOUSTIC CEMENT BOND LOG - GAMMA RAY DATED 5/7/91. PERFORATE 2 SPF AT THE FOLLOWING DEPTHS:
3250'-54; 3263'-67; 3270'-76 & 3290'-3330'.
NOTE: NO CASED HOLE LOG WAS FOUND IN THE DALLAS OFFICE, IF A CASED HOLE LOG EXISTS IN THE FIELD FILES DO NOT RUN A GAMMA RAY WITH THE PERF GUN. POOH & RD WIRELINE.
3. HYDROTEST TO 5000 PSI WHILE RIH WITH 3 1/2" PACKER AND RTBP ON THE WORKSTRING. SET THE PACKER AT 3200' AND TEST THE BACKSIDE TO 500 PSI. UNSET THE PACKER AND LOWER TO 3500'. SET THE RTBP.
4. RU AND ACIDIZE AS FOLLOWS:

ACID: 6400 GALS 15% ANTI-SLUDGE ACID W/INHIBITOR, IRON CONTROL & NEA.

A. SPOT 1 BBL ACID. PU PKR AND SET AT 3350'. PUMP 3300 GALS ACID AT A MAXIMUM RATE WITHOUT EXCEEDING 2500# SURFACE TREATING PRESSURE.
B. UNSET PKR AND LOWER TO LATCH ON TO RTBP. SET RTBP AT 3350'. SET PACKER AND TEST RTBP TO 500#. UNSET PKR AND SPOT 1 BBL ACID. PU PKR AND SET AT 3200'. TEST BACKSIDE TO 500#. PUMP 3000 GALS ACID AT A MAXIMUM RATE WITHOUT EXCEEDING 2500# SURFACE TREATING PRESSURE.
C. IF THE LOWER SET OF PERFS COMMUNICATE WITH UPPER SET CONTACT DALLAS OFFICE FOR REVISED PROCEDURE. RECORD ISIP & 5 MIN SI PRESSURES.
5. UNSET THE PACKER, LATCH ONTO RTBP AND POOH. RWTI. ND BOP'S. RD WSU. RUN INJECTION PROFILE.

December 11, 1969 ✓

Atlantic Richfield Company
P. O. Box 1978
Roswell, New Mexico 88201

Attention: Mr. A. D. Kloxin

PROPOSED ENLARGEMENT TO INCLUDE
ATLANTIC'S STUART "A" LEASE
LANGLIE MATTIX QUEEN UNIT
LEA COUNTY, NEW MEXICO

Gentlemen:

We would like for Atlantic to reconsider its rejection of our November 14, 1969 proposal concerning enlargement of the Langlie Mattix Queen Unit to include your Stuart "A" lease in the NE/4 of the NW/4 of Section 14, T-25-S, R-37-E. Because the Eppenauer tract referred to in our November 14 letter has now been withdrawn from consideration for inclusion in the unit, the basis for computation of Phase II participation has changed slightly bringing the proposed participation for your Stuart "A" tract to 0.3614% instead of 0.3504% suggested earlier. This Phase II participation for your Stuart "A" lease is based upon the relationship of 12,500 barrels of Stuart "A" lease incremental reserves, to January 1, 1969 cumulative recovery for the total unit. The 12,500 barrels figure is the reserve testified to by Atlantic's witness at the August 27, 1969 waterflood hearing before the NMOC in Santa Fe. Participation to this extent will assure the tract of ultimately recovering 12,500 barrels or more, if waterflood reserves are equal to or better than primary recovery which is taken to be January 1, 1969 cumulative. There are several Lea County, New Mexico Queen waterfloods that are sufficiently mature to demonstrate a secondary to primary ratio of one or more.

With respect to your November 18, 1969 proposal to recommend the sale of the Stuart "A" lease for \$20,000, we would like to point out that our estimates indicate at least \$18,000 will be expended in placing the Stuart "A" No. 1 in condition to receive injection water which would bring the total cost to \$38,000 including the selling price of \$20,000. This is approximately what a new well would cost at the present time. Because the Stuart "A" No. 1 was shot with nitroglycerin, some question exists as to whether the well might lend itself to controlled injection in the desired intervals even if a liner is set through the open hole section without any trouble. The fact that the casing in the well is

Atlantic Richfield

2

December 11, 1969

more than 30 years old raises the question of future casing leaks if they do not already exist. These prospective difficulties when balanced against use of a new well with new casing perforated opposite selected intervals make it appear less risky and more efficient to drill the new well if the monetary considerations are about the same.

We believe the prior offer of \$12,000 for the Queen rights beneath the Stuart "A" lease is generous in view of risks involved and will probably afford Atlantic as many dollars now as might be generated in profit over the 17 year flood life. We believe that either of the proposals herein will afford Atlantic an ample opportunity to receive payment at least equal to the value of the property to be contributed to the unit.

We need very much to bring this matter to a conclusion as soon as possible in order to begin injection along the east side of the unit in the vicinity of Unit Well No. 14 or the Stuart "A" No. 1. Injection has already commenced in the downdip input wells and it is imperative to initiate a waterblock between the oil reservoir and the gas cap on the east very soon. We are accordingly asking the NMOCC to schedule a hearing on Mobil's application to drill and use LMQU No. 14 for injection should Atlantic not be inclined to accept either of the proposals herein.

Yours very truly,

Original Signed By

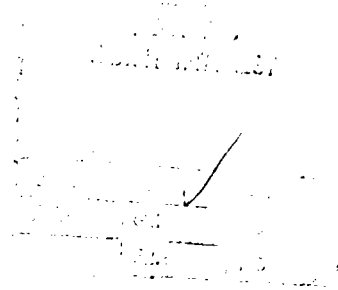
J. D. Howard
Joint Interest Administrator
Midland Division

PWKelly/tlb

cc: Mr. Jim Sperling

Atlantic Richfield Company North American Producing Division
New Orleans, Louisiana 70112
Post Office Box 1576
Houston, Texas 77251
Telephone 535 332-4541

J. P. Tomlinson
District Engineer



January 2, 1970

Mobil Oil Corporation
P. O. Box 633
Midland, Texas 79701

Attention: Mr. J. D. Howard

Gentlemen:

We are unable to accept either of Mobil's offers as presented in your letter of December 11, 1969 because neither offer fairly reflects the value of our Stuart "A" No. 1 contained in Unit C of Section 14, Township 25 South, Range 37 East. As we understand these proposals Mobil is offering a Phase II participation of 0.3614% in the unit for our Stuart "A" tract or \$12,000 for our well. The Phase II participation is based on 12,500 barrels of incremental reserves for the Stuart "A" Lease.

We are unable to accept your offer of participation in the unit on the basis of the Stuart "A" incremental reserves only. These 12,500 barrels of incremental reserves testified to by Mr. Osborne before the New Mexico Oil Conservation Commission in Santa Fe on August 27, 1969, refer to the additional reserves which will be recovered by use of the Stuart "A" No. 1 which would not be recovered by drilling the Langlie Mattix Queen Unit Well No. 14. Since the use of our Stuart well would recover these additional reserves and also save the cost of drilling the Langlie Mattix Queen Unit No. 14, we believe that Atlantic Richfield should be compensated not only for the value of the incremental oil to be recovered but also for the value of our well as a replacement for the LMQU No. 14.

Participation of our well in the unit on the basis of reserves only should be based on the relationship of the primary recovery of our well to the cumulative primary recovery for the total unit. Please note that our Stuart "A" No. 1 has recovered 62,080 barrels of oil on primary as of January 1, 1969, which would give us a 1.7949% participation in Phase II.

If participation of our well is to be based on the aforementioned incremental reserves, we feel that two considerations should be made in determining the value of our well. First, we request compensation for the value of our wellbore as a replacement for the proposed Unit Well No. 14. Second, we believe that the use of our well as an injection well will result in the recovery of 12,500 barrels of incremental reserves for which Atlantic should be compensated.

January 2, 1970
Page 2

In calculating the value of our Stuart "A" No. 1 as a replacement wellbore for the LMQU Well No. 14, we have considered the cost of drilling and completing a new well to be \$38,000. We estimate that approximately \$18,000 would be expended in preparing the well for injection. Based on our experience, this work should have a 25% risk factor or \$4,500 of additional risk. This reduces the value of the wellbore to \$15,500.

In addition to the value of the Stuart "A" No. 1 as a wellbore, we have considered the value of the incremental oil which will be recovered by the use of our well which would not be recovered by using the LMQU Well No. 14. This additional recovery has been calculated to be 12,500 barrels of oil which is equivalent to a Phase II participation in the unit of 0.3614%, as stated in Mobil's letter of December 11, 1969.

Combining the value of the wellbore and the incremental oil, we consider the Stuart "A" No. 1 to be worth \$15,500 plus a Phase II participation of 0.3614%.

As an alternate proposal to our participation in the unit, we would be willing to accept a cash settlement for the value of this incremental oil in addition to \$15,500 for the replacement wellbore. Using a \$1.00 per barrel net profit after tax the undiscounted value of this incremental oil is \$12,500 or discounting at 10% the present worth value of this oil is \$8,330.

Combining the value of the wellbore and the incremental oil, we consider the Stuart "A" No. 1 to be worth \$23,830. We believe that our proposal to sell the well for \$20,000, as a compromise figure, is equitable to both parties. In the event that Mobil is still unwilling to accept our proposal, however, we would appreciate the opportunity to meet with your representative to discuss possible alternate locations for the LMQU Well No. 14.

Yours very truly,



W. P. Tomlinson

MAO:jcb

Atlantic Richfield Company North American Producing Division
New Mexico-Arizona District
Post Office Box 1978
Roswell, New Mexico 88201
Telephone 505 622 4041

Jack Biard
District Landman



November 18, 1969

Mobil Oil Corporation
P. O. Box 633
Midland, Texas 79701

RECEIVED		
JOHN D. HOWARD		
NOV 19 1969		
JDH	ERE ✓	CHS
JWE	GS	EG
DE	FILE	ROUTE

Attention: Mr. John D. Howard

Re: NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 14, T25S, R37E
Lea County, New Mexico
Our File SOC #5028

Gentlemen:

Your letter of November 14, 1969 addressed to Mr. A. D. Kloxin has been forwarded to me for reply. Atlantic Richfield does not wish to commit its Stuart "A" Lease to the Langlie-Mattix Queen Unit as a working interest owner. This would give us a working interest participation of approximately 0.35% of Phase II.

We have discussed your cash offer of \$12,000 for the well and leasehold rights in the unitized interval and have concluded that this is inadequate. We have discussed this matter thoroughly among our interested departments and are agreed that unless you can raise your offer to \$20,000 we will be unable to recommend the sale of this property to management.

Yours very truly,

ATLANTIC RICHFIELD COMPANY

Jack Biard
Jack Biard
District Landman
JB/rr

November 14, 1969 ✓

Atlantic Richfield Company
P. O. Box 1978
Roswell, New Mexico 88201

Attention: Mr. A. D. Kloxin

PROPOSED ENLARGEMENT TO INCLUDE
ATLANTIC'S STUART "A" LEASE,
LANGLIE-MATTIX QUEEN UNIT, LEA
COUNTY, NEW MEXICO

Gentlemen:

This will continue correspondence on the above subject ending with Atlantic's letter of July 22, 1969.

Mobil is in the process of endeavoring to enlarge the subject unit with the addition of Mobil's Federal "X" Lease located in the SW/4 Section 15, the Eppenauer Lease which is the NE/4 NW/4 Section 22, and is also interested in bringing in Atlantic's Stuart "A" Lease located in the NE/4 NW/4 Section 14, all subject to the approval of the Langlie-Mattix Queen Unit Working Interest Owners. Mobil would be willing to recommend to the Working Interest Owners that the Atlantic-Stuart "A" Lease be brought into the unit with a Phase II participation of 0.3504%. It is anticipated that Phase II will be effective on approximately January 1, 1971. The Stuart "A" Lease would be expected to pay any adjustment necessary under the unit inventory adjustment procedure and to also pay its share of the unit investment from the time the unit was formed. The total of the unit inventory is approximately \$73,700 and it is expected that the unit investment over the entire life of the unit will amount to approximately \$1,150,000. Slightly over half of this amount will have been spent by January 1, 1970. Should Atlantic desire not to enter the Stuart "A" Lease in the Langlie-Mattix Queen Unit, Mobil would be willing to offer \$12,000 (subject to the lease coming into the unit) for a net 0.875% working interest in the Langlie-Mattix Queen (as defined by the NMCCC: 100' above the base of the Seven Rivers to the base of the Queen) beneath the Stuart "A" 40-acre lease to include the Stuart "A" Well No. 1; provided, of course, that your records do not indicate collapsed casing or other conditions in the well which would prevent its use for injection into the Queen.

We would appreciate an early reply as to your acceptance of either of the above proposals.

Yours very truly,

Original Signed By
E. R. FRAZIER

John D. Howard
Joint Interest Administrator
Midland Division


ERFrazier/bg

AtlanticRichfieldCompany

North American Producing Division
New Mexico-Arizona District
Post Office Box 1978
Roswell, New Mexico 88201
Telephone 505 622 4041

Jack Biard
District Landman

RECEIVED JOINT INTEREST		
JUL 22 1969		
DEC	✓	
JNF	✓	BG
DE	CS	RGUTE

Handwritten: 7/23
rounded E
Eng. for

July 22, 1969

Line Agreement, Stuart Leases
Langlie Mattix Queen Pool
Lea County, New Mexico

Mobil Oil Corporation
P. O. Box 633
Midland, Texas 79701

Attention: Mr. Don B. Cooper

Gentlemen:

We have reviewed your proposals regarding our 40-acre Stuart "A" lease (formerly Sinclair) covering the NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 14, T-25-S, R-37-E, Lea County, New Mexico, and find that neither alternative is acceptable. We appreciate your desire to place this area under waterflood in the Queen formation within a few months and would like to be able to work with you toward this end. We, therefore, would like to hear from you regarding the basis on which our Stuart "A" lease might participate in the proposed waterflood.

Yours very truly,

ATLANTIC RICHFIELD COMPANY

Handwritten signature: Jack Biard

Jack Biard
District Landman

JB/dlm

cc: Mr. W. P. Tomlinson



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

September 8, 1969

Mr. James E. Sperling
Modrall, Seymour, Sperling, Roehl & Harris
Attorneys at Law
Public Service Building
Post Office Box 2168
Albuquerque, New Mexico 87106

Dear Sir:

Reference is made to Commission Order No. R-3823, recently entered in Case No. 4202, approving the Mobil Langlie Mattix Unit Water-flood Project.

Injection is to be through the 16 authorized water injection wells, each of which shall be equipped with a string of cement-lined tubing set in a packer. Packers shall be set within 50 feet of the uppermost perforation, or in the case of open-hole completions, within 50 feet of the casing shoe. The casing-tubing annulus in all wells shall be loaded with a corrosion-inhibited fluid and a pressure gauge installed at the surface to facilitate detection of leakage in the casing, tubing, or packer.

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 1148 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less. When the three additional proposed producing wells, Unit Well Nos. 9, 23, and 26, have been completed, this maximum allowable will increase to 1190 barrels per day.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate district proration office.

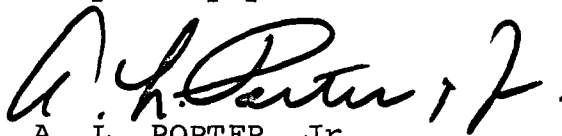
-2-

Mr. James E. Sperling
Modrall, Seymour, Sperling, Roehl & Harris
Attorneys at Law
Public Service Building
Post Office Box 2168
Albuquerque, New Mexico 87106

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A handwritten signature in dark ink, appearing to read "A. L. Porter, Jr.", with a stylized flourish at the end.

A. L. PORTER, Jr.
Secretary-Director

ALP/DSN/ir

cc: Oil Conservation Commission
Hobbs, New Mexico

U. S. Geological Survey
Hobbs, New Mexico

Mr. D. E. Gray, State Engineer Office
Santa Fe, New Mexico

Mr. Paul Eaton
Roswell, New Mexico



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

September 4, 1969

Mr. James E. Sperling
Modrall, Seymour, Sperling, Roehl &
Harris
Attorneys at Law
Public Service Building - Box 2168
Albuquerque, New Mexico 87106

Re: Case No. 4202
Order No. R-3823
Applicant:
Mobil Oil Corporation

Dear Sir:

Enclosed herewith is a copy of the above-referenced Commission order recently entered in the subject case. Letter pertaining to conditions of approval and maximum allowable to follow.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC _____
Aztec OCC _____
State Engineer x

Other Mr. Paul Eaton

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

File

February 3, 1970

C
Mr. James E. Sperling
Modrall, Seymour, Sperling, Roehl & Harris
Attorneys at Law
Public Service Building
Post Office Box 2168
Albuquerque, New Mexico 87106

Dear Sir:

O
Enclosed herewith is Order No. R-3823-A, entered in Case No. 4202 (reopened), approving an injection well at an unorthodox location in Mobil Oil Corporation's Langlie Mattix Unit Water-flood Project.

P
Injection shall be through cement-lined tubing set in a packer which shall be located as near as is practicable to the uppermost perforation.

Y
As to allowable, this project's maximum allowables as set forth in our letter of September 8, 1969, will be increased by 14 barrels per day upon commencing injection into the subject well.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/DSN/ir

cc: Oil Conservation Commission - Hobbs, New Mexico (w/ copies of
U. S. Geological Survey - Hobbs, New Mexico order)
Mr. D. E. Gray, State Engineer Office, Santa Fe, N.M.
Mr. Clarence Hinkle - Hinkle, Bondurant & Christy,
Roswell, New Mexico