

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

December 2, 1968

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P  
Y  
  
Monsanto Company  
101 North Marienfeld  
Midland, Texas 79701

Attention: Mr. A. W. Wood

Administrative Order PIC-29

Gentlemen:

Reference is made to your application dated October 23, 1968, for an exception to Rule 303 (a) and Rule 309-A of the Commission Rules and Regulations to permit the commingling of gas condensate from the Rock Tank-Upper Pennsylvanian and the Rock Tank-Lower Pennsylvanian zones of your Rock Tank Unit Well No. 1 in Section 7, Township 23 South, Range 25 East, Eddy County, New Mexico, after separately metering the condensate from each zone. It is our understanding that this would not only be pool commingling but also lease commingling inasmuch as different participating areas have been or will be established for each pool.

Monsanto Company is hereby authorized to commingle the production from the aforesaid two pools after passing each wet stream through an individual separator and then metering the condensate by means of the Floco meters proposed. The gas from the separators will not be commingled prior to metering into the pipeline.

Condensate sales shall be allocated to each zone on the basis of the meter readings and Monsanto shall comply with the allocation formula in the Commission's "Manual for the Installation and Operation of Commingling Facilities." Please notify the Artesia

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District Office of the Commission at such time as this installation is complete in order that an inspection may be made of the installation prior to putting it in operation.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/DSN/esr

cc: Oil Conservation Commission (with enclosure) - Artesia  
Oil & Gas Engineering Committee - Hobbs  
United States Geological Survey - Roswell

# Monsanto

HYDROCARBONS & POLYMERS DIVISION

Monsanto Company  
101 North Marienfeld  
Midland, Texas 79701  
(915) 683-3306

October 23, 1968

*PL 101  
Midland*

New Mexico Oil Conservation Commission (3)  
State Land Office Building  
Santa Fe, New Mexico 87501

Gentlemen:

Monsanto Company asks for administrative approval to commingle into common storage facilities the gas condensate from the Upper and Lower Morrow zones of the Rock Tank Unit No. 1 gas well located in Section 7-23S-25E, Eddy County, New Mexico. The Rock Tank Unit No. 1 is a dual completion with the Lower Morrow zone producing through a tubing string from the Rock Tank-Lower Morrow Gas Pool and the Upper Morrow zone producing through the tubing-casing annulus from the Rock Tank-Upper Morrow Gas Pool.

Temporary Field Rules granted 640-acre spacing to both the Upper and Lower Morrow Gas Pools; however, the Participating Areas for these zones are not identical. The first revised Participating Area for the Lower Morrow formation (outlined on the attached plat) was approved October 16, 1968. A Participating Area for the Upper Morrow formation has not yet been approved.

Rule 309-B (exception to rule 309-A) pertaining to commingling between leases with diversified ownership applies to this request. Exception to rule 303(a) governing commingling between pools or zones also applies to this request.

The information requested in rules 303 and 309-B for administrative approval to commingle production is submitted as follows:

1. A plat is enclosed showing the location of the Rock Tank Unit No. 1 and the Participating Areas of the Lower Morrow Formation. The Rock Tank Unit No. 2 located in Section 6-23S-25E is completed in only the Lower Morrow zone.
2. Volume and gravity data of the gas condensate to be commingled were reported January 30, 1968, on the Multi-Point Back Pressure Test (Form C-122) as follows:

	<u>Upper Morrow</u>	<u>Lower Morrow</u>
A.P.I. Gravity of Liquid Hydrocarbon	None Produced	54°
Gas-Liquid Hydrocarbon Ratio	--	755.5 MCF/Bbl.

A reservoir limit test was conducted on the Upper and Lower Morrow zones in March 1968. The volume and gravity data of the gas condensate to be commingled were measured during this test as follows:

	<u>Upper Morrow</u>	<u>Lower Morrow</u>
A.P.I. Gravity of Liquid Hydrocarbon	47.7 <sup>o</sup>	54.5 <sup>o</sup>
Gas-Liquid Hydrocarbon Ratio	3,154 MCF/Bbl.	2,140 MCF/Bbl.

Gas is contracted to Transwestern Pipeline Company at a quantity of 5 MMCF per day from the well. It is anticipated the gas will be taken at a rate of 1 MMCF per day from the Upper Morrow zone and 4 MMCF per day from the Lower Morrow zone which would yield approximately 1/3 barrel condensate per day from the Upper Morrow zone and 2 barrels condensate per day from the Lower Morrow zone based on volumes measured during the reservoir limit test.

3. Value of gas condensate - the gravity of commingled production is expected to be approximately 53<sup>o</sup> API. Scurlock Oil Company will purchase the condensate for approximately \$3.00 per barrel. Value of condensate is approximately \$3.00 per barrel whether commingled or segregated.
4. A schematic diagram of the Proposed Production Equipment Installation is attached. The wet gas stream from each zone will be produced through a heater equipped with two (2) sets of coils in order to keep the wet gas streams segregated; then the wet gas streams will pass from the heater to individual high pressure separators which will be operated at pipeline pressure (from 500 to 1000 psi). From the separators, the dry gas will go directly to pipeline sales, the water will go to water disposal facilities, and the gas condensate will be metered from each separator with Floco Meters before being commingled in a common storage tank.

Condensate sales allocated to each zone will be based on the meter readings and comply to the Allocation Formula in the New Mexico Oil Conservation Commission's Manual for the Installation and Operation of Commingling Facilities, September 13, 1961.

5. The Rock Tank Unit No. 1 is in a Federal Unit. Permission to commingle the gas condensate from the Upper and Lower Morrow zones in the Rock Tank Unit No. 1 was approved by the Regional Supervisor of the United States Geological Survey. Attached is a copy of his letter of approval.
6. A list of working interest owners is enclosed. These parties and Scurlock Oil Company, condensate purchaser, are being advised of our request to commingle the condensate from the Upper and Lower Morrow zones of the Rock Tank Unit No. 1 by copy of this letter.

Commingling of the gas condensate from the Upper and Lower Morrow zones of the Rock Tank Unit No. 1 will require only one storage tank instead of two if the condensate has to be segregated. This would result in a savings to the Working Interest Owners on the cost of production equipment. The Morrow gas has a low

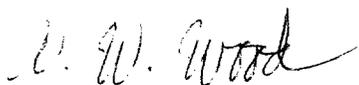
October 23, 1968

condensate ratio; consequently, commingling of the condensate will substantially reduce the time required to obtain a transport truck load for sales. This will reduce storage time and, as a result, will reduce loss of revenue from weathering of the condensate while in storage.

Approval to commingle in common storage facilities the gas condensate from the Upper and Lower Morrow zones in the Rock Tank Unit No. 1 will be greatly appreciated.

Yours very truly,

MONSANTO COMPANY



A. W. Wood  
District Production  
Superintendent

PDH:lmj  
Encls.

cc: Scurlock Oil Company  
Mid-America Building  
Midland, Texas 79701  
Attn: Mr. V. G. Brown

W.I. Owners

Mr. E. H. Muhlbach

WORKING INTEREST OWNERS

Rock Tank Unit No. 1

David Fasken  
608 1st National Bank Bldg.  
Midland, Texas 79701

Gulf Oil Corporation  
P. O. Box 1938  
Roswell, New Mexico 88201

Messrs. Max Coll II & James R. Stephens  
P. O. Box 1818  
Roswell, New Mexico 88201

Monsanto Company  
101 North Marienfeld  
Midland, Texas 79701



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

P. O. Drawer 1857  
Roswell, New Mexico 88201

MIDLAND DIST.

IN REPLY REFER TO:

10/17/68  
C.W.  
of  
P.O.  
M.D.L.  
ENG. 1  
ENG. 2  
FOREST

October 17, 1968

Monsanto Company  
101 North Marienfeld  
Midland, Texas 79701

Gentlemen:

Your letter of September 18, 1968 requests approval to commingle into common storage gas condensate produced from the Upper and Lower Morrow zones from your well No. 1 Rock Tank Unit located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 23 S., R. 25 E., N.M.P.M., Eddy County, New Mexico.

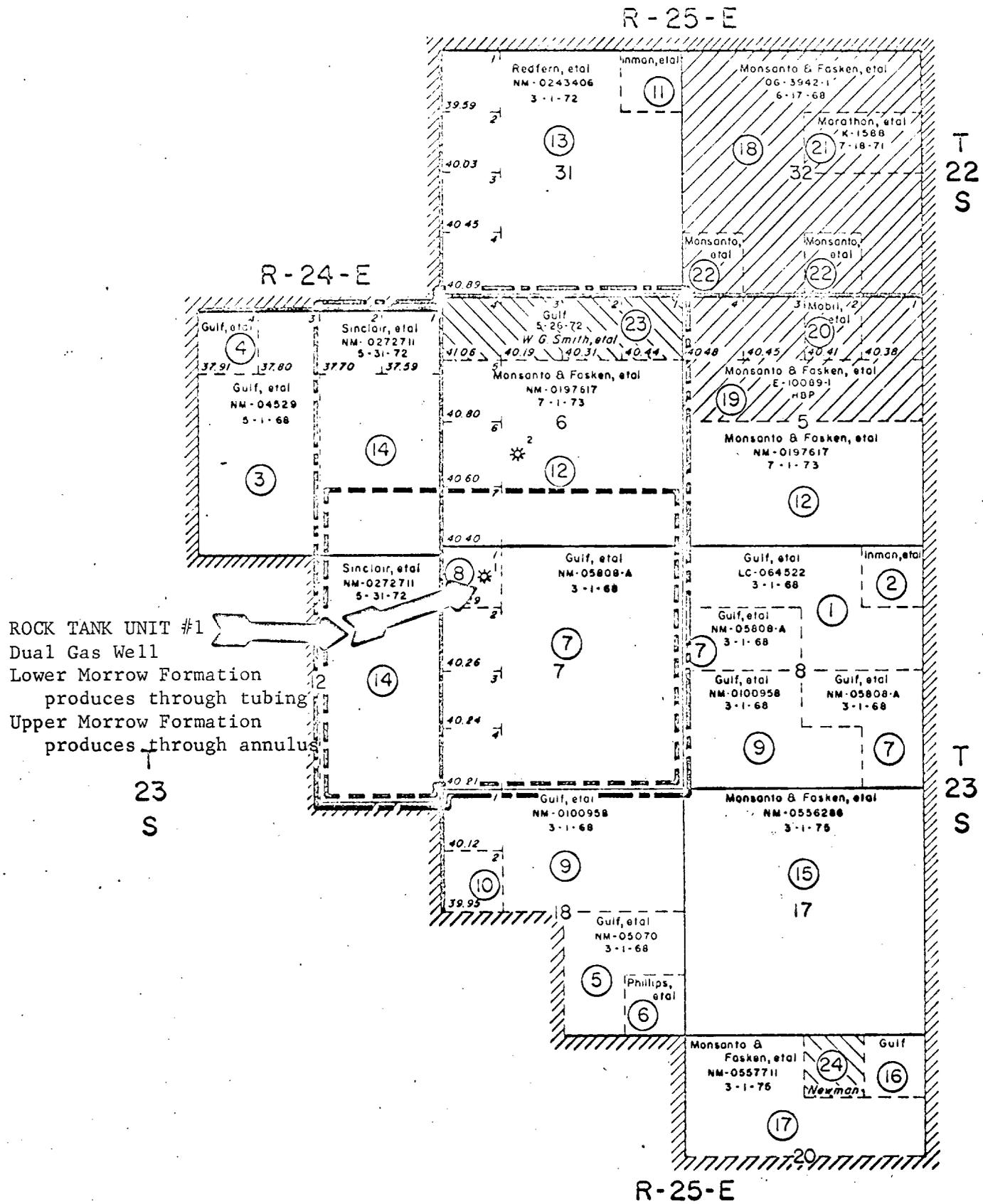
You propose to locate the common storage facilities in the section described above where the liquid hydrocarbons will be commingled and then sold. The volume from each zone is to be metered separately, and allocated back on the basis of meter readings.

The method of commingling described above is hereby approved subject to like approval by the New Mexico Oil Conservation Commission. You are requested to notify the District Engineer, U. S. Geological Survey, Post Office Drawer U, Artesia, New Mexico 88210, when the installation is completed and operative so that it can be inspected.

Lessee's Monthly Report of Operations (form 9-329) and Lessee's Monthly Report of Sales and Royalty (form 9-361) must show all computations used in the calculation of lease sales.

Sincerely yours,

J. W. SUTHERLAND  
Acting Oil and Gas Supervisor



ROCK TANK UNIT #1  
 Dual Gas Well  
 Lower Morrow Formation  
 produces through tubing  
 Upper Morrow Formation  
 produces through annulus

-  - Federal Lands, 5,074.83 Acres
-  - State of N.M. Lands, 961.72 Acres
-  - Patented Lands, 202.0 Acres
-  - Tract Number
-  - Unit Outline
-  - Initial Participating Area
-  - First Revised Participating Area

## ROCK TANK UNIT Eddy County, New Mexico

Containing 6,238.55 Acres of Land

Scale: 1" = 3000'

Exhibit "A"

Application For First  
 Revision Of The  
 Participating Area  
 Lower Morrow Formation

SCHEMATIC OF PROPOSED  
PRODUCTION EQUIPMENT INSTALLATION

Rock Tank Unit #1

Rock Tank - Upper & Lower Morrow Gas Pools  
EDDY COUNTY, NEW MEXICO

