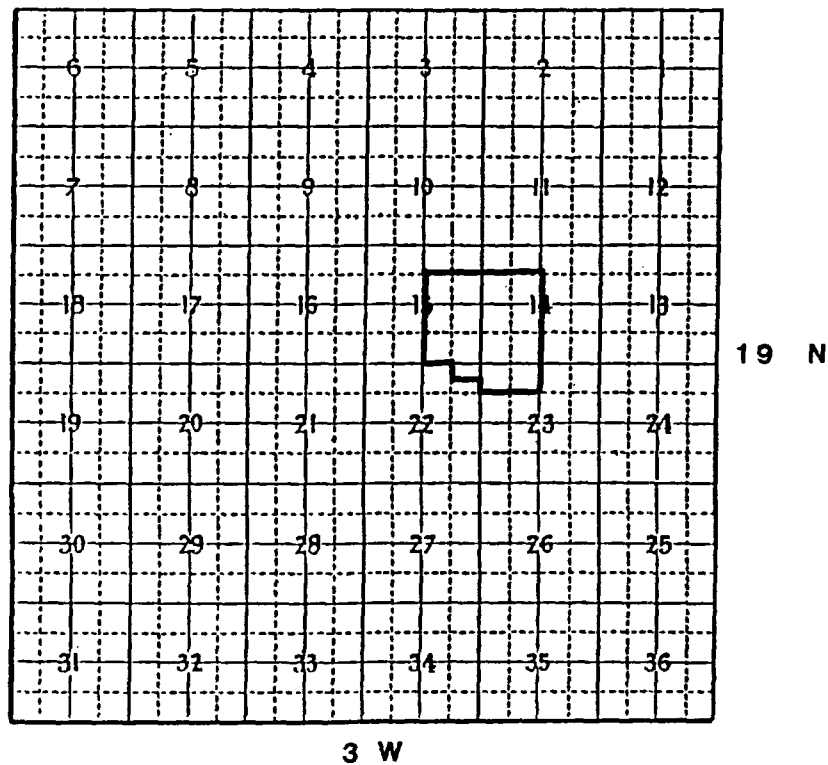


# MEDIA ENTRADA

SANDOVAL COUNTY  
NEW MEXICO

No. 14-08-0001-14269

EFFECTIVE 11-1-75



gulram, inc.

**petroleum engineering and government regulation consultants**



gulram, inc.

petroleum engineering and government regulation consultants

UNIT NAME: MEDIA ENTRADA UNIT AREA  
CONTRACT NUMBER: 14-08-0001-14269  
APPROVAL DATE: 10-10-75  
EFFECTIVE DATE: 11-1-75  
ACREAGE TOTAL: 580.00 (580.00 FEDERAL)  
TYPE: WATERFLOOD  
UNITIZED FORMATION: ENTRADA  
AUTOMATIC ELIMINATION DATE: NONE  
OPERATOR: KIRBY EXPLORATION COMPANY OF TEXAS

PARTICIPATING AREAS

Name: INITIAL (ALL UNIT)  
Effective Date: 11-1-75  
Legal Description: T.19N., R.3W.:  
S/2NW/4, SW/4 sec. 14; S/2NE/4, SE/4 sec.  
15; N/2NE/4NE/4 sec. 22; N/2NW/4 sec.  
23.

**STATE OF NEW MEXICO  
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:**

**NOMENCLATURE  
CASE NO. 10478  
Order No. R-9701**

**APPLICATION OF MERRION OIL AND  
GAS CORPORATION FOR POOL CREATION  
AND TEMPORARY SPECIAL POOL RULES,  
SANDOVAL COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This cause came on for hearing at 8:15 a.m. on May 28, 1992, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 6th day of August, 1992, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

**FINDS THAT:**

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Merrion Oil and Gas Corporation, seeks the creation of a new pool for the production of oil from the Fractured Mancos Shale formation comprising all of Townships 18 and 19 North, Range 3 West, NMPM, Sandoval County, New Mexico, said pool to be designated the Rock Mesa-Fractured Mancos Shale Oil Pool, and the promulgation of temporary special rules therefor including provisions for 640-acre oil spacing, designated well locations and special allowables.

(3) At the time of the hearing, the applicant requested that the proposed pool boundaries be contracted to include only the following described acreage in Sandoval County, New Mexico:

TOWNSHIP 18 NORTH, RANGE 3 WEST, NMPM

Sections 4 through 5: All

TOWNSHIP 19 NORTH, RANGE 3 WEST, NMPM

Sections 9 through 11: All

Sections 14 through 17: All

Sections 20 through 22: All

Sections 27 through 29: All

Sections 32 and 33: All

(4) The applicant further proposed that the vertical limits of the proposed Rock Mesa-Fractured Mancos Shale Oil Pool comprise that interval from 500 feet below the top of the Point Lookout formation to the base of the Greenhorn formation.

(5) The applicant is currently attempting to form a voluntary Federal exploratory unit comprising the acreage described in Finding No. (3) above.

(6) Within the subject area, the applicant owns approximately 39.77% of the acreage. Approximately 78% of the working interest owners in the subject area are, according to testimony, in support of the formation of a unit and also in support of the proposed temporary rules and regulations.

(7) Within or directly offsetting the proposed unit area, there have been five wells which have been tested in or produced from the Gallup formation, these being the Medio No. 2 located in Unit O of Section 14, the Federal Media Nos. 3 and 7 located, respectively, in Units B and G of Section 22, and the PLR Inc. No. 1 and Flint No. 1 located, respectively, in Units L and B of Section 23, all in Township 19 North, Range 3 West, NMPM.

(8) With the exception of the Federal Media No. 7, all of the above-described wells were uneconomic in the Gallup formation and were subsequently plugged and abandoned. Testimony by the applicant indicates that the Federal Media No. 7 cumulatively produced approximately 20,000 barrels of oil from the Gallup formation prior to being plugged and abandoned.

(9) All of the above-described wells were drilled in the 1960's or 1970's. Production and geologic data from these wells is insufficient, according to applicant's testimony, to infer or determine what the appropriate spacing in the Mancos formation should be in this area.

(10) The applicant has proposed the drilling of an initial test well to be located in Section 32, Township 19 North, Range 3 West, NMPM.

(11) Within the San Juan Basin, there are numerous Mancos pools, among them the Gavilan-Mancos and West Puerto Chiquito-Mancos Oil Pools.

(12) Throughout the past several years, the Division has received an extensive amount of geologic and reservoir engineering data relating to the various Mancos pools in the San Juan Basin.

(13) Based on the extensive evidence available, it can be surmised that the Mancos reservoirs in this area of the San Juan Basin are generally highly fractured in nature, that the Mancos reservoirs generally produce by a combination of solution gas drive and/or gravity drainage, and that depending on the extent of fracture systems within the reservoir, wells have demonstrated communication over very large distances.

(14) Both the West Puerto Chiquito-Mancos and the Gavilan-Mancos Oil Pools are currently spaced on 640-acre spacing, and the respective special pool rules for each of these pools also provides for the drilling of a second well on a standard proration unit.

(15) Through its geologic evidence and testimony, the applicant has demonstrated that the Mancos formation underlying the proposed unit area should demonstrate similar geologic characteristics as those found in other Mancos pools in the San Juan Basin.

(16) The applicant presented economic evidence and testimony which further indicates that initial wells drilled in the proposed unit area on less than 640-acre spacing will, in all likelihood, be uneconomic to drill.

(17) The applicant has requested that the proposed special rules and regulations be promulgated for a temporary period of two years in order to allow the applicant the opportunity to gather sufficient reservoir information to show that a 640-acre unit in the area can be efficiently and economically drained and developed by one well.

(18) The proposed unit area and pool boundaries have reasonably been defined by the applicant through its geologic and engineering evidence and testimony as an area which is likely to be productive in the Mancos formation.

(19) The evidence and testimony presented in this case indicates that a new pool for the production of oil from the Mancos formation should be created at this time and designated the Rock Mesa-Mancos Oil Pool.

(20) The vertical limits of the Rock Mesa-Mancos Oil Pool should be from 500 feet below the top of the Point Lookout formation to the base of the Greenhorn formation. The horizontal limits of the Rock Mesa-Mancos Oil Pool should comprise the area proposed by the applicant and identified in Finding No. (3) above.

(21) The applicant presented proposed temporary rules and regulations for the Rock Mesa-Mancos Oil Pool which include 640-acre spacing and proration units with wells to be located no closer than 990 feet from the outer boundary of the proration unit nor closer than 10 feet from a quarter-quarter section line or subdivision inner boundary, an oil allowable of 800 barrels of oil per day, a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil, a penalty provision for non-standard well locations, and a requirement to conduct an initial bottomhole pressure build up test on each well drilled.

(22) In 1988, a committee composed of industry personnel was formed by the Division for the purpose of deriving general rules and regulations for the Mancos formation which could be utilized by the Division to regulate development in those areas of the San Juan Basin not within existing Mancos pools and not subject to other special pool rules.

(23) The temporary special rules and regulations proposed by the applicant in this case are essentially those adopted and agreed upon by the aforesaid committee and represent, subject to minor modifications, the best method to initially develop the Mancos formation in this area.

(24) In order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, special rules and regulations providing for 640-acre spacing units should be promulgated for the Rock Mesa-Mancos Oil Pool.

(25) The applicant's request for the promulgation of special rules and regulations for a temporary period of two years should be granted.

(26) This case should be reopened at an examiner hearing in July, 1994, at which time the operators in the subject pool should be prepared to appear and show cause why the temporary rules for the Rock Mesa-Mancos Oil Pool promulgated herein should not be rescinded.

**IT IS THEREFORE ORDERED THAT:**

(1) Pursuant to the application of Merrion Oil and Gas Corporation, a new pool in Sandoval County, New Mexico, classified as an oil pool for Mancos production is hereby created and designated the Rock Mesa-Mancos Oil Pool, with vertical limits comprising that interval from 500 feet below the top of the Point Lookout formation to the base of the Greenhorn formation, and the horizontal limits comprising the following described area:

TOWNSHIP 19 NORTH, RANGE 3 WEST, NMPM

Sections 9 through 11: All  
Sections 14 through 17: All  
Sections 20 through 22: All  
Sections 27 through 29: All  
Sections 32 and 33: All

(2) Temporary Special Rules and Regulations for said pool are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS  
FOR THE  
ROCK MESA-MANCOS OIL POOL**

RULE 1. Each well completed in or recompleted in the Rock Mesa-Mancos Oil Pool or in the Mancos formation within one mile thereof, and not nearer to or within the limits of another designated Mancos oil pool shall be spaced, drilled, operated, and produced in accordance with the Special Rules hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 640 acres, more or less, comprising a single governmental section being a legal subdivision of the United States Public Lands Survey.

RULE 3. A second well may be drilled on a standard or approved non-standard proration unit provided that the production from the first well drilled on such unit has not stabilized at a rate greater than 50 barrels of oil per day and 300 MCF gas per day after 180 days of production.

RULE 4. The Director of the Oil Conservation Division, hereinafter referred to as the "Division", may grant an exception to the requirements of Rule No. 2 without hearing when an application has been filed for a non-standard unit comprising all of a governmental section but containing less than 632 acres or more than 648 acres as a result of a variation in the United States Public Lands Survey. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Director has received the application.

RULE 5. Each well shall be located no closer than 990 feet from the outer boundary of the proration unit nor closer than 330 feet from any quarter section line nor closer than 10 feet from any governmental quarter-quarter section line or subdivision inner boundary. Any second well drilled on a proration unit shall not be located in the same quarter section as the first well drilled on said unit. A directional survey shall be required to be conducted on any well drilled closer than 1,090 feet from the outer boundary of the proration unit prior to obtaining an oil allowable. The requirement for a directional survey may be waived by the Division upon receipt of written consents from all operators offsetting the subject proration unit.

RULE 6. Exceptions to the well location requirements contained within Rule No. (5) may be approved only after notice and hearing.

RULE 7. The allowable for a standard proration unit (632 through 648 acres) shall be 800 barrels of oil per day. The limiting gas-oil ratio shall be 2,000 cubic feet of gas per barrel of oil. In the event there is more than one well on a standard proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 640 acres.

RULE 8. (a) The operator of each well projected to and completed in the Rock Mesa-Mancos Oil Pool shall conduct deviation tests in accordance with Rule 111 of the Division Rules and Regulations. If the total deviation, assumed in a constant direction, indicates that the bottomhole location is closer than 990 feet from the outer boundary of the proration unit, the operator shall be required to conduct a directional survey on the well in order to determine the actual bottomhole location.

(b) Wells completed at non-standard bottomhole locations as determined from directional surveys shall be assigned an oil allowable in accordance with the following formula:

$$(\text{Bottomhole distance to proration unit boundary}/990 \text{ feet})^3 \times 800$$

RULE 9. Within 30 days of first production from a well drilled in the Rock Mesa-Mancos Oil Pool or within a mile thereof, the well shall be shut-in and a bottomhole pressure buildup test conducted in accordance with procedures obtained from the Aztec district office of the Division. The results of this test shall be submitted to the Aztec district office. At the request of the operator, the test results will be kept confidential for a period of one year from the date of completion of the test.



**IT IS FURTHER ORDERED THAT:**

(3) The locations of all wells presently drilling to or completed in the Rock Mesa-Mancos Oil Pool or in the Mancos formation within one mile thereof are hereby approved; the operator of any well having an unorthodox location shall notify the Aztec District Office of the Division in writing of the name and location of the well within thirty days from the date of this order.

(4) Pursuant to Paragraph A of Section 70-2-18, NMSA (1978), contained in Chapter 271, Laws of 1969, existing wells in the Rock Mesa-Mancos Oil Pool shall have dedicated thereto 640 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

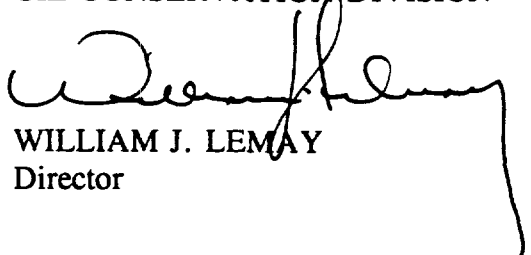
Failure to file new Forms C-102 with the Division dedicating 640 acres to a well or to obtain a non-standard unit approved by the Division within sixty days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said sixty-day limitation, each well presently drilling to or completed in the Rock Mesa-Mancos Oil Pool or in the Mancos formation within one mile thereof shall receive no more than one-half of a standard allowable for the pool.

(5) Unless called earlier upon the motion of the Division, this case shall be reopened at an examiner hearing in July, 1994, at which time the operators in the subject pool should be prepared to appear and show cause why the Temporary Special Pool Rules for the Rock Mesa-Mancos Oil Pool should not be rescinded.

(6) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY  
Director

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

CASE NO. 10478  
Order No. R-9701-A

APPLICATION OF MERRION OIL AND  
GAS CORPORATION FOR POOL CREATION  
AND TEMPORARY SPECIAL POOL RULES,  
SANDOVAL COUNTY, NEW MEXICO.

NUNC PRO TUNC ORDER

BY THE DIVISION:

It appearing to the Division that Order No. R-9701 dated August 6, 1992, does not correctly state the intended order of the Division,

IT IS THEREFORE ORDERED THAT:

(1) Decretory Paragraph No. (1) on pages 4 and 5 of said Order No. R-9701 be and the same is hereby amended to read in its entirety as follows:

"(1) Pursuant to the application of Merrion Oil and Gas Corporation, a new pool in Sandoval County, New Mexico, classified as an oil pool for Mancos production is hereby created and designated the Rock Mesa-Mancos Oil Pool, with vertical limits comprising that interval from 500 feet below the top of the Point Lookout formation to the base of the Greenhorn formation, and the horizontal limits comprising the following described area:

TOWNSHIP 18 NORTH, RANGE 3 WEST, NMPM

Sections 4 and 5: All

TOWNSHIP 19 NORTH, RANGE 3 WEST, NMPM

Sections 9 through 11: All

Sections 14 through 17: All

Sections 20 through 22: All

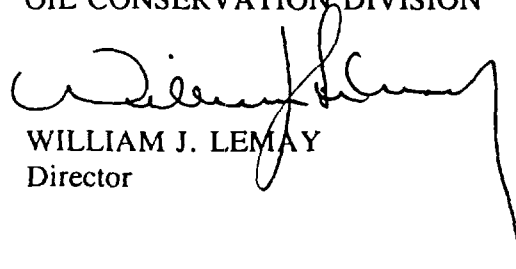
Sections 27 through 29: All

Sections 32 and 33: All"

(2) The corrections set forth in this order be entered nunc pro tunc as of August 6, 1992.

DONE at Santa Fe, New Mexico, on this 20th day of August, 1992.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director