

State of New Mexico
Energy, Minerals and Natural Resources Department

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Occidental Petroleum Corporation
c/o Beth Schenkel
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Request for approval to use multi-phase flow meters in lieu of separators in surface commingling projects as an alternative allocation method approved by the Division under 19.15.12.10(B)(1)(e) NMAC and 19.15.12.10(C)(1) NMAC

Ms. Schenkel,

The Oil Conservation Division (OCD) has reviewed Occidental Petroleum Corporation's (Oxy) request, presented to OCD on or around December 13, 2022, for approval to use multi-phase flow meters (MPFM) in lieu of separators in surface commingling projects as an alternative allocation method approved by OCD under 19.15.12.10(B)(1)(e) NMAC and 19.15.12.10(C)(1) NMAC.

Oxy conducted an initial round of testing using "MPFM-50" line of meters including the optional fluidic flow diverter (FFD) and manufactured by Agar Corporation (Agar). Approximately 24 wells were tested. Each test consisted of installing a MPFM in line prior to a separator and comparing the measured volumes of each phase. The results of the initial round of testing were provided to OCD around the same time of the presentation on or around December 13, 2022. Most of the tests indicated a variability of delta greater than 5% between the oil volumes measured by the MPFM and separator.

Oxy conducted another round of testing using the same equipment and methodology on a well in May of 2025 and provided the results to OCD on or around June 10, 2025. The results of that test indicated a variability of delta of around 4.2% between the oil volumes measured by the MPFM and separator with a minimum delta of negative 1.6% and a maximum delta of 2.6%.

Oxy provided additional testing data using the same equipment and methodology on or around August 7, 2025. The data was gathered from tests conducted on 3 wells which occurred in April and May of 2022. The results of the tests indicated a variability of delta greater than 5%

State of New Mexico
Energy, Minerals and Natural Resources Department

between the oil volumes measured by the MPFM and separator, but generally the variability was less than 5% for most data points.

Most of the test results provided by Oxy indicated that the MPFM had an error of greater than 5%, but the results provided in 2025 had many occurrences in which the MPFM was consistently off by approximately the same percentage. OCD is considering a variability in delta rather than a magnitude in delta. For instance, a data set with a delta error that ranges from 3% to 8% is considered to have a variability in delta of 5%. It is assumed that Oxy will have a relatively similar magnitude in delta across its MPFM allowing for the allocated total to correct for that general magnitude in error.

The MPFM test results provided by Oxy after the initial round of testing indicated a substantial increase in accuracy from the initial round of testing. Based upon Oxy's representation, OCD's understanding is that the later results are a better representation of the results that Oxy expects to achieve going forward when utilizing MPFM. OCD's understanding is that Oxy will maintain an error equal to or less than 5% in its allocation to each well when using MPFM. Well testing schedules shall be adjusted within the surface commingling orders when using MPFM and Oxy shall meet those stricter requirements.

OCD finds that for the reasons above; the approval of this request is in the interest of prevention of waste and is protective of correlative rights. Therefore, Oxy is conditionally approved to use the "MPFM-50" line of meters manufactured by Agar within its surface commingling projects as an alternative allocation method approved by OCD under 19.15.12.10(B)(1)(e) NMAC and 19.15.12.10(C)(1) NMAC provided the conditions listed below are followed. This approval is designated as SCM-900.

1. To utilize MPFM in a surface commingling project as an alternative allocation method under 19.15.12.10(B)(1)(e) NMAC or 19.15.12.10(C)(1) NMAC, Oxy shall include within its application:
 - a. a detailed description of the MPFM and its purpose such that a layman will understand;
 - b. if ownership in the surface commingling project is diverse as defined under 19.15.12.7(A) NMAC; a certification that Oxy shall ensure the allocation of production to each well shall be done accurately; and
 - c. a reference to this approval using its designation as SCM-900.
2. Oxy shall maintain an error of equal to or less than 5% in its allocation of production to each well. This is defined as the difference between the true and allocated productions for the well divided by the true production for that well.
3. Additional well tests shall be required as stipulated in the commingling order if:
 - a. ownership in the surface commingling project is diverse as defined under 19.15.12.7(A) NMAC; and

State of New Mexico
Energy, Minerals and Natural Resources Department

- b. any allocation is determined via well test.
4. Any MPFM used for allocation shall:
 - a. belong to the Agar MPFM-50 line of meters;
 - b. include a Fluidic Flow Diverter (FFD); and
 - c. be appropriately sized.
5. Oxy shall maintain each MPFM used for allocation in accordance with Agar's recommended maintenance schedule as provided to the Division with Oxy's proposal, or under 19.15.12.10(C) NMAC, whichever is more frequent. Should Agar's recommended maintenance schedule change, then no later than 60 days after such occurrence, Oxy shall provide the Division with that updated maintenance schedule and await approval from the OCD prior to adjusting its maintenance schedule including any modifications OCD may include.
6. Oxy shall install, maintain, and monitor a SCADA system to:
 - a. gather and maintain production data;
 - b. conduct checks and comparisons to prior tests as described in the business checks included in Oxy's proposal to flag tests for review by a technician;
 - c. conduct comparisons of the recorded gas-oil-ratio (GOR) and water cut to prior tests and flag tests for review by a technician if either result indicates a change of more than 5% from the prior test;
 - d. be used by a technician to determine if a test was bad as described in Oxy's proposal; and
 - e. be used to determine if maintenance, in addition to the maintenance schedule, is required.
7. Should additional information or techniques become available to better determine if a test is bad or additional maintenance is required, Oxy shall provide a description of such to OCD and if changes to its procedures are warranted or desired, await approval from OCD before making such modifications to its procedures.
8. Oxy shall maintain and provide to OCD upon its request:
 - a. individual test data for each production test for at least 1 year; and
 - b. all calibration and maintenance details for at least 3 years.
9. If necessary, corrections and adjustments to allocation shall be done under 19.15.12.10(C)(2)(c) NMAC except that Oxy shall use its gathered data to determine a date to correct production for in lieu of using the last half of the period elapsed since the last calibration date.



JUSTIN WRINKLE
ENGINEERING BUREAU CHIEF

DATE: 11-4-2025

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CONDITIONS

Action 522864

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 522864
	Action Type: [IM-SD] Admin Order Support Doc (ENG) (IM-AAO)

CONDITIONS

Created By	Condition	Condition Date
dmcclure	Please review the content of the order to ensure you are familiar with the authorities granted and any conditions of approval. If you have any questions regarding this matter, please contact me.	11/4/2025