

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

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

NOMENCLATURE

CASE NO. 10261
ORDER NO. R-9484

APPLICATION OF CHEVRON U.S.A., INC.
FOR POOL EXTENSION AND CONTRACTION,
LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 7, 1991, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 8th day of April, 1991, 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) Division Case Nos. 10259, 10260 and 10261 were consolidated at the time of the hearing for the purpose of testimony.

(3) The applicant, Chevron U.S.A., Inc., is the operator of the proposed Arrowhead Grayburg Unit Area, Arrowhead-Grayburg Pool, Lea County, New Mexico. The proposed horizontal limits

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of the Arrowhead-Grayburg Pool are shown on Exhibit "A" attached hereto. The proposed Arrowhead-Grayburg Unit Area includes all of the acreage shown on Exhibit A except for the NW/4 NW/4 of Section 17 and the NE/4 NE/4 of Section 14.

(4) Chevron, as operator of the Arrowhead Grayburg Unit, seeks the expansion of the Arrowhead-Grayburg Pool to include the vertical limit described as the top of the Grayburg formation or -150 feet below sea level, whichever is shallower, to -1500 feet below sea level for the area described in Exhibit "A", except for the NW/4 NW/4 of Section 17, the SE/4 of Section 18 and the N/2 N/2 of Section 19 in Township 22 South, Range 37 East and the NE/4 NE/4 of Section 14, Township 22 South, Range 36 East which shall have a lower vertical limit as being the top of the San Andres formation.

(5) Various portions of both the vertical and horizontal limits of the proposed amended Arrowhead-Grayburg Pool are currently dedicated to existing pools.

(6) The expansion and contraction of the Arrowhead-Grayburg Pool and the corresponding contraction of portions of certain existing pools is necessary to permit the applicant to successfully carry out secondary recovery operations within the full oil column underlying said unit and said Unit Area.

(7) No party appeared and objected to the proposed amendment of said vertical limits.

(8) Granting this application will serve to prevent waste and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Within the area designated as the Arrowhead Grayburg Unit Area, as described in Finding No. (3) above, the vertical limits of the Arrowhead-Grayburg Pool are hereby amended to be from 150 feet below sea level or the top of the Grayburg formation, whichever is shallower, to a depth of 1,500 feet below sea level; with the geologic marker for the top of the Grayburg formation being found to occur at 3671 feet in the Chevron Harry Leonard (NCT-C) Well No. 20 (located 660 feet from the North line and 990 feet from the West line (Unit D) of Section 36, Township 21 South, Range 36 East, NMPPM, Lea County,

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New Mexico) as recorded by the Gearhart Compensated Neutron Log measured from the Kelly Drive Bushing elevation of 3,532 feet and dated February 25, 1985, save and except the following: in the SE/4 of Section 18, Township 22 South, Range 37 East, and the N/2 N/2 of Section 19, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, the lower vertical limit of the Arrowhead-Grayburg Pool shall be the top of the San Andres Formation which occurs at 3,804 feet below the Kelly Drive Bushing on the Dresser Atlas Compensated Density Neutron Log dated August 16, 1978 on the Zia (Exxon) New Mexico "M" Well No. 49 which is located 2,610 feet from the South line and 2,310 feet from the East line (Unit J) of Section 18, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) The following changes in the horizontal and vertical limits of the following pools are hereby ordered:

a) Contract and expand horizontal limits of Arrowhead-Grayburg Pool to include the Unit Area (Exhibit "A") and the NE/4 NE/4 of Section 14, Township 22 South, Range 36 East and the NW/4 NW/4 of Section 17, Township 22 South, Range 37 East by:

(1) Adding:

Township 21 South, Range 36 East, NMPM
Section 25: E/2
Section 36: NE/4 NE/4

Township 22 South, Range 37 East, NMPM
Section 18: SE/4
Section 19: N/2 N/2

(2) Deleting:

Township 21 South, Range 36 East, NMPM
Section 26: W/2; NE/4; W/2 SE/4;
NE/4 SE/4
Section 34: E/2
Section 35: N/2 NW/4; SW/4 NW/4;
NW/4 SW/4

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Township 22 South, Range 36 East, NMPM
Section 3: E/2
Section 11: W/2 NW/4; SE/4 NW/4; W/2 SE/4;
SE/4 SE/4
Section 13: S/2 SW/4; NW/4 SW/4; SW/4 NW/4
Section 14: SE/4; W/2 NE/4; SE/4 NE/4
Section 24: S/2; NW/4; NW/4 NE/4;
S/2 NE/4

Township 22 South, Range 37 East, NMPM
Section 6: E/2 NW/4
Section 7: NE/4 SE/4

(b) Contract horizontal limits of Langlie-Mattix Pool
by deleting the following acreage from that pool:

Township 22 South, Range 37 East, NMPM
Section 18: SE/4
Section 19: N/2 N/2

(c) Contract horizontal limits of Penrose-Skelly Pool
by deleting following acreage from that pool:

Township 21 South, Range 36 East, NMPM
Section 25: NE/4; E/2 SE/4

(d) Contract lower vertical limits of Eumont Pool
(Yates-Seven Rivers, Queen) from the top of the Grayburg or
-150 feet below sea level, whichever is shallower, in the
following areas:

Township 21 South, Range 36 East, NMPM
Section 25: All
Section 26: SE/4 SE/4
Section 35: E/2; SE/4 NW/4; E/2 SW/4;
SW/4 SW/4
Section 36: All

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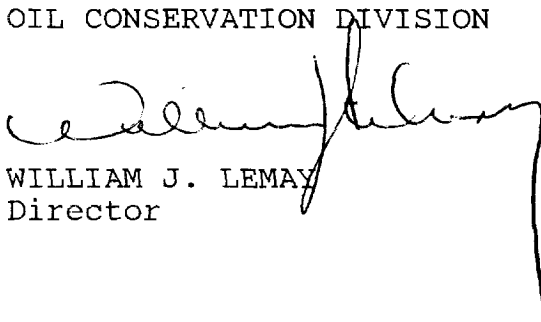
Township 22 South, Range 36 East, NMPM
Sections 1 and 2: All
Section 12: All
Section 13: E/2; N/2 NW/4; SE/4 NW/4;
NE/4 SW/4

Township 22 South, Range 37 East, NMPM
Section 6: W/2 W/2; E/2 SW/4
Section 7: W/2; W/2 SE/4; SE/4 SE/4
Section 18: All

(3) Jurisdiction of this cause is 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

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EXHIBIT "A"

Township 21 South, Range 36 East, NMPM

Section 25: All
Section 26: SE/4 SE/4
Section 35: E/2; E/2 SW/4; SW/4 SW/4; SE/4 NW/4
Section 36: All

Township 22 South, Range 36 East, NMPM

Section 1: All
Section 2: All
Section 11: NE/4 NW/4; NE/4; NE/4 SE/4
Section 12: All
Section 13: E/2; E/2 NW/4; NW/4 NW/4; NE/4 SW/4
Section 14: NE/4 NE/4
Section 24: NE/4 NE/4

Township 22 South, Range 37 East, NMPM

Section 6: W/2 NW/4; SW/4
Section 7: W/2; S/2 SE/4; NW/4 SE/4
Section 17: NW/4 NW/4
Section 18: All
Section 19: N/2 N/2