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:

> CASE NO. 10303 ORDER NO. R-9255-B

APPLICATION OF BASF CORPORATION FOR AMENDMENT OF DIVISION ORDER NO. R-9255, AS AMENDED BY ORDER NO. R-9255-A, TO PROVIDE FOR A HORIZONTAL DRILLING PILOT PROJECT, SPECIAL OPERATING RULES THEREFOR, A NON-STANDARD OIL PRORATION UNIT AND AN UNORTHODOX OIL WELL LOCATION, SAN JUAN COUNTY, NEW MEXICO

ORDER OF THE DIVISION

<u>BY THE DIVISION</u>:

This cause came on for hearing at 8:15 a.m. on May 2, 1991, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>9th</u> day of August, 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) By Order No. R-9255, dated August 22, 1990, the Division authorized BASF Corporation to initiate a horizontal directional drilling pilot project in the S/2 SW/4 of Section 28, Township 31 North, Range 14 West, NMPM, as projected into the unsurveyed Ute Mountain Indian Reservation, Undesignated Verde-Gallup Oil Pool, San Juan County, New Mexico, by drilling its Ute Mountain Tribal "28" Well No. 14 at an unorthodox surface location 1250 feet from the South line and 1100 feet from the West line (Unit M) of said Section 28 in the following unconventional manner:

Drill vertically to a depth of approximately 3820 feet, kick-off from vertical and commence a medium radius curve in an east-southeasterly direction building angle to approximately 90 degrees to encounter the Gallup formation at a true vertical depth of approximately 4460 feet, continue drilling horizontally a distance of approximately 1000 feet and bottoming said wellbore in the adjoining quarter-quarter section (Unit N) at an approximate location 1004 feet from the South line and 2542 feet from the West line of said Section 28.

(3) By Division Order No. R-9255-A, dated October 19, 1990, the surface location of the Ute Mountain Tribal "28" Well No. 14 was moved to a new unorthodox location 1284 feet from the South line and 1112 feet from the West line (Unit M) of said Section 28.

(4) BASF Corporation drilled its Ute Mountain Tribal "28" Well No. 14 as authorized, but encountered problems during drilling which rendered it unable to comply with the provisions of Division Orders R-9255 and R-9255-A, and furthermore resulted in an unsuccessful attempt at drilling and completing a horizontal well in the Gallup formation.

(5) BASF Corporation seeks amendment of Division Order No. R-9255, as subsequently amended by Division Order R-9255-A, to permit re-entry of its Ute Mountain Tribal "28" Well No. 14, as described above, set a cement plug at 4435 feet (measured depth) in the open hole section below the 9 5/8-inch casing and re-drill the directional portion of the hole in a northeasterly direction to intercept the Gallup formation in the N/2 SW/4 of Section 28 and then continue drilling horizontally in a northeasterly direction for approximately 1000 feet into the adjoining quarter-quarter section (NW/4 SE/4) in Section 28.

(6) The well should be dedicated to a 160-acre non-standard spacing and proration unit, comprising the SW/4 SW/4, N/2 SW/4 and NW/4 SE/4 of said Section 28.

(7) Applicant also seeks special rules and provisions within this pilot project area, including the designation of a prescribed area limiting the horizontal displacement of the proposed wellbore so that it cannot be closer than 50 feet from the outer boundary of the assigned proration unit, and a special allowable provision for this well based on the total acreage dedicated to it.

(8) Finding Paragraph Nos. (6), (7), (8), (14), (15), (16) and (17) in previous Order No. R-9255 are still pertinent in this matter and should therefore be incorporated herein.

(9) The evidence indicates that the producing interval of the new horizontal wellbore, as currently proposed, will traverse only the N/2 SW/4 and NW/4 SE/4 of said Section 28. Therefore the project allowable should be limited to equal the top unit allowable for the Verde-Gallup Oil Pool (80 barrels of oil per day) times three or 240 barrels of oil per day.

(10) No part of the producing interval of the wellbore should be located closer than 50 feet from the outer boundary of the assigned 160-acre project area.

(11) This application should be approved at this time and previous Order Nos. R-9255 and R-9255-A should be superseded by this order.

IT IS THEREFORE ORDERED THAT:

(1) The application of BASF Corporation for a horizontal directional drilling pilot project in the SW/4 SW/4, N/2 SW/4 and NW/4 SE/4 of Section 28, Township 31 North, Range 14 West, NMPM, as projected into the unsurveyed Ute Mountain Indian Reservation, Undesignated Verde-Gallup Oil Pool, San Juan County, New Mexico, forming a non-standard 160-acre oil spacing and proration unit for said pool, is hereby approved.

(2) The applicant is further authorized to re-enter its Ute Mountain Tribal "28" Well No. 14 located at an unorthodox surface location 1284 feet from the South line and 1112 feet from the West line (Unit M) of said Section 28 in the following manner:

set a cement plug at 4435 feet measured depth in the open hole section below the 9 5/8-inch casing and re-drill the directional portion of the hole in a northeasterly direction to intercept the Gallup formation in the N/2 SW/4 of Section 28 and then continue horizontally drilling in a northeasterly direction for approximately 1000 feet into the adjoining quarter-quarter section (NW/4 SE/4) in Section 28.

<u>PROVIDED HOWEVER THAT</u>, the horizontal portion of the subject well shall be located no closer than 50 feet from the outer boundary of the project area.

(3) Said 160-acre non-standard proration unit shall only be assigned an acreage factor of 3 thereby limiting the project allowable to 240 barrels of oil per day.

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(4) The applicant shall be required to conduct a directional survey on the horizontal portion of the wellbore subsequent to directional drilling operations in order that the direction, extent, and terminus of said wellbore may be determined to be in compliance with the provisions set forth above.

(5) The applicant shall further be required to submit copies of said directional surveys to the Santa Fe and Aztec district offices of the Division.

(6) The applicant shall notify the supervisor of the Aztec District Office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the proposed well in order that these operations may be witnessed.

(7) 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 00 WILLIAM J. LEMAY Director

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