

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 8858
Order No. R-8218

APPLICATION OF EXXON CORPORATION
FOR DOWNHOLE COMMINGLING, EDDY
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on March 19, 1986, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 9th day of May, 1986, 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) This case was consolidated with Division Case No. 8842 at the time of the hearing for the purpose of testimony.

(3) The applicant, Exxon Corporation, is the owner and operator of the Mary Federal Well No. 5, located in Unit N of Section 11, Township 23 South, Range 25 East, NMPM, Eddy County, New Mexico.

(4) The applicant seeks authority to commingle production from the Undesignated Upper Pennsylvanian Formation (Cisco and Canyon) and from the Undesignated (Sheep Draw) Strawn Gas Pool within the wellbore of the above-described well.

(5) The Mary Federal Well No. 5 was drilled in November, 1985 and the production casing was set through the base of the Strawn formation.

(6) As a result of gas influx into the well during primary cementing operations, there exists a channel in the

cement behind the production casing from the Strawn formation up through the Upper Pennsylvanian formation.

(7) The Strawn formation and the Upper Pennsylvanian formation are in communication behind the production casing as a result of this channel.

(8) In order to rectify the communication problem, the applicant would have to bear considerable costs attempting to squeeze cement the channel.

(9) Testimony by the applicant indicated that, based on their previous experience with similar remedial cement jobs, there is an approximate twenty-five percent chance of a successful cement squeeze operation on the well.

(10) Further testimony by the applicant indicated that there exists substantial risk of damaging the formations in performing the remedial cementing operations which may result in the loss of a considerable amount of gas reserves.

(11) The ownership of the Strawn formation and the Upper Pennsylvanian formation are common in the subject well including working interest and royalty interest.

(12) The proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(13) The reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(14) To afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Artesia district office of the Division any time the subject well is shut-in for seven (7) consecutive days.

(15) At the time of the hearing, the applicant submitted as evidence a multipoint back pressure test and a gas analysis which were conducted on the Strawn formation in December, 1985.

(16) In order to allocate the commingled production to each of the commingled gas zones in the well, the applicant should be required to conduct a multipoint back pressure test and a gas analysis on the well after perforating the Upper

Pennsylvanian formation, and should submit these tests to the supervisor of the Division's Artesia district office.

(17) After consultation with the applicant, the supervisor of the Division's Artesia district office should make a determination of whether an accurate allocation formula can be determined based on the multipoint pressure tests.

(18) The supervisor of the Division's Artesia district office should have the authority to require the applicant to conduct additional tests or production logs to determine an accurate allocation formula, should the multipoint tests not be sufficient to make a determination.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Exxon Corporation, is hereby authorized to commingle Undesignated Upper Pennsylvanian (Cisco and Canyon) and Undesignated (Sheep Draw) Strawn Pool production within the wellbore of the Mary Federal Well No. 5, located in Unit N of Section 11, Township 23 South, Range 25 East, NMPM, Eddy County, New Mexico.

PROVIDED HOWEVER that in order to allocate the commingled production to each of the commingled gas zones in the well, the applicant shall conduct a multipoint back pressure test and a gas analysis on the well after perforating the Upper Pennsylvanian formation, and shall submit these tests to the supervisor of the Division's Artesia district office.

PROVIDED FURTHER that if an accurate allocation formula cannot be determined by the multipoint tests, the supervisor of the Division's Artesia district office shall have the authority to require the applicant to conduct additional tests or production logs as he deems necessary to determine an accurate allocation formula for the well.

(2) The operator of the subject well shall immediately notify the Division's Artesia district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

(3) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

-4-

Case No. 8858
Order No. R-8218

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in dark ink, appearing to read 'R. L. Stamets', with a stylized flourish at the end.

R. L. STAMETS,
Director

S E A L