

dugan production corp.

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JUL 18 1984

July 12, 1984

Frank Chavez

New Mexico Oil Conservation Division
1000 Rio Brazos Rd.
Aztec, NM 87410

RE: Proposed Revision of Allocation Factors Jerome P. McHugh's Wright Way #1 Gavilan Mancos-Dakota Fields Unit C, Sec. 2, T-24N, R-2W, NMPM Rio Arriba County, New Mexico JUL 13 1984

OIL CON. DIV.

DIST. 3

Case 8369

Dear Mr. Chavez:

We are are writing to request your approval of revised allocation factors to be utilized in splitting production between the Mancos and Dakota formations in the captioned well.

Currently, as provided by Order R-7367, dated October 4, 1983, the Mancos formation receives 67% of the oil and 85% of the gas, while the Dakota formation is allocated 33% of the oil and 15% of the gas. It is proposed that the oil allocation factor be revised to reflect 92% of the commingled stream being allocated to the Mancos and 8% of the commingled oil stream allocated to the Dakota. The gas allocation factors should not be changed.

The proposed revised allocation factors are necessitated by the fact that production has improved since the initial testing, at which time a combined potential of 78 BOPD with an average GOR of 4615 was indicated (51 BOPD with a GOR of 6000 from the Mancos perforations 6760-7072' and 27 BOPD with a GOR of 2000 from Dakota perforations 7865-8141'). The early testing indicated that the well would flow intermittently and appeared to be a mediocre well. Since installing artificial lift equipment in November of 1983, the commingled production has averaged 124 BOPD and has consistently produced at rates exceeding that indicated by the initial potential, which was utilized in determining our original allocation factors. It is our belief that the increase in productivity actually exhibited by the well is the result of natural fractures in the Mancos cleaning up with production. During the drilling of the Mancos, we did encounter lost circulation and it was necessary to include lost circulation material in our mud system in order to maintain circulation. It is believed that this is indicative of natural fracturing within the Mancos. The Dakota interval was drilled with no lost circulation and it is believed that the initial potential is indicative of the productive capacity of the Dakota formation.

NMOCD - Wright Way #1 July 12, 1984

With respect to gas production, gas sales were commenced 3-16-84 and since that time the commingled stream GOR has averaged 586 SCF/STB, much less than anticipated from our initial testing. With the revised oil allocations and the reported gas production, the GOR during the past 2 months has averaged 497 SCF/STB from the Mancos and 1290 SCF/STB from the Dakota. These GOR's are in line with the GOR's indicated from testing and/or production in other wells in the field.

I have summarized the production submitted to date for the Wright Way #1 on the attached tabulation and have also indicated the numbers as revised, utilizing the proposed revised allocation factors. It is my belief that it is necessary to make these revisions in order to avoid misrepresenting the true productive capacity of the Dakota in this general area. As can be seen from the tabulation, based upon our current allocations, the Dakota is indicated to have averaged up to 46 BOPD and actually averaged 41 BOPD per producing day during the last 7 months of production on rod pump. These high rates of production from the Dakota are unrealistic, considering the initial testing and the reservoir parameters that are indicated from the open hole logs and sample analysis. As can be seen from the revised production schedule, the actual Dakota production during the last 7 months averaged 10 BOPD with the increase in productivity being from the Mancos interval. It has been our contention ever since the date of first production that the Dakota reservoir in this general area is of secondary interest and that the primary zone of interest is the Mancos and we believe that the revised allocation factors proposed herein more properly reflect this fact than do our original factors based upon an initial potential totaling 78 BOPD.

Should you have questions regarding this matter or need additional information, please feel free to contact me.

Sincerely,

folio D. Roc

John D. Roe Petroleum Engineer

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cc: Jerome P. McHugh

Attachment

Jefur. 74 b Per duction NC = No Change manues 7 8 mr-645 DAKSTA 7 ŀ 15 FAC X11-0 . 6-115 AC > = PROduction, 21.4 SOMBU 926 3757 24353 2496 3704 3539 3725 MAN - 51 8010 4041 3034 100-169 DAKATA 298 279 8 2/2/ 320 329 319 287 622 9,00 101 9,4 ۸, Star 52 20 3/ 31 Z/W 30 3/ 2 634 15V 20012 200 To fac PROduc Fron Dotota manos 1776 2238 Met- 6ms 320 396 Submitted noisk may 10.1 In was Proplety Telme 4041 cil production-bb! 4036 25.454 4337 2826 4023 3363 3826 A SS MANEOS 2725 2704 2707 1893 67% 2254 2 907 2695 2564 6-115 (328 43 1334 13 8730 41 1109 1 14324 41 25E 1262 at 200 DAKOTA 33% 833 Poof Total 2/84 7 mo. Total 1/84 11/83 12/83 3/84 2/84 4/00

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. 7968 Order No. R-7367

APPLICATION OF JEROME P. McHUGH FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on September 28, 1983, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 4th day of October, 1983, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Jerome P. McHugh, is the owner and operator of the Wright Way Well No. 1, located 950 Feet from the North line and 1680 feet from the West line of Section 2, Township 24 North, Range 2 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle Basin-Dakota and Undesignated Gallup production within the wellbore of the above-described well.
- (4) That from the Undesignated Gallup zone, the subject well is capable of low marginal production only.
- (5) That from the Basin-Dakota zone, the subject well is capable of low marginal production only.
- (6) That 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.

- (7) That 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.
- (8) That to afford the Division the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Division any time the subject well is shut-in for 7 consecutive days.
- (9) That in order to allocate the commingled production to each of the commingled zones in the subject well, 67 percent of the commingled oil production and 85 percent of the commingled gas production should be allocated to the Undesignated Gallup zone, and 33 percent of the commingled oil production and 15 percent of the commingled gas production to the Basin-Dakota zone.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Jerome P. McHugh, is hereby authorized to commingle Basin-Dakota and Undesignated Gallup production within the wellbore of the Wright Way Well No. 1, located 950 feet from the North line and 1680 feet from the West line of Section 2, Township 24 North, Range 2 West, NMPM, Rio Arriba County, New Mexico.
- (2) That 67 percent of the commingled oil production and 85 percent of the commingled gas production shall be allocated to the Undesignated Gallup zone and 33 percent of the commingled oil production and 15 percent of the commingled gas production shall be allocated to the Basin-Dakota zone.
- (3) That the operator of the subject well shall immediately notify the Division's Aztec 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.

(4) That 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

OLL CONSERVATION DIVISION

JOE D. RAMEY

Director

SEAL