

Entered March 10, 1976

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BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5571 DE NOVO
Order No. R-5139-A

APPLICATION OF ROBERT G. COX
FOR AMENDMENT OF ORDER NO.
R-4561, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 21, 1976, and February 24, 1976, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 10th day of March, 1976, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Robert G. Cox, is the owner and operator of the Federal "EA" Well No. 1, the surface location of which is reported as being 330 feet from the North line and 330 feet from the West line of Section 12, Township 18 South, Range 27 East, NMPM, Empire-Abo Pool, Eddy County, New Mexico.

(3) That when originally drilled, the subject well deviated 23 feet to the South and 172 feet to the West of the surface location at a measured depth of 6050 feet (true vertical depth 6046 feet) in the Empire-Abo Pool.

(4) That on June 25, 1973, the Commission entered Order No. R-4561 which authorized the applicant to re-enter said well, set a whipstock at approximately 4,200 feet and directionally drill said well to a depth of approximately 6,200 feet, bottoming the well in the Empire-Abo Pool at a point within 100 feet of the surface location.

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(5) That Order No. R-4561 also required that the applicant make a continuous multi-shot directional survey of said well from total depth to the whipstock point with shot points not more than 100 feet apart and provide a copy of the survey to the Commission.

(6) That in July and August, 1975, the applicant herein, Robert G. Cox, re-entered said well and directionally drilled the same in a northwesterly direction to a depth of approximately 6220 feet at a bottom-hole location approximately 269 feet north and 321 feet west of the surface location.

(7) That said well was completed in August, 1975, capable of production from the Abo formation through perforations from 6212 feet to 6216 feet.

(8) That the applicant seeks amendment of Commission Order No. R-4561 to permit bottoming of the subject well at approximately 58 feet from the North line and approximately 8 feet from the West line of Section 12, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico, and to eliminate the requirement of a continuous multi-shot survey of the well.

(9) That this matter came on for hearing before Examiner Richard L. Stamets on October 8, 1975, and November 19, 1975, and pursuant to this hearing, Order No. R-5139 was issued in Case No. 5571 on December 16, 1975, which order denied the application of Robert G. Cox for the amendment of Order No. R-4561.

(10) That on January 7, 1976, applicant Robert G. Cox filed application for hearing De Novo of Case No. 5571, and the matter was set for hearing before a quorum of the Commission.

(11) That this matter came on for hearing De Novo on January 21, 1976, and February 24, 1976.

(12) That the evidence adduced at said hearing clearly establishes that the applicant made no effort to comply with the provisions of Order No. R-4561 which required that the well be bottomed within 100 feet of the surface location.

(13) That the evidence further establishes that the applicant intentionally deviated the well toward the northwest corner of said well's spacing and proration unit, being the NW/4 NW/4 of Section 12, Township 18 South, Range 27 East, NMPM, well beyond the 100-foot target area described in Finding No. (4) above, and that he in fact did bottom said well at a point 62 feet from the North line and 9 feet from the West line of said Section 12.

(14) That the owners of interest in acreage offsetting said well appeared at the hearing on January 21, 1976, and February 24, 1976, and objected to the production of the well at the aforesaid bottom-hole location.

(15) That the evidence indicates that the productive interval in the subject well, i.e., the perforated interval from approximately 6212 feet to approximately 6216 feet, is correlative to, and in communication with, the Abo producing interval in wells to the north and west of said well.

(16) That the evidence indicates that there are probably no more than two and one-half acres underlying applicant's lease in the NW/4 NW/4 of Section 12, Township 18 South, Range 27 East, NMPM, which are productive of hydrocarbons from the Abo formation.

(17) That the evidence indicates that the above-described two and one-half acres would have a reservoir hydrocarbon pore volume of approximately 4520 barrels.

(18) That due to the reservoir volume factor, there actually would be produced at the surface somewhat less than 4520 barrels of stock tank oil in voiding the aforesaid 4520 barrels of reservoir hydrocarbon pore space, because of shrinkage of the oil as the dissolved gas is released at the surface.

(19) That subsequent to its August, 1975, completion at the bottom-hole location described in Finding No. (13) above, and through December 31, 1975, the subject well produced 4008 barrels of stock tank oil, representing more than 4008 barrels of reservoir hydrocarbon pore space because of the reservoir volume factor described above.

(20) That at the time of the hearing of Case No. 5571 De Novo, no records were yet available to indicate the volume of stock tank oil produced from the subject well in January, 1976, and February, 1976.

(21) That said well produced an average of approximately 35 barrels of oil per day during November, 1975, and December, 1975, and was assigned an allowable of 35 barrels of oil per day for January, 1976, and February, 1976.

(22) That assuming said well continued to produce 35 barrels of oil per day in January, 1976, and February, 1976, its cumulative production from its August, 1975, completion at the bottom-hole location described in Finding No. (13) above through February, 1976, would be 6108 barrels of stock tank oil.



(23) That even disregarding the reservoir volume factor, the aforesaid 6108 barrels of oil would be in excess of the original oil in place in the Abo formation under the Robert G. Cox Federal "EA" Lease in the NW/4 NW/4 of Section 12, Township 18 South, Range 27 East, NMPM.

(24) That the production of oil in excess of the original oil in place under said lease would of necessity be the production of oil migrating to applicant's lease from offsetting properties.

(25) That the production of oil in excess of the original oil in place under said lease would cause drainage across lease lines which would not be equalized by counter-drainage.

(26) That Section 65-3-11, Subsection 7, NMSA 1953 Comp. authorizes and empowers the Commission "To require wells to be drilled, operated and produced in such manner as to prevent injury to neighboring leases or properties."

(27) That to permit the subject well to produce, after more than the original oil in place has been produced, would result in injury to neighboring leases or properties.

(28) That Section 65-3-10 NMSA 1953 Comp. places upon the Commission the duty to protect the correlative rights of owners of mineral interests in oil and gas pools in New Mexico.

(29) That the granting of the application in this case would impair the correlative rights of the owners of interest in the acreage offsetting the Robert G. Cox Federal "EA" Well No. 1.

(30) That to permit the continued production of the subject well at its present bottom-hole location would impose upon the operators of the acreage offsetting said well the obligation to drill additional wells on their own property at the same approximate distance from the lease line as the subject well, if they would protect their leases from drainage.

(31) That wells drilled under the conditions set out in Finding No. (30) above would not significantly add to the total ultimate production from the Empire-Abo Pool and would not be necessary for the efficient and economic production of the Empire-Abo Pool, and would, therefore, constitute economic waste.

(32) That wells producing under the conditions set out in Finding No. (30) above would not produce the oil and gas from said pool as efficiently as wells more distantly spaced from one another, and could result in underground waste.

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(33) That to protect correlative rights, to prevent economic waste, and to prevent underground waste, the application should be denied.

IT IS THEREFORE ORDERED:

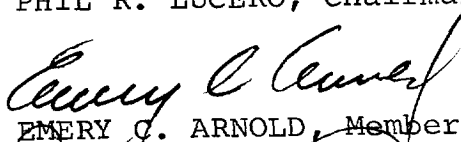
(1) That the application of Robert G. Cox for the amendment of Order No. R-4561 is hereby denied.

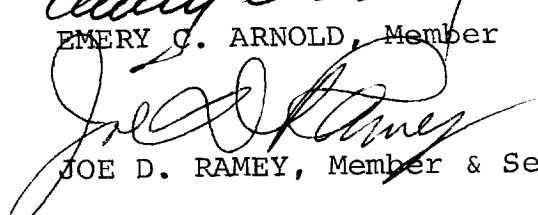
(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


PHIL R. LUCERO, Chairman


EMERY C. ARNOLD, Member


JOE D. RAMEY, Member & Secretary

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