

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

Application of Pan American Petroleum
Corporation for permission to drill in
the Potash-Oil Area, Eddy County, New
Mexico. Applicant, in the above-styled
cause, seeks authority to drill a well to
the Mississippian formation at an ap-
proximate depth of 12,600 feet, said well
to be located 660 feet from the South line
and 660 feet from the East line of Section
17, Township 20 South, Range 30 East,
Eddy County, New Mexico, or to drill said
well at an alternate location anywhere with-
in a circle of 100 feet radius around the
Barber Well No. 4-A, located 1639.2 feet
from the South line and 2304.5 feet from
the East line of said Section 17. The above
location and the alternate location are in the
Potash-Oil Area as defined by the Commis-
sion in Order No. R-111-A as amended.

CASE 3029

REQUESTED FINDINGS OF FACT AND
CONCLUSIONS OF LAW OF APPLICANT
PAN AMERICAN PETROLEUM CORPORATION

COMES now Applicant Pan American Petroleum Corporation
and respectfully requests the Oil Conservation Commission to adopt
the following

FINDINGS OF FACT

1. Applicant Pan American Petroleum Corporation, herein
referred to as "Pan American", is the owner and operator of oil
and gas properties in the State of New Mexico and is the owner of
the oil and gas leasehold estate created by the State of New Mexico
Oil and Gas Lease B-2386, dated January 10, 1934, as to all rights

below a depth of 2500 feet beneath the surface of the ground in the $SE\frac{1}{4}$ Section 17, Township 20 South, Range 30 East, N.M.P.M., Eddy County, New Mexico. Pan American also is the owner of similar deep rights in additional tracts located in the immediate vicinity of the $SE\frac{1}{4}$ of said Section 17 as more fully shown on Pan American's Exhibit 1, in evidence herein. These tracts include all of Section 9, all of Section 15, all of Section 16, all of Section 17 except the $N\frac{1}{2}NE\frac{1}{4}$, all of Section 18 except the $SW\frac{1}{4}NW\frac{1}{4}$ and $NW\frac{1}{4}SW\frac{1}{4}$, all of Section 19, the $W\frac{1}{2}$ of Section 20, the $NE\frac{1}{4}$ of Section 21, the $NW\frac{1}{4}NW\frac{1}{4}$ of Section 28, the $W\frac{1}{2}NW\frac{1}{4}$ of Section 29, the $N\frac{1}{2}$ of Section 30, all in Township 20 South, Range 30 East, and all of Section 11, the $W\frac{1}{2}$ and the $SE\frac{1}{4}$ of Section 12, the $W\frac{1}{2}SE\frac{1}{4}$ and $SW\frac{1}{4}NE\frac{1}{4}$ of Section 13, Township 20 South, Range 29 East, N.M.P.M., Eddy County, New Mexico.

2. Protestant Potash Company of America, herein referred to as "PCA", is the owner of State of New Mexico Potash Mining Lease No. M-873 issued by the Commissioner of Public Lands on April 24, 1939, and of the rights created thereby to explore for, develop and produce potassium, sodium, phosphorus and other minerals of similar occurrence and their salts and compounds from the $SE\frac{1}{4}$ of Section 17, Township 20 South, Range 30 East, and other lands in the vicinity thereof.

3. The title of PCA to the potash mining lease embracing the $SE\frac{1}{4}$ of Section 17, Township 20 South, Range 30 East, was acquired by assignment of the rights of Homer H. Harris, the original lessee

of Potash Mining Lease M-873. The said Homer H. Harris, by assignment from M. A. Lewis and Dorothy F. Lewis, his wife, dated March 14, 1939, acquired title to Potash Mining Lease M-274, dated June 30, 1931, which embraced the SE $\frac{1}{4}$ of Section 17, Township 20 South, Range 30 East, and other lands in the vicinity thereof. Under date of April 20, 1939, the said Homer H. Harris and wife relinquished and released unto the State of New Mexico all of their rights, title and interest in and to said Potash Mining Lease No. M-274, as to all lands embraced therein, reciting in said release that it was made for the sole purpose of consolidating said lease with three other leases held by Homer H. Harris, to-wit: Potash Mining Leases M-306, M-275 and M-348. At the time of the relinquishment of Lease M-274 there remained unexpired, of the primary term thereof, only the period from March 14, 1939 to June 30, 1941, on which date said lease would expire by its terms in the absence of production in paying quantities from lands included in said lease.

4. The relinquishment of Lease M-274 so made was filed in the office of the Commissioner of Public Lands on April 24, 1939, and approved by the Commissioner of Public Lands on said date. On the same date, to-wit, April 24, 1939, the Commissioner of Public Lands issued to the said Homer H. Harris Potash Mining Lease M-873, dated April 24, 1939, which embraced all lands included in Lease M-274, and other lands, and provided for a primary term of ten (10) years from its date and as long thereafter as said minerals

should be produced in paying quantities from the leased lands.

5. At the time of the relinquishment of Potash Minine Lease M-274, and the issuance of Potash Mining Lease M-873, the statutes of New Mexico, N.M.S.A., 1929 Comp., provided, in part, as follows:

"§111-501. The Commissioner Public Lands is hereby authorized to issue leases for the development, exploration and production of potassium, sodium, phosphorus and other minerals of similar occurrence, and their salts and compounds including chloride, sulphates, carbonates, borates, silicates, nitrates and any and all other salts and compounds of the said minerals, on any lands of the State of New Mexico upon such terms and conditions as he may deem to be for the best interest of the State and conformable to this Act. * * *

" §111-502. Leases under this Act may be made for a term of ten (10) years or less and as long after as said minerals, or any of them, in paying quantities shall be produced from the leased lands."

6. As a result of seismic and geophysical operations recently completed, Pan American has delineated a Devonian structure disclosed by its Exhibit 1 herein, the closure of which centers in the SE $\frac{1}{4}$ of Section 17, Township 20 South, Range 30 East. In the opinion of qualified experts of Pan American the structure so disclosed indicates that approximately 1825 acres centering in the SE $\frac{1}{4}$ of Section 17, will be productive of oil from the Devonian Formation, that approximately 640 acres would be productive from the Morrow Formation and approximately 1825 acres will be productive from the Strawn Formation. On the basis of reserves developed in comparable reservoirs in the area, it is the opinion of qualified experts of Pan American that the working interest, income which might be expected to accrue from production of oil or gas or both from the Devonian

Formation would be in the approximate amount of \$5,590,000.00, from the Strawn Formation in the amount of \$5,100,000.00, and from the Morrow Formation, \$1,430,000.00. It is further the opinion of such experts that royalty income to the State of New Mexico from such production would be as follows: Devonian, \$675,000.00; Strawn, \$630,000.00; Morrow, \$169,000.00; and to the United States of America, Devonian, \$225,000.00; Strawn, \$210,000.00; Morrow, \$56,000.00.

7. The proposed location of Pan American is within the outer limits of the Barber-Yates Oil Pool in which nine wells are currently producing. These wells were completed in the early 1940's and are producing from an approximate depth of 1600 feet. The Barber 4-A Well which was completed in July of 1942, is located in the $SE\frac{1}{4}$ of Section 17, Township 20 South, Range 30 East, N. M. P. M.

8. Pan American regularly filed with the Commission its application to drill a single well for oil or gas to the Mississippian Formation at an approximate depth of 12,600 feet at a location 660 feet from the South line and 660 feet from the East line of Section 17, Township 20 South, Range 30 East, Eddy County, New Mexico, or in the alternative, to drill at a location anywhere within a circle of 100 feet radius around the Barber Well No. 4A above referred to. In the event of the granting of either of said applications, Pan American proposes to drill to the Mississippian Formation and, using it as a marker to determine whether or not additional drilling

to the Devonian Formation is justified, in which event, additional authority of the Commission would be requested. In so filing its application contemplating an ultimate completion in the Devonian, Pan American was following a practice which has been used in other cases before the Commission. Both of the above locations are in the so-called Potash-Oil Area as defined in Order R-111-A of the Oil Conservation Commission as amended.

9. The proposed locations of Pan American Petroleum Corporation in the $SE\frac{1}{4}$ of Section 17 lie within the area embraced in potash reserves of PCA which aggregate twelve to thirteen thousand acres. At this time the nearest underground workings of PCA are located approximately 1200 feet West of the Barber 4-A Well which Pan American proposes to twin. No work in the mine has occurred at this point since the year 1957.

10. The ore body proposed to be mined by PCA in the $SE\frac{1}{4}$ of Section 17 is approximately 4 feet in thickness and is found at a depth of 700 feet. All existing wells in the Barber-Yates Pool produce at a depth of approximately 1600 feet so that the well bore and casing of all existing wells in that pool, including the Barber 4-A Well, pass through the potash formation which PCA proposes to mine.

11. Under existing practices of PCA it will be necessary for PCA to leave a pillar 100 feet in diameter around the casing in the Barber 4-A Well at such time as mining operations are conducted at the location of this well.

12. The Barber 4-A Well is an average well in the pool.

Extrapolation of the pressure production curve of the wells in the pool indicates that they will continue to produce until approximately 1984 so that, in no event, will it be possible for PCA to mine the ore left in the pillar around the Barber 4-A Well for approximately twenty years.

13. Market value cannot be determined for the potash in place, mining of which would be prevented by existing or future oil and gas wells. The economic impact upon PCA of inability to remove specified quantities of ore therefore is measured by profit which it would have realized from the removal, refining and sale of said ore and not by the gross value of the ore in place.

14. The proposed cementing and casing program of Pan American in the well applied for meet all requirements of the Oil Conservation Commission for wells drilled in the Potash area.

15. Through the use of casing of greater strength than required, and casing-coat on the exterior thereof, the proposed well would have casing strength and cementing program sufficient to avoid the escape of oil or natural gas from said well.

16. It is in the interest of the people of the State of New Mexico that all of its natural resources be developed so that the maximum benefit from each will be realized by the State of New Mexico. While the contemporaneous development of potash deposits and oil deposits underlying them results in certain additional expense, postponement of profits and loss of revenue to those producing each natural resource, it is in the interest of the State of New Mexico that such development go forward simultaneously

wherever possible

17. The drilling of the proposed well of Pan American at the alternate location proposed, which is within a radius of 100 feet of the Barber 4 A Well will minimize the amount of potash which will be required to be left in place during the life of said wells and will not unduly prejudice PCA in its mining operations through loss of profit or otherwise. By reason thereof, the alternate location proposed by Pan American is preferable.

18. The drilling by Pan American of a well at the alternate location will not result in undue waste of potash deposits or constitute a hazard to, or interfere unduly with, potash deposits. To prohibit the drilling of the well of Pan American at the location proposed would unreasonably interfere with the orderly development and production of oil and gas from the deposits indicated by the geological and geophysical exploration conducted by Pan American.

CONCLUSIONS OF LAW

1. State of New Mexico Oil and Gas Lease B-2386 having been issued on January 10, 1934, and been in full force and effect at all times since that date, rights and interests created thereby are paramount and superior to rights created by Potash Mining Lease M-873 which was issued by the Commissioner of Public Lands on April 24, 1939. While the State of New Mexico under the police power can impose reasonable regulations and restrictions upon the exercise of the rights granted by Lease B-2386, subordination of the exercise

of the rights under said lease to the exercise of rights and interests created by the junior Potash Mining Lease M-873 in order to prevent waste of potash or interference with the mining of potash deposits, does not constitute a reasonable exercise of the police power and is beyond the power of the Oil Conservation Commission.

2. The effect of denying the application of Pan American on the basis of the protest of PCA would be to subordinate the rights under its lease to the rights of PCA under a junior lease and would constitute the taking of the property of Pan American without due process of law.

3. The State of New Mexico has not authorized the Oil Conservation Commission to prohibit or postpone the exercise of rights created by oil and gas leases issued by the Commissioner of Public Lands of the State of New Mexico on the basis of possible interference with potash mining operations conducted under a junior lease and the Commission has no authority to deny the application of Pan American Petroleum Corporation under the circumstances of this case.

4. The Oil Conservation Commission of the State of New Mexico has been given jurisdiction and authority over all matters relating to the conservation of oil and gas in New Mexico and is charged with the responsibility of preventing waste of oil and gas and of protecting the correlative rights of the owners thereof. The legislature has granted the Oil Conservation Commission no authority to conserve potash, to prevent the waste thereof, or to prevent interference with potash mining operations. To the extent that Order R-111-A of the

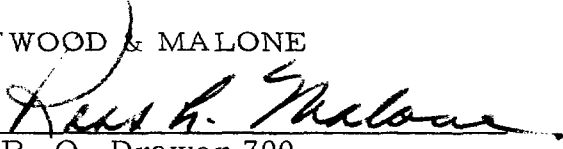
Oil Conservation Commission of New Mexico purports to prohibit the drilling of oil or gas wells, or the production of oil and gas because it would result in interference with potash mining operations or result in the waste of potash, said Order is beyond the authority of the Oil Conservation Commission of New Mexico and provides no basis for denying the application of Pan American in this case.

5. The application of Pan American as elaborated by the testimony in this case meets all valid requirements of the statutes of New Mexico and the Orders of the Oil Conservation Commission for the drilling of a well at the alternate location proposed by Pan American and said application should be granted.

Respectfully submitted,

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By


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