BEFORE THE
OIL CONSERVATION COMMISSION
HOBBS, NEW MEXICO
APRIL 13, 1961

IN THE MATTER OF

CASE 2241 Application of Potash Company of America for an extension of the potash-oil area. Applicant, in the above-styled cause, seeks an extension of the potash-oil area as set forth in Order R-111-A, and amendments thereto, to include the following-described acreage: Township 20 South, Range 29 East, NMPM, Eddy County, New Mexico.

BEFORE:

A. L. Porter

T R A N S C R I P T O F P R O C E E D I N G S

MR. PORTER: The meeting will come to order, please.

We will call next Case No. 2241.

MR. MORRIS: Application of Potash Company of America for an extention of the potash-oil area in Eddy County.

MR. PORTER: I will ask for appearances.

MR. BLACKMAN: I am R. H. Blackman, Potash Company of America, Carlsbad. We have one witness, Mr. J. B. Cummings.

J. B. CUMMINGS

called as a witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BLACKMAN:

Q Will you please state your name.

A J. B. Cummings.

Q You are now employed by the Potash Company of America?

A Yes, I am.

Q And your educational background, Mr. Cummings?

A I am a Mining Engineer, a graduate of the South Dakota School of Mines with a B. S. Degree.

Q When did you receive that degree?

A In 1935.

Q Since 1935 by whom have you been employed?

A I have been employed in the mining industry by several companies. First, three years after graduation, by a number of small gold mines as a mining engineer, geologist, mining superintendant, and on one occasion general manager. During the past 20 years I have been employed in the exploration branch of mining engineering having spent some 5 years with the Bureau of Mines, U. S. Bureau of Mines as a mining exploration engineer. Since 1946 I have been with the Potash Company of America during which time I have served in the capacity of exploration engineer, chief geologist, development superintendant and resident manager.

MR. BLACKMAN: If the Commission please, we offer Mr. Cummings qualifications as a mining engineer.

MR. PORTER: The Commission accepts his qualifications.

DIRECT EXAMINATION

Q Mr. Cummings, the application of the Potash Company of America alleges that it is the owner of U. S. Government potash leases and prospect permits in the southwest quarter of the northwest quarter and the northwest quarter of the southwest quarter in Section 13; and the southeast quarter of the northeast quarter and northeast quarter of the southeast quarter in Section 14, all in township 20 south, range 29 east, Eddy county, New Mexico; is that true?

A That is true.

MR. BLACKMAN: We would like to have applicant's Exhibit No. 1 marked for identification.

(Thereupon, Applicant's Exhibit No. 1 was marked for identification).

Q (By Mr. Blackman) Identify that exhibit, please.

A This exhibit shows - - number 1 in the area outlined here in red is the origional existing R-111-A boundaries. The yellow line here identifies an extention to that boundary listed as R-111-E. Outlined in blue is this area which shows the location of drill holes core test, 1 in which we are principally interested and which will determine the acceptance of commercial potash. It is identified at this particular point as 175.

Q That point is that the west center line of Section 13?

A That is correct. That is near the southwest quarter

of the northwest quarter of Section 13, slightly on the east, and slightly north, approximately 100 feet and 100 feet north.

Q Mr. Cummings, would you identify the curved line which is drawn in light purple?

A This line represents the cut off which is considered to be commercial potash.

Q Mr. Cummings, would you explain why that line is shown as a dotted line in two instances?

A In the first instance it is shown as a dotted line in as much as there is not sufficient information available to indicate that it does not extend beyond this point in this direction nor is there sufficient information to indicate that the mine extends further in this direction.

Q Is there sufficient information available to indicate that it goes that far?

A Yes, there is.

Q Will you explain the basis on which that line is established?

A By interpolation between drill holes, straight line interpolation based upon proportioning the distance between drill holes on the basis of ratio of grade and acceptance of the four intersections at the drill hole.

Q Was this exhibit prepared by you or under your supervision?

A Under my supervision.

MR. BLACKMAN: I'll offer applicant's Exhibit 1 in evidence.

MR. PORTER: Without objection, the exhibit will be admitted.

Q (By Mr. Blackman) Mr. Cummings, I refer you to a document which has been marked applicant's Exhibit 2 and ask if you will identify that document.

A Yes, I recognize that document as the detailed analysis of the core that was taken from the previously mentioned drill hole number 175.

MR. BLACKMAN: May I ask the pleasure of the Commission whether you prefer to have this document read into the record or is it sufficient to simply offer it in evidence?

MR. PORTER: I believe it would be well to read it into the record.

Q (By Mr. Blackman) Read the entire document.

"POTASH COMPANY OF AMERICA

Core Test No. 175

Feb. 21, 1961

From	To	Int.	Sample Number	% K_2O
510' 9 "	-511' 6 1/2"	9 1/2"	701	-
511' 6 1/2"	-511' 11 1/2"	5 "	702	0.98
511' 11 1/2"	-512' 6 "	6 1/2"	703	1.31
512' 6 "	-513' 3 "	9 "	704	1.64

From	To	Int.	Sample Number	% K_2O
513' 3 " -	513' 9 "	6 "	705	35.62
513' 9 " -	514' 4 1/2"	7 1/2 "	706	19.77
514' 4 1/2" -	514' 10 "	5 1/2 "	707	33.43
514' 10 " -	515' 0 1/2"	2 1/2"	708	44.66
515' 0 1/2 " -	515' 2 1/2"	2 "	709	5.15
515' 2 1/2 " -	515' 8 1/2"	6 "	710	-

511' 6 1/2" - 515' 6 1/2" - 48" at 16% K_2O

Floyd W. Neeley
Asst. Chief Chemist "

Q Mr. Cummings, were these samples taken by you or under your supervision?

A Under my supervision.

Q Has this analysis been certified to the U. S. Geological Survey as you have testified?

A Yes, it has.

Q You have mentioned a commercial cut off point of 4 feet 14 K_2O. Will you tell the Commission the origin of that cut off point?

A That is the cut off point of commercial ore and is established by the U. S. Geological Survey.

Q Is it true also that that cut off point heretofore has been used by this Commission in establishing the ore cut off

line for the purpose of defining the area limits of R-111-A as ammended?

Q Mr. Cummings, I will ask you if in your opinion the projection line which you have placed on applicant's Exhibit 1 is, in your opinion, a conservative estimate of the boundary limits of the potash ore in this location.

A Based on mining experience over a long period of years I would say it is very conservative.

MR. BLACKMAN: I will offer in evidence applicant's Exhibit No. 2.

MR. PORTER: Do you have other exhibits?

MR. BLACKMAN: No.

MR. PORTER: Without objection applicant's Exhibit No. 2 will be admitted in the record.

MR. BLACKMAN: That constitutes the case of the proponents on direct examination.

MR. PORTER: Anyone have any questions of Mr. Cummings?

QUESTIONS BY MR. MORRIS:

Q Mr. Cummings, you didn't testify at this hearing as the cores obtained in wells No. 163 and 173, but from your general recollection could you tell me whether the formation of potash as encountered in this test, that is number 175, correlates favorably in percentage of potash with the other two test wells?

A Yes, it does.

Q At the same depth?

A Horizon.

Q So, it might be possible that you have fairly even distribution in this area that might continue further, is that correct?

A That is correct.

MR. MORRIS: That's all I have; thank you.

QUESTIONS BY MR. PAYNE:

Q Mr. Cummings, I note that three of the 40 acre tracts which you propose as extentions do not appear to be commercially productive in their entirety, is that correct?

A As nearly as we can tell by this conservative interpolation, there is a portion outside of the east side and to the north that would not be commercial.

Q Are you proposing that these three 40 acre tracts be taken in their entirety because of subsidence?

A Yes, because of subsidence and because of the fact that we have - - there is also a possibility of continuation beyond our interpolated line.

Q Are there any oil and gas wells in this area at present?

A To my knowledge there are none in that immediate area.

MR. PAYNE: Thank you.

MR. PORTER: Does anyone have a question of the witness? The witness may be excused.

(Witness excused)

MR. BLACKMAN: I would like to state only that the evidence concerning the potash cores which have been taken in the surrounding area has already been presented to the Commission in this case and previous hearings.

MR. PORTER: Is there anyone else to present testimony in this case? Are there any statements?

MR. FULTON: My name is R. S. Fulton, Mining Supervisor, U. S. Geological Survey. In my opinion, the picture presented by Mr. Cummings is a reasonable estimate of the extended ore. Also in my opinion I think the acreage sought by them is also a reasonable request.

MR. PORTER: Does anyone else have anything to say in this case? If not, the Commission will take the case under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, Thomas F. Horne, Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in machine shorthand and reduced to typewritten transcript under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the 4th day of May 1961, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Thomas F. Horne
Court Reporter

My Commission Expires:

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