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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

February 5, 1969

EXAMINER HEARING

IN THE MATTER OF:)

Application of Kennedy Oil)
Company for a waterflood)
project and waterflood)
buffer zone, Eddy County,)
New Mexico.)

Case No. 4038

BEFORE: Daniel S. Nutter,
Examiner

TRANSCRIPT OF HEARING

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MR. NUTTER: Call Case 4038.

MR. HATCH: Case 4038, application of Kennedy Oil Company for a waterflood project and waterflood buffer zone, Eddy County, New Mexico.

MR. KENNEDY: I am Robert B. Kennedy, Kennedy Oil Company, Artesia, New Mexico.

(Whereupon, Applicant's Exhibits Numbers 1 through 5, inclusive, were marked for identification.)

ROBERT B. KENNEDY

called as a witness by the Applicant, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

MR. KENNEDY: We have come here to make application for a waterflood project in the Square Lake Pool, with waterflood buffer zone allowable.

I will refer first to our Exhibit Number 1. It is a portion of the Square Lake Field, showing the Kennedy Oil Company properties, and offset properties, and the status of the present and proposed waterflood project in the area under question. Our project covers the north half of the southwest quarter of Section 19, Township 16 South, Range 31 East, containing our Carper Federal No. 1 and No. 2 wells.

Previous testimony that was given on the prior case

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did concern Anadarko, which is the offset acreage in this particular case.

MR. NUTTER: While we are on this exhibit, the north half of the southwest quarter of Section 19 is the only acreage that is concerned in this case?

MR. KENNEDY: In our case.

MR. NUTTER: Now, you show a proposed injection well in the northeast quarter of the southwest quarter of Section 20, but you recently obtained authority to use that well for injection?

MR. KENNEDY: That's right, that has been granted by the Commission.

MR. NUTTER: Has that well been put on injection?

MR. KENNEDY: No, we are waiting for the conclusion of the order on this project that we are proposing at this time.

MR. NUTTER: Go ahead.

MR. KENNEDY: The red circles, of course, are the expanded project of Kennedy and Anadarko, and the Newmont interest there in Section 19.

Now, I will refer to Exhibit Number 2. On this, we will see that we have the cumulative to 10-1-68 on our Carper Federal No. 1 and No. 2, and then showing October and November production, and the total production from each well in the

1. The first step in the process of the investigation is to determine the scope of the problem.

2. The second step is to identify the causes of the problem.

3. The third step is to develop a plan of action to address the problem.

4. The fourth step is to implement the plan of action and monitor the results.

5. The fifth step is to evaluate the results and make adjustments as needed.

6. The sixth step is to document the results and share them with others.

7. The seventh step is to review the process and make improvements for the future.

8. The eighth step is to communicate the results and share them with others.

9. The ninth step is to evaluate the results and make adjustments as needed.

10. The tenth step is to document the results and share them with others.

11. The eleventh step is to review the process and make improvements for the future.

12. The twelfth step is to communicate the results and share them with others.

13. The thirteenth step is to evaluate the results and make adjustments as needed.

14. The fourteenth step is to document the results and share them with others.

15. The fifteenth step is to review the process and make improvements for the future.

16. The sixteenth step is to communicate the results and share them with others.

17. The seventeenth step is to evaluate the results and make adjustments as needed.

18. The eighteenth step is to document the results and share them with others.

19. The nineteenth step is to review the process and make improvements for the future.

20. The twentieth step is to communicate the results and share them with others.

21. The twenty-first step is to evaluate the results and make adjustments as needed.

22. The twenty-second step is to document the results and share them with others.

23. The twenty-third step is to review the process and make improvements for the future.

section.

Exhibit Number 3 gives our completion dates, total depths, casing sizes, depth, casing cement, and perforations of each well in question.

On the Carper Federal No. 2, eight and five-eighths was set at 374 with 50 sacks of cement. Five and a half fourteen-pound new seamless casing was run in this well, set at 3,309, with 100 sacks of cement, with perforated intervals as shown on the sketch, itself.

Exhibit Number 4 is a density log of our Carper Federal No. 2, which will be the proposed injection well. And on this, we have it labeled to the Grayburg Formation and the San Andres Formation with perforations, size of holes, and a proposed packer setting point, which will be approximately 3,170. That will be a short tension packer run in that well. The intervals are the same as the offset operators have. Mainly the Premier and the Lovington Sand sections are what we are concerned with.

Exhibit Number 5 is a schematic drawing of our proposed injection well. The estimated top of cement behind the eight and five-eighths casing is 191 feet. Five and a half-inch casing was run, new seamless pipe. The cement estimated top is 2,924. We propose that there again to run our tubing with short tension packer set approximately 3,180, so that we

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can inject separately into the Grayburg and the Lovington Sand. The pressure differential there caused us to separate these zones, and pressures anticipated are approximately 2,100 pounds to inject into the Premier, and 2,600 pounds to inject into the Lovington.

We propose to inject approximately 250 barrels of water per day in this well. 150 barrels will be going into the Premier section, and 100 barrels will be going into the Lovington. Prior to any injection in this well, we will pressure-test our casing to 3,000 pounds per square inch. If we have any failure, we will repair at that point and proceed.

Water source will be from a commercial water company, and water will be coming from the Ogallala Formation. Pressured water will be purchased from Anadarko Production Company. Our produced water will be returned to Anadarko Company's plant, treated, mixed with fresh water, and then in turn will give us our injected water.

The estimated life of this project is approximately ten years, there again, depending on economics. The recovery estimate is 50,000 barrels of oil.

Referring back to Exhibit Number 1, on the map the south half of the southeast quarter was previously covered by Order R-1011-B, which did grant allowables. We, just having an

[illegible]

80-acre tract need capacity allowables, because there are times when we come upon peak production where we just have two wells. If furnished, this will protect correlative rights and prevent waste. I introduce Exhibits 1 through 5 in support of the application of Kennedy Oil Company for a waterflood project covering the north half of the southwest quarter of Section 19, Township 16 South, Range 31 East, with buffer zone allowable.

MR. NUTTER: Exhibits 1 through 5 will be admitted in evidence.

(Whereupon, Applicant's Exhibits
Numbers 1 through 5, inclusive,
were admitted in evidence.)

CROSS EXAMINATION

MR. NUTTER: Mr. Kennedy, you heard the testimony offered by Mr. Stumhoffer in the previous case, I presume, that that water will be identical to the water he is going to be injecting?

MR. KENNEDY: It will, off their line.

MR. NUTTER: So this will be the same inhibited water going down the annulus and down the tubing?

MR. KENNEDY: Yes.

MR. NUTTER: That top of the cement at 2,924 on the five and a half-inch casing in the injection well, is that a calculated top or temperature survey?

1. The first step in the process of creating a new product is to identify a market need. This can be done through market research, which involves gathering information about the target market and its needs.

2. Once a market need has been identified, the next step is to develop a product concept. This involves creating a detailed description of the product, including its features, benefits, and target market.

3. The third step is to conduct a feasibility study. This involves assessing the technical, financial, and market viability of the product concept.

4. If the feasibility study is positive, the next step is to develop a business plan. This involves creating a detailed plan for the production, distribution, and marketing of the product.

5. The final step is to launch the product. This involves manufacturing the product, distributing it to the target market, and promoting it through various marketing channels.

1. *Chlorophyll a* (Chl *a*)

1. What is the purpose of the document?
 2. What are the main points of the document?
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1. *Journal of the American Medical Association*, 1997; 277: 1033-1038.

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1. *Phragmites australis* (Cav.) Trin. ex Steud. (Common reed)

Received 12 November 2003; accepted 12 November 2003

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Received 15 February 2005; accepted 15 April 2005

$$f_0 = f_1 = f \quad \text{if } |x| \leq 1, \quad f_0 = f_1 = 0 \quad \text{if } |x| > 1, \quad g_0 = g_1 = g \quad \text{if } |x| \leq 1, \quad g_0 = g_1 = 0 \quad \text{if } |x| > 1,$$
[illegible][illegible]

five and a half days

1. Explain the importance of the following factors in the development of a country's economy:

MR. KENNEDY: That is calculated top.

MR. NUTTER: Any further questions of Mr. Kennedy?

You may be excused.

Does anyone have anything they wish to offer in this case?

MR. HATCH: The Commission has received a letter from Newmont Oil Company supporting the application.

MR. NUTTER: Anything further in Case No. 4038? We will take the case under advisement.

not to be taken as a recommendation.

The following information is for your information only.

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STATE OF NEW MEXICO)
) ss.
 COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Samuel Mortelette
 COURT REPORTER

I do hereby certify that the foregoing is
 a complete record of the hearing held before
 the Executive Hearing of the New Mexico Oil Conservation Commission
 heard by me on 2/5 4038
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Samuel Mortelette, Reporter
 New Mexico Oil Conservation Commission

\mathcal{L}_1 and \mathcal{L}_2 are the loss functions for the first and second stages, respectively. \mathcal{L}_1 is the loss function for the first stage, and \mathcal{L}_2 is the loss function for the second stage.

The first stage is a supervised learning task, where the model is trained to predict the ground truth labels. The second stage is an unsupervised learning task, where the model is trained to learn the underlying structure of the data. The first stage is a supervised learning task, where the model is trained to predict the ground truth labels. The second stage is an unsupervised learning task, where the model is trained to learn the underlying structure of the data.

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