

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

13 March 1985

EXAMINER HEARING

IN THE MATTER OF:

Application of Union Texas Petroleum Corporation for salt water disposal, Lea County, New Mexico. CASE 9523

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

Jeff Taylor
Attorney at Law
Legal Counsel to the Commission
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant: William F. Carr
Attorney at Law
CAMPBELL & BLACK P. A.
P. O. Box 2208
Santa Fe, New Mexico 87501

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I N D E X

WALTER KOMOS

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MR. QUINTANA: We'll call next
Case 8523.

MR. TAYLOR: The application of
Union Texas Petroleum Corporation for salt water disposal,
Lea County, New Mexico.

MR. CARR: May it please the
Examiner, my name is William F. Carr with the law firm Camp-
bell and Black, P. A., of Santa Fe, appearing on behalf of
Union Texas Petroleum Corporation.

I have one witness.

MR. QUINTANA: Are there other
appearances in Case 8523?

If not, sir, would you please
stand up and be sworn in at this time?

(Witness sworn.)

WALTER KOMOS,
being called as a witness and being duly sworn upon his
oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. CARR:

Q Will you state your full name, please?

A My name is Walter Komos and I reside in
Midland, Texas.

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Q And how do you spell your last name?

A K-O-M-O-S.

Q By whom are you employed?

A I'm employed by Union Texas Petroleum as a petroleum engineer.

Q Mr. Komos, have you previously testified before this Commission or one of its examiners and had your credentials accepted and made a matter of record?

A No, I have not.

Q Would you briefly review for Mr. Quintana your educational background and your work experience?

A I graduated from the University of Missouri at Rolla in May, 1979, with a degree in geological engineering.

I went to work with Union -- I mean Texas Pacific Oil Company as a petroleum engineer. I worked for them for two years, at which time they were purchased by Sun Oil Company.

I worked for Sun Oil Company as a production engineer for two and a half years. At that time I left to go to work for Enstar Petroleum in January of 1984.

In October of 1984 Enstar Petroleum was purchased by Union Texas Petroleum and I have been working with Union Texas Petroleum as a reservoir engineer since then.

Q Are you familiar with the application filed in this case on behalf of Union Texas Petroleum Cor-

1
2 poration?

3 A Yes, I am.

4 Q And are you familiar with the proposed --
5 the proposal to convert the Post No. 1 Well to salt water
6 disposal?

7 A Yes, I am.

8 MR. CARR: Are the witness'
9 qualifications acceptable?

10 MR. QUINTANA: They are.

11 Q Mr. Komos, will you briefly state what
12 Union Texas is seeking with this application?

13 A Union Texas proposes to re-enter and con-
14 vert the temporarily abandoned Post No. 1 to a salt water
15 disposal well in the Devonian reservoir through the existing
16 Devonian perforations and some additional Devonian perfora-
17 tions that will be added.

18 Q Did Union Texas file a Form, a Division
19 Form C-108 with all required attachments with the Division?

20 A Yes, they have.

21 Q And is what has been marked as Union
22 Texas Petroleum Corporation Exhibit Number One a copy of
23 that application and attachments, as filed?

24 A Yes, it is.

25 Q Will you now refer to that Exhibit Number
One and first refer to the actual Form C-108 and identify
for Mr. Quintana the disposal interval?

A The Form C-108, on the attachment to it

1 on the C-108 Item 7, the proposed injection interval is
2 12,729 feet to 12,802 feet, which is the Devonian reservoir
3 that we are currently producing out of.

4 Q And this is in the Post No. 1 Well?

5 A And this is in the Post No. 1 Well.

6 Q When was that well drilled?

7 A It was spudded in October of 1982 and was
8 completed in January of 1983.

9 Q What is the current status of this well?

10 A It is temporarily abandoned.

11 Q And why was it abandoned?

12 A It was abandoned due to watering out.

13 Q Would you now go to the plat which is
14 contained within Exhibit Number One, and review that for Mr.
15 Quintana?

16 A The center of the area of review is, of
17 course, the Post No. 1, and the yellow acreage does indicate
18 the Union Texas Petroleum acreage within the area of review.

19 The four -- or three water wells within
20 one mile of the Post No. 1 are indicated, one of which is in
21 the southwest quarter of Section 6; one is in the northwest
22 quarte of Section 7; and one is in the northwest quarter of
23 Section 12. They're a little hard to see.

24 Q And this shows all wells --

25 A And this shows all wells --

-- within the area --

A -- producing and plugged and abandoned in

1 the area.

2 Q Will you now refer to the tabular data
3 which is included in this exhibit and review that?

4 A On the supplement to the C-108 is a list
5 of the current wells within the area of review, their total
6 depth, their completion, and their current status.

7 The Post No. 2 and 3 and Barnhill No. 1
8 are the only producers within the area of review and they
9 are operated by Union Texas.

10 Q What is the status of the Exxon State
11 "EM" No. 1 Well which is listed on this supplement to the
12 Form C-108?

13 A It is currently being completed by Exxon
14 and they have been notified.

15 Q Would you now refer to the schematic
16 drawings which are included in Exhibit One and review those?

17 A Attachments to the C-108 are the wellbore
18 sketches of the current producing Barnhill 1, the Post No.
19 2, and the Post No. 3, currently operated by Union Texas and
20 producing, and the wellbore sketches of the offset plugged
21 and abandoned wells.

22 Q Now if you will go to the wellbore sketch
23 of the proposed injection well, and would you review for Mr.
24 Quintana the way in which Union Texas Petroleum Corporation
25 plans to complete this well for disposal purposes.

A The existing perforations are from 12,729
to 12,750. We propose to add additional perforations,

1 Devonian perforations, from 12,790 to 12,802. Then we plan
2 to run internally plastic-coated 2-7/8ths inch injection
3 tubing on a Bake LocSet packer and set the packer at 12,650
4 feet to begin injection of the produced water.

5 Q Will the annular space be filled with
6 fluid?

7 A Yes, it will.

8 Q And does Union Texas Petroleum Corpora-
9 tion agree to pressure test the fluid in the annulus as re-
10 quired by the Federal Underground Injection Control Program?

11 A Yes, we do.

12 Q Now you've indicated you propose to dis-
13 pose into the Devonian.

14 What portion of the Devonian do you ac-
15 tually propose to inject into?

16 A The Devonian in this area is in excess of
17 600 feet depth. We are currently completed in the upper
18 100-foot of that Devonian, so we will be currently disposing
19 into only the upper 100-foot.

20 Q What is the source of the water which you
21 propose to inject into this well?

22 A It is the produced water from the Post
23 Nos. 2 and 3.

24 Q And these are waters coming also from the
25 Devonian?

A These are waters from the Devonian also.

Q What are you presently doing with this

1 water?

2 A We are hauling the water, or having the
3 water hauled.

4 Q And what costs are you incurring to haul
5 water from these wells?

6 A We're incurring the costs of approximate-
7 ly \$1000 a day.

8 Q And do you request that this order be ex-
9 pedited to the fullest extent possible?

10 A Yes, we do.

11 Q What volumes do you propose to inject or
12 dispose of in this well?

13 A Initially we'll inject 1000 barrels of
14 water per day up to a maximum of 3000 barrels of water per
15 day.

16 Q And is this going to be an open or a
17 closed system?

18 A It will be a closed system.

19 Q Will you be injecting by gravity or under
20 pressure?

21 A It will be under pressure.

22 Q What is the maximum injection pressure
23 you propose to use?

24 A The maximum injection pressure we propose
25 to use is 2500 pounds.

26 Q And is that figure within the pressure
27 limitation of 0.2 pound per foot of depth to the top of the

1 injection interval?

2 A Yes, it is.

3 Q And if the order provided that the pres-
4 sure be limited based on this 0.2 of a pound per foot of
5 depth, would that be satisfactory to Union --

6 A That would be satisfactory.

7 Q -- Texas? Would you now refer ot the
8 water analyses contained in Exhibit Number One and review
9 those for Mr. Quintana?

10 A There are two attachments of water ana-
11 lyses. The initial water analysis contains the three water
12 wells within the one mile area of the proposed injection
13 well and as well as the date of the analysis.

14 And the second attachment is an analysis
15 of the water, the Devonian produced water to be disposed.

16 Q Now if we look at that Devonian produced
17 water, this is water -- you're going to re-injecting water
18 into the Devonian that was produced from it.

19 A Yes, we will.

20 Q Do you anticipate any problems with com-
21 patibility of the fluids?

22 A No, we do not.

23 Q What exactly is the source of the water?
24 You stated it's Devonian. Are there any particular wells
25 that you're going to be taking water from?

A The Post Nos. 2 and 3 are the only two
wells that produced water out of the King South Devonian

1 Field, and so water will be taken from those two wells, in-
2 jected down dip into the Post No. 1.

3 Q You also have some water analyses of
4 fresh water wells in the area --

5 A Yes.

6 Q -- and you just referenced those. What
7 are the fresh water zones in this area?

8 A The Ogallala is the fresh water zone
9 within this area to a depth of 300 feet, and the water wells
10 in the area normally from 80 to 200 feet.

11 Q And all three of these water wells are
12 from the Ogallala?

13 A Yes, they are.

14 Q Would you now go to your cross section,
15 which has been marked as Exhibit Number Two, and review this
16 for the examiner?

17 A The Post No. 1 is indicated in the cross
18 section, as well as the DST and the completion information.

19 The Post No. 1 is shown as down dip from
20 the Post No. 2 and the Post No. 3 and further down dip from
21 the Post No. 1 is (not clearly understood.)

22 The DST information is included. The log
23 is included, and the proposed injection interval is shown,
24 as well as the offset wells, or the producing wells, produc-
25 ing intervals.

26 Q What does this cross section actually
27 show?

1 A It shows the actual log of the Post No. 1
2 and the associated data, completion data.

3 Q Does it also show that the disposal zone
4 correlates to the other wells in the area?

5 A Yes, it does.

6 Q Would you now refer to Exhibit Number
7 Three and identify that for Mr. Quintana?

8 A Exhibit Number Three is the receipt of
9 certified mail to the surface owner and the offset operators
10 of this area.

11 Q Have you provided notice to all the
12 leasehold operators within the area of review?

13 A Yes, we have.

14 Q And those are the return receipts back
15 from each of them?

16 A Yes, they are.

17 Q Mr. Komos, are you aware of similar ap-
18 plications that have been approved by this Division for salt
19 water disposal in the same general area or pool as the sub-
20 ject application?

21 A Yes, Cabot Petroleum in the King Field
22 one mile to the north of us was also received and has an
23 active Devonian disposal well in the Devonian reservoir,
24 which is case docket --

25 MR. CARR: Mr. Examiner, that
approval was by Order R-6101 and the order was entered on
September 10, 1979, and we would ask that you take admini-

1 strative note of that order.

2 MR. QUINTANA: R-6101 will be
3 taken into administrative notice.

4 A The King Field north of us is a similar
5 structural feature as our feature and it's separated by a
6 structural saddle between the two features.

7 Q Mr. Komos, have you examined the
8 available geologic and engineering data and have you found
9 as a result of this examination any evidence of open faults
10 or any other hydrologic connections between the disposal
11 zone and any underground source of drinking water?

12 A No, I have not.

13 Q In your opinion will granting this
14 application prevent waste, protect correlative rights, and
be in the best interest of conservation?

15 A Yes, it will.

16 Q Were Exhibits One through Three prepared
17 by you or under your direction and supervision?

18 A Yes, they were.

19 MR. CARR: At this time we
20 would offer into evidence Union Texas Petroleum
21 Corporation's Exhibits One through Three.

22 MR. QUINTANA: Exhibits One
through Three will be entered as evidence.

23 MR. CARR: That concludes my
24 direct examination of Mr. Komos.

25

CROSS EXAMINATION

BY MR. TAYLOR:

Q On your Exhibit Three you have the receipts. What letter were those attached to?

A That cover page should be the letter that was attached to it.

Q February 26th?

A If you refer back to Figure One.

MR. CARR: Or Exhibit Number One.

A Or Exhibit Number One, I'm sorry, the letter dated February 13th, 1985, to all surface owners and offset operators.

MR. QUINTANA: So a copy of the application itself was sent with this.

MR. CARR: Yes.

Q Were they notified either of the date of the hearing or the method to make objection for this?

A They were notified of the -- to be able to make an objection to this, as shown in the letter. Objections may be filed by contacting the Oil Conservation Division or we can be contacted by them, and address and phone number.

Q That's not the letter I'm looking at.

MR. CARR: Okay. It's about a third of the way back --

Q Okay, I see.

MR. CARR: -- and it's address-

sed -- it's dated February 13th, to all surface owners and
offset operators, and it provides the method of -- of pre-
senting an objection.

Q Okay, thank you.

MR. QUINTANA: Are there further questions of the witness?

If not, he may be excused.

Case 8522 will be taken under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY
CERTIFY that the foregoing Transcript of Hearing before the
New Mexico Oil Conservation Division was reported by me;
that the said transcript is a full, true, and correct record
of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Exon hearing of Case No. 8523
heard by me on 13 March 1985.

[Signature], Examiner
Oil Conservation Division