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

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

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

7 Q When was that well drilled?

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

10 Q What is the current status of this well?

11 A It is temporarily abandoned.

12 Q And why was it abandoned?

13 A It was abandoned due to watering out.

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

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

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

25 Q And this shows all wells --

A And this shows all wells --

Q -- 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.

Q And is that figure within the pressure  
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  
2           A           It shows the actual log of the Post No. 1  
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  
of this area.

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

12          A           Yes, we have.

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

15          A           Yes, they are.

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

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

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

1 administrative note of that order.

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

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

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

13 A No, I have not.

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

17 A Yes, it will.

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

20 A Yes, they were.

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

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

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

## CROSS EXAMINATION

1  
2 BY MR. TAYLOR:

3 Q On your Exhibit Three you have the re-  
4 ceipts. What letter were those attached to?

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

7 Q February 26th?

8 A If you refer back to Figure One.

9 MR. CARR: Or Exhibit Number One.

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

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

15 MR. CARR: Yes.

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

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

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

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

Q Okay, I see.

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

1  
2 sed -- it's dated February 13th, to all surface owners and  
3 offset operators, and it provides the method of -- of pre-  
4 senting an objection.

5 Q Okay, thank you.

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

8 If not, he may be excused.

9 Case 8522 will be taken under  
10 advisement.

11 (Hearing concluded.)  
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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 Ex parte hearing of Case No. 8523 heard by me on 13 March 1985.

[Signature], Examiner  
Oil Conservation Division