

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY )  
THE OIL CONSERVATION DIVISION FOR THE )  
PURPOSE OF CONSIDERING: )  
APPLICATION OF THE NEW MEXICO OIL )  
CONSERVATION DIVISION FOR AN ORDER )  
REQUIRING MARALO, LLC, TO REMEDIATE )  
HYDROCARBON CONTAMINATION AT AN )  
ABANDONED WELL AND BATTERY SITE, )  
LEA COUNTY, NEW MEXICO )

CASE NO. 13,142

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

November 20th, 2003

Santa Fe, New Mexico

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Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, November 20th, 2003, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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 Examiner Hearing  
 CASE NO. 13,142

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## A P P E A R A N C E S

FOR THE DIVISION:

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and  
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By: RICK G. STRANGE

FOR JAY ANTHONY:

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By: DAVID SANDOVAL

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   3:47 p.m.:

3           EXAMINER CATANACH: All right, at this time we'll  
4 call the hearing back to order and call Case Number 13,142,  
5 which is the Application of the New Mexico Oil Conservation  
6 Division for an order requiring Maralo, LLC, to remediate  
7 hydrocarbon contamination at an abandoned well and battery  
8 site, Lea County, New Mexico.

9           Call for appearances in this case.

10          MS. MacQUESTEN: Gail MacQuesten representing the  
11 Oil Conservation Division.

12          EXAMINER CATANACH: Additional appearances?

13          MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of  
14 the Santa Fe law firm of Kellahin and Kellahin. I'm  
15 appearing today in association with Mr. Rick Strange. Mr.  
16 Strange is an attorney, he's a member of the Texas bar. He  
17 resides in Midland, Texas, and their firm is the Cotton,  
18 Bledsoe, Tighe and Dawson firm. Together we represent  
19 Maralo, LLC.

20          EXAMINER CATANACH: Any additional appearances?

21          MR. SANDOVAL: Mr. Examiner, my name is David  
22 Sandoval. I'm an attorney with Heard, Robins, Cloud, Lubel  
23 and Greenwood here in Santa Fe, and I'm here appearing on  
24 behalf of the surface owner, Jay Anthony.

25          EXAMINER CATANACH: Any additional appearances?

1                   How many witnesses do we have today? Ms.  
2 MacQuesten.

3                   MS. MacQUESTEN: I have one witness, Willie  
4 Olson, for the OCD.

5                   EXAMINER CATANACH: Mr. Kellahin?

6                   MR. KELLAHIN: We have two potential witnesses to  
7 be sworn.

8                   EXAMINER CATANACH: Okay, and do you have any  
9 witnesses, Mr. --

10                  MR. SANDOVAL: I'd like to present Mr. Anthony  
11 for some short testimony.

12                  EXAMINER CATANACH: Okay. Can I get all the  
13 potential witnesses to stand and be sworn in at this time?

14                  (Thereupon, the witnesses were sworn.)

15                  EXAMINER CATANACH: You may proceed, Ms.  
16 MacQuesten.

17                  MS. MacQUESTEN: I would call William Olson.

18                                 WILLIAM C. OLSON,  
19 the witness herein, after having been first duly sworn upon  
20 his oath, was examined and testified as follows:

21   DIRECT EXAMINATION

22 BY MS. MacQUESTEN:

23                   Q.    Would you please state your name for the record?

24                   A.    My name is William C. Olson.

25                   Q.    And where do you work?

1           A.    I'm employed by the Environmental Bureau of the  
2 Oil Conservation Division, which is a division of the  
3 Energy, Minerals and Natural Resources Department.

4           Q.    And in what capacity are you employed there?

5           A.    I'm a senior hydrologist for the Environmental  
6 Bureau.

7           Q.    Could you review briefly your relevant education  
8 and work experience?

9           A.    I have a bachelors in geology and a master's in  
10 hydrology from the New Mexico Institute of Mining and  
11 Technology, and I've been employed over a period of 17  
12 years with the State of New Mexico, 15 of that with the Oil  
13 Conservation Division as a hydrologist.

14          Q.    Now, hydrologist involves the investigation of  
15 water?

16          A.    It involves investigation of groundwater  
17 contamination, as well as remediation of soils, a variety  
18 of types of sites from fixed facilities, refineries and gas  
19 plants, to oilfield field locations and other types of  
20 facilities as well, oilfield facilities.

21          Q.    How many site-remediation cases have you reviewed  
22 or been involved with?

23          A.    Soil-remediation sites, I've worked on thousands  
24 of soil-remediation sites and pit-closure sites, especially  
25 up on the San Juan Basin, a large number up there, and also

1 worked on a lot of soil-remediation sites, refineries, as  
2 part of cleanup of contaminated groundwater and the  
3 associated soil contamination that is there as well.

4 MS. MacQUESTEN: I would tender Mr. Olson as an  
5 expert in hydrology, water and surface contamination and  
6 remediation.

7 EXAMINER CATANACH: Are there any objections?

8 MR. KELLAHIN: No, sir.

9 EXAMINER CATANACH: Mr. Olson is so qualified.

10 Q. (By Ms. MacQuesten) Mr. Olson, are you familiar  
11 with the investigation of contamination at a former tank  
12 battery site near the Humble State Well Number 3 in Lea  
13 County?

14 A. Yes, I am. I'm currently the staff person  
15 responsible for the oversight of this site.

16 Q. If I may approach, I have a packet of exhibits.  
17 Mr. Olson, how did the contamination issue at  
18 that site come to the attention of OCD?

19 A. This originally came to the attention through Mr.  
20 Jay Anthony, who had filed a complaint with the District  
21 Office in Hobbs, New Mexico, and that was -- complaint was  
22 originally filed with Donna Williams, who was the  
23 environmental inspector for the OCD Hobbs District Office.

24 Q. Is she still with the OCD?

25 A. No, she's no longer employed by the OCD.

1 Q. Would you please take a look at what has been  
2 marked as Exhibit Number 1? Is that a copy of the  
3 complaint that Donna Williams took regarding this case?

4 A. Yes, it is.

5 Q. And what is the date of that complaint?

6 A. There's -- The initial date on the complaint is  
7 October 6th of 1999.

8 Q. If you would look to the middle of that page, she  
9 describes an investigation and findings. What location or  
10 locations are described there?

11 A. Described on this is -- particularly, is an old  
12 Maralo lease location, and it also refers to the Shell "A"  
13 State Number 1 site in the middle part of the form here,  
14 which is the actual site investigation that she conducted.  
15 It refers to the tank bottom -- or not a tank bottom but a  
16 tank battery facility at the Humble State Number 3.

17 Q. Which of those locations is relevant to our case  
18 today?

19 A. Based on the information we have, it's the Humble  
20 State Number 3, is the location for which we have records  
21 on in the Oil Conservation Division associated with that  
22 facility.

23 Q. That is the location where she describes  
24 "asphalty material"?

25 A. That's correct.

1 Q. Does this investigation complaint form refer to  
2 any actions that were taken regarding this complaint?

3 A. Yes, at the bottom of the page, right under the  
4 section on "Follow-Up", it lists a November 15th, 1999,  
5 date where she had sent a letter requesting a remediation  
6 plan for determining the extent of contamination at the  
7 site.

8 And also it discusses a call which they had, a  
9 conference call with Maralo, on December 1st of 1999,  
10 regarding the letter that they had sent.

11 Q. Would you please take a look at what has been  
12 marked as Exhibit Number 2? Is that the letter that is  
13 referred to in the complaint document?

14 A. Yes, it is.

15 Q. I notice there are a lot of scribbles on this  
16 letter. Are those scribbles made by you?

17 A. No, this is some notations that -- This is the  
18 way the letter came from the District Office. They had  
19 made some notations on phone numbers of people and  
20 relations to the site.

21 Q. What does Ms. Williams ask for in this letter?

22 A. In this letter, she is stating her observations  
23 from her field inspection and is asking that Maralo perform  
24 an investigation to determine the extent of contamination  
25 at the location and determine what remediation may be

1 necessary at the site.

2 Q. Does she also request a verification of the  
3 legals on the tank battery locations?

4 A. Yes, she did.

5 Q. What -- Do you know whether Maralo made a  
6 response to this letter?

7 A. The response appears to be -- to this letter, at  
8 least what we have from our files, is just in her -- on  
9 Exhibit Number 1 at the bottom of the "Follow-Up" where it  
10 notes that they had a conference call about this letter at  
11 that point.

12 Q. Did they submit a cleanup plan?

13 A. Not to my knowledge.

14 Q. Did they provide verification of the legals on  
15 the tank-battery locations?

16 A. Not to my knowledge.

17 Q. Was further investigation done of this site?

18 A. Further investigation has been done at this site  
19 by the Oil Conservation Division, as well as by the land  
20 owner, Mr. Jay Anthony.

21 Q. What investigation did Mr. Anthony perform,  
22 first?

23 A. The first thing that we had come in after this  
24 was a representative of his that had sampled a water well  
25 on the property that is right in the approximate location

1 or adjacent to the former tank battery.

2 MR. KELLAHIN: Mr. Examiner, at this time we're  
3 going to object to the hearsay testimony with regards to  
4 whatever searches or conduct was initiated by the  
5 landowner.

6 MS. MacQUESTEN: We don't intend to offer that  
7 into evidence, but we offer this only to indicate what  
8 further action was taken by OCD in response to Mr.  
9 Anthony's submitting the results.

10 MR. KELLAHIN: Do you propose to introduce  
11 Exhibit 5?

12 MS. MacQUESTEN: Yes, we will at some point.

13 MR. KELLAHIN: Is this not a study done by Mr.  
14 Seay on behalf of the landowner?

15 MS. MacQUESTEN: It is, but it's not the study  
16 we're talking about at this point. The first study was  
17 simply of the water samples. The second study was a soil-  
18 contamination study.

19 MR. KELLAHIN: When we come to it, Mr. Examiner,  
20 we will object to Exhibit 5.

21 EXAMINER CATANACH: You may proceed.

22 Q. (By Ms. MacQuesten) When Mr. Anthony presented  
23 his water samples to you, what action did OCD take?

24 A. Those samples that show some elevated chlorides  
25 in groundwater from that well, the petroleum screen that

1 they had done on the water sample was limited, so at that  
2 point the Division arranged with Mr. Anthony to come back  
3 and sample the well.

4 Q. Were you involved in taking that sample?

5 A. Yes, I obtained that sample from the water well.

6 Q. What was the result of your sample?

7 A. It verified that we did have some chloride  
8 contamination of groundwater above the New Mexico Water  
9 Quality Control Commission standard, and it did not confirm  
10 any petroleum contamination of the water.

11 Q. So your test results corroborated the results  
12 that Mr. Anthony had submitted to you?

13 A. Yes, it did. And we also -- We wanted to check  
14 to make sure that we didn't have also some of the benzene,  
15 toluene, ethylbenzene, xylene contamination of the water,  
16 which is typically found along with produced water.

17 Q. What did you see when you did your site visit?  
18 Could you describe the scene for us?

19 A. When we arrived at the site, Mr. Anthony pointed  
20 out what was the former location of the tank battery, and  
21 the appearance of three pits, one to the south of the tank  
22 battery, and there was two pits located to the west of the  
23 tank battery.

24 And then there's an area to the -- there's a road  
25 that crosses the site right there, and then to the north of

1 that road there was surface contamination of large chunks  
2 of asphaltic-type oil, oily material.

3 Q. Was there any equipment at the site?

4 A. No, there was not.

5 Q. This asphaltic area with chunks, how large an area  
6 are we talking about?

7 A. I didn't make a notation of the exact size of  
8 that area. I'd estimate maybe an acre or so at that point.  
9 I don't really have specific information on the exact size  
10 of that, though. It covered an area that had been cleared,  
11 and it appeared that the material had been spread across or  
12 disked across at that point.

13 Q. How big were these chunks of asphalt that you  
14 saw?

15 A. Materials range from smaller pieces up to, you  
16 know, maybe softball size or maybe a little larger.

17 Q. You testified that there were three pits?

18 A. Yes, there was three pits at the location as  
19 well.

20 Q. What did they look like?

21 A. It appeared that they had been covered or buried  
22 at some point in time, and the oil had resurfaced around  
23 the rims of these pits. There was a hard, asphaltic oil  
24 rim around each of the pits.

25 Q. Did you see where the water well was located?

1           A.    The water well was located next to the road,  
2 along the area of where the -- just north of where the tank  
3 battery was located.

4           Q.    All of these areas that you're describing, did  
5 they all -- are they all on a single lease?

6           A.    To our knowledge, they're all part of a lease  
7 associated with the Humble State Number 3 well.

8           Q.    Now, given the findings that you had at that  
9 point from Mr. Anthony's test results and from the OCD test  
10 results that showed chlorides in the well water, what were  
11 your suspicions at this point in the investigation?

12          A.    Our first thought was that the pits had been used  
13 for disposal of oily waste as well as produced water that's  
14 produced in conjunction with oil and gas.

15          Q.    So what did you decide to do next?

16          A.    At that point we had sent a letter to Maralo  
17 requesting a work plan to determine the extent of  
18 contamination at the site.

19          Q.    Did they provide one?

20          A.    No, they did not. We did receive return  
21 correspondence that they did not feel that they needed to  
22 perform any work at the site.

23          Q.    Did you conduct any further investigation of the  
24 site?

25          A.    Yes we did, we had -- at point had come back, at

1 a series of points, to look at the pits and potential  
2 contamination, the magnitude of contamination in the pit  
3 sites as well as in the tank battery area.

4 Q. In fact, there were three reports done on soil  
5 contamination regarding this site?

6 A. There was three that were conducted, yes.

7 Q. Two by OCD and the one report from Mr. Seay that  
8 was previously mentioned?

9 A. That's correct.

10 Q. I'd like you to start out by just providing a  
11 timeline for us on these on these three investigations.  
12 The first investigation was done by OCD; is that right?

13 A. Yes, was looking at following some correspondence  
14 on -- with Maralo on cleanup of the site. The Division  
15 came out at that point and obtained some soil samples from  
16 a few different portions of the site.

17 Q. That was in the summer of 2001?

18 A. That is in -- yes, I believe it was in --  
19 actually, it was in -- the samples were taken on May the  
20 2nd of 2001.

21 Q. Okay. I'd like you to take a look at Exhibit  
22 Number 3. Is that the report from that first OCD  
23 investigation of soil contamination at the site?

24 A. Yes, this is a laboratory report of the soil  
25 samples that the OCD took at that time.

1 Q. Could you take a look at Exhibit Number 4? Is  
2 that a copy of the report from OCD's investigation of soil  
3 contamination the next year, in 2002?

4 A. Yes, that is correct.

5 MR. SANDOVAL: Mr. Examiner, would you mind if I  
6 sit at counsel table?

7 EXAMINER CATANACH: No, no problem at all.

8 THE WITNESS: And these samples, according to  
9 this report, were taken on May the 16th of 2002.

10 Q. (By Ms. MacQuesten) And the last report -- and  
11 this is the one that we have a pending objection on -- is  
12 that Exhibit Number 5, the Seay report done in 2003?

13 A. That's correct, this is the report that was  
14 provided to the OCD by the land owner.

15 Q. So there were three investigations done over the  
16 course of three years?

17 A. Three that involved soils. The first inspection  
18 of the site and sampling involved water-quality sampling of  
19 the water well.

20 Q. Let's start by looking at Exhibit Number 3, and  
21 that is the results of the 2001 investigation done by OCD.  
22 Now, the first page from the back is a summary of the  
23 findings; is that correct?

24 A. Yes, this is a summary of the laboratory results  
25 provided by the laboratory.

1 Q. And behind that is a summary of the detailed data  
2 from the testing?

3 A. Yes, actually this is the actual -- following  
4 that is the actual laboratory data from TraceAnalysis Labs,  
5 Lubbock, Texas.

6 Q. I'd like you to take a look at the very last page  
7 and tell us what that is.

8 A. The last page is a diagram showing the  
9 approximate locations of the samples that were obtained by  
10 the OCD.

11 Q. Those three white rectangles, those are the three  
12 pit areas that you saw?

13 A. Yes, there's three pit areas. They're not  
14 actually to scale from -- When I was out there on the first  
15 investigation, the pit area that you see there to the south  
16 of the old tank battery area on the south side is -- that  
17 pit is approximately 75 feet square, and so these are not  
18 quite drawn to scale. The two pits that are listed to the  
19 west of the old battery area are -- were approximately 150  
20 foot square. That was just on a rough pacing when I was  
21 out at the site on the initial site inspection.

22 Q. So it's not to scale, but it shows roughly the  
23 areas that you described to us before?

24 A. Yes.

25 Q. And the dark rectangles, those are labeled "old

1 battery area". What did you see in that area?

2 A. The old battery area on the south side, the one  
3 that's listed there on the diagram, was indicated to us as  
4 the former location of the tank battery. I believe there  
5 was four tanks that were located at that portion of the  
6 site, as indicated to us by Mr. Anthony.

7 And then there's the area that's to the north  
8 side, which is just designated as the old battery area,  
9 north side.

10 Q. Now, if you look at the bottom of this page,  
11 there's an index showing six samples taken from this area?

12 A. That's correct.

13 Q. And the samples were taken at the locations that  
14 are small circles marked with X's?

15 A. That is correct.

16 Q. One was in the old battery site, and the rest are  
17 in the pit areas?

18 A. Yeah, sample number 1 was located in the old  
19 battery area, south side, and then the remainder are  
20 located in the pit locations.

21 Q. And samples 5 and 6, if I understand this  
22 correctly, were taken from one single location but at  
23 different depths?

24 A. Well, they're taken from approximately the same  
25 area but at different depths.

1 Q. What kind of depths are we talking about in the  
2 tests done here?

3 A. Most of these were -- well, two of the samples,  
4 sample 1 and number 2, were taken across the interval from  
5 zero to 12 foot.

6 Sample number 3 was a surface sample.

7 And sample 4 was collected from four feet deep.

8 And then sample 5 and 6 were taken from  
9 approximately -- one's taken -- sample 5 is taken from  
10 about the three- to four-foot interval in the pit.

11 And sample number 6 is collected from  
12 approximately six to eight foot depth.

13 Q. All right. If you'd turn back to the first page,  
14 I'd like to talk about the results from those samples. The  
15 first page, in the center there's a box that's titled  
16 "BTEX". Does that summarize the result of the test for  
17 hydrocarbons?

18 A. Yes, it's the summary of the results for the  
19 volatile organics, notably the benzene, toluene,  
20 ethylbenzene and xylene, and as well as on the far right-  
21 hand side is listed the total petroleum hydrocarbon  
22 analysis.

23 Q. Is there a standard for an acceptable or  
24 unacceptable level of TPH?

25 A. The Division uses a guidance that has been

1 adopted for use in closure of unlined pits as well as for  
2 remediation of subsurface spills and releases.

3 Q. And what is that system?

4 A. It's a tiered system, largely based upon the  
5 depth to groundwater at the site, and it's also based upon  
6 distance to water wells, as well as distance to surface  
7 water bodies.

8 Q. What are the acceptable levels under those  
9 different tiers?

10 A. Based upon the tiered system, you essentially  
11 rank the site based on the site characteristics, and you  
12 have a criteria that essentially sets it out into either a  
13 high -- high-risk, low-risk or moderate-risk area, and then  
14 you have a TPH level that is scaled to the type of risk at  
15 the site.

16 Q. What TPH level would be acceptable in a high-risk  
17 area?

18 A. In the high-risk area, the TPH level is 100  
19 milligrams per kilogram.

20 Q. And a moderate risk level?

21 A. A moderate risk level uses a level of 1000  
22 milligrams per kilogram.

23 Q. And the lowest risk level?

24 A. Is 5000 milligrams per kilogram.

25 Q. Which tier would apply in this case?

1           A.    At this site we would most likely be looking at  
2 the 5000-milligram-per-kilogram level, based upon the depth  
3 to groundwater at the site and the -- from what we --  
4 observations of the site, it would be 5000, at least from  
5 what we've seen.

6           Q.    Is that true even though there's a water well  
7 located close by?

8           A.    It could be argued that the level should be 100,  
9 but based upon some of the contamination that we've seen,  
10 I'd say we probably would be looking most likely towards a  
11 5000-milligram-per-kilogram cleanup level.

12          Q.    What are these levels attempting to protect?

13          A.    They are attempting -- The 100-milligram-per-  
14 kilogram level is when you're in a shallow -- largely in a  
15 shallow groundwater area.

16                    You have a level of 1000 milligrams per kilogram  
17 for moderate risk areas, approximately 50 feet to 100 feet  
18 to groundwater.

19                    And then over 100 feet to groundwater there's a  
20 5000-milligram-per-kilogram level. The 5000 level is  
21 largely based upon detriment to surficial plants at that  
22 point, and it is -- Well, the idea is that the leachability  
23 through large levels is not great at that concentration,  
24 and also that concentration is allowable for plant  
25 viability at the surface.

1 Q. You mentioned that these standards come from soil  
2 remediation guidelines for surface impoundments?

3 A. That's correct.

4 Q. When did those take effect?

5 A. They were developed in -- I don't know the exact  
6 month, but it was in 1993.

7 Q. What were the standards before that time?

8 A. Up till that time we had been using the 100-  
9 milligram-per-kilogram cleanup level, which is the level  
10 that was used at that time by the -- or developed by the  
11 New Mexico Environment Department, Underground Storage Tank  
12 Bureau, for petroleum releases.

13 Q. So prior to 1993 there was a straight 100  
14 guideline for all circumstances?

15 A. That's the level that we were using for cleanups  
16 at the Environmental Bureau at that time.

17 Q. So the standards applicable now for entities like  
18 Maralo, who are being judged by the lowest standard, are  
19 actually more favorable than they were prior to 1993?

20 A. Yes, there's more discretion given for varying  
21 depths to groundwater.

22 Q. If we turn back to the results of the Summary  
23 Report from the 2001 investigation, if 5000 is the standard  
24 that we're looking for, do these samples show acceptable  
25 levels of TPH?

1           A.    No, they do not, according to our guidance  
2 criteria. We have -- and I'll have to maybe lay these out  
3 for you. The first sample, which goes by the field code  
4 over on the left, has a multi-digit code which is the --  
5 the first two digits is the year, and then the second two  
6 digits is the month, and then the next two digits is the  
7 day, and then there's a four-digit military time.

8                   And those sample codes correspond back to the  
9 sample locations on the final figure. So -- but they're  
10 laid out the same way as the samples were taken. So the  
11 first result that you see on that, which has a TPH level of  
12 35,700, would be sample number 1, and then subsequently  
13 sample 2, 3, 4, 5 and 6 --

14           Q.    Now sample number 1 --

15           A.    -- down below that.

16           Q.    Excuse me. Sample number 1 was the sample taken  
17 at what is labeled here as the old battery area, south  
18 side?

19           A.    Yes, that was the sample that was taken from  
20 about the zero-to-12-inch level in the tank-battery --  
21 former tank-battery location.

22           Q.    And that has the highest level of TPH?

23           A.    Yes, it showed 35,700 milligrams per kilogram of  
24 total petroleum hydrocarbons.

25           Q.    The remaining samples were all taken from it

1 areas?

2 A. The remaining were taken from the pit areas, that  
3 is correct.

4 Q. And as we discussed before, samples 5 and 6 were  
5 taken at roughly the same location but at different depths?

6 A. Yes.

7 Q. And even at the deeper depth we still have an  
8 unacceptable level of TPH?

9 A. Yes, at the 6- to 8-foot level we're still seeing  
10 16,500 milligrams per kilogram of total petroleum  
11 hydrocarbons.

12 Q. The rest of the summary report covers whether  
13 chlorides were found in these samples; is that right?

14 A. That's correct.

15 Q. And were chlorides found?

16 A. In this sampling the chlorides were all nondetect  
17 in each sample set.

18 Q. I'd like to jump ahead to what has been marked as  
19 Exhibit Number 6 and ask you if you can tell us what this  
20 exhibit shows.

21 A. This Exhibit is showing some photographs of where  
22 the samples were obtained.

23 Q. Were these pictures taken during this first soil-  
24 contamination investigation?

25 A. Yes, they were taken during this investigation.

1 Q. And are they part of the investigation file?

2 A. Yes, they are.

3 Q. What does the top picture show?

4 A. The top picture shows the backhoe sample that was  
5 being used to obtain the deeper samples at pit locations,  
6 and that would be for samples number 5 and number 6.

7 Q. What is that darker substance?

8 A. That's petroleum-contaminated soils, dark soils.

9 Q. And the picture on the bottom of that exhibit?

10 A. This, you can see the actual rim of the pit lines  
11 and how the petroleum hydrocarbons have been resurfaced at  
12 the margins of the pit.

13 Q. Is that that white substance in the center of the  
14 picture?

15 A. Yes, in this black-and-white photo it comes out  
16 as kind of a whitish substance. It's actually black, kind  
17 of black to gray, grayish material.

18 Q. I hate to break it to you, but the second-class  
19 citizens here have the black-and-white photos, but the  
20 Hearing Examiners and the opposing counsel have the color  
21 pictures. They may be able to see it a little better than  
22 we can.

23 Is this second picture consistent with what you  
24 saw when you visited the site?

25 A. Yes, except for the soils that were dug out at

1 that time. We did not dig out any soil samples at the  
2 site, but the picture below represents how both -- or  
3 actually all the pits were pictured with petroleum  
4 hydrocarbons that had surfaced around the rims of the pit.

5 Q. I'd like to turn now to the second soil  
6 investigation that was done in 2002, and that is Exhibit  
7 Number 4. Why was additional testing done?

8 A. At that point we were a little confused that we  
9 weren't seeing any chloride contamination, because we had  
10 originally believed that this produced water had been  
11 disposed in these areas, and we were looking at trying to  
12 obtain some deeper samples at that point to see if maybe  
13 chlorides were found deeper in the profile, in the soil  
14 profile.

15 Q. How deep were the samples taken in this second  
16 investigation?

17 A. In this portion of the investigation, they were  
18 taken from about the 27- to 28-foot level with a small  
19 trailer-mounted drill rig.

20 Q. All right. Now again, we have -- the first pages  
21 provide the summary of the results, followed by the data?

22 A. Yes, the first two pages contain the summary of  
23 the report. And then the actual laboratory data that the  
24 summary is obtained from is contained on the subsequent  
25 pages.

1 Q. Now, if we look at the box on the bottom of the  
2 first page of Exhibit 4, it's set up similar to the box we  
3 looked at in Exhibit Number 3; is that right?

4 A. That's correct.

5 Q. And in this investigation there were two areas  
6 that were sampled?

7 A. Yes, there was one area that was sampled on the  
8 north side of the road, about 43 yards, roughly, north of  
9 the on-site water well. And then the remainder of the  
10 samples were taken from a borehole that's listed as the  
11 southwest area, and it's approximately taken in one of the  
12 pits over there in the southwestern area.

13 Q. So this box shows the results we have -- a number  
14 of listings for "North Area" and a number of listings for  
15 "Southwest Area" at different depths?

16 A. Yes, each one of those are -- the north area is a  
17 single borehole, and then you have different sample  
18 intervals that were obtained with depth down from two feet,  
19 down to 27 feet. And then in the southwest area you had,  
20 again, a single borehole with samples taken from 5 feet to  
21 27 to 28 feet in depth.

22 Q. All right. Looking at the results for the north  
23 area, were there unacceptable levels of TPH all the way  
24 down to 27 feet?

25 A. Yes, it was seen throughout the soil profile in

1 that area north of the battery.

2 Q. What were the results for the southwest area?

3 A. The southwest area showed a very high level --  
4 high levels of total petroleum hydrocarbons down to a depth  
5 of about 20 feet, where the concentrations dropped off at  
6 that point to low levels, below our guidance criteria.

7 Q. And if you could turn to the next page of Exhibit  
8 Number 4, these are the results for chlorides?

9 A. Yes, on the back of the first page, and then on  
10 the second page.

11 Q. And what were those results?

12 A. Again, we showed very low chloride concentrations  
13 in the soil profile.

14 Q. Now, a third examination was done, but this one  
15 was not done by OCD; is that right?

16 A. That's correct.

17 Q. This was done by Eddie Seay for -- on behalf of  
18 land owner Jay Anthony?

19 A. Yes, it was, and it was submitted by Mr. Seay for  
20 Mr. Anthony.

21 Q. And is Exhibit Number 5 a copy of the report that  
22 was submitted by Mr. Seay?

23 A. Yes, it is.

24 Q. Did you use this report in your evaluation of the  
25 site and in what you would -- in making your decision

1 regarding what you would request from Maralo regarding the  
2 site?

3 A. Yes, the -- this report --

4 MR. KELLAHIN: Mr. Examiner, at this time I'm  
5 going to renew my objection to Mr. Olson testifying from or  
6 utilizing this report.

7 EXAMINER CATANACH: What is the basis for that  
8 objection, Mr. Kellahin?

9 MR. KELLAHIN: The basis is hearsay, Mr.  
10 Examiner. The difficulty is that Mr. Seay is not here to  
11 describe for you the collection protocol, the methodology,  
12 the sampling and all the rest.

13 It's very obvious that this is difficult to work  
14 with. If you'll look through the report very quickly and  
15 find the locator map -- here's the map -- unlike Mr. Olson,  
16 who has provided for us a schematic by footages, it's not  
17 possible to locate any of these information by looking at  
18 this. There's no footages, there's no way to understand  
19 this display.

20 And without Mr. Seay's presence, we are unable to  
21 verify or explain the accuracy of the drawing, and so we  
22 object.

23 MR. SANDOVAL: Mr. Examiner, if I may?

24 EXAMINER CATANACH: Please.

25 MR. SANDOVAL: My client hired Mr. Seay to

1 perform these tests, and we certainly would like to have  
2 the opportunity to have them admitted here. Mr. Olson has  
3 been qualified as an expert witness in this case, he's  
4 testifying as an expert. He just testified in response to  
5 Ms. MacQuesten that he used this particular report to help  
6 him arrive at his conclusions that he is testifying about  
7 today.

8 I know this is an administrative hearing and the  
9 Rules of Evidence don't typically apply, but here they do  
10 provide some guidance in that when an expert witness is  
11 testifying, the materials that he relies on to form his  
12 opinion need not be specifically admissible in a court of  
13 law. The important thing is whether or not the materials  
14 that he is relying on have been helpful to him in  
15 formulating his opinion.

16 With regard to whether or not the methodology or  
17 the accuracy of the Seay study is in question, we've got an  
18 expert witness here that can be cross-examined in terms of,  
19 Was there anything in that report, Mr. Olson, that you  
20 disagreed with or that you feel was not properly done.

21 So I don't think that there's any problem in  
22 allowing, certainly, Mr. Olson to testify about the results  
23 of the Seay examination, and I don't believe that it is  
24 inadmissible, and I would urge that it be admitted before  
25 the Examiner at this hearing.

1 EXAMINER CATANACH: I am going to allow this  
2 exhibit to be admitted at this time.

3 Q. (By Ms. MacQuesten) Mr. Olson, how did this third  
4 investigation differ from the ones that were already  
5 conducted by the OCD?

6 A. In this investigation they have brought out a  
7 larger drill rig so they could go to a deeper depth. The  
8 samples that we obtained in Exhibit Number 4 were limited  
9 by the capabilities of the drilling rig at that point, so  
10 it could only be -- samples could only be obtained from  
11 about the 25-, 27-foot interval, based upon the limitations  
12 of that small drilling rig. So in this one, a larger rig  
13 came in and did soil sampling to a greater depth.

14 Q. If you would please take a look at the third page  
15 of Exhibit 5, does this show the depths at which samples  
16 were taken in this investigation?

17 A. Yeah, I believe it's on pages 3 and 4, the copy I  
18 have.

19 Q. And how far down did they go in this one?

20 A. They went down to 80 feet in depth.

21 Q. How many areas were sampled?

22 A. There was two boreholes locations that samples  
23 were obtained from, according to the report, one to the  
24 north side of the road, north of the tank battery, and one  
25 in the tank battery area.

1 Q. If you could, please turn to the hand-drawn map  
2 that Mr. Kellahin was referring to earlier. It's in about  
3 the middle of the exhibit. How accurate does this map  
4 appear to you, based upon what you saw at the site?

5 A. It's not accurate in terms of what the distances  
6 were from the road in this area, but for where the samples  
7 -- OCD samples have been taken before, it fairly well  
8 approximated at least one of the locations that we had  
9 taken one before, where MA 2 was located.

10 Q. And which location was that closest to?

11 A. That would have been closest to the samples that  
12 were designated "North Area" on Exhibit Number 4.

13 Q. Now, were these samples, MA 2, and if you look  
14 down below there's MA 1 -- those are the two sample  
15 locations --

16 A. Yes.

17 Q. -- in this third investigation?

18 A. Yeah, the two borehole locations.

19 Q. Can you tell, were they taken in the pit areas or  
20 in the tank battery areas?

21 A. These were taken more towards the area -- like  
22 the area -- at least from this map, from the tank battery  
23 area, and then on the north side from the tank battery at  
24 that point. So they were not actually obtained from the  
25 pit areas.

1 Q. If you turn to the next page behind the hand-  
2 drawn map, does that give us the analysis of the samples?

3 A. Yes, it does.

4 Q. And what were the TPH findings?

5 A. The TPH levels in MA 1 varied from 5480  
6 milligrams per kilogram at the 10-foot interval, down to  
7 2860 milligrams per kilogram at the 80-foot level.

8 Q. Now, it looks as though they start out at about  
9 5000, then actually go up for a while, and then go down as  
10 you reach greater depths; is that right?

11 A. That's correct.

12 Q. And there were unacceptable levels of TPH down to  
13 approximately what level?

14 A. That would be down to approximately 40 feet in  
15 depth. MA 1 is taken from approximately a 10-foot  
16 interval, and then 2 -- MA 1-2 is taken from the 20 foot  
17 interval, and MA 1-3 is taken from the 40-foot interval.  
18 And at that point they still had 8250 milligrams per  
19 kilogram of total petroleum hydrocarbons.

20 Q. And they're still finding TPH down to 80 feet,  
21 but at a lower level?

22 A. That's correct.

23 Q. How about for the MA 2 site? What were the TPH  
24 results there?

25 A. They were significantly higher in the near-

1 surface sample. Up at the 10-foot interval they observed  
2 concentrations of 16,600 milligrams per kilogram of TPH,  
3 and they dropped off significantly at the next interval and  
4 then fluctuated a little down to a depth of 80 feet where  
5 at the bottom they were still seeing 1370 milligrams per  
6 kilogram of total petroleum hydrocarbon.

7 Q. Are these fluctuations unusual? Would you expect  
8 to see a steady decline in the level?

9 A. Not really. You can typically see a lot of  
10 variation in the soil profile, just based on preferential  
11 migration of contamination through the soils. It doesn't  
12 necessarily move in a nice, straight line as it's moving  
13 through the subsurface.

14 Q. Did this third investigation also look at  
15 chlorides?

16 A. Yes, it did.

17 Q. And what did it find?

18 A. It found relatively low levels of chloride  
19 contamination at the site, well below the -- even the State  
20 groundwater standard at that point.

21 Q. At the back of Exhibit Number 5 there are a  
22 number of pictures. Are they consistent with what you saw  
23 at the site when you did your onsite visit?

24 A. Yes, they are.

25 Q. In particular, would you look at the third page

1 of pictures which has a label "MA #2" in the middle of the  
2 page. Is the top picture consistent with what you saw when  
3 you saw the pits?

4 A. Yes, this is consistent with the condition of  
5 each of the pits at the site.

6 Q. And if you could turn to the next page, can you  
7 tell us what those pictures show?

8 A. These show just large broken-up asphaltic  
9 material just scattered across the site.

10 Q. And is that consistent with what you saw when you  
11 were there?

12 A. Yes, it is.

13 Q. So to summarize your testimony on the  
14 investigations, there were two water investigations that  
15 form chlorides in the water but not significant  
16 hydrocarbons in the water; is that right?

17 A. That's correct.

18 Q. And then three soil investigations that found  
19 hydrocarbons in the soil but not significant chlorides; is  
20 that right?

21 A. That's correct.

22 Q. From the results of this investigation, do you  
23 have an opinion on what the pits contained?

24 A. Well, it appears that based upon the sample  
25 analyses from us that they largely contained oily material,

1 most likely waste oils and possibly tank bottoms at that  
2 point, would be the most likely materials that are placed  
3 in there at this point.

4 I had looked at -- in the -- we originally had  
5 thought that there was -- again, as I said earlier about a  
6 problem with produced water from these and a potential  
7 chloride problem, but the results of our studies showed we  
8 did not have chlorides in these pit areas, so they do not  
9 appear that they have been used for produced water  
10 disposal.

11 And I bring that up largely because in some  
12 discussions with our District Office, they have some  
13 information available to them on the formations for this  
14 area, and at least we had a -- water-sample results from  
15 the Jalmat-Yates-Seven Rivers, showing that that water  
16 contains, at least at another location in that area,  
17 approximately 5000 milligrams per kilogram of chloride.

18 Q. So if produced water containing that level of  
19 chlorides had been placed in those pits, would you have  
20 expected to find higher levels of chlorides in the soil  
21 testing?

22 A. Yes, you would.

23 Q. Do chlorides dissipate, evaporate, go away?

24 A. No, usually they would even -- typically would  
25 concentrate up towards the surface, because they would wick

1 back -- a lot of the chlorides will wick back up in the top  
2 three feet and form a salty crust at that point. But you  
3 would also see them within the soil profile as well.

4 Q. And yet you found no significant chlorides in any  
5 of the soil tests in this area?

6 A. No, we didn't.

7 Q. What is your opinion on the source of the  
8 asphaltine material?

9 A. It appears it's just a result of either tank-  
10 bottom material that had been previously spread on the  
11 site, or leaks and spills around the tank batteries. This  
12 is pretty typical-type material we've observed at other  
13 tank batteries within -- in our investigations through Lea  
14 County.

15 Q. From the physical evidence in this case, can you  
16 tell when the pits were used?

17 A. It's not possible to tell specifically when they  
18 were used. You can tell that they were most likely used  
19 for some period of time, just based upon the -- or that  
20 they have been there for some period of time, based upon  
21 the depth that the contamination has migrated, as shown by  
22 the sample results.

23 Q. Can you tell from the physical evidence when the  
24 tank battery was used?

25 A. No, you cannot.

1 Q. I'd like to take the next exhibit out of order  
2 and have you jump to what has been marked as Exhibit Number  
3 11. Are these excerpts from the well file for the Humble  
4 Number 3?

5 A. Yes, they are.

6 Q. Before we get into this well file let me ask you,  
7 does OCD keep files on tank-battery sites?

8 A. No, they do not. There's not a requirement for  
9 permitting tank batteries in the OCD Rules and Regulations.

10 Q. Is there a requirement to register pits?

11 A. There is not a requirement for registration of  
12 pits either.

13 Q. So for the OCD to get information on activity in  
14 the area, we need to look at a well file that is associated  
15 with the property on which the tank battery and pits are  
16 located?

17 A. Yes, sometimes there's information, but typically  
18 there's not information in the well files. Usually it's  
19 just specific information to the drilling, production and  
20 abandonment of an oil and gas well.

21 Q. The excerpts in Exhibit Number 3 are from the  
22 Humble Number 3 -- I'm sorry, the -- The excerpts in  
23 Exhibit Number 11 are from the well file for the Humble  
24 Number 3 well?

25 A. Yes, these are the files that I have observed

1 from our review of our well files.

2 Q. And is that well located at or near the battery  
3 site?

4 A. It's located in the area of the battery site.

5 Q. Can you tell from this file when that well was  
6 first drilled?

7 A. It has -- the notice of intent to drill lists  
8 that the -- it was done in May 28th of 1945.

9 Q. And who was the operator?

10 A. It was submitted by Ralph Lowe as the operator.

11 Q. If you turn to the second page, is this document  
12 the first document in the well file on which Maralo  
13 appears?

14 A. Yes, it was.

15 Q. And what is the date of this document?

16 A. The date of this document appears to be April 19,  
17 1974.

18 Q. And if you look under the box that identifies  
19 Maralo, it says that "If change of ownership give name and  
20 address of previous owner". And who's listed as the  
21 previous owner?

22 A. Ralph Lowe, the same person that had been listed  
23 on the notice of intent to drill.

24 Q. Is the address for Maralo the same as the address  
25 for Ralph Lowe?

1 A. Yes, it is.

2 Q. If you look at the third page in this packet,  
3 what does that show us?

4 A. This is a notice of intent to plug and abandon  
5 the Humble State Number 3 well.

6 Q. And when was this submitted?

7 A. It was submitted on October the 9th, 1986.

8 Q. Is there any mention of the tank battery in this  
9 document?

10 A. No, there is not.

11 Q. There's a mention of an intent to clean up  
12 location; is that right?

13 A. That's correct.

14 Q. Are there any specifics about what they intend to  
15 do to clean up the location?

16 A. No, it just lists "Clean up location".

17 Q. Would that include a battery? Is there any way  
18 of knowing that?

19 A. There's no way of knowing that. Typically, a lot  
20 of plug-and-abandonments usually just included a lot of the  
21 well activities themselves and not necessarily other  
22 facilities located with them.

23 Q. If you turn to the last page in this packet, what  
24 does this document show us?

25 A. This is the subsequent report of plugging and

1 abandonment of the Humble State Number 3.

2 Q. And this was signed off on by OCD?

3 A. And this was signed by an OCD inspector.

4 Q. When was it submitted?

5 A. It was submitted on October 28th of 1988.

6 Q. Does it contain any mention of a battery?

7 A. It does not contain any mention of battery or of  
8 cleanup activities at the site.

9 Q. I notice that all of the well documents here list  
10 the operator as Maralo, Inc. Who is the operator of record  
11 on ONGARD for this lease?

12 A. Currently in the system it's Maralo, LLC.

13 Q. In a contamination case, who does OCD look to for  
14 cleanup?

15 A. The Division looks to the current operator or  
16 most recent operator of the facility.

17 Q. And in this case that would be who?

18 A. That would be Maralo, LLC.

19 Q. And who has OCD been dealing with regarding  
20 cleanup since Ms. Williams' letter in 1999?

21 A. We have been dealing with Maralo, LLC.

22 Q. Is OCD required by statute or rule to look for  
23 the operator who was in charge at the time the  
24 contamination first occurred?

25 A. No, they are not. There is -- That is not

1 specified in the statute.

2 Q. Would that be practical?

3 A. No, typically these -- you could have -- we  
4 commonly do have prior operators that are no longer in  
5 business, or actually -- especially considering the  
6 condition and age of oilfield in Lea County area, may no  
7 longer be living.

8 Q. Would it be practical in the sense of whether you  
9 could even determine when the contamination first occurred?  
10 And in this case, didn't you just testify that you couldn't  
11 tell when the tank batteries had been used or when the  
12 contamination happened in the pits?

13 A. I'm not sure I --

14 Q. Well, if we were required to go to the operator  
15 because the contamination -- can we always tell who caused  
16 the contamination?

17 A. It's not always possible to determine that. We  
18 just know, usually from inspection of a site such as this,  
19 that it was -- appeared to be the result of the disposal  
20 activities at that facility during the operation of the  
21 facility.

22 Q. Let's go back to what has been marked as Exhibit  
23 Number 7, and this is a letter you received from Maralo,  
24 LLC?

25 A. That is correct, it's a letter dated December

1 15th of 2000.

2 Q. Now in it I'd like to draw your attention to some  
3 language here. This is from Joe Pulido of Maralo, LLC?

4 A. Yes.

5 Q. And it says that "While Maralo acknowledges that  
6 it has operated two wells in the immediate area, which as  
7 you may know were plugged...and the battery remediated by  
8 discing in 1993..." Did you see any evidence of disking at  
9 this site?

10 A. It appears that the material was broken up. I  
11 don't know if that was at the disk or some other method,  
12 but obviously material in the area of the battery itself  
13 appears to have been broken up at some time in the past,  
14 and the result is the large asphaltic material that's  
15 placed around the site. I don't know if that was --  
16 necessarily be considered disked material, since you have  
17 the very large chunks of material that are still remaining  
18 at the site. Usually the purpose of the disking is to  
19 incorporate the material into the soil matrix, which was  
20 not done in this case. There's large pieces of material  
21 still left at the surface.

22 Q. Now, all of the soil contamination testing that  
23 was done, was done after 1993; is that correct?

24 A. The soil testing, yes, it was all done by the  
25 Division from somewhere -- it was around 2000 to the

1 present.

2 Q. So whatever diskings were done in 1993 didn't solve  
3 the contamination problem?

4 A. It appears that it has not.

5 Q. If you could turn to what has been marked as  
6 Exhibit Number 8. And quickly, this is just -- this is  
7 another letter from, in this case, Maralo's attorney.

8 A. Yes, this is a letter dated April 23rd, 2001,  
9 from Mr. Rick Strange, representing Maralo, LLC.

10 Q. And again, it references remediation done in  
11 1993?

12 A. Yes, it does.

13 Q. Now, both of these letters are referring to the  
14 diskings of the asphaltic material. Was there any evidence  
15 that you could see of remediation attempted on the pits?

16 A. There appears to have been no remediation of the  
17 pits. They appear to be intact and have had some -- just  
18 filled in on top of the pits at that point, with the oil  
19 resurfacing later on at some point around the edges, or  
20 during the closure, one or the other.

21 Q. I'd like to draw your attention to what has been  
22 marked Exhibit Number 9. Can you tell us what this exhibit  
23 shows?

24 A. This is a final letter, dated April 22nd, 2003,  
25 from the Division to Maralo, LLC.

1 Q. What does the letter ask for?

2 A. The letter rescinds a prior abatement plan  
3 requirement. I don't know if that was mentioned here. At  
4 one point in time the Division had required an abatement  
5 plan pursuant to Rule 19, based upon the chloride  
6 contamination that we observed in the water well.

7 Based upon the subsequent soil sampling where we  
8 did not see any significant chloride contamination of the  
9 soils, we then issued this letter which rescinded the prior  
10 April 11th, 2001, abatement plan requirement. And --  
11 However, it did state that the site inspections show that  
12 we had several pits still at the site and that there's --  
13 that these materials would need to be remediated as they  
14 caused surface damage, and asked for a work plan to address  
15 this issue.

16 Q. Now, the abatement plan -- under Rule 19, that  
17 would have been regarding contaminated groundwater?

18 A. It would include soils, but the Rule itself --  
19 the purpose of the Rule is for contaminated groundwater or  
20 surface water.

21 Q. And you chose not to pursue that action because  
22 you couldn't -- because why?

23 A. Because we did not have a clear link for the  
24 chloride contamination in the pit areas, and the chloride  
25 contamination that we are seeing in the -- the lack of

1 contamination in the pit areas and the chloride  
2 contamination in the groundwater.

3 Q. What is the basis for requesting a plan to  
4 remediate the surface damage?

5 A. We requested the current plan under Rule 313,  
6 because it appeared to us that, you know, oily materials  
7 and tank bottoms were being placed in these pits and that  
8 they have caused surface damage, which is a violation of  
9 the Rule.

10 Q. Does the April 22nd letter dictate a specific  
11 plan?

12 A. No, it does not, it actually requests a work plan  
13 from the company. The Division does not specify methods  
14 for how to either investigate or remediate a site. We look  
15 at the company to submit a plan, which we would then look  
16 over and review to see if it is adequate, and approve or  
17 modify from there.

18 Q. I'd like you to take a look at what has been  
19 marked as Exhibit Number 10 and tell us what this is.

20 A. This is a May 5th, 2003, letter from Maralo.

21 Q. There's more than that one letter, is there not?

22 A. Excuse me, it's actually a series of  
23 correspondences at that point.

24 Q. Is this all the correspondence following our  
25 April 22nd request for a cleanup plan?

1           A.    I believe this is all the correspondence  
2 following -- Yes.  Yes, it is.

3           Q.    I want to make it clear, this isn't all the  
4 correspondence in the case, just the correspondence that  
5 followed after that April 22nd letter.

6           A.    Yes.

7           Q.    Is that right?

8           A.    That's correct.

9           Q.    You had been in contact with Maralo, LLC,  
10 throughout this process, though; is that true?

11          A.    We had been through our correspondence, yes.

12          Q.    Looking at the correspondence after the April  
13 22nd letter, could you summarize what Maralo's response was  
14 to our request for a cleanup plan?

15          A.    We were a little confused that Maralo was still  
16 focused on the implementation of Rule 19, since we had  
17 rescinded the abatement plan requirement at that point, and  
18 so there was a little point of confusion from us on that  
19 point.  But they were still unwilling to submit a work plan  
20 to address the site.

21          Q.    Did you attempt to clarify that we were no longer  
22 pursuing action under Rule 19?

23          A.    Yes, that was done by our Division counsel on  
24 July 9th of 2003.

25          Q.    Even with that clarification, did you ever

1 receive a cleanup plan from Maralo?

2 A. No, we did not.

3 Q. What would you want to see in a plan from Maralo  
4 for this site?

5 A. At this point we would need to see a plan to  
6 delineate -- to complete the delineation of the extent of  
7 contamination. We've done some limited investigations of  
8 the depth of contamination, but there still has not been a  
9 complete definition of the extent of contamination  
10 laterally as well as completely vertically across the site.

11 And then subsequent to that, we would need some  
12 type of a plan to address -- mitigate surface damages at  
13 the site as we have observed as well.

14 Q. What would you expect to remediate the surface  
15 damage, based on what you have right now in front of you?

16 A. For surface damages, typically we look at folks  
17 doing some type of remediation of the upper soil profile.  
18 It might be in the top, you know, three to five feet  
19 possibly. If there's high-level contamination still under  
20 that, possibly to install some type of system to limit  
21 migration of remaining contamination so that it would not  
22 pose any future threats at that point.

23 Q. Would this plan cover what we've been describing  
24 as the pit areas and the tank-battery areas?

25 A. Yes.

1 MS. MacQUESTEN: At this time I would move for  
2 the introduction of Exhibits 1 through 11. I understand  
3 Number 5 has already been admitted.

4 EXAMINER CATANACH: That's correct. Any  
5 objection to the remaining exhibits, Mr. Kellahin?

6 MR. KELLAHIN: No objection.

7 EXAMINER CATANACH: Exhibits 1 through 11, with  
8 the exception of 5 which has already been admitted, will be  
9 admitted at this time.

10 MS. MacQUESTEN: That concludes my direct  
11 examination of Mr. Olson.

12 EXAMINER CATANACH: Mr. Kellahin?

13 MR. KELLAHIN: Mr. Strange will do the cross-  
14 examination.

15 EXAMINER CATANACH: Okay, Mr. Strange?

16 MR. STRANGE: Thank you, sir.

17 CROSS-EXAMINATION

18 BY MR. STRANGE:

19 Q. Do you happen to have Rule 313 handy? I'd like  
20 to do -- just focus with you on that Rule, because as I  
21 understand it, and please correct me if I'm wrong, the  
22 focus of this request is based upon that Rule?

23 A. That's correct.

24 Q. Now, obviously you've gone over some of the  
25 discussion. Earlier in this case there was allegations

1 made that Maralo had polluted the groundwater, and you  
2 wanted Maralo to take actions to remedy that, but you're  
3 not pursuing that today; is that correct?

4 A. That's correct.

5 Q. You've talked about some of your investigation.  
6 I want to go over that a little bit with you. What you've  
7 done is, you've gone out on two occasions and you've taken  
8 some soil samples, correct?

9 A. Soil samples and a water sample as well from the  
10 site.

11 Q. Okay. The water samples, though, as far as what  
12 you're asking for today, do not play a part in your  
13 request?

14 A. That's correct.

15 Q. So -- I phrased my question poorly, but really  
16 what you're looking at is, you've gone out a couple of  
17 times and you've taken some soil samples; is that correct?

18 A. That's correct, we've taken soil samples.

19 Q. Now I'm not an expert on OCD operations, but the  
20 State requires that certain documents be filed, if I'm  
21 going to drill a well, if I'm going to take certain actions  
22 on a well, correct?

23 A. That's correct.

24 Q. And you've got access to whatever records are  
25 filed with the State of New Mexico?

1 A. That's correct.

2 Q. And I'm assuming you've taken the opportunity  
3 before coming here today to go through the New Mexico  
4 records, and you've pulled what you felt was relevant,  
5 correct?

6 A. I pulled from the well files the -- what under  
7 Maralo was the only site I saw listed for Humble State in  
8 our well file records.

9 Q. That's not exactly my question, sir, with  
10 respect.

11 A. Okay.

12 Q. What you're asking today -- To get ready for  
13 today, you've had the opportunity to go through any records  
14 that the State of New Mexico has on operations out in this  
15 area; is that correct?

16 A. Yes.

17 Q. And Maralo hasn't done anything that's kept you  
18 from looking through any of the State's records, any well  
19 files, any other records that the OCD maintains; is that  
20 correct?

21 A. No.

22 Q. And you've brought with you what you believe are  
23 relevant to this particular inquiry; is that correct?

24 A. Yeah, I believe that's in the exhibits, yes.

25 Q. All right, let's look at Rule 313. I'm going to

1 read out loud here a little bit.

2 "Wells producing oil..." and by the way, we're  
3 talking about the current version of Rule 313, aren't we?

4 A. Yes, we are, as listed in the Rules as of today,  
5 yes.

6 Q. And I think you and I are probably looking at the  
7 same document. The version we're looking at is effective  
8 May 15th of 2000; is that correct?

9 A. The final date was listed as -- I guess we're  
10 looking at 19.15.5.313; the final date they list there is  
11 5-15 of 2000.

12 Q. All right, so let's you and I look at the 2000  
13 version of this Rule. "Wells producing oil shall be  
14 operated in such a manner as will reduce as much as  
15 practicable the formation of emulsion and basic sediments."  
16 Did I read that sentence correctly?

17 A. That's correct.

18 Q. Okay, and you and I agree that if I'm out there  
19 drilling a well and I'm producing oil, there is no way to  
20 operate a well in New Mexico without having some emulsions  
21 and some basic sediments?

22 A. I agree.

23 Q. What the Rule says is that you will reduce as  
24 much as practicable, right?

25 A. That's right.

1 Q. So we need to look at what industry standards  
2 are, correct?

3 A. Correct.

4 Q. And industry standards are going to vary from  
5 time to time?

6 A. Yes.

7 Q. And I think we've established that this  
8 particular well was drilled in the Forties?

9 A. 1945, I think we testified to.

10 Q. Okay. Number 3? Yeah. July 23rd, 1945.

11 Now, back in the Forties it was allowed in the  
12 State of New Mexico to dispose of water in pits, unlined  
13 pits; is that correct?

14 A. That's correct.

15 Q. And that practice continued, depending on what  
16 area we're at, for many years after that?

17 A. Approximately -- Probably about 20 years after  
18 that.

19 Q. On into the Sixties.

20 A. The mid-Sixties, correct.

21 Q. All right. So from 1945 through the mid-Sixties,  
22 if the operator had disposed of produced water out in an  
23 open, unlined pit, that would not be a violation of any New  
24 Mexico rule?

25 A. That's correct.

1 Q. And that would be consistent with Rule 313, as we  
2 look at it. There's no way to produce oil out here without  
3 getting some water, correct?

4 A. That's correct.

5 Q. And nothing that you do to try to reduce the  
6 formation of emulsion and basic sediments is going to have  
7 any impact whatsoever on the water that comes out, correct?

8 A. Can you say that again?

9 Q. All right, a reasonably prudent operator -- I  
10 don't care how you operate a well out in Lea County, you're  
11 going to have some water?

12 A. Yes.

13 Q. And depending upon where I'm at, the levels of  
14 chloride will vary in that water, correct?

15 A. Usually depending on the formation that's  
16 produced from.

17 Q. But even within a formation, you've seen  
18 instances where wells that were separated by some distance  
19 that were being produced from the same formation had  
20 different levels of chloride?

21 A. Yes.

22 Q. You can't simply take a well and, if it has  
23 chlorides of X parts per million, assume that every other  
24 well that's producing from that same formation will have  
25 water of X parts per million chlorides?

1           A.    They're usually not the same, but they're usually  
2 within a -- in a range of --

3           Q.    Okay.  And you use the word "usually".

4           A.    Yeah.

5           Q.    You've seen instances where there have been some  
6 pretty wide variances between wells that were being  
7 produced in the same formation?

8           A.    Yes, I have.

9           Q.    There are any number of reasons to explain that,  
10 correct?

11          A.    There's a lot of reasons for that.

12          Q.    All right.  But as far as looking at the first  
13 sentence, this is telling us when you're operating a well  
14 you've got to reduce formation of emulsions and basic  
15 sediments, I think we've agreed you're going to follow  
16 industry practices, those practices are going to vary from  
17 time to time, but regardless of how I do it I'm still going  
18 to have some saltwater, correct?

19          A.    Yes.

20          Q.    All right.  Let's look on at the second sentence.  
21 "Those substances..." which is emulsions and basic  
22 sediments, correct?

23          A.    That's correct.

24          Q.    "Those substances and tank bottoms shall not be  
25 allowed to pollute fresh waters or cause surface damage."

1 Did I read that sentence correctly?

2 A. Yes, you did.

3 Q. All right. So can we agree that the Rule as  
4 written, the 2000 version of the Rule, talks about  
5 emulsions, basic sediments and tank bottoms? Is that  
6 correct?

7 A. That's correct.

8 Q. Now, there are things that come out of a well  
9 that wouldn't constitute emulsions, basic sediments and  
10 tank bottoms, correct?

11 A. That's correct.

12 Q. There are substances, there are hydrocarbons that  
13 come out of that well that don't constitute emulsions, tank  
14 bottoms or basic sediments, correct?

15 A. Correct, oil and condensates.

16 Q. Okay. Now, the Rule could have been written, I  
17 suppose, to not talk about those three but to talk about  
18 oil or anything else, correct?

19 A. Yes, but this rule, I believe, was specifically  
20 designed for those substances.

21 Q. Well, sir, with respect to you, let's look at the  
22 language of this, because this is an important proceeding  
23 to us. You understand the potential consequences of this  
24 action on the company, do you not?

25 A. Yes.

1 Q. All right. And this Rule, the Rule that you're  
2 trying to punish us with, talks about three things,  
3 emulsion, basic sediments and tank bottoms?

4 A. That's correct.

5 Q. Is it all right with you if I just say BS? It's  
6 hard for me to --

7 A. BS&W.

8 Q. Okay. Can you and I agree BS&W is the same thing  
9 as basic sediments?

10 A. Yes.

11 Q. Okay. This Rule could have been written in any  
12 number of fashions, one of which could have been written to  
13 talk not about those three things but just to talk about  
14 oil.

15 A. Yes, there's a separate rule that deals with the  
16 storage of oil in open receptacles.

17 Q. And you have absolutely no specific evidence that  
18 anyone at any time has ever stored oil out there in any  
19 open receptacle, can you?

20 A. I can only say that oil has been in those pits,  
21 just based upon the --

22 Q. Yes, sir.

23 A. -- contaminants that we've seen.

24 Q. But the Rule says "stored", and there's a  
25 difference between "stored" --

1 MS. MacQUESTEN: Objection. Counsel is  
2 mischaracterizing what the Rule says. It says "stored or  
3 retained".

4 Q. (By Mr. Strange) All right, the Rule that you  
5 base this on -- we got off track -- was Rule 313, correct?

6 A. Yes, but I think we also had cited Rule 310 in  
7 our Application for this as well.

8 Q. Okay, I don't know how many times I've asked you  
9 and how many times you've testified, but I've always heard  
10 Rule 313, that that was the basis of this action. And I  
11 think you and I can agree that Rule 313, as drafted, is  
12 limited to those three things, BS&W, tank bottoms and  
13 emulsion?

14 A. Yes.

15 Q. Now, can you and I agree that if I've got oil in  
16 a tank battery and that oil escapes -- or let's say the  
17 tank battery runs over for whatever reason, that oil comes  
18 out and it comes into contact with the surface. If at some  
19 point in time, if we were to take soil samples, you would  
20 find elevated levels of TPH?

21 A. Yes.

22 Q. And depending on the time, you'd find elevated  
23 levels of BTEX?

24 A. Yes.

25 Q. But that would not be one of the three substances

1 as defined by the Rule, that would just be oil coming out  
2 of that tank battery, correct?

3 A. That would be as -- I think as you're referring  
4 to here, that's correct.

5 Q. Okay. Now, when I'm producing oil and I've got  
6 water that comes out of it, it's been typical practice in  
7 the oil industry for a number of years to try to separate  
8 the oil and the water. Can you and I agree on that?

9 A. Yes.

10 Q. Can we agree that there is no way, no practical  
11 way, when I'm separating the water to eliminate all of the  
12 hydrocarbons?

13 A. I'd agree with you.

14 Q. Can you and I agree that if I had one of those  
15 surface disposal pits that was legal in the Forties and the  
16 Fifties and on into the Sixties, that if I dispose of water  
17 into that pit, the water will evaporate over a period of  
18 time, correct?

19 A. Based on whether or not there's a full layer of  
20 oil across it, but yes. The oil will inhibit the  
21 evaporation.

22 Q. And when it evaporates, that oil -- whatever oil  
23 is left that I couldn't knock out, will remain behind,  
24 correct?

25 A. That's correct.

1 Q. Now, you can go out there with a vacuum truck and  
2 you can pick up some percentage of that oil, correct?

3 A. That's correct.

4 Q. But you can't get a hundred percent, can you?

5 A. You can get most of it, but you can't get a  
6 hundred percent of it.

7 Q. Right. So if you can't get a hundred percent, if  
8 you dispose of saltwater in that pit for 20 years, you'd  
9 expect there to be some remnants of hydrocarbons?

10 A. Well, you would have some remnants of  
11 hydrocarbons anyways, because you have dissolved-phase  
12 contamination from the produced water as well. You'll have  
13 BTEX in a dissolved phase as well, so you'll see  
14 hydrocarbons -- whether you have oil -- Usually with  
15 produced water you'll see hydrocarbons if you have oil or  
16 not.

17 Q. Okay. So I'm producing that well, I'm following  
18 industry custom, I'm following all the rules and  
19 regulations in the Forties and the Fifties and the Sixties,  
20 and periodically I bring a vacuum truck out there to try to  
21 clean that pit. Even though I've followed all the rules  
22 that were in place right then, you would expect at some  
23 point, if I went back in time, I'd find some remnants of  
24 hydrocarbons?

25 A. Typically, yes.

1 Q. Now, BTH is going to -- I'm sorry, BTEX is  
2 lighter as compared with other elements within the  
3 hydrocarbons, the oils, correct?

4 A. Yes, it's a volatile organic.

5 Q. And so if you go out and do sampling and you  
6 don't find BTEX but you still find TPH, that would indicate  
7 to you that it had been some period of time since that oil  
8 was in that pit?

9 A. Yes.

10 Q. And looking at your test results, it looks like  
11 for the most part the BTEX was below detectible limits, it  
12 was nondetect?

13 A. Yes, there was some low-level BTEX, but it was --  
14 in a couple of the samples, but overall it was relatively  
15 low.

16 Q. Okay. Why don't -- So it'll help us, look at  
17 Exhibit 3. And that -- Do you see the box in the middle of  
18 the page?

19 A. Yes.

20 Q. That summarizes the BTEX analysis?

21 A. Yes, it does.

22 Q. All right. And if you've got that "less than"  
23 sign and a number, does that indicate that the test did not  
24 find whatever the element is, benzene, toluene, it was  
25 below detectible limits?

1           A.    Yes, I think you'll see it's below detectible  
2 levels for the BTEX in, I guess, four of the six samples, I  
3 believe.

4           Q.    Right, and on the other two there was none, there  
5 was no -- Well, these are pretty big words. There was some  
6 of the BTEX elements, but not all; is that correct?

7           A.    Right, in the first sample there was a xylene  
8 contamination, and then the final sample there, at the  
9 bottom, there showed benzene and toluene.

10          Q.    But no xylene on that last sample?

11          A.    But no xylene.

12          Q.    Or no ethylbenzene?

13          A.    Ethylbenzene, that's correct.

14          Q.    All right, now those are volatiles, so it would  
15 suggest to you that whatever fluid that went in there that  
16 left behind the TPH, it had been in there long enough for  
17 the volatiles to dissipate in whatever way?

18          A.    Yes, I'd agree with you.

19          Q.    All right. You talked earlier in your testimony,  
20 you said something about tank bottoms. As I understand,  
21 the only evidence that you have as far as tank bottoms is  
22 simply the soil analysis, the TPH levels?

23          A.    That's correct. We did not -- have never  
24 witnessed any disposal into those pits.

25          Q.    Okay. But if -- Let's forget the chlorides for

1 just a second. Let's talk about the other analysis you did  
2 with those soil samples. If I'm putting produced fluids in  
3 those surface disposal pits, back in the Forties and the  
4 Fifties and the Sixties, I would find elevated levels of  
5 TPH, correct?

6 A. You would potentially find elevated levels of  
7 TPH, that's correct.

8 Q. That would be completely consistent -- I'm  
9 sorry -- We can talk about possibilities and we can talk  
10 about a definitive analysis --

11 A. Uh-huh.

12 Q. -- your -- the difference, I'm talking about.

13 A. Uh-huh.

14 Q. There is no definitive analysis that tells you  
15 tank bottoms were ever placed in any of those old disposal  
16 pits?

17 A. No, that's based just upon our observations of  
18 similar types of pits in the San Juan Basin -- or not in  
19 the San Juan Basin, Lea County, excuse me.

20 Q. The results that we've seen, these results, there  
21 are TPH left, but without BTEX, and you -- BTEX for the  
22 most part -- that analysis is consistent with oil -- not  
23 the tank bottoms, but oil going out in those tanks for  
24 whatever reason?

25 A. It could be.

1 Q. And with the tank-battery site itself, it's the  
2 same analysis. The mere fact that you've got TPH in the  
3 soil is as consistent with the tank battery overflowing as  
4 it would be any number of other activities?

5 A. Yes.

6 Q. But the Rule talks about disposal of tank bottoms  
7 there, at least in that third sentence where it says, If  
8 tank bottoms are removed to service the pits? Do you see  
9 that sentence?

10 A. Just a second. Yes.

11 Q. All right. But you can't definitively tell the  
12 agency that you know tank bottoms were placed out there,  
13 because the lab analysis you've got is consistent with any  
14 number of activities?

15 A. That's right, we base that upon our observations  
16 of similar types of pits.

17 Q. All right. Now, from your records was there any  
18 indication that any operator was ever cited for using a  
19 surface disposal pit after the no-pit order was issued?

20 A. No.

21 Q. Now you know from your records that Maralo was  
22 not the party that drilled the well, Maralo was not the  
23 party that operated the well initially, Maralo did not  
24 become operator until 1974; is that correct?

25 A. Yeah, according to our records that's correct.

1 Q. You have no evidence that Maralo ever used those  
2 surface disposal pits, correct?

3 A. No, we do not.

4 Q. Can you point to me in your Rules any rule that  
5 in black and white says Maralo, as the current operator, is  
6 responsible for the actions of any other party?

7 A. There's not a specific rule to that.

8 Q. Okay. Now, you talked about in some instances  
9 it's difficult to determine who did what when there are  
10 multiple operators. Is that a fair summary?

11 A. Yes.

12 Q. But that wouldn't apply if, in this case, the  
13 evidence showed that a prior operator used the surface  
14 disposal pits but that Maralo never used any of those pits  
15 for any reason? In that instance you would be able to  
16 determine who had done what?

17 A. That's true, but it's been the policy of the  
18 Division to go after the current operators for  
19 contamination at facilities that they operate.

20 Q. And can you point to me a rule that I can look at  
21 where the Legislature has authorized such a policy?

22 A. No, I cannot.

23 Q. Okay, but we can agree that at least in this  
24 instance, if the evidence was that Maralo had never  
25 operated any of those pit areas, that you could

1 definitively say all right, I know you didn't do it,  
2 someone else did?

3 A. I'd agree with you, but our Division doesn't have  
4 any specific evidence to that, of that point. But I would  
5 agree with you, if there is evidence that Maralo did not do  
6 that, that's -- you know.

7 Q. Let's just assume that one of the other witnesses  
8 that testifies in this proceeding testifies that the pits  
9 were abandoned when a saltwater disposal well came on line  
10 and was permitted. Would you have any reason to dispute  
11 that testimony?

12 A. No, I don't have any evidence to dispute that.

13 Q. All right. So if that's the case, if a saltwater  
14 disposal well came on line in the Sixties and Maralo became  
15 the operator in the Seventies, in that instance you would  
16 be able to separate what Maralo had done, as opposed to  
17 what other operators have done?

18 A. It's possible to separate them at that point.

19 Q. All right. Now, in your -- the drawing that you  
20 prepared -- and I'm sorry, I'm not sure which exhibit it's  
21 in, but this -- the drawing where you've got the depiction  
22 of the site --

23 A. Yes.

24 Q. Have you measured the boundary of any of these  
25 sites?

1           A.    I have paced off the boundaries of the pit areas  
2 themselves. That was the only thing that I had looked at  
3 when I was out at the site.

4           Q.    And are those measurements in any of the  
5 correspondence that you've given Maralo?

6           A.    No, they're not, they are in my field notes.

7           Q.    Okay. You've got an old tank battery on the  
8 south side and an old battery on the north side of the  
9 road. Do you see that?

10          A.    Yes.

11          Q.    Do you have any evidence that Maralo, as opposed  
12 to someone else, conducted any operations on the south side  
13 of the road?

14          A.    No, as I think I'd said, if you go out there  
15 today there is no real evidence of where the battery was.  
16 I was basing this upon what I was told at that point.

17          Q.    All right. And if the testimony is that Maralo  
18 itself never conducted any operations on the south side of  
19 the road in that site, you'd have no way to dispute that?

20          A.    I'd have no way to dispute that.

21          Q.    And that would be another instance where we could  
22 separate what Maralo had done, as opposed to other  
23 entities, correct?

24          A.    I would assume so. I mean, I would say that  
25 something obviously happened on that site, just based upon

1 the sample results. But who actually did it, I don't think  
2 we have any evidence in our files that would say who  
3 specifically cause the contamination in that area.

4 Q. Now, in the map that was in the material Mr. Seay  
5 prepared, he indicated there was a pipeline out there. Are  
6 you aware of that?

7 A. Yes. There's a few pipelines in that area.

8 Q. Well, he had a pipeline that went right through  
9 this area. Do you recall that?

10 Q. Does he have that pipeline correctly located?

11 A. I don't know, because I did not locate those  
12 lines myself.

13 Q. Do you know what type of products are being  
14 carried in that pipeline?

15 A. No, I do not.

16 Q. So there's no way to tell whether or not there's  
17 been any leaks in that TNMP-Eott pipeline, whether those  
18 leaks have contributed to any TPH or other substances that  
19 you all found in the testing?

20 A. We did not investigate the pipelines.

21 Q. Okay. But certainly according to Mr. Seay's map,  
22 that pipeline is closer to MA Number 2 than any of the  
23 operations on the south side of the road, correct, where he  
24 put the old pits?

25 A. Let me just take a look at that. Yeah, it's in

1 proximity to the, you know, MA 2.

2 Q. Well, assuming that the tank battery was located  
3 on the south side of the road --

4 A. Correct.

5 Q. -- that pipeline would be closer to MA 2 than the  
6 tank battery, correct?

7 A. That's correct.

8 Q. Do you know what depth that pipeline is?

9 A. I do not.

10 Q. I'm assuming you have not looked at any analysis  
11 that's ever been done on the water that was actually  
12 produced by the Number 3 well?

13 A. No, we have not. That well is plugged, so we  
14 wouldn't be able to at this point.

15 Q. Did you ever look back at any records or anything  
16 like that?

17 A. We didn't have any records in our files on that  
18 well.

19 Q. Do you have any idea how much water was produced  
20 by the Number 3 well?

21 A. That may be in our records. I just don't have  
22 those available to me at the moment.

23 MR. STRANGE: Your Honor, I pass the witness.

24 EXAMINER CATANACH: Did you have any questions,  
25 Mr. Sandoval?

1 MR. SANDOVAL: I have just a couple, your Honor  
2 -- or Mr. Examiner.

3 EXAMINATION

4 BY MR. SANDOVAL:

5 Q. Mr. Olson, you testified earlier that part of  
6 your notice to Maralo with regard to what was going on on  
7 this property also involved a violation of Rule 310,  
8 correct?

9 A. That's correct, that was in the application for a  
10 hearing at that point.

11 Q. Okay. And can you briefly describe the nature  
12 and the substance of that violation?

13 A. Yes, the Rule reads that oil shall not be stored  
14 or retained in earthen reservoirs or open receptacles, and  
15 I think along the lines of what Mr. Strange was getting at,  
16 it was -- I mean, it's obvious that there was oil in here.  
17 It's difficult to tell whether that's -- truly it was tank  
18 bottoms or oil, so we cited both provisions in our  
19 Application for the hearing at that point.

20 Q. And you had -- you felt you had sufficient  
21 evidence with which to make that allegation of a violation  
22 of 310 when you put them on notice of same?

23 A. That's correct.

24 Q. Mr. Strange asked you whether or not you had  
25 previously provided Maralo the measurements of the areas

1 that are affected here, and I believe your testimony was  
2 no; is that correct?

3 A. Yeah -- I don't that we had -- that was actually  
4 contained within my field notes, which I notice that page  
5 of the field notes didn't make it in the file at that  
6 point, so...

7 It was actually the notes from the water sampling  
8 where we noted some of the conditions of the site, and I  
9 had a little sketch in there on the approximate sizes of  
10 the pit, just a rough pacing of them.

11 Q. In your testimony also earlier in response to Ms.  
12 MacQuesten's question -- "Ms. MacQuesten's question" --  
13 about whether or not the site had been completely  
14 delineated was that, you know, it really hasn't, you really  
15 don't know yet the full extent of the contamination that's  
16 on site?

17 A. That's correct.

18 Q. In your review of the records related to this  
19 battery -- tank and battery site, did you come across any  
20 evidence whatsoever that there had ever been any difficulty  
21 with a pipeline operation out there or a leak in a pipeline  
22 or any such incident involving a pipeline that might have  
23 resulted in the release of hydrocarbons?

24 A. No, we didn't do a detailed review of the spill  
25 records, which is kind of difficult to do these days with

1 the state of some of those older records at that point.  
2 But we were confident that the contamination was from the  
3 tank battery, just due to where the locations of the  
4 samples were and the magnitude of the contamination in the  
5 tank battery area.

6 Q. Okay. And one last question. Do you have any  
7 knowledge as to who owned or owns this pipeline, or who  
8 operates or operated this pipeline that Mr. Strange was  
9 referring to?

10 A. Just from the indication of the map, it's  
11 indicated as a Texas-New Mexico Pipeline-Eott. Texas-New  
12 Mexico Pipeline was the previous operator and were  
13 purchased by Eott. And that's even now, since, changed  
14 name to Link Energy, I believe it is. So that's -- I have  
15 no idea what the age of this pipeline, though, is or what  
16 it could -- I would assume it's a crude oil line, because  
17 the Texas-New Mexico pipelines were crude oil lines.

18 MR. SANDOVAL: I have nothing further, thank you.

19 EXAMINER CATANACH: Okay, did you have anything?

20 MS. MacQUESTEN: Just a few.

21 EXAMINER CATANACH: Go ahead.

22 MS. MacQUESTEN: And I apologize.

23 REDIRECT EXAMINATION

24 BY MS. MacQUESTEN:

25 Q. Mr. Strange began his cross-examination of you by

1 characterizing OCD's request for a cleanup plan from them,  
2 for the site for which they are the operator of record, as  
3 punishing their company.

4 When OCD requests a cleanup plan from an  
5 operator, are they doing it for punishment?

6 A. No, we're doing it for -- to meet our statutory  
7 requirements in the Oil and Gas Act for protection of fresh  
8 waters, human health and the environment.

9 Q. And is it OCD's position that the operator of  
10 record is responsible for that cleanup, whether or not that  
11 operator caused the contamination?

12 A. Yes, that is our position.

13 Q. And just to clarify, the Application in this case  
14 is based on both Rule 313 and 310.A

15 A. That's correct.

16 Q. 313 is the Rule regarding tank bottoms and basic  
17 sediments?

18 A. That's correct, 313 is the rule on emulsion,  
19 basic sediments and tank bottoms.

20 Q. The suggestion was made that the pits were used  
21 for produced water and that the hydrocarbons that were  
22 found in the pits were hydrocarbons incidental to that  
23 produced water. What is your opinion?

24 A. I've cleaned up a lot of -- I've worked on  
25 cleanups of a lot of produced-water pits, and any pit that

1 had received significant quantities of produced water  
2 typically has high levels of chloride, especially in the  
3 Lea County area. It's quite high in a lot of the areas.  
4 Although, as I think I stated from another well that was  
5 located maybe a mile and a half or so from there in the  
6 same formation, was producing at about 5000 milligrams per  
7 liter of chloride. So there is elevated chloride in the  
8 formation in that area. So I wouldn't have expected that  
9 would have been used solely for produced water at that  
10 point.

11 Q. The suggestion has also been made that perhaps  
12 the contamination that you saw was the result of a pipeline  
13 leak. Would a pipeline leak have created the rims of  
14 hydrocarbons surrounding the pits?

15 A. No, and it typically does not cause the  
16 contamination, the high asphaltic contamination as well  
17 that's spread across the other portion of the site where  
18 the material had been broken up or disked, I think, as they  
19 refer to it.

20 Q. Rule 310.A is the rule prohibiting the storage or  
21 retention of oil in an earthen receptacle; is that right?

22 A. Yes.

23 Q. The pits that are there, are they still retaining  
24 oil?

25 A. They are still retaining oil at this time, with

1 the contamination that's there, at a lower level than a  
2 free product, but it's at a percentage level based upon the  
3 contamination that we saw -- I think we've seen  
4 contamination from total petroleum hydrocarbons there so  
5 that -- in the percent range in some of those areas.

6 MS. MacQUESTEN: No more questions.

7 RE-CROSS-EXAMINATION

8 BY MR. STRANGE:

9 Q. Can you agree this is the first case like this  
10 that's ever gone to hearing?

11 A. I guess it's the first case where we've had a  
12 dispute over which operator caused the contamination,  
13 that's correct.

14 Q. Now, looking at 310.A, it says oil shall not be  
15 stored -- and I guess we can all agree what that means:  
16 You're not supposed to take oil and just put it out there  
17 until you go back and get it later, correct?

18 A. Correct.

19 Q. -- stored or retained. Okay, it doesn't say  
20 placed, it says or retained. Have I read that correctly?

21 A. That's correct.

22 Q. Now obviously, if I'm going to use a pit in the  
23 Forties, Fifties and Sixties, I'm going to produce fluid in  
24 there, under all practical standards and the equipment and  
25 the technology that's available, there's still going to be

1 some oil products and hydrocarbons in that water?

2 A. That does occur, yes.

3 Q. There is no way humanly possible in the real  
4 world to eliminate all the hydrocarbons that go into that  
5 pit?

6 A. I wouldn't say that. I mean, I've seen a lot of  
7 pits that have no hydrocarbons in them, so --

8 Q. I'm talking about real life. If I'm producing  
9 oil out there in Lea County I'm going to have produced  
10 fluids, correct?

11 A. Uh-huh, correct.

12 Q. Those produced fluids, when I knock them out, I'm  
13 still going to have some hydrocarbons left?

14 A. Yeah, possibly you'll have some emulsion and  
15 stuff that carries over, uh-huh.

16 Q. And it was legal in the Forties and Fifties and  
17 Sixties to put that water out there in that surface  
18 disposal pit?

19 A. Yeah, up until about roughly the mid-Sixties.

20 Q. Okay. So for twenty-some-odd years while this  
21 well was in operation, it was legal to put produced water  
22 out there?

23 A. That's correct.

24 Q. You let it evaporate, and then the remnants are  
25 going to contain, after it's all evaporated, it's going to

1 be -- Let me just back up. The reason for the pit, that  
2 was what that pit was allowed for, was to get rid of the  
3 water?

4 A. That's correct.

5 Q. And everybody knew, put that water out there, the  
6 water is going to evaporate and it will leave behind some  
7 hydrocarbons?

8 A. I would dispute the word "evaporate" more than  
9 "seep into the ground", but that's -- it was for disposal  
10 of produced water.

11 Q. Okay. But that was -- the Rule allowed you to  
12 use that pit to dispose of water, some evaporated, some  
13 went into the ground --

14 A. Right.

15 Q. And it's going to leave behind some hydrocarbons?

16 A. Correct.

17 Q. And that was perfectly legal in the Forties and  
18 the Fifties and the Sixties?

19 A. That's correct.

20 Q. Now --

21 A. Up to the mid-Sixties.

22 Q. And good practice -- periodically that oil is  
23 going to accumulate at some level and you need to go out  
24 there and try to clean it up?

25 A. Yes.

1 Q. There's -- With a vacuum truck you cannot get, I  
2 think we agreed, 100 percent of the oil that might be out  
3 there in that pit?

4 A. Yes.

5 Q. And if we look at the language of the Rule, 310,  
6 the May 15th, version -- and that's what it's talking about  
7 -- oil shall not be stored or retained in earthen  
8 reservoirs or in open receptacles, correct?

9 A. Correct.

10 Q. And as we sit here today, you have no evidence  
11 that Maralo, as opposed to anybody else -- that Maralo ever  
12 placed any oil in any of those old pits for any reason?

13 A. That's correct.

14 Q. You have no evidence that Maralo affirmatively  
15 took any action whatsoever with any of those pits?

16 A. That's correct.

17 Q. So you have no evidence that Maralo, as opposed  
18 to any other operator, took any action in violation of Rule  
19 310, the May 15th, 2000, version?

20 A. In the actual operation of those pits, that's  
21 correct.

22 MR. STRANGE: Thank you, pass the witness.

23 EXAMINATION

24 BY EXAMINER CATANACH:

25 Q. Okay. Mr. Olson, if you did put produced water

1 into those pits over the years, that had any kind of  
2 chloride content in it, would you expect elevated chloride  
3 levels in the soil beneath the pit?

4 A. Yes, you would.

5 Q. And you did not find any elevated chloride  
6 levels?

7 A. No, we did not.

8 Q. And those were tested down to -- Do you recall  
9 the depth?

10 A. I believe the deepest that we had in the pit area  
11 was around -- I think that was in -- probably in Exhibit 4,  
12 and that would be in the -- you know, approximately 27, 28  
13 feet.

14 I think the significant thing that we looked at,  
15 for when we were looking at oil in the pit, was the  
16 thickness of, you know, the rim of the contamination that  
17 was in and around that area. It seemed like there was a  
18 significant amount of oil at that point.

19 But we did -- I'll admit, initially we did think  
20 that produced water had been in there. That was because of  
21 the chloride contamination of the adjacent water well.

22 Q. Typically in a produced-water pit, you would see  
23 elevated chloride levels in the soil?

24 A. That's correct.

25 Q. So let me ask you this: If you were to put tank

1 bottoms in the pit, would you also get some BTEX and some  
2 TPH in the soil as a result of that?

3 A. Yes, you would.

4 Q. The amount of asphaltines around the pit area, to  
5 you does that indicate a large volume of hydrocarbons that  
6 were put in there over the years?

7 A. It just appeared, based upon the thickness of the  
8 -- you know, the edges of that, you can sure see now that  
9 there was a significant amount of oil in there at that  
10 point since it was covered at that point and the stuff had  
11 apparently been oozing back out from the pit area.

12 Q. If produced water were placed in the pit and  
13 there was oil in the water or mixed with the water, when  
14 the water evaporated, would the oil -- could the oil  
15 necessarily form a barrier on the bottom of that pit to  
16 prevent fluid from flowing downward, produced water from  
17 flowing downward?

18 A. If it was produced, usually if it essentially  
19 dried out and then more produced water came into, a lot of  
20 times that oil would float back up out of the soils at that  
21 point, based upon the density of the fluid.

22 Q. So that wouldn't necessarily preclude fluid from  
23 flowing down?

24 A. No, we've never seen a case where oil has  
25 actually performed more of a sealing mechanism like that.

1 Q. Okay. I noticed on the well file that you have,  
2 and something curious struck me, is that when this -- the  
3 original operator was Ralph Lowe and the subsequent  
4 operator was Maralo. Do you know if there's any  
5 association between those two parties?

6 A. Only just from what I've heard that they were  
7 essentially -- it was a successor to -- or a successor  
8 entity to Ralph Lowe at that point and it had formed --  
9 possibly formed Maralo, but I don't have any specific  
10 information about that.

11 Q. Well, I'm looking on the C-104. It lists Maralo  
12 and Ralph Lowe with the same P.O. Box in Midland, Texas. I  
13 just found that to be interesting. I don't know what the  
14 relationship is between those two companies, and you don't  
15 either at this point?

16 A. No, I was told there was another family member  
17 named Mary, and that's where they joined the names that  
18 became Maralo. I don't know if that's true or not, though.  
19 That's something that somebody else told me.

20 Q. So in all the data that you've looked at, you  
21 don't know of any other operator beside Ralph Lowe and  
22 Maralo that have operated at this site?

23 A. That's the only two operators we have on record.

24 Q. And the current policy of going after the  
25 operator, the current operator, is that routinely done by

1 this Bureau?

2 A. We've been doing that since I was first employed  
3 in 1986 with the Bureau, looking at the current operator of  
4 any facility, and then that becomes -- our position was,  
5 that's a civil matter between them and past operators as to  
6 whatever environmental liability they may have from a past  
7 operator.

8 Q. In your experience, has any operator ever  
9 challenged that policy of going after them, the current  
10 operator?

11 A. Yes, there was once -- I don't know if that was  
12 about a year ago, roughly, in a case with surface  
13 contamination that residents in Hobbs -- property owned in  
14 Hobbs, New Mexico, and there was actually three operators  
15 there, and it was difficult to deal with that site.

16 And at that point the Division had set that for  
17 hearing to have that determined, and the operators at that  
18 point settled that prior to going to hearing, and one of  
19 the operators taking responsibility, at least at this point  
20 in time.

21 Q. Okay. With regards to the plan that you would  
22 like Maralo to submit, I believe you testified that you  
23 wanted to delineate the site -- the contamination of the  
24 site?

25 A. Yes, that's what we were envisioning, was

1 delineating the -- for a start, just to delineate the  
2 extent of the contamination so that you could use that  
3 information to develop a remediation plan.

4 Q. Okay, and as I heard you testify -- now, correct  
5 me if I'm wrong. Did you say that they would be required  
6 to remediate the top three to five feet of soil?

7 A. Yeah, if the investigations confirmed how -- our  
8 preliminary investigations, that this is largely a surface  
9 issue at that point, we'd just be looking at a surface  
10 remediation issue, which usually tries to take care of the  
11 plant root zone up in the near surface and making the  
12 surface usable at that point. But not specifically to, you  
13 know, a crop or something like that, but to make the  
14 surface available to, you know, propagate plants.

15 Q. Based upon your studies, you wouldn't want to go  
16 any deeper than that, to prevent any groundwater  
17 contamination?

18 A. We've been working a lot of sites at the moment  
19 where if the contamination is relatively limited in this  
20 site, the -- there is some extensive contamination, but the  
21 depth to groundwater at this site is -- I'm trying to  
22 remember. I think it's approximately 190 feet. So if the  
23 contamination is relatively consistent in the remaining  
24 delineation with what we've seen already, I think as I  
25 stated in reviewing some of the summaries of these reports,

1 the contamination got below our guidance criteria down at  
2 some depth at that point, so we're showing that the  
3 contamination did migrate substantially, at least in the  
4 areas that we looked at, but did cease at some point.

5 So if you could remove the bulk of the source  
6 area which that goes towards when you're dealing with the  
7 surface, then you have less material left to migrate. And  
8 typically you can put some type of a -- even a barrier  
9 below that, and then clean soil coming back up, and you've  
10 reduced the area for water in the future to migrate down  
11 through that contamination and cause it to go any further  
12 than it already has.

13 Q. If that was what you required to remove the top  
14 three to five feet of soil in that location, is that a very  
15 expensive proposition?

16 A. It can be, depending on how you deal with the --  
17 especially deal with the material that you're generating.  
18 If you're having to haul that for disposal and you have a  
19 significant distance to haul it to, that's one of the major  
20 factors in a lot of the remediation sites, is the distance  
21 that you may have to haul that for disposal. That can be a  
22 significant cost at that point. Usually the driving cost  
23 in a lot of sites is actually the disposal cost versus the  
24 actual excavations.

25 EXAMINER CATANACH: Okay. I think I'd better

1 stop there. That's all I have.

2 Anything further of this witness?

3 MR. KELLAHIN: (Shakes head)

4 MR. SANDOVAL: I have one, maybe two, to clarify  
5 one of the Hearing Examiner's last points.

6 FURTHER EXAMINATION

7 BY MR. SANDOVAL:

8 Q. Mr. Olson, I believe your testimony was that in  
9 one of the studies that was done, either by the OCD or by  
10 Mr. Seay, that eve when you went down to 80 feet there was  
11 contamination present. Did I misunderstand that?

12 A. That's correct, it was -- I think it was still  
13 around 2000 or so in Mr. Seay's report.

14 Q. And was that in the tank area, or was that in the  
15 pit area?

16 A. That was actually in the tank area, so there's a  
17 potential that there could be a further or a deeper  
18 migration in the pit area.

19 Q. And as part of the requested delineation, you're  
20 going to be requesting Maralo dig deeper to see, you know,  
21 whether or not it's even at a greater depth than 80 feet?

22 A. That's part of what we would envision, yes.

23 Q. So my question, then, let's -- I have two more  
24 questions.

25 Let's assume it just stops at 80. Is your

1 testimony that replacing the upper three to five feet of  
2 topsoil will take care and will fully address that  
3 contamination at 80 feet?

4 A. Yeah, as long as there is some mechanism as well  
5 to address, you know, leachate coming through that area.  
6 Usually you crown those areas as well.

7 And we've had a lot of sites that are going now  
8 with unremediation where some type of a one-foot -- or one-  
9 or two-foot clay barrier that's placed at the bottom of  
10 that with, then, approximately three feet of soil placed up  
11 above, so the liner or -- clay liner, if you want to think  
12 of it that way, prohibits water from moving down through  
13 that area and causing leachate, which will cause material  
14 to move farther at that point.

15 Q. And let's assume, then, that as the result of  
16 delineation it is determined that the contamination goes  
17 deeper than the 80 feet. Is there some point or some depth  
18 of point where it would implicate a need to address a  
19 greater footage of topsoil to correct the problem, or is  
20 there a point in which the depth is sufficiently deep that  
21 it might implicate the need to address the groundwater  
22 concerns that the Hearing Examiner was raising?

23 A. Well, typically the burden is at that point on  
24 the operator to determine the extent of contamination.  
25 There's not a specific cutoff level when we say we stop. I

1 mean, we look at the -- our guidelines for guidance in  
2 that, and if we get down to below the guidance criteria,  
3 based upon that and the depth to groundwater, we would cut  
4 it off, say, at 5000 or 1000 or 100, depending on what the  
5 depth to groundwater is.

6 MR. SANDOVAL: Okay, I have nothing further.

7 Thanks.

8 EXAMINER CATANACH: Okay, this witness may be  
9 excused.

10 MS. MacQUESTEN: OCD has no other witnesses.

11 EXAMINER CATANACH: That concludes your  
12 presentation?

13 MS. MacQUESTEN: Yes.

14 EXAMINER CATANACH: Okay. What is the plan, Mr.  
15 Kellahin?

16 MR. KELLAHIN: What is your plan, Mr. Examiner?

17 EXAMINER CATANACH: I'm at your disposal, Mr.  
18 Kellahin.

19 MR. KELLAHIN: You need to tell us if you want to  
20 continue to do this tonight, or do you want us to come back  
21 in the morning?

22 EXAMINER CATANACH: I've been advised Ms.  
23 MacQuesten is not available tomorrow.

24 MR. KELLAHIN: May we have a short recess and --

25 EXAMINER CATANACH: Yes.

1 MR. KELLAHIN: -- talk about this?

2 (Thereupon, a recess was taken at 5:46 p.m.)

3 (The following proceedings had at 5:55 p.m.)

4 EXAMINER CATANACH: Everybody here, I think? Are  
5 we ready to begin?

6 MR. STRANGE: Yes, sir, call Mr. Hunt.

7 WILLIAM B. HUNT,

8 the witness herein, after having been first duly sworn upon  
9 his oath, was examined and testified as follows:

10 DIRECT EXAMINATION

11 BY MR. STRANGE:

12 Q. Could you state your full name for us, please,  
13 sir?

14 A. William B. Hunt.

15 Q. Mr. Hunt, where do you live?

16 A. I live in Midland, Texas.

17 Q. For whom do you work?

18 A. I'm retired.

19 Q. What did you do before you retired?

20 A. I worked for -- When I retired I was working for  
21 Maralo Oil, Incorporated, when I retired.

22 Q. What were you doing for Maralo?

23 A. I was operations manager.

24 Q. All right, just basically tell me what an  
25 operations manager does.

1           A.    Well, I looked after all the drilling and  
2 production.

3           Q.    How long were you employed in the oil and gas  
4 business?

5           A.    Well, I've been employed in the oil and gas  
6 business since 1950.

7           Q.    From 1950 till your retirement, were you  
8 primarily involved in operations?

9           A.    Not altogether. I went to work for Ralph Lowe.

10          Q.    All right, you went to work for the original --

11          A.    Ralph Lowe.

12          Q.    -- Mr. Lowe that drilled this particular well; is  
13 that correct?

14          A.    That's right.

15          Q.    What did you do for Mr. Lowe?

16          A.    I was working on a drilling rig.

17          Q.    What kind of jobs did you hold on a drilling rig?

18          A.    Well, I was just a roughneck.

19          Q.    Did you work your way up through the company?

20          A.    Worked my way up through the company.

21          Q.    What was your ultimate position with Ralph Lowe?

22          A.    Assistant production foreman.

23          Q.    As assistant production foreman, did you have  
24 responsibility for the well that we've been talking about?

25          A.    Yes, I did.

1 Q. Have you been out there?

2 A. Uh-huh.

3 Q. Is that -- I'm sorry, you need to say yes or  
4 no --

5 A. Yes, yes.

6 Q. -- because this is being taken down.

7 Any idea how many times you've been out there?

8 A. Well, until 1981 I was out there on a regular  
9 basis. In 1981 I had ceased to be the operations -- I mean  
10 in the production end of it.

11 Q. And you went into drilling?

12 A. I went into drilling. I drilled wells from there  
13 on. I didn't -- I wasn't in that.

14 Q. Now, you went to work for Mr. Lowe in 1950?

15 A. Yeah. Well, I went to work -- I've been in the  
16 oilfield since 1950. I went to work for Mr. Lowe in 1955.

17 Q. I'm sorry, my fault. All right, from 1955 up  
18 until 1982, from time to time you were out on this  
19 particular location?

20 A. That's right.

21 Q. You're familiar with how this well was operated?

22 A. That's right.

23 Q. Now, in 1974 when Maralo was formed, did you go  
24 to work for Maralo?

25 A. I went to work for Maralo.

1 Q. Just to kind of maybe put to rest a question  
2 that's come up, is there a difference between Ralph Lowe  
3 and Maralo.

4 A. It's two different companies.

5 Q. And was there quite a lot of activity that went  
6 on right before 1974 to form Maralo?

7 A. There was, certainly was.

8 Q. So it's not just a name change, it was a  
9 different company?

10 A. Different company.

11 Q. Now this particular well, were there surface  
12 disposal pits out there?

13 A. When it was Ralph Lowe it was disposal pits out  
14 there.

15 Q. What were those disposal pits used for?

16 A. Well, they was used to put water in, salt- --  
17 brine -- water from wells, well water.

18 Q. All right. Well, you've heard testimony that  
19 couldn't possibly be true because there aren't any  
20 chlorides out on the soil. What --

21 A. Well, the chlorides in that water out there was  
22 very low.

23 Q. How do you know that?

24 A. Because it would freeze. You used to get a  
25 little water, and it would freeze on the ground. I can't

1 swear as to what the chlorides were, but I do know it was  
2 awful low. And they had trouble separating the oil and  
3 water because of the chlorides being so low. We had to use  
4 emulsion breakers to try to separate the oil and the water.  
5 Sometimes you still couldn't get it separated.

6 Q. All right. Now, those surface disposal pits, how  
7 long were they used out there?

8 A. They were used until 1968, when we made a  
9 disposal well.

10 Q. And then from 1968 on, what did you do with the  
11 water?

12 A. It went into Disposal Well Number 1.

13 Q. Now, when you're producing water out there, is  
14 there any way that you know of, using a real-world  
15 technology and real-life conditions, to get all of the oil  
16 out of that water?

17 A. No, there was not.

18 Q. Would you have oil buildup from time to time in  
19 those surface disposal pits?

20 A. We sure did.

21 Q. What did Ralph Lowe do?

22 A. We picked it up with a vacuum truck and tried to  
23 treat out the best of it we could, put it bank in the tank  
24 batteries and back through the system. And the rest of it,  
25 the vacuum truck hauled some disposal.

1 Q. Now, you're familiar with tank bottoms?

2 A. That's right.

3 Q. Did you ever, ever, put any tank bottoms out  
4 there in any of those old pits?

5 A. No, we did not.

6 Q. Did you ever dispose of any tank bottoms out in  
7 the area that we've talked about as far as the tank battery  
8 area?

9 A. No, as far as I know, we did not.

10 Q. Now, from time to time would you have a leak at a  
11 tank battery site?

12 A. Sometimes the tanks ran over.

13 Q. What would you do then?

14 A. We'd have to pick that oil up out of the  
15 firewalls, put it back in the tank.

16 Q. All right. Now, from 1974 on, when Maralo was in  
17 existence, did Maralo ever use any of those surface  
18 disposal pit sites for any reason whatsoever?

19 A. Surface disposal site?

20 Q. I'm sorry, you know the little surface pits?

21 A. Yes, uh-huh.

22 Q. The land where those pits were located --

23 A. Yeah.

24 Q. -- after you put in the SWD well, what did you  
25 all do with those old locations?



1 Q. Okay. And were you regularly visiting those  
2 wells as well?

3 A. Daily.

4 Q. Okay.

5 A. I didn't visit all of them every day, you can't  
6 get around that many.

7 Q. So when you testified that you were there on this  
8 particular well site on a regular basis, can you be a bit  
9 more specific about that?

10 A. Well, I lived in Jal, and it was right there next  
11 to me, you know, and I had occasion to drive through the  
12 lease and check it out, you know, to visually see what's  
13 happening out there.

14 Q. When you mean "visually", like as you're driving  
15 past the well site, or did you actually disembark your  
16 vehicle and then walk the premises?

17 A. Well, if I saw anything I thought I needed to, I  
18 would.

19 Q. So if you saw anything from your vehicle as you  
20 were driving through?

21 A. Yeah.

22 Q. How often did that happen?

23 A. Not very often.

24 Q. So that means you weren't out there on site  
25 physically walking the property very often?

1 A. Not every day, no.

2 Q. Okay. Well, the question was how often, sir?

3 A. Well, I would make sure that I went out there at  
4 least twice a week, through that area.

5 Q. Okay. Well, I want to be clear because there's  
6 some confusion in my mind about what it means to be out  
7 there. Part of your testimony was that you would drive  
8 through the site; is that correct?

9 A. That's right, I drove through it.

10 Q. And that on occasion you would see something that  
11 caught your attention and you'd stop?

12 A. That's right.

13 Q. And you'd get off of your vehicle and actually  
14 walk onto the well site?

15 A. Yeah, I did.

16 Q. So my question is, how often did you actually do  
17 that, where you were actually walking on the well site  
18 because something caught your attention?

19 A. I can't say how often something caught my  
20 attention. It was when it did catch my attention that I  
21 would get out.

22 Q. Okay. But your testimony earlier was that you  
23 would do that like maybe twice a week?

24 A. Well, I did drive through there twice a week, but  
25 that didn't mean I got out and looked at it twice a week.

1 Q. Okay, thanks.

2 You testified that Ralph Lowe and Maralo were  
3 different companies?

4 A. That's right.

5 Q. Was Mr. Lowe operating this well individually,  
6 kind of as a sole proprietor, or was he incorporated into  
7 an actual formal company or corporation? Do you know that?

8 A. I can't answer that question as to what is -- He  
9 owned Ralph Lowe Estates, Ralph Lowe, and then it went into  
10 the Ralph Lowe Estates after he died, and it stayed in the  
11 Estates until Maralo -- somehow or another they got it  
12 changed over. I'm not familiar with how that happened.

13 Q. Do you know who Mary Lowe is?

14 A. Yes, I know who Mary Lowe is.

15 Q. And who is she?

16 A. His daughter.

17 Q. Okay. And do you know whether Mary Lowe has any  
18 -- or at the time that Maralo was created, do you know what  
19 Mary Lowe's responsibility or relationship to Maralo, Inc.,  
20 was?

21 A. No, I can't answer that question.

22 Q. Do you know whether she was an officer of the  
23 corporation?

24 A. I can't answer that because I'm not familiar with  
25 it, I don't know.

1 Q. Okay. Do you know whether Ralph Lowe remained an  
2 officer --

3 A. He died in '65.

4 Q. In '65, okay. Were there any surviving children?

5 A. No.

6 Q. So really, even though you know that the well  
7 went from being operated by Ralph Lowe to then being  
8 operated by Maralo, Inc., you really don't know exactly how  
9 that transition was made?

10 A. I was not involved in that, I don't know. I  
11 can't testify to that.

12 Q. Okay. Do you know when this particular well was  
13 plugged and abandoned by Maralo?

14 A. The Number 3?

15 Q. Yes, sir.

16 A. The Number 3 was plugged in -- well, I was not  
17 working in that company, I was already -- well, no, I was  
18 working for them too. 1988 is when it was plugged.

19 Q. Okay. At that time were you still employed by  
20 Maralo, Inc.?

21 A. Yes.

22 Q. Okay, but certainly not in a production  
23 capacity --

24 A. Not in production, I was in drilling.

25 Q. And you went from production to drilling in 1981?

1 A. Yes, in 1981, yes.

2 Q. So certainly for those last seven years of  
3 operation, from 1981 to 1988, you did not have any  
4 responsibility to oversee the operation of that well?

5 A. No, no.

6 MR. SANDOVAL: I have nothing further.

7 EXAMINER CATANACH: Just a couple of questions,  
8 Mr. Hunt.

9 EXAMINATION

10 BY EXAMINER CATANACH:

11 Q. Do you recall how many wells were served by that  
12 tank battery?

13 A. There were several there that we had. I think  
14 the Shell State A water went down there, and possibly  
15 another well up there, I don't remember now what -- It was  
16 Humble -- Humphries, Humphries Number 1, went down there.

17 Q. So there was two or three --

18 A. Well, and -- there was -- That made three wells,  
19 Shell State A, Humble State Number 3 and the Humphries.

20 Q. Okay, so three wells going into that battery?

21 A. Well, no, no, they didn't go into the battery.  
22 The water was carried down there.

23 Q. The water --

24 A. The Humphries has its own tank battery for the  
25 oil.

1 Q. Okay.

2 A. And the Shell State had a tank battery inside  
3 that Humble State for its oil. So it was not a -- It was a  
4 combination battery for two different leases, the Shell  
5 State and the Humble State.

6 Q. Okay, and the water from these wells was  
7 separated -- Did you have separating equipment on the  
8 location?

9 A. We had separating equipment up on the Humphries  
10 that separated the oil and water. The water went down  
11 there and went into a disposal well -- or went into a  
12 disposal well down there. As long as we had the pits up --  
13 the pit rules, why, we wasn't putting the Humphries down  
14 there.

15 Q. Okay. Before the disposal well came on line, the  
16 water, the produced water was just -- was it being piped  
17 down to the pit?

18 A. It was piped to the pit, yeah.

19 Q. From all three of those wells?

20 A. Yeah.

21 Q. Okay. Was it a lot of produced water? Do you  
22 recall?

23 A. We had quite a bit off of the Humble State,  
24 because we had a submersible pump in it.

25 Q. Okay. And you testified it was hard to separate

1 the oil, so you did have --

2 A. That's right.

3 Q. -- a pretty good percentage of oil in that water?

4 A. A good bit of oil in that water, and it would  
5 collect on the pit, and when it did, enough that we could,  
6 well, we'd pull it off. That's all you can do.

7 Q. But you couldn't get all of it?

8 A. No, you can't get all of it.

9 Q. Right. And you went to work in 1955 for Mr.  
10 Lowe?

11 A. That's right.

12 Q. Now, this well was drilled in the mid-1940s?

13 A. That's what the records show. I'm not familiar  
14 with it, other than what the records show.

15 Q. So as far as you know, when you came to work that  
16 was how they had been doing things before you came to work  
17 for them; is that correct?

18 A. Yeah.

19 Q. Okay, they had just been disposing water into  
20 those pits?

21 A. Yeah.

22 Q. As far as you know?

23 A. As far as I know, yeah.

24 Q. Okay. And you don't have any knowledge of what  
25 the chloride content of that water was, Mr. Lowe?

1           A.    No, I'm sure I couldn't tell you, other than the  
2 fact it was not really salty, because it would freeze real  
3 easily.  If you had a line laying out there, if you spilled  
4 some on the ground, it was freezing weather, it would  
5 freeze right there.

6                    And that was the reason it was hard to separate,  
7 because the salinity of it was so low that, you know, oil  
8 and water will separate better if you've got a higher  
9 concentrate of salt in it.

10           Q.    Now, these wells, I think according to the  
11 records, were producing from the Jalmat Gas Pool; is that  
12 right?  Or Jalmat Oil Pool?

13           A.    Seven Rivers, yeah.

14                    EXAMINER CATANACH:  Okay.  I think that's all I  
15 have of this witness.

16                    Anything else?

17                    MR. STRANGE:  No, sir.

18                    MS. MacQUESTEN:

19                    EXAMINER CATANACH:  Okay.

20                                    EXAMINATION

21 BY MS. MacQUESTEN:

22           Q.    Could I just ask -- I'm sorry, Mr. Humphries --

23           A.    Okay.

24           Q.    -- I was a little confused about the tank  
25 batteries.  Was there a tank battery in place when you were

1 working for Mr. Lowe and then --

2 A. That's right.

3 Q. -- for Maralo?

4 And what were the tanks used for?

5 A. And when I went to work for Maralo?

6 Q. (Nods)

7 A. No, when I went to work for Maralo I don't know  
8 about the tanks there, because I moved to Midland in 1981,  
9 and I think Maralo took over in 1974. Yeah, the tank  
10 batteries was there. There was two 500-barrel tanks, two  
11 250-barrel tanks, setting in that one tank area.

12 Q. And what did they contain?

13 A. Oil.

14 Q. Oil? And from which wells?

15 A. Well, the two 500s was for the oil from the  
16 Humble State Number 3, and the two 250s was from the Shell  
17 State A.

18 Q. What was done with the tank bottoms from those  
19 tank batteries, do you know?

20 A. When we had to have a tank cleaned, when it got  
21 to where the pipeline would not run it, we'd call the  
22 trucking outfit out there to come out there and clean the  
23 tank.

24 Q. What did they do with the tank bottoms?

25 A. I'm not sure what they did with the tanks, tank

1 bottoms.

2 MS. MacQUESTEN: I don't have any other  
3 questions. Thank you.

4 MR. STRANGE: One question

5 EXAMINATION

6 BY MR. STRANGE:

7 Q. Did they dispose of those tank bottoms on the  
8 location?

9 A. No. No, they hauled them off-location.

10 MR. STRANGE: Okay.

11 MR. SANDOVAL: Mr. Examiner, you mentioned  
12 something I hadn't heard before. I just have one -- two  
13 follow-up questions.

14 EXAMINER CATANACH: Go ahead.

15 EXAMINATION

16 BY MR. SANDOVAL:

17 Q. You testified just in response to Ms.  
18 MacQuesten's last question that -- or you mentioned a  
19 pipeline when it wasn't working. What pipeline are you  
20 referring to?

21 A. When it wasn't working?

22 Q. You said there was a pipeline out there that at  
23 times would not work.

24 A. No, I didn't say the pipeline wouldn't work. You  
25 must have misunderstood me, because I didn't say the

1 pipeline didn't work.

2 Q. Was there a pipeline out there associated with  
3 this well site?

4 A. There was an oil line that carried the oil away  
5 from it.

6 Q. And that was part of Maralo's operation of that  
7 well?

8 A. No, it had nothing to do with that. No, it had  
9 nothing to do with that. Oil was sold to an oil buyer, and  
10 when it went out of the tank we had nothing to do with it  
11 from that point on.

12 Q. But you would place the oil that you drilled from  
13 your well into that pipeline for someone else?

14 A. For somebody else, yes.

15 MR. SANDOVAL: Okay.

16 EXAMINER CATANACH: I'm sorry, I've just got two  
17 more, then we'll let you go.

18 EXAMINATION

19 BY EXAMINER CATANACH:

20 Q. The well that was drilled -- or the well that you  
21 started utilizing in 1968, a disposal well --

22 A. Uh-huh.

23 Q. -- was that Maralo's well?

24 A. It was Maralo's well. It was drilled for an oil  
25 well and it wasn't worth producing, so it was never

1 produced, very much anyhow. And then when that ruling --  
2 when the State come up with the ruling that we could not  
3 use pits anymore, then we made a disposal well out of it.

4 Q. Do you recall what the name of that well was,  
5 sir?

6 A. Humble State Number 1.

7 Q. That was the Humble State Number 1. Was it  
8 fairly close to this site?

9 A. Oh, yeah, it was -- I couldn't say exactly how  
10 far. Probably 400 feet, 400 or 500 feet from...

11 Q. Okay. And from that point on when that disposal  
12 well was drilled and converted to disposal, no additional  
13 water was placed into the pits at that --

14 A. No.

15 Q. -- from that point on?

16 A. No, not since 1968 when we made a disposal well  
17 out of the Number 1.

18 Q. And you retired from Maralo in what year, sir?

19 A. Ninety-six.

20 Q. 1996?

21 A. Yeah.

22 EXAMINER CATANACH: Thank you, that's all I have.

23 MR. STRANGE: We have no additional testimony or  
24 evidence.

25 EXAMINER CATANACH: Really.

1 (Laughter)

2 MR. KELLAHIN: Don't you want to go home, David?

3 EXAMINER CATANACH: I'm just surprised.

4 MR. STRANGE: Yes, sir, that's it.

5 EXAMINER CATANACH: Okay.

6 MR. SANDOVAL: Well, I'll follow that lead. I do  
7 have some, but I'll make it very short. I'd like to  
8 call --

9 EXAMINER CATANACH: Do you have a witness?

10 MR. SANDOVAL: I'd like to call Jay Anthony.

11 EXAMINER CATANACH: Okay.

12 JAY S. ANTHONY,

13 the witness herein, after having been first duly sworn upon  
14 his oath, was examined and testified as follows:

15 DIRECT EXAMINATION

16 BY MR. SANDOVAL:

17 Q. Please state your name for the record.

18 A. Jay S. Anthony.

19 Q. And where do you live, Mr. Anthony?

20 A. Jal, New Mexico.

21 Q. And you're the person that filed the complaint  
22 with the OCD regarding this particular well site and  
23 battery --

24 A. Yes, sir.

25 Q. -- that we've been talking about, correct?

1           What do you do in that area of New Mexico?

2           A.    I'm a cow/calf operator.  I ranch that country  
3 right there.

4           Q.    How large is your ranch, sir?

5           A.    Approximately 20,000 acres.

6           Q.    And how long have you owned that ranch?

7           A.    Solely, since 1994.

8           Q.    How many head of cattle do you currently run, on  
9 the average, on that property?

10          A.    On the average we run around 250 head.

11          Q.    You testified, I think, that you've owned it  
12 solely since about 1994.  What was your association with  
13 the ranch prior to that?

14          A.    I was in partners with my brother, and before  
15 that my granddad owned it.

16          Q.    How long -- Well, when did your granddad first  
17 acquire the property?

18          A.    In the 1950s.

19          Q.    And what kind of operation did he run on that  
20 ranch?  Cattle as well?

21          A.    Cattle, cattle operation.

22          Q.    Where did you -- when -- you grew up -- Where did  
23 you grow up?

24          A.    I grew up in Monahans, Texas.

25          Q.    And when did you first have occasion to come to

1 reside on the ranch?

2 A. I moved to Jal in 1985.

3 Q. And were you aware at that time of the oil and  
4 gas operations that were being conducted on-site by Maralo?

5 A. Yes, I was.

6 Q. Can you describe for me what you recall about  
7 that point in time?

8 A. Describe the wells or the --

9 Q. Yeah, how many wells do you recall Maralo --

10 A. Well, I recall that they had a big battery site,  
11 which is the one in question, on the north side -- on the  
12 south side of the road, there were four 250-barrel tanks.  
13 And on the north side of the road there was a separator and  
14 another water leg, on the north side.

15 Q. And that is all associated with the well and tank  
16 battery that's --

17 A. Yes.

18 Q. -- that was initially here, correct?

19 A. And the wells were just scattered out through the  
20 lease.

21 Q. About how many wells total? Do you know?

22 A. Four or five on my property.

23 Q. Okay. Do you have any specific recollection  
24 about the operation of those wells, and particularly this  
25 well that's at issue here in terms of, you know, how it may

1 have impacted the land at that point in time while the  
2 wells were actually being drilled?

3 A. You have to re-ask it.

4 Q. Do you recall any accidents, spills or things of  
5 that sort that may have occurred on this site?

6 A. There were signs of spills off that well, yes,  
7 and they're still there today.

8 Q. What can you tell me about those?

9 A. Well, they're just oily dirt that it ran over or  
10 -- and ran out through the -- off the location, and it's  
11 still on the location and off.

12 Q. Okay. In a little bit we'll have you go through  
13 a couple of photographs here, but you recall that the well  
14 at issue was plugged and abandoned in about 1988, correct?

15 A. Yes.

16 Q. Did you receive notice from -- formal notice from  
17 Maralo, that this was happening?

18 A. No.

19 Q. When did you first come to determine that there  
20 was a problem with the abandoned site there that caused you  
21 concern?

22 A. Well, they abandoned the site, they went in and  
23 tore down the -- took all the tanks and the battery down.  
24 They left the bottom part of the tank, the metal part. I  
25 think they had a salvage crew or something come in and take

1 them out. And they left the flow lines in, and they were  
2 -- some were buried, some were on the top of the ground.  
3 They're still there.

4 Q. What do you mean by a flow line?

5 A. A flow line that took water from the water leg to  
6 the disposal, and oil from the -- maybe from -- oil from  
7 the wells to the battery?

8 MR. SANDOVAL: May I approach, your Honor? I  
9 mean, Mr. Examiner?

10 EXAMINER CATANACH: (Nods)

11 MR. SANDOVAL: Is that an example of one of the  
12 flow lines that you're testifying about?

13 A. Yes, sir.

14 Q. Okay. And where is that located in relation to  
15 the location of the pit areas?

16 A. It will be on the north side of the road.

17 Q. And are there other spots on your property that  
18 -- on which you see the exposed flow lines --

19 A. Yes.

20 Q. -- as well?

21 A. This particular line crosses the road and goes  
22 across the pit area to the -- I think it's the Humble  
23 Number 1 where they made the disposal well.

24 Q. And to your knowledge, that's a flow line that  
25 was being utilized by Maralo in their operation of this

1 particular property?

2 A. Yes.

3 Q. Let me show you another photograph, Mr. Anthony,  
4 and have you describe what that photograph depicts for the  
5 Hearing Examiner, please.

6 A. This picture was taken on the west side of the  
7 northwest corner of the pit area. This is showing one of  
8 the pits and the crusty asphaltine around it.

9 Q. Okay. Can you please kind of describe to the  
10 Hearing Examiner what sort of impacts the presence of the  
11 contamination on your property has on your operation as a  
12 cattle rancher?

13 A. Well, I'm not able to use this property for  
14 anything. I can't grow grass on it, I can't use it for  
15 recreation, for enjoyment. I can't use it for anything. I  
16 can't grow anything on it.

17 Can I go back to this photo right here?

18 Q. Sure.

19 A. You'll see the pits, in the far background on  
20 that picture you'll see where the battery sat, and I have  
21 some photographs of where the battery was. All this, the  
22 battery site and these pits all connect together. They're  
23 all connected.

24 Q. Is this a photograph of the battery site?

25 A. No, this is air relief on the flow line that went

1 to the disposal.

2 MR. SANDOVAL: Let me then -- I'll tell you what,  
3 I don't think I have anything further.

4 EXAMINER CATANACH: Okay. Any cross-examination  
5 of this witness?

6 MR. STRANGE: No, sir.

7 MS. MacQUESTEN: No, sir.

8 EXAMINER CATANACH: Okay, I don't have anything.  
9 This witness may be excused.

10 What else? Is that it?

11 MR. KELLAHIN: I know it's late. Would you like  
12 us to submit draft orders for you? And by that way you  
13 would have our point of view and have it writing.

14 EXAMINER CATANACH: That would be appreciated, if  
15 you would do that.

16 MR. KELLAHIN: I think we're ready to stop.

17 EXAMINER CATANACH: Okay. I'm ready to stop too.

18 Okay, there being nothing further in this case,  
19 Case 13,142 will be taken under advisement.

20 MS. MacQUESTEN: Do we have a deadline on the  
21 draft orders?

22 EXAMINER CATANACH: Thirty days.

23 (Thereupon, these proceedings were concluded at  
24 6:25 p.m.)

25

\* \* \*

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. \_\_\_\_\_  
heard by me on \_\_\_\_\_

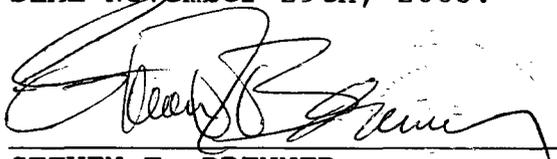
## CERTIFICATE OF REPORTER

STATE OF NEW MEXICO    )  
                                   )    ss.  
 COUNTY OF SANTA FE    )

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL November 29th, 2003.



STEVEN T. BRENNER  
 CCR No. 7

My commission expires: October 16th, 2006