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

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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I N D E X

November 20th, 2003
Examiner Hearing
CASE NO. 13,142

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E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	9	50
Exhibit 2	10	50
Exhibit 3	16	50
Exhibit 4	17, 27	50
Exhibit 5	17, 29	32
Exhibit 6	25	50
Exhibit 7	43	50
Exhibit 8	45	50
Exhibit 9	45	50
Exhibit 10	47	50
Exhibit 11	39	50

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A P P E A R A N C E S

FOR THE DIVISION:

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By: DAVID SANDOVAL

* * *

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

EXAMINER CATANACH: All right, at this time we'll call the hearing back to order and call Case Number 13,142, which is the 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.

Call for appearances in this case.

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

EXAMINER CATANACH: Additional appearances?

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

EXAMINER CATANACH: Any additional appearances?

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

EXAMINER CATANACH: Any additional appearances?

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

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

EXAMINER CATANACH: Mr. Kellahin?

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

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

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

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

(Thereupon, the witnesses were sworn.)

EXAMINER CATANACH: You may proceed, Ms. MacQuesten.

MS. MacQUESTEN: I would call William Olson.

WILLIAM C. OLSON,

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

DIRECT EXAMINATION

BY MS. MacQUESTEN:

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

A. My name is William C. Olson.

Q. And where do you work?

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

Q. And in what capacity are you employed there?

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

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

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

Q. Now, hydrologist involves the investigation of water?

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

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

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

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

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

EXAMINER CATANACH: Are there any objections?

MR. KELLAHIN: No, sir.

EXAMINER CATANACH: Mr. Olson is so qualified.

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

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

Q. If I may approach, I have a packet of exhibits.

Mr. Olson, how did the contamination issue at that site come to the attention of OCD?

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

Q. Is she still with the OCD?

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

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

A. Yes, it is.

Q. And what is the date of that complaint?

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

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

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

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

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

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

A. That's correct.

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

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

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

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

A. Yes, it is.

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

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

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

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

necessary at the site.

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

A. Yes, she did.

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

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

Q. Did they submit a cleanup plan?

A. Not to my knowledge.

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

A. Not to my knowledge.

Q. Was further investigation done of this site?

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

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

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

or adjacent to the former tank battery.

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

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

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

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

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

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

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

EXAMINER CATANACH: You may proceed.

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

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

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

Q. Were you involved in taking that sample?

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

Q. What was the result of your sample?

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

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

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

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

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

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

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

Q. Was there any equipment at the site?

A. No, there was not.

Q. This asphalty area with chunks, how large an area are we talking about?

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

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

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

Q. You testified that there were three pits?

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

Q. What did they look like?

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

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

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

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

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

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

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

Q. So what did you decide to do next?

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

Q. Did they provide one?

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

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

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

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

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

A. There was three that were conducted, yes.

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

A. That's correct.

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

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

Q. That was in the summer of 2001?

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

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

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

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

A. Yes, that is correct.

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

EXAMINER CATANACH: No, no problem at all.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A. Yes.

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

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

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

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

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

A. That's correct.

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

A. That is correct.

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

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

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

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

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

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

Sample number 3 was a surface sample.

And sample 4 was collected from four feet deep.

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

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

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

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

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

A. The Division uses a guidance that has been

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

Q. And what is that system?

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

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

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

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

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

Q. And a moderate risk level?

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

Q. And the lowest risk level?

A. Is 5000 milligrams per kilogram.

Q. Which tier would apply in this case?

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

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

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

Q. What are these levels attempting to protect?

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

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

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

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

A. That's correct.

Q. When did those take effect?

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

Q. What were the standards before that time?

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

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

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

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

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

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

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

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

Q. Now sample number 1 --

A. -- down below that.

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

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

Q. And that has the highest level of TPH?

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

Q. The remaining samples were all taken from it

areas?

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

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

A. Yes.

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

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

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

A. That's correct.

Q. And were chlorides found?

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

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

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

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

A. Yes, they were taken during this investigation.

Q. And are they part of the investigation file?

A. Yes, they are.

Q. What does the top picture show?

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

Q. What is that darker substance?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A. That's correct.

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

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

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

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

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

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

that area north of the battery.

Q. What were the results for the southwest area?

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

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

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

Q. And what were those results?

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

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

A. That's correct.

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

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

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

A. Yes, it is.

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

regarding what you would request from Maralo regarding the site?

A. Yes, the -- this report --

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

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

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

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

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

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

EXAMINER CATANACH: Please.

MR. SANDOVAL: My client hired Mr. Seay to

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

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

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

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

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

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

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

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

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

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

A. They went down to 80 feet in depth.

Q. How many areas were sampled?

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

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

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

Q. And which location was that closest to?

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

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

A. Yes.

Q. -- in this third investigation?

A. Yeah, the two borehole locations.

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

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

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

A. Yes, it does.

Q. And what were the TPH findings?

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

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

A. That's correct.

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

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

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

A. That's correct.

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

A. They were significantly higher in the near-

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

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

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

Q. Did this third investigation also look at chlorides?

A. Yes, it did.

Q. And what did it find?

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

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

A. Yes, they are.

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

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

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

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

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

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

A. Yes, it is.

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

A. That's correct.

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

A. That's correct.

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

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

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

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

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

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

A. Yes, you would.

Q. Do chlorides dissipate, evaporate, go away?

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

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

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

A. No, we didn't.

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

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

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

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

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

A. No, you cannot.

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

A. Yes, they are.

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

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

Q. Is there a requirement to register pits?

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

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

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

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

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

from our review of our well files.

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

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

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

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

Q. And who was the operator?

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

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

A. Yes, it was.

Q. And what is the date of this document?

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

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

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

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

A. Yes, it is.

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

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

Q. And when was this submitted?

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

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

A. No, there is not.

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

A. That's correct.

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

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

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

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

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

A. This is the subsequent report of plugging and

abandonment of the Humble State Number 3.

Q. And this was signed off on by OCD?

A. And this was signed by an OCD inspector.

Q. When was it submitted?

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

Q. Does it contain any mention of a battery?

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

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

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

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

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

Q. And in this case that would be who?

A. That would be Maralo, LLC.

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

A. We have been dealing with Maralo, LLC.

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

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

specified in the statute.

Q. Would that be practical?

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

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

A. I'm not sure I --

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

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

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

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

15th of 2000.

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

A. Yes.

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

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

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

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

present.

Q. So whatever disking was done in 1993 didn't solve the contamination problem?

A. It appears that it has not.

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

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

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

A. Yes, it does.

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

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

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

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

Q. What does the letter ask for?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A. Yes.

Q. Is that right?

A. That's correct.

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

A. We had been through our correspondence, yes.

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

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

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

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

Q. Even with that clarification, did you ever

receive a cleanup plan from Maralo?

A. No, we did not.

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

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

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

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

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

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

A. Yes.

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

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

MR. KELLAHIN: No objection.

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

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

EXAMINER CATANACH: Mr. Kellahin?

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

EXAMINER CATANACH: Okay, Mr. Strange?

MR. STRANGE: Thank you, sir.

CROSS-EXAMINATION

BY MR. STRANGE:

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

A. That's correct.

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

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

A. That's correct.

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

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

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

A. That's correct.

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

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

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

A. That's correct.

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

A. That's correct.

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

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

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

A. Okay.

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

A. Yes.

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

A. No.

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

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

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

read out loud here a little bit.

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

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

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

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

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

A. That's correct.

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

A. I agree.

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

A. That's right.

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

A. Correct.

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

A. Yes.

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

A. 1945, I think we testified to.

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

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

A. That's correct.

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

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

Q. On into the Sixties.

A. The mid-Sixties, correct.

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

A. That's correct.

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

A. That's correct.

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

A. Can you say that again?

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

A. Yes.

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

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

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

A. Yes.

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

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

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

A. Yeah.

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

A. Yes, I have.

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

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

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

A. Yes.

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

A. That's correct.

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

Did I read that sentence correctly?

A. Yes, you did.

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

A. That's correct.

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

A. That's correct.

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

A. Correct, oil and condensates.

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

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

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

A. Yes.

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

A. That's correct.

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

A. BS&W.

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

A. Yes.

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

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

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

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

Q. Yes, sir.

A. -- contaminants that we've seen.

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

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

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

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

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

A. Yes.

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

A. Yes.

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

A. Yes.

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

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

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

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

A. Yes.

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

A. I'd agree with you.

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

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

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

A. That's correct.

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

A. That's correct.

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

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

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

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

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

A. Typically, yes.

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

A. Yes, it's a volatile organic.

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

A. Yes.

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

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

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

A. Yes.

Q. That summarizes the BTEX analysis?

A. Yes, it does.

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

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

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

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

Q. But no xylene on that last sample?

A. But no xylene.

Q. Or no ethylbenzene?

A. Ethylbenzene, that's correct.

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

A. Yes, I'd agree with you.

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

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

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

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

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

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

A. Uh-huh.

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

A. Uh-huh.

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

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

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

A. It could be.

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

A. Yes.

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

A. Just a second. Yes.

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

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

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

A. No.

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

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

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

A. No, we do not.

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

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

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

A. Yes.

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

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

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

A. No, I cannot.

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

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

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

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

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

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

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

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

A. Yes.

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

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

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

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

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

A. Yes.

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

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

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

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

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

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

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

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

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

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

Q. Does he have that pipeline correctly located?

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

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

A. No, I do not.

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

A. We did not investigate the pipelines.

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

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

proximity to the, you know, MA 2.

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

A. Correct.

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

A. That's correct.

Q. Do you know what depth that pipeline is?

A. I do not.

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

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

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

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

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

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

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

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

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

EXAMINATION

BY MR. SANDOVAL:

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

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

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

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

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

A. That's correct.

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

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

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

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

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

A. That's correct.

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

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

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

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

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

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

EXAMINER CATANACH: Okay, did you have anything?

MS. MacQUESTEN: Just a few.

EXAMINER CATANACH: Go ahead.

MS. MacQUESTEN: And I apologize.

REDIRECT EXAMINATION

BY MS. MacQUESTEN:

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

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

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

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

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

A. Yes, that is our position.

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

A. That's correct.

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

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

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

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

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

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

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

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

A. Yes.

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

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

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

MS. MacQUESTEN: No more questions.

RECROSS-EXAMINATION

BY MR. STRANGE:

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

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

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

A. Correct.

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

A. That's correct.

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

some oil products and hydrocarbons in that water?

A. That does occur, yes.

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

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

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

A. Uh-huh, correct.

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

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

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

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

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

A. That's correct.

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

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

A. That's correct.

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

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

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

A. Right.

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

A. Correct.

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

A. That's correct.

Q. Now --

A. Up to the mid-Sixties.

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

A. Yes.

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

A. Yes.

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

A. Correct.

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

A. That's correct.

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

A. That's correct.

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

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

MR. STRANGE: Thank you, pass the witness.

EXAMINATION

BY EXAMINER CATANACH:

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

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

A. Yes, you would.

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

A. No, we did not.

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

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

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

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

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

A. That's correct.

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

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

A. Yes, you would.

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

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

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

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

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

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

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

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

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

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

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

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

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

this Bureau?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

EXAMINER CATANACH: Okay. I think I'd better

stop there. That's all I have.

Anything further of this witness?

MR. KELLAHIN: (Shakes head)

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

FURTHER EXAMINATION

BY MR. SANDOVAL:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

EXAMINER CATANACH: Okay, this witness may be excused.

MS. MacQUESTEN: OCD has no other witnesses.

EXAMINER CATANACH: That concludes your presentation?

MS. MacQUESTEN: Yes.

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

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

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

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

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

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

EXAMINER CATANACH: Yes.

MR. KELLAHIN: -- talk about this?

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

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

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

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

WILLIAM B. HUNT,

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

DIRECT EXAMINATION

BY MR. STRANGE:

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

A. William B. Hunt.

Q. Mr. Hunt, where do you live?

A. I live in Midland, Texas.

Q. For whom do you work?

A. I'm retired.

Q. What did you do before you retired?

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

Q. What were you doing for Maralo?

A. I was operations manager.

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

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

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

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

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

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

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

A. Ralph Lowe.

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

A. That's right.

Q. What did you do for Mr. Lowe?

A. I was working on a drilling rig.

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

A. Well, I was just a roughneck.

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

A. Worked my way up through the company.

Q. What was your ultimate position with Ralph Lowe?

A. Assistant production foreman.

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

A. Yes, I did.

Q. Have you been out there?

A. Uh-huh.

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

A. Yes, yes.

Q. -- because this is being taken down.

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

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

Q. And you went into drilling?

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

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

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

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

A. That's right.

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

A. That's right.

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

A. I went to work for Maralo.

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

A. It's two different companies.

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

A. There was, certainly was.

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

A. Different company.

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

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

Q. What were those disposal pits used for?

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

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

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

Q. How do you know that?

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

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

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

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

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

A. It went into Disposal Well Number 1.

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

A. No, there was not.

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

A. We sure did.

Q. What did Ralph Lowe do?

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

Q. Now, you're familiar with tank bottoms?
A. That's right.
Q. Did you ever, ever, put any tank bottoms out there in any of those old pits?
A. No, we did not.
Q. Did you ever dispose of any tank bottoms out in the area that we've talked about as far as the tank battery area?
A. No, as far as I know, we did not.
Q. Now, from time to time would you have a leak at a tank battery site?
A. Sometimes the tanks ran over.
Q. What would you do then?
A. We'd have to pick that oil up out of the firewalls, put it back in the tank.
Q. All right. Now, from 1974 on, when Maralo was in existence, did Maralo ever use any of those surface disposal pit sites for any reason whatsoever?
A. Surface disposal site?
Q. I'm sorry, you know the little surface pits?
A. Yes, uh-huh.
Q. The land where those pits were located --
A. Yeah.
Q. -- after you put in the SWD well, what did you all do with those old locations?

A. They were just left there, you know, and filled up and -- When I left them there they was just -- they filled up.

Q. Okay. Did Maralo ever use those pits or those locations, where the surface disposal pits are located, for any reason whatsoever?

A. Maralo never did, no.

MR. STRANGE: All right, thank you. No further questions.

EXAMINER CATANACH: Cross-examination, Ms. MacQuesten?

MS. MacQUESTEN: No questions.

EXAMINER CATANACH: Mr. Sandoval?

MR. SANDOVAL: I have a couple.

EXAMINATION

BY MR. SANDOVAL:

Q. Mr. Hunt, I'm David Sandoval. I'm an attorney for Jay Anthony on whose property the well at issue is located. I have a few questions for you.

At the time that you were in -- you were the assistant production foreman for Mr. Lowe, and were -- and had responsibility for this well, how many other wells were you responsible for?

A. Oh, in that area right there, probably 50, 60 wells.

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

A. Daily.

Q. Okay.

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

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

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

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

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

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

A. Yeah.

Q. How often did that happen?

A. Not very often.

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

A. Not every day, no.

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

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

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

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

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

A. That's right.

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

A. Yeah, I did.

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

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

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

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

Q. Okay, thanks.

You testified that Ralph Lowe and Maralo were different companies?

A. That's right.

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

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

Q. Do you know who Mary Lowe is?

A. Yes, I know who Mary Lowe is.

Q. And who is she?

A. His daughter.

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

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

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

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

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

A. He died in '65.

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

A. No.

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

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

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

A. The Number 3?

Q. Yes, sir.

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

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

A. Yes.

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

A. Not in production, I was in drilling.

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

A. Yes, in 1981, yes.

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

A. No, no.

MR. SANDOVAL: I have nothing further.

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

EXAMINATION

BY EXAMINER CATANACH:

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

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

Q. So there was two or three --

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

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

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

Q. The water --

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

Q. Okay.

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

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

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

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

A. It was piped to the pit, yeah.

Q. From all three of those wells?

A. Yeah.

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

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

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

the oil, so you did have --

A. That's right.

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

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

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

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

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

A. That's right.

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

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

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

A. Yeah.

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

A. Yeah.

Q. As far as you know?

A. As far as I know, yeah.

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

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

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

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

A. Seven Rivers, yeah.

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

Anything else?

MR. STRANGE: No, sir.

MS. MacQUESTEN:

EXAMINER CATANACH: Okay.

EXAMINATION

BY MS. MacQUESTEN:

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

A. Okay.

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

working for Mr. Lowe and then --

A. That's right.

Q. -- for Maralo?

And what were the tanks used for?

A. And when I went to work for Maralo?

Q. (Nods)

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

Q. And what did they contain?

A. Oil.

Q. Oil? And from which wells?

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

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

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

Q. What did they do with the tank bottoms?

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

bottoms.

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

MR. STRANGE: One question

EXAMINATION

BY MR. STRANGE:

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

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

MR. STRANGE: Okay.

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

EXAMINER CATANACH: Go ahead.

EXAMINATION

BY MR. SANDOVAL:

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

A. When it wasn't working?

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

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

pipeline didn't work.

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

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

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

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

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

A. For somebody else, yes.

MR. SANDOVAL: Okay.

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

EXAMINATION

BY EXAMINER CATANACH:

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

A. Uh-huh.

Q. -- was that Maralo's well?

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

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

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

A. Humble State Number 1.

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

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

Q. Okay. And from that point on when that disposal well was drilled and converted to disposal, no additional water was placed into the pits at that --

A. No.

Q. -- from that point on?

A. No, not since 1968 when we made a disposal well out of the Number 1.

Q. And you retired from Maralo in what year, sir?

A. Ninety-six.

Q. 1996?

A. Yeah.

EXAMINER CATANACH: Thank you, that's all I have.

MR. STRANGE: We have no additional testimony or evidence.

EXAMINER CATANACH: Really.

(Laughter)

MR. KELLAHIN: Don't you want to go home, David?

EXAMINER CATANACH: I'm just surprised.

MR. STRANGE: Yes, sir, that's it.

EXAMINER CATANACH: Okay.

MR. SANDOVAL: Well, I'll follow that lead. I do have some, but I'll make it very short. I'd like to call --

EXAMINER CATANACH: Do you have a witness?

MR. SANDOVAL: I'd like to call Jay Anthony.

EXAMINER CATANACH: Okay.

JAY S. ANTHONY,

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

DIRECT EXAMINATION

BY MR. SANDOVAL:

Q. Please state your name for the record.

A. Jay S. Anthony.

Q. And where do you live, Mr. Anthony?

A. Jal, New Mexico.

Q. And you're the person that filed the complaint with the OCD regarding this particular well site and battery --

A. Yes, sir.

Q. -- that we've been talking about, correct?

What do you do in that area of New Mexico?

A. I'm a cow/calf operator. I ranch that country right there.

Q. How large is your ranch, sir?

A. Approximately 20,000 acres.

Q. And how long have you owned that ranch?

A. Solely, since 1994.

Q. How many head of cattle do you currently run, on the average, on that property?

A. On the average we run around 250 head.

Q. You testified, I think, that you've owned it solely since about 1994. What was your association with the ranch prior to that?

A. I was in partners with my brother, and before that my granddad owned it.

Q. How long -- Well, when did your granddad first acquire the property?

A. In the 1950s.

Q. And what kind of operation did he run on that ranch? Cattle as well?

A. Cattle, cattle operation.

Q. Where did you -- when -- you grew up -- Where did you grow up?

A. I grew up in Monahans, Texas.

Q. And when did you first have occasion to come to

reside on the ranch?

A. I moved to Jal in 1985.

Q. And were you aware at that time of the oil and gas operations that were being conducted on-site by Maralo?

A. Yes, I was.

Q. Can you describe for me what you recall about that point in time?

A. Describe the wells or the --

Q. Yeah, how many wells do you recall Maralo --

A. Well, I recall that they had a big battery site, which is the one in question, on the north side -- on the south side of the road, there were four 250-barrel tanks. And on the north side of the road there was a separator and another water leg, on the north side.

Q. And that is all associated with the well and tank battery that's --

A. Yes.

Q. -- that was initially here, correct?

A. And the wells were just scattered out through the lease.

Q. About how many wells total? Do you know?

A. Four or five on my property.

Q. Okay. Do you have any specific recollection about the operation of those wells, and particularly this well that's at issue here in terms of, you know, how it may

have impacted the land at that point in time while the wells were actually being drilled?

A. You have to re-ask it.

Q. Do you recall any accidents, spills or things of that sort that may have occurred on this site?

A. There were signs of spills off that well, yes, and they're still there today.

Q. What can you tell me about those?

A. Well, they're just oily dirt that it ran over or -- and ran out through the -- off the location, and it's still on the location and off.

Q. Okay. In a little bit we'll have you go through a couple of photographs here, but you recall that the well at issue was plugged and abandoned in about 1988, correct?

A. Yes.

Q. Did you receive notice from -- formal notice from Maralo, that this was happening?

A. No.

Q. When did you first come to determine that there was a problem with the abandoned site there that caused you concern?

A. Well, they abandoned the site, they went in and tore down the -- took all the tanks and the battery down. They left the bottom part of the tank, the metal part. I think they had a salvage crew or something come in and take

them out. And they left the flow lines in, and they were -- some were buried, some were on the top of the ground. They're still there.

Q. What do you mean by a flow line?

A. A flow line that took water from the water leg to the disposal, and oil from the -- maybe from -- oil from the wells to the battery?

MR. SANDOVAL: May I approach, your Honor? I mean, Mr. Examiner?

EXAMINER CATANACH: (Nods)

MR. SANDOVAL: Is that an example of one of the flow lines that you're testifying about?

A. Yes, sir.

Q. Okay. And where is that located in relation to the location of the pit areas?

A. It will be on the north side of the road.

Q. And are there other spots on your property that -- on which you see the exposed flow lines --

A. Yes.

Q. -- as well?

A. This particular line crosses the road and goes across the pit area to the -- I think it's the Humble Number 1 where they made the disposal well.

Q. And to your knowledge, that's a flow line that was being utilized by Maralo in their operation of this

particular property?

A. Yes.

Q. Let me show you another photograph, Mr. Anthony, and have you describe what that photograph depicts for the Hearing Examiner, please.

A. This picture was taken on the west side of the northwest corner of the pit area. This is showing one of the pits and the crusty asphaltine around it.

Q. Okay. Can you please kind of describe to the Hearing Examiner what sort of impacts the presence of the contamination on your property has on your operation as a cattle rancher?

A. Well, I'm not able to use this property for anything. I can't grow grass on it, I can't use it for recreation, for enjoyment. I can't use it for anything. I can't grow anything on it.

Can I go back to this photo right here?

Q. Sure.

A. You'll see the pits, in the far background on that picture you'll see where the battery sat, and I have some photographs of where the battery was. All this, the battery site and these pits all connect together. They're all connected.

Q. Is this a photograph of the battery site?

A. No, this is air relief on the flow line that went

to the disposal.

MR. SANDOVAL: Let me then -- I'll tell you what, I don't think I have anything further.

EXAMINER CATANACH: Okay. Any cross-examination of this witness?

MR. STRANGE: No, sir.

MS. MacQUESTEN: No, sir.

EXAMINER CATANACH: Okay, I don't have anything. This witness may be excused.

What else? Is that it?

MR. KELLAHIN: I know it's late. Would you like us to submit draft orders for you? And by that way you would have our point of view and have it writing.

EXAMINER CATANACH: That would be appreciated, if you would do that.

MR. KELLAHIN: I think we're ready to stop.

EXAMINER CATANACH: Okay. I'm ready to stop too.

Okay, there being nothing further in this case, Case 13,142 will be taken under advisement.

MS. MacQUESTEN: Do we have a deadline on the draft orders?

EXAMINER CATANACH: Thirty days.

(Thereupon, these proceedings were concluded at 6:25 p.m.)

* * *

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 _____.

_____, Examiner
Oil Conservation Division

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