BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

PIASA MOTOR FUELS, INC.,	)	
	)	
Petitioner,	)	
	)	
vs	)	PCB 14-131
	)	
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

TRANSCRIPT FROM THE PROCEEDINGS

taken before the HEARING OFFICER CAROL WEBB by LORI ANN ASAUSKAS, CSR, RPR, a notary public within and for the County of Cook and State of Illinois, at the Illinois Pollution Control Board, 1021 North Grand Avenue East (North Entrance), Room 1244N, Springfield, Illinois, on the 10th day of September, A.D., at 9:00 o'clock a.m.

A P P E A R A N C E S:

ILLINOIS POLLUTION CONTROL BOARD,
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BY: MS. CAROL WEBB, HEARING OFFICER,

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BY: MR. WILLIAM D. INGERSOLL,

Appeared on behalf of the Petitioner;

ILLINOIS ENVIRONMENT PROTECTION AGENCY,
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scott.sievers@illinois.gov
BY: MR. SCOTT SIEVERS,

Appeared on behalf of the Respondent.

ALSO PRESENT:
Ms. Antonette Palumbo
Mr. Shane Thorpe
Mr. Joseph W. Truesdale
Ms. Connie Newman
Mr. Karl Kaiser

I N D E X

E X H I B I T S

HEARING OFFICER WEBB: Good morning. My name is Carol Webb. This is the hearing for PCB 14-131, Piasa Motor Fuels versus IEPA. It is September 10th and we are beginning at 9:00 a.m.

For the record, although this facility is located in Madison County, there was no known public interest in this case. So at the parties' request, we will hold the hearing in Springfield.

I will note for the record that there are no members of the public present. We have witnesses here today as well as Connie Newman, who is the Board's public information officer.

Members of the public are allowed to provide public comment if they so choose.

At issue in this case is the Site Investigation Plan and Budget for Petitioner's facility located at 4101 Alby Street in Alton. The decision deadline is November 20th.

The Pollution Control Board members will make the final decision in this case. My purpose is to conduct a hearing in a neutral and orderly manner so that we have a clear record of the proceedings.

This hearing was noticed pursuant to the Act and the Board's rules and will be conducted pursuant to Sections 101.600 through 101.632 of the Board's procedural rules.

At this time I will ask the parties to please make their appearances on the record.

MR. INGERSOLL: For the Petitioner, William D. Ingersoll of Brown, Hay & Stephens.

MR. SIEVERS: Scott Sievers on behalf of the Illinois Environmental Protection Agency, Respondent.

HEARING OFFICER WEBB: Thank you. Are there any preliminary matters to discuss on the record?

MR. INGERSOLL: I think, and I think Mr. Sievers apparently concurred, that we would move to exclude witnesses.

MR. SIEVERS: That's correct.

HEARING OFFICER WEBB: Okay.

MR. INGERSOLL: So that would mean, I guess -- well, he's going to be the first witness.

MR. SIEVERS: Who is that?

MR. INGERSOLL: Joe Truesdale.

MR. SIEVERS: Okay.

MR. INGERSOLL: Shane is the -- our -- well, he may testify, but he's going to be the client's agent for the purposes of this.

MR. SIEVERS: Sure. Well, Mr. Kaiser here, is going to be the Agency representative for the Respondent. So I guess that leaves Brandon to step out, I guess.

MR. INGERSOLL: Well, in that case, if he's the only one that's going to be -- wind up being excluded, I don't care if he stays. I don't imagine that he wants to waste any time sitting here since his part would be some time later and may not --

MR. SIEVERS: I would still like to have him excluded.

MR. INGERSOLL: Okay. Yeah, I mean, you can always call him since he's in the building.

HEARING OFFICER WEBB: Okay.

MR. SIEVERS: Yes. If you could just -- if you could just wait in the library for now perhaps.

MR. HARGRAVE: Sure.

MR. SIEVERS: Great. Thank you.

HEARING OFFICER WEBB: All right. There is also a motion to supplement the record that I understand is unopposed; is that correct?

MR. INGERSOLL: Yes.

HEARING OFFICER WEBB: Okay. So I will go ahead and grant the motion to supplement the record that was filed with the Board yesterday.

Would the Petitioner like to make an opening statement?

MR. INGERSOLL: Yes, please.

HEARING OFFICER WEBB: Okay.

O P E N I N G S T A T E M E N T

by Mr. Ingersoll

The issues we bring to the Board today involve, number one, the site-specific conditions that would justify drilling below the "water table" and what level of justification is necessary on the record before the Agency at the time it makes its decision.

Secondly, what exactly is the water table and how is the Agency using it?

Third, I guess what -- we have -- we are trying to figure out what level of second-guessing, if you will, the Agency is allowed

to do on these kind of issues after approving the Stage 1 budget and plan, which is, as the rules require, only a P.E. certification that comes along with the 45-day report and, in fact, was approved in this situation by the Agency.

We believe -- I don't know -- we -- we have to explore what exactly the level of justification that is required to show site-specific conditions that warrant drilling below the water table, but we believe that whatever that level is, it has been met on the record in this matter and we will provide testimony to that affect.

We believe that the Agency or we're going to try to show that the Agency has been misusing or misapplying the regulatory provision as it relates to water table in that they are using incorrect terms interchangeably with the term water table.

That's it. We hope to show all of that stuff today and that's it.

HEARING OFFICER WEBB: Would the Agency like to make an opening statement?

MR. SIEVERS: No, we do not.

HEARING OFFICER WEBB: Okay. The

Petitioner may call its first witness.

MR. INGERSOLL: Joseph W. Truesdale.

HEARING OFFICER WEBB: Mr. Truesdale, would you come and have a seat up here, please? Let's go that way to make it easier for you. Right here (indicating).

Would the court reporter please swear in the witness?

THE COURT REPORTER: Would you please raise your right hand?

(Witness sworn.)

WHEREUPON:

J O S E P H W. T R U E S D A L E

called as a witness herein, having been first duly sworn, deposeth and saith as follows:

E X A M I N A T I O N

by Mr. Ingersoll

Q. Would you state your name and please spell your last name?

A. Joseph W. Truesdale, T-R-U-E-S-D-A-L-E.

MR. INGERSOLL: Okay. This is going to be Exhibit No. 1.

(Document marked as Petitioner's Exhibit No. 1 for identification, 9/10/14.)

BY MR. INGERSOLL:

Q. I'm going to show you what we have marked as Petitioner's Exhibit No. 1. Can you tell us what that is?

(Document tendered to the witness.)

BY THE WITNESS:

A. It would be my resume.

BY MR. INGERSOLL:

Q. All right. And do you believe that to be current?

A. Yes.

Q. Okay. Could you give us a description of your educational background?

A. I hold three degrees; the first being an associate's degree in engineering technology in surveying and construction management; the second being a bachelor of science in environmental engineering; and the third being a bachelor of science in geology, applied geology and hydrogeology.

Q. And what year -- do you recall what years those degrees were earned approximately?

A. The last one in applied geology and hydrogeology would have been in 1998. The first one would have been in 1991. The other one was somewhere in between there.

Q. Okay. That's fine. I believe you have additional graduate work?

A. Correct.

Q. Could you --

A. I completed graduate work in analysis of environmental systems, advanced soil mechanics, and subsurface flow in porous media.

Q. Could you please walk us through your work experience?

A. Well, I started with a consulting firm after the receipt of my associate's degree doing land development and working in LUST regulations in association with Capital Development Board UST upgrades for all of their facilities.

MR. SIEVERS: Can we go off the record for a second?

(Whereupon, a discussion was had off the record.)

HEARING OFFICER WEBB: Go ahead. We can go back on.

MR. INGERSOLL: Is that an objection?

MR. SIEVERS: Well, I was asking off of the record. That's why I was raising it off the -- trying to ask it off the record. So now it's not an objection now that it's clarified.

MR. INGERSOLL: Okay.

HEARING OFFICER WEBB: Okay. Go ahead.

BY THE WITNESS:

A. Following that, I had received my bachelor's degree in environmental engineering. I began -- actually, I received both my degree in environmental engineering and geology/hydrogeology. I began working for CSD Environmental Services in 1998.

I think I said that my applied geology and hydrogeology degree was in 1998, if I'm correct. I've been working primarily in the LUST site remediation program and RCRA management.

BY MR. INGERSOLL:

Q. Did you say RCRA?

A. Yes.

Q. R-C-R-A?

A. Yes.

Q. Okay.

A. And I was doing primarily site investigation, risk assessments, remedial action plans and documentation, project management, fiscal oversight, research and development of investigation and remedial action methodology. I received my P.E. license in 2003.

Q. From what state?

A. My original license was in Illinois. I have been licensed and am currently licensed in Illinois and Missouri. I have been licensed in Iowa, but I do not currently maintain that license. My professional geologist license was in 2005. I am licensed in Illinois as a professional geologist.

My professional land surveying license was in 2009, I believe. I'm only licensed in Illinois as a professional land surveyor. I currently act as the managing agent and professional engineer, senior professional hydrogeologist for CSD Environmental Services.

Q. Okay. You've mentioned being involved

with LUST projects and remedial activities over a period of time in different jobs that you described. When did you first start working with LUST projects, do you recall?

A. The LUST program, 1992 or probably maybe 1993-ish.

Q. Is that constituted as a significant portion of your experience?

A. Yes.

Q. Okay.

A. For some years probably greater than 90 percent.

Q. How many LUST projects have you been involved with overseeing?

A. Hundreds.

Q. Well, 100, 500?

A. I would say somewhere between -- at some level of involvement somewhere between, yeah, 100 and 300 maybe.

MR. INGERSOLL: Okay. I would request admission of Petitioner's Exhibit No. 1.

MR. SIEVERS: We will object. It's not -- it's not something that the Agency

relied upon in making its decision.

HEARING OFFICER WEBB: Well, you do or do not object?

MR. SIEVERS: We do object.

HEARING OFFICER WEBB: You do object. Well, it's --

MR. INGERSOLL: I think being in the record in the hearing is different than necessarily being part of the administrative record.

HEARING OFFICER WEBB: Yes. I mean, it -- I'll just go ahead and I'm going to admit it as Exhibit No. 1 as just supporting documentation.

(Petitioner's Exhibit No. 1 was admitted into evidence.)

MR. INGERSOLL: Okay. Thank you. I will mark this as Exhibit No. 2, the 45-day report. Mark that as Exhibit No. 2, please. The copy I gave you doesn't have markings on it.

(Document marked as Petitioner's Exhibit No. 2 for identification, 9/10/14.)

BY MR. INGERSOLL:

Q. I'm going to show you what we have marked as Petitioner's Exhibit No. 2. Do you recognize that document?

(Document tendered to the witness.)

BY THE WITNESS:

A. I do.

BY MR. INGERSOLL:

Q. All right. Could you tell us what that is?

A. It was the 45-day report for the referenced incident number that was submitted in conjunction with the statutory requirements for early action reporting.

Q. And from the numbers, can I assume that that is the incident that is at issue here today?

A. I believe so, yes.

Q. Okay. I see there's a lot of other markings on this page. Do you --

A. Yes.

Q. -- know what that is?

A. Yes. The received stamp by the

security desk is --

MR. SIEVERS: I'm going to object. I don't really even know what the question is. Could the court reporter read back the question?

HEARING OFFICER WEBB: All right. Would you read back the question?

(Whereupon, the requested portion of the record was read accordingly.)

MR. SIEVERS: Withdrawn.

HEARING OFFICER WEBB: Okay. Go ahead.

BY THE WITNESS:

A. I know that the received, July 21, 2006, security desk stamp is what they Bate stamp documents when we hand deliver them to the Agency. It looks like the notation at the top is the LPC number, county, responsible party, and the LUST tech notation for where the file was supposed to go.

BY MR. INGERSOLL:

Q. But you didn't put -- those weren't --

A. No.

Q. -- markings from CSD?

A. No.

Q. So do you believe they came from the Agency?

A. Correct.

MR. INGERSOLL: Okay. Instead of creating a lot of exhibits -- separate exhibits for items that are already in the record, if it's acceptable, I'm just going to refer to the witnesses to the record as filed and it's paginated. So we can all --

HEARING OFFICER WEBB: Go ahead.

MR. INGERSOLL: -- just flip -- we can all flip to where we need.

BY MR. INGERSOLL:

Q. All right. Mr. Truesdale, I am providing you a copy of what the Agency had filed as the administrative record.

Okay. Could you refer to the first item in that -- I'm not talking about the table of contents, but the first document there.

(Document tendered to the witness.)

BY THE WITNESS:

A. In the letter?

BY MR. INGERSOLL:

Q. In the record.

A. "The Illinois Environmental Protection Agency has received the 45-day report, which included a Stage 1 Site Investigation Plan and Budget Certification."

MR. SIEVERS: Objection. The call wasn't to read the document. It was just to refer to it.

BY THE WITNESS:

A. 45-day report, Stage 1 Site Investigation Plan and Budget Certification.

MR. SIEVERS: Was there a ruling on my objection?

HEARING OFFICER WEBB: Overruled.

BY MR. INGERSOLL:

Q. Do you -- can you tell from that letter what was -- what was its purpose? I mean, what -- was it in response to something?

MR. SIEVERS: Objection, calls for speculation.

HEARING OFFICER WEBB: What was the

question?

MR. INGERSOLL: Can you tell from this document to what it refers?

HEARING OFFICER WEBB: I'll allow it. Go ahead.

BY THE WITNESS:

A. It refers to this 45-day report listed as Exhibit No. 2.

BY MR. INGERSOLL:

Q. Okay.

A. And the associated Stage 1 site investigation site certification.

Q. Okay. And what decision was rendered in this letter by the --

MR. SIEVERS: I'm going to object. The document speaks for itself.

HEARING OFFICER WEBB: Mr. Sievers, could we just maybe -- just let him get through some testimony. I mean, it may speak for itself, but he's here -- he's a witness. You know, he needs to be able to testify to what he needs to testify to. I understand, but just -- I'll allow it. Go ahead.

MR. INGERSOLL: We're just trying to tell a story and we'll try to get through it as directly as possible.

HEARING OFFICER WEBB: Okay.

BY THE WITNESS:

A. It states that at a later time, the Illinois EPA will conduct a full technical review of the 45-day report and it states that pursuant to my certification, the Stage 1 site investigation plan is approved.

BY MR. INGERSOLL:

Q. Okay. The document to which that decision letter refers is not in the record, is it?

A. No.

Q. Okay. Now, I would ask you just to leaf through the 45-day report, Exhibit No. 2, and direct our attention -- well, first, direct our attention to the certification -- the P.E. certification that you have provided. What page would that be on?

A. Page 6 of 50.

Q. Okay. And we have paginated this particular exhibit in the lower right-hand corner

so it's page number to which he refers.

Okay. And then could you leaf through the document and point -- direct our attention to any information that would relate to, first of all, the depth of the groundwater or any groundwater that's found in the activities that led up to the 45-day report?

A. On Page 4 of 50, we responded to Item C 6 of the Agency's technical form, was groundwater encountered at the site? It was affirmatively answered as a yes.

Q. Okay.

A. On Page 8 of 50, we noted that noticeably saturated sediments were encountered by CSD at approximately ten to 11 feet below the ground surface. However, no wells have been installed yet to measure static groundwater levels.

We stated that no soil or groundwater has been transported off-site for disposal at that point in time.

We noted on the log for soil boring B-1 on Page 26 of 50 that very high moisture was observed at approximately 11 feet and noted

that groundwater was observed while drilling at that same elevation.

On boring B-2 on Page 27 of 50, we noted that very soft and wet soil was observed at ten feet and similarly noted, groundwater observation while drilling at a depth of ten feet.

I believe that is probably all of the references to any groundwater observations.

Q. Okay. Could you direct our attention to any information showing any levels of contamination at -- during your investigation?

A. Yes. On Page 7 of 50, we note that two soil borings were advanced to a depth of 16 feet and soil samples obtained from these borings -- based on soil samples obtained from these borings a determination was made that a release had occurred from the UST system and subsequently, there was the referenced incident number.

MR. SIEVERS: Can we have a reference to a paragraph on that exhibit page?

THE WITNESS: That is in response

to Section B-1 of the Agency's technical form.

BY MR. INGERSOLL:

Q. Okay.

A. We noted on Page 9 of 50 and in response to Section D, G-3 of the Agency's technical form that soil samples collected from these borings and submitted for laboratory chemical analysis were -- results were provided in Table 1 of Section E-4 below.

Copies of laboratory reports were provided in Attachment A and the results of said analysis indicated concentrations of benzene and MTBE above the Tier 1 clean-up objectives for residential land use.

Q. As you are going through all of this information, please skip all of the lab results.

A. Absolutely. Table 1 on Page 10 of 50 that was referred to, that indicates exceedances of Tier 1 objectives and samples B-2 for benzene and MTBE at a depth of 12 feet.

Q. All right. And that's in soil, right?

A. Correct.

Q. Okay.

A. And I believe absent the laboratory results, that is the only other reference to the analysis performed in the initial early action.

Q. Could you -- could you refer to Pages 26 and 27?

A. Yes.

Q. What are those forms?

A. Soil boring logs.

Q. And is that a standardized type of form?

A. Yes.

Q. So one --

A. We also --

Q. -- project to the next would have similar forms, wouldn't they?

A. Yes.

Q. Okay.

A. And in response to a previous question, actually on both of those logs, we reference organic vapor analysis photoionization detector response readings that are obtained from core samples from the soil from each of the soil

borings indicating the presence of --

Q. So wait a minute. Could you tell us what -- okay. Now, you said -- what's the OVA, did you say?

A. Organic vapor analysis.

Q. And PID?

A. Photoionization detector.

Q. And was -- were both used or was one used?

A. Organic vapor analysis. Photoionization detector is one means of conducting organic vapor analysis.

Q. Okay. And these numbers, what are the units of measurement?

A. PID is typically in milligrams per kilogram, but it's an overall summation of all organic vapors analyzed. It doesn't differentiate between the different chemical components of that or that organic vapor benzene, toluene, ethylbenzene. It's a summarization of everything. So it's just an indicator of the total organic vapor in a sample. The vapors are pulled through the photoionization detector using a vacuum. The vapor stream is exposed to

a light source with a specific ionization charge and different organic vapors exhibit different ionization potentials.

So the vapors within the range of typical BTEX show up as an organic vapor concentration based on their ionization response and PID.

Q. Okay. So to people like me, what do these numbers mean?

A. It means there are petroleum products or some other source of organic vapor typically associated with organic chemicals in the subsurface at those depths.

Q. Okay. So I guess it could be -- I mean, this is a screening tool?

A. Exactly.

Q. I mean, you're not going to analyze it to the -- it's not lab work clearly?

A. No.

Q. Okay.

A. It would be considered field screening.

Q. Okay. Now, this ASTM CL, what does that mean?

A. American Society for Testing Materials classification for the soil type encountered and its textural classification. ML would be a mean silty clay. SP would be a poorly sorted sand. CL would be a lean clay.

Q. Okay. And then you've got -- there are dotted lines across that. What are those?

A. Those are just reference lines for the soil core samples that we extract every four feet.

Q. Okay.

A. When we pull a -- when we advance a soil boring, we pull a core sample from that soil boring using thin wall tube sampling. That core that extends for a length of four feet then is evaluated by the geologist or environmental scientist on the site classified using visual/manual classification methodology, documented on the form, field screened for visual and olfactory evidence of petroleum contamination or -- and/or PID response. Once again, it is documented on the log.

Q. Okay. Describe this -- how do you do this boring? I mean, what piece of equipment

or what -- just --

A. With a -- with a drill rig. Like I said, we use thin wall tube samples, which are acetate tubes that are pushed below the ground surface.

As the tube is advanced through the ground surface -- once again, like I said, they're thin walls. So it's like a cutting edge around the parameter of this tube. It cuts through the soil and the core.

Q. All right. So that it spins on its way down?

A. No. It's in its case. We --

Q. Driven?

A. Yes. We -- to get a soil sampling, we would have done a direct push. So it would have just been a tube -- a thin wall tube that was pushed through the soil column.

Q. Okay. For the --

A. That way -- the intent of the thin wall tube sampling is to produce an undisturbed sample that yields more representative information about what's occurring in the subsurface.

Q. Now, earlier I think you described

that you do this four feet at a time, right?

A. There are variations, but our particular equipment uses a four-foot tube.

Q. Okay. So then you push this thing down in the ground four feet and you pull it up and then I assume that it's a tube full of --

A. Soil.

Q. And what's it look like? Just --

A. Well, apparently in this case --

Q. No, I mean, what's it look like? I mean, is it -- I assume it's just a round plug? I mean --

A. It's like a round cylindrical four-foot long chunk of dirt.

Q. Okay. And what do you do with it? I mean, break --

A. Visually --

Q. -- it up?

A. Yes. Our normal procedure is we would -- we would first look at the exterior -- the core and see if we could note any distinct contrast that would indicate bedding plains or transition between soil types and then we would start looking at core samples in those areas

and try to distinguish where specific gradational transitions occur, breaks between different soil types, potential migratory pathways based on soil textural classifications.

When we take those cores, we would segregate a portion of that core sample, screen it visually, you know, olfactory, for the evidence of petroleum contamination and/or with a PID meter and then document those results on the boring log.

Q. Okay. So that's -- you do our first four feet and then you push it down and then I guess you just add another pipe to the end and --

A. Exactly.

Q. -- push it another four feet?

A. Right.

Q. And now you've got a new four-foot --

A. Right.

Q. -- cylindrical plug of the dirt that was at those levels?

A. Right.

Q. Okay. I noticed that there are positive PID reported readings down to 12 feet?

A. Correct.

Q. Okay. And then zero below that down to 16?

A. Correct.

Q. All right. So what's the significance of that?

A. That's an indication there are no petroleum products or organic chemicals that produce organic vapors are present in the subsurface at those particular depths if there is a zero PID response.

Like I said, it's an indicator that certain soil conditions would not necessarily result in conclusive evidence of lack of any organic chemicals at that depth just based on field screening of PID.

There could, in fact, be low level concentrations still that just aren't volatilized quickly enough because of soil matrix to be recorded in the PID meter.

Q. Okay. Thank you. I see a notation of very high moisture --

A. Correct.

Q. -- at 11 feet?

A. Uh-huh.

Q. What -- I mean, what would that look like to the normal observer?

A. Water droplets.

Q. Okay.

A. If you look at your shower door after you take a shower, you will see droplets of water.

Q. Okay. I mean, does that -- I mean, can you see that while that tube of dirt is laying there where you break it up or how do you look at it?

A. In certain cases based on soil texture, classification, and diagnostic properties of that soil, yes. Sometimes you can see it. In this case, we noted Roxanna silts. Silts have an extremely high dilatancy, which is a measure of how rapidly soil moisture is expressed at the surface of a sample using the visual manual classification process for ASTM.

Other soils, clays, for instance, may have the same moisture content, but don't readily -- don't result in readily observing water or moisture in that particular core sample because of the soil texture of classifications or diagnostic

properties of that soil.

Q. Okay. I'm going to read you a couple of definitions from the Pollution Control Board regulations and then ask you to expand.

This is from Section 742.200. This is the definition section in the so-called TACO, T-A-C-O, all caps, regulations. "Capillary fringe" means the zone above the water table in which water is held by surface tension. Water in the capillary fringe is under a pressure less than atmospheric.

Then further down in the definitional section, "Water table" means the top water surface of an unconfined aquifer at atmospheric pressure.

Okay. What does all of that mean to this discussion about where it's noted that groundwater --

A. Capillaries --

Q. -- the depth while drilling was 11 feet?

A. That was the point where the geologist was actually able to visually observe moisture in a core sample or groundwater in a core sample.

The groundwater above that depth within the capillary fringe may not have been readily observable to the geologist because of the soil type. There's gradational contact there. Without getting into a lot of detail about geology and glacial depositional environments, we're not looking at things that have sharp contrast. We're talking about glacial timeframes of thousands of years.

So the difference between one specific soil type, a till, for instance, versus a windblown loess deposit is not always perfectly abrupt. It's -- the till is exposed to surface conditions, rainfall, weathering, grass growth, root zone penetrations, overlying silts that have been deposited on top of that over time, comingle with those and it creates a gradational transition between soil types.

Q. All right. Now, this -- where it indicates the depth while drilling 11 feet, is that a determination that that's the water table?

A. Absolutely not. There's no observable degree of saturation, moisture or groundwater from a soil boring or a core sample that could be uniquely

associated with the groundwater table, which is a pressure surface defined as the location where the pore water pressure is equal to atmospheric pressure and can only be observed by water table in a monitoring well at any particular location and time. It's dynamic. It changes daily based on differences in atmospheric pressure.

Q. Okay. Hold on. Let me interrupt. So if you did want to determine what the water table was, and for the sake of this question, we'll assume you are talking about any one day, one time, at a particular time, what would you need to do?

A. You would have to have a well screened in that aquifer and measure the depth of water within that well for that one specific location in that point in time.

Q. So you wouldn't be able to determine with any certainty or a given date, once again because I know it can change, be able to determine where the water table was until you had a monitoring well in a particular spot?

A. Absolutely correct.

Q. Okay. Thank you. On Page 27, I mean,

we've covered a lot of the types of information here --

A. Other than the other data we've covered in the other boring log lists, the OVA PID readings from this boring indicated more significant levels of contamination, which extended to a much greater depth terminating below our depth of investigation presumably since we still have large OVA PID response at the end of our boring.

Q. Okay. And there's also a difference here that the groundwater data in the lower left-hand portion of the form, the depth while drilling is ten feet, and then it appears at the ten-foot level of boring, the -- it's-- there's a description that says very soft and wet?

A. Correct.

Q. Are these objective assessments or subjective? I mean, is there a standard for how much water is there as how you describe it? I mean, do you have a -- do you have a set number of descriptors that you geologists can use?

A. Generally speaking, yes. The ASTM visual manual classification process outlines how to describe soils in a soil core.

Q. Okay.

A. And it uses those terms such as soft, hard, wet, dry, moist, plastic, non-plastic.

Q. Okay. So hopefully you get some consistency from one geologist to the next?

A. Sure. And some of those diagnostic characteristics are more readily observable in the field than others. So you may not have every single classification noted on a soil boring log. You will have the ones that are readily discernible.

Q. Okay. On both of these forms, at the bottom, it says, "geologist BH." Who is that?

A. That would be Brandon Hargrave.

Q. Okay. And he worked for CSD at that time?

A. Yes.

Q. Okay. Now, in the administrative record, would you turn to Page 354? At the upper part, there is an asterisk marked comment with a parenthetical below it. Would you read that parenthetical?

A. "This approval came from 45-day report certification for Stage 1 activities. Amended 45-day report followed."

Q. And what does that document? At least what do you believe it to be?

MR. SIEVERS: Objection, calls for speculation.

BY THE WITNESS:

A. Amended 45-day report.

MR. INGERSOLL: Hold on, hold on.

HEARING OFFICER WEBB: Okay.

MR. INGERSOLL: If there's an objection, wait until the hearing officer rules.

THE WITNESS: I tend to speak quickly, yes.

MR. INGERSOLL: As do we all. It's a common thing.

HEARING OFFICER WEBB: Well, go ahead.

MR. INGERSOLL: Go ahead.

BY THE WITNESS:

A. Once again, as I mentioned, there's a statutory requirement for a 45-day report submittal as part of early action. An amended 45-day --

BY MR. INGERSOLL:

Q. No, no, no. I'm sorry. The document that you are reading from here, what is that?

A. Oh, oh. I'm sorry. Leaking underground storage tank technical review notes.

Q. That was placed in the record and reportedly drafted the by Karl Kaiser; is that correct?

A. Yes.

MR. INGERSOLL: I would move for the admission of Petitioner's Exhibit No. 2.

HEARING OFFICER WEBB: Is there any objection?

MR. SIEVERS: No objection.

HEARING OFFICER WEBB: Okay. Then Petitioner's Exhibit No. 2 is admitted.

(Petitioner's Exhibit No. 2 was admitted into evidence.)

MR. INGERSOLL: We will mark this as Petitioner's Exhibit No. 3.

(Document marked as Petitioner's Exhibit No. 3 for identification, 9/10/14.)

BY MR. INGERSOLL:

Q. Mr. Truesdale, I'm showing you a document we have marked as Petitioner's Exhibit No. 3.

(Document tendered to the witness.)

BY THE WITNESS:

A. Okay.

BY MR. INGERSOLL:

Q. Do you recognize that document?

A. I do.

Q. What is it?

A. The amended 45-day report that was submitted to document early action activities conducted during the early action extension period.

Q. And this was submitted to the Agency --

A. Correct.

Q. -- from CSD?

A. Correct.

Q. On behalf of Piasa?

A. Correct.

MR. INGERSOLL: Before we walk through the document -- do you have

pictures?

MS. PALUMBO: Yes.

(Document marked as Petitioner's Exhibit No. 4 for identification, 9/10/14.)

BY MR. INGERSOLL:

Q. I'm showing you what we have marked as Petitioner's Exhibit No. 4. Do you recognize those pages?

(Document tendered to the witness.)

BY THE WITNESS:

A. Yes.

BY MR. INGERSOLL:

Q. And it looks like there are one, two, three, four, five, six, seven, eight, nine, ten photos on five pages?

A. Right.

Q. And I direct you attention to the Petitioner's Exhibit No. 3 at Pages 50 to 54. Are these color photos the same as the imaged photos that are found in the copies that we have?

A. They appear to be.

Q. All right. So what we have is just a better representation of what was in the Agency's file?

A. Correct.

Q. Okay. Now, going through the amended 45-day report, first of all, I assume you had a certification in this one as well?

A. I did. That would be Page 6 of 56.

Q. Okay. Now, similar to what we did with the 45-day report, which was Exhibit No. 2, could you flip through that document and direct our attention to places where groundwater is mentioned?

A. Several of the citations specified are referred in the 45-day report. So it's the same reference locations that I have discussed before would apply.

Then additionally in the amended 45-day report, I see no direct reference to any groundwater observed during the early action activities.

Q. There weren't any boring logs in this one, were there?

A. No.

Q. Okay.

A. So...

Q. Could you look at Page 15 of 56?

A. Okay.

Q. What does that represent?

A. That is the locations of UST removal early action excavation wall and floor samples.

Q. Okay. So these are an attempt at three dimensional descriptions of the pits on the previous page?

A. Yes.

Q. And you have a bunch of notations, TP-1 and so forth. What do those mean?

A. Those would be the sample identifiers used for the actual samples collected and submitted to the laboratory for chemical analysis at the locations identified in the figure.

Q. Okay. Now, directing your attention to, say, for instance, TP-1, TP-2, TP-3, TP-4, TP-9 in Pit 2, what are those? Where are they in relationship to this excavation?

MR. SIEVERS: Objection, compound.

HEARING OFFICER WEBB: I'm sorry. I didn't hear you.

MR. SIEVERS: Objection, compound.

HEARING OFFICER WEBB: If you could --

MR. INGERSOLL: I could rephrase it to make it a little more understandable.

HEARING OFFICER WEBB: Yes.

MR. INGERSOLL: I disagree that it's compound, but I will try to make it clearer.

BY MR. INGERSOLL:

Q. Okay. Look at the drawing for Pit 2. Could you tell us where in that pit the samples were taken from this drawing?

A. Yes.

Q. Please describe.

A. They were color coded in the original. So it would be easier to distinguish, but in the copy, I can still -- with this black and white, I can still make it out. TP-1 and TP-2 would have been floor samples. TP-5, 6, 9 and 10 would have been side wall samples. TP-3, 4, 7 and 8 would

have been end wall sample locations.

Q. How about Pit 1?

A. Floor samples would have been TP-21 and 22. Side wall samples would have been TP-11, 12, 13, 14, 19 and 20. End wall samples would have been TP-15, 16, 17 and 18.

Q. Okay. Now, is there any significance to the fact that floor samples were taken in these excavations?

A. We collected floor samples so soils at the bottom of the UST excavation were accessible for sampling at 13 feet. That would indicate to me based on our standard procedures for sampling that there was no water at the bottom of the excavation. Conditions were dry, accessible for sampling and representative of soil conditions at the bottom of the UST excavation at a depth of 13 feet.

Q. Looking at the photocopies that we have in what's been marked as Petitioner's Exhibit No. 4, and then I believe you testified before that those correlate with the black and white photos -- photocopies that we see on Pages 50 to 54, would you look at -- well, look at all of

them, I guess, and then do any of them show any water in that excavation pit?

A. Not that I can see.

(Document marked as Petitioner's Exhibit No. 5 for identification, 9/10/14.)

BY MR. INGERSOLL:

Q. I hand you what we have marked as Petitioner's Exhibit No. 5. Do you recognize that document?

(Document tendered to the witness.)

BY THE WITNESS:

A. I do.

BY MR. INGERSOLL:

Q. Do you know where -- you provided this to me, right?

A. I did.

Q. And what was its source?

A. It was an additional photograph that was in our file from Brandon Hargrave's photo documentation of early action activity -- activities that was not selected for inclusion in the amended 45-day report.

It looks like it is the same excavation as the photograph on the fourth page of Exhibit No. 5 from a different orientation -- the top of the fourth page of Exhibit No. 4.

Q. Okay.

A. Since it hasn't been scanned numerous times, it's a little more clear.

Q. All right. Okay. Flip back, please, to the second page of the photos in Exhibit No. 4 and compare this Exhibit No. 5 photo. It appears to be the same truck, doesn't it?

A. Yes. Once again, it's the same or excavation, just a different orientation. We probably took pictures from multiple orientations and selected a couple of representative ones for inclusion in the documentation.

Q. And Petitioner's Exhibit No. 5 came from CSD files; is that correct?

A. Correct.

Q. Once again, would you look at Page 354 of the record?

A. Yes.

Q. Just to cut to the chase here, what you read before, it says, "amended 45-day report

followed"?

A. Correct.

Q. Is the amended 45-day report that Mr. Kaiser referred to in his reviewer notes the same as this document?

A. Yes.

MR. INGERSOLL: Okay. Thank you. I would move for the admission of exhibits marked as Petitioner's Exhibit Nos. 3, 4 and 5.

MR. SIEVERS: No objection as to Exhibit No. 3 and no objection as to Exhibit No. 4 and subject to cross on Exhibit No. 5.

HEARING OFFICER WEBB: Okay. Then I will go ahead and admit these exhibits subject to cross on Exhibit No. 5.

I will admit Exhibits 3 and 4 right now and we will address Exhibit No. 5 after you have had a chance to do your cross.

MR. SIEVERS: Thank you.

(Petitioner Exhibit Nos. 3 and 4 were admitted into evidence.)

BY MR. INGERSOLL:

Q. I have one last question about this document.

So you can reasonably conclude from this -- the information included in this document that at least on that day, groundwater was lower than 13 feet deep?

MR. SIEVERS: I didn't mean to cut you off. Objection as to leading.

HEARING OFFICER WEBB: Would you like to rephrase the question? Is there any way to --

MR. INGERSOLL: I don't -- well, first of all, I don't think that it's an objectionable type leading question when we're just trying to fill in a couple of blanks, but I will try to rephrase it.

HEARING OFFICER WEBB: All right. Thank you.

BY MR. INGERSOLL:

Q. Can you draw any conclusions as to

the depth to groundwater -- and once again, I'm not talking about the water table -- but the depth to groundwater on the day these pictures were taken and the day the samples were taken?

A. No. I can conclude that the groundwater table was below 13 feet because there is no evidence of free flow into the open excavation.

Q. Okay.

A. I wouldn't be able to testify on the groundwater conditions without visually observing the actual soils that are depicted.

Q. Okay. Thank you. I will direct your attention back to the administrative record.

A. Okay .

Q. Once again, we're going to -- we're trying to look for information that may relate to the depth to groundwater at various times that are produced in here and I believe the first document is a Stage 3 Site Investigation Plan and Budget that appears to have been received by the Bureau of Land on January 11, 2012. That starts at Page 3 of the record. Page 9 appears to have some groundwater depth and boring information.

A. Uh-huh.

Q. What does that mean, groundwater depth and boring?

A. That would have been the location in each boring where groundwater was observed physically by the geologist evaluating the soil conditions.

Q. Okay. Does that define where the water table is?

A. Absolutely not.

Q. Okay. Now, there is some handwritten notations in the margin here that says "Average GW depth 8.8 during drilling." Is there any indication in any of this material who made those markings?

A. No.

Q. Look at Page 354 of the -- wait a minute -- 354 of the record again and there is a reference in there to groundwater was approximately 8.8 feet.

A. I see that.

Q. Okay. Let's see. Once again, we go through -- I mean, it's the same thing on Pages 10 and 11. We've got groundwater depth and boring. I guess your testimony will

consistently be that that's not an indicator of the groundwater table.

MR. SIEVERS: Objection, leading.

HEARING OFFICER WEBB: I mean, unless you're asking for clarification, I'll sustain that.

BY MR. INGERSOLL:

Q. As we look at all of these, Table 1, boring -- groundwater depth and boring, do any of those depths prove the level of the water table?

A. No observation of degree of saturation, moisture or groundwater in any soil boring or core sample can be uniquely related to the groundwater table.

Q. Okay. Then look at Page 12 and there is a Table 3.0.

A. Correct.

Q. And groundwater depth there is 3.6 to 5.65. Is seems to be considerably different than some of the numbers we have been looking at before.

A. Correct.

Q. Now, that's in a monitoring well. So was that the water table on that day?

A. Yes.

Q. Okay.

A. Or the phreatic surfaces.

Q. What now?

A. The phreatic surfaces, I prefer to refer to it, which is --

Q. Okay. Would you tell us --

A. -- pressure surface where --

Q. Tell the rest of us non-engineers and non-geologists what that means?

A. Okay. It is the pressure surface where poor water pressure is equal to atmospheric pressure.

Q. Okay. And the term you used is what?

A. Phreatic surface.

Q. Could you spell it?

A. P-A- -- no.

Q. Good enough.

A. Spelling is definitely not one of my strong suits.

Q. Okay then. Please turn to Page 14. Now, there you've got a bunch of different elevations. You know, we'll note here that in parenthesis,

it's 12/14/06, which is the same date as was on Table 3.0 and this is Table 6.0; is that correct?

A. No. That appears to be a typographical error. The narrative below states that the sampling was conducted -- actually, the narrative above states that the sampling and groundwater gauging was performed on November 13, 2007.

Q. Okay. I guess --

A. That's the same date noted on the previous table. We probably copied and pasted it to start the new table and then neglected to update the date in the title.

Q. Okay. So these numbers are quite a bit different. Could you comment on that?

A. I can.

MR. SIEVERS: Objection. I don't know the relevancy of the Stage 2 site investigation data. This is a Stage 1 issue, the entire case.

MR. INGERSOLL: I would suggest that the elevation of groundwater and water is or is not -- the groundwater table is one of the key issues here

in this matter.

HEARING OFFICER WEBB: Overruled.

BY THE WITNESS:

A. That is the elevation measured in the groundwater monitoring wells penetrating the aquifer identified at the site on the two different dates and illustrates that the water table is a dynamic environmental condition that varies spatially and temporal.

BY MR. INGERSOLL:

Q. Okay. All right. I will skip over these lab reports.

Could you refer to Page 143 and following? It's Appendix B, soil boring logs.

A. Okay.

Q. Is Appendix B where the soil boring logs are supposed to be put in all of these reports? Never mind. It just seems consistent.

A. I would say probably.

Q. Never mind. Never mind.

MR. SIEVERS: I'm going to object to further reference to the Stage 3 report at all. CSD actually asked the Agency to suspend its review

of this report. That's in the record. So this has really no bearing on this matter at all.

MR. INGERSOLL: Except that the Agency put it in the record so apparently it was relied upon.

MR. SIEVERS: No. That's not the requirement under the record -- the requirements under the record. It's not simply that it's relied upon. There are several things that are mentioned in there. Okay?

MR. INGERSOLL: That's true.

HEARING OFFICER WEBB: Well, I'm going to go ahead and allow your direct and then you can cross-examine him on that issue further.

MR. INGERSOLL: Thank you.

Going back to Page 9 of the record, please, somebody wrote that the average depth -- groundwater depth is 8.8. That same number appears in reviewer notes on Page 354.

So it would seem that

the same report that we're looking at for our testimony with Mr. Truesdale at this time contained that 8.8 information that was apparently used by someone at the Agency.

MR. SIEVERS: Objection. Is that a question or is that counsel now testifying?

MR. INGERSOLL: I'm not trying to testify. I'm trying to rebut your -- the argument behind your objection.

MR. SIEVERS: I move to strike.

HEARING OFFICER WEBB: Well, the objection is overruled.

MR. INGERSOLL: I'm just trying to --

HEARING OFFICER WEBB: You don't need to rebut.

MR. INGERSOLL: I want to tamp it down for the rest of this discussion.

HEARING OFFICER WEBB: Okay.

MR. INGERSOLL: All righty then.

BY MR. INGERSOLL:

Q. Let's go back to the boring logs

that start at Page 144, the ones on 144 and 145. Are those the same ones from the 45-day report?

A. Yes.

Q. Okay. We've already talked about them so let's move on.

All right. The ones that start at 146, there is a dashed line across Page 146. There is a dashed line at -- it looks likes at nine and a half feet. What does that indicate?

A. That is an indication of stratographic transition between the overlying Peoria loess and the underlying Roxanna silt.

Q. Okay. So that's not water -- immediate water?

A. No. It's where a change in soil, textural classification and diagnostic properties of the soil types encountered were observed.

Q. Okay. So the reference to depth to groundwater was hit. It's down here in the lower left-hand corner again, it's not this line?

A. No, no.

Q. Okay.

A. It's just -- there's a correlation there because once again, that consistent level

where there's a transitional stratographic change between Peoria loess and Roxanna silt, it's a location where the silt component would be most prominent and as a result, groundwater conditions at that particular interface would be more readily observable by the person logging the boring --

Q. Okay.

A. -- as a result of the dilatancy characteristics we discussed.

Q. Okay. Now, when -- looking from Pages 146 throughout 157, we will try to -- I mean, the terms on these are similar. So we're not going to go through every page, but here, we're in the OVA/PID column. There are no numbers. It's more of a descriptor. Would you tell us what was going on there?

A. That was visual olfactory screening versus PID screening.

Q. Okay. And who would have done that?

A. Brandon Hargrave.

Q. Okay. You certified all of these reports, correct, as overseeing?

A. I believe.

Q. Okay. I guess, let's put it this way,

I believe from some of these earlier things, you have certified work done by Brandon Hargrave before?

A. Brandon Hargrave was a staff geologist under my professional review as a professional geologist.

Q. And so he was qualified and capable of making these kinds of observations as it relates to organic material?

A. Yes.

Q. Particularly, the potential existence of organic material?

A. Yes.

Q. Okay. So we won't talk about all the rest of them if they are the same.

Is that typical if you don't -- I mean, what happens if you don't have the PID meter with you?

A. Yes, yes. I mean, a lot of times, we would note even with PID response that there was a discernible odor or visible occurrence of free product.

Q. Okay. And then starting on Page 158, then we have a bunch of numbers again. I assume that's the PID meter?

A. Correct.

Q. Okay.

A. Or like if he would have done a field screening with visual olfactory criteria for organic vapor analysis versus PID reading, like I said, there was probably a problem with the PID meter. It may have been out of calibration. It may have been dead. It may not have been --

Q. No. I mean, I wasn't trying to suggest what was going on. I just noticed that it was different.

Okay. And I believe you have already testified what those numbers mean at various depths.

Now, please turn to Pages 165 through 167. No, 166. Just 165 through 166. All right. This boring only went down to eight feet on Page 165, correct?

A. Yes.

Q. And 12 feet on the next one?

A. Yes.

Q. Okay. But then on the next -- on Page 167, it also stopped at 12 feet. Can you comment as to why the boring stopped at these --

on these three pages? If you don't know, that's fine too.

A. No. I mean, I would -- I probably directed them to stop from monitor well installation at that depth installing the 3.6 high water level elevation that we noted previously so that our screen interval would intercept that 3.6 elevation because that's a criteria that we've had issues with the Agency on in the past.

Q. Okay.

A. The screen during water table fluctuations, if this high water level falls outside of the screen interval, we've had problems with the Agency suggesting that they were installed improperly.

Q. Okay. Could you turn to Page 232?

A. Okay.

Q. What is that document? Do you recognize it?

A. That would be the Stage 2 site investigation plan and budget.

Q. And this is the -- this is the document that resulted in the Agency's April 8, 2014, decision letter; is that right?

A. Correct.

Q. Would you look at Pages 240 and 241? I haven't done a real perfect comparison, but it looks like we've seen these numbers before, is that right, in one of these earlier things?

MR. SIEVERS: Objection, leading.

HEARING OFFICER WEBB: I'll allow it. Go ahead.

BY MR. INGERSOLL:

Q. Are these tables the same or similar to the ones you've already testified to?

A. Yes.

Q. All right. Then we can skip them.

A. During site investigations -- during all LUST investigations, we build on successive pieces of data. So previous investigation results are always built upon and included on subsequent submissions.

Q. Okay. It looks like the boring logs in this report begin on Page 320. Would you look those over, 320 to, I think, 331?

A. Yes.

Q. All right. So can we -- can we

assume your testimony -- I mean, you've testified as to what all of these terms mean?

A. Correct.

Q. And I assume that that testimony would be consistent for these boring logs as well?

A. Correct.

MR. SIEVERS: Objection, leading.

HEARING OFFICER WEBB: I'll allow it just to expedite this direct examination.

MR. INGERSOLL: Thank you.

BY MR. INGERSOLL:

Q. Okay. Go ahead.

A. Correct.

Q. Now, is soil sampling for monitoring well development -- are the requirements for soil sampling and water well development -- monitoring well development -- I'm sorry. Let me start over.

For the development of monitoring wells, is the soil sampling requirement different than for soil borings to soil sampling?

A. Yes.

Q. Okay. I'm going to read from the

rules, 734.315(a)(2)(C), "One soil sample must be collected from each five-foot interval of each monitoring well installation boring drill pursuant to Subsection (a)(2)(B) of this section. Each sample must be collected from the location within the five-foot interval that is the most contaminated as a result of the release. If an area of contamination cannot be identified within a five-foot interval, the sample must be collected from the center of the five-foot interval. All soil samples exhibited signs of contamination must be analyzed for the applicable indicator contaminants. For borings that do not exhibit any signs of soil contamination, samples from the following intervals must by analyzed for applicable indicator contaminants, provided that the samples must not be analyzed if other soil sampling conducted to date indicates that soil contamination does not extend to the location of the monitoring well installation boring."

Okay. What's that mean to a guy in the field? What do you do different?

A. You collect samples based on the maximum PID reading or the highest evidence of

visual and olfactory organic vapor occurrence for every five-foot interval through the extent of contamination.

Q. Does that water table question come into play for that?

A. No.

Q. Okay. Now, in your opinion, is the Illinois EPA correctly using the term "water table" as it has been applied in this matter?

A. No.

MR. SIEVERS: Objection, vague.

HEARING OFFICER WEBB: It is a little vague. I'll sustain.

BY MR. INGERSOLL:

Q. Do you have an opinion as to the Illinois EPA's interpretation of water table?

A. (Witness nodded.)

Q. Please describe it. You just nodded your head.

A. I know I've done it a couple of times. No observation of degree of saturation, moisture or groundwater in a soil boring or core sample can be uniquely related to the water table.

Q. Okay.

A. The only way you can determine the water table is by measurement of the depth of the height which a column of water will rise in a monitoring well screened in the aquifer, which is representative of the pressure surface where the pore water pressure of that unit is equal to atmospheric pressure and that varies.

Q. Are wells present when you start a Stage 1 investigation?

A. No.

Q. Okay. Now, forget for a second the water table issue and the level of groundwater issue.

In your opinion, were there observations noted in the field on this project showing site-specific conditions warranting drilling through the water table?

A. Yes.

Q. Could you give us examples?

A. Yes.

Q. Okay. Please.

A. Normal contaminant fate and transport processes for any fine grain soil would almost

always necessitate drilling below the water table and evaluation of the distribution of soil phase contaminants absorbed to the solids within the water bearing unit.

Q. Okay. Now, the guy out in the field, how does he make this call? What's he looking at?

A. Field screening and PID response combined with textural classification of the soils that are impacted according to ASTM classification.

Q. And were those kind of observations present in the record before us?

A. Yes.

MR. INGERSOLL: Okay. Thank you. I have nothing further.

HEARING OFFICER WEBB: Okay. Mr. Sievers?

MR. SIEVERS: Sure.

C R O S S - E X A M I N A T I O N

by Mr. Sievers

Q. Mr. Truesdale, the boring logs that we've looked at today, in the lower left-hand corner of each of those forms, there's a little box that says groundwater data?

A. Correct.

Q. And then there are two references, depth while drilling and depth after drilling. In lay terms, can you explain what the difference is?

A. Depth while drilling would have been an observation once again made by the geologist logging the boring, the occurrence of the visual water in a particular core sample.

The depth after drilling, if we measured the height of the column of water in that soil boring prior to installation of monitoring well, he may record that as well there, but we don't typically do that. We rely on the monitor wells since that is the only means of determining the water table.

The soil boring logs give us a diagnostic criteria to establish that groundwater exists. The only way to establish what the water table is is through the measurement of monitoring wells.

Q. So you're saying that had the measurement been taken of a column of water coming up into the boring after the boring, that wouldn't be sufficient to determine the groundwater table?

A. Not typically because of disruption

to the soil. In that direct push boring, there's a smearing affect that usually occurs on the outside of our tube, which obscures. It produces a layer that limits infiltration of groundwater particularly in fine grain soils just like if you created a clay slurry on pottery that was a barrier that prevents the discharge of groundwater into that opening.

So we don't use it because it's not a reliable means of evaluating a groundwater table and it may not even -- because of the skin friction disruption, it may not even result in occurrence of groundwater in that boring and would certainly be affected by time.

So depending on the point in time we measured, the flux of groundwater into the hole, we would have to wait until it was at static conditions for a reliable measurement of the water table and not knowing what affects skin friction has on the disruption of that bore hole, there would be no way to know how long we would have to wait to have a reliable measurement of water table in a disturbed soil boring.

Q. Okay. Is it your contention that the term "groundwater table" is vague?

A. No. It's explicit.

Q. Is it your characterization that groundwater table is a term that has more than one meaning?

A. No.

Q. So you -- so there is one meaning for groundwater table as far as a professional engineer or geologist is concerned?

A. Yes. From a hydrogeologic standpoint, there is one definition of groundwater table.

Q. Okay. So if that term is used in your submissions here, what specifically are you referring to when you say "groundwater table"?

A. The elevation of a column of water measured in a monitoring well at that specific location at that specific point in time.

Q. I believe it was your testimony, correct, that there were site-specific conditions at this site warranting drilling -- boring below the groundwater table, correct?

A. Yes.

Q. And consequently, the geologist, Brandon Hargrave, did drill below the -- had borings go below the water table?

A. He wouldn't have been able to determine where the water table was at all at that point. So drilling would have advanced to the depth of extent of contamination where he could make a reasonable assumption that migration of organic chemicals began to cease or ceased.

Q. So there is no idea at all at that point -- strike that.

When a boring is going down, the field staff just have no clue where that groundwater table is; is that correct?

A. No.

Q. So just keep on drilling 20, 40, 70, 80 feet?

A. Until there is no indication that continual migration of organic chemicals is occurring based on field screening as described in the regulation.

MR. INGERSOLL: Could we go off the record for a second?

(Whereupon, a discussion was had off the record.)

HEARING OFFICER WEBB: Okay. We are back on the record after a short

break.

Mr. Sievers, we will pick up with your cross-examination.

BY MR. SIEVERS:

Q. Mr. Truesdale, when -- in a Stage 1 investigation, which is what is at issue in this case today, borings are being drilled at the site. Monitoring wells are not typically in place; isn't that correct?

A. Correct.

Q. And I believe it's your testimony that monitoring wells are really the only means by which the true and accurate measure of the groundwater table can be determined?

A. Correct.

Q. So when your staff is on-site boring in the course of a Stage 1 investigation, they do not know and cannot know where the groundwater table is?

A. Correct.

Q. And I believe your prior testimony -- let's see if we can try to clear this up a little bit.

It is correct that there is no

means for you to know or your staff to know when they are boring on site in the course of a Stage 1 investigation where that groundwater table is?

A. On a typical LUST site, no.

Q. Was the -- was this site at issue in the case today, the Piasa Motor Fuels site in Alton, a typical LUST site?

A. Based on my experience, yes.

Q. So when drilling those borings, there was no way the geologist -- no way any of your staff could know where the groundwater table was?

A. At that particular location at that point in time, no.

Q. And so since you can't determine where the groundwater table is while you are on-site, wouldn't it be accurate then that the provision in Section 734.315 of the regulations providing that borings must be drilled beyond the groundwater table only if site-specific conditions warrant would never apply to any of your borings because you could never know where the groundwater table was?

A. No. It would apply at any point

that the water table was based on the diagnostic properties of the soils and the site conditions. If the water table was three feet that day, it would warrant drilling below it. If it were at 12 feet that day, it would warrant drilling below it. If it were at eight feet that day, it would warrant drilling below it.

Q. You don't know where the groundwater table is?

A. No. At any point in that column, it would warrant drilling below it in those soil conditions.

Q. So that caveat in the regulations need never apply to CSD at least when its drilling borings in a Stage 1 investigation?

A. In my opinion, it does not need to apply at a typical LUST site in Illinois in a glacial depositional environment ever.

Q. Thank you. Let me call your attention to Petitioner's Exhibit No. 3.

MR. SIEVERS: May I approach, your Honor?

HEARING OFFICER WEBB: Yes.

BY MR. SIEVERS:

Q. I believe your testimony was water had not been encountered in the 45-day report?

A. No. I -- my testimony was that groundwater was encountered affirmatively. We encountered water in the boring.

Q. So it is correct, then, on Page 4 of Petitioner's Exhibit No. 3 that groundwater was encountered at the site?

A. Groundwater was encountered. The depth to the groundwater table could not be known, but groundwater was encountered.

Q. No. It never could be, could it?

A. No, not at that point in time.

Q. Not under the CSD interpretation, though, correct?

A. Not under scientific --

MR. INGERSOLL: Objection.

HEARING OFFICER WEBB: Sustained.

MR. INGERSOLL: Thank you.

BY MR. SIEVERS:

Q. Now, I would like to call your attention to Page 11 of the record, which is the stage site -- which is part of the Stage 3

Site Investigation Plan and Budget.

A. What page of the record?

Q. Page 11. And then go to Page 242 of the record, which is part of the Stage 2 Site Investigation Plan and Budget.

Have you found those pages?

A. Yes.

Q. Okay. On Pages 241 and 242, there is a Table 2.0, Summary of Stage 1 Soil BTEX and MTBE Results. Do you see that table?

A. On which page are you referring to?

Q. Pages 241 and 242.

A. Yes.

Q. Okay. Now, on Pages 11 and 12, we also have a Table 2.0 Summary of Stage 1 Soil BTEX and MTBE Results. Do you see that as well?

A. I do.

Q. Now, I believe your prior testimony was that these two tables reported the same data; is that right?

A. Correct.

Q. And the one at 241 and 242, that's a later submission by CSD than the one that's in Pages 11 and 12, correct?

A. Yes.

Q. Now, the table that's set forth in Pages 11 and 12, that has some text underneath that, doesn't it?

A. Yes.

Q. And that text differs from the text under Table 2 on Page 242, correct?

A. Correct.

Q. All right. What does the text say on Page 12?

A. Page 12?

Q. Underneath -- immediately underneath the table.

A. "Results shown in bold and highlighted exceed the applicable Tier 1 soil remediation objectives. Results shown in strikethrough font indicate the sample was collected below the depth at which groundwater was observed in the associated soil boring."

Q. Now, that is not included in the language underneath the table on Page 242, is it?

A. No. It was added in response to conversations with Karl Kaiser following the

submittal.

Q. And there are numbers in Table 2 on Pages 11 and 12 that have had a strikeout on them; isn't that correct?

A. Correct.

Q. And there are no numbers on Page 241 and Page 242 in Table 2 that are stricken out, correct?

A. Correct.

Q. Okay. Those tables have different information in them; isn't that correct?

A. They have the same information presented differently to -- in an attempt to illustrate to the Agency that it was ridiculous to exclude samples that were collected and analyzed beneath a depth where groundwater was observed in a boring or purposes of a risk assessment.

Q. Pages 241 and 242 don't have anything indicating which data was taken below the groundwater observation, correct?

A. Correct, but it can be inferred from the information presented.

Q. Let me call your attention to

Petitioner's Exhibit No. 5. Do you have a copy of that?

A. Yes.

Q. Who took that photograph?

A. Brandon Hargrave.

Q. When was that photograph taken?

A. Following UST removal and the early action extension period, early action excavation activities.

Q. What date?

A. The 45-day report --

Q. I'm not asking you to refer to other documents. I'm asking you off the top of your head do you know -- do you actually have personal knowledge when this photograph, Petitioner's Exhibit No. 5, was taken?

A. I can't state the date. The day it was taken was the day we completed early action excavation following UST removal, which is in the record.

Q. Do you know what time Petitioner's Exhibit No. 5 was taken?

A. No.

Q. Were you present at the time

Petitioner's Exhibit No. 5 was photographed?

A. I don't believe so.

Q. Okay. So your knowledge about the taking of this photograph is based on reading the reports and having some familiarity with when Brandon might have been out there and so forth, correct?

A. Yes. He would have reported directly to me and possibly corresponded with me via the telephone while he was in the field.

MR. SIEVERS: I'm going to object to the admission to Petitioner's Exhibit No. 5.

The witness has no personal knowledge of this photograph, foundation, it is undermined by his own testimony.

Further, Petitioner's Exhibit No. 5 was not before the Agency at the point where it made its -- reached its determination.

HEARING OFFICER WEBB: Well, Mr. Ingersoll, are you going to have another witness --

MR. INGERSOLL: Yes.

HEARING OFFICER WEBB: -- testify about -- do you want to hold off on the exhibit?

Are you going to use Exhibit No. 5 in your examination of your next witness?

MR. INGERSOLL: I think -- yes. I think we can close this up with Mr. Hargrave.

HEARING OFFICER WEBB: Okay. I will delay ruling on Exhibit No. 5 for now.

MR. SIEVERS: Okay. I have nothing further of this witness.

R E D I R E C T E X A M I N A T I O N

by Mr. Ingersoll

Q. Mr. Truesdale, Mr. Sievers, I think, elicited testimony from you seeking to show that according to you, there was no limitation -- the water table places no limitation on drilling. Is that a correct interpretation of your testimony?

A. According to regulations, there is a limitation under Stage 2, but not under Stage 1 if site-specific conditions warrant.

Q. Okay. So it's not unconditional?

A. No.

Q. The conditions are stated in the regulations?

A. Correct.

Q. I.e., site-specific conditions?

A. Right.

Q. And I believe you rendered an opinion earlier where you said site-specific conditions were present here?

A. Correct.

MR. INGERSOLL: Thank you. That's all.

HEARING OFFICER WEBB: Is there anything else?

MR. SIEVERS: Yes.

R E C R O S S - E X A M I N A T I O N

by Mr. Sievers

Q. Mr. Truesdale, isn't it correct, though, you don't need any site-specific conditions because you only need to know site-specific conditions to drill below groundwater table, isn't that right, under the regulation?

A. You need to know site-specific

conditions under the regulation in Stage 1 to support drilling below the water table, correct.

Q. And you don't -- CSD, when it does a boring in Stage 1, doesn't know where that groundwater table is?

A. I don't care where it is in Stage 1 under a typical LUST site. Site-specific conditions with glacial geology, with a typical LUST site in Illinois, always provides site-specific conditions that dictate drilling below the water table.

Q. So that provision in Section 734.315 qualifying the ability to bore to the full vertical extent of contamination, but only if -- to only below the groundwater table if site-specific conditions apply, that caveat never applies because you're saying that you always need to be drilling?

MR. INGERSOLL: Objection, objection, objection. He's asking for a legal conclusion, which is one of the very core issues here today.

MR. SIEVERS: I believe that Mr. Ingersoll has asked the same question. I can rephrase it if

you like.

HEARING OFFICER WEBB: Yes.

I mean, he can give his interpretation.

BY THE WITNESS:

A. I said that in a typical LUST site. There are always site-specific conditions in a glacial depositional environment. In Illinois, there are other types of depositional environments such as alluvial, sand and gravel, valley terrains, where conditions may not dictate sampling below the water table.

If there's a large vertical separation between the source and observed groundwater and visual olfactory evidence or field screening of organic vapors, that indicates that migration ceases before groundwater is observed in a boring, those are the two principle cases where it would not apply.

But in a typical LUST site, that clause would never be applicable, but there are cases in Illinois where that would be applicable.

MR. SIEVERS: Okay. Very good.

I have nothing further.

MR. INGERSOLL: Nothing.

HEARING OFFICER WEBB: Okay. Thank you. Mr. Truesdale.

(Witness excused.)

MR. INGERSOLL: Can he leave or should he hang around as a potential rebuttal witness?

HEARING OFFICER WEBB: Do you want to call him again at all?

MR. INGERSOLL: He might be a rebuttal witness by someone. Sorry, Joe. You get to take a break in the other room.

MR. TRUESDALE: No problem.

MR. SIEVERS: And leave the exhibits here.

HEARING OFFICER WEBB: You may call your next witness.

MR. INGERSOLL: Let's get Brandon Hargrave out of the way.

(Whereupon, after a short break was had, the following proceedings were held accordingly.)

HEARING OFFICER WEBB: Let's go back on the record.

Mr. Ingersoll, you may call your next witness.

MR. INGERSOLL: I will now call Brandon Hargrave.

HEARING OFFICER WEBB: The court reporter will swear you in.

THE COURT REPORTER: Raise your right hand, please.

(Witness sworn.)

WHEREUPON:

B R A N D O N H A R G R A V E

called as a witness herein, having been first duly sworn, deposeth and saith as follows:

D I R E C T E X A M I N A T I O N

by Mr. Ingersoll

Q. Would you state your name and spell your last name, please?

A. Brandon Hargrave, H-A-R-G-R-A-V-E.

Q. And where are you employed?

A. Illinois EPA.

Q. And what position?

A. I work for the solid waste permit

section, Bureau of Land.

Q. Okay. Prior to your employment at the Illinois EPA, where were you employed?

A. CSD Environmental Services.

Q. And what was your position there?

A. Staff geologist.

Q. Okay. Are you familiar with a site called Piasa Motor Fuels, Inc. and I think in some places, I saw that it was called Steve's Service? Are you familiar with that site?

A. Yes.

Q. And how? What's your contact with that site?

A. It was quite some time ago. You know, I remember being onsite. I generally remember what the site looks like. I believe it's a former gas station site used as an auto service station now.

Q. Okay. I'm going to show you what was previously marked as Petitioner's Exhibit No. 3 and Petitioner's Exhibit No. 4. Do you recognize those documents?

(Documents tendered to the witness.)

BY THE WITNESS:

A. I don't recognize it. I know what it is though.

BY MR. INGERSOLL:

Q. Okay. And what do you understand it to be?

A. This is a 45-day report generally issued, oh, after an incident has been called in stating that there may or may not have been a release of contamination at a site. Someone like now, a staff geologist, would have showed up and advanced a couple of borings to see if, indeed, there was contamination at the site. I believe this report, the 45-day report, would have been issued after that.

Q. I believe that's the amended 45-day report, isn't it?

A. This says amended, yes.

Q. Okay. And do you know what the purpose of that report was? As it stands --

MR. SIEVERS: Objection. He's already testified he doesn't even recognize the report.

HEARING OFFICER WEBB: Pardon me?

MR. SIEVERS: He already testified he doesn't even recognize the report.

BY THE WITNESS:

A. I haven't seen this before.

BY MR. INGERSOLL:

Q. Okay. Do you recall being at that location for a tank pull?

A. Yes.

Q. Okay. And would you look at Petitioner's Exhibit No. 3?

A. Three is this?

Q. Yes. Look at Pages 50 to 54.

A. Okay.

Q. And then would you look at Petitioner's Exhibit No. 4. Those are the color photos.

A. Is it the same thing, but color?

Q. I'm asking you to confirm that.

MR. SIEVERS: He has already testified that he doesn't recognize the report. Now, he is asking him to match up two documents and the only way he can do it is if he -- I mean, anybody could do that by comparing two documents.

There is no testimony that he has any personal knowledge to put these two together any more than a layperson on the street.

MR. INGERSOLL: Except that he --

HEARING OFFICER WEBB: Well, is he the one who took the picture? Did he take the photograph?

MR. INGERSOLL: We haven't gotten there yet.

HEARING OFFICER WEBB: All right. Well, that's where we're going, right?

MR. INGERSOLL: We do have him present at the scene during the tank pull.

HEARING OFFICER WEBB: Okay. I'll allow it.

BY THE WITNESS:

A. These look to be the same, yes, as the one that's in color.

BY MR. INGERSOLL:

Q. Did you take these pictures?

A. I believe I did, yes.

Q. Thank you. I'm going to show you

what we have marked as Petitioner's Exhibit No. 5.

(Document tendered to the witness.)

BY THE WITNESS:

A. Okay.

BY MR. INGERSOLL:

Q. Did you take that photo?

A. Most likely. I generally would take photos on the job sites and especially of the tank pulls.

Q. Now, based on your recollection and those other pictures that you have identified, does this -- does that photo accurately portray the scene at that tank pull excavation as you recall it?

A. Yes.

Q. Your recollection and pictures compare with the pictures that you did take?

A. Yes.

Q. Okay. Thank you.

MR. INGERSOLL: I would move for the admission of Petitioner's Exhibit No. 5.

MR. SIEVERS: Subject to cross.

MR. INGERSOLL: Okay.

HEARING OFFICER WEBB: All right. We will hold off ruling.

MR. INGERSOLL: Once again?

HEARING OFFICER WEBB: Once again.

BY MR. INGERSOLL:

Q. Okay. So that we don't spend as much time as we did earlier, let's find some boring logs here.

Would you look at the administrative record, which is -- I didn't give it to you yet. I'm sorry.

This is the administrative record that the Agency has filed in this underground storage tank appeal. It was paginated in the lower right-hand corner. It will say Piasa Motor Fuels, Inc. and it's paginated all the way through.

Would you look at Pages 320 and following up to 331. Now, the BH initials, that's you, right?

(Document tendered to the witness.)

BY THE WITNESS:

A. That is me, yes.

BY MR. INGERSOLL:

Q. On Page 320, there is a column that says, "OVA/PID"?

A. Yes.

Q. Could you tell us what those descriptors mean to you?

A. These were my descriptions -- normally, this column would have a series of numbers in it as if taken by some equipment. We didn't have a working piece of equipment that day called the PID machine. So you will see these -- you will see these words, "slight in odor." That is me using my, you know, visual and olfactory sense of -- I basically had to look and smell the soil to try to see if it was contaminated or not.

Q. Okay. How many LUST projects had you been involved with in your career?

A. How many different sites are you talking about?

Q. Yes.

A. I'm just taking a guess here off the cuff. Maybe 40.

Q. Okay. And these descriptors, slight, odor, odor, odor, odor, slight, is that standard

practice for when you have to use your nose to figure it out?

A. That is not standard practice. You know, like I said, it's pretty rare to see this. Usually, you will see a series of number recordings by a PID, a photoionization detector.

Q. Okay. All right then. Let us flip back to Page 144 in the record.

A. Okay.

Q. Okay. BH is still you?

A. Yes.

Q. And now you have numbers instead of descriptions?

A. Correct.

Q. Okay. That's what you are talking about, the typical scenario?

A. Correct, typical scenario. We would have a PID machine in the field to -- what the PID does is it kind of reads the hydrocarbons that are being released by the soil samples while I'm logging in basically.

Q. Okay. Back to Page 320, or any of them, but Page 320, let's look at that.

A. Okay.

Q. In the lower left-hand corner, it says, "Groundwater data, depth while drilling, ten feet"?

A. Yes.

Q. So what does that mean that you noticed at ten feet?

A. That means that we encountered the groundwater table at a depth of ten feet.

Q. The groundwater table?

A. Yes.

Q. Could you give me the definition for groundwater table?

A. The depth below ground surface at which groundwater -- where you generally encounter groundwater.

Q. Okay. Now, in the regulations, the Board's regulations, there is a definition for water table.

A. Okay.

Q. Do you know what it is?

A. No, I don't.

Q. Okay. Let me read it to you.

A. Okay.

Q. Once again, it's from Section

742.200. It's from the so-called TACO regs.

A. Okay.

Q. "Water table means the top water surface of an unconfined aquifer at atmospheric pressure." Now, that's not the same as when you encounter groundwater is it?

A. Can you repeat that, please?

Q. "Water table means the top water surface of an unconfined aquifer at atmospheric pressure."

A. Can you just -- I mean, that's generally the same thing as what I stated, right?

Q. That's what you stated.

A. Okay.

Q. Okay.

MR. INGERSOLL: I have nothing further.

MR. SIEVERS: Permission to go beyond the scope just to speed things up? Otherwise, I'm going to have to call Mr. Hargrave back for my case-in-chief.

MR. INGERSOLL: I'll tell you what, I've got a question then.

Have you spoken with Mr. Sievers about this --

MR. SIEVERS: I'm sorry. I believe that you closed your testimony at this point.

HEARING OFFICER WEBB: I'll allow it. Go a head and finish up.

BY MR. INGERSOLL:

Q. Have you spoken with Mr. Sievers about this proceeding we are here for today?

A. Yes.

Q. And what did he tell you?

A. I don't know that he told me anything. He asked me various things about the project here. I saw a couple of these documents.

Q. Did he tell you what the issues were in this proceeding?

A. All I know is this is in reference to an appeal for payment for soil samples taken.

Q. Soil samples that you took?

A. Yes.

Q. Aren't you the one who physically extracted the soil samples?

A. Yes, that's correct.

MR. INGERSOLL: Okay. Nothing further.

And, yes. It's okay to.

HEARING OFFICER WEBB: To go beyond the scope.

MR. INGERSOLL: Yes. We will try to work through it.

C R O S S - E X A M I N A T I O N

by Mr. Sievers

Q. Mr. Hargrave, did I -- when we met, at any time did I tell you how to answer questions as to what the definition of what a water table is?

A. No.

Q. Of what the groundwater table is?

A. No.

Q. You are employed here at the Agency, correct?

A. Yes.

Q. How long have you been employed?

A. Since June of 2012.

Q. And where are you employed?

A. Bureau of Land in the solid waste permit section.

Q. And you were employed at CSD prior to that.

A. Yes.

Q. I believe you testified you were a staff geologist there?

A. Yes.

Q. You have a degree in geology from EIU?

A. Eastern Illinois, yes.

Q. Thank you. And what were your duties at CSD?

A. I was generally their field point technician for any of these job sites that we would go to that came to the door that required actual field analysis, field expertise. I was part of the group, myself and another guy. The field supervisor would show up and actually perform the work on job sites.

Q. Just the two of you?

A. Yes.

Q. Was he also a geologist?

A. No. He was our field supervisor. He generally ran the equipment.

Q. So in the field, you were CSD's

geologist?

A. Correct.

Q. You were the one that was there when borings were taken?

A. Yes.

Q. When borings were analyzed in the field?

A. Yes.

Q. Let's talk about when you would come to the site, how would you determine what borings to take?

A. Can you clarify that question?

Q. Well, would you determine -- would you just -- would there be a plan in place to determine where maybe the first boring would be taken how many boring would be taken before you got to the site?

A. Generally, yes, like a plan of attack kind of a thing.

Q. Would you develop that or would that be provided to you?

A. Usually provided by the project manager. We may sit down and go through it together, but for the most part, you know, I

had a plan, you know, with a number of borings maybe in mind, that kind of thing.

Q. And what are the -- what is the purpose of the borings from a geologist's perspective?

A. The purpose of the borings?

Q. Yes.

A. Well, as it relates to specifically this site, the purpose of borings is to go in and not only catalogue the soil types, but we're searching for evidence of contamination in those borings.

When the borings come up, I would log the soil types, log any evidence of contamination and potentially take samples.

Q. Now, you are talking about vertical borings, correct?

A. Yes.

Q. So are we only measuring where contamination might be vertically?

A. That's all you can do in a single boring.

Q. With multiple borings, what could you do?

A. With multiple borings, you can determine the horizontal extent. What you are looking for is contamination or a contaminant plume. So with multiple borings, you can kind of start beginning to define this, you know, three dimensional horizontal -- how far does this contamination spread horizontally. Within the boring itself, all you can do is determine vertical in a single boring.

Q. Is that the goal of conducting borings at a LUST site, is to determine the extent of the horizontal and vertical contamination?

A. Yes.

Q. All right. Now, when you are conducting these borings, you are also pulling cores; is that right?

A. Yes. You are pulling up soil samples known as cores, the actual -- you know, you are pulling soil out of the ground. Those are known as soil cores.

Q. When you were boring at -- when you bored at this site, did you have some sort of equipment that allowed you to conduct the boring?

A. Do you mean the drilling mechanism?

Q. Yes.

A. Yes.

Q. How far down could that boring equipment go?

A. Capability-wise?

Q. Yes.

A. We have been as deep as maybe 60 feet before.

Q. Okay. Now, how would the cores be taken?

A. We would have a series of four-foot steel tubes. Each tube would be pounded into the ground by our -- it's called a direct push geoprobe. So each four-foot section is pounded into the ground.

Once that four-foot section has been pounded in or driven in, we remove that four-foot section and have an inner liner, which would trap that soil inside the soil cores. So we would pull out the inner liner and lay them out on the table for, you know, observation.

Q. Do you know what at that inner

liner was made out of?

A. It was plastic. It was PVC probably.

Q. Okay. When you have -- and at that point, what would you do with the core once that had been removed?

A. I would open up the plastic sleeve and set it out on the table. I would then begin to log the soil types. Normally, I would PID, which is a field screen, a PID screen every foot or so.

Q. That's an electronic device?

A. Correct.

Q. To determine the soil types, how would you do that?

A. Just by training. You know, it may have been sand, it may have been clay, it may have been silt, that kind of thing. So I would -- you know, I would make -- for example, I would denote, you know, zero to two feet may be organic top soil. Then, you know, two feet to four feet may be a clay or a silty clay, something of that nature.

Q. Was this a visual determination?

A. Yes.

Q. While you were conducting this analysis of the core, what is your fellow CSD employee doing?

A. He is running the equipment, you know, preparing further -- another rod to be driven down further, you know, et cetera and so forth, whatever. It's kind of my job, you know, I was logging the soils while he was performing the mechanical duties.

Q. So did it happen where you would be analyzing a four-foot core and your coworker was in the process of drilling or boring an additional -- another deeper four-foot core?

A. Yes, that possible.

Q. Was that the normal process?

A. Generally, yes.

Q. So that likely was the process that applied here at the Piasa site?

A. Yes, most likely. I don't recall specifically.

Q. How far down would you typically bore at a LUST site?

A. It kind of depends. You know,

each site is so specific-specific. You know, when you're dealing with geology, each side is different. You know, we might drill ten feet. We might drill 30 feet. It just kind of all depends on what we find.

Q. Would your analysis of the cores in the contamination you might find in those cores have some bearing as to how deep you might drill?

A. Yes.

Q. And explain how that would work?

A. You know, generally we might take a boring -- it kind of all depends. If you look -- well, like I said, generally -- a common boring, you know, you might go the first four feet and you may have no evidence of contamination. The next rod or two rods or three rods, you may find signs of contamination. Then you may go, you know, even deeper until you're quote, unquote clean again. That's kind of a typical -- a typical boring.

Q. Is that typically then when you stop boring when you reach clean samples?

A. Typically, yes.

Q. So would the goal then, as you are conducting these borings, to determine the full vertical extent of contamination?

A. For the most part, yes.

Q. When is that not the case?

A. It kind of depends on where you are at in the progress of work at that site. When you first show up, you know, you may not even know there is contamination there. So you might do a couple of borings just to see if there is.

So the very first, you know, borings that you do, you really don't know what you're going to find at that site, you know, with everything being site-specific. So if the first two borings are clean at 16 feet, you can begin to make an assumption that, you know, hey, these might all be clean at 16 feet, but as you continue on, you might find contamination to go deeper, you know, at 20 feet or something like that.

Q. If you pull a core and there is still some odor, slight or otherwise, in that core, at the very bottom of this core, the

farthest down you bore to date, do you take further steps at that point?

A. Yes.

Q. What's a further step?

A. You might advance one more four-foot rod to see if the soil will clean up at some point after that.

Q. Is that because you are trying to determine the full extent vertically of contamination?

A. Yes.

Q. I want to call your attention to Page 232 of the administrative record on to Page 352, but the document begins at 232.

A. Page 232 to what?

Q. To 352.

A. 352. Okay.

Q. Do you recognize that document?

A. I do.

Q. What do you recognize it to be?

A. This is the Stage 2 Site Investigation Plan and Budget.

Q. Have you seen this before?

A. I have.

Q. Now, did you prepare this entire document?

A. No.

Q. Did you prepare any portion of this document?

A. Only the boring logs and the monitoring log completion reports.

Q. Okay. Now, let me call your attention to Page 240 of that report and Page 241.

A. Okay.

Q. Am I reading correctly then -- well, strike that.

Table 1 has four -- I'm sorry -- six columns to it; is that right?

A. Yes.

Q. And one of the columns has the boring depth, correct?

A. Yes.

Q. And these are the depths for each of the borings that were conducted as part of Stage 1 at the Piasa site?

A. Yes.

Q. Am I reading it correctly that all, but one of the borings was drilled to 20 feet?

A. Yes. It looks like that way.

Q. One of them was just a 16?

A. Yes.

Q. And what do you -- on the column next to that to the right, what is the heading there?

A. Soil sample depth.

Q. Actually to the left of that.

A. Oh, I'm sorry. Boring name.

Q. I'm looking for -- it says GW depth in boring. What does that mean?

A. Oh, excuse me. I'm sorry. GW depth in boring.

Q. What does that mean?

A. It means groundwater depth in boring.

Q. Is that when you encountered the groundwater table, the groundwater table?

A. Yes.

Q. All right. Let me call your attention to Page 241 and Page 242. Do you see that Table 2 there?

A. Yes.

Q. Now, that table shows lab results; is that right?

A. Yes, that's correct.

Q. And what do you understand the bold numbering to indicate?

MR. INGERSOLL: I'm going to object to going beyond the boring information. Mr. Hargrave's testimony was not at CSD when this document was prepared and he told us that he prepared the boring logs and the monitoring well completion portions of this document.

MR. SIEVERS: I asked him what he understood the bold portions to be.

HEARING OFFICER WEBB: Okay. I'll allow it.

BY THE WITNESS:

A. I'm sorry. Can you repeat your question?

BY MR. SIEVERS:

Q. What do you understand the bold portions on Pages 241 and 242 to indicate?

A. It looks like these bold numbers -- according to the last row, it appears as if the

bold numbers means that there was an exceedance of objectives in these particular samples, meaning a dirty sample.

Q. That there were exceedances in these lab samples, is that consistent of your recollection of the analysis of the lab work at the ^ class off-site?

A. Yes, sir.

Q. Let me call your attention to boring logs at Page 320.

A. Okay.

Q. And so my understanding, and you can correct me, is that the column on that log that says OVA/PID, that normally would have numerical numbers in there --

A. Correct.

Q. -- indicating PID readings?

A. Yes.

Q. These, instead, have things like slight in odor.

A. Yes.

Q. How are those determined?

A. By my nose. I literally smelled each foot of soil core that I examined.

Q. What does ND stand for?

A. ND means no detection.

Q. So on Page 320, your first observation was no detect; is that correct?

A. Yes.

Q. And then your next observation was slight?

A. Yes.

Q. So slight -- slight what?

A. Slight odor.

Q. Then the next is odor?

A. Yes.

Q. Would that indicate something stronger than a slight odor?

A. It would indicate most likely in this case the presence of a gasoline smell.

Q. Okay. And would that be the case all the way down that column until we got to slight and ND again?

A. Correct.

Q. Okay. So in your professional opinion then, looking at Page 320, would that column, OVA/PID, indicate to you where contamination might begin, continue and then fade off and end?

A. Yes.

Q. And now that boring, that ended at 20 feet; is that right?

A. Yes.

Q. And that was a no detect at the very end of that boring?

A. Yes.

Q. I will call your attention to the next page, which is Page 321, is that correct as well there that the very last observation you made was a no detect at that 20-foot level?

A. Yes, relative to these portions that day odor, you know, where we would get a strong odor and then towards the end of the boring, we began to detect less or none in that case.

Q. Okay. And would it be the case then on Pages 322, 323, 324 and 325?

A. Yes, all the same reasoning.

Q. Okay. On Page 330, there was a slight -- you identified a slight, the very last detection, on that boring, correct?

A. I'm just getting there. Hang on.

Q. Sure.

A. You said 330?

Q. Yes.

A. Yes.

Q. Before that, you had indicated odor in that last core sample; is that right?

A. Yes.

Q. Would -- in your professional opinion, has the full vertical extent of contamination been determined through boring 13 at this point?

A. Here's where it gets a little tricky. Anything that's done in the field, my observations made in the field are just that. They are my observation at the time.

Without actually having these so-called result samples back from the laboratory, there is really no actual way to tell. So to the best of my ability, these are my observations in the field at that moment.

Q. Another core could have been taken below that, correct, to determine whether you get to a point where there was a no detect?

A. Quite possibly.

Q. At this point you -- on B-13 on Page 330, you don't know yet from a field

perspective whether the vertical extent of contamination has been defined?

A. Not without the lab results.

Q. Okay. That would apply for all of the field analysis, correct?

A. You know, in the field, my observations at the time, it is using my training and my best guess to try to determine this stuff at that moment, you know, while the boring has been advanced and I have the soil cores in front of me and I am writing that stuff down.

Q. So you could have had a core pulled where you had no defect at all in there, but you still take a lab sample and the lab sample is what controls?

A. Yes. The lab sample is be all, end all.

Q. What do you have to do to know that you have fully defined a vertical extent of contamination?

A. I'm not --

Q. Is there a point in your boring that you, in the field, have in your professional opinion gotten to the point where you feel that

you have fully defined the vertical extent of contamination?

A. If you are using your PID machine, and again, the PID is a useful tool it helps us in the field at the time of the boring, it gives you a general idea, your PID readings. You know, if those would be a zero or a non-defect, you'd have a pretty good idea that the soil at that location was quote, unquote clean.

Q. And without that PID, you'd be left to your visual and olfactory senses; is that correct?

A. Correct, yes. That's my best -- you know, it's based on my training and what I saw and what I smelled and, you know, any discoloration maybe, if there was any, in the soil. That's what I had to go by on that day.

Q. So if you got to a stretch of a core where you didn't -- where there was a no detect, you didn't see any indications and you didn't smell any indication of contamination and this is below areas where you have identified contamination, might that indicate to you then that you have at least as far as you could tell

from the field, you fully determined the vertical extent of contamination?

A. I would agree with that, yes.

Q. I would like to call your attention to Petitioner's Exhibit No. 4 and Petitioner's Exhibit No. 5.

(Documents tendered to the witness.)

BY THE WITNESS:

A. Okay.

BY MR. SIEVERS:

Q. Are you certain that you took those photographs?

A. I'm not certain. Normally, I would take photographs, but I don't specifically recall taking these pictures.

Q. Could another employee of CSD have taken these photographs?

A. That could have been, yes.

Q. Sitting here today, do you know for sure?

A. I don't know for sure, no. I mean, this was quite a few years ago.

MR. SIEVERS: And nothing further.

I have nothing further of this witness.

HEARING OFFICER WEBB: Okay.

R E D I R E C T E X A M I N A T I O N

by Mr. Ingersoll

Q. Mr. Hargrave, staying with these boring logs at 320 and onward, if you look at Page 328, the boring went to 16 feet --

A. Yes.

Q. -- and stopped. Why did you stop at that point?

A. From the -- my description here on the boring log, it appeared that at 16 feet, I no longer smelled a strong odor.

Q. Once again, these are four feet?

A. Four-foot sections.

Q. They are not -- you do it a foot at a time because --

A. No.

Q. -- you do it four feet at a time?

A. It was four feet or nothing, you know, pretty much.

Q. Okay. So look at the next page. Your non-detect down at 1920.

A. Yes.

Q. You had odor at 16?

A. Yes.

Q. So based on what your other testimony was, it would seem that the next option was to move four more feet?

A. Correct.

Q. And look at 324, please, Page 324. So if your same logic is being applied, you will note what you believe to be contamination at the end of the fourth push at 16?

A. Yes, at 16 feet, yes. I did note a slight odor there.

Q. So you -- the only option to get to non-defect would be to stick on another four-foot extension?

A. Push down another rod, yes.

Q. When we were talking earlier about Petitioner's Exhibit No. 3, you said -- I believe you said you didn't recognize that. You could read it and tell what it was, but you didn't recognize that; is that correct?

A. That's right.

Q. Did you take any samples during the tank pull?

A. I don't recall without reviewing a document. I don't recall right now.

Q. Would you look at Page 44 of 56?

A. Sure.

Q. It's the same, I think, on all of these chain of custody forms.

A. Yes.

Q. On the lower left-hand corner --

A. Yes.

Q. -- is that you?

A. That's me.

Q. I can hardly read what it says for the title of that little box. Does it say collected by or what the heck does it say?

A. I can't read it. That is my signature, B. Hargrave. That's my signature.

Q. Okay. So it appears that you did take those samples or at least you were responsible for them at some point or another?

A. Yes.

Q. So you were, in fact, there when this activity was going on?

A. Yes, apparently.

Q. And you took samples from the --

and do you recall taking any samples from the bottom of the excavation?

A. I don't recall.

Q. Would you look at Page 15 of 56?

A. Yes.

Q. Can you tell what that is?

A. Yes.

Q. Okay. And the TP-1, et cetera, et cetera, et cetera?

A. Yes.

Q. Those are sample locations?

A. Yes.

Q. And you took all of them? Nope. You didn't take -- yes, you did. You took all of these samples, right?

A. Let me check to see if the core --

MR. SIEVERS: I'm going to object. He's asking him just to review the document. Clearly, he doesn't have actual knowledge separate from the document. I mean, if he refreshes his recollection, he can present the document to him and have him review the document, take the document away from him and then

ask him questions about the document. Otherwise, he's simply asking him to look at the document and read off of it.

MR. INGERSOLL: And we are looking at a record that has already been admitted into evidence. It was in the Agency's files and omitted for some unknown reason from the administrative record in this matter.

HEARING OFFICER WEBB: I'll go ahead and allow it.

BY HE WITNESS:

A. Can you repeat the question? I'm sorry.

BY MR. INGERSOLL:

Q. Okay. So you took all of these samples according to this. I mean, your signature is on these pages, which indicates you took those samples?

A. Correct, yes.

Q. Okay. When you were in that hole in the ground, were you standing in any water?

A. I don't recall.

Q. Would you take soil samples if you were standing in water?

A. No.

MR. INGERSOLL: Okay. Nothing further.

HEARING OFFICER WEBB: Okay. Mr. Sievers?

R E C R O S S - E X A M I N A T I O N

by Mr. Sievers

Q. Counsel asked you about Page 324, boring B-7.

A. Which document?

Q. We are talking about the Stage 2 Site Investigation Plan and Budget.

A. What was the page number?

Q. Page 324.

A. Okay.

Q. Now, where was the groundwater table on that boring?

A. Nine feet.

Q. How did you determine that?

A. Inside the boring, that's where the -- you kind of have a change from, you know, a dryer soil into a wetter soil. That's where you kind

of -- that's where you kind of surmise there might be a groundwater table right there. That's as you are doing it in the field as I'm logging the borings, you might go from a period of dry soil to wet soil, in which case I will denote that.

Q. And would that be the case throughout your boring logs that if you indicated the depth while drilling, that indicates you've determined that's where the groundwater table is through analyzing cores?

A. Yes. That's where we encountered moisture, yes.

MR. SIEVERS: I have nothing further.

HEARING OFFICER WEBB: Anything further for you, Mr. Ingersoll?

MR. INGERSOLL: No. I think we should let Mr. Hargrave go to lunch.

HEARING OFFICER WEBB: Thank you very much.

(Witness excused.)

HEARING OFFICER WEBB: Let's go off the record for a moment.

(Whereupon, after a short break was had, the following proceedings were held accordingly.)

HEARING OFFICER WEBB: We will go back on the record. We just had a short break and the Petitioner may call its next witness.

MR. SIEVERS: The Respondent would just like to renew its objection to Petitioner's Exhibit No. 5, a photograph that was still pending subject to cross.

HEARING OFFICER WEBB: It is still pending. Would you like to deal with that now or will it be used again in any of the future testimony?

MR. INGERSOLL: No. I guess my response would be that if you look at the picture itself and compare it with the known pictures that are in the record -- no, I'm sorry. They are not in the record. They were admitted into the evidence.

I think there is a certain amount of corroboration in that that the vehicles in the background can be identified as the same vehicles. So it would seem that corroborates its accuracy and its useful necessary at least at this level.

I'm not going to request that it be supplemented into the record.

MR. SIEVERS: We would just reiterate that it was not made part of the record. There is no argument there. There has never been submission to the Agency. I mean, it clearly has not been submitted to the Agency prior to today. So certainly, it has had no basis whatsoever upon the Agency's decision.

Further, we don't have a witness here testifying they actually took the photograph to lay the foundation to make this admissible. This is simply hearsay at this point.

HEARING OFFICER WEBB: Well, I -- I'll interject here. I also am not totally

comfortable with this exhibit, but I will -- if you would like to make an offer of proof, I will -- we will send it to the Board.

MR. INGERSOLL: No, that's okay.

HEARING OFFICER WEBB: No?

MR. INGERSOLL: I will withdraw it.

HEARING OFFICER WEBB: Okay. Mr. Ingersoll, you may call your next witness.

MR. INGERSOLL: Karl Kaiser, please.

HEARING OFFICER WEBB: Mr. Kaiser, you may step up here and the court reporter will swear you in.

THE COURT REPORTER: Raise your right hand, please.

(Witness sworn.)

WHEREUPON:

K A R L K A I S E R

called as a witness herein, having been first duly sworn, deposeth and saith as follows:

D I R E C T E X A M I N A T I O N

by Mr. Ingersoll

Q. Would you state your name and spell your last name, please?

A. It's Karl Kaiser, K-A-I-S-E-R, and Karl with a K.

Q. Thank you. Okay. The site we have been talking about all day, you have been here, so you are the Agency's assigned project manager?

A. Yes.

Q. And you have been from the beginning, as I understand it, from looking at the record?

A. I believe so.

Q. Okay. Looking at pages -- is the record there? Yes. Looking at Pages 353, 354 and 355, those purport to be your review notes of this matter; is that correct?

(Document tendered to the witness.)

BY THE WITNESS:

A. Yes.

BY MR. INGERSOLL:

Q. These were all prepared by you?

A. Yes.

Q. I notice they were prepared on different dates?

Let's put it this way, I note that they report -- that they were reviews of different dates. The one that says, "date reviewed, April 8, 2014," when was that document created?

A. April 8, 2014.

Q. So the same date as the review is when you completed it?

A. When I completed my review and generated the letter on it.

Q. Was this document created before the letter was signed by Mr. Lowder?

A. Yes.

Q. Do you have any idea when you sent this document to the Agency's central files?

MR. SIEVERS: Assumes a fact not in evidence, objection.

HEARING OFFICER WEBB: Pardon

me?

MR. SIEVERS: I'm going to object because it assumes a fact not in evidence.

HEARING OFFICER WEBB: Would you like to ask an additional question?

BY MR. INGERSOLL:

Q. Did you ever send this document to the Agency's central files?

A. I don't recall it would have been part of my review, but and I'm not sure when it would have been in the Agency's file.

HEARING OFFICER WEBB: Mr. Kaiser, could you just speak up a little bit?

THE WITNESS: Yes. Excuse me.

BY MR. INGERSOLL:

Q. Well, who is responsible for seeing that a document such as these are filed in the central files?

A. Normally, when we send a letter for signature, it includes notes and particular submittals that I reviewed and those would then go to our Agency clerical along with signed letters and they would be -- I'm not sure exactly

how they route them to the actual division file, but they are the ones who then would send it on to the files.

Q. Okay. Going back to Page 353, it mentions a March 25, 2014, manager's meeting. Were you at that meeting?

A. Yes.

Q. Who else was present?

A. From the best of my recollection, it would have been Hernando, our section manager, Tom Henninger, Harry Chappel and Mike Lowder.

Q. And did you make a presentation to those managers?

A. Yes.

Q. Could you describe your presentation to them?

A. Yes.

Q. What did it entail?

A. I explained to them and set forth the information that was given to me for the Stage 2 Plan and Budget and the circumstances around that site and presented them what I, through my review, had planned on doing with it as far as what type of letter I was going

to generate and my determinations on that.

I was getting concurrence with them whether that was what type of letter needed to be sent and whether that fell in line with the circumstances of the report that was submitted and how that applied to the regs.

Q. Did you provide them with any memos or written records?

A. No.

Q. On Page 354, it says, "Average depth to groundwater was approximately 8.8 feet." Go back to Page 9.

A. What was the page you just mentioned?

Q. I'm sorry. Page 354.

A. Okay.

Q. It was the second page of the three-page review note set.

A. Okay.

Q. It mentioned "Average depth to groundwater is approximately 8.8 feet." Go back to Page 9 in the Agency record. There's some handwritten -- there's a handwritten entry in the right-hand margin.

A. Uh-huh.

Q. Is that your writing?

A. Yes, it is.

Q. And what information did you use to derive that 8.8 feet average?

A. I used that or calculated that based on the information that was provided in this particular report.

Q. Well, could you point us to the information?

A. It would have been going through and averaging the depth to groundwater that was listed on the -- four of the different borings in Stage 2 -- Stage 1.

Q. So that would have been the 14 borings in Stage 1, the table that runs over onto Page 10?

A. I don't recall if it included that or if it included the additional Stage 2 at this time. I can't remember.

Q. Okay. Would you please look at Page 12, Table 3.0. I assume you didn't use any of these numbers?

A. No.

Q. Okay. Then on Page 14, there is a

question mark and handwritten markings on that piece of paper and then average, approx, 9.5. Are those your marks?

A. Yes.

Q. Okay. Can I assume you don't believe -- you believe that the 12/14/06 is inaccurate?

A. The date?

Q. Yes.

A. Yes.

Q. And the 9.5 is the arithmetic average of all the numbers in the depth to groundwater --

A. Uh-huh.

Q. -- column?

A. Yes.

Q. So what is the groundwater table level at that site?

A. Based on an average -- looking at an averaging, it was 8.8.

Q. Not the 9.5 that actually came from monitoring wells?

A. Correct.

Q. And you did not include the very low numbers that were seen on 12/14/06?

A. No.

Q. Okay. If the average that you thought was 9.5, why did you use 8.8 in your notes?

MR. SIEVERS: Objection. That's contrary to his testimony. That's not what he just testified to.

MR. INGERSOLL: I know. He testified it was 9.5.

MR. SIEVERS: He testified it was 8.8 and then he said it was 9.5 on this other table.

HEARING OFFICER WEBB: Let's clear this up.

BY MR. INGERSOLL:

Q. What's the groundwater table out at this site? What's the level?

A. It's 8.8.

Q. Okay. What's -- so you have decided that the monitoring well levels mean nothing?

A. I did not use those. I used the depth while drilling.

Q. And why is that?

A. Because that's -- the depth while

drilling is what we used to determine the level of whether you are taking soil samples or whether it becomes a groundwater issue.

Q. Where is that from? I mean, why did you decide on that? Is that Agency policy or what?

A. It's through the Agency insofar as the LUST action is concerned and our determinations of where the wells need to be set and everything else. It's determined or purveyed to me as the project manager that it's depth while drilling.

Q. Okay. Did anyone offer up any technical support for that position?

A. I myself am not aware of the decisions the Agency made to make the determination of depth while drilling. I was not included in that decision.

Q. Okay. So the Agency will interpret the groundwater table to be the depth -- the average depth contacting -- at which groundwater is contacted during drilling?

A. It would be -- the individual boring would be the depth while drilling -- determined while depth while drilling. The average -- the

8.8 is what I came up by averaging the information given to me in this particular report.

Q. Okay. I believe the rule allows drilling through and beyond the water table if site-specific conditions warrant. Is that your understanding?

A. Yes.

Q. And can you describe any site-specific conditions that would warrant that?

A. As far as my understanding, there would not be any site-specific conditions that would warrant taking samples below the groundwater table that I have seen.

Q. Is that the Agency's position?

A. As far as the regs are concerned, it leaves it open for that to be site-specific determination or site-specific conditions to be surveyed, but I did not see anything that would require them to take samples below the groundwater table in this particular instance.

Q. Does the Agency have a position on this generally? I mean, is it -- are there any site-specific conditions that the Agency would consider justifying going beyond the water

table?

A. Not that I'm aware of.

Q. Have you been advised by any of your managers that there are none that would be approved?

A. Correct. This was discussed, like I said, in the manager's meeting. We came up with the determination that there was no site-specific conditions that warranted the sampling below the groundwater table.

Q. Ever or in these circumstances?

A. In these particular circumstances.

Q. How about ever?

A. That, I wouldn't know.

Q. Have you been getting any instructions on that?

A. No.

Q. I assume you reviewed this amended 45-day report that's marked as Petitioner's Exhibit No. 3?

(Document tendered to the witness.)

BY THE WITNESS:

A. Yes.

BY MR. INGERSOLL:

Q. Okay. And they have the number of excavation so-called floor samples -- soil samples from the floor of those excavations, don't they?

A. Yes.

Q. All right. So what was the water table level on that day of -- let's see when those samples were taken -- August 24, 2006?

MR. SIEVERS: Are we making a reference to a part of the record?

MR. INGERSOLL: No. I'm making reference to this document, Exhibit No. 3.

MR. SIEVERS: Can you give us a page number?

MR. INGERSOLL: Well, the -- the sample forms -- the chain of custody forms are at 43, 44, 45. Then once again, you go back to the figures, which I did not really direct him to. I just -- I asked him if he did floor samples and he said yes. I think --

BY MR. INGERSOLL:

Q. Did they do floor samples?

A. Yes.

Q. Of soil?

A. Yes.

Q. Okay. So what was the water table on that date?

A. They didn't indicate depth of water at that table based on those samples.

Q. Okay. There's a hole 13 feet in the ground and it didn't have any water in it. How deep was it -- what was the water table on that day? It was below 13 feet, wasn't it?

A. That, I don't know. I wasn't given that information. I was given in that particular reporter that they encountered groundwater.

Q. Well, I'm not talking about this report. It's a different day. It's different information. This doesn't say anything about what level the groundwater was encountered because they've got a dry hole in the ground. What's that say? What's that tell you about the level of groundwater?

MR. SIEVERS: I'm going to object. This particular report actually

does say groundwater was encountered at the site on Page 4 of 56.

HEARING OFFICER WEBB: Is this Exhibit No. 3?

MR. INGERSOLL: That's a different question.

MR. SIEVERS: Exhibit No. 3.

MR. INGERSOLL: I'm talking about the date that that hole in the ground was made. I don't think there has been any disagreement.

MR. SIEVERS: I don't think there's any qualification that said that it was not encountered on that day. It says groundwater was encountered at the site in question.

MR. INGERSOLL: Groundwater has been encountered at the site, yes.

HEARING OFFICER WEBB: Do you want to ask the question again?

MR. INGERSOLL: As reported in this very report. Referencing the 45-day report, it was submitted sometime before, I've got a question. I mean, this man

has been reviewing project reports for how many years?

THE WITNESS: Twenty-two, 23 years.

MR. INGERSOLL: Okay.

HEARING OFFICER WEBB: I'll allow it. Go ahead and ask it.

BY MR. INGERSOLL:

Q. Okay. So are you unable to deduce that the groundwater, at least on that day that that excavation was going on, was below 13 feet?

A. Based on the information that they provided in here and the fact that they took samples and showed the excavation, they did not indicate to me a depth to groundwater level other than stating in a report that they encountered groundwater.

Q. At the site?

A. At the site. Based on looking at the pictures alone, I could not determine that myself because of the quality and clarity of those pictures.

MR. INGERSOLL: I have nothing further.

HEARING OFFICER WEBB: Okay.

Mr. Sievers?

C R O S S - E X A M I N A T I O N

by Mr. Sievers

Q. Okay. Mr. Kaiser, there has been introduced in this case Petitioner's Exhibit No. 2 and Petitioner's Exhibit No. 3.

Petitioner's Exhibit No. 2 is a 45-day report and Petitioner's Exhibit No. 3 is amended 45-day report. They were not included in administrative record in this case; is that your recollection?

A. Correct.

Q. Why?

A. Because at the time that I reviewed that, I had already seen a Stage 3 Site Investigation Plan and Budget that documented Stage 1 and Stage 2 activities.

The particular report that I was reviewing at the time was a Stage 2 Plan and Budget because they had neglected to ever submit that particular report prior to the Stage 3 submittal. So I was reviewing that particular information based on my knowledge of the site.

I did go back and look at the 45-day report or the certification of the 45-day or what was on our database to determine if that was approved, which would have included the Stage 1 certification.

Q. But you didn't rely upon the 45-day report -- the amended 45-day report in reaching your decision on the Stage 2 site inspection and budget?

A. No.

Q. Is it possible that site-specific conditions could exist warranting boring below the groundwater table, but you just haven't encountered them yet?

A. True.

Q. In the Stage 2 report that was submitted to you in this action or to the Agency in this action, were any site-specific conditions called to your attention that the Petitioner contended warranted drilling or boring below the groundwater table?

A. No.

Q. Your job duties, they include reviewing, approving, denying, modifying budget

plans involved in the Leaking Underground Storage Tank Program, correct?

A. Yes.

Q. What's your highest level of education?

A. I have a master's degree in environmental studies.

Q. Do you work with the Office of the State Fire Marshal?

A. Yes.

Q. In what capacity?

A. I am a liaison between the Agency and the Office of the State Fire Marshal with regards to record retrievals or removal logs or anything that our project managers may need during the process of a review.

Q. Okay. What's your title with the IEPA?

A. Environmental protection specialist three.

Q. How long have you worked at the Agency?

A. Approximately 23 years. I started contractually for six months and then was an

employee after that.

Q. You are in the LUST section?

A. I have been in the LUST section the whole entire time.

Q. Leaking Underground Storage Tank Section?

A. Yes.

Q. You are a project manager?

A. Correct.

Q. And you are the project manager on the Piasa Motor Fuels, Inc. site or the Steve's Service site?

A. Yes.

Q. And how did you get assigned to this site?

A. I'm not aware. I think it's maybe a random allotment of sites that come in.

Q. Does a file exist for this site?

A. A division file?

Q. Within the Agency.

A. A division file exists, yes.

Q. It includes petitioner's submissions and correspondence and so forth?

A. Correct.

Q. I'm going to call your attention to Page 3 of the administrative record through Page 229.

A. Through page what?

Q. Page 229.

A. Okay.

Q. Do you recognize what that document is?

A. Yes.

Q. What do you recognize it to be?

A. This is their Stage 3 planning budget.

Q. Have you seen it before?

A. Yes.

Q. Is it in that file that we spoke about?

A. No, it isn't.

Q. Is it part of the Agency files?

A. Yes.

Q. Now, before -- strike that.

Prior to receiving this Stage 3 Site Investigation Plan and Budget at Page 3 of the record, when was the last time you received a submittal from the Petitioners?

A. I believe it would have been at the

point of the amended 45-day report.

Q. In 2006?

A. Yes.

Q. And this Stage 3 Site Investigation Plan and Budget was received by EPA in January 2012; is that right?

A. Yes.

Q. After you received this -- after the Agency received this Stage 3 Plan and Budget, did you receive a letter from CSD concerning this plan and budget?

A. Yes.

Q. Calling your attention to Page 231 of the record, do you recognize that document?

A. Yes.

Q. What is that document?

A. It was a letter that was submitted to the Agency requesting that the Stage 1 and Stage 2 action costs and the Stage 3 Plan and Budget, that the review for that be waived.

Q. Was that the word they used?

A. No. Their words were, "At this time, CSD would like to request that the Agency suspend their review of these documents until

receipt of a revised Stage 2 Plan and Budget currently being completed for submittal to the Agency."

Q. Okay. And to your knowledge, did the Agency so suspend its review?

A. Yes.

Q. This is a May 7, 2012, document; is that right?

A. Yes.

Q. Prior to this -- prior to the Agency's receipt of this document, did you have any conversations with CSD Environmental Services, Inc.'s personnel?

A. Yes, I did.

Q. Did you have -- did those conversations, in your mind, result in the receipt of this letter at Page 231?

A. Yes.

Q. Who did you have the conversation with?

A. I believe at the time I talked to Joe Truesdale.

Q. And what about that conversation do you think prompted this letter?

A. Upon my initial review of that particular document, I became aware that they had never submitted a Stage 2 Plan and Budget to the Agency for review and approval.

So I called Mr. Truesdale up and explained to him that we had a Stage 3 plan that had come in prior to this and that I could not review that based on the fact that I -- I don't know what they would have ever had proposed in their Stage 2 Plan and Budget.

Therefore, the actual costs in Stage 1 and Stage 2 included that particular thing were things that were -- at that particular point in time I felt I couldn't review because of a lack of that Stage 2 Plan and Budget.

I suggested to him that they suspend review on this particular report at such time that would give them the opportunity to submit a Stage 2 Plan and Budget so that it would bring things back into the normal progression of submittal of the plans and reports to the Agency.

Q. So in the five and a half years between the amended 45-day report and the receipt

of the Stage 3 Site Investigation Plan and Budget, the Agency had not received any other submittals from CSD for the Piasa Motor Fuels, Inc. site?

A. Yes.

Q. Now, response to this conversation, you received this letter. Did you ultimately also receive a Stage 2 Site Investigation Plan and Budget?

A. Yes.

Q. I call your attention to Pages 232 through 352 of the record.

A. Okay.

Q. Do you recognize Pages 232 to 352 of the administrative record? Do you recognize that document?

A. Yes.

Q. What do you recognize it to be?

A. Stage 2.

Q. Have you seen it before today?

A. Yes.

Q. Was it in the Agency's files?

A. Yes.

Q. And I'll call your attention to Pages 353 through 355 of the record.

A. Page 253?

Q. Pages 353 to 355.

A. Okay.

Q. All right. Now, do you recognize those documents?

A. Yes.

Q. What do you recognize them to be?

A. My review notes.

Q. Is that more than one set of review notes?

A. Yes. There's two separate review notes.

Q. Are they from different dates?

A. Yes.

Q. One is for April 8, 2014, and one for March 25, 2014?

A. Correct.

Q. Okay. And in the review note dated April 8, 2014, there is reference to a LUST section manager's meeting. Do you see that?

A. Yes.

Q. Are you aware of any records documenting this meeting such as agendas, memos,

notes, emails, et cetera?

A. No.

Q. Have you searched for any such records?

A. Yes.

Q. And what was the result of your search?

A. There is none.

Q. Okay. Now, I want to call your attention to Page 356 of the administrate record through Page 358. Do you recognize that document?

A. Yes.

Q. What is that document?

A. Yes.

Q. What is that document?

A. That is the letter that I generated in response to the Stage 2 Plan and Budget.

Q. Is that the Agency's decision letter?

A. Yes.

Q. Who drafted that letter?

A. I did.

Q. Now, that's signed by someone other than you, correct?

A. Yes.

Q. Who is that signed by?

A. My immediate supervisor, Michael Lowder.

Q. Okay. Why did Michael Lowder sign it and not you?

A. It's just Agency protocol for the LUST section. Project managers don't sign their own letters. It's done by the individual unit managers.

(Document marked as Respondent's Exhibit No. R-1 for identification, 9/10/14.)

MR. SIEVERS: May I approach the witness?

HEARING OFFICER WEBB: Yes.

MR. SIEVERS: Thank you.

BY MR. SIEVERS:

Q. Mr. Kaiser, I'm handing you what was previously marked as Respondent's Exhibit No. 1 or R-1. Can you take a moment to review that and let me mow when you have finished?

(Document tendered to the witness.)

BY THE WITNESS:

A. Okay.

BY MR. SIEVERS:

Q. What do you recognize exhibit -- Respondent's Exhibit R-1 to be?

A. It's an excerpt of a reg regulations regarding Stage 1 site investigation.

Q. Does it set forth Section 734.315 of the regulations?

A. Yes.

Q. And did you rely upon Section 734.315 in reaching your decision on the decision letter set forth April 8, 2014, as set forth in the record at Pages 356 to 358?

A. Yes.

Q. And Respondent's R-1 contains language concerning borings being drilled groundwater table, correct?

A. Yes.

Q. And that -- was that language -- did you rely upon that language in reaching your April 8, 2014, decision?

A. Yes.

Q. Okay. And is it your understanding

of Section 734.314 as set forth in Respondent's R-1 that borings are not to be advanced below the groundwater table unless site-specific conditions warrant it?

A. Correct.

Q. Do you understand the Petitioner's Stage 2 submittal to include a Stage 1 budget for work involving boring below the groundwater table?

A. The Stage 2 Plan and Budget did include sample results below the groundwater table that were in their corresponding budget.

Q. Were any site-specific conditions set forth in the Stage 2 submittal indicating to you that site-specific conditions warranted boring below the groundwater table?

A. No, they were not.

Q. Were any site-specific conditions called to your attention in the Stage 2 submittal in which CSD or the Petitioner contended site-specific conditions warranted boring below the groundwater table?

A. No.

Q. Did the Stage 2 submittal from the Petitioner include the submittal of any actual costs

incurred in Stage 1?

A. No, it did not.

MR. SIEVERS: I don't think I have anything further with this witness.

R E D I R E C T E X A M I N A T I O N

by Mr. Ingersoll

Q. Mr. Kaiser, is it your contention that an applicant has to specifically highlight site-specific conditions that it may want to rely upon for drilling beyond the water table?

A. When looking at -- when reviewing a particular report like this and looking at compliance like this, I would look for a statement within the submittal of the extenuating circumstances or the reasoning why they would have wanted to stay below the water table and that was not provided in the submittal.

Q. It was not provided. That implies that you think it's required by the regs?

A. Yes.

MR. SIEVERS: Objection.

HEARING OFFICER WEBB: You object?

MR. SIEVERS: Withdrawn.

HEARING OFFICER WEBB: Okay.

BY MR. INGERSOLL:

Q. So it's your contention that the applicant should not be allowed to just rely upon you being able to deduce from the information provided in the report whether or not those conditions exist?

A. I don't understand the question.

Q. Is it your contention -- okay.

Are the applicants allowed to rely upon your review of the information in the report that would allow you to deduce whether those conditions exist absent -- go ahead, I'm sorry. Do you want to answer to that part? This is a mess. I'm sorry.

A. I was going to --

Q. No, no, no. My fault, my fault.

Okay. You testified that it is required for the applicant -- if they drill beyond the water table it's required that they specifically highlight the site-specific conditions that relate to that?

A. It's my understanding that site-specific conditions need to be present to

warrant them drilling below the water table and taking samples.

Q. If there's information elsewhere in the report, unless they do a specific assertion about those site-specific conditions, you don't believe that's adequate?

A. They need to provide me with their reasoning why they had site-specific conditions that warrant them taking samples below the water table.

Q. It has to be set forth separately from the data that may be otherwise present?

A. That's what I would look for, yes.

MR. INGERSOLL: I have nothing further.

HEARING OFFICER WEBB: Mr. Sievers, anything further?

MR. SIEVERS: Nothing further of for this witness.

HEARING OFFICER WEBB: Okay. Thank you, Mr. Kaiser.

(Witness excused.)

MR. INGERSOLL: We have nothing further. Thank you.

HEARING OFFICER WEBB: Mr. Sievers?

MR. SIEVERS: Yes. I guess we will call Mr. Thorpe.

HEARING OFFICER WEBB: Mr. Thorpe, why don't you come up and let the court reporter swear you in.

THE COURT REPORTER: Raise your right hand, please.

(Witness sworn.)

WHEREUPON:

S H A N E T H O R P E

called as a witness herein, having been first duly sworn, deposeth and saith as follows:

D I R E C T E X A M I N A T I O N

by Mr. Sievers

Q. Mr. Thorpe, could you state your name and spell it for the court reporter?

A. Shane Thorpe, T-H-O-R-P-E.

Q. Are you employed?

A. Yes.

Q. Where are you employed?

A. I'm a senior project manager with CSD Environmental Services.

Q. How long have you been employed by

CSD Environmental Services?

A. Currently, I have been there for -- since 2007. Before that, I worked there for a couple of years in the '90s.

Q. Okay. Are you familiar with the Stage 2 Site Investigation Plan and Budget that was submitted in this matter?

A. Yes.

Q. I would like to call your attention to the record. Do you have that before you?

(Document tendered to the witness.)

BY THE WITNESS:

A. I do.

BY MR. SIEVERS:

Q. I would like to call your attention to Page 238.

A. Okay.

Q. Is Page 238 part of the Stage 2 Site Inspection Plan and Budget?

A. Site investigation.

Q. Site Investigation Plan and Budget?

A. Yes.

Q. Okay. And on Page 238, is that your

signature under the heading of consultant?

A. Yes.

Q. Now, the Stage 2 Site Investigation Plan and Budget, that reports, among other things, results from a Stage 1 investigation; isn't that right?

A. Correct.

Q. And the Stage 1 investigation involved Brandon Hargrave, and another CSD employee physically going out to the Piasa Motor Fuels, Incorporated site and conducting an investigation?

A. Yes.

Q. Mr. Hargrave and his coworker caused borings to be taken at the site?

A. They caused borings to be taken?

Q. Borings were taken at the site; is that right?

A. Yes.

Q. And whether it was taken by Mr. Hargrave or his coworker, one of the two of them took the borings; is that correct?

A. As I understand it, yes by, by looking at the boring logs.

Q. You weren't onsite when those borings were taken?

A. No.

Q. So Mr. Hargrave, he was a geologist on the site; isn't that right?

A. Yes.

Q. His analysis of the borings -- of the cores retrieved from the borings, those are the basis for the Stage 1 data set forth in the Stage 2 Site Investigation Plan and Budget; is that correct?

A. That's a portion of the data, yes.

Q. Okay. It's the data -- did you have other data about the site from the Stage 1 investigation that didn't come from Brandon Hargrave?

A. Well, after the wells were installed, someone went down and gauged them and sampled them. I don't -- off the top of my head, I don't know who did that.

Q. Could that have been Brandon?

A. It could have been.

Q. Okay. But as far as the borings for Stage 1 are concerned, the analysis of the

cores that were taken from those borings, that was all done by Brandon Hargrave; isn't that right?

A. As far as I know. Like I said, I started at CSD again in 2007. These borings were done in 2006. You are asking me to testify to something that I can't.

Q. Fair enough. You did sign the Stage 2 Investigation Plan and Budget as a consultant, correct?

A. Correct.

Q. And you relied upon at least data from somebody in preparing that plan and budget, correct?

A. Yes.

Q. Okay. Are you aware of any statement in the Stage 2 Investigation Plan and Budget that's false? Well, let me -- I didn't mean to be that burdensome. Let me withdraw that question and ask you another question and ask you this.

At the time that you signed the Stage 2 Site Investigation Plan and Budget, was it your understanding that everything in that plan and budget was true and accurate?

A. Yes.

Q. And let me call your attention to Page 7 of the administrative record or actually Pages 3 through 229 of the administrative record. So go to Page 3 to start with. Do you see that?

A. Okay.

Q. Now, do you understand Pages 3 through 229 of the administrative record to be Stage 3 Site Investigation Plan and Budget in this matter?

A. Yes.

Q. I will call your attention to Page 7 of that document. Does that include your signature as the consultant for that document as well?

A. Yes.

Q. At the time you signed that, you had every reason to believe that that document was true and accurate; isn't that correct?

A. That's correct.

Q. Okay.

A. Going back through it, I have seen a couple of errors and I think we have identified a couple of them today.

Q. Right. Have you identified any errors in either the Stage 2 Site Investigation Plan and Budget or the Stage 3 Site Investigation Plan and Budget that are anything more than a typographical error?

A. No. Although I will -- well, sort of, I guess. I noted in the Stage 2 Plan and Budget on Page 246 of the record that we were only going to propose two BTEX and MTBE from each boring because I knew that that was going to be an issue with the samples from below the water table. I did forget -- I forgot to take that out of the budget itself, but the budget didn't get approved or anything.

Q. I'm sorry. I'm confused. Could you point to the sentence that you are talking about on Page 246?

A. It's in the third paragraph down, second sentence, "For budgetary purposes, only two BTEX and MTBE soil samples are proposed from each soil boring."

Q. Now, are you saying that is a mistake to have included that in the report or not?

A. No. I'm saying I meant to only

include two of each in the budget, but when I went back and looked at it, I saw that there are four from each of those in the budget.

Q. Why is that a mistake?

A. Because as we have conceded in this case, the Stage 2 explicitly denies or prohibits samples from below the water table whereas Stage 1 does not.

Q. Okay. I just wanted clarification on that.

A. It's not to be confused with the depth to groundwater in the boring samples.

MR. SIEVERS: I don't think I have anything further with this witness.

MR. INGERSOLL: I don't have any questions.

HEARING OFFICER WEBB: Okay. thank you.

(Witness excused.)

HEARING OFFICER WEBB: Mr. Sievers, do you have anything else you would like to present?

MR. SIEVERS: No, your Honor.

HEARING OFFICER WEBB: Okay. All

right.

MR. INGERSOLL: May I have a couple minutes to confer to see if we need to put anybody on rebuttal?

HEARING OFFICER WEBB: Okay. Let's go off the record.

(whereupon, a discussion was had off the record.)

HEARING OFFICER WEBB: Okay. We will go back on the record.

It is my understanding that Petitioner has nothing further to present today.

MR. INGERSOLL: Correct.

HEARING OFFICER WEBB: Respondent has one additional issue to address?

MR. SIEVERS: Merely moving into evidence Respondent's R-1.

HEARING OFFICER WEBB: Which is?

MR. SIEVERS: Which is Regulation 731.315.

HEARING OFFICER WEBB: Okay. I understand you do not have any objection to that?

MR. INGERSOLL: No.

HEARING OFFICER WEBB: Okay. So I will go ahead and admit that for the convenience of the Board. Respondent's Exhibit No. 1 is admitted.

(Respondent's Exhibit No. 1 was admitted into evidence.)

HEARING OFFICER WEBB: You have nothing further for the Agency?

MR. SIEVERS: That's correct, your Honor.

HEARING OFFICER WEBB: Okay. The transcript is due by September 22nd and will be posted on the Board's website. The public comment deadline is September 24th. Any public comment must be filed in accordance with Section 101.628 of the Board's procedural rules.

Petitioner's brief is due by October 6th and Respondent's brief is due by October 20th. The mailbox rule will not apply and briefs are due by 4:30 p.m. on the due date.

Would Petitioner like to

make a closing argument?

MR. INGERSOLL: No, thank you.

HEARING OFFICER WEBB: Would the Agency like to make a closing argument?

MR. SIEVERS: No, thank you.

HEARING OFFICER WEBB: At this time, I will conclude the proceedings. We stand adjourned and I thank you all for your participation.

(Whereupon, the proceedings in the above-entitled cause were adjourned.)

STATE OF ILLINOIS)
) SS.
COUNTY OF C O O K)

I, LORI ANN ASAUSKAS, CSR, RPR, do hereby state that I am a court reporter doing business in the City of Chicago, County of Cook, and State of Illinois; that I reported by means of machine shorthand the proceedings held in the foregoing cause, and that the foregoing is a true and correct transcript of my shorthand notes so taken as aforesaid.

Lori Ann Asauskas, CSR, RPR.
Notary Public, Cook County, Illinois

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