Electronic Filing: Received, Clerk's Office 05/22/2023

ILLINOIS POLLUTION CONTROL BOARD

SIERRA CLUB, )
ENVIRONMENTAL LAW AND )
POLICY CENTER, PRAIRIE )
RIVERS NETWORK, and )
CITIZENS AGAINST RUINING )
THE ENVIRONMENT, )
Complainants, )
vs. ) No. PCB 13-15
MIDWEST GENERATION, )
Defendant. )

TRANSCRIPT FROM DAY FOUR of the PROCEEDINGS taken before HEARING OFFICER BRADLEY HALLORAN at the Michael M. Bilandic Building, Room N-505, Chicago, Illinois, on the 18th day of May, 2023, A.D., at 9:00 o'clock a.m.

Reported by: Kari Wiedenhaupt, CSR
License No.: 084-004725

Electronic Filing: Received, Clerk's Office 05/22/2023

APPEARANCES:
MS. FAITH E. BUGEL
1004 MOHAWK ROAD
WILMETTE, ILLINOIS 60091
(312) 282-9119
fbugel@gmail.com

- and -

SIERRA CLUB, by
MR. GREG WANNIER
MS. MEGAN WACHSPRESS
2101 WEBSTER STREET
SUITE 1300
OAKLAND, CALIFORNIA 94612
(415) 977-5646
greg.wannier@sierraclub.org
megan.wachspress@sierraclub.org
-and-
ENVIRONEMNTAL INTEGRITY PROJECT, by
MR. ABEL RUSS
VERMONT AVENUE, NW, SUITE 1100
WASHINGTON, DC 20005
(202) 296-8800

Representing the Complainants;

Electronic Filing: Received, Clerk's Office 05/22/2023

APPEARANCES CONTINUED:
NIJMAN FRANZETTI LLP, by
MS. JENNIFER T. NIJMAN
MS. KRISTEN LAUGHRIDGE GALE
MR. ANDREW NISHIOKA
10 SOUTH LASALLE STREET
SUITE 3600
CHICAGO, ILLINOIS 60603
(312) 251-5250
jn@nijmanfranzetti.com
kg@nijmanfranzetti.com
an@nijmanfranzetti.com
Representing the Respondent.

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023


Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023



[^0]Integrity Project on behalf of Prairie Rivers Network.

MS. GALE: Kristen Gale, with my partners, Jennifer Nijman and Drew Nishioka, on behalf of Midwest Generation, LLC.

HEARING OFFICER HALLORAN: All
right. Thank you. I think we left off yesterday, Mr. Russ is doing an adverse direct on Mr. Gnat.

And at this point, Mr. Gnat, if you could raise your right hand again just in case the oath wore off somehow and the court reporter will swear you in.
(Whereupon, the witness was duly sworn.)

HEARING OFFICER HALLORAN: Okay.
Thank you. Mr. Russ. You may proceed.
MR. RUSS: Thank you, your Honor.
Just as background, we conferred
with opposing counsel and tried to seek a compromise, and we offered to try to admit excerpts. They would still like us to read through the document and establish relevance for various sections and subsections. So that's what we are going to do.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

L.A. Court Reporters, L.L.C.

WHEREUPON:

$$
R I C H A R D \quad G N A T
$$

called as an adverse witness herein, pursuant to Section 1-01.624 of procedural rules of the Illinois Pollution Control Board, having been first duly sworn, deposeth and saith as follows: CROSSEXAMINATIONOCNTID by Mr. Russ
Q. Good morning, Mr. Gnat.
A. Good morning.
Q. Do you have Exhibit 1331 in front of you?
A. I do.
Q. And apologies for -- this might be a little tedious, but could you turn to the table of contents again? I think we did this yesterday.

THE COURT REPORTER: Would you speak up a little bit? BY MR. RUSS:
Q. Yeah. I think we did this yesterday, but $I$ just want to look at the table of contents one more time.
A. Yes. I have it in front of me.
Q. Great. Thank you.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023


Now, I believe yesterday you said that you -- you were responsible for writing Section 9 of the report; is that right?
A. That is correct, yes.
Q. And does that include Attachment 9?
A. Yes.
Q. And figures that start with 9?
A. Yes.
Q. And tables that start with 9?
A. Yes.
Q. Okay. Thank you.

And I think you also said that you -- that KPRG played a role in drafting some of the texts associated with Section -- Sections 1 and 2?
A. Correct.
Q. And 10, 11, and 12?
A. 12? I'm not sure who wrote 12 , if it -- if KPRG was involved. I was not involved in that. One of our engineers would be. I do not know if Section 12 was a KPRG section or if that was one of the other consultants pulling other parts of this plan together.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

KPRG?
A. I believe I just said I don't know. It is possible, but it may not be. I --
Q. Right.
A. I don't know.
Q. Okay. Thank you.

And Section 13, I believe you
said you worked on that, or KPRG worked on that?
A. That is correct, yes.
Q. And Section 20?
A. I believe so. I was not involved in
that. So, again, $I$ believe we went over that.
There are two parts to that, that I -- I'm aware of, but I know that the -- when they checked the website there, I was not part of that, I don't know.
Q. Okay. And for the -- for just the text part of the report, which starts on page -the introduction starts on page 110637?
A. Yes.
Q. This is a narrative text that goes for, $I$ can't remember, 20 pages or something like that.

When KPRG compiled it, did KPRG

## review and edit the text?

A. Well, certainly text is reviewed and edited as it's being pulled together in a report, and a lot of this is basically a compendium of, you know, historical information, so --
Q. Right.
A. So, yes, it's -- things are reviewed and edited, but did I review and edit everything personally? No.
Q. Understood. Thank you.

Turning to Section 9 of the text, which -- bear with me -- begins on page 110647.
A. Okay.
Q. Can you describe what a hydrogeologic site characterization entails?
A. Sure. It's -- it's basically a compiling of all of the available -- that there was a lot of already available information, and basically compiled it to provide a synopsis and an understanding of -- a conceptual model type understanding of the geology and hydrogeologic conditions of the site, understand which way the groundwater is flowing, the gradient, and so on.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$



Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

There is a section of texts entitled, "Groundwater Monitoring System Design and Construction Plans;" is that right?
A. Yes.
Q. The first sentence says, "A
comprehensive monitoring well network in the vicinity of the east and west ash ponds was established in 2010, the CCA, as well as other work in the area (e.g. the ELUC wells installed as part of the Giess-Pfleger tannery site investigation/remediation located immediately west of the Waukegan Generation Station.)"

My only question about this is, does this section encompass monitoring wells that are included as part of CCA compliance and also other monitoring wells?
A. Correct. We used all the information possible to provide the overall understanding of the site, yes.
Q. And is it safe to say that, for example, groundwater flow and groundwater quality on the east side of the site is affected by groundwater flow and groundwater quality on the west side of the site?

[^1]Electronic Filing: Received, Clerk's Office 05/22/2023


[^2]correction.
And it says "subject unit."
What is the subject unit here?
A. The subject unit here would be the regulated unit that's actually both the ponds -the east pond and the west pond combined.
Q. Okay. And were these upgradient
wells equivalent to background wells?
A. That is correct. I identified three wells in which $I$ was going to try to use the groundwater quality from those wells to try and establish a background for the site, correct.
Q. And I believe yesterday you testified that for some purposes you want background wells that might be located where these are. For other purposes, you might want background wells that are located more immediately adjacent to the subject unit; is that right?
A. That is correct, yes.
Q. Okay. Thank you.

Turning to page 110658. That's
where Section 10 starts, right?
A. 110658, yes, at the bottom of that page.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
Q. And I believe yesterday when

Ms. Bugel was asking the questions, she asked about whether this closure plan is still current, and your response was that you weren't sure. You didn't know; is that correct?
A. That is correct. You know, I did not review exactly what was in here, and obviously, some time has passed, but I believe it's still actually -- as I reviewed it a little bit last night there -- that it was correct.
Q. Okay. Thank you.

Section 11, Post-Closure Plan,
did you have anything to do with that section?
A. No, I did not.
Q. Okay.
A. Well, KPRG did. Generally, just
like Section 10, KPRG was part of that, but $I$ did not develop that.
Q. Okay. And I believe I already asked about Section 12. Sections 13 through 19, I think you stated that KPRG was not involved in those sections?
A. Well, Section 13, I -- KPRG was, and I was involved actually in that as well. That

[^3]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
basically is just a summary of some of the information that's already out in previous reports as to what we know or some of what might be some exceedances under the proposed -- what our proposed groundwater protection standards are and so on.
Q. Okay.
A. And it's basically just a summary of that information that's already out there.
Q. Okay. And Section 14, Financial Assurance, did you have any involvement in that section?
A. No, I did not.
Q. Skipping ahead quite a bit, I would like to -- oh, wait, I'm sorry. Not quite a bit. Can we just go to where the tables start, which is, I think, on page 110663? That's the section header for Operating Permit Tables, I think?
A. Yes.
Q. The first table is actually called

Table 2, correct?
A. Correct.
Q. Can you explain what this shows?

[^4]Electronic Filing: Received, Clerk's Office 05/22/2023
A. That is a -- basically just a -- the parameter list for the CCR chemical constituents, and I believe this is an ash sample result that was collected on July 1st, 2021.
Q. Okay. Thank you. Do you recognize any coal ash indicators in this list?
A. Sure. This is the list of Appendix 3, Appendix 4 parameters from the federal rule, as well as the same parameters generally that are identified in the state rule as well.
Q. Okay. Thank you. The next table is called Table 9-1; is that right?
A. Correct.
Q. And this shows average monthly precipitation at Waukegan?
A. Yes.
Q. This is presumably the precipitation that would be blocked by a cap over the former slag and flash area, correct?
A. Correct. This is the average monthly precipitation. I believe it's from the Waukegan airport area, if $I$ remember correct.
Q. Okay. Thank you.

Now, the next table is Table

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

9-2. Can you explain what this shows?
A. $\quad 9-2$ is a summary of groundwater
elevations collected over time from 2015 through May of '21, 2021, for the monitoring wells specified in the groundwater network, monitoring network.
Q. And on page -- thank you.

On page 110667, can you look at the bottom section of that from Monitoring Well $11 ?$
A. Yes.
Q. Is -- am I reading this right? Does this show depth to groundwater ranging between five and seven feet?
A. That Monitoring Well 11, that is correct. And that is up on THE upgradient property boundary off of the tannery site, correct.
Q. Right. Thank you. Okay.
A. And that is also relative to ground elevation at that point.
Q. Absolutely, yep. Thanks for the clarification.

Can you now turn to Table 9-3,
which is on page 110669?
A. Yes.
Q. Can you explain what seepage velocity means?
A. Sure. This is a calculation that's required by the both the federal and the state rule, and seepage velocity is the estimated velocity of groundwater movement through the aquifer matrix.
Q. Okay. And do you remember -- were you here when Mr. Quarles was testifying?
A. Yes, I was.
Q. Do you remember there was a discussion about whether the groundwater velocity would change after de-watering of an impoundment?
A. I -- I don't remember exactly what he might have said, but relative to this, the ground -- the impoundment itself is isolated from the groundwater flow system. So I believe if you would de-water the east pond and the west pond, our groundwater flow direction would not be affected.
Q. I agree. I'm actually wondering more about the former slag and fly ash area. If

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

```
Midwest Generation were to put a cap over that area, could it change the groundwater velocity underneath it?
```

MS. NIJMAN: Objection to asking an opinion of this witness. It's an expert opinion. He can ask that of Weaver when they are testifying, but --

HEARING OFFICER HALLORAN: Mr. Russ?
MR. RUSS: I can rephrase.
HEARING OFFICER HALLORAN: That
would be great. Thanks. BY MR. RUSS:

```
Q. Have you had the opportunity to review groundwater estimates under different scenarios at this site?
```

A. Under different scenarios? We did do some under the construction permit application. We did do some modeling on contaminant transport primarily. We weren't specifically evaluating the associated flow impacts with that, but, I guess, in answer to your question, $I$ really think, especially in this forum, the answer to that is you would really have to establish a model to test it and see once you put the cap on, what is that
effect, and how might that be projected, rather than trying to speculate on that.
Q. And in your capacity as a principal at KPRG, do you use models to estimate groundwater flow?
A. Well, just standard, you know, analytical solutions in two dimensional flow when you do your flow maps. You know, that's basically on -- based on water levels and the -- the aerial distribution of those water levels, and you contour them out.

If we need to get a little more quantitative on something, we do -- we do additional analytical solutions, but we also will then look at potentially doing three-dimensional numerical models.

Now, numerical modeling is a very specialized field within our -- a very big niche within groundwater, within hydrogeology. I personally am not a groundwater modeler. I know enough to -- to help direct it and understand it and help interpret the results, but establishing the model, running the model, calibrating it? We do use an associate firm that specializes in this

Electronic Filing: Received, Clerk's Office 05/22/2023
called BAS Groundwater Consulting out of Evergreen, Colorado.
Q. Okay. Thank you.

And is one of the models that's
used for this called MODFLOW?
A. That is correct. That is a very
well-known USGS-based model for numerical modeling, yes.
Q. Okay. And would the information in this table be used as an input?
A. Certainly some of this information would be used as an input, as well as other information, yes.
Q. Thank you. The next page includes a very fine print table, and I don't necessarily think there is any need to look at the details, but can you explain what this table is on page 110670?
A. Sure. This is a summary table of groundwater analytical results for the Waukegan station, and this is CCR data. It includes our background -- eight rounds of the background sampling, as well as subsequent sampling. It is a -- basically a summary of data that's already

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

been out there in various other reports and that we have covered in various of these other documents. So it's obviously just a documentation in support of what we are discussing.
Q. Right. Can you turn to page 110673?
A. Okay.
Q. Can you explain what this table shows?
A. Sure. This is some supplemental groundwater information that's required under the state rule, but not under the federal rule. The state has required turbidity measurements with each round of sampling, and so since we didn't have any available data at this point for turbidity under the federal rule, these are our initial rounds of turbidity measurements starting in March of ' 21 and ending in September of ' 21 .
Q. Okay. Thank you. I was actually on a different page, but I'm glad you mentioned that. Since this information you said
was not available pursuant to the CCR federal rule, is this information available on the federal CCR rule website?
A. Not on the federal website. It is

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

on the state.
Q. Okay. And the next page, 110673, is called Table 9-6, and it says, summary of sample bottles preservation holding time, and so on. Do you see that?
A. Yes, I do.
Q. Can you explain what this table is?
A. This table is -- when you put
together a sampling plan which is required as part of our permit application, you also identify what the lab requirements are going to be in terms of container types and so on by -- by parameter. And so this table summarizes for each parameter that we are going to be analyzing them for, the analytical method the lab is going to be using, the container type for collection, the preservation method, the hold time that is allowed for by the lab, and the method detection limit that we are shooting for the lab to achieve, and then the last column includes the 8 -- Section 845.600(a) standards.
Q. Thank you. Can you explain what the method detection limit is?
A. Sure. That is the detection limit

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

that the -- the analytical method that the lab will be using. That is the statistically identified limit of detection that above that limit, they are within all of the required statistical accuracies, so to speak, and you start dropping below that limit, they are outside of the window, and it's no longer -- they will usually flag it with a J-value, which says it's an estimated value.
Q. All right. Thank you.

Is that -- is the method detection limit the same as a reporting limit?
A. I believe so. I believe so. I might misspeak on that.
Q. Okay. I'm also confused about that, too.

Now, Table 9-7 on page 110674?
A. Yes.
Q. These proposed groundwater protection standards in the far right column?
A. Yes.
Q. Is that what that is? Are these the same as the groundwater protection standards under the federal CCR rule?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

A. Not necessarily, no.
Q. Can you explain the difference?
A. Sure. It is a slight difference. I believe I am using the same wells; however, under the federal -- so when you calculate the proposed groundwater protection standards, you first calculate your background, and your interwell background, and that's where there could be a slight difference.

The actual groundwater protection standard is a comparison between the statistical background that is calculated versus what the Section 845.600 standard is, and whatever the higher value is would be the proposed groundwater protection standard. So doing the interwell background, that's where a little bit of the difference can come in.

And that's simply because under
the federal rule, you are looking at -- for development of groundwater protection standards, you are only looking at the Appendix 4 parameters, not the Appendix 3 parameters, and initially upfront, you're -- you can be on a semi-annual monitoring. So you have got a smaller number of

[^5]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
parameters being analyzed for a smaller frequency, and that affects the statistical calculations.

So I could then take the same well, but under the state standard, I now am analyzing -- for development of groundwater protection standards, I am analyzing a larger analytical dataset, and I'm doing it quarterly, so four times a year, and so statistically in order to -- there's -- within the calculations, and we use a program called Sonitus to assist with the calculations.

There is some additional air factor, if you want to call it, to facilitate the not having false positives, to protect against false positives, and so since you are increasing the number of constituents and the frequency of the comparison, that statistical background value can change a little bit. That is correct.
Q. Okay. And, now, for boron on this table, there is a groundwater protection standard of 5.965 milligrams per liter; is that right?
A. That is correct, yes.
Q. Is there a groundwater protection standard under the federal CCR rule for boron?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
A. Under the federal? Yes. I would
have to go back and take a look at what number we 30
used for that. It's probably pretty close.
Q. Is boron an Appendix 4 constituent
in this federal CCR rule?
A. Oh, I'm sorry. No. You are
correct. It's an Appendix 3 parameter, and you
don't necessarily have to generate the groundwater
protection standard for that.
Q. And is it -- my understanding is
that under the federal ccR rule, boron because
it's on Appendix $3, ~ i s ~ c o m p a r e d ~ t o ~ b a c k g r o u n d, ~ b u t ~$

[^6]BY THE WITNESS:
A. Can you restate that?

BY MR. RUSS:
Q. Sure.
A. Or say it again just so I can
follow?
Q. Let me -- I can ask a couple preliminary questions.

For the federal CCR rule, do you use the same background wells?
A. Yes, we do.
Q. And -- okay. That actually -- that probably answers my question better than anything. So I will just take another quick look at this.

Now, this table shows the
groundwater protection standard for turbidity, right?
A. Yes, it does.
Q. Is that something that's analyzed under the federal CCR rule?
A. No, it's not.
Q. Okay. Thank you.
A. And turbidity, in and of itself, is not a number that would trigger to -- any type of

[^7]action. It's to get an understanding of how much sediment may be within that water sample, which can affect some of the data interpretations as that sample is placed on an acidic preservative, and/or it can also help you to determine if you are seeing that your turbidity in a particular well is going up and up, you may want to take a look at having to redevelop that well because of sediment accumulation is getting too close to the pump or whatnot.

So that, I think, is more of an operational -- system operational in assistance of data evaluation, as opposed to an action trigger.
Q. Right. Okay. Thank you.

Now, the next page, 110675, is
where the figures begin; is that right?
A. That is correct, yes.
Q. And the first figure on my PDF, it's all black, but $I$ think in the print copy it's probably white, the background.

MS. GALE: It's black. BY MR. RUSS:
Q. Do you have the black on the printed copy, too?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
A. Yes.
Q. So this has the name of your company on the bottom, correct?
A. That is correct. I was not involved
in this. This is part of an engineering
evaluation. I was not involved in this. I really can't speak to it.
Q. Do you know what type of information

## this is displaying?

A. I can read the title of -- it's an east ash basin area capacity curve, and this has some notes here, but again, as to -- and then it also says the area capacity curve created by Geosyntec --
Q. Okay.
A. -- as part of completing. So, again, this is information pulled into the permit generated by another consultant.
Q. Okay. Thank you for that.

I'm going to turn to Figure 9-1,
which is on page 110678?
A. Yes.
Q. Is this something you are familiar
with?

[^8]A. Yes, I am.
Q. Did you develop this?
A. KPRG did, yes, and at my direction, yes.
Q. And earlier you were talking about MW-11, where the depth to groundwater was five to seven feet. Can you find that on this map?
A. MW-11 is the furthest well to the northwest along the western property boundary downgradient of the tannery. The old tannery site was to the west of here.
Q. Okay. Now, you said it's downgradient to the tannery site. Why is that significant?
A. You know, as part of -- an important part of evaluating what's eventually required under the rule, the evaluation is, is whether or not the regulated units are leaking. And that's where, you know, kind of my discussion yesterday went.

You know, we have to somehow
identify some wells, assuming there -- we can practically locate them or find them in an area that we feel should be generally unaffected by the

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

regulated units. We did that, but then it also provides us an understanding especially in heavily industrial areas, which this is within, that we've got an industrial property to our west, which is impacting groundwater quality on our site. Ground water is flowing from that site onto ours, but not only just affecting our water quality, but by some of the same parameters in which our regulated units may be.

And those parameters include arsenic, they include boron, and borax is a very common thing used in tannery. So you have got some parameters that are similar to what we are going to be looking at. So one of the -- when you have to do an evaluation as to whether or not what you're seeing in your downgradient wells might be associated with your impoundments, it's important to know what's coming onto our property from off-site in an industrial area.

And then, of course, within my alternate source demonstrations, Well 5, which is immediately upgradient of the ash ponds here, and we have identified it's not necessarily being used as a CCR well, well, we will look at the water

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

quality from that well to help us understand what's going on downgradient, simply because that's the closest that we can get to the unit prior to water passing beneath the unit.
Q. Great. Okay. Great. Thank you. Now, turning to the next page, I think on my screen it's rotated, but it's Figure 9-2?
A. Yes.
Q. On page 110679 maybe? The Bates pages are cut across with a horizontal line, but I think that's right. Do you recognize this figure?
A. Yes, I do.
Q. Can you explain what this shows?
A. It's -- a part of the requirements of the permit is to provide a -- a cross section of the vicinity of the ash ponds and the monitoring well network. And so we have a series of cross sections that go from north to south and east to west, east -- north to south and along both sides of the regulated units and east to west beneath or through the regulated unit area.
Q. Thank you. And there is an icon -there is a box labeled "A" in the legend that's --

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

describes fill that may include ash, black cinder, slag, and occasional coal and wood. Do you see that?
A. Yes.
Q. And in the figure, that pattern, is depicted beneath and west and east of the ash ponds; is that right?
A. Yes, it is.
Q. And with -- yeah, go ahead.
A. I'm sorry. With the understanding that we have got fill across that whole area, but again, within the description, it's -- the fill is brown and black, fine to medium sand, with some gravel and silt seams, and it may include oc- -this black cinder, slag, occasional coal ash.

So I -- I would have to go back
and look at the individual boring logs for these wells to see which wells -- certainly I know Well 5 had some ash and cinders in it. I -- I would have to look at Well 3. I believe that did as well, so -- and Well 6, I -- I don't think it did, but that might just be fill without ash and cinder.

So just with that caveat, that

Electronic Filing: Received, Clerk's Office 05/22/2023
specifically on this figure you would have to go back to an individual boring log to verify whether or not it had the cinders and slag and so on.
Q. Okay. Now, the figure -- the figure on the lower, right inset, that shows the cross sections, correct, where they are located?
A. That is correct. So this is Cross Section A - A', and that's highlighted in red in that -- on that figure.
Q. Yeah. And it also shows the monitoring wells for reference?
A. That is correct, yes.
Q. And those are the same monitoring wells that are discussed in the text of the report?
A. Correct.
Q. Now, where is the water level on this figure relative to the fill material?
A. The water level depicted on this
figure is the water level measured in the well. This is the actual water table. So any transient water that may be in the fill above there is certainly not -- not -- is not representative of the water table. It's not fully saturated. It's
basically a wetting front if you have precipitation moving through -- through the fill, through the unsaturated fill.

And so, I mean, those water levels depending on the precipitation and so on, you know, could be different. This actually -this is the water table. So below that line is where we are interpreting everything is saturated. That is the top of the water table.
Q. Okay. And can you just explain where that water table is relative to the fill that -- the fill that's shown in Icon $A$ in legend?
A. It's -- basically, it looks in some parts coincident with the base and in other parts slightly below the base of that fill.
Q. Okay. And when was the -- when were these water levels taken?
A. I would have to go back and take a look at which water levels were being used for this map. Oh, it says, water level date May '21.
Q. Thank you. And can you now scroll down -- scroll. I'm sorry -- flip a couple of pages to Bates page 110683?

[^9]A. Okay.
Q. Does this show water levels at
various times in various wells?
A. Right. This is a hydrograph of the monitoring wells in the -- in the network, in the proposed network, and water levels from November '15 through May '21.
Q. Are you able to identify the water levels on May 2021?
A. I -- you know, roughly, yes. I haven't --
Q. Have they ever been higher than they were on that date in this chart?
A. Yes. They have been.
Q. How much higher?
A. Depending on the well, at Well -specific well, I don't know -- 9, it's been up at 584, and at Well 16, it's been as high as roughly 584. At Well 1 on the downgradient side, it's been as high as, say, 586.
Q. Okay. And so the water levels

## fluctuate?

A. Right. And some wells certainly more than others.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
Q. And if the -- you were saying before that the water level is coincident with the ash in some places in the diagram we were looking at previously?
A. Yes.
Q. And so that means, I guess, if the water level of MW -- if the water level in May 2021 was lower than it had been at other times historically, the water level will at times rise up into the area marked as fill?
A. The water level will fluctuate, correct.
Q. Okay. Thank you. And turning back to this water level chart, Figure -- I'm sorry. I'm having trouble scrolling here. The water level chart we were looking at before is Figure 9-6.

MS. BUGEL: Bates 110683.
BY MR. RUSS:
Q. Yeah, Bates 110683. For MW-3, what is the maximum water elevation for that well?
A. A little hard to tell on this. It somewhat ties up with the thing, but it looks like perhaps around 584, just slightly over.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Q. Okay. Thank you.

Now, can you turn to the next
figure, figure 9-7, on page 110684?
A. Yes.
Q. Can you explain what this shows?
A. This is a groundwater flow map from water levels collected in August of 2020.
Q. Is this something that changes from date to date? If you were to draw this same image on a different date, would you see a slightly different set of contours?
A. There will be some changes, certainly, but the general flow that we've seen over the time of our monitoring beneath -relative to the ponds beneath the ponds itself is generally in an east/southeasterly direction, clearly consistent.
Q. Okay. Thank you.

And, now, the next image is another contour map similar to the one before, but slightly different as you were just describing?
A. Correct.
Q. And if you look at monitoring wells MW-08, I recognize that it's hard to see because

[^10]Electronic Filing: Received, Clerk's Office 05/22/2023
of the pink font, but if you look at MW-08, and then you look at MW-07, do you see where those wells are located?
A. Yes.
Q. What direction is groundwater
flowing from MW-08 towards MW-07?
A. From MW-08 to MW-07, in a southeasterly direction.
Q. And then the next one is another contour map from a different date, again, similar but slightly different, correct?
A. Correct.

MS. GALE: I'm sorry. Which one are we on? We keep saying "next one."

MR. RUSS: I'm looking at now Figure 9-9 on Bates page 110686.

MS. GALE: And not to belabor the point, but the next figure, $9-10,110687$, this is another contour map, again, generally similar, but slightly different; is that correct?
A. Correct.
Q. And can you now turn to page 110689?

Can you explain what this one shows?
A. Is this our Figure 9-2? I can't see

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

the Bates numbers, yeah. This is the 2500 -foot radius around the regulated units that was used as part of the potable well evaluation required under the permit --
Q. Okay.
A. -- in the application.
Q. So the requirement, as you
understood it, was to look within this radius to see if there are any potable wells?
A. Correct.
Q. And did you identify any?
A. There were two wells identified.

One there where the former foundry was, and that's now an electric substation, and there was another one identified here as well. These are upgradient, obviously, of our units, groundwater flow being from west to east. And I would have to go back to the text for any further discussion as to what we dug up on the information on these wells.
Q. Okay. Is this information discussed in the text of Section 9?
A. If it's not in the text of Section 9, it's somewhere else within the permit, and I
believe so, yes.
Q. Okay. Now, I'm going to --
A. I believe it is actually Section 9, yes.
Q. Okay. Great. Thank you.

I'm going to skip way ahead, if
I can, to Attachment 9, and I -- because I'm scrolling on a computer, it's going to take me a little longer than it takes you to get there. It's on Bates page 110855 is where it starts.
A. Okay.
Q. And now, the first attachment, 9-1, can you explain what this shows?
A. Sure. As part of getting a larger -- part of the requirement under the permit application relative to the geology, hydrogeology, is to also discuss the geology of the -- and hydrogeology of the larger region, which then allows you to focus in and understand the local as well.

So this is a survey of well logs that we obtained from the vicinity of the -- of the station, which allowed us to get a better understanding of the larger scale regional

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

stratigraphy.
Q. Okay. And the Well Count column there -- well, can you explain what the ID column is and what the Well Count column is?
A. Okay. So the ID column is -- it goes by identification. And, you know, we are identifying specific units in here, and so well log -- the well -- Well Count, one. So the first well we looked at had eight -- eight entries for the stratigraphy in there, eight layers that they identified, and so the well count is the number of wells, and then those are the various layers that are identified in Well 2.

$$
\text { So in Well } 2 \text { we had one, two, }
$$ three, four, five, six, seven eight -- nine layers called out in the boring log and those -- the descriptions of those nine layers are provided in the right-hand column, the description, and the depth range of those layers is provided in between.

Q. And is it safe to say that the different layers are separated not with a fixed interval, but based on differences in the material that you encountered?

[^11]A. Right. These are from the drill -from the drill logs of -- you know, obviously somebody else installed these wells. So this is just direct information from those.
Q. And this shows in Well 2 in the top layer, black cinders fill, correct?
A. That is correct, but I -- you know, without taking a look at where Well 2 is located relative to -- to our site -- I mean, certainly black cinders aren't exclusive to power plants. You can have other types of industry and foundries. You will go into a foundry and drill, you will find black cinders.
Q. Understood. Thank you. And then there is another -- the third layer down, it goes from four and a half to seven feet. It says, very loose brown cinders fill; is that right?
A. Yeah, but with the same caveat. I have no -- without taking a look at the map, I do not have a reference point to where this well is located. It's probably and possibly located nowhere near our property.
So, again, talking about our

[^12]sites and the implications on cinders as they relate to our site, it's very -- I can tell you what it says, but it has no meaning without understanding where this well is located.
Q. Okay. And this is not MW-2 as depicted in the --
A. No, no. This is Well 2 from the survey from this larger survey that we did. Clearly this goes to 60 -- 69 wells that we looked at from around the area.
Q. Okay.
A. Now, our wells, what you see here in the well ID column?
Q. Yeah.
A. That's the -- the state ID number for that well. So that's tied to the well location.
Q. Okay.
A. But if you go further down in the table and look at -- starting at well number -- at number 63, line ID number 282, that starts MW-01.
Q. Okay.
A. That's one of our wells.
Q. Okay. Thank you.
\[

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
A. And so our wells are from that point down.
Q. Okay. Thank you for the clarification. That makes it much clearer.

And you said that the well ID
number is something that you could use to identify the location?
A. That is correct. It's a state well number, and it provides it on a map, and it shows where that point is.
Q. Okay. Great. Thank you.

And you said there were 60
something of these wells in this table?
A. You know, including our wells, we have 69 wells in which we drew stratigraphic information from boring logs, correct.
Q. Okay. And it says, "Local Well Stratigraphy Information" for Waukegan is the title of the attachment, correct?
A. Right. Local being that area, not local to, you know, on the plant or immediately. It's -- it was a fairly large area we were trying to get an understanding of the overall, since it's a requirement of the permit.

[^13]|  | Page 50 |
| :---: | :---: |
| Q. Okay. Would this allow you to |  |
| compare soil characteristics onsite and off-site? |  |
| A. In a general sense, yes. |  |
| Q. Okay. Thank you. Attachment 9-2 |  |
| starts on page 110861, correct? |  |
| A. Correct. |  |
| Q. And this includes boring logs? |  |
| A. Yeah. These are boring logs that |  |
| have been included in probably a number of -- of |  |
| exhibits that have gone into the record over the |  |
| years, and I believe these are the same logs that |  |
| we went through in fair detail during the previous |  |
| hearing. So it's information that has certainly |  |
| been out there in at least one, probably several |  |
| exhibits. |  |
| Q. Do you know sitting here today |  |
| whether all of these boring logs have been |  |
| introduced already? |  |
| A. I believe so, yes. |  |
| Q. Okay. I'm just going to scan |  |
| through. I'm seeing MW-1, MW-2, MW-3, and if you |  |
| just flip through with me, I will get to the end |  |
| and see where we have gotten. It looks like it |  |
| goes from MW-5, MW-6, which has a different -- can |  |

[^14]you explain the difference between MW-5, and MW-6? They look different visually. Is that just because they were taken at different times and created with different software?
A. MW -- Wells MW-1 through MW-5 were installed by Patrick Engineering.
Q. Uh-huh.
A. And MW-6, 7, 8, 9 were -- and 10
were installed -- 8 and 9 were installed -monitoring wells installed by KPRG. So we have a slightly different boring log program and well construction summary program. And then Wells 11, 12, 14,15 were actually installed as part of the ELUC by other consultants.

However, we were not able to
find boring logs for those wells, and even though we believe those wells -- since we believe those wells are pertinent, and we used certainly Wells 11 and 14 as part of our groundwater monitoring network, we went out and did soil borings immediately adjacent to those existing wells so that we can develop that data gap and develop the stratigraphy for those wells to provide that as in -- in the operating permit. And then Well 16

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
was previously installed by KPRG.
Q. Okay. And looking at MW -- the boring log for MW-11, which is on page 110877 -are you on there? Okay.
A. Yes.
Q. What's the date of this boring log?
A. The date of this boring log is

9/2/21. So the logs for the ELUC wells, that is correct, those were not in previous discussions. Those were logs that we generated to be able to qualify using those wells in our -- in our submittal.
Q. Thank you. So this -- we wouldn't have had this boring log at the hearing in 2017?
A. That is correct, yes.
Q. And similarly, on the preceding page, 110876, what's the date of that boring log?
A. Same. September of -- 2nd, '21.
Q. Okay. Now, going the other direction. I'm sorry to do this. 110878, Bates page?
A. The 78, the same for MW-12.
Q. Okay.
A. September of '21.

[^15]Electronic Filing: Received, Clerk's Office 05/22/2023 May 18, 2023
Q. And MW-14, same date?
A. Same date, correct.
Q. And MW-15?
A. Same date, correct.
Q. And as you've said before, MW-16 is an earlier date. That's one that you did earlier?
A. Correct. And that one should be in the record, yes.
Q. Okay. Thank you.

Now, can you turn to page
110884 ?
A. Yes.
Q. I'm actually not necessarily going to ask you about the content of this page. I'm just curious about the fact that it says appendix.
A. This is a copy of Appendix A from the Phase II environmental site assessment that was performed for Commonwealth Edison dated December 7th, 1998. That is, I believe, the ENSR report, and these are ENSR boring logs.
Q. Okay. This is still part of Attachment 9- -- I'm sorry. Bear with me. PDF problems again. I'm trying to flip through the end of the ENSR boring logs.

[^16]|  | Page 54 |
| :---: | :---: |
| This was all part of Attachment |  |
| 9-2; is that right? |  |
| A. That is correct, yes. |  |
| Q. And then following Attachment 9-2, |  |
| you get to Bates page 110907; is that right? |  |
| A. Yes. |  |
| Q. And this is historical CCA |  |
| groundwater data? |  |
| A. That is correct. |  |
| Q. And this was cited in the text of |  |
| the report, presumably? |  |
| A. Yes, as part of just background |  |
| information, so -- and I believe I had said |  |
| yesterday during my testimony that this |  |
| historic -- the CCA data, even though it's |  |
| collected slightly different from CCR data, it's |  |
| filtered rather than not filtered, so dissolved |  |
| rather than total. During previous hearings it |  |
| was determined that there is really not much |  |
| difference between the two, despite the collection |  |
| difference. |  |
| So there is some difference, but |  |
| not necessarily much difference. So having had |  |
| much more -- a much longer sampling timeframe -- I |  |

[^17]mean, the CCA sampling started back in -- you know, it includes all the way back to 2011. You know, we included this as -- just as thoroughness of all of the historical information for water quality. And, again, this -- there is nothing on these data tables that isn't in several other exhibits that we were talking about already.
Q. Right. And the difference is that the CCA -- I think you testified yesterday that CCA data are field filtered so that you have a dissolved total?
A. Right. A dissolved metal, and, you know, if you really compare the two, which was some of the discussions that were done in the earlier hearings, for our site, there isn't much difference between the total and dissolved.
Q. But I believe you testified yesterday that occasionally you'll see a difference?
A. Yeah, occasionally, sure. Yeah.
Q. Can you explain what Attachment 9-4 is?
A. Sure. This is a certification that's required under the rule, that's required in
the permit as a stamp-off by a certified and licensed Illinois professional engineer that the information provided in the previous section and in support of the development of the groundwater monitoring network is that the network being proposed is sufficient based on the following reasons, and this is a requirement by the -- by the rule.
Q. Do you know why it's required?

MS. GALE: Objection, calls for a legal opinion.

HEARING OFFICER HALLORAN:
Sustained. BY MR. RUSS:
Q. Is this -- in your field, is this something you are frequently asked to prepare?
A. To stamp off on a monitoring
network, quite honestly, the first time $I$ encountered it was under the CCR rules.
Q. Okay. Interesting.

But what was -- what would be
the implications, I guess, of there being
misrepresentations in this document and having your stamp on it?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023 May 18, 2023


[^18]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

Let's go off the record for a second.
(Whereupon, a discussion was had off the record.)

HEARING OFFICER HALLORAN: Back on
the record. Thank you.
BY MR. RUSS:
Q. Can you explain what this attachment
is?
A. Sure. It's entitled, "Illinois State CCR Rule Compliance Statistical Approach For Groundwater Data Evaluation" dated August 23, 2021.
Q. Is this an attachment that was discussed in the text of the report?
A. It was referred to, yes.
Q. Okay. This is something that KPRG prepared because it's required by the state CCR rule?
A. That is correct.
Q. Is this the same statistical package that you prepared for the federal CCR rule?
A. Basically the same, yes.
Q. When you say basically the same, what are the differences?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

```
A. I would have to go back, and, you know, again, I don't want to misspeak in this forum. It should be primarily the same. I believe in -- it should be the same. The federal rule where a detection -- you know, we are doing semi-annual monitoring. Here we are doing quarterly monitoring. So \(I\) was just checking to see if \(I\) had any specific items here, you know, referencing quarterly versus semi-annual, but it should basically be the same, yes.
Q. Okay. Now, turning down to page 110929. Do you see there is a section on that page that's called "Trend Testing"?
```

A. Yes.
Q. It says, "As discussed above, it is intended to expand the initial background dataset collected under the federal CCR rule, which consisted of eight rounds of quarterly sampling with any additional data collected for a specific well since that time."
A. Uh-huh.
Q. Does that mean that this would be a larger dataset than you used?
A. That's correct. So whenever I do

[^19]statistics or background statistics, ideally you want to use as much representative data as possible. The more data you have, the more reliable or robust your estimate is going to be. And so now we are several years past already the federal CCR rule.

## Q. Sorry. You're okay?

A. You know, now we are several years already past the CCR rule. We have got a lot of additional data for the exact same parameters being collected, the same -- same method, and so we have got this larger dataset available.

> So to see if I can bring those two datasets together since the last evaluation we did, you know, we do some trend testing in this data. If $I$ combine these two datasets, is there a trend now in that well? If there is, I really shouldn't be combining it. Then we will take a look at spacial varia- -- the variability. Not spacial -- but the variability between these two datasets. If there is a statistically significant difference in the variability, you shouldn't be pooling them.

> But if you do these various
tests, and you see these two datasets from before, you know, everything we generated before, as well as what we are having now, they correspond, we can pool this data, and it gives us a much better dataset, and you do this by parameter.
Q. Okay. And if the trend -- if you did see a significant trend in one of these wells, how would that affect your use of the data?
A. And that's somewhat discussed. So this is kind of the approach, and then we have got a discussion now, this is how we implemented it, and that's how we say, these values we were able to pool for background, and these we weren't.

So if we have two datasets that we want to pool, but they are statistically different from the -- too variable from each other from the specific constituent, we are not going to pool them.
Q. Right. Okay.
A. So that's --
Q. And then not to -- I don't want to read a fragment of a sentence, but $I$ will just say it. On the fourth line of this paragraph, you refer to subsequent interwell and, if necessary,
intrawell prediction limits. Can you explain the difference between those?
A. You establish your background statistics, and your interwell will be the value that you would -- you would compare downgradient wells to the background generated based on upgradient water quality. If you want to over time, say, make sure that your upgradient well is still providing good data, you might want to take a look at the intrawell.

How is this well behaving over time in and of itself statistically? And you can also use an intrawell comparison -- you know, you are having some issues. You are trying to evaluate something that you might be seeing downgradient. You might want to also look at that well individually by itself, how is it behaving, and that's -- you would look at the intrawell, which is strictly the statistical behavior of the water quality in that well from your initial eight rounds, versus maybe you're two years, three years down the road, how is this doing that?

So that intrawell comparison is
really a tool to help you understand some of the
larger pictures.
Q. Okay. Thank you.

And when $I$ was reading through
this, I saw mainly interwell comparisons. Do you recall using any intrawell for this analysis?
A. No, no. These are interwell.
Q. Okay. Thank you.

Now, I think I am going to skip
to section -- Attachment 10, if I can. Now, I
believe Ms. Bugel was asking you about the text in Section 10 that corresponds to this attachment yesterday. Do you remember that?
A. Attachment 10, the written closure plan, yes.

HEARING OFFICER HALLORAN: What page
is that?
MR. RUSS: Oh, I'm sorry. It begins
on Bates page 111162.
HEARING OFFICER HALLORAN: Thank
you.
BY MR. RUSS:
Q. Did you -- have you reviewed this closure plan?
A. The closure plan is written by

[^20]Sargent \& Lundy. So it's one of the other consultants that is doing work for Midwest Generation, and we brought it into this document. I perused it, but, again, $I$ did not write it, and it's written by another consultant.
Q. Sure. Understood.

But this is the closure plan that's discussed in the text of Section 10 of the report?
A. I would imagine so, yes.
Q. I just have to clarify for the record. Thank you.

Okay. And then Attachment 11 begins on page -- oh, Attachment 10-2, you've got to get through that, and then get to Attachment 11 on Bates page 111185. Do you see that?
A. Yes.
Q. What -- can you describe what this attachment includes?
A. This is the post-closure plan, the post-closure care plan for the site.
Q. And I believe you testified that you did not participate in this section or this attachment?

[^21]Electronic Filing: Received, Clerk's Office 05/22/2023
A. That is correct. This section was generated by Sargent \& Lundy.
Q. And then flipping down to Section
12. Attachment -- I'm sorry. Attachment 12.

It's on Bates page 111192. Are you familiar with this attachment?
A. I don't know if it was a KPRG
engineer, or a Sargent \& Lundy or perhaps it -- I do not know who generated this -- this attachment.
Q. Okay. If you turn to page 111193?
A. Yes.
Q. Do you see the row that says, "Upper Liner Component"?
A. On the pond profile?
Q. Yes, under the pond profile.
A. Yes.
Q. And if you go over towards the third column from the right there is a column that says "layer thickness (inch)"?
A. Layer thickness (inch).
Q. And this shows that the layer was
0.06 inches thick, right?
A. That's what is in the table. Again, I did not generate this table. I -- you know, I'm
not quite sure what -- yes. That's what it says in the table.
Q. Okay. All right. I mean, have you worked with HDPE liners before?
A. Have I worked with them?
Q. As part of your -- you know, in your professional experience, do you use HDPE liners?
A. Well, I know that the engineering groups specify HDPE liners for liner components, absolutely. Do I know the specifications of an HDPE liner? I do not have a PE behind my name.
Q. Okay. Thank you. That's all I have on that attachment.

And I think I would now move to admit this exhibit, 1131 -- 1331. Sorry. That's a mistake we made yesterday.

HEARING OFFICER HALLORAN: Ms. Gale?
MS. GALE: I would request a clarification. I thought the understanding was it was an excerpt that we were moving to admit.

MR. RUSS: Yeah, we can do it that way.

MS. GALE: Okay.
MR. RUSS: So I would move to admit

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Bates pages --
HEARING OFFICER HALLORAN: Well, you know, I don't know how many Bates pages we have. My -- to make this cleaner and quicker, and I think it will just be just as good, I would direct the Board to take note of Mr. Gnat's testimony and what he has knowledge of and what he can speak to and disregard the remainder of this exhibit.

MR. RUSS: Okay.
MS. GALE: Mr. Hearing Officer, actually, we just have one more request of caution for the Board. As Mr. Gnat testified, there is certain pieces of information here that were admitted as part of the earlier hearing, including the data and some of -- many of the boring logs. I think you identified five or six that were new. And we would just request that you also direct the Board to similarly, as you did before, to not consider the --

HEARING OFFICER HALLORAN:
Duplicative.
MS. GALE: -- duplication. Right.
HEARING OFFICER HALLORAN: Yes.
That's on the record. And I would ask the Board
to disregard any kind of duplicative or cumulative information in Exhibit 1331.

So 1331 is admitted. Thank you.
(Whereupon, Complainants'
Exhibit No. 1331 was admitted into evidence.)

HEARING OFFICER HALLORAN: I was
planning to take a break about five until 11:00. Is that too late for anybody, or do you want to sneak out now for five?

MR. RUSS: I could probably -- I
have a proposal that might streamline it, and give us an opportunity to take a break.

HEARING OFFICER HALLORAN: We're off
the record.
(Whereupon, a discussion was had off the record.)

HEARING OFFICER HALLORAN: Let's go
back on the record. Again, Exhibit 1331 is
admitted subject to my directives to the Board and requests, I guess I should say.

And Mr. Russ is going to address
Exhibit 1332. And you are on.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
(Whereupon, Complainants'
Exhibit No. 1332 was marked for
identification.)

```

BY MR. RUSS:
Q. Thank you. Mr. Gnat, do you have

Exhibit 1332 in front of you?
A. Yes, I do.
Q. Can you turn to the table of
contents, which begin on page -- Bates page 125617?
A. Okay.
Q. Did KPRG have any involvement in writing Section 1 of this report?
A. Yes. We would have involvement in some of these sections, and some of these were written by other consultants and brought -brought into the document.
Q. Okay. Thank you. And I really apologize for the tedious nature of the questions. I'm going to have to ask about every section. Did KPRG have any involvement in writing Section 2 of this report?
A. Possibly, yes.
Q. Section 3?
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]


\footnotetext{
L.A. Court Reporters, L.L.C.
}
and identify the things that they looked at, again, \(I\) would object to relevancy.

What we're interested in is, is
the content. So we can just skip the table of contents and go to the various areas that they are interested in.

HEARING OFFICER HALLORAN: Mr. Russ?
MR. RUSS: Can I respond.
HEARING OFFICER HALLORAN: Thank
you.
MR. RUSS: The problem I'm having is that if we are splitting the document up, and the Board is directed to look at parts of it and not other parts of it, I feel like I have an obligation to establish how the parts are connected so that the Board is aware of what they are looking at when the text cites an attachment and the attachment has a table and it's discussed in the table.

HEARING OFFICER HALLORAN: It might be better that way since we're here now.

So you may proceed, Mr. Russ.
BY MR. RUSS:

\section*{Q. Thank you.}
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
```

involvement in Section 11?

```
A. Again, possibly. I would have to take a look back there and see if -- who developed the closure -- the post-closure plan.
Q. And Section 12?
A. Don't know.
Q. Section 13, I believe for the other site you were involved?
A. Yes, that's correct.
Q. And I believe Sections 14 through 19 you were not involved in, based on your response for the prior site?
A. That is correct.
Q. But Section 20 KPRG may have been involved in?
A. Yes. And when you say -- you know, when you are referring to "you," it may not be me personally.
Q. Right. Thank you for that clarification.

Now, the tables here all
begin -- there is Table 2, but other than that, everything begins table 9-something, correct?

\footnotetext{
L.A. Court Reporters, L.L.C.
}
A. Correct.
Q. And that means they are associated
with Section \(9 ?\)
A. Yes.
Q. Which KPRG wrote?
A. Yes.
Q. And similarly, the figures, there
are two that start 1-something, and then the remainder are 9-something, correct?
A. Correct.
Q. And that means they are associated with Section 9?
A. Yes.
Q. And KPRG would have been involved in preparing them?
A. Yes.
Q. Thank you.

Now, I'm going to turn to
Section 9 of the text, which begins on page -Bates page 9- -- 9.0 begins on Bates page \(125628 ?\)
A. Yes.
Q. In your prior testimony you
described the hydrogeologic site characterization for the Waukegan site. This is a similar

\author{
L.A. Court Reporters, L.L.C.
}
characterization for the Will County site, correct?
A. That is correct, yes.
Q. And it describes the geology and hydrogeology of the site is what it says?
A. Yes, it does.
Q. So that means the soil and groundwater conditions and things like that?
A. Correct.
Q. Can you describe on page -- Bates page 125627 what Section 6 is about?
A. Well, the title of Section 6 is,
"Incised/Slope Protection Documentation," and I believe this is one of the sections that I had indicated that I do not believe that KPRG wrote, and I believe this might have been another consultant, and we brought in the information. But I was not involved. If Josh, who was the senior engineer assigned to write some of the engineering sections, but also pool everything, I don't know. I can't speak to that section.
Q. Okay. That's fair. Thank you.

You said you were involved in the fugitive dust control plan that begins on the
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
same page?
A. KPRG was, yes.
Q. Right. And on the prior section we were just talking about, you mentioned someone named Josh. Is he a KPRG employee?
A. Joshua Davenport is the -- is a senior engineer at the Wisconsin office, correct.
Q. Turning to -- does he report to you?

Does Josh report to you?
A. Yes, he does.
Q. Okay. Turning to page 17, which is Bates page 125632. There is a description of the "Groundwater Monitoring System Design and

Construction Plans"?
A. Yes.
Q. This section describes wells that include MW-1 through MW-9, and it cites Figure 9-1, correct?
A. Yes.
Q. And then it goes on a few lines down to discuss other wells, including MW-13, MW-14, MW-15 and so on; is that correct?
A. Correct.
Q. And it says Wells MW-13 through

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

MW-15 were installed by KPRG in April of 2021; is that right?
A. That is correct, yes.
Q. So we would not have been discussing these wells in the 2017 hearing, correct?
A. Those three wells, no. They were
just recently installed to support the permit requirements -- state permit requirements for Ponds 1 North and 1 South, which were not included under the federal CCR rule.
Q. Okay. And how did those wells relate to those ponds?
A. Those are downgradient wells, and in order to meet the minimum well number standard issued in the rule, we needed to augment the wells that were there.
Q. Okay. Thank you.

And then further down on this
page, page 18, which is Bates page 125633 , it goes into the "Groundwater Sampling and Analysis Program." Similar to the program you discussed for the Waukegan site, this is the one for the Will County site; is that right?
A. That is correct.
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
```

            Q. And this includes quarterly
    groundwater monitoring, as opposed to the federal
program, which is semi-annual; is that right?
A. Correct, quarterly groundwater
monitoring specified in the state rule.
Q. And this sampling program includes turbidity like the one in Waukegan did?
A. Yes, it does.
Q. Turning to page 125637. Section 9.3.6 describes the analytical methods, and it cites Table 9-6; is that right?
A. Yes.
Q. And this, similar to what we were talking about with Waukegan, gets into the ability of various analytical methods to detect individual constituents and what their detection limits would be and so on?
A. Correct.
HEARING OFFICER HALLORAN: Keep your voice up, please.
MR. RUSS: Sorry.
HEARING OFFICER HALLORAN: Thank
you, Mr. Russ.
BY MR. RUSS:

```

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
Q. Thank you. Now, turning to page 125638, at the top there is a series of bullets with well numbers. And I think you were just describing what we are seeing here, which is that these ponds aren't covered by the federal CCR rule, or at least Midwest Generation is not applying the federal CCR rule to these ponds; is that correct?
A. My understanding is that they do not qualify for regulation under the federal CCR rule. That is correct.
Q. Okay. And so this data is specific to the state \(C C R\) rule?
A. Yes.
Q. Okay. Now, turning to Section 10 of this report, on page 24, it says, "Pond 1N and Pond 1S will be closed with CCR remaining in place and topped with a final cover system," correct?
A. That is what it states there, yes.
Q. Do you know whether that closure plan is still current or whether it has changed?
A. My understanding, it is still current.
Q. Okay. Thank you.
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

\begin{abstract}
And the post-closure plan discussed in Section 11, are you familiar with that post-closure plan?
A. Somewhat. You know, again, I didn't write it. I am familiar with the post-closure care plan, yes.
Q. Okay. Section 12, Liner
\end{abstract}

Certification, discusses Poz-O-Pac. Do you see that?
A. Yes, I do.
Q. Are you familiar with that material?
A. I am familiar with what Poz-O-Pac is, yes.
Q. Can you describe what it is?
A. You know, again, a non-engineering description, it is a composite that hardens like a cement. It was historically used and accepted as liner type material. It's -- it is a combination of various components that are -- that they chemically react and form this cement-like substance. It was not just used historically for liners. It was also used as -- for road construction, various engineering purposes, not just for liners, but quite honestly, across the
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
country at that time.
Q. Right. Thank you.

And this paragraph describes the
liner as having 12 inches of Poz-O-Pac followed by 12 inches of fill and then 12 more inches of Poz-O-Pac; is that right?
A. That is correct. That's -- that's what it states here, yes.
Q. Has KPRG had any opportunity to investigate this condition of that liner?
A. I believe that historically there was a core taken of one of the Poz-O-Pac liners at Will County, and that was certainly discussed in the previous hearing.
Q. Do you recall whether that core showed what is described here, with 12 inches of Poz-O-Pac, 12 inches of fill, 12 inches of Poz-O-Pac?
A. I don't remember offhand, no.
Q. Okay. And then I guess it's just -sorry to belabor this, but down at the bottom there is a new paragraph that starts with the upper liner component for Pond 1S, and it describes a similar liner as the one for Pond 1N;

\footnotetext{
L.A. Court Reporters, L.L.C.
}
is that right?
A. That is correct, yes.
Q. Okay. Thank you. And then turning to Section 13 on page 25, which is Bates page 125640. There is a history of known exceedances. I believe you stated that KPRG prepared that section?
A. That is correct. It's kind of a summary of what has been already provided out in a public arena with some of our previous monitoring submittals at both the state and federal level, I believe.
Q. Okay. Now, turning to Bates page 12566 -- I'm sorry. Let me start over.
125644. This is the first table in the section of Operating Permit Tables, correct?
A. Correct.
Q. And like for Waukegan, this shows the results of a sample of the material in a pond; in this case, Pond 2S?
A. Yes, it does.
Q. And it says that -- in the notes, these are in units of milligrams per kilogram; is

\footnotetext{
L.A. Court Reporters, L.L.C.
}
that right?
A. Correct.
Q. So that's a solid concentration?
A. Yes.
Q. And do you know whether there was a similar sample taken from pond -- the other pond? Actually, is this one of the two ponds that are -this document on page -- Bates page 125639 talks about Ponds 1N and 1S, correct?
A. That is correct, yes.
Q. And this is -- this sample is from a different pond, right?
A. This is from Pond 2 South. That is the information that was available at the time of preparing this -- this document. That's my understanding, yes.
Q. So is this presented here to be representative of the material in Ponds \(1 N\) and 15 ?
A. Yes. Yes, it was. And I can add a caveat. I believe that in preparation of the construction permit, which is a follow-on document application, that actually samples from 1S -- 1 North and 1 South were then also collected to augment this data with more -- potentially more

\footnotetext{
L.A. Court Reporters, L.L.C.
}
representative of the units themselves.
Q. Right. And I believe you testified yesterday that those may not have been finalized yet, the construction permits you just mentioned?
A. I don't remember if they were already submitted. I know that the public hearings are being scheduled, so I would imagine those have been posted.
Q. Okay. The next page, Table 9-1 on Bates page 125645?
A. Yes.
Q. This includes precipitation data that's intended to be representative of the Will County station area; is that correct?
A. That is correct, yes.
Q. And this is relevant to the site, because this precipitation will presumably fall on all the areas that are discussed in the site -- in the report?
A. Right. And, you know, again, to -part of the requirement is to provide a general understanding of the climate in the area as well, and that's part of that, yes.
Q. Okay. And turning to the next page,

Electronic Filing: Received, Clerk's Office 05/22/2023

Bates page 125646. Again, no need to look at the fine print. I just want to confirm that this is groundwater elevations?
A. Right, the groundwater depths and the elevations, correct.
Q. And this includes Wells MW-1 through MW-15, correct?
A. That is correct, yes.
Q. And just looking at Wells MW-13, 14, and 15 on Bates page 125649, those water elevations start on May 24th, 2021. You have a magnifying glass? Okay.
A. Yes, I do.
Q. Is that right? They start on May 24th, 2021?
A. Yes.
Q. Why is that?
A. These are the three new monitoring wells that were installed downgradient of Ponds 1 North, 1 South to further fulfill the requirements as they are specified in the state -- state rules.

So we have to augment the system that was downgradient, and those are the three new wells, and then once the wells are installed,

\footnotetext{
L.A. Court Reporters, L.L.C.
}
developed, and stabilized, we started collection of groundwater levels.
Q. Okay. And now, the far right column says, "depth to groundwater." Do you see that?
A. Yes.
Q. And the results for MW-11 seem to be in excess of 500 feet; is that accurate?
A. No. Those columns are switched
around. So the 5 -- for example, let's take MW-13, May 24th, 2021. The second, the 10.92, should be in the third column depth to groundwater, and the 581.88 should be in the groundwater elevation column. There is a flip-flop on this table.
Q. Okay. And thanks for pointing that out.

And it looks like that might be true for MW-11 through MW-15. Does that look right to you?
A. That is correct.
Q. Okay. Thank you.

Now, Bates page 125650 shows
groundwater flow direction and seepage velocity. Similar to what we talked about for Waukegan; is

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
that right?
A. Correct.
Q. And this describes groundwater
flowing to the west?
A. Yes, it does.
Q. And it shows how fast the
groundwater is flowing?
A. That's the seepage velocity
estimate, yes.
Q. Okay. Thank you.

And then the next set of -- the
next table is very, very fine print, but it appears to be groundwater monitoring --
groundwater quality data for MW-1 through -- well, for a subset of the wells at the site; is that right?
A. That is correct. These are the wells associated with the monitoring well network for Ponds 1 North and 1 South specifically.
Q. Okay. Thank you. And this includes the new wells you mentioned?
A. Yes.
Q. Bates pages 125652 and 125653. This includes turbidity data, right?

\footnotetext{
L.A. Court Reporters, L.L.C.
}
A. Yes, it does.
Q. Which is not included as part of the federal CCR monitoring reporting?
A. That is correct.
Q. And Table 9-7 on Bates page 125655, this includes the background prediction limits and proposed groundwater protection standards for Pond 1N; is that right?
A. For Pond 1N, correct.
Q. As you were describing with Waukegan, you calculated the prediction limit by pooling two upgradient wells in this case?
A. Well, it depends on the parameters.
Q. Right, right.
A. Let's take, for example, antimony.

Based on the various statistical tests that I did to determine whether or not I can pool that data -- in this case, \(I\) was able to pool the data from both upgrandient Wells 1 and 2 -- for antimony specifically, I calculated the background prediction limit, and that prediction limits comes in at 0.033 , which is below what the drinking water standard is. So -- or what the 845.600 standard is, which is the same as the 620 standard
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
in this case.
So the proposed groundwater protection standard becomes the higher of those two numbers.
Q. Right.
A. And arsenic, for example, I was not able to pool the data from the -- from Wells 1 and 2, because it failed one of my statistical tests, and so, therefore, we used the arsenic from Well 1. And note that the interwell background is an order of magnitude lower than what the drinking water standard is, and so the proposed groundwater protection standard is at the 845.600 standard.
Q. Okay. And now for lithium, scrolling down the table to lithium, MW-2, you didn't pool the data, right?
A. That is correct.
Q. And somewhere in the statistical package it includes a statistical comparison of data from MW-1 and MW-2 and shows that they are not sufficiently similar to be pooled; is that right?
A. That is correct, yes.
Q. You can say no to this, but do you

\footnotetext{
L.A. Court Reporters, L.L.C.
}
```

happen to know where in this statistical package
that would be?

```
A. Sure. If you give me a moment --
Q. Yep.
A. -- I will try and find my way.

All right. It would be in
Attachment 9-6. That would be starting on your Bates page number 125820 .
Q. Okay.
A. And Attachment 6 provides what that -- the various tests and analyses that we did, and then on page 1 -- Bates page 125824. So let's take a look at Pond 1N, and it discusses, the third bullet, background Well MW-2 parameters were used to for boron, calcium, chloride, total dissolved solids, TDS, lithium, molybdenum, and combined radium. For these compounds, with the exception of boron, there were no statistically significant outliers, and for all of the datasets, there were no statistically significant trends, so on and so forth. So it provides the reasoning as to how we are selecting what and --
Q. And it goes on to say that maybe one of the reasons you didn't pool, MW-1 had a
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
statistically significant trend?
A. Correct.
Q. And that would be found later in the statistical package as well?
A. Right. That would be discussed a little bit earlier in the trends analysis, Bates page 125822, under Pond 1N. MW-1, a statistically significant trend was noted in boron. At MW-02, a statistically significant trend was noted in arsenic.

So if you notice, for arsenic, when we did our background calculation, I limited it to Well 1, because Well 2 had a trend, and in this case, visa versa. So that's kind of -- all of that reasoning and discussion is provided here for the basis of our selections.
Q. Yep. Thank you.

And then the details of the
trend analysis and the outlier analysis, and all of that is found in later pages of this attachment, correct?
A. That is correct. All of my background, you know, all the runs and the Sonitus printouts are included here.

\footnotetext{
L.A. Court Reporters, L.L.C.
}
Q. Okay. So now I'm going to flip back to the -- where we were before, which is -- bear with me for a second here -- Bates page -- we were on Bates page 125655. And then the next page is the same information we were talking about for Pond 1N, but in this case for Pond 1s, which so now I am on 125656?
A. Yes.
Q. Okay. Thank you.

And now, flipping to the
figures, Figure 9-1 on Bates page 12 -- it's hard to read that. I think it's 125 -- 125660, Figure 9-1 dated January 18th, 2022?
A. Yes.
Q. This shows the wells we were talking about, the new wells downgradient is Ponds \(1 N\) and 1S; is that correct?
A. That is correct.
Q. Now, the next figure is called Figure 9-2. It's on Bates page 125661. And this is similar to what we were talking about at Waukegan. It shows fill consisting of various materials that may include coal and black cinders and slag; is that right?

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
A. That is correct. Not necessarily at all locations, but as a general description, that is correct.
Q. And it shows the water level as of May 2021?
A. Yes.
Q. And, actually, you know, it might be more helpful to turn to a couple pages ahead. So Figure 9-4, which is Bates page 125663, it shows the same information, but it's zoomed in to focus on Pond 1N, correct?
A. Well, it's a different cross section, and the other cross sections were going north-south. I believe this is an east-west cross section that goes beneath Pond 1 N and actually goes northwest -- northwest to southeast through that pond, which is -- one of the requirements under the state rule is to have cross sections that go -- transect the pond as well.
Q. Okay. Thank you for that clarification.

And this shows the water level overlapping with the fill; is that right?
A. Yes, it does.

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
Q. And the date of this water level is different. This is November 2021; is that right?
A. That's -- that's what it -- it has here on the figure. And whether or not that might be a typo, I don't know.
Q. Okay. And now turning to Bates page 125665. Same sort of questions I had for Waukegan. This shows the groundwater elevation at the various wells over time, correct?
A. Yes.
Q. And is it -- November 2021, it isn't clear on the table, but it's one of the last few data points here?
A. Yes.
Q. And is it fair to say that for most of these wells, that's not the highest that the groundwater has ever been in this period of record?
A. For some of them, certainly. I have got a lot of lines on this figure, so --
Q. Fair enough.
A. But, yes, there are higher water levels at some of the wells.
Q. Okay. Thank you.
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023 time, I will just ask you to scan through the next few figures, 9-7 through 9-11, which is on Bates pages 125666 through 125670.

And similar to Waukegan, these show the potentiometric contours that were drawn on different dates; is that right?
A. That is correct, yes.
Q. And so they generally show groundwater flow from east to west, but there are slight differences from date to date?
A. Yes.
Q. Can you turn to page -- Figure 10 on page 125669? And if you are able, sort of look at it side by side with the preceding Figure 9-9 on 125688?
A. Yes.
Q. I noticed that between Ponds \(1 S\) and 2S, the potentiometric contour veers sharply to the west in Figure \(9-10\) in a way that it doesn't in Figure 9-9. Can you explain what that might signify?
A. Based on the water levels, the -the water level in Well 4 -- Well 5 and Well 3
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
appear to have gone down a little bit. Well 4 hadn't, and Well 13 it went down a little bit. So we had to pull the contour around over to be reflective of the water level at the time.
Q. Okay.
A. Just -- yeah. So some variants, I have seen some of that on previous flow maps as well.
Q. Right. Thank you. Yeah. And that's all I was really looking for is just that it does change a little bit from time to time.

HEARING OFFICER HALLORAN: You know, I'm sorry, Mr. Russ. Let's -- let's go off the record. Let's take a break now and be back at, I don't know, 11:05.

MR. RUSS: Sure.
HEARING OFFICER HALLORAN: Okay.
Thank you.
(Whereupon, a discussion was had off the record.)

HEARING OFFICER HALLORAN: I have
been remiss that other personnel from Board have been here: Member Michelle Gibson and Member Van Wie, and I think Essence Brown. They all came in

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
right after the hearing started. Thank you. Off the record.
(Whereupon, a short break was taken.)

HEARING OFFICER HALLORAN: All
right. We are back on the record at
approximately, what, 11:05? Thank you. You may continue, Mr. Russ.

BY MR. RUSS:
Q. Thank you.

Mr. Gnat, can you turn to Bates page 125778, which is where Attachment 9 begins?
A. 1257 --
Q. I'm sorry. 125778.
A. Got it.
Q. This is the attachment that supports Section 9 of the text, correct?
A. Correct.
Q. Now, the first table that starts on page -- Bates page 125780, similar to what we saw at Waukegan, this include a series of, in this case, 45 different borings from the vicinity of the Will County station?
A. Right, from water wells installed in

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
the area and pulling drillers' logs and then the wells installed in the area, and then the -starting at the number 34 there, those are from our site wells, the logs.
Q. Right. Thank you.

And as you said before for the
Waukegan site, the Well ID column provides a number that you could use to identify the location of each boring?
A. Yes.
Q. And like we talked about with Waukegan, the different layers aren't at fixed intervals, but instead they correspond to differences in the material that you encountered in the borings or that were encountered in the borings?
A. Yes.
Q. And then for MW-01, if you can read it, the first line there says, "Fill: Black coal cinders, fine gravel, cobbles, crushed." And then it looks like it cuts off, correct?
A. Yes, it does.
Q. So there may be more information there that we can't see?

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
A. That is correct.
Q. Okay. And then flipping over to page -- Bates page 125783, we get into a series of boring logs again like we did with Waukegan. And this includes boring logs for Wells MW-1 through MW-12; is that right?
A. That is correct. It appears that the boring logs for 13, 14, and 15 for some reason are not included here.
Q. Okay. They're presumably included somewhere. Maybe they -- I won't ask. I would just be speculating, but maybe they would appear in the construction permit applications you discussed earlier?
A. Yes, and if not, they inadvertently were omitted and can be provided.
Q. Okay. Thank you. And then starting on Bates page 125805, like we discussed with Waukegan, this provides -- and like we have already discussed for this site as well, actually, this provides the details on the statistical approach for analyzing groundwater data?
A. Right. This is a permit, a state permit, as well as federal permit requirement to
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
basically put down on paper how you are intending your general approach for approaching your statistical evaluation.
Q. Okay. Can I ask you a question about Bates page 125849?
A. Okay.
Q. And not to put you on the spot, but can you explain the difference between the Tukey's Outlier Screening and EPA screening?

MS. GALE: Objection, foundation. BY MR. RUSS:
Q. Okay. I'll ask about the foundation.

\section*{Are you familiar with these}
```

statistical tests?

```
A. Yes.
Q. Did you run these tests?
A. Yes, we did. As part of the statistical package we run, it not only includes, for example, the EPA screening, but it provides other -- other outlier tests as well for, you know, helping evaluate things. So it's -basically the program is set up with general defaults to the EPA requirements that are

\footnotetext{
L.A. Court Reporters, L.L.C.
}
generally outlined in the unified guidance, but it also provides you other information that the statistical -- whoever is taking a look at it, that may be of help to them, yes.
Q. Okay. Now, could you explain the difference between the Tukey's Outlier Screening and the EPA screening?
A. I would have to go back through and really put my head into the difference between the two, which, I guess, I was not prepared to get into that detail, but --

\section*{Q. That's understandable?}
A. -- if you give me a minute. It will also -- it will determine, I believe, on the -the distribution of the constituent in the particular well.

And so, for example, at Well 2 on the background, it's defaulting to a Tukey's Outlier Screening for a specific reason, and -and it goes to the EPA screening default for, in this case, total dissolved solids for downgradient Well 7, which is, \(I\) guess, the question that you are asking. So I would have to go through and really read through and determine what was the

Electronic Filing: Received, Clerk's Office 05/22/2023
reason that the statistical program decision was made for one versus the other.
Q. Okay. That's fine. Thank you for answering that to the best of your ability.

Can you turn now to page -- keep
your finger on this one, but also look at page 125853? And in the lower, right corner there is a Tukey's Outlier Screening Chart MW-14 for lead, and there is a diamond that's filled in with black. Does that indicate an outlier?
A. 1258, and I'm sorry. Can you --
Q. Sure. Yeah. The Bates page is 125853.
A. 125853, okay.
Q. And on the lower, right there is that Tukey's Outlier screening for lead for MW-14?
A. Yes.
Q. Does this indicate that there was an outlier in this dataset? And if it helps, if you look over at the legend on the right, the first sentence is "Outlier is drawn as solid."
A. That is correct, yes.
Q. And can you just explain briefly what an outlier is, for the record?

\footnotetext{
L.A. Court Reporters, L.L.C.
}
A. An outlier is a data point that is sufficiently higher or lower in concentration that it falls outside of the statistical allowance that you are -- that you are looking at, and in this case, we are generally looking at 95 percent confidence and then alpha values of -- I forget if it's 0.01 or 0.05 , but it's a statistical
calculation. So this value is, if you want to say, uniquely higher or lower than all of the other values that are in that particular data grouping that you have.
Q. Is it fair to say that they are statistically anomalous?
A. That is correct.
Q. And with these charts you are able to see if there was an outlier, when it was, and what the concentration was for each constituent?
A. That's -- that's right. And we
also, \(I\) believe, provide a summary data table that takes these observations and tabulates them.
Q. Okay. Thank you.

I'm going to skip ahead to
Attachment 10, which begins on Bates page 126011. Okay. Are you familiar with

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
this preliminary closure plan?
A. Well, for Ponds 1 North and 1 South, yes.
Q. Correct. Thank you. And just, for the record, the -- the closure plan actually begins on Bates page 126012 and has a KPRG header?
A. Yes.
Q. And it says under heading three on that page Pond 1N and Pond 1S will be closed by leaving the CCR in place. Similar to what it said in Section 10 of the text, correct?
A. Yes.
Q. And you have already answered -- I already asked you about whether that's current. So I won't ask it again.

But this provides more details
about the closure plan, correct?
A. Yeah, it's, again --
Q. Preliminary?
A. Yes.
Q. Including how long it's going to
take and the largest area of CCR requiring a final cover?

> A. I don't see a specific area. Oh,
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
oh, yeah, the largest area requiring cover, yes.
Q. Okay. Thank you.

Now, Attachment 11, I believe you said you weren't involved in. I just want to clarify, because it has a KPRG header. I don't -I'm not necessarily fishing for any particular answer. I'm just curious if you were involved in the production of this.
A. You know, I might have glanced at it, yes. Did I write it? No.
Q. Okay. Fair enough. Thank you.

And then the Liner Certification that begins on Bates page 126019. This describes what we were talking about with Section 12 of the text where it has 12 inches of Poz-O-Pac, 12 inches of fill, 12 inches of Poz-O-Pac; is that right?
A. It's a liner certification, and, you know, again, \(I\) wasn't involved in these tables here or any of that. I don't know if it was our firm or another engineering firm. I would have to ask Josh, our engineer, who compiled all this information. But relative to your question, I see that as inputs there in that table of the upper
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
liner component.
Q. Okay. And then Attachment 13,

History of Known Exceedences, starts on Bates page 126022, but then the subsequent page says, "no attachment." Do you see that?
A. Yes.
Q. So does that mean there is no
history of known exceedances?
A. I believe this was relative to -- in particular, relative to the fact that -- from a CCR perspective, which is the total analyses and so on. Since this was not under the federal rule, we didn't have -- we don't have historical data, so to speak. So that's why that was put in place.
Q. Okay. So it's an absence of data more than an absence of exceedances, so to speak? MS. GALE: Objection.

Mischaracterizes the document.
HEARING OFFICER HALLORAN: Could you
rephrase, Mr. Russ?
BY MR. RUSS:
Q. Sure.

If I understand what you are
saying, there wasn't -- the data relevant to this

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
section weren't available, so you couldn't write anything about it?
A. The data -- certainly we have CCA data for this area, but this being a CCR rule document, we didn't feel it appropriate to make decisions based on CCA data.
Q. Okay. So this is a history of known exceedances under the state CCR program?
A. That's the -- yes.
Q. Okay. Thank you. I would like to move to admit Exhibit 1332, subject to the same conditions that you stated earlier?

HEARING OFFICER HALLORAN: Ms. Gale?
MS. GALE: No objection to that. We just -- also, as he mentioned, there is some duplication in here of historic information that's already been admitted. So we request the same direction that you have made before to the Board.

HEARING OFFICER HALLORAN: Thank you.
I'm going to admit Exhibit --

Exhibit 1332 and request the Board not to consider parts of the exhibit Mr. Gnat through his testimony cannot speak to or has no knowledge, and

\footnotetext{
L.A. Court Reporters, L.L.C.
}
disregard the remainder that's in the exhibit.
Also, I understand there are duplications and cumulative documents in here and -- from other exhibits that have been entered, and I would ask the Board to disregard that.

Thank you.
(Whereupon, Complainants'
Exhibit No. 1332 was admitted
into evidence.)
MR. RUSS: And we have no further questions, your Honor.

HEARING OFFICER HALLORAN: All
right. Let's go off the record for a minute.
(Whereupon, a short break was taken.)

HEARING OFFICER HALLORAN: We are back on the record.

Ms. Gale will be crossing
Mr. Gnat, but Mr. Russ has a housekeeping matter. You may proceed.

MR. RUSS: Just to preserve the issue for appeal -- sorry to do this -- but we're going to put on the record an objection to the ruling on the partial -- the limitations on the
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
admissibility of Exhibits 1331 and 1332 based on Board Rule 101.626(e), which states that the lack of personal knowledge can affect the weight, but not the admissibility of a document as a business record.

HEARING OFFICER HALLORAN: Okay. So
noted. Thank you. I'm sure the Board will take that under consideration.

MR. RUSS: Thank you.
HEARING OFFICER HALLORAN: You may proceed, Ms. Gale. Sorry. \(R E-D I R E C T E X A M I N A T I O N\) by Ms. Gale
Q. Good afternoon, Mr. Gnat. It's still morning. Good morning. Yesterday I believe Ms. Bugel was asking you questions about you walking over the northeast area at Joliet 29. Do you recall that discussion?
A. Yes, I do.
Q. And she asked you about whether you had conducted any sediment testing along the banks of Joliet -- excuse me -- along the banks of Joliet 29. Do you recall that?
A. Yes.
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

\begin{abstract}
Q. Is there any basis to test the sediments along the Joliet station in the Des Plaines River?
\end{abstract}
A. You know, based on my walkovers, I have never seen any seeps or anything entering the Des Plaines River. I am not aware of any groundwater information from that area. So there -- from my perspective, there was no basis. I haven't been requested either. I do know that there has been some recent sampling done now by the Army Corp of Engineers in the sediments that actually extends a good portion along the banks of the northeast area, and I believe in others' discussion of that, that data did not show anything that was above a comparison value.
Q. Okay. And then we are talking about the northeast area. I want to then now discuss the -- she asked you about walking the bank -west of the Joliet 29 further downriver, and I believe you stated that you don't walk those banks; is that correct?
A. Oh, that's correct. I do not walk those banks. I'm not aware of anything that was occurring in that area that would suggest the need
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
for that. It's not part of the stormwater permit that the walks that \(I\) do require.
Q. And similar question. For the rest of the downriver section of the Des Plaines River along Joliet 29 , do you see any basis to test the sediments?
A. No. Not at this point, no, I don't.
Q. And then I believe yesterday you
also discussed walking the bank of the Powerton station along the Illinois River. Do you remember that discussion?
A. Yes.
Q. And if I remember correctly, you responded that you did not, and you had an explanation why. Do you remember that?
A. Yes.
Q. Please tell us why.
A. Well, the Illinois River is on the far north end, and then you have got the little old feeder in what that used to be the inlet channel for the plant. The downgradient monitoring wells closest to the Illinois River are Wells 2, 3, 4, and 5, and, you know, looking at the CCR data, we don't have any exceedances of --
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
quite honestly, there is nothing above a drinking water standard in those monitoring wells.

And so that in and of itself suggests that there is no seep to be looking for. The groundwater is already at standard or below standard, and also, somewhat the distance. So the nearest location to the entrance of the intake channel is Well 5, and that's about 550 feet, and the nearest well to the first bank of the Illinois River would be Well 4, and that's over 1,000. It's about 1100 feet.

So between the fact that the groundwater quality is already below the 620 standards and the distance, \(I\) don't see a need to go doing that walk.
Q. And then, similar question along the same lines. Do you see any basis to test the sediments in the Illinois River along the Powerton station?
A. No, I don't for -- for the same reason.
Q. Yesterday she also asked you about walking the shore of Lake Michigan along Waukegan station. Do you recall that testimony?

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
A. Yes, I do.
Q. And you said you had walked that, correct?
A. Correct.
Q. And you -- I believe you also said that you had not recalled seeing any seeps when you had, correct?
A. Correct.
Q. And -- and is there any basis to look for seeps along the Waukegan station at -near the lake -- river -- Lake Michigan? Excuse me.
A. Again, I think it would go back to not just what we are seeing in the downgradient monitoring wells of the east pond, but also the distance. I mean, that's another 900 plus feet from the regulated unit to the lake shoreline.
Q. And, again, a similar question. Is there any basis to test the sediments in Lake Michigan near the Waukegan station?
A. Not in my opinion, no.
Q. And we are also going to discuss the Will County station, and I believe you were asked questions about walking along the bank of the
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
western edge of the Will County station. Do you remember that discussion?
A. Yes.
Q. And I believe you said that you have walked along it, and for other reasons, and then you had not seen any seeps; is that correct?
A. That's correct. And whenever I am down there, the downgradient line of monitoring wells is right at the edge, and then the bank -the slope starts to slope down towards the river. There's a utility corridor that's -- that goes through there, overhead lines, and certainly just whenever \(I\) am out there and just looking down, I certainly do not see any seeps, no.
Q. And is there any basis to test the sediments along -- in the Des Plaines River along the Will County station?
A. Not in my opinion based on not seeing any seeps or so on, no.
Q. Mr. Gnat, for the Midwest stations that are at issue here today, are you aware that some are not burning coal anymore?
A. Yes. I believe that the Waukegan station no longer burns coal. The Joliet station
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
no longer burns coal. The Will County station no longer burns coal. Powerton is -- still is a coal-fired power plant.
Q. All right. And I want you to find in your stack of documents Exhibit No. 1315, which would be the alternate source demonstration for the former ash basin.
A. Okay.
Q. All right. And I want you to turn, please, to Table 1 , which is Bates numbered MWG13-15_70544.
A. Okay.
Q. And here in this table you have an -- or there is -- excuse me -- a value that's called a prediction limit. Do you see that?
A. I'm sorry. Can you refer me over to the right page?
Q. I'm sorry. 70544, Table 1.
A. Oh, thank you.
Q. I will re-ask the question.
A. Okay.
Q. So in the second column, for each of the monitoring wells there is a phrase -- it's actually pred. limit, which I would take as stands

\footnotetext{
L.A. Court Reporters, L.L.C.
}
for prediction limit.
What does the prediction limit
mean?
A. The prediction limit is the statistical calculation for comparison that's based on background evaluation, and in this particular case, it's a -- based on a 95 percent confidence, and it's a value, the statistical value, that says, based on the upgradient background concentration, if I pull a sample from this particular well, I have a 95 percent probability or chance that \(I\) will be at or below this particular value, and a 5 percent chance that I might be above.
Q. Now, is it tied to the 620
groundwater standards?
A. No, no. It is not tied to the groundwater quality standards at all. This is strictly a background-based calculation. So it can easily be substantially lower than a standard.
Q. Well, and let's give an example.

Can you go to Monitoring Well 5
and look at sulfate, please?
A. Sure.
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

\begin{abstract}
Q. And if you can recall the groundwater standard value under 620 for sulfate, otherwise, \(I\) can get you there.
\end{abstract}
A. Yeah.
Q. Can you describe what you are seeing there?
A. Okay. So for Well 5, the prediction limit based on background for sulfate is 85 milligrams per kilogram. And so, for example, in the August 26 th sampling, which is the first round of sampling after we generated our background dataset, we were above that value. So under the detection limit rules of the federal CCR rule, I have got a potential statistically significant increase here, and if the sample confirmed, then we would have to evaluate.

But here is the reality. The -so the 85, the prediction limit is based on the background data from the background wells. The actual standard, the 620 standard for sulfate, is 400. So even though I have a potential statistically significant increase over this background prediction value of 85 , that is substantially lower than the 400 milligram per
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
kilogram standard, drinking water standard, for sulfate.
Q. Thank you. You can put that exhibit aside, please. I'm going to switch gears again. Yesterday I believe you touched
upon a discussion of brownfields, and you mentioned the SRP program, which stands for, in Illinois, the site remediation program. How -and, you know, can you explain how you apply that brownfield SRP program, generally speaking, to industrial sites?
A. You know, most old historical and industrial sites do have impacts. I mean, that's just a fact of life, and the SRP program allows an old industrial property to go through -- it provides the framework to take an old industrial property through a site investigation, identify appropriate remedial options, what option you want to implement, and then go ahead and implement that program.

And the SRP program allows for risk-based corrective action type approaches where you can look at general areas based on risk, on your property boundary, nearest receptors, and so
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
on, and implement a remedy, which, you know, just standard monitored natural attenuation remedies aren't -- you have to have something additional in terms of source control, removal, whatnot, to augment that, but it allows for making some common sense source control strategies, and then augment those with what are called engineering controls, be it engineering barriers, what are somewhat a part of a remedy, placing an asphalt cap over impacted -- residually impacted soils to preclude percolation of rain.

You know, buildings will
accomplish the same thing. So you can structure that type of engineering control with your development plan or redevelopment plan, and also, you can implement institutional controls; such as, ELUCs, which is what we talked about what was done for the tannery site west of Waukegan, which basically places a deed restriction on -- on the property that doesn't allow for, in that case, the installation of drinking water wells.

So it's a way to be able to
approach large industrial facilities that can have fill, quite honestly, over large portions of those
areas. I don't like using the term "ubiquitous," but sometimes that is an appropriate term. And it can be a mixture of clean fill. It could be a mixture of old industrial fills. You know, foundries, again, a very typical example. You've got foundry sands all over those areas also impacted with heavy metals, but honestly, also impacted with solvents that are much more carcinogenic.

And full removals of every, you know, bit of fill are not required. What makes sense you do, you can do control measures, but it allows you to develop a strategy which focuses on appropriate source control measures and then management as well to facilitate being able to get these properties back into appropriate uses. Usually industrial; sometimes they cross over into commercial, and if it does cross over into residential, you have to address it in a more robust fashion to meet residential criteria under the SRP.
Q. All right. Again, switching gears. Yesterday I recall you using the phrase, various -- so we are talking now about the Midwest

Gen stations and your work, and related to groundwater work, and at the Midwest Gen stations.

And you use the phrase, "various masters." What did you mean by that?
A. In the case of several of our sites -- and we talked about it, and, in fact, that's kind of how towards the end we got crossed a little bit, because I'm thinking about CCR, and the reference was relative to a discussion that I had several years back in my deposition, which was relative to CCA, and hence, you know, potential confusion.

Well, you know, here are, you know, plans for reality. So we have got our impoundments, the same impoundments. We sample these things on a quarterly basis, these wells, under a compliance commitment agreement for dissolved parameters, as we said, in a slightly different list by the Illinois Water Group, listed by the Illinois Water Group.

And we provide those reports to them on a quarterly basis. Then, we have -- the federal rule kicks in, in 2015. Same impoundments, primarily the same monitoring wells.
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

We may have added a few to augment the rule, and then we have a separate set of contaminants; some overlap, some not, but now total instead of dissolved. We have got detection monitoring parameters, and then assessment monitoring parameters.

And then so now we are operating
under two -- the same ponds -- monitoring programs, two separate rules, making sure that everything is being complied with this and then that. And then come along '21. Illinois kicks in its own rule, which is fine and understandable.

However, recognizing now we have got, again, the same set of wells for the same ponds being analyzed for the same parameters as the federal rule, plus turbidity, but now we are going to restructure detection versus assessment. We are no longer going to recognize that. We are no longer going to allow for semi-annual, but, no, now you are going to have to do everything for annual, again, which is fine, but at the same time, I can't stop having to fulfill federal requirements, which are slightly different, and I can't stop fulfilling CCA requirements.

So that's why I said three
masters in this case, and in each case, recognize how these samples are pooled. We go up to, let's say, Well 5 at Will County, and let's say this Well 5 is actually included in the CCA program. It's included in the federal CCR program, and it's included in the state CCR program.
\[
\text { So we go -- go in Well } 5 \text { with }
\]
all the sample bottles. And we always tell our samplers, start with the CCR because that's under the federal rule and this and that. We want to -if the well goes dry for some reason, we want to make sure we have enough sample to fulfill those requirements.

So they will start the purge, and then they'll start their low purge sampling, and they'll fill up the jars for the federal rule. Some of those are crossover for the state rule, and then those are done. Those jars are sealed, placed on ice.

Then we start collection the exact same time. You know -- well, you know, a half hour later or whatever, you know, however long it took to collect the federal samples, and
now we are going to start on the next set of -the CCA samples. So now we are going to place the filter in line and start the CCA sampling process. But the fact of the matter is it's the same well that was basically sampled on the same day over the period of time that it takes to fill all those sample bottles. So you are basically looking at the same sample from the same well on the same day then being compared against three different programs.

\section*{Q. And yesterday wasn't another} publication issued by the US EPA?
A. Sure. And now their new -- there's a new publication. I haven't looked at it yet, but my understanding is that there is a new proposed rule coming out on how to address the legacy ash, which is the ash outside of the impoundments, which for the most part, you know, I have always viewed as part of that larger brownfields type issue, but now, it appears that they are -- for some reason, there is going to be specific regulations for that ash.

And I also know that relative to that same topic, there is a subdocket that's still
in place, that may address that at a state level as well. So, you know, again, if both rules for the legacy ash pass under the federal rule, and, say, the state follows and does a state rule, then there are going to be two additional sampling programs probably requiring, you know, so on.

And so, again, you are going to
be having the same issue managed at that point then under five potential programs. So it gets pretty crazy out there, and quite honestly, it's inherent at some point -- it's asking for field mistakes to be made.
Q. Thank you. Okay.

I want to turn to Exhibit 1330, which is the investigation of the area west of the west ash pond at the Waukegan station.

And, Drew, could you put that up on the screen? Or not, it's fine.
A. I have it here.
(Whereupon, Complainants'
Exhibit No. 1330 was previously
marked for identification.)
BY MS. GALE:
Q. Oh, you have it. Okay.

Electronic Filing: Received, Clerk's Office 05/22/2023

No. A1?
A. Okay.
Q. Okay. And I believe there was a lot of discussion yesterday about the term "wet." And I believe you stated that wet would indicate a saturated layer. Am I recalling that correctly?
A. That is correct, yes.
Q. Okay. On -- in Boring No. A1, do you see wet on there?
A. Yes. At -- under -- at 12 feet under the description, the brown/gray fine to medium sand, wet.
Q. And where is that? Is that in the -- under the remarks? What section is that in?
A. That's in the native sand and gravel.
Q. Okay. Great. And then I want you to look at the same time at Boring No. A2. I think you can just look at the same time.
A. Yes.
Q. And you see it says wet at five feet there?

\footnotetext{
L.A. Court Reporters, L.L.C.
}
A. Correct.
Q. And then below that it says moist.

And then it says wet again at 10 feet?
A. Yes.
Q. Can you tell me -- and if we can
look at the map, they are -- A1 and A2 are next to each other on a north-south position, correct?
A. Right, I believe 100 feet apart.
Q. Yeah. So what's the difference?

Why the difference between the two?
A. Well, what this is saying is it's observing as the boring was going through and the geologist was logging it, it started out with a -a slightly -- a clay topsoil with some gray silt. It was moist, and there was ash mixed in with it, clearly, there, and as the boring was going down at about just past four and a half feet, a wet zone was encountered.

However, by the time seven -- at
seven feet, basically, came back to a black fine sand, but -- with slag, but it was slightly moist. So what that says is we have got probably precipitation water, and if \(I\) remember right, it was -- it was a pretty wet season. This was done

\footnotetext{
L.A. Court Reporters, L.L.C.
}
towards the end of November.
So probably we have got this -from infiltration, from precipitation, you have got a wetting front or layer working its way through. So you've got this pocket of some saturated material, and that's just basically water moving vertically downwards through the system.

So it came back up. Below that, it was still moist. So that hasn't worked its way down through, and then the actual water table -and water table defines anything -- that depth beyond this level is saturated, and that's the natural water table, and that's -- again, at this point, it's at 10 feet in the native materials.
Q. Excellent. Let's skip to Boring Log C10, which -- and I should have said before.

Boring Log A1 is on Bates paged MWG13-15_79494, and C10 is at MWWG13-15_79523. Are you there?
A. Yes, I am.
Q. Okay. Similar question as before.

Where does it say wet on C10?
A. It does not, which shows to me or suggests to me here that the actual water table or
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
saturated conditions are deeper than 15 feet.
Q. And does that indicate anything?
A. That it's still not -- anything
above 15 feet at this point is still not saturated.
Q. Okay. And I want to look at -- so at seven and a half feet, do you see that it says, "medium sand, ash and slag"?
A. Yes.
Q. Okay. And -- and then below that in the native area it says, "medium sand, moist." Do you see that?
A. Yes.
Q. Okay. And medium sand is, what, a particle size or a grain size, right?
A. A grain size, correct, yes.
Q. Okay. And then, so, when looking at a boring log like this, you know, you see medium sand, ash, and sand, and medium sand. How would you know the difference between the two?
A. Well, you know, sand is also a descriptor. You know, everybody knows what a beach sand looks like, but it is also a particle size. So if you have a fill material, you can
have a sandy or a gravelly or a sandy gravelly fill material that is actually clean sand and gravel type material. It's just brought on to this property from a quarry somewhere, and it's used to bring a property elevation up.

An example of that is a lot of what we saw at Joliet 29 in our boring logs, it was a -- it was a sand and gravel type fill, but there was no notice, no indication of ash or cinders or anything else in that material.

So if you have a sandy matrix, a medium sand matrix, but what these other notes here are telling me is that it's -- clearly above 13 feet it appears to have -- to be intermixed with -- with components that have here been identified as ash or slag, or I don't know if cinders -- the term "cinders" was used in this particular log, but, you know, I look at that, and it suggests to me, yes, I have got fill. It's not native. It may have some native components, some sand, but certainly mixed in with, in this case, ash and slag.

And below that, that is the
native. That's the fine beach -- the fine to
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
medium, the beach sands, which really make up that water table aquifer beneath the Waukegan station.
Q. And I -- you made a point there, and I just want to point on that. You said some fill can be medium sand, and some fill can be medium sand, ash, and slag. Is it industry standard to make that distinction?
A. You know, certainly it's industry standard to provide as much description there as possible. For us, it's our standard. It helps us evaluate it, but I think for the most part, when a geologist is identifying a fill layer, they will describe it, and if they see a sandy, gravelly fill and they see some brick pieces or wood pieces or organic pieces, even some municipal waste sometimes in there, that's noted on the log. I mean, that's usually a pretty good environmental standard.
Q. And, I guess, a similar question for if you see gravel in the fill --
A. Uh-huh.
Q. -- would they similarly be specific in the gravel if it's gravel or if it's bottom ash or, you know, et cetera?
\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{25}{*}{\begin{tabular}{l}
A. Sure. You know, and sometimes the distinction to bottom ash might not be able to be made, but, again, I think any geologist behind the drill rig that's looking at a gravelly fill can distinguish an industrial waste type gravel size particles, which you would see from a bottom ash, versus kind of the native gravel that you get from your gravel quarry or even \(a\), you know, native gravel from, you know, different fluvial deposits, background deposits, whatever, you know. That's quite a difference. They are both gravel-sized particles, but you can for the most part tell an industrial slag chunk that's gravel-sided, versus a natural piece of dolomite gravel. \\
Q. Thank you. And can you turn to -back to the boring logs, Boring Log D1, which is a -- just flipping the next page, MWG13-15_79524. \\
A. Yes. \\
Q. And looking at this boring log, \\
where does it say wet? \\
A. There is no indication of wet conditions being encountered. \\
Q. And what does that mean to you? \\
A. Again, that throughout this layer
\end{tabular}}} \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline & \\
\hline
\end{tabular}

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
there, this is all unsaturated material.
Q. And would that mean there is no indication of a wetting front?
A. In this particular log, that there is no indication of that.
Q. I'm sorry. That fell off. Can you just make sure that she got that?
A. There is no indication of that on this log.
Q. Thank you. Mr. Gnat, you discussed earlier the tannery site near the Waukegan station, and to confirm, that's upgradient of the Waukegan station, right?
A. Yes.
Q. And it's actually -- I'll clarify. It's the tannery and the boiler -- what's it called?
A. General boiler.
Q. Thank you. The general boiler site.

Would you call the tannery and
the general boiler site potential historic sources?
A. Yes, I would.
Q. And I believe you said the tannery

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
and the general boiler are in the Illinois SRP program?
A. Certainly the tanner was. I believe the general boiler was as well, yes.
Q. And I believe you said that their groundwater is contaminating the Midwest Gen station?
A. Yes.
Q. And will that contamination --
contaminated groundwater from the tannery and the general boiler continue to flow onto Midwest Generation's property?
A. Yes.

MS. BUGEL: Objection. Calls for speculation.

HEARING OFFICER HALLORAN: He may answer if he's able.

BY THE WITNESS:
A. Yes. They are upgradient. Groundwater will continue to flow from west to east.

BY MS. GALE:
Q. All right. I want to just go through a few pages of the Exhibit 1331. Bear

\footnotetext{
L.A. Court Reporters, L.L.C.
}
with me, Mr. Hearing Officer, I'm skipping a lot. Oh, I just want to make sure we hit upon this. Can you turn to Figure 9-11, which is on Bates number 110688?
A. Okay.
Q. What's depicted on Figure 9-11?
A. Figure 9-11 identifies what the initial -- on the west side there in yellow, what the previously established environmental land use control boundary or ELUC boundary, E-L-U-C, was established for the work that was done for the sites to the west of the tannery site, the general boiler site, and this is what -- the area that was identified in that ELUC that Midwest Generation that we voluntarily agreed to sign to facilitate those sites being able to get closure under the site remediation program and part of that management strategy.

And then to the east in the more pink type color hashed that goes beneath the impoundments and over to the lake is the environmental land use control boundary that was agreed upon between Illinois EPA and Midwest Generation as part of the compliance commitment

Electronic Filing: Received, Clerk's Office 05/22/2023
agreement that was then -- I believe this was also subsequently placed, the description of -- well, both of these ELUCs is upon the deed for the property restricting the use of groundwater beneath those areas.
Q. And it -- thank you.

And so the pink, it actually
describes it as "proposed ELUC boundary
extension." Is that accurate?
A. Well, this is a figure from when the discussions were occurring, but this was finalized, and it is on the deed.
Q. Okay. All right. Mr. Gnat, I want you to turn to -- well, turn to Attachment 9-1, turning to page Midwest -- excuse me --MWG13-15_110856.
A. Okay.
Q. Okay. And this is entitled the,
"Local Well Stratigraphy Information," right?
A. Yes.
Q. And I just want to clarify for
everyone, Well Count 1 does not mean Monitoring
Well 1 at Midwest Gen, right?
A. That is correct, yes.

\footnotetext{
L.A. Court Reporters, L.L.C.
}


\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023


\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
fill out there. It's a fairly industrial area, and there are a lot of industrial-generated fills mixed in.
Q. Oh, yes, thank you. I want to now turn to Attachment 9-4, which is on MWG13-15_110923.
A. Okay.
Q. And this is the certification by Josh Davenport, the professional engineer that you had discussed with Mr. Russ this morning, right?
A. Yes, it is.
Q. And he based his conclusion and certification upon four bases, right?
A. Yes.
Q. What's the fourth basis?
A. Illinois Environmental Protection

Agency, IEPA, approved the overall hydrogeologic assessment as part of a larger study.
Q. Thank you. Right. Okay. Let's move on to Attachment 10, which is at -- and this is simply a correction, I think, that we had. There was a statement earlier. MWG13-15_111163.
A. Okay.
Q. And when Mr. Russ was talking with

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
you about the cover section of this document, I believe you had stated that KPRG had done the closure plan for Exhibit 1331, but who wrote the preliminary closure plan for Exhibit 1331, the Waukegan initial operating permit application?
A. For the Waukegan permit it was Sargent \& Lundy.
Q. Okay. Great. And, again, in the introductory 20 pages at the top of this, it's called at Section 10, the Written Closure Plan, but what is it described as in Attachment 10?
A. Preliminary Written Closure Plan.
Q. Thank you. Okay. We are done with that document.

Can you pull out Exhibit 1332,
which is the Will County Operating Permit Application, please?
A. Okay.
Q. And can you turn to -- well, we will
be looking at Figure 9-12, and it's the Bates
number -- oh, boy -- 125671.
A. Okay.
Q. What's depicted in Figure 9-12, please?

\footnotetext{
L.A. Court Reporters, L.L.C.
}
A. This is a -- there is a -- the cross-hatched part of the figure shows the groundwater management zone that was agreed upon between Illinois EPA and Midwest Generation relative to the compliance commitment agreement. MS. GALE: Thank you. Can I have a moment, Mr. Hearing Officer?

HEARING OFFICER HALLORAN: You may.
(Whereupon, a discussion was had off the record.)

MS. GALE: I have no further
questions at this time.
HEARING OFFICER HALLORAN: You have
no further questions?
MS. GALE: At this time.
HEARING OFFICER HALLORAN: Great.
I'm confused as to whose witness this is.
MR. RUSS: I will be doing
re-direct. Would you like to break for lunch now?
HEARING OFFICER HALLORAN: Yeah.
MS. NIJMAN: We would certainly like
to get Mr. Gnat finished.
THE WITNESS: You and me both.
HEARING OFFICER HALLORAN: He's been
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
up here a while. Fair enough.
\(R E-C R O S S\) E X A M I N A T I O N by Mr. Russ
Q. Just a second. Excuse me.

Can you, Mr. Gnat, look at
Exhibit 1331 that Ms. Gale was just asking you about, and can you turn to page -- Bates page 111163? I'm sorry. Bear with me for a minute. I'm having a technical issue.

Oh, yeah. Okay. And does this describe a preliminary written closure plan for the east ash pond?
A. I'm sorry. Could you -- I looked at 111063.
Q. \(\quad \mathrm{Oh}\), do you have that number? I'm looking at 111163.
A. Oh, okay. I'm sorry. I --
Q. Yeah. No problem.
A. Okay. Got it.
Q. This is a preliminary written
closure plan for the east ash pond?
A. That's the title of the document, Sargent \& Lundy, "Preliminary Written Closure Plan for East Ash Pond, Revision 1, October 29, 2021."

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
Q. Okay. And the -- I believe the text of Section 10 refers to -- if you look to page 110658?
A. Yes.
Q. And here it says, "Written Closure Plan," and then the last line on that page says, "The written closure plan complies with 845.720." Do you see that?
A. Yes, I do.
Q. I just want to clarify. Where it's discussing the written closure plan here, the attachment says, "Preliminary Written Closure Plan."

Is there a final written closure plan that should have been attached?
A. Again, I did not write either this Section 10, nor the preliminary written closure plan. Why the word "preliminary" is used in this area and not that, you know, I would have to first go back to the regulation. To resolve this, I would have to go back to \(845.230(\mathrm{~d})(2)(\mathrm{J})\) seeing, does that require a written or a preliminary written closure plan, to see which of this wording is actually the correct wording.

\footnotetext{
L.A. Court Reporters, L.L.C.
}


\footnotetext{
L.A. Court Reporters, L.L.C.
}
which are the wells closest -- they're the furthest north closest to the river itself, yes.
Q. Okay. And would you compare sediment to a drinking water standard in your line of work?
A. No, I would not. In general, I believe that the -- a lot of the sediment or surface water requirements are not as stringent as the -- as the drinking water standards, but that relative to walking for seeps, I'm not quite sure how the standard fits in on a sediment standard versus walking to visually inspect for a seep.
Q. Understood. I guess the point I'm just trying to get out is that there are separate standards for drinking water, surface water for aquatic life, and sediment; different types of standards for different reasons?
A. That's my understanding, yes.
Q. Do you ever walk along -- do you ever walk along the intake channel at Powerton for any reason?
A. Along the intake channel, again, we have got wells that parallel along that channel, and so, you know, if I'm out at the site, I'm

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
certainly walking past those wells, and I do look around and in the area and vicinity, yes, as well as our sampling crew.
Q. Okay. Thank you. And with Ms. Gale you were talking about the federal and state rules that would apply to historic fill. Do you remember that?
A. The upcoming or the proposed, yes. There is some rule out there that -- apparently that has come out proposed for the federal rule, and I do know that there is an open sub-docket for -- relative to the state.
Q. Right. And I just wanted to clarify for the record, both of those are currently proposed, but not final. Is that your understanding?
A. That is correct, yes. And I believe I kind of said when \(I\) was talking, if those had passed, then potentially we're looking at up to five different programs at the same time.
Q. Right. And actually, that's funny. That was my next question.

I think you said that that would
be the same ash monitored by five different

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
```

programs. And I just want to clarify, are you --
you are not saying that the historic ash and the
ash in the ponds are the same ash?

```
A. No, no.

MR. RUSS: No further questions.
HEARING OFFICER HALLORAN: Thank
you, Mr. Russ.
Ms. Gale?
MS. GALE: We are done.
HEARING OFFICER HALLORAN: Thank
you, Mr. Gnat, you are done.
THE WITNESS: Thank you, sir.
HEARING OFFICER HALLORAN: Thank
you. We are off the record.
(Whereupon, a lunch break was
taken.)
HEARING OFFICER HALLORAN: All
right. We are back on the record. It's
approximately 1:30. Welcome back from lunch. I believe we have Ms. Wachspress --

MS. WACHSPRESS: Yes.
HEARING OFFICER HALLORAN: -- who
will be calling her witness.
MS. WACHSPRESS: Yes. I would like
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
to call Sharene Shealey, please.
HEARING OFFICER HALLORAN: There
should be room. I don't know if we need those exhibits. I don't think you need them. Okay.

Thank you. If you could raise your right hand, and the court reporter will swear you in.
(Whereupon, the witness was duly sworn.)

HEARING OFFICER HALLORAN: You may proceed. Thanks. WHEREUPON:

SHARINE SHEALEY called as an adverse 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 Ms. Wachspress
Q. Hi, Ms. Shealey. My name is Megan

Wachspress. Could you state your name for the record?
A. And I will spell it, too.
Q. Yeah.
A. It's Sharene Shealey, S-H-A-R-E-N-E, \(\mathrm{S}-\mathrm{H}-\mathrm{E}-\mathrm{A}-\mathrm{L}-\mathrm{E}-\mathrm{Y}\).
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
Q. And I can see you brought a piece of paper with you to the stand today. Could you tell me what's on that piece of paper, please?
A. A list of the impoundments across the four stations.

MS. WACHSPRESS: Okay. And could we -- actually, could we go off the record, your Honor?

HEARING OFFICER HALLORAN: Sure.
(Whereupon, a discussion was had off the record.)

HEARING OFFICER HALLORAN: We are back on the record.

MS. WACHSPRESS: I have been handed a sheet that \(I\) have been told is the same sheet that Ms. Shealey has in front of her. I would like to mark this as Exhibit 1400.
(Whereupon, Complainants'
Exhibit No. 1400 was marked for identification.)

BY MS. WACHSPRESS:
Q. I can just write 1400 on there.

Okay. So, Ms. Shealey, if I
were to use the term "CCR" in this context, would
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
you know what I meant?
A. Yes.
Q. Okay. And what -- what would you
assume that I meant by that word or CCR?
A. I would presume you meant coal
combustion residuals.
Q. Great. And if I were to use the term "coal ash," what would you understand me to mean?
A. Ash that is produced from the burning of coal.
Q. Okay. Great.

And if I were to use IEPA to
stand for the Illinois Environmental Protection
Agency, would we understand each other?
A. Yes, we would.
Q. And if I were to use US EPA for the
federal Environmental Protection Agency, would we understand each other?
A. Yes, we would.
Q. Okay. Great.

Are you familiar with the
Resource Conservation and Recovery Act?
A. By title.
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
Q. And if \(I\) were to refer to that as RCRA, would we understand each other?
A. Yes, we could.
Q. Okay. Are you familiar with Part 257 of RCRA regulations?
A. Yes.
Q. Can you briefly describe your understanding of these regulations?
A. And I will rephrase that. I'm not sure I'm familiar with all of Part 257. I am familiar with the part that deals with coal combustion residuals, which may be Subpart D or E.
Q. That's my understanding as well. So if I refer to Part 257 to refer to the parts of that regulations dealing with CCR, would we understand each other?
A. Yes.
Q. Okay. And are you familiar with the Illinois Part 845 regulations?
A. Yes.
Q. So if I refer to Part 854, we will understand each other?
A. Yes, we will.
Q. Okay. Great.
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

\section*{Who is your current employer?}
A. I do -- I work for Midwest

Generation.
MS. WACHSPRESS: Okay. At this
time, your Honor, I would like to move -- to treat this witness as adverse for the remainder of the direct examination.

HEARING OFFICER HALLORAN: Ms. Gale?
MS. GALE: No objection.
HEARING OFFICER HALLORAN: Thank
you. Granted.
WHEREUPON:
SHARENE SHEALEY
called as an adverse witness herein, pursuant to
Section 1-01.624 of procedural rules of the
Illinois Pollution Control Board, having been
first duly sworn, deposeth and saith as follows:
CROSSEXAM I NATION
by Ms. Wachspress
Q. Okay. When did you come to work for

Midwest Generation?
A. I'm so sorry. Excuse me.

Come to work for is slightly
different, and I'm not trying to be difficult at
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
all. I probably was hired to work for Midwest
Generation in the fall of 2014. I came to
Illinois in the winter of 2015.
Q. Okay. And so have you ever been
employed by NRG?
A. Yeah. Yes, I think so.
Q. And when did you first begin to be employed by NRG?
A. I didn't write that on my sheet.

Sorry. I believe it was December of 2012.
Q. Okay. And so to make sure I understand your testimony, in December of 2012, you began working for NRG, and then in fall of 2014, you left NRG and started to be employed by Midwest Gen?
A. I think that -- well, I am paid by NRG, but my work is for Midwest Generation.
Q. Okay. So NRG continues to pay you today?
A. Yes.
Q. Okay. And you said your work is for Midwest Gen?
A. Yes.
Q. Tell me about that work. Could you
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
describe your job responsibilities for me?
A. I can attempt to. I am the Director of Environmental for Midwest Generation, which means that \(I\) deal with all things -- well, maybe not all. A lot of things that are related to environmental compliance or planning with regard to operations of the plants.
Q. And when you say the plants, which plants are you referring to?
A. Every plant that Midwest Generation owns.
Q. Okay. And that would include Joliet \(29 ?\)
A. Yes.
Q. And Waukegan?
A. Waukegan station, yes.
Q. And Powerton?
A. Station, yes.
Q. And Will County station?
A. Yes.
Q. Yes. Okay. And so are you the lead environmental compliance officer at each of those plants?
A. I would never consider myself to be
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
an officer.
Q. Okay.
A. But \(I\) am the lead compliance, yes, generally.
Q. Do you cover any particular regulatory compliance issues at those plants or are -- go ahead.
A. No. That -- and that's why I said I would attempt to describe. I kind of do everything.
Q. So if there is an environmental issue, you are involved in that at those plants?
A. Not 100 percent, but, yes, generally.
Q. Okay. And so -- and so in particular, you're responsible for environmental compliance with respect to rules governing the disposal of CCR?
A. Is that a question?
Q. Yes. In particular, are you responsible for the compliance with rules governing the disposal of CCR?

MS. GALE: Objection to the extent that the rules of disposal -- it's not just

\footnotetext{
L.A. Court Reporters, L.L.C.
}
disposal under the rules.
MS. WACHSPRESS: I will rephrase.
MS. GALE: Thank you.
BY MS. WACHSPRESS:
Q. You have primary responsibility for compliance with rules governing CCR at the four plants we have discussed, correct?
A. Primary is tough for me, but \(I\) do have responsibility for that -- what you stated.
Q. Why is primary tough for you?
A. There are an abundance of -there -- there's a team. I am just a member of a team.

\section*{Q. And who are the other members of}

\section*{that team?}
A. One of my responsibilities is to hire consultants, and as Mr. Gnat testified with the -- with regard to the operating permit operation applications, there are -- I think those -- some of those applications may have up to five or six different consulting firms.

So I would be responsible for finding and working with the consultants towards compliance.
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
Q. But those consultants are not employed by NRG, correct?
A. Correct.
Q. Correct. So --
A. Well, yeah, I -- technically, no, I guess, yes.
Q. Okay. Is there anyone employed by NRG that you would consider part of this team?
A. Yes.
Q. Okay. And how many people would you say?
A. I -- I am uncertain of that number. As an example -- and I'm going off track.
Yes, I am -- I'm really
uncertain. It has -- it's more than a handful.
Q. Okay. And are you primarily responsible for compliance with rules governing groundwater quality at the four plants at issue in this proceeding?
A. Yes.
Q. And are you primarily responsible for compliance with rules governing the release of waste into surface waters at the four plants covered by this proceeding?
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
A. If you mean discharges?
Q. Discharges, yes.
A. Not exactly, but I am involved.
Q. Okay. Is your approval required before certain documents are filed with state regulators?
A. Approval is a strong word.

Agreement would probably be a better characterization.
Q. Is that also the case with filings with federal regulators?
A. Yes.
Q. Okay. And which of those documents is your agreement required on?
A. There -- those are -- there are hundreds of documents I touch, but with -- I'm sorry.
Q. No, no.
A. Literally, hundreds.
Q. Is your agreement required for
filings under Part 257?
A. Generally.
Q. Okay. What about Part 845?
A. I can think of an example where I
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
have removed myself from the process or have been removed, however you would like to look at it.
Q. And was that an occasion involving one of the plants that we are discussing here today?
A. The only plants that \(I\) work with would be -- are subject to Part 845.
Q. Is your approval required before certain actions are taken at the four plants?
A. Approval, again, is a strong word, but agreement I would say I would -- I would definitely be a member of a team who would agree to do things, yes.
Q. And what sorts of actions would your agreement be --
A. A simple example is Part 845 requires public hearings -- public meetings. Forgive me. Public meetings to be held prior to operating permit application -- or construction permit application submittals. I would be a -I -- I would set the date, essentially, of those meetings.
Q. What about sampling, would your agreement be --
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
A. We don't sample in-house. We contract that out. So I would be involved in hiring the contractor.
Q. And would your agreement be involved in the work order or the specification sent to that contractor?
A. The request for proposal would probably go through me, yes.
Q. Okay. Okay. And what about removal of CCR at the plants? Would your agreement be part of that?
A. No.
Q. Would you be informed?
A. I believe, generally, but I don't know what \(I\) don't know.
Q. Okay. Okay. Are you involved in the preparation of permit applications under -well, scratch.

Are you involved in reporting under Part 257 of RCRA?

MS. GALE: Objection, vague.
Reporting. Reporting of what?
HEARING OFFICER HALLORAN: Yeah.
Could you rephrase, please?
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023

BY MS. WACHSPRESS:
Q. Is it your understanding that Part 257 of RCRA requires that owners and operators publish certain information about CCR units at their sites?
A. Yes.
Q. Yes. Okay.

Are you involved in the preparation of those reports that are published pursuant to Part 257 for the plants for which you are responsible?
A. I cannot say 100 percent, but generally, yes.
Q. Generally. And it is correct that Illinois Part 845 also requires certain reporting, as well as permit applications; is that correct?
A. Correct.
Q. Okay. Are you responsible in the preparation of the reporting for Illinois Part 845?
A. That's an example of where I'm -Part 845 requires sampling be reported, I think, within 14 -- I would have to read the regs, but within 14 or 30 days. I do not review those
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023

14-day reports anymore. So I'm not completely
involved in reporting for Part 845.
Q. So is it fair to say that you are generally involved, but when timing prevents you from the opportunity of reviewing the materials, you do not necessarily --

MS. GALE: Objection. Misstates her
testimony.
BY MS. WACHSPRESS:
Q. Is it fair to say that you are
generally involved in that reporting --
A. Yes.
Q. -- with the exception of -- with the exception of sampling under a short time frame for reporting?

MS. GALE: Again, same objection.
HEARING OFFICER HALLORAN:
Sustained.
BY MS. WACHSPRESS:
Q. Would you say -- would you say you
are generally involved in reporting for Illinois Part 845, with exceptions?
A. Yes.
Q. Okay. And one of those exceptions
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
is when sampling data must be turned around in a short period of time?
A. Yeah. And another one that came immediately to mind is that we are required to post our weekly inspections, I believe. I believe that's a requirement, and that's kind of where you can tell that I'm not really involved in that, because I believe it is. So I would not review every week's inspections at every facility or for every unit.
Q. And you -- can you think of any other exceptions to that general rule as we sit here?
A. Not immediately, I cannot. Nothing comes to mind.
Q. Okay. So sometimes water that is in a coal ash impoundment will be discharged into surface waters of the United States, correct?
A. Correct.

MS. GALE: Objection, foundation.
HEARING OFFICER HALLORAN:
Sustained. Ms. Wachspress, rephrase. BY MS. WACHSPRESS:
Q. Are you familiar with the term
"Surface Waters of the United States"?
A. Yes.
Q. Okay. And that term refers to
waters that are subject to the Clean Water Act?
A. Yes. And I actually would have
called -- I think the correct -- the term is Waters of the United States. Not Surface Waters of the United States. That's the term I'm familiar with, Waters of the United States.
Q. Thank you. And it is the case that impoundments, which are places for the storage of water and coal ash, sometimes have outfalls, correct?
A. Impoundments don't necessarily contain both water and coal ash. My simple understanding is that an impoundment impounds a material.
Q. So I'm referring -- if I -- if I refer to the term "coal ash impoundment," can we understand that I mean an impoundment with both coal ash and liquid material in it?
A. Yes.

HEARING OFFICER HALLORAN: Can you
speak up?

\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023


\footnotetext{
L.A. Court Reporters, L.L.C.
}

Electronic Filing: Received, Clerk's Office 05/22/2023
that there are pipes or other places where water exits from the impoundment in -- from the coal ash impoundment into another facility, correct?
A. Into a --

MS. GALE: Objection, vague.
BY MS. WACHSPRESS:
Q. Okay. Scratch it. Okay.

Let's just stick with the
outfalls. Okay? In the case where a coal ash impoundment has an outfall, if that outfall were to exit into a waters -- Water of the United States, a permit under the Clean Air Act would be required for that outfall; is that correct?
A. No.

MS. GALE: Objection, foundation.
Did you say Clean Air Act?
BY MS. WACHSPRESS:
Q. Oh, sorry. Clean Water Act. I misspoke. I'm sorry.

All right. I'm just going to -I'll -- all right. We will come back to that one. Okay.

If Midwest Generation files
construction permits for CCR facilities, are you
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
involved with the preparation of those permit applications?

MS. GALE: Objection. Vague as to CCR facilities.

HEARING OFFICER HALLORAN: Yeah. BY MS. WACHSPRESS:
Q. If Midwest Generation files construction permits for places where CCR is held, disposed, or stored, are you involved with the preparation of those permit applications?

MS. GALE: Objection. Vague as to
construction permits. Are we talking about the construction permits under the Illinois rule? Are we talking about construction permits under a different rule?

HEARING OFFICER HALLORAN:
Sustained. Ms. Wachspress? BY MS. WACHSPRESS:
Q. All right. If Midwest Generation files construction permits under Illinois law, as required by Illinois law for facilities for the storage, disposal -- or disposal of CCR, are you involved with the preparation of those permit applications?
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]


\footnotetext{
L.A. Court Reporters, L.L.C.
}
excuse me -- scratch -- placement of CCR?
MS. GALE: I guess, objection,
vague. Placement where? I mean --
BY MS. WACHSPRESS:
Q. On -- at the -- at the Joliet 29
site, for example.
MS. GALE: In an impoundment? I'm
not quite following.
HEARING OFFICER HALLORAN: She can
answer, if she is able.
BY THE WITNESS:
A. And -- okay. I need the question again because -- I'm so sorry. Am I --

HEARING OFFICER HALLORAN: Shall we read the question back or --

MS. WACHSPRESS: Yeah, why don't we read the question back.

THE WITNESS: Okay. Thank you.
(Whereupon, the record was read as requested.)

BY THE WITNESS:
A. My knowledge of the history of permitting, for example, at Joliet 29 is that they have N-P-D-E-S permits, NPDES permits. They are
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]
operating permits, or NPDES permits. They have construction permits, and we have applied for an operating permit under Part 845, but 845 doesn't restrict me from placing ash in an impoundment today.

BY MS. WACHSPRESS:
Q. Okay. So the 845 applies to the
construction of the facility to place the CCR --
A. If you're constructing a new facility --

THE COURT REPORTER: Sorry. The end of your question.

HEARING OFFICER HALLORAN: Yeah.
You've got to keep your voice up at the end. BY MS. WACHSPRESS:
Q. Oh, I'm sorry. Okay. So Part 845 applies to the construction of the facility in which the CCR is placed?
A. If it were new construction, yes. We -- the -- my understanding is the facilities we are here to discuss existed, so I did not need or we -- Midwest Generation did not need permits to construct the impoundments that may or may not be coal ash impoundments that are on my list.

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
Q. Are you involved in the preparation of documents required by Part 257 of the RCRA rules -- the RCRA CCR rules?
A. Generally. Not -- not -- may or may
not be 100 percent.
Q. Could you give an estimate of what percentage?
A. Most. No, I cannot. I'm sorry.
Q. But most would be a fair characterization?
A. Most would be fair, yes.
Q. And you receive the results of groundwater testing for purposes of compliance with federal regulations, correct?
A. Yes.
Q. For purposes of compliance with state regulations?
A. Yes.
Q. And do you receive the results of any testing done for CCR constituents at the four Midwest Generation sites?
A. Not 100 percent of the time, no.
Q. And under what circumstances would you not receive such results?
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
```

    A. When stations need to empty
    impoundments under routine operations, I would
generally not see the sampling results.
Q. But that's the only exception you
can think of?
A. As I sit here right now.
Q. Okay.
A. I'm not certain that there aren't
others, though.
Q. What about the results of testing
for CCR constituents in soil or subterranean
materials? Would you receive those?
A. I believe so.
Q. And you would receive the results of
testing for CCR constituents in groundwater at the
four Midwest Generation sites?
A. Yes.
HEARING OFFICER HALLORAN:
Ms. Wachspress, you are tailing off at the end of
your --
MS. WACHSPRESS: Oh, I'm so sorry.
I'm so sorry.
HEARING OFFICER HALLORAN: No, no,
that's -- it's fine.

```
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
\begin{tabular}{|c|c|}
\hline & Page 172 \\
\hline MS. WACHSPRESS: I'm trying not to & \\
\hline shout, but it's -- & \\
\hline HEARING OFFICER HALLORAN: I know. & \\
\hline Just act like you are an angry -- I'm an angry & \\
\hline hearing officer. & \\
\hline BY MS. WACHSPRESS: & \\
\hline Q. You are included on correspondence & \\
\hline from Midwest Generation to IEPA, correct? & \\
\hline A. Correct. & \\
\hline Q. Correct. Okay. And vice versa, are & \\
\hline you included on correspondence to I -- from IEPA & \\
\hline to Midwest Generation? & \\
\hline A. In many instances, yes. & \\
\hline Q. In many. In instances involving & \\
\hline coal ash? & \\
\hline A. Not 100 percent, but yes. & \\
\hline Q. And when you say not 100 percent, & \\
\hline what exceptions can you think of? & \\
\hline A. The immediate one that comes to mind & \\
\hline is I don't -- I don't believe I receive the & \\
\hline invoices. I could. I'm not sure, to be honest. & \\
\hline Q. But other than invoices, you can't & \\
\hline think of any exceptions? & \\
\hline A. I can think of other exceptions. & \\
\hline
\end{tabular}
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023


\footnotetext{
L.A. Court Reporters, L.L.C.
}
```

            Q. And does he cover more than the four
    plants at issue in this case?

```
A. Yes.
Q. Okay. Does he cover all of the NRG plants?

MS. GALE: Objection, relevance.
HEARING OFFICER HALLORAN:
Sustained.
MS. WACHSPRESS: Your Honor, later on I'm going to ask about her familiarity with documents and practices at these plants, and I want to get a full understanding of her degree of knowledge about the operation of the organization.

MS. GALE: Again, that -- but that has nothing to do with NRG. We are talking about the four plants at -- and these four -- she has established that she is generally familiar with the documents coming in and out of those stations, and if they don't come to her, she sees them.

HEARING OFFICER HALLORAN: I -that's my understanding, correct. I'm not sure NRG is a part of this situation. BY MS. WACHSPRESS:

\section*{Q. Who at Midwest Generation could}

\footnotetext{
L.A. Court Reporters, L.L.C.
}
direct the construction of a well for obtaining samples for testing groundwater at Joliet 29?
A. There are several people I could think of. So it -- and it would depend on the situation and need, the reason for constructing the well, who would be the director of that work.
Q. Even within the category of testing groundwater, taking groundwater samples?
A. Even within the category of taking groundwater samples, yes.
Q. Would you be informed if such a well were constructed?
A. Generally, yes.
Q. And that's also true at Powerton?
A. Yes.
Q. At Waukegan?
A. I believe so.
Q. And at Will County?
A. Yes.
Q. Great. Who at Midwest Generation could direct the sampling of soil material at Joliet?
A. Same answer. It could be any number of people, depending on the reason or need.
\[
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
\]

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
Q. But you would be informed if such
sampling were to take place?
    A. My -- yes, I believe so.
    Q. And the same is true at Powerton?
    A. Yes, I believe so.
    Q. Waukegan?
    A. I believe so.
    Q. And Will County?
    A. Yes, I believe so.
    Q. Okay. Who at Midwest Generation
    could direct the removal of CCR material from a
site?
    A. Again, an abundance of people.
    Q. Would you be informed?
    A. No, not necessarily.
    Q. Not necessarily, okay.
    A. Again, I'm --
    Q. Do you have any direct reports?
    A. Yes.
    Q. How many?
    A. One.
    Q. One. And what's their role?
    A. She is an air compliance specialist.
    Q. Okay. A topic we will likely not be
```

[^22]getting into today.
All right. If I could direct your attention to MWG -- Exhibit MWG 636. Do you recognize this document?
(Whereupon, MWG Exhibit No. 636
was previously marked for identification.)

BY THE WITNESS:
A. Not offhand, but I know what it is. BY MS. WACHSPRESS:
Q. Okay. And what is it?
A. It looks like a -- well, it's the Agency's acceptance of a compliance commitment agreement.
Q. And that compliance commitment agreement is between Midwest Generation and Illinois EPA, correct?
A. That's what it looks to be, yes.
Q. And if I use CCA for compliance commitment agreement, will we understand each other?
A. Yes, we will.
Q. Great. And this is dated

October 24th, 2012?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

A. Yes.
Q. Okay. And it's in relation to the Powerton generating station, correct?
A. That's what it appears, yes.
Q. All right. If I could direct your page -- your attention to Bates number 554, and I'm going to read Item $5(\mathrm{a})$. Okay. "The ash ponds at Powerton shall not be used as permanent disposal sites and shall continue to function as treatment ponds to precipitate ash. Ash shall continue to be removed from the ponds on a periodic basis."

Have I read that correctly?
A. Yes.
Q. Okay. And then I will direct your attention to $5(e)$ on the same page, and $I$ will read, "Within 90 days of the effective date of the CCA, Midwest Generation shall submit an application for a construction permit to re-line the ash surge basin and the secondary ash settling basin at Powerton with a 60-mil thickness high density polyethylene HDPE liner or an Illinois EPA approved equivalent material." Is that correct?
A. Yes.

[^23]Q. What is your understanding of what would have occurred if Midwest Generation had not agreed to the CCA?

MS. GALE: Objection. It calls for a legal conclusion. Speculation.

HEARING OFFICER HALLORAN: Yeah, I agree. It's --

MS. WACHSPRESS: Your Honor, she was -- has already said that she was employed by NRG at the time that this was signed. I'm asking her, her understanding, not for a legal conclusion, and I think it's fair to say what Midwest Gen believed to be the case was the alternative to signing the CCA in understanding the circumstances surrounding it and its impact on this case.

MS. GALE: If I may respond?
HEARING OFFICER HALLORAN: Yes.
MS. GALE: She was -- this is
addressed to Midwest Generation. She wasn't with Midwest Generation until 2014. This document is from 2012. So any -- her understanding in 2012 would -- is -- just doesn't exist.

HEARING OFFICER HALLORAN:

[^24]Ms. Wachspress?
BY MS. WACHSPRESS:
Q. Were you responsible for the

Powerton generating station in 2012?
A. No.
Q. No. You did not come to be
responsible for the Powerton generation -generating station in 2014?
A. I'm sorry. I'm not playing semantics for --
Q. No, no, no.
A. But I didn't come to be responsible until way after I got here.
Q. When -- when --
A. I have been learning as I have been going.
Q. Okay. When --
A. I did not appear until -- I moved to Illinois in February of 2015.
Q. When did you first become responsible for the Powerton generating station?
A. I would probably guess around the time I moved here.
Q. So around 2015?

[^25]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
A. Late '14, but, yeah, probably '15 is more accurate.
Q. Okay. So if I could refer you to the first page of this exhibit, Bates numbered 552, and it states, "Failure to fully comply with the CCA may, at the sole discretion of the Illinois EPA, result in referral of this matter to the Office of the Attorney General, the State's Attorney General, or the U.S. Environmental Protection Agency."

Based on your eight years of experience as dealing with environmental matters with respect to the Powerton generating station, how would you understand that statement?
A. I'm not sure what you are asking. Is it -- it's sort of -- it's plain language.
Q. Based on this language, what would you understand the consequences of failing to sign the CCA would have been for Midwest Generation?
A. I don't think this is failing to -MS. GALE: I guess, object to legal.

This is a legal document, and she is asking what would the consequences be if the Illinois EPA would -- had made a decision. I just am not --

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

objection.
MS. WACHSPRESS: I mean, based on her years of experience as an environmental compliance employee of Midwest Generation how she would have understood a statement in a document that was sent not to another attorney, but to a senior vice president at Midwest Generation.

HEARING OFFICER HALLORAN: You know, I think she can give her -- opine exactly what -or not exactly, but just kind of opine what she thinks that means based on her years of experience, but I do note -- and I'm not sure if they still use the same language -- this is a 2012 document. She just stated she didn't start until 2014.

But she may answer if you are
able.
BY THE WITNESS:
A. I guess, you asked me, had they not signed this document? They did sign the document. So I don't understand what you mean.

This is -- this is -- I -- my
understanding without having read it completely is that this is the result of them having signed.

Yes. Because the signatures are on the back page. BY MS. WACHSPRESS:
Q. So if I could -- I'll refer you to page 5, Bates number 555, number 6, and direct you to where it says, "Respondent shall comply with all provisions of the CCA, including, but not limited to, any appendices to the CCA and all documents incorporated by reference into the CCA. Pursuant to" -- and then there's a citation -- "if Respondent complies with the terms of this CCA, the Illinois EPA shall not refer the alleged violations that are the subject of the CCA as described in Section II above to the Office of the Illinois Attorney General or the State's Attorney of the county in which the alleged violations occurred."
So I will ask a slightly
different question. Is it your understanding based on that statement, that if Powerton had failed to install the HDPE liner as described in $5(e)$, that the violations described in this could be referred to the Attorney General?

MS. GALE: Objection. Again, calls
for a legal conclusion.

HEARING OFFICER HALLORAN: Calls for
what?
MS. GALE: A legal conclusion.
MS. WACHSPRESS: I'm asking -- I
mean, I could go through it again, and say, asking on the basis of her experience and --

HEARING OFFICER HALLORAN: Well, you
know, she can. The Board can parse that out, whether it's legal or not.

If you can answer, Ms. Shealey,
please do so.
BY THE WITNESS:
A. I'm sorry. Just to be clear, whether Powerton had not complied with the CCA as written, whether they could be referred to the Attorney General or State's Attorney? BY MS. WACHSPRESS:
Q. Yes.
A. That's exactly what $I$ think it says.
Q. Okay. Let's turn to MWG 647. This

## is the Waukegan CCA.

(Whereupon, MWG Exhibit No. 647
was previously marked for
identification.)

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$



[^26]Electronic Filing: Received, Clerk's Office 05/22/2023
respect to the Powerton CCA, were these CCAs ever discussed since you came to Midwest Gen in 2015?
A. Mr. Gnat, I think, clearly testified that he does CCA monitoring, and so yes.
Q. But within Midwest Generation, were these CCAs ever discussed or --
A. Well, I'm sorry. I'm sorry to
interrupt you. I'm so sorry.
Q. It's okay.
A. Okay.
Q. I get excited, too.

Within Midwest Generation, were
these CCAs ever discussed?
MS. GALE: Objection, vague at ever.
HEARING OFFICER HALLORAN:
Sustained.
BY MS. WACHSPRESS:
Q. Have you been part of any conversations in which -- within Midwest Generation in which the CCAs were mentioned?
A. Yes.
Q. Okay.
A. I am involved with hiring Mr. Gnat, and I have to tell the plant managers to pay

[^27]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

Mr. Gnat, or whoever our contractor is. So I talk
about this annually with our plant managers so
that we can continue to do the monitoring.
Q. So you are pretty familiar with
these CCAs then?
A. I -- I'm familiar.
Q. Okay. Familiar enough to be
responsible for the hiring of the contractors to fulfill the terms of the CCA?

MS. GALE: Objection. Misstates
testimony.
HEARING OFFICER HALLORAN: Correct.
Sustained. Rephrase.
BY MS. WACHSPRESS:
Q. You just testified that you were responsible for hiring Mr . Gnat and other consultants for testing in accordance with the terms of the CCA. Is that a fair restatement of your testimony?
A. I'm sorry. Responsible for or involved with, yes.
Q. Yes.
A. Yes.
Q. Okay. So would you say you are

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

familiar enough with the CCAs to be responsible for or involved in the hiring of consultants responsible for fulfilling one or more of the terms of the CCAs?

MS. GALE: I would object to the extent that some of the terms are already over and no longer applicable. This is a ten-year-old document.

MS. WACHSPRESS: Your Honor, I asked about her familiarity with it.

HEARING OFFICER HALLORAN: She can answer. Overruled. BY THE WITNESS:
A. I guess familiar is a -- I don't know -- it's kind of fuzzy to me. I know that I have to -- Midwest Gen has to continue to monitor groundwater. That is the thing I am completely familiar with. The rest of this, probably, but as I sit here today, I could not quote chapter or verse anything except for the fact that we continue to monitor groundwater.

BY MS. WACHSPRESS:
Q. Would you be in a position -- all respect to Mr . Gnat, but if the testing were to

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023

```
come up short of what was required under the CCA,
would you be in a position to recognize that the
testing came up short?
```

A. More likely than not.
Q. Okay.
A. Oh, no. I'm so sorry. What do you
mean by came up short? Like I don't -- yeah.
What do you mean by came up short?
Q. If you felt that the testing did not fulfill the terms of the CCA, would you be in a position to basically quality control Mr. Gnat's work?
A. I'm reviewing the CCA to make sure --

HEARING OFFICER HALLORAN: Oh, sure. Take your time, Ms. Shealey.

BY THE WITNESS:
A. If Mr. Gnat or if any consultant who would do our groundwater monitoring would not include the list of constituents that are in the CCA, and I was aware of that, I would be in the position to redirect the work, yes. BY MS. WACHSPRESS:
Q. But my question goes to whether you

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

would be aware of that.
Would you be aware looking at
the report whether it met the requirements of the CCA?
A. I cannot say that each quarter I go through -- okay. First off, I do not have this list of constituents memorized, nor do I quarter by quarter go through the list to QA our consultants' work.

So if I -- as I stated, if I see it, if I'm aware, I am the one who will remedy that.

MS. WACHSPRESS: Okay. Your Honor, may I take just one minute to confer with co-counsel?

HEARING OFFICER HALLORAN: You may. We are off the record.
(Whereupon, a short break was taken.)

HEARING OFFICER HALLORAN: Back on
the record.
BY MS. WACHSPRESS:
Q. And just if I haven't been clear about where in the document, please just let me

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
know, and I can help you, help you find that.
Okay. So we are looking at
liability phase Exhibit 6 -- 647. And is -- do you recognize this document?
A. I don't have a document.
(Whereupon, a discussion was had off the record.)

BY MS. WACHSPRESS:
Q. This is the next one.
A. Oh, I'm sorry. She called it liability. I'm sorry, Mr. Hearing Officer. When you said liability, I expected to hear you say MWG 647. That's what $I$ was expecting to hear. I was thinking you were giving me something new.
Q. You're right. I -- I think we all got a little bit lost. So do you recognize this document?
A. I know what it is.
Q. Okay. And this is a compliance commitment agreement between Midwest Generation and the Illinois EPA, correct?
A. It is the acceptance of that agreement, yes.
Q. Okay. And this is for Waukegan
station, correct?
A. Correct.
Q. Okay. And would any of the answers
you just gave with respect to Powerton differ with respect to Waukegan?

MS. GALE: Objection, compound.
HEARING OFFICER HALLORAN:
Sustained. Break it up, please. Thanks.
MS. WACHSPRESS: Okay. Your Honor, I am just trying to move things along here.

HEARING OFFICER HALLORAN: I know.
MS. WACHSPRESS: Okay.
HEARING OFFICER HALLORAN: But it's
not working.
MS. WACHSPRESS: Okay. Okay.
HEARING OFFICER HALLORAN: It hasn't worked for the last three and a half days, so -BY MS. WACHSPRESS:
Q. All right. All right. All right. All right. Have you ever been in a conversation where this CCA was discussed within Midwest Generation?

MS. GALE: Same objection. Vague.
Sorry. Same objection, vague. I should speak

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

more clearly.
HEARING OFFICER HALLORAN: Can you
rephrase?
MS. WACHSPRESS: Your Honor, I'm
asking if she has ever been in a --
HEARING OFFICER HALLORAN: Just --
BY MS. WACHSPRESS:
Q. Have you ever had cause to discuss this CCA with other employees of Midwest Generation?
A. Yes.
Q. Yes. And do you have any responsibility with respect to fulfilling the terms of this CCA?
A. Similar to my answer, I think for Power- -- we were at Powerton's CCA, yes, I would specifically be responsible for finding and recommending consultants to complete groundwater monitoring.
Q. Okay. All right. And I know we had some back and forth about your ability to oversee the work of those consultants.

Would you be able to evaluate if the work of the consultants fulfilling the terms

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
of the Waukegan CCA did not comply with that CCA?
A. Would I be able to? I am capable of, yes.
Q. So you have sufficient understanding of the CCA to do that?
A. As I sit here today, I believe I do.
Q. Okay. Great. All right. Now, we
are going on to MWG Exhibit 656 from the liability phase. So this is not a new exhibit. Okay. Do you recognize this document?
(Whereupon, MWG Exhibit No. 656
was previously marked for identification.)

BY THE WITNESS:
A. I know what it is.

BY MS. WACHSPRESS:
Q. Okay. And what is it?
A. It is the compliance commitment agreement with regard to Violation Notice W-202 --2012-00058 between the Agency and Midwest Generation for Will County station.
Q. Okay. So this is a compliance commitment agreement between Midwest Generation and the Illinois EPA, correct?

[^28]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
A. This is the acceptance of it, yes.
Q. The acceptance of it. Okay. And if you will turn the page, you will see the agreement itself is attached to the -- to the acceptance letter?
A. I do see that now.
Q. Okay. Okay. And have you participated in discussions with other Midwest Generation employees about this CCA?
A. Similar to my responses for Powerton and Waukegan, I am very involved in securing contractors for groundwater monitor -- monitoring under this CCA.
Q. And similar to the other sites, you are sufficiently knowledgeable about the CCA that you would be able to know if the work performed by consultants was not in compliance with the CCA?

MS. GALE: Objection as to
monitoring. I think that's what she -- her testimony has been.

MS. WACHSPRESS: She testified more generally than that with respect to Waukegan. She didn't limit her answer to monitoring with respect to her work with consultants.

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

HEARING OFFICER HALLORAN: You can
answer, if you are able.
BY THE WITNESS:
A. I lost my answer. Could you read it back to me? I'm so sorry.

HEARING OFFICER HALLORAN: Yeah.
Could you read it back, Kari, please?
(Whereupon, the record was read as requested.)

BY THE WITNESS:
A. And I didn't say it at Waukegan, but I said it at Powerton, and I will go back and state it for Waukegan. I do not have this list of parameters memorized, nor do I quarter by quarter QA that every parameter is included in each report.

I would hope that if I would miss it, the Agency would catch it, because those reports are submitted to the Agency. BY MS. WACHSPRESS:

## Q. Okay. All right. Let's do Midwest

Gen Exhibit 626. Okay. Do you recognize this document?

[^29]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
(Whereupon, MWG Exhibit No. 626
was previously marked for
identification.)
BY THE WITNESS:
A. I am aware of what it is.

BY MS. WACHSPRESS:
Q. Okay. What is it?
A. It is the compliance commitment
acceptance for Violation Notice W-2012-00059
between Midwest Generation and the Illinois EPA for Joliet 29 station.
Q. Okay. And you will note that if you turn over to the following page, the agreement itself is part of the document.
A. Yes, thank you. I do see it.
Q. Okay. And so this CCA is between Midwest Generation and the Illinois EPA, correct?
A. Yes.
Q. And it relates to Joliet 29,
correct?
A. Correct.
Q. Okay. And do you have any responsibility with respect to complying with the terms of this CCA?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

```
    A. Yes.
    Q. Okay. And what are those
responsibilities?
    A. I cannot -- without having read this
line by line immediately, I cannot -- it goes back
to the other ones. I cannot without reading them
line by line tell you what all of my
responsibilities are for compliance. Some of
these things happened before I even knew Midwest
Gen existed, but currently the thing that comes to
mind first is responsibility for ensuring that the
groundwater monitoring is done.
    Q. Okay. And your responsibilities
with respect to that groundwater monitoring
include hiring consultants to carry it out,
correct?
    A. Correct.
    Q. And you are sufficiently
knowledgeable about the CCA, such that if the
consultants' work were not to meet the terms of
the CCA, you would be able to identify that,
correct?
                            MS. GALE: Objection, misstates
testimony.
```

HEARING OFFICER HALLORAN: She can answer, if she is able.

BY THE WITNESS:
A. Again, I do not know the list of constituents that are included in 620.410(a) by memory, nor do $I$ quarter by quarter $Q A$ the groundwater monitoring reports against that list. If $I$ were made aware that something -- if $I$ did do that, or I do do that, and I'm aware that
something is missing, I would be responsible for that.

BY MS. WACHSPRESS:
Q. And you have mentioned monitoring. Are there any other aspects of the CCA for which you have some responsibility?
A. The CCAs require that certain
ponds -- and I'm speaking generally across all four CCAs -- certain ponds be re-lined. Excuse me. I am responsible for helping the plants to ensure compliance with liner integrity requirements. There may be other things, again, not having read each term.
Q. Okay. All right. I would like to introduce marked as 1401 for now -- marked for

Electronic Filing: Received, Clerk's Office 05/22/2023
labeling purposes Exhibit 1401.
(Whereupon, Complainants'
Exhibit No. 1401 was marked for identification.)

BY MS. WACHSPRESS:
Q. All right. Ms. Shealey, do you recognize this document?
A. Yes.
Q. Okay. What is it?
A. It is an -- oh, wait. Let me just make sure. It is an alternate capacity demonstration for Powerton station.
Q. I think you misstated that slightly. It's an alternate --
A. Alternate closure. Sorry.
Q. -- closure.
A. Alternate closure. Sorry. It's an alternate closure dem- -- no alternative capacity, right? But anyway. It's an alternate closure demonstration. I don't think I misstated. I'm not sure.
Q. It's not -- I won't testify on the record, but I think -- it is an alternate closure demonstration and capacity is part of what it's

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

about, so yes.
And have you seen this document
before today?
A. Yes.
Q. Okay. And this is an application
filed in 2020 requesting an alternative deadline to initiate closure of the ash surge basin at the Powerton facility, correct?
A. I believe so, yes.
Q. Okay. And who filed this application?
A. Midwest Gen.
Q. And I'm going to direct you to the very first page. At the bottom it states it was filed by David Bacher of NRG energy, so --
A. Okay. Then that's who it was.
Q. And this application was filed in November of 2020, correct?
A. Correct.
Q. Okay. And under federal regulations at the time, it was Midwest Generation's understanding that the deadline to close the ash surge basin was April 11th, 2021, correct?

MS. GALE: Objection, foundation.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023


[^30]Electronic Filing: Received, Clerk's Office 05/22/2023

What role? Sorry. I'm not being facetious. Lots of them. I may or may not. I cannot say specifically. I definitely -- the one thing I can definitely say specifically, I reviewed it before it left.
Q. Okay. And was your agreement required for the submission of this application?
A. Yes. Required is strong. I'm so sorry. Required is a strong word. It was definitely sought.
Q. Okay. At the time this application was filed, Midwest Generation did not seek an extension of the deadline to initiate closure of the bypass basin, correct?
A. At the time this was filed, no.
Q. And in this application, Midwest Generation represents that the bypass basin had already ceased receipt of $C C R$ at the time the application was filed, correct?
A. I would have to read the application.
Q. Yeah. So I'm going to direct you to Bates number 78832, and the first full paragraph. And I will read it.

[^31]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023


[^32]bypass basin had already complied with the April 2021 deadline for closure, correct?
A. I don't believe that that's what
that sentence says.
Q. Okay. So was it Midwest

Generation's position that the bypass basin had not yet complied with the April 2021 deadline for closure?

MS. GALE: Objection. Misstates -mischaracterization of law and of any sort of deadline closure.

MS. WACHSPRESS: Your Honor, I asked about Midwest Generation --

HEARING OFFICER HALLORAN: Could you rephrase, please?

BY MS. WACHSPRESS:
Q. I asked her, was it Midwest Generation's -- was it Midwest Generation's position that the bypass basin had already complied with the April 2021 deadline for closure at the time it filed this application?
A. We took it out of service. No, because it says, we will not send wastestreams after April 11th of 2021, and
this was in October. That's where I was questioning. I don't specifically remember the period -- interim -- wait. Let me keep reading. Maybe it -- it says, "and does not plan," so I cannot tell you exactly what happened between October 2020 and April 2021, because at that point, it was a plan not to send any other wastestreams to the bypass basin. I cannot tell you whether we achieved that, as I sit here today.
Q. So it was Midwest Generation's position that it planned to comply with the April 2021 deadline?
A. Oh, absolutely, and we did.
Q. You just stated that you -- okay.

Okay.
A. I just stated that we didn't
know what --
Q. That you weren't sure what
happened --

> THE COURT REPORTER: Sorry?

BY MS. WACHSPRESS:
Q. Sorry for the crosstalk.

Okay. Could I direct your
attention to Bates number 78841 within this? And

[^33]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

Midwest Generation represented as part of this application that the bypass basin would be clean closed; is that correct?
A. No, I don't believe so, unless you can point me to where it says that.
Q. So I'm going to point you to about midway up the page, and if you see the two bullet points and then "of the new" it states, "MWG can and plans to refurbish Powerton's dewatering bins while going through the process of obtaining a construction permit under the final Illinois CCR rule to clean close and subsequently repurpose the bypass basin and to install a concrete ash-settling tank."
A. Oh, at this point in time, that was indeed our plan.
Q. Okay. So as of November 30th, 2020, it was Midwest Generation's plan to clean close the bypass basin?
A. As of that date, yes, that was the plan.
Q. And if you will turn to 78855. And it's very tiny print because these engineers make these big documents. And if you look about

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

40 percent of the way down the page where it says "Close Bypass Basin" it states, "6.2.3.1, "excavate existing liner and CCR-impacted soils (if any)" and then "decontaminate pond floor and appurtenances" and "certify bypass basin closure."

And so was it Midwest
Generation's plan as of the date this was filed that it would excavate the existing liner and any CCR-impacted soils beneath it?
A. At the time this was filed, I believe the plan was that we would replace the bypass basin with concrete tanks. So, yeah, and that plan has been completely revised, and there is a document, I believe, posted on our website that gives those revisions, so -- and I'm sorry. I don't mean to be difficult, but that's why some of these details are out of my memory. These are not our current plans.
Q. Okay. The by-pass basin has not, in fact, been clean closed since this application was filed?
A. The bypass basin does not -- we cannot close the bypass basin without a permit from the Illinois EPA. So, no, it has not.

Electronic Filing: Received, Clerk's Office 05/22/2023
Q. Okay. And so Midwest Generation has not completed the closure steps outlined?
A. We cannot close any impoundment without permits from the Illinois EPA, and we have not been issued any permits from the Illinois EPA.
Q. Okay. I know this is -- I'm going to belabor it, but Midwest Generation has not removed all CCR material from the embankments of the bypass basin?
A. Not to my knowledge, no.
Q. And Midwest Generation has not removed the historical HDPE liner within the bypass basin?
A. No to my knowledge, no.
Q. And Midwest Generation has not assessed whether any soils beneath that historical HDPE liner are impacted by CCR?
A. We can't close the basin. There is no need for us to pull up the liner at this point.
Q. And without pulling up the liner, you cannot assess whether the soils underneath the liner --
A. That is my simple understand -- I'm sorry to overtalk you. I didn't mean to.

Electronic Filing: Received, Clerk's Office 05/22/2023
Q. No. Please go ahead.
A. That is my simple understanding, yes.
Q. Okay. All right. So if I could -all right.

## So I am going to direct your

attention to 78890. This is another tiny one. It is a flow diagram.
A. I can't -- I'm -- I'm so sorry, but I cannot read whether this is 90. I would -- I can read 89. I assume this is 90 since it was sequenced that way.
Q. Yeah. Okay. Yeah. It's the second diagram after Appendix B?
A. That -- no. That would be my first one.
Q. Okay.
A. 8 -- Appendix B, this is my 89.
Q. 89, you are right. You are right.

You are correct. So it would be -- it would -- it would be -- it would be 8890 .

Okay. And I would like to
direct your attention -- well, first, you said you
were -- your agreement was -- was appreciated in

[^34]Electronic Filing: Received, Clerk's Office 05/22/2023
terms of prior to submission of this -- of this
document, correct?
A. That would be a characterization, yes.
Q. Okay. And so was this diagram true and correct at the time it was filed, to the best of your knowledge?
A. Yes.
Q. Okay. So if you look in the bottom, right corner, you can see that they are actually -- you know what? I actually -- if I could direct your attention to 78891. I apologize. I'm off by one. And the same question.
A. I'm assuming the next -- the back of the page would be --
Q. The back of the page.
A. All right.
Q. And it says on the bottom, "Existing

## Water Block Flow Diagram"?

A. That -- that's 90. I'm confused.
Q. Okay.
A. Because I was on what I thought was 90, and that says existing water block. What I

[^35]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
believed to be 91 says proposed.
MS. WACHSPRESS: Okay. So can we go
off the record for just for a moment?
HEARING OFFICER HALLORAN: Sure. We are off the record.
(Whereupon, a discussion was had off the record.)

HEARING OFFICER HALLORAN: Back on
the record. Thank you.
BY MS. WACHSPRESS:
Q. Okay. So we are looking at 78890, and it's labeled, "Existing Water Block Flow Diagram," correct?
A. Correct.
Q. Okay. And this was true and correct, to the best of your knowledge, at the time of its filing?
A. Yes.
Q. Okay. And if you look on the bottom, right you can see a purple box labeled, "Ash Surge Basin"?
A. Yes.
Q. Okay. And then there is a dotted line that states, emergency overflow to the former

[^36]ash basin; is that correct?
A. I'm not seeing it yet. Give me a second, please.
Q. Okay.
A. Emergency overflow to the -- yes, I
do.
Q. Okay. Has the former ash basin been
used for emergency overflow from the ash surge basin since June 2019?
A. I cannot tell you if they have
needed -- if there has been an overflow since
June 2019, as I sit here today. I would need to
review records.
Q. Does Midwest Generation make any record if such an event were to occur?
A. I believe so, yes.
Q. Okay. As we sit here today, do you know whether there is coal ash in the former ash basin?
A. Yes, I do know that.
Q. Is there coal in the former ash basin?
A. Yes, there is.
Q. Okay. All right. Let's go to
\[

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$
\]

Electronic Filing: Received, Clerk's Office 05/22/2023

78896, which is further along. And this is an appendix to the application, correct?
A. That's what it appears to be, yes.
Q. Yes. And it's an appendix relating to geology and hydrogeology, correct?
A. That's what it appears to be, yes.
Q. Okay. And this appendix was true and correct, to the best of your knowledge, at the time you filed the application, correct?
A. Correct.
Q. Okay. Okay. So if you look at the first bullet point, it describes fill, quote, "consisting of tan, black -- brown and black fine to medium sand with some gravel and clay seams. Several locations also included black cinders and brick fragments." Have I read that correctly?
A. Yes.
Q. And cinders are CCR, correct?
A. I'm not being -- oh, my goodness.

CCR is from any coal combustion,
not just electric generating unit coal combustion. Is that accurate? I don't know. I would have to look at the term as it's defined in the regulations --

Electronic Filing: Received, Clerk's Office 05/22/2023
Q. Do you --
A. -- to be able to say that these
cinders are CCR. I would be willing to say that they are most likely from the combustion of coal.
Q. Okay. So you understand the black cinders reference here to be remnants of the combustion of coal?
A. That's what I would understand it to be, yes.
Q. Okay. And this is describing fill throughout the Powerton site, correct?
A. I would have to read the whole page. So do you want to -- to know if -- to know if it's a specific area or the entire site?
Q. Okay. I will direct your attention upwards where it says, "site-specific stratography to a depth of approximately 54 [sic] feet below."
A. Yeah.
Q. Is there any --
A. What --
Q. Please go ahead.
A. I'm so sorry.
Q. I was going to say, does that help you at all in your response?

[^37]A. No, because it could be in the introduction paragraph he defined site as a specific area of the plant. So $I$ can't sit here and represent that this is the entire however large Powerton station is.
Q. But it's not limited to a particular place within the Powerton facility?
A. I don't know. That's my point. I haven't read this in years.
Q. Got it. Okay. But it does state that these cinders are part of the fill that extends between 16 to 24.5 feet where the samples were taken?
A. Wherever this -- sorry. MS. GALE: I would object to the characterization, though, because it says several locations. So her characterization of being throughout the site is a mischaracterization of what this -- what that first bullet states. HEARING OFFICER HALLORAN:

Ms. Wachspress?
MS. WACHSPRESS: She is fair to -HEARING OFFICER HALLORAN:

Ms. Wachspress, could you rephrase maybe?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

BY MS. WACHSPRESS:

```
Q. Okay. It is -- CCR was found between 16 and 24 feet below surface at several locations throughout the site; is that correct?
```

MS. GALE: And I would object to mischaracterization. Again, it calls -- says black cinders.

MS. WACHSPRESS: She just -- I mean, your Honor, she -- that's why I went through laying the foundation --

HEARING OFFICER HALLORAN: We have to make a clean record.

MS. WACHSPRESS: Okay.
HEARING OFFICER HALLORAN: So if you could say it again, that would be great.

MS. WACHSPRESS: I -- but I already laid the foundation. I don't understand why I have to go back to cinders when I've already laid the foundation to call cinders CCR.

HEARING OFFICER HALLORAN: Well, I'm asking you to, so --

MS. WACHSPRESS: Okay. All right.
MS. NIJMAN: She called cinders
combustion of coal.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$



[^38]approximately 18 to 32 feet across the site"?
A. That is what it says, yes.
Q. Is that correct? Okay. All right.

Okay. Let's go to 78901.
A. Those numbers are blended into
the --
Q. Yeah.
A. You are going to have to tell me, yeah.
Q. So it is Figure $\mathrm{C}-1$. It is the first CCR monitoring well site map.
A. You said C-1?
Q. Figure $C-1$ is the first $C C R$ monitoring well site map.
A. I'm there. Thank you.
Q. Okay. And this is a CCR monitoring well site map, correct?
A. That's what it's labeled as, yes.
Q. Okay. And do you see Monitoring

Well 5?
A. Yes.
Q. Okay. And that is outside the area marked as approximate former ash basin, correct?
A. Correct.

[^39]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
Q. And it is to the northwest of that,
correct?
A. North, not necessarily. It's west.
Q. West. Okay. Fair enough. Okay. So if you could turn to 78913. And this is a boring log, correct?
A. That's what it appears to be, yes.
Q. And you will see at the top it's marked $\mathrm{B}-\mathrm{MW}-5-\mathrm{Po}$, correct?
A. Yes.
Q. So this appears to be a boring log for Monitoring Well 5, correct?
A. It does.
Q. Okay. And so if I could draw your attention to the column Soil/Rock Description, and you will see that it says, black coal cinders at a depth of 0 feet, correct?
A. At a depth of 0 feet?
Q. Right at the top.
A. Okay. Thank you.
Q. And --
A. Yes. I'm sorry.
Q. Yes. And going downward to 17 feet it also says at points red coal cinders and trace

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

black coal cinders, correct?
A. Yes.
Q. Okay.
A. Well, I'm sorry. I'm not -- I'm
not -- no. It doesn't. I don't -- I'm not sure. I'm not a geologist. I don't read these well. I don't -- I'm not convinced that it goes all the way to 17 feet, because below the black coal cinders, you get clay, gray clay silt. So it looks to me that that bottom portion does not necessarily contain cinders.
Q. Okay. But more than half of the way to 17 feet as represented here?
A. More than half, yes.
Q. Okay. All right. Let's go back to 78901, and we are going to be flipping back and forth, so if you want to hold your place there.
A. Can I possibly have a marker? I'm sorry.

HEARING OFFICER HALLORAN: Go ahead, Ms. Shealey.

THE WITNESS: Can I possibly have like a Post-It, because as I keep flipping back and forth --

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023

| Page 222 |  |
| :---: | :---: |
| MS. WACHSPRESS: Oh, sure. |  |
| THE WITNESS: Just so I can hold |  |
| this page. |  |
| HEARING OFFICER HALLORAN: We're off |  |
| the record. |  |
| (Whereupon, a discussion was had |  |
| off the record.) |  |
| BY MS. WACHSPRESS: |  |
|  | Okay. Do you see Monitoring Well 8? |
| A. | Yes. |
|  | And that is to the west of the ash |
| surge basin, correct? |  |
| A. | Correct. |
| Q. | Okay. Let's go to 78 -- sorry. |
| Excuse me. 78915. And this is a boring log for |  |
| Monitoring Well 8, correct? |  |
| A. Correct. |  |
| Q. Okay. And you will see -- under the |  |
| Soil/Rock Description, from 0 to 10 feet, you will |  |
| see where it says black cinders; is that correct? |  |
| MS. GALE: So I am going to object |  |
| to this testimony. She just said, "I'm not a |  |
| geologist, and I don't read these typically." |  |
|  | And so, I guess, object to |

[^40]foundation. I mean, also, frankly, these boring logs are already in the record as a different exhibit from phase -- from the first phase. In fact, I believe they had Mr. Gnat go through them, each and every single one, in the first phase of the hearing.

HEARING OFFICER HALLORAN: Ms. --
MS. WACHSPRESS: Your Honor, if I
may, she has testified that she was involved and her agreement was required -- or not required but strongly encouraged as part of the filing of this application. And I am anticipating, because this is not an agreed exhibit, an objection similar to the one we heard yesterday to putting in an entire exhibit without familiarity of the witness.
And so I'm merely walking
through all of the procedural niceties to make sure we get our exhibit in. If they would stipulate to admission of the document in its entirety, we can move on.

MS. GALE: Mr. -- Hearing Officer,
first of all, I would -- our objection will
obviously be duplication, because we truly have gone -- did these boring logs in the last phase
page by page with Mr. Gnat. In fact, he mentioned it earlier when he said, "I have seen these before," and we went through that.
So -- and whether she -- you
know, she probably reviewed the prose that was drafted, but her review of boring logs from -- I don't know the date on these -- 2010 probably was not necessary when she -- so it is certainly lack of foundation, beyond the scope of her understanding, duplicative, and if we went -- you know.
HEARING OFFICER HALLORAN: Well,
will you stipulate?
MS. GALE: No.
HEARING OFFICER HALLORAN: Okay.
Well, you may proceed, although she did say she is not a geologist, and she has trouble reading charts, as do I, but continue.

BY MS. WACHSPRESS:
Q. I will try to make it fast.

So you will see in the boring
log for Monitoring Well 8, there is black cinders down to the level of 20 feet; is that correct?
A. Again, I'm not a geologist, and I

Electronic Filing: Received, Clerk's Office 05/22/2023
don't know how to read this. I would say that black cinders stop at 10 .
Q. If I could direct your attention to page 78916 at the very top.
A. Oh, okay. You had me on 915.
Q. Okay.
A. I see black cinders at 20 feet, yes.
Q. Okay. And you see that the -- there is a marker just before black cinders that indicates the saturation up until that point; is that correct?
A. Just before? No.
Q. Just below black cinders on page --
A. I thought you said before.
Q. Okay.
A. I do see the word "saturated."
Q. Okay. Okay. Let's go to 78901.
A. Okay.
Q. And do you see Monitoring Well 9 on
this diagram?
A. Yes.
Q. Okay. And using the scale to your
left, about how far would you place that monitoring well from the ash bypass basin?

L.A. Court Reporters, L.L.C.

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023


[^41]Electronic Filing: Received, Clerk's Office 05/22/2023


[^42]Electronic Filing: Received, Clerk's Office 05/22/2023

Generation attempted to determine the volume of coal ash that has been identified by these boring logs?
A. Since 2010?
Q. When the boring logs were taken.
A. The boring -- I -- I don't even
know. I -- honest to goodness, I'm not even sure what you are asking me. Could you --
Q. So these boring logs indicate some amount of cinders within the ground, correct?
A. That's what they say.
Q. Has Midwest Generation ever attempted to determine the volume of cinders that are in the ground at these locations?
A. Ever? I cannot speak to. I'm sorry.
Q. Since 2010?
A. I cannot speak to since 2010 either, because I didn't appear until '15.
Q. Since 2017?
A. Ever? I -- I don't recall, but I
cannot -- I cannot say -- confirm or deny, to be honest with you.
Q. But you are not personally aware?

[^43]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

|  | Page 229 |
| :---: | :---: |
| A. I do not recall. I may be aware if |  |
| my memory were jogged in the right way. |  |
| Q. And that responsibility -- well, has |  |
| Midwest Generation ever directed someone else to |  |
| attempt -- |  |
| A. Same answer. I just don't have the |  |
| specific memory of that. It does not mean it did |  |
| not occur, nor does it mean I wasn't involved in |  |
| it. I just don't remember. |  |
| Q. And since 2017 had -- has Midwest |  |
| Generation undertaken any activity to remove the |  |
| coal ash described in these boring logs? |  |
| A. Again, I cannot say in its entirety, |  |
| but I am not aware. As I sit here today, nothing |  |
| comes to mind. |  |
| Q. And no one acting at Midwest |  |
| Generation's direction? |  |
| A. As I sit here today, I'm not aware, |  |
| nor do I recall. |  |
| Q. Okay. |  |
| A. It does not mean it did not happen, |  |
| I just don't -- nothing is coming to mind right |  |
| now. |  |
| Q. But you could not tell me, as we sit |  |

[^44]
## here today, when it was?

A. I cannot.

MS. WACHSPRESS: Okay. All right.
I would like to move for admission of
Exhibit 1401.
HEARING OFFICER HALLORAN: Ms. Gale?
MS. GALE: Well, with the same
limitations that were established in the prior exhibit, that it was -- it would be limited to those pages that were -- the testimony that she has given here today. This is a 100-page document filed pursuant to federal law, not part of the complaint, and so, you know, they identified the pages they thought were relevant.

MS. WACHSPRESS: Your Honor, may I respond?

HEARING OFFICER HALLORAN: You may.
MS. WACHSPRESS: Unlike the previous exhibit, this is an exhibit in which the witness was involved in the preparation, submitted by Midwest Generation to a federal agency, presumptively true and correct. She has testified to elements of it being true and correct, to the best of her knowledge, and it's been filed since
the liability phase in this hearing.
This goes directly to what actions Midwest Gen has taken, not taken, been required to take, tried to avoid taking with respect to cleanup at the plant, and it's a document they themselves produced in its entirety. I really don't see how they can keep out something that comes from them, was turned over to us by them, was filed with a federal agency, involves a period of time directly at issue in this proceeding and relates to precisely the question here, which is what should happen with these ponds?

MS. GALE: Mr. Hearing Officer, if I can respond?

HEARING OFFICER HALLORAN: I will give one more.

MS. GALE: Thank you.
HEARING OFFICER HALLORAN: Go ahead,
Ms. Gale.
MS. GALE: Production does not make it relevant, first of all. So simply because we produced it in response to a document request does not make it relevant.

[^45]Second of all, this is pursuant
to the federal program. The Board does not have jurisdiction over federal law, and this -- and so that also makes it not relevant to this case. The complaint is related to complaints related to 12 (a) and $21(d)$ and regulations under 620. So it also doesn't make -- many of the documents which we discussed are duplicative. Many of them are un- -- are just not relevant to the claims made in this matter.

HEARING OFFICER HALLORAN: Okay.
MS. WACHSPRESS: Your Honor, may I?
HEARING OFFICER HALLORAN: No.
MS. WACHSPRESS: Okay.
HEARING OFFICER HALLORAN: I'm going to -- I'm going to allow it. I find it relevant. The only thing is, it's duplicative. I would ask the Board to disregard that, but I'm accepting the whole thing. Thank you.
(Whereupon, Complainants'
Exhibit No. 1401 was admitted into evidence.)

MS. WACHSPRESS: Thank you. And I'm prepared to press on with a new exhibit, or we can
take a break.
THE WITNESS: I'm sorry. Hold on just a minute.

HEARING OFFICER HALLORAN: Yes,
Ms. Shealey. You're the boss here.
THE WITNESS: Break, please.
MS. WACHSPRESS: If we can -- may we have a short recess, your Honor, to give the witness a break?

HEARING OFFICER HALLORAN: Yes.
We're off the record.
(Whereupon, a short break was taken.)

HEARING OFFICER HALLORAN: Okay. We're back on the record at approximately 3:10. You may proceed. Thank you.

BY MS. WACHSPRESS:
Q. Thank you, your Honor.

Okay. Ms. Shealey, I am now
going to introduce Exhibit 14 -- well, marked for identification Exhibit 1402.
(Whereupon, Complainants'
Exhibit No. 1402 was marked for identification.)
L.A. Court Reporters, L.L.C.

BY MS. WACHSPRESS:
Q. Do you recognize this document?
A. Yes.
Q. Okay. And what is it?
A. It is an outdated closure plan for

Powerton's former ash basin.
Q. And you say outdated. What is the date on this closure plan?
A. May of 2019. It has been revised several times since.
Q. Okay. And have you reviewed this document before today?
A. In 2019 or when it was updated, yes.
Q. Okay. And did you participate in the drafting of this document?
A. Probably not.
Q. Probably not. Was your agreement part of the process for submitting this document?
A. Again, in May of 2019, maybe not.
Q. Maybe not. You don't recall?
A. Not -- I believe if this is the
initial -- I believe this is the initial closure plan by this date. I don't -- I don't know. I know it's not the most recent one.

[^46]Electronic Filing: Received, Clerk's Office 05/22/2023
Q. Okay. But this is a closure plan from May 2019 for the former ash basin at the Powerton site, correct?
A. That is what this is, yes.
Q. Okay. And it describes Midwest

Generation's intentions with respect to the handling of coal ash in the former ash basin on a permanent basis as of the time it was filed, correct?
A. In May of 2019, that is my understanding.
Q. Okay.
A. And I can remember. I -- based on who the $P E$ that signed this, $I$ would say that $I$ probably was not intimately involved.
Q. And the drafting and publication of this plan was required by Part 257 , correct?
A. Yes.
Q. Okay. And so Midwest Generation has since published an amended plan, correct?
A. At least once. I believe maybe -- I would have to look, but at least one.
Q. Okay. And there was an amended plan published in November of 2022, correct?

[^47]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
A. If -- I don't know. I would have to
look.
Q. Okay. Could I --
A. You said what of 2022?
Q. November of 2022.
A. That doesn't sound right to me, but
okay.
Q. All right. I am going to -- well, while we are looking for it, I'm going to ask you some questions about the 2019. Has the former ash basin been a part of the ash slicing system at Powerton -- sluicing system at Powerton at any point since 2019?
A. No.
Q. Okay. Has the former ash basin received overflow from other areas that contain CCR at any point since 2016?
A. As I stated when you were asking me questions about the other document, I would have to review documents to know.
Q. Okay. And the 2019 closure plan, so the May 2019 closure plan you are looking at, stated that Midwest Generation intended to remove CCR from the north pond and consolidate it with

[^48]Electronic Filing: Received, Clerk's Office 05/22/2023

CCR in the south pond, correct?
A. I haven't read it.
Q. Okay.
A. Do you want me to read it?
Q. Yes, please do. Take your time.
A. That is not what this says.
Q. What does it say?
A. It says, "both the south and north ponds will be closed in place."
Q. So the 2019 closure plan stated that Midwest Generation intended to close both ponds with ash in place, correct?
A. I wouldn't call them both ponds. I would call them both parts of a single impoundment, but that's what Section 2.0 , first sentence says.
Q. Okay.
A. I didn't continue reading, though.

I stopped when I found the answer to your question.
Q. Okay. No. That's fine.

So now -- yeah. I am going to
try to refresh your recollection about the
November 2022. This is not an exhibit. This is a

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

refreshing recollection. Okay. And you have an exhibit in front of you titled, "Final Closure Plan, Former Ash Basin Powerton Station,

November 2022," correct?
A. I thought you just said it wasn't an exhibit. Was not.
Q. No. I said it's not an exhibit.
A. So you just said -- so I don't have an exhibit in front of me --
Q. Do you have a document in front of you?
A. Oh, yes, I do.
Q. Okay. Do you recognize this
document?
A. Generally, yes.
Q. Okay. And it is the final closure
plan, correct?
A. That's what it's titled.
Q. Okay. And does this document refresh your recollection as to Midwest

Generation's plans with respect to the former ash basin at Powerton station?
A. I would have to read. Let me read, please.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Q. Okay.
A. Yes.
Q. Okay. So does Midwest Generation still intend to close the former ash basin by leaving CCR in place?
A. Again, I -- so seven months have
passed since this. I would have to review the CCR operating record to ensure that this is the current and -- the most current plan. I believe it is the most current plan, but without reviewing the CCR operating record, I can't assure you of that. So I would hate to represent -- I would hate to misrepresent if we made an edit in February. That's my point.
Q. So this document, it states it was the final closure plan?
A. Prepared in the -- yes.
Q. Okay. Is Midwest Generation in the habit of labeling things as final if they are still subject for revision?
A. I would suggest that that
terminology came from the regulation that this is citing to.
Q. Do you know what --

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

```
A. So, yeah, there are tons of -- for example, I would have considered Exhibit 1401 a final document. I am 100 percent certain
Exhibit -- this -- this request has been modified.
So back in 2020, this was final. Sometime after
2 0 2 0 \text { we amended or modified our alternate -- I}
called it the wrong thing.
Q. Alternate closure demonstration?
A. Alternate -- yes. I called it the wrong thing again. Alternate closure demonstration.
So am I in the habit of final and -- no. Things change. We revise. We keep up with the times to the best we can.
Q. So as you sit here today, is it Midwest Generation's intention to close the former ash basin with ash in place?
A. This states that it would be closed in place in the southern half or southern portion, and it would be removed from the northern portion.
Q. But you -- but you have previously testified that this is all part of one pond, correct, north and south?
```

A. Yes.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

```
            Q. Okay. So the pond as a whole will
be closed with ash in place under Midwest
Generation's current plans?
    MS. GALE: Objection.
Mischaracterizes testimony.
    HEARING OFFICER HALLORAN: I agree.
Sustained.
BY MS. WACHSPRESS:
    Q. Okay. So as of November 2022, it
was Midwest Generation's intent to close the
former ash basin with CCR material in place?
    MS. GALE: Objection. Same
objection. Misstates -- mischaracterizes
testimony.
    HEARING OFFICER HALLORAN: Could you
rephrase?
    MS. WACHSPRESS: I don't
understand how it -- I said as of November 2022.
    HEARING OFFICER HALLORAN: Could you
rephrase, please?
    MS. WACHSPRESS: Okay.
    HEARING OFFICER HALLORAN: Don't
argue with me. Just rephrase.
BY MS. WACHSPRESS:
```

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

```
    Q. Okay. As of November 2022, the date
on this document, was it Midwest Generation's
intention to close the former ash basin with CCR
materials in place?
    A. It was our -- sorry.
        MS. GALE: She has asked the same
    question three times, and the objection has been
    sustained.
    HEARING OFFICER HALLORAN: Let's get
this over with.
                            Ms. Shealey, if you can answer,
please do so.
BY THE WITNESS:
    A. As of -- I'm sorry. As of
November 2022, it was our intention to remove ash
from the northern portion of the FAB. The FAB is
bisected, dissected, whichever the correct word
is.
                            I guess -- I'm not sure bisected
is the correct term, because I'm not sure if it's
equal, but it is bisected by a rail line. Half of
the -- or a portion of the FAB is north of the
rail line. A portion is south of the rail line.
It was our intention at this time to remove the
```

ash north of the rail line, and consolidate it south of the rail line, and close that portion in place.

BY MS. WACHSPRESS:
Q. And just to be clear, are there one or two ponds called the former ash basin at Powerton station?
A. It is a single pond that was bisected by a rail line. I believe in one of these documents it says 2010, and, in fact, bifurcated is the word, in the May 2019 closure plan. Oh, in both of them. Both of them call -the word is bifurcated.
Q. And just to confirm, when you say FAB, do you mean the former ash basin?
A. Oh, I'm so sorry. It -- yes, F-A-B, former ash basin, and I do use the FAB shorthand.
Q. Thank you.
A. Is that okay?
Q. Oh, yes.
A. Okay.
Q. No. That's totally fine. I just wanted to make sure it was clear --
A. Yes, yes. Oh, sorry.

[^49]Electronic Filing: Received, Clerk's Office 05/22/2023
Q. -- for the record.

So if you will turn to the next
page of the 2019 FAB closure plan, and if you look right under 4.0 it says, "Implementation of closure of the FAB is estimated to require 14 months. Closure is anticipated to begin in 2019 and estimated to be completed in 2020." Is that correct?
A. That is what this says, yes.
Q. Was closure completed in 2020?
A. No. In 2019, a state law -- what I would call Senate Bill 9, but I can't remember the exact name. It was passed, and that prohibited us from closing anything, because that became -those laws led to -- or that law, I guess, led to Part 845 of the Board rules. So, no, we did not.
Q. Okay.
A. Because that would be a violation.
Q. Okay. And then if you turn -- if you go back to the 2020 -- scratch that.

What is Midwest Generation's
current estimation of when closure is anticipated to be completed at the FAB?
A. I think you should ask -- I'm sorry.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

That question would be better asked of the Agency. I'm going to refer to my chart. Did I write that down? FAB. We are at the FAB. We submitted the closure permit application for the FAB, but I cannot tell you when, because $I$ did not write it down.

## Q. Okay. Okay.

MS. WACHSPRESS: I would like to
move for the admission of the 2019 FAB closure plan, the document marked as Exhibit 1402.

HEARING OFFICER HALLORAN: Ms. Gale? MS. GALE: Well, as she testified, she doesn't even remember it. It's outdated, so it's not even relevant. A construction permit application has been submitted to Illinois EPA, as she testified. It doesn't have the plan, which she testified what -- before the current, for the former ash basin. It's -- it's outdated. It's not relevant. There's -- it really has no reason to come in.

HEARING OFFICER HALLORAN:
Ms. Wachspress?
MS. WACHSPRESS: Your Honor, you may pick up a theme over the course of this

[^50]cross-examination. We are looking at all of the regulatory and compliance actions that Midwest Generation has taken since the liability phase of this proceeding to understand and convey the degree to which they have actively complied with consistent plans for dealing with these facilities, and we think a historical record of changes to their plans is important for the Board to understand the need for additional relief beyond regulatory requirements.

HEARING OFFICER HALLORAN: Yeah, I
think the Board might find this of assistance, or they might just throw it out, but I will accept Complainant's Exhibit 1402 over objection.
(Whereupon, Complainants'
Exhibit No. 1402 was admitted into evidence.)

MS. WACHSPRESS: Okay. Our next
Exhibit 1403 is Midwest Generation's petition for adjusted standard.

HEARING OFFICER HALLORAN: We're off the record.
(Whereupon, a discussion was had off the record.)
L.A. Court Reporters, L.L.C.

Electronic Filing: Received, Clerk's Office 05/22/2023

HEARING OFFICER HALLORAN: Back on
the record. You may proceed.
(Whereupon, Complainants'
Exhibit No. 1403 was marked for
identification.)
BY MS. WACHSPRESS:
Q. Okay. And I have marked for
identification as 1403 a document. The first page is Notice of Filing, but if you scroll down to -or turn to the sixth page of the document, it's entitled, "Midwest Generation, LLC's Petition an Adjusted Standard and Finding of Inapplicability for the Powerton Station;" is that correct?
A. That is what this is titled, yes.
Q. Do you recognize this document?
A. I'm sorry. Forgive me. Not -- I
didn't realize it printed out this large.
Q. So you do recognize it?
A. I'm familiar with the subject matter of this document. I could tell you that one.
Q. Okay. And what is it?
A. It is a petition for an adjusted -well, it's a -- this is just an adjusted standard? Yes. This is a petition for the adjusted standard

[^51]for a portion of which we withdrew, I believe. When it was filed in May of 2021, it was for a finding of -- if $I$ am -- without reading it, I believe it was for a finding of inapplicability for the service water -- the Part 845 rules to the service water basin at Powerton which the Board granted. Am I right? Let me go to my chart.
Service water, the -- which the

Board granted, and it was initially for reuse of a liner, I believe. Well, I would have to read to figure out which basin it was, but reuse of a liner at least -- in at least one basin for continued use as a CCR service impoundment.
Q. Okay. And if you will look down at the first paragraph it states, "An adjusted standard is needed for the ash surge basin, bypass basin, and metal cleaning basin to allow the decontamination and retention of the existing liners in the three basins, rather than the liners' removal as provided in the Illinois CCR rule"?
A. Okay. And those were all withdrawn.
Q. All three were withdrawn?
A. All three.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

```
MS. WACHSPRESS: Okay. Okay. So if you will give me just a moment. Your Honor, can I go off the record for just two minutes, please?
HEARING OFFICER HALLORAN: Sure.
We're off the record for two minutes.
(Whereupon, a discussion was had off the record.)
HEARING OFFICER HALLORAN: Back on
the record. You may proceed. BY MS. WACHSPRESS:
Q. You said that this application was withdrawn with respect to all three basins, correct?
A. With respect to reuse of the liner in those three basins, yes.
Q. Does that -- does that mean that Midwest Generation is currently intending to remove the liner from all three of those basins?
A. Midwest Generation is currently intending to retrofit the three basins such that the -- and I believe with -- with Agency approval, the current HDPE liners can be decontaminated and reused as an extra layer of protection in the retrofitted basins.
```

Q. So you said IEPA approval. The -it is still -- Midwest Generation still needs approval from the IEPA to reuse the liners as you describe?
A. I believe so. I would have to go to the regulations. It is in the Board rules, that requirement.
Q. So let's go back to the time that this was filed back in May of 2021. At the time that this was filed, Midwest Generation understood that it would be required to remove the historical HDPE liners and any CCR material underneath them as part of the closure of these basins, correct?

MS. GALE: I would say objection, foundation. I don't think that's what she said.

MS. WACHSPRESS: I'm asking about
why this was filed.
HEARING OFFICER HALLORAN: Try to
rephrase that.
MS. WACHSPRESS: Okay.
HEARING OFFICER HALLORAN: I think
you can get it. BY MS. WACHSPRESS:
Q. Do you know why this document was

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

filed?
A. To request an adjusted standard to reuse the liners.
Q. What is an adjusted standard?
A. It is an -- I cannot use the
words -- I cannot define it without using the words "adjusted standard." It is a mechanism of regulatory relief that is available to sources.
Q. And why would such regulatory relief be required?
A. Because of site-specific conditions that don't exactly fit with regulations.
Q. So the relief is required because regulations might otherwise require something?
A. No.
Q. No?
A. Or not exclusively I wouldn't say that.
Q. Okay. So the regulations might -what --
A. It may not -- it may or may not be practical to do some things that you're -depending on your site-specific conditions. There are a lot of reasons. I guess, as I stated, I

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
work in all media. There are lots of reasons I could need an adjusted standard.
Q. Okay. Well, let's talk about adjusted standards in Part 845. Why would an adjusted --
A. I cannot talk about any adjusted -again, I'm so sorry to interrupt you, but that is a universe that is beyond the scope of what $I$ can tell you. There are -- 845 is over 800 sections. It goes to 8, 900. There are tons of things in there a specific source would need an adjusted standard for.
Q. Okay. With respect to the closure requirements of Part 845, are you familiar with those?
A. Generally.
Q. So why did Midwest Generation submit this adjusted standard petition?
A. I would have to read. It's -again, I'm so sorry. I'm not trying to be facetious, but it was withdrawn. So it really doesn't matter to me. So I would have to read to refresh my memory. I know what our current plans are today.

[^52]Q. Uh-huh.
A. I don't remember whatever I was
thinking or we were thinking as a group, essentially two years -- more than two years ago. This was filed on May 11th, 2021, so -- and to get to this filing, we started as soon as the rules were probably at second notice, before they were finalized and at second notice.
Q. So going back to May 2021 at the time this petition was being contemplated, did Midwest Generation have any alternatives to filing this petition?
A. I'm sure we did.
Q. Do you know what those alternatives were?
A. Again, I don't even remember a specific reason. I would have to read this. I would literally have to read this to be able to convey to you the specific reason we thought that we needed an adjusted standard at this time.
Q. Oh, okay.
A. Once it was withdrawn, I stopped caring. I'm not being facetious or -- in any way, but it's erased from my memory. I would have to
\[

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$
\]

reread it.
Q. The -- I think I understand our misunderstanding.

## The Part 845 requires the

removal of historical noncompliant liners, correct?
A. I'm not sure.
Q. Was it Midwest --
A. I would have to -- I have to -again, $I$ would have to read the regulations to be able to agree with you. If you want to say that, then you can say it. I would have to read to bring this all back freshly. I do not have Part 845 memorized in any way, shape, or form, and that's why it's written down and it's printed out, so I can find the sections when I need to.
Q. Okay. So let's just talk about the contents of the petition then.
A. Okay.
Q. Since you are having trouble
remembering the circumstances surrounding its filing.
A. Okay.
Q. So under the proposed closure plan

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

described in this petition, Midwest Generation would add another HDPE liner to the bypass basin and the ash surge basin, correct?
A. I have no idea. I didn't -- again,
I've got to read it, because I don't even know
that a closure plan is included in this petition.
I -- if you are telling me that it is, point me to
it, please. This was a -- this was a continued
operation plan in my simple way of thinking of it.
Q. Okay. So I'm turning at the very next page. I am -- the first full paragraph, "Midwest Generation seeks to reuse the basins' high-density polyethylene liner, HDPE liners, because the liners are in good condition and, after decontamination, can continue to serve the intended purpose as a liner. The CCR surface" -I'm on -- it's indicated page 2 on the first full sentence.

> "The CCR surface impoundment closure by removal requirement under the Illinois CCR rule instead requires removal of the liner in a CCR surface impoundment. By comparison, the federal CCR rule does not require removal of the liner when a CCR surface impoundment is closed by

[^53]removal.
Because the liners in the ash surge basin, bypass basin, and metal cleaning basin are in good condition and can be effectively decontaminated consistent with the federal CCR rule, MWG is requesting an adjusted standard from Section 845.740(a) to allow the continued post-closure use of the three liners."

Does that refresh your
recollection at all as to what -- the purpose and content of this document?
A. Somewhat. But there is a lot of words after that, too, because I -- and forgive me, but you said the first full sentence, so I looked for the first capital letter, which is the first -- which is "Recycling." Because it was a name, when you were reading, I wasn't with you. So if you would allow me to read it, I could reread it, but I wasn't with you, because I was busy looking for what you were talking about.
Q. Okay. Go ahead, and take your time. Go ahead and reread it.
A. Okay. What was your question?
Q. Does this refresh your recollection

```
at all as to the circumstances and content of this
petition?
```

A. Yeah. It was for a completely different operating scheme of Powerton. With -that's -- that could be the -- again, I cannot -I don't remember exactly why it was withdrawn, but that could be the reason. This is associated with the November 30th, 2020 alternate closure demonstration, which was modified. So these two things were plans at those moments in time that are different today. We do not intend this as it's stated here at this time.
Q. So Midwest Generation, I think your words were, has -- now intends to do a completely different system with respect to these ponds; is that correct?
A. Yes.
Q. Okay.
A. I believe. I'm sorry. I believe. What I just read -- what you just pointed me to leads me to believe that this is associated with installation of concrete tanks, which is a November 30th, 2020 submittal. We have no intent to use concrete tanks at Powerton going forward.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

```
            We intend to retrofit the basins
as they stand with compliant liners and leachate
collection systems as required by Part 845.
    Q. Has Part }845\mathrm{ been revised at all
since this document was filed?
    A. It was -- no. It was new.
    Q. So the completely different system
you described was not motivated by any change in
regulatory requirements?
A. It absolutely was. I think we
received -- well, I can't -- again, sequence is
hard for three years ago. My belief is that we
received feedback from US EPA that a concrete tank
would be considered a surface impoundment, which
made us re-visit our plans. If we had to have a
surface impoundment, and in combination with the
requirements of Part 845, somewhere along the line
we decided it was easiest or best to simply
retrofit the impoundments we have, and that is our
current plan, to retrofit the impoundments with
compliant liners and compliant leachate collection
systems.
    Q. And the advice from the US EPA with
regard to the concrete storage system, that's in
```

L.A. Court Reporters, L.L.C.
relation to the -- is that the Clifty Creek proposed decision?

THE COURT REPORTER: Sorry?
BY THE WITNESS:
A. I have no idea. I've never heard of that.

MS. WACHSPRESS: Clifty Creek, $\mathrm{C}-\mathrm{L}-\mathrm{I}-\mathrm{F}-\mathrm{T}-\mathrm{Y}, \quad \mathrm{C}-\mathrm{R}-\mathrm{R}-\mathrm{E}-\mathrm{K}$.

THE COURT REPORTER: Thank you. BY MS. WACHSPRESS:
Q. Excuse me. Or, E-E-K. Oh, boy. I lost the spelling.

Okay. So you don't know anything beyond the US EPA advised you of this? You don't know the basis on which they advised you or --
A. I am sure that at the time of that advisement, $I$ was aware of their reasoning and rationale. Whether I agreed with it is different, but I'm sure $I$ was aware at that time. Again, once we decided not to have concrete tanks, it is not relevant to my work at all. My work is relevant to operating the plants and complying today.

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
Q. So when you say, once we --
A. And in the future. Sorry.
Q. Once you decided not to have concrete tanks, what is it that wasn't relevant to your work?
A. This. That's what -- it was
withdrawn. I don't even understand what you are asking me about it. It's mute -- it's moot.
Q. Okay. So let's go to page -notwithstanding that it's moot, let's go to what's marked as page 8 in this petition.
A. Uh-huh.
Q. And under subsection (a), if you look at the third line it states, "The liner systems consist of six layers of material from bottom to top. The --"
A. The fourth line?
Q. $\quad$ Oh, sorry. $O h$, so I'm on subsection
(a). It's labeled page 8 at the top.
A. Four. It's the fourth line.
Q. Fourth line. "The liner systems consist of six layers of materials (from bottom to top): The original poz-o-pac, a geotextile cushion, the HDPE liner, a geotextile cushion, a

[^54]12-inch think sand cushion layer, and a 6-inch limestone warning layer." Have I read that correctly?
A. I believe so, yes.
Q. Okay. So at the time this was
filed, Midwest Generation represented to Illinois EPA that there was original poz-o-pac in all three of the basins at issue?
A. This was not filed with the Agency. This was filed with the Board. So we represented it to the Board, yes.

MS. WACHSPRESS: With that correction, yes. Okay.

All right. I would like to -- I would like to move for admission of this document, of the exhibit labeled 1403.

HEARING OFFICER HALLORAN: Ms. Gale?
MS. GALE: Mr. Hearing Officer, she testified -- stated that this document is moot. It's not relevant. It's also a legal document that has been filed with the Board. It has the Board's stamp on it. The matter is over and closed. The Board issued an order. I don't -- so the Board doesn't need it. It's not necessary for
this proceeding at all. Also, as she said, half of it was withdrawn. So it's -- I don't understand.

And they pointed out two pages on here, and, you know, again, now we have a whole thing, and I can tell you, since I wrote it, there is a number -- a lot of this information is in the record already because we went through the liners during the first hearing. So this would be entirely duplicative.

HEARING OFFICER HALLORAN: Okay. As you know, it's on the Board's website, and the Board can take official notice, and I would -- I would admit it, but I would advise the Board that -- you know, that it is duplicative, to disregard, but it is admitted. That's my ruling. Thank you.

MS. GALE: Okay.
HEARING OFFICER HALLORAN: Thank
you.
MS. NIJMAN: Can we get the
qualification limited to testimony?
MS. WACHSPRESS: Your Honor, no.
HEARING OFFICER HALLORAN: No, no.

[^55]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

The whole thing is in. Thank you.
(Whereupon, Complainants'
Exhibit No. 1403 was admitted into evidence.)

THE WITNESS: Do I need this again?
Will I need this again? I'm sorry.
BY MS. WACHSPRESS:
Q. You may hold onto it for now. Okay. So -- so let's -- let's talk about that amended petition. So I think that's 1404.
(Whereupon, Complainants'
Exhibit No. 1404 was marked for identification.)

BY MS. WACHSPRESS:
Q. So. You have marked in front of you a document marked as 1404 for labeling purposes.

Do you recognize this document?
A. Yes.
Q. And what is it?
A. An amended petition for an -- "An

Amended Petition For an Adjusted Standard and a Finding of Inapplicability For Powerton Station."
Q. And it was filed on November 11th, 2021; is that correct?

[^56]Electronic Filing: Received, Clerk's Office 05/22/2023
A. That is what it is dated, yes.
Q. Okay. And it amended the petition that we had just been discussing, correct?
A. That is my recollection, yes.
Q. Okay. Were you involved in the preparation of this document?
A. Yes.
Q. What was your role in the
preparation of this document?
A. I definitely did not write it. It is filed by an attorney. I probably reviewed it. I definitely was involved in decisions to change our plans.
Q. And was this document true and correct, to the best of your knowledge, at the time it was filed?
A. I believe so, yes.
Q. And if I could direct your attention to Bates number 124135?
A. Uh-huh.
Q. It states, "Since Midwest Generation or MWG filed its petition for an adjusted standard petition on May 11th, 2021, it has determined it is no longer necessary to close the ash surge

[^57]basin, bypass basin, and metal cleaning basin, and reuse their liners." Is that -- have I read that correctly?
A. Yes, you have.
Q. As you sit here today, does Midwest Generation intend to remove the historical HDPE liners in the ash surge basin?
A. I would have to look at the current closure plan. As -- the closure plan which would occur after retrofit. As I sit here today, we do not intend to remove the liners for retrofitting of the basins. I would have to look at the closure plans post-retrofit to answer that question completely.
Q. So as you sit here today, Midwest Generation intends to retrofit all three basins, correct?
A. Surge, bypass, metal cleaning, yes.
Q. Okay. And by retrofit, what do you mean?
A. To the liners and those -- to put in a composite liner system. To install composite liner systems and leachate collection systems in each of the basins.

[^58]Electronic Filing: Received, Clerk's Office 05/22/2023
Q. And is that so the basins can continue to be used to store wastewater?
A. And/or CCR materials.
Q. So the intention is to use the ash surge basin to store CCR materials?
A. A retrofit would not otherwise be necessary. So, yes, that is our intent.
Q. And that's true of the bypass basin
as well?
A. Yes.
Q. And the metal cleaning basin?
A. Yes.
Q. Okay. Let's go back. I know -let's go back to the original or the -- excuse me. The amended petition we had previously spoken about, Exhibit 1403.
A. I'm sorry. That is not amended. That's original.
Q. Original. 1403. Okay. And if I could direct you to what's labeled as page $21 ?$
A. Yes.
Q. Okay. And where it says subdivision (e), if I could direct you to I think it's the sixth line below that where it says "because"?

[^59]A. Yes.
Q. And it states, "Because the planned removal is not a 'clean closure', some CCR will remain on the slopes and in the base of the basins before demolition begins." Have I read that correctly?
A. Yes, you have.
Q. So at the time Midwest Generation submitted this petition, Midwest Generation anticipated that there would be CCR material on the slopes and the base of the basins when it performed the retrofit of the bypass basin, correct?
A. At this -- no. There was no retrofit. I am -- I am lost. I don't -- I thought that I figured out already that this was associated with the concrete tanks. So there wouldn't have been a retrofit at -- in 2021. The retrofit -- the decision to retrofit occurred after this with -- that's why the petitions were withdrawn.
Q. Okay. So at the time this was filed, Midwest Generation anticipated that there was CCR materials on the slopes and the base of

[^60]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
the basins for which it was seeking the adjusted standard?
A. This says "before demolition begins." So if that's what you were asking, yes.
Q. Okay. And Midwest Generation
represented as part of this petition that it would place a new HDPE liner on top of the materials in the basin, correct?
A. I have no idea. I honest to God have no idea, because it was withdrawn. I have lost that from my memory. What I have stated is that the retrofitted basins will have an additional -- or I probably didn't even say this.

The retrofitted basin will have an additional HDPE liner. I would have to read this to know what this says.
Q. But part of the reasoning in requesting the adjusted standard here was concern with what would happen to CCR on the slopes in the base of the basin?
A. Ms. Wachspress, forgive me, but I -God, it's thousands of pages, it looks like. I would have to read to remember.
Q. Okay. All right. We will move on.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$



[^61]Electronic Filing: Received, Clerk's Office 05/22/2023

## HEARING OFFICER HALLORAN: We're off

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

HEARING OFFICER HALLORAN: Back on
the record.
BY MS. WACHSPRESS:
Q. So this is an alternate source demonstration from March 25th, 2019, correct?
A. Yes, it is.
Q. Okay. And it is addressed to you, correct?
A. Yes, it is.
Q. Okay. And it describes groundwater levels of arsenic, barium, molybdenum, selenium, and thallium, correct?
A. I have no idea.
Q. Okay. Take as long as you need to refresh your memory. I believe the -- it starts on page 3 of the document.
A. Okay. I'm sorry. Can you re-ask?
Q. Yes. This alternate source demonstration describes groundwater levels of arsenic, barium, molybdenum, selenium, and

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

thallium, correct?
A. It looks like that is correct, without having read through everything, yes.
Q. And if you turn to page 7 of it, this -- this demonstration was signed by two individuals, correct?
A. Yes.
Q. And one of them was Mr. Gnat,
correct?
A. Correct.
Q. Okay. And this alternate source demonstration was performed because groundwater testing indicated statistically significant increases of these five metals, correct?
A. In certain or in specific wells, yes. Not across every well.
Q. And if you look at the final paragraph, it states that, KPRG -- oh, sorry. Oh, sorry. Look at the final paragraph.

It says that these sources "have
been evaluated and determined to be associated with other potential alternate sources and not a release from the regulated units." Have I read that correctly?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

A. I think you paraphrased the beginning. I'm sorry. I wasn't reading along with you.
Q. Okay. I'll -- no. I'll start at the beginning.
"Based on the discussions
provided above, the noted arsenic, barium, molybdenum, selenium, and thallium concentrations detected above the GWPS at several well locations have been evaluated and determined to be associated with other potential alternate sources and not a release from the regulated units." Is that correct?
A. Yes, it is.
Q. Okay. And do you understand what it meant by GWPS there?
A. Yes.
Q. Okay. What is -- what does that mean?
A. Groundwater protection standards.
Q. Okay. So these constituents were measured at levels exceeding the groundwater protection standards?
A. Yeah. And it looks like they were

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

in specific wells, but not all of them, and not every constituent was detected at statistically significant levels at every well that is listed in this report.
Q. And by regulated units, you understood the alternate source demonstration to refer to the ash bypass basin and the ash surge basin, correct?
A. I believe that's what it was titled, yes.
Q. Okay. Are there any potential

## alternate sources identified in this document?

A. Not having read it in -- since a long time, this was dated March of 2019. It does not -- I don't know what else is in here. How long is this -- I'm sorry. Is the rest of this --
Q. No. It's -- that's the -- again, it's -- the certification follows on the subsequent page and then figures.
A. I'm sorry. Your question was?
Q. My question was, does KPRG identify the alternate source that they believe was the source of these levels?
A. As I sit here, I do not see that

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

they did.
Q. And as you sit here today, has

Midwest Generation subsequently identified the source of these levels -- these elevated levels?
A. Not to the best of my recollection, no.
Q. Okay. And to your knowledge, has anyone, you know, a consultant working on behalf of Midwest Generation identified the source of the levels?
A. Oh, I assumed that that's what you meant by your first question.
Q. Okay.
A. A consultant would not work unless they were directed by Midwest Generation.
Q. Are you aware of any action taken by Midwest Generation since the date of this alternate source demonstration to determine the source of these elevated levels?
A. Powerton. As I sit here today, I -nothing comes to mind, ma'am.
Q. So you can't recall any?
A. No, I -- I cannot.
Q. All right. So if we turn all the

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
way back to the affidavit of Mr. Dale Green, and that is, $I$ think, near the beginning, that one is not tabbed. I apologize. It's the -- it's the first exhibit.

## And at the time this was

filed --
A. I haven't found it.
Q. Oh, please, take your time. Sorry.
A. I found it.
Q. Okay. And at the time this was filed, Mr. Green was the station manager of the Powerton station, correct?
A. Correct.
Q. Okay. And he states in paragraph 6 that at the time this was written, approximately 88 people worked at the Powerton station. Is that a correct representation of what's on the page there?
A. It is.
Q. Okay. Do you agree with Mr. Green that at the time that this was written, 88 people worked at Powerton station?

MS. GALE: Mr. Hearing Officer, we're going to -- I would have to object to this

[^62]line of questioning.
This is an affidavit by Dale
Green. He is not here. They did not identify Ms. Sharene as a corporate representative, but they identified her in and of herself. I -- I don't -- there's -- she has no foundation for her to be able to -- what Dale Green said two years ago.

MS. WACHSPRESS: Your Honor, in one of the exhibits counsel produced for this proceeding, Ms. Shealey indicated to Mr. Richard, who's another expert who will be testifying later, that there were 88 individuals working at Powerton, which is consistent with Mr. Green's statement.

HEARING OFFICER HALLORAN: I'm going to let it stand.

THE WITNESS: Who is Mr. Richard?
HEARING OFFICER HALLORAN: And
Ms. Gale, you have your cross and --
BY MS. WACHSPRESS:
Q. Okay. So to the best of your
knowledge and recollection, is this a correct statement of how many folks worked at Powerton?

[^63]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
A. At the time, yes.

MS. WACHSPRESS: Okay. All right.
We are done with that. Okay.
So, housekeeping, have I moved
for admission of the amended -- 1404, the amended petition?
(No response.)
MS. WACHSPRESS: No. I would like
to move at this time for admission of
Exhibit 1404, the amended petition for adjusted standard for Powerton.

HEARING OFFICER HALLORAN: Ms. Gale?
MS. GALE: No objection.
HEARING OFFICER HALLORAN: Thank you. Complainant's Exhibit 1404 is admitted.

THE WITNESS: Am I done with 1403?
MS. WACHSPRESS: We are done with 1403, I think.

HEARING OFFICER HALLORAN: Never say
never.
MS. WACHSPRESS: Never say -- never say never, but --

THE WITNESS: I would like to move this out of my way, if I can. Thank you.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023


[^64]Electronic Filing: Received, Clerk's Office 05/22/2023
the bypass basin? Yes. I'm certain I reviewed lots and lots of things. I probably hired consultant and contractors.

HEARING OFFICER HALLORAN: Can you
speak up?
BY THE WITNESS:
A. Oh, sorry. Hired consultants and contractors. I have many roles.

BY MS. WACHSPRESS:
Q. Okay. And you mentioned public hearings, so I'm actually going to direct your attention to the very end of this.
A. And I'm sorry. I corrected myself. It's not a public hearing.
Q. Public -- public meeting.
A. Yeah, public meeting.
Q. You mentioned public meetings, so I would like to direct your attention to the very end of this document. I hope I have tabbed it. Maybe not. It's at 117214. So just a few pages from the end.
A. Could you repeat? 117 --
Q. -- 214, but the start of the document is -- I will be referring to 117214, but

[^65]Electronic Filing: Received, Clerk's Office 05/22/2023
the start of the document is actually at 117211.
A. It actually starts at 210 .
Q. 210, oh, there you go. Okay.

So this is a summary, a public meeting general summary, with respect to the bypass basin retrofit, correct?
A. And additionally the closure of the FAB.
Q. Okay. And if you turn to 117214, and where it says "Bypass Basin." It says, "Bypass Basin Underlying Surface." There is a short paragraph, and then indented it says, "During the May 18 meeting, MWG mistakenly stated that the bypass basin never had a Poz-o-Pac liner, and corrected that statement during the May 19 meeting when the question was asked again. The original construction documents showed that a 12-inch thick layer of Poz-o-Pac was installed over the bypass basin's original Hypalon liner along the basin floor.

Both the Poz-o-pac and Hypalon
liners were removed from the bypass basin when the basin was lined in 2010 with a 16-mil HDPE geomembrane liner."

[^66]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

And it says, "Currently, the
bypass basin does not have either of its original
Poz-o-Pac or Hypalon liners; only the relatively
new 60-mil HDPE geomembrane liner is present;" is that correct?
A. That's what it says.
Q. Okay. And I have to apologize to you, because we are, in fact, going back to the petition for existed standard at what is labeled page 8 -- petition for adjusted standard at page 8.

Oh, sorry. For the record, this
is Exhibit 1403.
MS. NIJMAN: We are looking back at
1403?
MS. WACHSPRESS: We are. I apologize. And there, if you will look at subsection (a) one, two, three, four lines down, it states --

MS. GALE: I'm sorry. Wait. Where
are we?
BY MS. WACHSPRESS:
Q. Labeled page 8 of the Powerton petition for -- the 1403.

[^67]Electronic Filing: Received, Clerk's Office 05/22/2023
A. Uh-huh.
Q. And it states, "The liner system consists of six layers of material, from bottom to top. The original Poz-o-Pac, a geotextile cushion, the HDPE liner, a geotextile cushion, a 12-inch thick sand cushion layer, and a 6-inch limestone warning layer."

So it is the case that in the
petition for adjusted standard, Midwest Generation represented that there was Poz-o-Pac liners beneath the historical HDPE liner, correct?
A. That is what that document says, yes.
Q. And in the permit for the retrofit, they stated that, in fact, there is no Poz-o-Pac liner?
A. That is what that document says also, which conflicts, and was -- both were written by humans. Somebody made a mistake. I do not know which one is correct. So I don't know.
Q. As you sit here today, you don't

## know --

A. As I sit here today --
Q. -- whether there is Poz-o-Pac --

[^68]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023


[^69]Electronic Filing: Received, Clerk's Office 05/22/2023
the record.
BY MS. WACHSPRESS:
Q. Okay. So I would like to direct your attention back to Exhibit 1405, page 117121.

MS. GALE: I'm sorry. Did you say
11712?
BY MS. WACHSPRESS:
Q. 117121.
A. Yes, got it.
Q. Okay. All right. And so this -- if you look in the bottom, right this is labeled,
"Cross Section D - D', and it's a document produced by KPRG; is that correct?
A. You characterize that as a prime, but okay.

MS. GALE: I'm sorry. I thought you said 11721. BY MS. WACHSPRESS:
Q. 117121. Okay.

And on the bottom, left the
Cross Section D to D prime or D to D apostrophe -it depends if you're a math or English major -- is labeled in red, correct?
A. I guess. I'm not -- I'm not a

[^70]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
professional engineer. I cannot digest this document in 30 seconds.
Q. But you were involved in the filing of it, correct?

MS. GALE: Objection.
Mischaracterization as to how she handled this document.

HEARING OFFICER HALLORAN:
Sustained.
BY MS. WACHSPRESS:
Q. You testified that you played a role in the filing of this document, correct? Or this entire document, Exhibit 1405, correct?
A. Which one is this? Yes.
Q. Okay. All right. Did you review it at the time it was filed?
A. I -- I cannot review -- I'm not a professional engineer. I rely on professional engineers. I rely on the engineers to give me guidance and direction to get me to compliance. I probably did look at this document. I may have digested it at that point, but $I$ would have to redigest it again here to be able to understand what you just asked me. I'm not a PE. That's not

[^71]what I do.
Q. Earlier today you testified that if the consultant fulfilling the terms of the CCA had not done it correctly or done it in accordance to regulations, you wouldn't have -- be in a position to recognize that?

MS. GALE: Objection. Asked and
answered. And I actually didn't -- would or would not? I didn't --

THE WITNESS: I didn't understand.
MS. GALE: It's vague.
HEARING OFFICER HALLORAN:
Sustained.
BY MS. WACHSPRESS:
Q. Are you able to tell from looking at figures produced by KPRG whether coal ash is saturated in water?

MS. GALE: Objection, foundation.
MS. WACHSPRESS: All right. Your
Honor, I'm trying to assess whether the witness can look at a document in a larger exhibit that she filed and testify to its meaning. If counsel's position is that she is not in a position to assess basic facts about the

[^72]hydrogeology of the plants for which she has testified that she is one of the senior environmental compliance individuals, then -- and who is also -- that counsel intends to call as a witness to these matters later, I think we need to have a discussion about whether she is able to answer questions going forward about MW -- Midwest Generation's compliance with existing rules and their ability to comply with any order that the Board issues.

MS. GALE: If I may respond?
HEARING OFFICER HALLORAN: Yes, you may.

MS. GALE: What she testified was that she oversees these things, and she relies on experts. This document is a KPRG document. They put Mr. Gnat, the principal of $K P R G$, on as a witness, and they did not ask him about this document. So I don't see why they would put it in front of Ms. Shealey, who testified that --

HEARING OFFICER HALLORAN: I don't understand that either, Ms. Wachspress.

MS. WACHSPRESS: All right. If we
can move to have the document -- you know what?

If we -- if we are able to -- if they are willing to stipulate to move to have the Exhibit 1405 entered in the record, we are done with this line of questions.

HEARING OFFICER HALLORAN: Ms. Gale?
MS. GALE: Mr. Hearing Officer, this is one of the documents that we told them we would object to as to relevance, because we didn't find this document to be relevant to this proceeding. As I said previously related to the other operating permit applications, this is -- this document is not relevant to the Board's analysis of their complaint.

That it occurred may be relevant, but the document as it exists, does -is not relevant. Ms. Shealey is able to testify about how these ponds will be retrofitted in a general basis, but drilling down into the nitty-gritty way into the attachments prepared by an expert -- by a consultant is not something that she testified that she would be able to do, nor it's something that, you know -- well, she can't do it.

> HEARING OFFICER HALLORAN: That, I

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

recall.
Ms. Wachspress?
MS. WACHSPRESS: Your Honor -- well,
we --
HEARING OFFICER HALLORAN: I mean,
you know --
MS. WACHSPRESS: I mean, it's a
document that they submitted to the -- I'm just struggling to understand how it's unfair to enter into the record a document that their own expert produced. We are asking Ms. Shealey questions about this only because they have objected to putting the document in its entirety into the record. We are jumping through these hoops because we believe they have been unreasonable about admitting things into the record that they themselves produced.

HEARING OFFICER HALLORAN: Well,
Ms. Shealey --
MS. WACHSPRESS: I don't know what else to do here.

HEARING OFFICER HALLORAN: Excuse me. Ms. Shealey testified that she is not a geologist. She can't read, for the most part --

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

and no disrespect -- the boring samples and all this other stuff.

You know, $I$ can take it as an offer of proof, and the Board can overrule me. They will take a look at this stuff, see if it is relevant, see, you know, if it will be any assistance, but at this point, no, I can't -- I can't take it, you know, as an exhibit other than an offer of proof.

MS. WACHSPRESS: Okay. Well, I will continue as an offer of proof.

HEARING OFFICER HALLORAN: And there
is always a post-hearing brief. I mean, I --
MS. WACHSPRESS: I will continue as an offer of proof, your Honor.

HEARING OFFICER HALLORAN: Okay
thank you.
(Whereupon, the Offer of Proof section begins.)

BY MS. WACHSPRESS:
Q. So, Ms. Shealey, if you take a look at the cross section printed at the top of this page, you will see on the left numbers marked along the left-hand side and on the right-hand

[^73]side; is that correct?
A. Yes.
Q. And you will see three types of fill -- or excuse me -- three types of shaded areas within this diagram; is that correct?
A. And a lack of shaded area. So maybe
four.
Q. Four, yes. And you will see the one labeled A has small diamonds in it; is that correct?
A. Yes.
Q. Okay. And if you look below, you will see that the one marked as $A$ with the diamonds is labeled "Fill: Consisting of tan, brown and black fine to medium sand with some gravel and clay seams. Several locations also included black cinders and brick fragments." Is that correct?
A. It is.
Q. So with your understanding and many years of experience in this area, would you understand that to mean that there is coal ash in at least some locations labeled by that diamond shaded area?
\[

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$
\]

Electronic Filing: Received, Clerk's Office 05/22/2023


[^74]the bottom of the former ash basin indicated on the diagram.
A. That's what it appears to be. And may I state, the problems -- one of the problems I'm having is you're picking out of a page -you're picking a page out of what probably looks like hundreds of pages. So I'm out of context.
Q. Okay. I get that. There is specific information on this page that I would like to get into the record. That's all. I promise we are very near to done.

And you will see a blue line with a triangle on it, and that blue line is indicated below as water level; is that correct?
A. As of $5 / 21$, it appears, yes.
Q. Yes. And so that water level extends above the level of the bottom of the former ash basin, correct?
A. On -- I actually believe that's on 5/21 it did.
Q. On 5/21 it did. And you will see -and I know you're an engineer. You'd need a ruler, but it is -- would you say it's fair to say that is more than five of the scale marked on the

Electronic Filing: Received, Clerk's Office 05/22/2023
left and the right-hand sides; is that correct?
A. I don't need a ruler, because it is actually a scale that is marked. It is more than. It is at some places more than five, but not at all places, it appears.
Q. Okay. Okay. And I think we have finished with the offer of proof.

HEARING OFFICER HALLORAN: All
right. Thank you. We are outside the offer of proof now. Thanks.
(Whereupon, the Offer of Proof section ends.)

BY MS. WACHSPRESS:
Q. Have any monitoring wells been installed at the Powerton site since 2019?
A. I think Mr. Gnat testified to that, and forgive me if he -- if I'm -- if he didn't, and $I$ just know it. Yes.
Q. Yes. Okay. And those were 20 and $21 ?$
A. I have no idea of the numbers. You've got to point me to a diagram.
Q. Well, we can go back to -- I mean, we can go back to the permit application if you

[^75]Electronic Filing: Received, Clerk's Office 05/22/2023
would like the diagram. That's 117204. And I guess we are back in the offer of proof?

HEARING OFFICER HALLORAN: We are back in the offer of proof.
(Whereupon, the Offer of Proof section begins.)

BY THE WITNESS:
A. 117. Try it again. 117 what?

BY MS. WACHSPRESS:
Q. 204 .
A. $\quad 117$-- labeled Figure 1?
Q. It's labeled, "CCR Monitoring Well Site Map," and it's dated June 10th of 2021.
A. Yes. Should I answer the question?
Q. Okay. And if you will look at this, you will see monitoring wells marked at the site, correct?
A. Correct.
Q. Have any monitoring wells been installed at the site since June 10th, 2021?
A. June 10, 2021?
Q. Since the --
A. I believe. Yeah, what's June 10th?

What's the significance of that date?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
Q. It's the date this map is --
A. $\quad \mathrm{Oh}, \mathrm{no}$.
Q. The date of this map.
A. Not in addition to this map.
Q. Okay.
A. I'm sorry. I knew that -- I didn't
realize that you had limited it to after this map.
Q. Yeah.
A. I'm sorry.
Q. No. But this is a complete list of all the monitoring wells at the Powerton site?
A. To the best of my recollection, yeah.
Q. Okay. And if I could direct your attention to the area near Monitoring Well 11 and 12. It's between the ash surge basin and the ash bypass basin. And, to your knowledge, since 2017, has any CCR material been removed from this area between the two basins?

MS. GALE: Objection, foundation.
Has it been established there is CCR there?
MS. WACHSPRESS: Under the order on
liability, yes.
HEARING OFFICER HALLORAN: Could you

[^76]read the question back, Kari, please?
(Whereupon, the record was read as requested.)

HEARING OFFICER HALLORAN: You may
answer.
BY THE WITNESS:
A. I'm not aware that there is CCR
material between the two basins. So, no, not to my knowledge. BY MS. WACHSPRESS:
Q. Has Midwest Generation attempted to assess whether there is any CCR material in this area?
A. Outside of the basins?
Q. Yes.
A. Limited to my time, I'm not currently -- nothing comes to mind. I'm not currently -- as I sit here, nothing comes to mind.
Q. And that includes any consultants acting at Midwest Generation's direction?
A. As I sit here, nothing comes to mind.
Q. Has Midwest Generation taken any leach, $\mathrm{L}-\mathrm{E}-\mathrm{A}-\mathrm{C}-\mathrm{H}$, tests in this area?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
A. Outside of the basin?
Q. Yes.
A. Not that I am aware.
Q. Anyone at Midwest Generation's
direction?
A. Not that I am aware.
Q. So at -- Midwest Generation has not
taken a leach test anywhere outside a basin at the
Powerton site?
A. I cannot say that with 100 percent certainty, no. The Powerton site --
Q. But you don't recall?
A. The Powerton site is large.
Q. But you don't recall any instances?
A. I have not been involved. I don't recall that $I$ have been involved in any instances.
Q. And similarly, you don't recall that you have been involved in any effort to assess the volume of ash outside of the basins at Powerton?
A. That would be true, I think, yeah. Not to my recollection.
(Whereupon, the Offer of Proof section ends.)

MS. WACHSPRESS: Okay. All right,

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
your Honor. I think, if I may, go off the record. HEARING OFFICER HALLORAN: Let's go off the record, Kari. Thank you.
(Whereupon, a discussion was had off the record.)

MS. WACHSPRESS: Your Honor, I would like to move for admission of Exhibit 1405 into the record.

HEARING OFFICER HALLORAN: You did already, and I said no. I will take it as an offer of proof.

MS. WACHSPRESS: Okay.
HEARING OFFICER HALLORAN: Thank
you.
MS. WACHSPRESS: Great. Thank you, your Honor. I'm at a stopping place now. I -but I can also keep going. It's up to you, your Honor.

HEARING OFFICER HALLORAN: Let's go
off the record.
(Whereupon, a short break was
taken.)
HEARING OFFICER HALLORAN: Back on
the record. You may proceed. Thank you.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023

BY MS. WACHSPRESS:
Q. Okay. I would like to -- I would like to introduce what I have marked for identification as Exhibit 1406. (Whereupon, Complainants'

Exhibit No. 1406 was marked for identification.)

BY MS. WACHSPRESS:
Q. Okay. So it's another big one. Do you recognize the document that's just been placed in front of you?
A. Yes, I believe so. It's a lot of pages, but $I$ believe $I$ do.
Q. Okay. And what is it?
A. It looks like a petition for an adjusted standard at Waukegan generating station and a finding of inapplicability.
Q. And the finding of inapplicability related to an area sometimes called "the grassy field," correct?
A. Correct.
Q. And the petition for inapplicability sought a determination that the grassy field is not a CCR surface impoundment, correct?

[^77]Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
. Under Part 845, yes.
Q. Under Part 845?
A. That is correct, yes.
Q. And as this petition was filed on

May 11th, 2021, correct?
A. Yes.
Q. Did you participate in the
preparation of this document?
A. Yes.
Q. What was your role?
A. Reviewing. I'm -- many roles. I'm not exactly sure, because $I$ don't know how many -what's all in here. It was a long time ago. I definitely didn't do the filing. It was done by an attorney.
Q. Okay. And as part of this petition, Midwest Generation sought permission to leave the existing liner in the east pond rather than remove it, correct?
A. I'm so sorry. What -- we actually modified the petition. So this is the original one. I believe this one would have requested reuse of the east pond liner. We later modified it for the west pond, and hence my confusion.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
Q. Yeah. I have my own little chart. You are not alone. So -- okay. So let's turn in this document to page -- what's Bates stamped 123865, and it is about, I would say, three-quarters of the way down. I don't know if I tabbed it. I didn't.
A. Got it.
Q. Okay. And do you recognize this document that was filed as part of the petition?
A. Yes.
Q. Okay. What is it?
A. It is an alternative closure demonstration for a pond, whether that would be east or west I would have to read, at Waukegan station.
Q. And I believe that if you read down to the second paragraph, this relates to the east ash pond; is that correct?
A. Yes.
Q. Okay. And you were carbon-copied on this, correct?
A. Yes.
Q. Okay. And the purpose of this application was to extend the deadline for closure

[^78]Electronic Filing: Received, Clerk's Office 05/22/2023
of the east ash pond from April 11th, 2021, under the federal CCR rules, correct?
A. Beyond April 11th, 2021, yes.
Q. And Midwest Generation understood that it could extend this deadline by submitting an application demonstrating that it had no technically feasible alternative for placing the wastestreams that went into east ash pond, correct?
A. Or that we could not achieve a technically feasible alternative by -- before -by or before April 11th, 2021.

MS. WACHSPRESS: Okay. All right.
I would like to move for admission of Exhibit 1406.

HEARING OFFICER HALLORAN: Ms. Gale?
MS. GALE: Well, objection to
relevance. She talked about two pages, and she also testified that this has been amended, and this -- in the original one, the east pond was going to be reused, and she said, "We amended it later." So this is no longer -- it is not relevant. And it would be confusing to the Board to have these voluminous documents that say

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

numerous things, because as she has testified to over the past many years, things have changed.

MS. WACHSPRESS: Your Honor, this is exactly the type of document you have already admitted with respect to Powerton, and our reasons for admission are the same. We have to admit the entire document, because we understood that to be opposing counsel's position with respect to these voluminous exhibits.

It goes to what steps Midwest Generation has or has not taken since the order on liability to address coal ash and what their current plans are with respect to the ponds.

HEARING OFFICER HALLORAN: I'm going to admit it, and the Board can take a look at it. It is on our Board website.

So Complainants' Exhibit 1406 is admitted over objection. Is there -- does anybody have a file stamped copy of this? I have no idea what number this is. PCB -- this is before -- I have the one before it was filed. It's not stamped by the Board.

MS. WACHSPRESS: We have the one that was produced to us by Midwest Generation to
address authenticity issues. We can also --
HEARING OFFICER HALLORAN: What --
MS. WACHSPRESS: We can --
HEARING OFFICER HALLORAN: Yeah.
I'm sorry. We are still on the record. You can make a note, and then the Board will know, but I have no idea what the adjusted standard number is. AS --

MS. BUGEL: AS 2021-003.
HEARING OFFICER HALLORAN: Okay. I would ask the Board to note that it is AS 21--03. Accepted over objection. Thank you.
(Whereupon, Complainants'
Exhibit No. 1406 was admitted into evidence.)

BY MS. WACHSPRESS:
Q. Okay. I would like to introduce with -- introduce labeled for identification as Exhibit 1407.
(Whereupon, Complainants'
Exhibit No. 1407 was marked for identification.)

BY MS. WACHSPRESS:

## Q. Okay. And do you recognize the

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

document in front of you?
A. Yes, I do.
Q. Okay. And what is it?
A. It is -- I believe I just referenced
the amended petition for adjusted standard for the Waukegan station to switch from one pond to the other. Forgive me. I'm losing track.
Q. Okay. And it was filed on September 17th, 2021, correct?
A. That is when it was received. That's the date it is stamped, yes.
Q. The date it's stamped, yes. And were you involved in the preparation of this document?
A. Yes.
Q. Okay. And what was your role?
A. Review.
Q. Review?
A. Maybe other things. I definitely was not the author. This was authored by an attorney.
Q. Okay. And if I could direct your attention to -- oh, gosh; one, two, three, four, five, six lines from the bottom on page -- I

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

should give you the page number first.
Page 124091 Bates stamp, and
then go up six lines from the bottom. And it states, "In sum, this amendment seeks approval to close the west pond by removal and reuse its liner instead of the original request to reuse the east pond's liner. No other changes to the petition are proposed." Is that a correct -- have I correctly read that statement?
A. Yes, you have.
Q. And is that your understanding of the purpose of this amendment?
A. Yes, it was.
Q. Okay.
A. Or it is. I'm sorry.
Q. So this is the current request
before the --
A. Yes, it is.
Q. Before the Board?
A. Yes, it is.
Q. Okay. And so as we sit here today,

Midwest Generation intends to leave the historical
HDPE liner in place in the west pond, correct?
A. We intend -- yes. Our desire is to

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

reuse the HDPE -- to decontaminate and reuse the HDPE liner in the west pond.
Q. And is it Midwest Generation's intention to remove the historical HDPE liner from the east pond?
A. I believe -- I don't know whether this document contains it, but I believe our plan -- our current closure plan is to close the east pond in place with a final cover system, which would not -- which would mean we do not intend to remove the liner.
Q. Does Midwest Generation intend to test the soils beneath that liner for contamination?
A. No. My understanding, and based on numerous conversations with professional engineers and geologists, is that the final cover system is protective of the environment. There will be no need to test the soils between, underneath any liner.
Q. So there are two options under the federal CCR rules, correct, for closure?
A. And as well as state. By removal or in place.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

| Q. And Midwest Generation has selected closure-in-place for the east pond? |
| :---: |
| A. Yes. |
| Q. Okay. Does Midwest Generation |
| intend to construct a low volume waste pond in the |
| footprint of the west pond? |
| A. Yes. |
| Q. Okay. And is it Midwest |
| Generation's position that the low volume waste |
| pond to be installed in the west pond is a CCR |
| surface impoundment under Illinois regulations? |
| A. No. That is -- |
| Q. Is it -- |
| A. I'm sorry. |
| Q. Go ahead. |
| A. That would be the purpose of the |
| adjusted -- wait. I'm not sure if that's the |
| purpose of the adjusted standard. I may be |
| incorrect. I may be walking myself in a circle. |
| It would not be -- our intention |
| is not to continue to operate any CCR surface |
| impoundments at Waukegan station. |
| Q. Okay. So just so the record is |
| clear, it's Midwest Generation's position that the |

[^79]low volume waste pond to be installed in the west pond is not a CCR surface impoundment under Illinois law?

MS. GALE: I would just object to the characterization of the document. I believe --

MS. WACHSPRESS: I'm not asking about a document. I'm asking her understanding.

MS. GALE: Okay. I object to the characterization. I believe the low -- there is not going to be a construction of a low volume waste pond. That's my objection.

HEARING OFFICER HALLORAN: The --
MS. WACHSPRESS: Your Honor, the witness can testify as to what's going -- the -- I can't -- counsel has --

HEARING OFFICER HALLORAN: When I start talking --

MS. WACHSPRESS: Okay. Sorry.
HEARING OFFICER HALLORAN: -- people
have to stop. At least here.
So if you can rephrase, that
would be perfect. Thank you.
MS. WACHSPRESS: I apologize, your

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Honor.
HEARING OFFICER HALLORAN: No. No
worries.
BY MS. WACHSPRESS:
Q. I'll go back to my original
question.
Is it Midwest Generation's
position -- is Midwest Generation going to
construct a low volume waste pond in the footprint of the west pond?
A. With Board approval.
Q. Okay. And is it Midwest

Generation's position that that pond, that low volume waste pond, if constructed, would be a CCR surface impoundment under Illinois law?
A. Our position is that it would no longer be a CCR surface impoundment because it will not impound CCR. It would be a low volume waste pond.
Q. Okay. So if we could go back to the May 2021 -- the original May 2021 petition.
A. Sorry. That is 1406?
Q. That's 1406. And if I could direct you to Bates number 124055.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

A. Okay.
Q. Okay. And do you recognize this document?
A. $\quad 124055$ ?
Q. Sorry. 124054. I apologize.
A. I'm sorry. I was on the wrong page.

I was on 005, and I was like, wow. That's a -wow. Sorry.
Q. No worries.
A. 124054. Is that what you said?
Q. Yes.
A. 12405 -- I have caught up to you now. Please go ahead.
Q. And do you recognize this document?
A. I would presume it's an outdated closure plan for Waukegan station. Yes, I do recognize it.
Q. And that closure plan is dated October 2016, correct?
A. Yes. And that's why I would presume it would be updated by now. That is more than six -- so, shoot, seven years ago. Almost seven.
Q. And this closure plan was published consistent with Part 257 regulations, correct?

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
A. That's what it says, yes.
Q. Okay. And if I could direct your
attention to 124055?
A. Yes.
Q. And under Item 3 it says, "CCR will
be removed from the east and west ash basins in accordance with Section $257.102(c)$. Therefore, no final cover system will be constructed for closure." Have I read that correctly?
A. Yes.
Q. So in 2016, was it Midwest Generation's plan to close both ponds by removal?
A. In accordance with federal regulations, yes.
Q. Okay. But as we currently sit here, it is Midwest Generation's plan to close the west pond by installing a cap; is that correct?
A. No.
Q. No?
A. No. It's the east pond we intend to install by closing in -- with a cap.
Q. So the west pond is not closing?
A. The west pond -- the adjusted standard -- without having read the adjusted

[^80]standard in the past recency, the west -- I believe that we are requesting an adjusted standard from the state closure requirements so that we can remove ash to the HDP -- ash and materials down to the HDPE -- HDPE liner, decontaminate that liner so that it is closed as a CCR surface impoundment, and reuse that area, that pond, as a low volume waste pond.
Q. Okay. I hate to do this, but if I could direct your attention to Exhibit 1331 from the previous witness.
(Whereupon, a discussion was had off the record.)

HEARING OFFICER HALLORAN: We are back on the record.

BY MS. WACHSPRESS:
Q. Okay. And if I could direct you in this exhibit to Bates page number 111166.

MS. GALE: I'm sorry. What was the number?

BY MS. WACHSPRESS:
Q. 111166 .
A. I have it.
Q. Okay. And this is part of a

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

Electronic Filing: Received, Clerk's Office 05/22/2023
document that is -- sorry. If you scroll up to 111163. This is a preliminary written closure plan for the east ash pond, correct?
A. That's what it's labeled, yes.
Q. Okay. And it's dated October 29th, 2021, correct?
A. Correct.
Q. And if then you scroll down to 111166, and it describes at 3.0 the final cover system description; is that correct?
A. That appears, yes, to be what it says.
Q. Okay. So in 2016, the Midwest Generation closure plan for the east pond indicated that it would be removing CCR material and would not need a cover, correct?
A. In 2016, we only had to comply with
federal rules. In 2021, we had state and federal rules. Our plans changed.
Q. And your plans changed because now it is Midwest Generation's intention to comply with federal regulations by closing the east pond with coal ash in place and a cover, correct?
A. Federal and state regulations, and

[^81]additionally, I can't really get into a time machine and know this for certain, but in 20 -- in 2016, I don't believe that we would have thought Waukegan would have ceased operating by now, or ceased combusting coal by now. So plans changed. I guess, my point being, plans have changed in five, seven, eight years, yes.
Q. The decision to cease operating the plant didn't cause there to be more coal ash, did there?
A. It has ceased producing coal ash.
Q. Okay. Okay. And you anticipated my next question, which is that Waukegan station was retired on or before June 1st --
A. Not -- not the entire station. The coal units were retired.
Q. Okay. The coal units at Waukegan were retired by June 2022?
A. By June 2022, yes.

MS. WACHSPRESS: Okay. Okay. I
would move for admission of -- oh, we have done Exhibit 1406. 1407. I would like to move for admission of the amended -- 1407, the amended Waukegan petition.

$$
\begin{gathered}
\text { L.A. Court Reporters, L.L.C. } \\
312-419-9292
\end{gathered}
$$

HEARING OFFICER HALLORAN: I
should -- in the interest of full disclosure, I believe I'm assigned to this AS 21-03 as a hearing officer with the Illinois Pollution Control Board, but I will not and have not made any substantive decisions on this case, nor, you know, I have not made any substantive decisions on the 13-15 that we are in the middle of now, nor will I.

With that said, Ms. Gale?
MS. GALE: No objection.
HEARING OFFICER HALLORAN: Thank
you. Exhibit 1407 is admitted.
(Whereupon, Complainants'
Exhibit No. 1407 was admitted into evidence.)

HEARING OFFICER HALLORAN: You know,
I think it's about time to take a long break.
THE COURT REPORTER: Are we off the
record?
HEARING OFFICER HALLORAN: Yes. I'm
sorry. We are off the record for a second, and then we are going to get back on.
(Whereupon, a discussion was had off the record.)
L.A. Court Reporters, L.L.C.

Electronic Filing: Received, Clerk's Office 05/22/2023
May 18, 2023
right. Let's go back on the record. We are calling it quits for today. It's about five until 5:00. Have a safe evening, and see you tomorrow.
(END OF PROCEEDINGS.)
HEARING OFFICER HALLORAN: All
L.A. Court Reporters, L.L.C.

312-419-9292

I, KARI WIEDENHAUPT, do hereby certify that the foregoing was reported by stenographic and mechanical means, which matter was held on the date, and at the time and place set out on the title page hereof and that the foregoing constitutes a true and accurate transcript of same.

I further certify that $I$ am not related to any of the parties, nor am I an employee of or related to any of the attorneys representing the parties, and I have no financial interest in the outcome of this matter.

I have hereunder subscribed my hand on the
$\qquad$ day of $\qquad$ , 2023.

KARI WIEDENHAUPT, CSR

| A | 32:9 | 248:15 251:2,4,7 | 181:10 194:20 | 248:17 256:7,18 |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{A}^{\prime} 38: 8$ | accuracies 27:5 | 252:2,4,5,6,11 | 96:18,1 | allowance 102 |
| A.D 1:18 | accurate 85:7 | 252:18 253:2 | 30:21 231 | allowed 26:17 |
| a.m 1:18 | 135:9 181:2 | 256:6 263:21 | 245:2 249:21 | 45:23 |
| A1 125:2,9 126:6 | 214:22 283:7 | 264:22 268:1,18 | 261:9 | allows 45:19 |
| 127:18 | 319:7 | 277:10 281:10 | Agency's 177:13 | 17:14,21 118:5 |
| A2 125:20 126:6 | achieve 2 | 282:9 300:16 | ago 185:8 202:24 | 9:13 |
| Abel 2:19 4:4,6 | 303:10 | 305:7 306:5 | 253:4 258:12 | alpha 102:6 |
| 24 | achie | 309:17,18 | 276:8 301:13 | alternate 35:2 |
| ability 77 | acidic 32:4 | 313:23,24 314:2 | 312:22 | 114:6 200:11,14 |
| 101:4 193:21 | act 149:23 16 | admissibility | agree 21:23 | 200:15,17,18,19 |
| 287:9 | 165:12,16,18 | 108:1,4 | 158:12 164:6 | 200:23 240:6,8,9 |
| able 30:24 40:8 | 172:4 | admission 223: | 164:14,18,20 | 240:10 257:8 |
| 51:15 52:10 | acting 229 | 230:4 245:9 | 167:7 179:7 | 270:8,22 271:11 |
| 57:23 61:12 | 297:20 | 261:15 277:5,9 | 241:6 254:11 | 271:22 272:11 |
| 87:18 88:7 | action 32:1,13 | 299:7 303:14 | 275:20 | 273:6,12,22 |
| 94:14 102:15 | 117:22 274:16 | 304:6 316:21,23 | agreed 134 | 274:18 |
| 118:22 119:15 | actions 158:9,1 | admit 7:20 66:15 | 140:3 179:3 | alternative 179:14 |
| 131:2 133:17 | 231:3 246:2 | 66:20,24 106:11 | 218:2 223:13 | 200:18 201:6 |
| 134:16 168:10 | actively $246: 5$ | 106:21 262:14 | 259:19 | 302:12 303:7,11 |
| 182:17 193:23 | activity 229:11 | 304:6,15 | agreement 120:17 | alternatives |
| 194:2 195:16 | actual 28:10 | admitted 5:7 8:6 | 135:1 140:5 | 253:11,14 |
| 196:2 198:21 | 38:21 116:20 | 67:14 68:3,5,20 | 157:8,14,20 | amended 235:20 |
| 199:2 215:2 | 127:11,24 | 106:17 107:8 | 158:11,15,24 | 235:23 240:6 |
| 226:12 253:18 | add 82:19 255 | 232:21 246:16 | 159:4,10 177: | 63:9,20,21 |
| 254:11 276:7 | added 121:1 | 262:16 263:3 | 177:16,20 | 264:2 266:15,17 |
| 285:23 286:15 | addition 296:4 | 277:15 304:5,18 | 191:20,23 | 277:5,5,10 |
| 287:6 288:1,16 | additional 23: | 305:14 317:12 | 194:19,23 195:3 | 303:19,21 306:5 |
| 288:21 | 29:12 59:19 | 317 | 197:13 203:6 | 316:23,23 |
| absence 105:15,16 | 60:10 118:3 | admitting 289 | 210:24 223:10 | amendment 307:4 |
| absolutely 20:22 | 124:5 246:9 | adverse 7:8 9:3 | 234:17 | 307:12 |
| 66:10 206:13 | 268:13,15 | 147:14 151:6,1 | ahead 18:14 37:9 | America 15:10,11 |
| 258:10 | additionally $280: 7$ | advice 258:23 | 45:6 92:8 | amount 228:10 |
| abundance | 316:1 | ad | 102:22 117 | an@nijmanfra... |
| 155:11 176:13 | address 6 | advised 259:14,15 | 154:7 210: | 3:12 |
| accept 246:13 | 119:19 123:16 | advisement | 215:21 221:2 | analyses |
| acceptance | 124:1 143:13 | 259:1 | 231:19 256:21 | 105:11 |
| 177:13 191:22 | 304 | aer | 56:22 309:1 | nalysis 63 |
| 195:1,2,4 197:9 | addressed 173:15 | affect 32:3 61 | 312:1 | 76:20 90:6,19,19 |
| accepted 79:17 | 173:16 179:20 | 108: | air 29:12 165 | 288:12 |
| 5:12 | 270 | davit | 65:16 |  |
| accepting 232:18 | adjacent 1 | afternoon | airport 19:22 | 24:20 26:15 |
| accomplish |  | afternoo | alleged 183:11,15 | 27:1 29:7 77:10 |
| 118:13 <br> accumula | $\begin{array}{\|r\|} \hline \text { adjusted 246:20 } \\ 247: 12,22,23,24 \end{array}$ | $\begin{array}{\|c} \hline \text { agency } 138: 17 \\ 149: 15,18 \end{array}$ | $\begin{gathered} \text { allow } 50: 1118: 20 \\ 121: 19232: 16 \end{gathered}$ | 77:15 <br> analyzed 29:1 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 19 121:15 | 312:5 | apply 117:9 145:6 | 124:15 128:11 | 229:12 234:6 |
| :---: | :---: | :---: | :---: | :---: |
| analyzing 26:14 | apostrophe | applying 78:7 | 134:13 137:17 | 235:2,7,7 236:10 |
| 29:5,6 98:22 | 284:21 | appreciated | 138:1 142:19 | 236:11,15 |
| Anand 6:10 | apparently 145:9 | 210:24 | 145:2 215:14 | 237:12 238:3,21 |
| and- 2:17 | appeal 107:22 | approach 58:10 | 216:3 219:22 | 239:4 240:17,17 |
| and/or 32:5 266:3 | appear 95:1 98:12 | 61:10 98:22 | 291:6,21,24 | 241:2,11 242:3 |
| ANDREW 3:5 | 180:18 228:19 | 99:2 118:23 | 292:11,15 | 242:15 243:1,6 |
| angry 172:4,4 | APPEARANCES | approaches | 296:15,18 | 243:15,17 |
| annual 121:21 | 2:1 3:1 | 117:22 | 297:13,24 | 245:18 248:16 |
| annually 187:2 | appears 86:13 | approachin | 300:19 314:7 | 255:3 256:2 |
| anomalous 102:13 | 98:7 123:20 | appropriate 106:5 | areas 35:3 71:5 | 264:24 265:7 |
| answer 22:21,22 | 129:14 178:4 | 117:18 119:2,14 | 83:18 117:23 | 266:4 273:7,7 |
| 30:24 104:7 | 214:3,6 220:7,11 | 119:16 | 119:1,6 135:5 | 286:16 291:22 |
| 133:17 168:10 | 278:13 293:3,15 | approval 157:4,7 | 236:16 291:5 | 292:2,17,20 |
| 175:23 182:16 | 294:5 315:11 | 158:8,10 249:21 | arena 81:10 | 293:1,18 296:16 |
| 184:10 188:12 | appendices 183:7 | 250:1,3 307:4 | argue 241:23 | 296:16 298:19 |
| 193:15 195:23 | appendix 19:7,8 | 311:11 | Army 109:11 | 302:18 303:1,8 |
| 196:2,4 199:2 | 28:21,22 30:4,7 | approved 138:17 | arsenic 35:11 88:6 | 304:12 313:6 |
| 218:7 229:6 | 30:12 53:15,16 | 178:23 | 88:9 90:10,11 | 314:4,4 315:3,23 |
| 237:19 242:11 | 210:14,18 214:2 | approximate | 270:15,24 272:7 | 316:9,11 |
| 265:13 287:7 | 214:4,7 | 219:23 226:14 | ash 13:13,22 14:7 | ash-settling |
| 295:14 297:5 | applicable | approximately | 19:3,6 21:24 | 207:14 |
| answered 103:13 | application 22:17 | 96:7 146:19 | 33:11 35:22 | aside 117:4 |
| 286:8 | 26:10 44:6 | 215:17 219:1 | 36:17 37:1,6,15 | asked 17:2,19 |
| answering 101:4 | 45:16 82:22 | 233:15 275:15 | 37:19,22 41:2 | 56:16 103:14 |
| answers 31:13 | 139:5,17 158:19 | appurtenances | 114:7 123:17,17 | 108:20 109:18 |
| 192:3 | 158:20 167:15 | 208:5 | 123:22 124:3,16 | 111:22 112:23 |
| anticipated 244:6 | 178:19 201:5,11 | April 76:1 201:23 | 126:15 128:8,19 | 182:19 188:9 |
| 244:22 267:10 | 201:17 202:10 | 202:23 204:7 | 129:9,16,22 | 204:17 205:12 |
| 267:23 316:12 | 202:16,19 203:7 | 205:2,7,20,24 | 130:6,23 131:2,6 | 205:17 242:6 |
| anticipating | 203:11,16,19,21 | 206:6,12 303:1,3 | 137:21 141:12 | 245:2 280:16 |
| 223:12 | 204:14,20 | 303:12 | 141:21,24 | 285:24 286:7 |
| antimony 87:15 | 205:21 207:2 | aquatic 144:16 | 145:24 146:2,3,3 | asking 17:2 22:4 |
| 87:20 | 208:20 214:2,9 | aquifer 21:9 130:2 | 149:8,10 162:17 | 63:10 100:23 |
| anybody 68:9 | 223:12 245:5,15 | area 14:9 19:19 | 163:12,15,19,21 | 108:16 124:11 |
| 304:18 | 249:11 278:10 | 19:22 21:24 | 164:14,16,17,19 | 141:6 143:16 |
| anymore 113:22 | 294:24 302:24 | 22:2 33:11,13 | 164:19,22 165:2 | 167:4 179:10 |
| 161:1 | 303:6 | 34:23 35:19 | 165:9 169:4,24 | 181:15,22 184:4 |
| anyway 200:19 | applications | 36:22 37:11 | 172:15 178:7,10 | 184:5 193:5 |
| apart 126:8 | 98:13 155:19,20 | 41:10 48:10 | 178:10,20,20 | 217:21 228:8 |
| apologies 9:14 | 159:17 160:16 | 49:20,22 83:14 | 201:7,22 202:12 | 236:18 250:16 |
| apologize 69:19 | 166:2,10,24 | 83:22 97:1,2 | 212:21 213:1,7,8 | 260:8 268:4 |
| 167:1 185:19 | 288:11 | 103:22,24 104:1 | 213:18,18,21 | 289:11 310:7,8 |
| 211:13 275:3 | applied 169:2 | 106:4 108:17 | 219:23 222:11 | aspects 199:14 |
| 281:7,17 310:24 | applies 169:7,17 | 109:7,13,17,24 | 225:24 228:2 | asphalt 118:9 |

L.A. Court Reporters, L.L.C.

312-419-9292

| assess 209:21 | 154:9 229:5 | B | 59:16 60:1 | 203:14,17 204:2 |
| :---: | :---: | :---: | :---: | :---: |
| 286:20,24 | attempted 228:1 | B | 61:13 62:3,6 | 04:7,9,13,18 |
| 297:12 298:18 | 228:13 297:11 | B-MW-5-Po | 87:6,20 88:10 | 205:1,6,19 206:8 |
| assessed 209:16 | attention 177:3 | 220:9 | 89:14 90:12,23 | 207:2,13,19 |
| assessment 53:17 | 178:6,16 206:24 | Bacher 201:15 | 100:18 115:6,10 | 208:2,5,12,19,22 |
| 121:5,17 138:18 | 210:7,23 211:12 | back 13:16 30:2 | 116:8,11,19,19 | 208:23 209:9,13 |
| assigned 74:19 | 215:15 220:15 | 37:16 38:2 | 116:23 131:10 | 209:18 212:21 |
| 317:3 | 225:3 264:18 | 39:19 41:13 | background-ba... | 213:1,7,9,19,22 |
| assist 29:10 | 279:12,18 284: | 44:18 55:1,2 | 115:19 | 219:23 222:12 |
| assistance 32:12 | 296:15 306:23 | 58:4 59:1 68:19 | bank 109:18 | 225:24 234:6 |
| 246:12 290:7 | 313:3 314:10 | 72:4 91:1 95:14 | 110:9 111:9 | 235:2,7 236:11 |
| associate 23:24 | attenuation 118:2 | 96:6 100:8 | 112:24 113:9 | 236:15 238:3,22 |
| associated 10:14 | attorney 6:10,22 | 107:17 112:13 | banks 108:21,22 | 239:4 240:17 |
| 22:20 35:17 | 181:8,9 182:6 | 119:16 120:10 | 109:12,21,23 | 241:11 242:3 |
| 73:2,11 86:18 | 183:14,14,22 | 126:20 127:9 | barium 270:15,24 | 243:6,15,17 |
| 257:7,21 267:17 | 184:16,16 | 131:16 136:7,17 | 272:7 | 245:18 248:6,11 |
| 271:21 272:11 | 264:11 301:15 | 137:12 142:20 | barriers 118:8 | 248:12,16,17,17 |
| assume 149:4 | 306:21 | 142:21 146:18 | BAS 24:1 | 255:2,3 256:3,3 |
| 210:11 | attorneys 319:11 | 146:19 148:13 | base 39:15,16 | 256:4 265:1,1,1 |
| assumed 274:11 | augment 76:15 | 165:21 168:15 | 267:4,11,24 | 265:7 266:5,8,11 |
| assuming 34:22 | 82:24 84:22 | 168:17 183:1 | 268:20 | 267:12 268:8,14 |
| 211:15 | 118:5,6 121:1 | 185:24 190:20 | based 23:9 46:23 | 268:20 273:7,8 |
| Assurance 15:5 | August 42:7 58:11 | 193:21 196:5,7 | 56:6 62:6 72:12 | 278:11,24 279:1 |
| 18:11 | 116:10 | 196:12 198:5 | 87:16 94:23 | 280:6,10,11,14 |
| assure 23 | authentici | 211:15,17 212:8 | 106:6 108:1 | 280:20,22,23 |
| attached 142:15 | 305:1 | 217:18 221:15 | 109:4 113:18 | 281:2 292:17,20 |
| 195:4 | author 30 | 221:16,23 | 115:6,7,9 116:8 | 293:1,18 296:16 |
| attachment 10:5 | authored 306:20 | 233:15 240:5 | 116:18 117:23 | 296:17 298:1,8 |
| 13:19 45:7,12 | available 12:18,19 | 244:20 247:1 | 138:12 181:11 | basin's 280:19 |
| 49:19 50:4 | 25:14,21,22 | 249:8 250:8,9 | 181:17 182:2,11 | basins 248:19 |
| 53:22 54:1,4 | 60:12 82:14 | 253:9 254:13 | 183:19 235:13 | 249:12,15,18,20 |
| 55:21 57:17 | 106:1 251:8 | 266:13,14 270:5 | 272:6 308:15 | 249:24 250:13 |
| 58:7,13 63:9,11 | AVENUE 2:20 | 275:1 281:8,14 | bases 138:13 | 258:1 261:8 |
| 63:13 64:13,14 | average 19:14,20 | 283:10,24 284:4 | basic 286:24 | 265:12,16,24 |
| 64:15,19,24 65:4 | avoid 231:4 | 294:23,24 295:2 | basically $12: 4,17$ | 266:1 267:4,11 |
| 65:4,6,9 66:13 | aware 11:13 71:16 | 295:4 297:1 | 12:20 18:1,8 | 268:1,12 296:19 |
| 71:17,18 89:7,10 | 109:6,23 113:21 | 299:23 311:5,20 | 19:1 23:8 24:24 | 297:8,14 298:19 |
| 90:21 96:12,16 | 189:21 190:1,2 | 314:15 317:22 | 39:1,14 58:22,23 | 313:6 |
| 102:23 104:3 | 190:11 197:5 | 318:2 | 59:10 99:1,23 | basins' 255:12 |
| 105:2,5 135:14 | 199:8,9 228:24 | background 7:18 | 118:19 123:5,8 | basis 90:16 109:1 |
| 138:5,20 139:11 | 229:1,14,18 | 16:8,12,15,17 | 126:20 127:6 | 109:8 110:5 |
| 142:12 | 259:18,20 | 24:22,22 28:7,8 | 189:11 | 111:17 112:9,19 |
| attachments | 274:16 297:7 | 28:12,16 29:17 | basin 33:11 114:7 | 113:15 120:16 |
| 288:19 | 298:3,6 | 30:12,17 31:10 | 178:20,21 201:7 | 120:22 138:15 |
| attempt 153:2 |  | 32:20 54:12 | 201:23 202:12 | 178:12 184:6 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 235:8 259:15 | behalf 7:1,5 274:8 | 249:21 250:5 | 95:2,11 119:11 | 37:17 38:2 |
| :---: | :---: | :---: | :---: | :---: |
| 288:18 | behaving 62:11 | 257:19,19,21 | 120:8 185:24 | 46:16 49:16 |
| Bates 36:10 39:24 | 62:17 | 261:4 264:17 | 191:16 | 50:7,8,17 51:11 |
| 41:18,20 43:16 | behavior 62:19 | 270:19 273:9,22 | black 32:19,21, 23 | 51:16 52:3,6,7 |
| 44:1 45:10 | belabor 43:17 | 278:19 283:6 | 37:1,13,15 47:6 | 52:14,17 53:20 |
| 52:20 54:5 | 80:21 209:7 | 289:15 293:19 | 47:10,13 91:23 | 53:24 67:15 |
| 63:18 64:16 | belief 258:12 | 295:23 300:12 | 97:19 101:10 | 97:9 98:4,5,8 |
| 65:5 67:1,3 69:9 | believe 10:1 11:2 | 300:13 301:22 | 126:20 136:24 | 125:1,9,20 |
| 73:20,20 74:10 | 11:7,11,12 16:13 | 302:16 306:4 | 214:13,13,15 | 126:12,16 |
| 75:12 76:19 | 17:1,8,19 19:3 | 308:6,7 310:6,10 | 215:5 217:7 | 127:16,18 |
| 81:4,13 82:8 | 19:21 21:19 | 314:2 316:3 | 220:16 221:1,8 | 128:18 129:7 |
| 83:10 84:1,10 | 27:13,13 28:4 | 317:3 | 222:20 224:22 | 131:16,16,19 |
| 85:22 86:23 | 37:20 45:1,3 | believed 179:13 | 225:2,7,9,13 | 220:6,11 222:15 |
| 87:5 89:8,12 | 50:11,19 51:17 | 212:1 | 227:4 291:15,17 | 223:1,24 224:6 |
| 90:6 91:3,4,11 | 51:17 53:19 | beneath 36:4,22 | 292:2,11 | 224:21 226:17 |
| 91:20 92:9 93:6 | 54:13 55:17 | 37:6 42:14,15 | blended 219:5 | 226:21 227:12 |
| 94:3 96:11,20 | 57:20 59:4 | 92:15 130:2 | block 211:20,24 | 227:14,14,19 |
| 98:3,18 99:5 | 63:10 64:22 | 134:20 135:5 | 212:12 | 228:2,5,6,9 |
| 101:12 102:23 | 72:8,11 74:14,15 | 208:9 209:16 | blocked 19:18 | 229:12 290:1 |
| 103:6 104:13 | 74:16 80:11 | 282:11 308:13 | blue 293:12,13 | borings 13:13 |
| 105:3 114:10 | 81:6,12 82:20 | best 57:15 101:4 | Board 1:1 6:4 9:5 | 51:20 96:22 |
| 127:18 134:4 | 83:2 92:14 | 211:6 212:16 | 57:22 67:6,12,18 | 97:15,16 |
| 139:20 141:7 | 100:14 102:19 | 214:8 230:24 | 67:24 68:20 | boron 29:19,24 |
| 178:6 181:4 | 104:3 105:9 | 240:14 258:18 | 70:23 71:13,16 | 30:4,11,16 35:11 |
| 183:4 203:23 | 108:15 109:13 | 264:15 274:5 | 95:22 106:18,22 | 89:15,18 90:8 |
| 206:24 264:19 | 109:20 110:8 | 276:22 296:12 | 107:5 108:2,7 | boss 233:5 |
| 269:23 302:3 | 112:5,23 113:4 | better 31:13 45:23 | 151:16 184:8 | bottles 26:4 122:9 |
| 307:2 311:24 | 113:23 117:5 | 61:4 71:21 | 232:2,18 244:16 | 123:7 |
| 314:18 | 125:4,6 126:8 | 157:8 245:1 | 246:8,12 248:6,9 | bottom 16:23 20:9 |
| beach 128:23 | 132:24 133:3,5 | beyond 57:3 | 250:6 261:10,11 | 33:3 80:21 |
| 129:24 130:1 | 135:1 137:11 | 127:13 224:9 | 261:21,23,24 | 130:23 131:2,6 |
| bear 12:12 53:22 | 139:2 142:1 | 246:10 252:8 | 262:13,14 | 201:14 202:14 |
| 91:2 133:24 | 143:3,10 144:7 | 259:14 303:3 | 287:10 290:4 | 211:9,19 212:20 |
| 141:8 | 145:17 146:20 | bifurcated 243:11 | 303:23 304:15 | 221:10 260:16 |
| began 152:13 | 152:10 159:14 | 243:13 | 304:16,22 305:6 | 260:22 282:3 |
| beginning 272:2,5 | 162:5,5,8 171:13 | big 23:18 207:24 | 305:11 307:19 | 284:11,20 |
| 275:2 283:18 | 172:20 173:21 | 300:9 | 311:11 317:4 | 292:20 293:1,17 |
| begins 12:12 | 175:17 176:3,5,7 | Bilandic 1:16 | Board's 261:22 | 306:24 307:3 |
| 63:17 64:14 | 176:9 194:6 | Bill 244:12 | 262:12 288:12 | boundary 20:17 |
| 72:24 73:19,20 | 201:9 205:3 | bins 207:9 | boiler 132:16,18 | 34:9 117:24 |
| 74:24 96:12 | 207:4 208:11,14 | bisected 242:17 | 132:19,21 133:1 | 134:10,10,22 |
| 102:23 103:6 | 213:16 218:9 | 242:19,21 243:9 | 133:4,11 134:13 | 135:8 |
| 104:13 267:5 | 223:4 234:21,22 | bit 9:18 17:10 | 218:14 | box 36:24 212:20 |
| 268:4 290:19 | 235:21 239:9 | 18:14,15 28:16 | borax 35:11 | boy 139:21 259:11 |
| 295:6 | 243:9 248:1,4,10 | 29:18 90:6 95:1 | boring 13:17,18 | Bradley 1:15 6:3 |

L.A. Court Reporters, L.L.C.

312-419-9292

| break 68:8,13 | 204:2,7,13,18 | 132:17 139:10 | 47:19 82:20 | 171:15 176:11 |
| :---: | :---: | :---: | :---: | :---: |
| 95:14 96:3 | 205:1,6,19 206:8 | 147:14 151:14 | CCA 14:8,15 54:7 | 203:18 204:5,6 |
| 107:14 140:19 | 207:2,13,19 | 163:6 191:10 | 54:15 55:1,9,10 | 207:11 209:8,17 |
| 146:15 190:18 | 208:2,5,12,22,23 | 217:23 240:7,9 | 106:3,6 120:11 | 214:18,20 215:3 |
| 192:8 233:1,6,9 | 209:9,13 225:24 | 243:6 292:2 | 121:24 122:5 | 217:2,19 218:6,8 |
| 233:12 299:21 | 248:16 255:2 | 300:19 | 123:2,3 177:19 | 218:15 219:11 |
| 317:17 | 256:3 265:1,18 | calling 146:23 | 178:18 179:3,14 | 219:13,16 |
| brick 130:14 | 266:8 267:12 | 318:3 | 181:6,19 183:6,7 | 236:17,24 237:1 |
| 214:16 291:17 | 273:7 278:11,24 | calls 30:21 56:10 | 183:8,10,12 | 239:5,7,11 |
| brief 290:13 | 279:1 280:6,10 | 57:1 133:14 | 184:14,21 186:1 | 241:11 242:3 |
| briefly 101:23 | 280:11,14,19,22 | 179:4 183:23 | 186:4 187:9,18 | 248:13,20 |
| 150:7 | 281:2 296:17 | 184:1 217:6 | 189:1,10,13,21 | 250:12 255:16 |
| bring 60:13 129:5 |  | cap 19:18 22:1,24 | 190:4 192:21 | 255:19,21,22,23 |
| 254:13 | $\frac{\mathbf{C}}{\text { C }}$ | 118:9 313:17,21 | 193:9,14,16 | 255:24 256:5 |
| broad 137 | C 9:2,7,7 108:12 | capable 194:2 | 194:1,1,5 195:9 | 266:3,5 267:3,10 |
| 167:3 | 141:2 147:16 | capacity 23:3 | 195:13,15,17 | 267:24 268:19 |
| brought 64:3 | 151:18 | 33:11,13 200:11 | 197:16,24 | 295:12 296:18 |
| 69:16,17 74:1 | C-1 219:10,12 | 200:18,24 | 198:19,21 | 296:21 297:7,12 |
| 129:3 148:1 | C-L-I-F-T-Y | capital 256:15 | 199:14 286:3 | 300:24 303:2 |
| brown 37:13 | 259:8 | carbon 202:15 | CCAs 186:1,6,13 | 308:22 309:10 |
| 47:17 95:24 | C-R-R-E-K 259:8 | carbon-copied | 186:20 187:5 | 309:21 310:2 |
| 214:13 291:15 | C10 127:17,19,22 | 302:20 | 188:1,4 199:16 | 311:14,17,18 |
| brown/gray | calcium 89:1 | carcinoge | 199:18 | 313:5 314:7 |
| 125:12 | calculate 28:5,7 | 119:9 | CCR 19:2 24:21 | 315:15 |
| brownfield 117:10 | calculated 28:12 | care 64:21 79:6 | 25:21,23 27:24 | CCR-impacted |
| brownfields 117:6 | 87:11,20 | caring 253:23 | 29:24 30:5,11,17 | 208:3,9 |
| 123:20 | calculation 21: | carry 198:15 | 31:9,20 35:24 | cease 316:8 |
| Bugel 2:2 6:22,22 | 90:12 102:8 | case 7:10 81:21 | 54:16 56:19 | ceased 203:18 |
| 17:2 41:18 | 115:5,19 | 87:12,18 88:1 | 58:10,17,21 | 204:19 316:4,5 |
| 63:10 108:16 | calculations 29:2 | 90:14 91:6 | 59:17 60:6,9 | 316:11 |
| 133:14 305:9 | 29:9,11 | 96:22 100:21 | 76:10 78:5,7,10 | cement 79:17 |
| Building 1:16 | calibrating 23:23 | 102:5 115:7 | 78:13,17 87:3 | cement-like 79:20 |
| buildings 118:12 | CALIFORNIA | 118:20 120:5 | 103:10,22 | CENTER 1:5 |
| bullet 89:14 207:7 | 2:13 | 122:2,2 129:21 | 105:11 106:4,8 | certain 67:13 |
| 214:12 216:19 | call 29:13 132:2 | 157:10 163:10 | 110:24 116:13 | 157:5 158:9 |
| bullets 78:2 | 147:1 217:19 | 164:21,24 165:9 | 120:8 122:6,7,10 | 160:4,15 171:8 |
| burned 218:13 | 237:13,14 | 174:2 179:13,16 | 148:24 149:4 | 199:16,18 240:3 |
| burning 113:22 | 243:12 244:12 | 232:4 282:8 | 150:15 154:18 | 271:15 279:1 |
| 149:11 | 287: | 317:6 | 154:22 155:6 | 316:2 |
| burns 113:24 | called 9:3 15:11 | catch 196:18 | 159:10 160:4 | certainly 12:2 |
| 114:1,2 | 18:21 19 | category 175:7,9 | 165:24 166:4,8 | 13:17 24:11 |
| business 108:4 | 24:1,5 26:3 | caught 312:12 | 166:22 167:16 | 37:18 38:23 |
| busy 256:20 | 29:10 46:16 | cause 193:8 316:9 | 167:19,24 168:1 | 40:23 42:13 |
| by-pass 208:19 | 59:13 91:19 | caution 67:11 | 169:8,18 170:3 | 47:9 50:13 |
| bypass 203:14,17 | 114:15 118:7 | caveat 37:24 | 170:20 171:11 | 51:18 80:13 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 93:19 106:3 | charts 102:15 | 143:2 145:13 | 70:17 72:5 | 218:13,17 |
| :---: | :---: | :---: | :---: | :---: |
| 113:12,14 | 224:18 | 146:1 | 78:20 103:1,5,17 | 220:16,24 221:1 |
| 129:21 130:8 | checked 11:14 | clay 126:14 | 134:16 139:3,4 | 221:8 228:2 |
| 133:3 140:21 | checking 59:7 | 214:14 221:9,9 | 139:10,12 | 229:12 235:7 |
| 145:1 224:8 | chemical 19:2 | 291:16 | 141:11,21,23 | 286:16 291:22 |
| certainty 298:11 | chemically 79:20 | clean 119:3 129:2 | 142:5,7,11,12,14 | 292:2 304:12 |
| certification | Chicago 1:17 3:8 | 163:4 165:12,16 | 142:17,23 | 315:23 316:5,9 |
| 55:23 79:8 | Chloe 6:11 | 165:18 207:2,12 | 200:15,16,17,18 | 316:11,16,17 |
| 104:12,18 138:8 | chloride 89:15 | 207:18 208:20 | 200:19,23 201:7 | coal-fired 114:3 |
| 138:13 273:18 | chunk 131:13 | 217:12 267:3 | 202:11 203:13 | cobbles 97:20 |
| certified 56:1 | cinder 37:1,15, | clean | 205:2,8,11,20 | coincident 39:15 |
| certify 208:5 | cinders 37:19 38:3 | cleaning 204:3 | 208:5 209:2 | 41:2 |
| 319:2,9 | 47:6,10,13,17 | 248:17 256:3 | 234:5,8,22 235:1 | collect 122:24 |
| certifying 5 | 48:1 91:23 | 265:1,18 266: | 236:21,22 | collected 19:4 |
| cetera 130:24 | 97:20 129:10,17 | cleanup 231:5 | 237:10 238:2,16 | 20:3 42:7 54:16 |
| chance 115:12,13 | 129:17 136:24 | clear 93:12 184:13 | 239:16 240:8,10 | 59:17,19 60:11 |
| change 21:15 22:2 | 137:4,7 214:15 | 185:14 190:23 | 243:11 244:3,5,6 | 82:23 |
| 29:18 95:11 | 214:18 215:3,6 | 243:5,23 309:24 | 244:10,22 245:4 | collection 26:16 |
| 240:13 258:8 | 216:11 217:7,18 | clearer 49:4 | 245:9 250:13 | 54:20 85:1 |
| 264:12 | 217:19,23 | clearly 42:17 48:9 | 252:13 254:24 | 22:21 258:3,21 |
| changed 78:21 | 218:12,16 | 126:16 129:13 | 255:6,20 257:8 | 265:23 |
| 304:2 315:19,20 | 220:16,24 221:1 | 186:3 193:1 | 265:9,9,13 280:7 | color 134:20 |
| 316:5,6 | 221:9,11 222:20 | Clifty 259:1,7 | 302:12,24 308:8 | Colorado 24:2 |
| changes 42:8,12 | 224:22 225:2,7,9 | climate 83:22 | 308:22 312:16 | column 26:20 |
| 246:8 307:7 | 225:13 227:4 | close 30:3 32:9 | 312:18,23 313:9 | 27:20 46:2,3,4,5 |
| channel 110:21 | 228:10,13 | 201:22 207:12 | 314:3 315:2,14 | 46:18 48:13 |
| 111:8 144:20,22 | 291:17 292:2 | 207:18 208:2,23 | closure' 267:3 | 65:18,18 85:3,11 |
| 144:23 | circle 309:19 | 209:3,18 237:11 | closure-in-place | 85:13 97:7 |
| chapter 18 | circumstances | 239:4 240:16 | 309:2 | 114:22 220:15 |
| characteristics | 170:23 179:15 | 241:10 242:3 | Club 1:3 2:8 6:19 | columns 85:8 |
| 50:2 | 254:21 257:1 | 243:2 264:24 | 6:19,21,21,23 | combination |
| characterizati | citation 183:9 | 307:5 308:8 | co-counsel 190:15 | 79:18 258:16 |
| 12:16 73:23 | cited 54:10 | 313:12,16 | coal 19:6 37:2,15 | combine 60:16 |
| 74:1 157:9 | cites 71:17 75 | closed 78:17 103:9 | 91:23 97:19 | combined 16:6 |
| 170:10 211:3 | 77:11 | 207:3 208:20 | 113:22,24 114:1 | 89:17 |
| 216:16,17 310:5 | citing 239:23 | 237:9 240:18 | 114:2 149:5,8,11 | combining 60:18 |
| 310:10 | CITIZENS 1:7 | 241:2 255:24 | 150:11 162:17 | combusting 316:5 |
| characterize | claims 232:9 | 261:23 314:6 | 163:12,15,19,21 | combustion 149:6 |
| 284:14 | clarification 8: | closest 36:3 | 164:14,15,17,19 | 150:12 214:20 |
| characteri | :23 | 110:22 144:1,2 | 164:19,22 165:2 | 214:21 215:4,7 |
| 13:12 | 6:19 72:21 | closing 244:14 | 165:9 169:24 | 217:24 218:1,3,6 |
| chart 40:13 41:14 | 92:21 | 313:21,22 | 172:15 213:18 | 218:17 |
| 41:16 101:8 | clarify 64:11 | 315:22 | 213:21 214:20 | come 28:17 |
| 245:3 248:7 | 104:5 132:15 | closure 17:3 63:13 | 214:21 215:4,7 | 121:11 145:10 |
| 302:1 | 135:21 142:10 | 63:23,24 64:7 | 217:24 218:2,3,6 | 151:20,23 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 165:21 174:19 | 200:2 232:20 | 259:23 | conflicts 282:18 | 169:9 175:5 |
| :---: | :---: | :---: | :---: | :---: |
| 180:6,12 189:1 | 233:22 246:15 | component 65:13 | confused 27:15 | construction 14:2 |
| 245:20 | 247:3 263:2,11 | 80:23 105:1 | 140:17 211:21 | 22:17 51:12 |
| comes 87:21 | 278:1 300:5 | components 66:9 | 283:13 | 75:14 79:23 |
| 162:15 172:19 | 304:17 305:13 | 79:19 129:15,20 | confusing 303:23 | 82:21 83:4 |
| 198:10 229:15 | 305:20 317:13 | 218:5 | confusion 120:12 | 98:13 158:19 |
| 231:8 274:21 | complaint 230:13 | composite 79:16 | 301:24 | 165:24 166:8,12 |
| 297:17,18,21 | 232:5 288:13 | 265:22,22 | connected 71:16 | 166:13,14,20 |
| coming 35:18 | complaints 232:5 | compound 192:6 | consequences | 169:2,8,17,19 |
| 123:16 174:18 | complete 193:18 | compounds 89:17 | 181:18,23 | 175:1 178:19 |
| 229:22 | 218:22 296:10 | comprehensive | Conservation | 207:11 245:14 |
| commercia | completed 209:2 | 14:6 | 149:23 | 280:17 310:11 |
| 119:18 | 244:7,10,23 | compromise 7:20 | consider 67:19 | consultant 33:18 |
| commitment | completely 161:1 | computer 45:8 | 106:22 153:24 | 64:570:18 |
| 120:17 134:24 | 182:23 188:17 | concentration | 156:8 | 74:17 189:18 |
| 140:5 177:13,15 | 208:13 257:3,14 | 82:3 102:2,17 | consideratio | 274:8,14 279:3 |
| 177:20 191:20 | 258:7 265:14 | 115:10 | 108:8 | 286:3 288:20 |
| 194:18,23 197:8 | completing 33:16 | concentrations | considered 240:2 | consultants 10:22 |
| common 35:12 | compliance 14:15 | 272:8 | 258:14 | 51:14 64:2 |
| 118:5 | 58:10 120:17 | conceptual 12:21 | consist 260:15,22 | 9:16 70:4 |
| Commonwealth | 134:24 140:5 | concern 268:18 | consisted 59:18 | 155:17,23 156:1 |
| 53:18 | 153:6,22 154:3,6 | conclusion 57:2,5 | consistent 42:17 | 187:17 188:2 |
| company 33:2 | 154:17,21 155:6 | 138:12 179:5,12 | 246:6 256:5 | 93:18,22,24 |
| compare 50:2 | 155:24 156:17 | 183:24 184:3 | 276:14 312:24 | 95:17,24 |
| 55:13 62:5 | 156:22 170:13 | concrete 207:13 | consisting 91:22 | 198:15 279:7 |
| 144:3 | 170:16 176:23 | 208:12 257:22 | 214:13 291:14 | 297:19 |
| compared 30:12 | 177:13,15,19 | 257:24 258:13 | consists 282:3 | consultants' 190:9 |
| 123:9 | 182:4 191:19 | 258:24 259:21 | consolidate | 198:20 |
| comparison 28:11 | 194:18,22 | 260:4 267:17 | 236:24 243 | consulting 24:1 |
| 29:17 62:13,23 | 195:17 197:8 | condition 80:10 | constituent 30:4 | 155:21 |
| 88:19 109:15 | 198:8 199:20 | 255:14 256:4 | 61:17 100:15 | contain 163:15 |
| 115:5 255:22 | 246:2 285:20 | conditions 12:23 | 102:17 273:2 | 221:11 236:16 |
| comparisons 63:4 | 287:3,8 | 74:8 106:12 | constituents 19:2 | container 26:12 |
| compendium 12:4 | compliant 258 | 128:1 131:22 | 29:16 77:16 | 26:16 |
| compiled 11:24 | 258:21,21 | 18:23 251:11 | 70:20 171:11 | contains 164:15 |
| 12:20 104:22 | complied 121:10 | 251:23 | 171:15 189:20 | 308:7 |
| compiling 12:18 | 184:14 205:1,7 | conducted 108:21 | 190:7 199:5 | contaminant |
| Complainant's | 205:20 246:5 | confer 190:14 | 72:21 | 22:18 |
| 246:14 277:15 | complies 142:7 | conferred 7:18 | constitutes 319:7 | contaminants |
| Complainants 1:9 | 183:10 | confidence 102:6 | construct 169:23 | 121:2 |
| 2:23 | comply 181:5 | 115:8 | 309:5 311:9 | ntamin |
| Complainants' | 183:5 194:1 | confirm | constructed | 133:10 |
| 4:13 5:8,18 8:2 | 206:11 287:9 | 32:12 228:2 | 5:12 311:14 | contaminating |
| 68:4 69:1 107:7 | 315:17,21 | 243 | 313:8 | 133: |
| 124:20 148:18 | complying 197:23 | confirmed 116:15 | constructing | contamination |

L.A. Court Reporters, L.L.C.

312-419-9292

| 133:9 308:14 | conversations | 94:8 96:17,18 | 255:3 257:16 | 287:4 310:16 |
| :---: | :---: | :---: | :---: | :---: |
| contemplated | 186:19 308:16 | 97:21 98:1,7 | 263:24 264:3,15 | counsel's 286:23 |
| 253:10 | convey 246:4 | 101:22 102:14 | 265:17 267:13 | 304:8 |
| content 13:21 | 253:19 | 103:4,11,17 | 268:8 269:11,16 | count 46:2,4,8,11 |
| 53:14 71:4 | convinced 221:7 | 109:21,22 112:3 | 270:9,12,16 | 135:22 136:13 |
| 256:11 257:1 | copied 202:15 | 112:4,7,8 113:6 | 271:1,2,6,9,10 | 136:22 137:2,5,8 |
| contents 9:16,22 | copies 269:24 | 113:7 125:8 | 271:14 272:13 | 137:9 |
| 69:9 70:24 71:5 | copy 32:19,24 | 126:1,7 128:16 | 273:8 275:12,13 | country 80:1 |
| 254:18 | 53:16 57:21,21 | 135:24 136:15 | 275:17 276:23 | county 74:1 76:23 |
| context 148:24 | 304:19 | 137:10 142:24 | 278:12 280:6 | 80:13 83:14 |
| 293:7 | core 80:12,15 | 145:17 155:7 | 281:5 282:11,20 | 96:23 112:23 |
| continue 96:8 | corner 101:7 | 156:2,3,4 160:14 | 283:6 284:13,23 | 113:1,17 114:1 |
| 133:11,20 178:9 | 211:10 | 160:16,17 | 285:4,12,13 | 122:4 139:16 |
| 178:11 187:3 | Corp 109:11 | 162:18,19 163:6 | 291:1,5,10,18 | 153:19 175:18 |
| 188:16,21 | corporate 276:4 | 163:13 165:3,13 | 293:14,18 294:1 | 176:8 183:15 |
| 224:18 237:18 | correct 10:4,16 | 167:16 170:14 | 295:17,18 | 194:21 |
| 255:15 266:2 | 11:9 14:17 16:9 | 172:8,9,10 | 300:20,21,24 | couple 31:7 39:23 |
| 290:11,14 | 16:12,19 17:5,6 | 174:21 177:17 | 301:3,5,19 | 92:8 |
| 309:21 | 17:10 18:22,23 | 178:3,23 187:12 | 302:18,21 303:2 | course 35:20 |
| continued 3:1 6:6 | 19:13,19,20,22 | 191:21 192:1,2 | 303:9 306:9 | 245:24 |
| 248:13 255:8 | 20:16,18 24:6 | 194:24 197:17 | 307:8,23 308:22 | court 7:11 9:17 |
| 256:7 | 29:18,22 30:7,14 | 197:20,21 | 312:19,24 | 147:6 169:11 |
| continues 152:18 | 32:17 33:3,4 | 198:16,17,22 | 313:17 315:3,6,7 | 206:20 259:3,9 |
| continuing 226:20 | 38:6,7,12,16 | 201:8,18,19,23 | 315:10,16,23 | 317:18 |
| contour 23:11 | 41:12 42:22 | 202:12,16 | corrected 279:13 | cover 78:18 |
| 42:20 43:10,19 | 43:11,12,20,21 | 203:14,19 205:2 | 280:15 | 103:23 104:1 |
| 94:19 95:3 | 44:10 47:6,7 | 207:3 210:20 | correction 16:1 | 139:1 154:5 |
| contours 42:11 | 49:8,16,19 50:5 | 211:2,6 212:13 | 138:21 261:13 | 174:1,4 308:9,17 |
| 94:6 | 50:6 52:9,15 | 212:14,16 213:1 | corrective 117:22 | 313:8 315:9,16 |
| contract 15:9 | 53:2,4,7 54:3,9 | 214:2,5,8,9,10 | correctly 110:13 | 315:23 |
| 159:2 | 57:10,11,14 | 214:18 215:11 | 125:7 164:12 | covered 25:2 78:5 |
| contractor 159:3 | 58:19 59:24 | 217:4 218:18 | 178:13 204:10 | 156:24 |
| 159:6 187:1 | 65:1 72:10,14,24 | 219:3,17,23,24 | 214:16 261:3 | crazy 124:10 |
| contractors 187:8 | 73:1,9,10 74:2,3 | 220:2,6,9,12,17 | 265:3 267:6 | created 33:13 |
| 195:12 279:3,8 | 74:9 75:7,18,22 | 221:1 222:12,13 | 271:24 286:4 | 51:4 |
| control 1:1 6:4 9:5 | 75:23 76:3,5,24 | 222:16,17,20 | 307:9 313:9 | Creek 259:1,7 |
| 15:6 74:24 | 77:4,18 78:8,11 | 224:23 225:11 | correspond 61:3 | crew 145:3 |
| 118:4,6,14 | 78:18 80:7 81:2 | 227:8,12 228:10 | 97:13 | criteria 119:20 |
| 119:12,14 | 81:8,17,18 82:2 | 230:22,23 235:3 | correspondence | cross 36:16,19 |
| 134:10,22 | 82:9,10 83:14,15 | 235:9,17,20,24 | 172:7,11 | 38:5,7 92:12,13 |
| 151:16 189:11 | 84:5,7,8 85:20 | 237:1,12 238:4 | corresponds | 92:14,18 119:17 |
| 317:4 | 86:2,17 87:4,9 | 238:17 240:23 | 63:11 | 119:18 276:20 |
| controls 118:7,16 | 88:17,23 90:2,21 | 242:17,20 244:8 | corridor 113:11 | 284:12,21 |
| conversation | 90:22 91:17,18 | 247:13 249:13 | counsel 6:18 7:19 | 290:22 |
| 192:21 | 92:1,3,11 93:9 | 250:13 254:6 | 173:20 276:10 | cross-examinati... |

L.A. Court Reporters, L.L.C.

312-419-9292

| cross-hatched | 59:19 60:2,3,10 | DC 2:21 | 278:23 301:14 | 130:13 141:11 |
| :---: | :---: | :---: | :---: | :---: |
| 140:2 | 60:16 61:4,8 | de-water 21:20 | 306:19 | 150:7 153:1 |
| crossed 120:7 | 62:9 67:15 | de-watering 21:15 | degree 174:12 | 154:9 250:4 |
| crossing 107:18 | 78:12 82:24 | deadline 201:6,22 | 246:5 | described 73:23 |
| crossover 122:18 | 83:12 86:14,24 | 202:11 203:13 | delay 202:11 | 80:16 139:11 |
| crosstalk 206:22 | 87:18,18 88:7,16 | 205:2,7,11,20 | dem- 200:18 | 183:13,20,21 |
| crushed 97:20 | 88:20 93:13 | 206:12 302:24 | demolition 267:5 | 229:12 255:1 |
| CSR 1:21 319:22 | 98:22 102:1,10 | 303:5 | 268:3 | 258:8 |
| cumulative 68:1 | 102:19 105:13 | deal 153:4 | demonstrating | describes 37:1 |
| 107:3 | 105:15,24 106:3 | dealing 150:15 | 303:6 | 74:4 75:16 |
| curious 53:15 | 106:4,6 109:14 | 181:12 246:6 | demonstration | 77:10 80:3,24 |
| 104:7 | 110:24 116:19 | deals 150:11 | 114:6 200:12,20 | 86:3 104:13 |
| current 17:3 | 162:1 | December 53:19 | 200:24 240:8,11 | 135:8 214:12 |
| 78:21,23 103:1 | dataset 29:7 59:16 | 152:10,12 | 257:9 270:9,23 | 235:5 270:14,23 |
| 151:1 208:18 | 59:23 60:12 | decided 258:18 | 271:5,12 273:6 | 315:9 |
| 239:9,9,10 241:3 | 61:5 101:19 | 259:21 260:3 | 274:18 302:13 | describing 42:21 |
| 244:22 245:17 | 116:12 | decision 101:1 | demonstrations | 78:4 87:10 |
| 249:22 252:23 | datasets 60:14,16 | 181:24 259:2 | 35:21 | 215:10 |
| 258:20 265:8 | 60:21 61:1,14 | 267:19 316:8 | density 178:2 | description 37:12 |
| 304:13 307:16 | 89:19 | decisions 106:6 | deny 228:22 | 46:18 75:12 |
| 308:8 | date 39:21 40:13 | 264:12 317:6,7 | depend 175:4 | 79:16 92:2 |
| currently 145:14 | 42:9,9,10 43:10 | decontaminate | depending 39:5 | 125:12 130:9 |
| 198:10 249:17 | 52:6,7,17 53:1,2 | 208:4 308:1 | 40:16 70:20 | 135:2 136:23 |
| 249:19 281:1 | 53:4,6 93:1 | 314:6 | 175:24 251:23 | 137:3,6 220:15 |
| 297:17,18 | 94:11,11 143:7,8 | decontamina | depends 87:13 | 222:19 226:18 |
| 313:15 | 158:21 178:17 | 249:22 256:5 | 284:22 | 227:5 315:10 |
| curve 33:11,13 | 202:8 207:20 | decontamination | depicted 37 | descriptions |
| cushion 260:24,24 | 208:7 224:7 | 248:18 255:15 | 38:19 48:6 | 46:17 |
| 261:1 282:5,5,6 | 234:8,23 242:1 | deed 118:19 135:3 | 134:6 139:23 | descriptor 128:22 |
| cut 36:11 | 274:17 295:24 | 135:12 | deposeth 9:6 | Design 14:2 75:13 |
| cuts 97:21 | 296:1,3 306:11 | deep 136:17 | 147:15 151: | desire 307:24 |
| D | 306:12 319:5 | deeper 128:1 | deposition 120:10 | despite 54:20 |
| D | dated 53:18 58:11 | default 100:20 | deposits 131:9,10 | detail 50:12 |
| D 4:1 9:2,7 108:12 | 91:13 177:23 | defaulting 100:18 | depth 20:13 34:6 | 100:11 |
| 147:16 150:12 | 227:12,18 264:1 | defaults 99:24 | 46:19 85:4,11 | details 24:16 |
| 284:12,21,21,21 | 273:14 295:13 | Defendant 1:12 | 127:12 215:17 | 90:18 98:21 |
| 284:21 | 312:18 315:5 | define 251:6 | 218:24 220:17 | 103:16 208:1 |
| D' 284:12 | dates 94:7 | defined 214:23 | 220:18 227:5,6,7 | detect 77:15 |
| D1 131:16 | Davenport | 216:2 218:8 | depths 84:4 | detected 272:9 |
| Dale 275:1 276:2 | 138:9 | defines 127:12 | Deputy 173:20 | 273:2 |
| 276:7 | David 201:15 | 218:15 | Des 109:2,6 110:4 | detection 26:18 |
| data 24:21,24 | $\text { day } 1: 14,176: 5$ | definitely 158:12 | 113:16 | 26:23,24 27:3,12 |
| 25:14 32:3,13 | 123:6,9 319:15 | 173:14 203:3,4 | describe 12:15 | 59:5 77:16 |
| 51:22 54:8,15,16 | days 160:24 | 203:10 227:23 | 64:18 74:10 | 116:13 121:4,17 |
| 55:6,10 58:11 | 178:17 192:17 | 264:10,12 | 79:14 116:5 | determination |

L.A. Court Reporters, L.L.C.

312-419-9292

| 300:23 | 93:2 94:7 96:22 | 157:2 | 166:22,22 | 258:5 261:15,19 |
| :---: | :---: | :---: | :---: | :---: |
| determine 3 | 97:12 120:19 | disclosure 317:2 | 167:24 178:9 | 261:20 263:16 |
| 87:17 100:14,24 | 121:23 123:10 | discretion 181:6 | dispose 167:15 | 263:17 264:6,9 |
| 228:1,13 274:18 | 131:9 144:16,17 | discuss 45:17 | disposed 166:9 | 264:14 269:2 |
| determined 54:19 | 145:20,24 | 75:21 109:17 | 167:19 | 270:20 273:12 |
| 264:23 271:21 | 151:24 155:21 | 112:22 169:21 | disregard 67:8 | 278:6,8,15,20 |
| 272:10 | 166:15 183:18 | 193:8 | 68:1 107:1,5 | 279:19,24 280:1 |
| develop 17 | 223:2 257:4,11 | discussed 38:14 | 232:18 262:16 | 282:12,17 |
| 34:2 51:22,22 | 257:15 258:7 | 44:21 58:14 | disrespect 290:1 | 284:12 285:2,7 |
| 119:13 | 259:19 | 59:15 61:9 64:8 | dissected 242:17 | 285:12,13,21 |
| developed 70 | difficult 151:24 | 71:18 76:21 | dissolved 54:17 | 286:21 287:16 |
| 72:4 85:1 | 208:16 | 79:2 80:13 | 55:11,12,16 | 287:16,19,24 |
| development 13:4 | digest 285:1 | 83:18 90:5 | 89:16 100:21 | 288:9,12,15 |
| 28:20 29:5 56:4 | digested 285:22 | 98:14,18,20 | 120:18 121:4 | 289:8,10,13 |
| 118:15 | dimensional 23:7 | 110:9 132:10 | distance 111:6,14 | 300:10 301:8 |
| dewatering 207:9 | direct 7:8 23:21 | 138:10 155:7 | 112:16 226:10 | 302:3,9 304:4,7 |
| diagram 41:3 | 47:4 67:5,17 | 186:2,6,13 | distinction 130:7 | 306:1,14 308:7 |
| 210:8,14 211:5 | 151:7 175:1,21 | 192:21 232:8 | 131:2 | 310:5,8 312:3,14 |
| 211:20 212:13 | 176:11,18 177:2 | discusses 79:8 | distinguish 131:5 | 315:1 |
| 225:20 291:5 | 178:5,15 183:4 | 89:13 | distribution 23:10 | documentation |
| 293:2 294:22 | 201:13 203:22 | discussing 25:4 | 100:15 | 25:3 74:13 |
| 295:1 | 206:23 210:6,23 | 76:4 142:11 | document 7:22 | documents 25:3 |
| diamond 101:9 | 211:12 215:15 | 158:4 264:3 | 56:23 57:14 | 107:3 114:5 |
| 291:23 | 225:3 264:18 | 269:16 | 64:3 69:17 | 143:6 157:5,13 |
| diamonds 291:9 | 266:20,23 | discussion 21:14 | 71:12 82:8,15,21 | 157:16 170:2 |
| 291:14 | 279:11,18 284:3 | 34:19 44:18 | 105:18 106:5 | 173:5,9 174:11 |
| differ 192:4 | 296:14 306:22 | 8:2 61:11 | 108:4 139:1,14 | 174:18 183:8 |
| difference 28:2,3 | 311:23 313:2 | 68:16 70:22 | 141:22 143:4,9 | 207:24 232:7 |
| 28:9,17 51:1 | 314:10,17 | 90:15 95:19 | 177:4 179:21 | 236:20 243:10 |
| 54:20,21,22,23 | directed 71:13 | 108:18 109:14 | 181:22 182:5,14 | 280:17 283:5,13 |
| 55:8,16,19 60:22 | 173:12 229:4 | 110:11 113:2 | 182:20,20 188:8 | 288:7 303:24 |
| 62:2 99:8 100:6 | 274:15 | 117:6 120:9 | 190:24 191:4,5 | doing 7:8 23:15 |
| 100:9 126:9,10 | direction 21:21 | 125:5 140:9 | 191:17 194:10 | 28:15 29:7 59:5 |
| 128:20 131:11 | 34:3 42:16 43:5 | 148:10 191:6 | 196:23 197:14 | 59:6 62:22 64:2 |
| differences 46:23 | 43:8 52:20 | 212:6 222:6 | 200:7 201:2 | 111:15 140:18 |
| 58:24 94:11 | 85:23 106:18 | 246:23 249:6 | 202:3 208:14 | dolomite 131:14 |
| 97:14 | 229:17 285:20 | 270:3 283:22 | 211:2 223:19 | dotted 212:23 |
| different 22:14,16 | 297:20 298:5 | 287:6 299:4 | 230:11 231:6,23 | downgradient |
| 25:19 39:6 | directives 68:20 | 314:12 317:23 | 234:2,12,15,18 | 15:21,22 30:16 |
| 42:10,11,21 | directly 231:2,10 | discussions 52:9 | 236:19 238:10 | 34:10,13 35:16 |
| 43:10,11,20 | director 153:2 | 55:14 135:11 | 238:14,19 | 36:2 40:19 62:5 |
| 46:22 50:24 | 175:6 | 195:8 272:6 | 239:15 240:3 | 62:16 76:13 |
| 51:2,3,4,11 | discharged | displaying 33:9 | 242:2 245:10 | 84:19,23 91:16 |
| 54:16 61:16 | 162:17 | disposal 154:18 | 247:8,10,15,20 | 100:21 110:21 |
| 82:12 92:12 | discharges 157:1 | 154:22,24 155:1 | 250:24 256:11 | 112:14 113:8 |

L.A. Court Reporters, L.L.C.

312-419-9292

| downriver 109:19 | E-E-K 259:11 | electric 44:14 | 79:23 104:21 | 134:23 140:4 |
| :---: | :---: | :---: | :---: | :---: |
| 110:4 | E-L-U-C 134:10 | 214:21 218:10 | 118:7,8,14 | 149:17 177:17 |
| downward 220:23 | e.g 14:9 | elements 230:23 | engineers 10:20 | 178:22 181:7,23 |
| 292:20 | earlier 34:5 53:6,6 | elevated 274:4,19 | 109:11 207:23 | 183:11 191:21 |
| downwards 127:7 | 55:15 67:14 | elevation 20:21 | 285:19,19 | 194:24 197:10 |
| drafted 224:6 | 90:6 98:14 | 41:21 85:13 | 308:16 | 197:17 204:5 |
| drafting 10:13 | 106:12 132:11 | 93:8 129:5 | English 284:22 | 208:24 209:4,5 |
| 234:15 235:16 | 138:22 224:2 | elevations 20:3 | ENSR 53:19,20 | 245:15 258:13 |
| draw 42:9 220:14 | 286:2 | 84:3,5,11 | 53:24 | 258:23 259:14 |
| drawn 94:6 | ear | ELUC 14:9 5 | ensure 199:20 | 261:7 |
| 101:21 | easiest 258:18 | 52:8 134:10,14 | 239:8 | equal 242:21 |
| drew 7:4 49:15 | easily 115:20 | 135:8 | ensuring 198: | equivalent 16:8 |
| 124:17 | 136:7 | ELUCs 118:1 | entails 12:16 | 178:23 |
| drill 47:1,2,12 | east 14:7,22 15:2 | 35:3 | enter 289: | erased 253:24 |
| 131:4 | 16:6 21:20 | embankments | entered 107:4 | especially $22: 22$ |
| drillers' 97 | 33:11 36:20,2 | 209:8 | 288:3 | 35:2 |
| drilling 288:18 | 36:21 37:6 | emergenc | entering | Essence 95:24 |
| drinking 87:22 | 44:17 94:10 | 213:5,8 | entire 215:14 | essentially 158:21 |
| 88:11 111:1 | 112:15 133:21 | employed 152:5,8 | 216:4 223:14 | 253:4 |
| 117:1 118:21 | 134:19 141:12 | 152:14 156:2,7 | 85:13 304:7 | establish 7:22 |
| 143:22 144:4,9 | 141:21,24 | 173:22 179:9 | 316:15 | 16:12 22:23 |
| 144:15 | 301:18,23 | employee 57:10 | entirely 26 | 62:3 71:15 |
| dropping 27: | 302:14,17 303:1 | 57:13 75:5 | entirety 223:20 | established 14:8 |
| dry 122:12 | 303:8,20 307:6 | 182:4 319:10 | 229:13 231:6 | 134:9,11 174:17 |
| dug 44:19 | 308:5,9 309:2 | employees 193:9 | 289:13 | 230:8 296:21 |
| duly 7:13 9:6 | 313:6,20 315:3 | 195:9 | entitled 14:1 15:5 | establishing 23:22 |
| 147:8,15 151:17 | 315:14,22 | employer 151 | 58:9 135:18 | estimate 23:4 60:4 |
| duplication 67:22 | east-w | empty 171:1 | 247:11 | 86:9 170:6 |
| 106:16 223:23 | east/southeasterly | encompass 14 | entrance 1 | estimated 21:7 |
| duplications | 42:16 | encountered | entries 46:9 | 27:9 244:5,7 |
| 107:3 | edge 113:1,9 | 6:24 56:19 | ENVIRONE | estimates 22:14 |
| duplicative 67:21 | Edison 53:18 | 7:14,15 126:18 | 18 | estimation 244:22 |
| 68:1 224:10 | edit 12:1,8 239:13 | 131:22 | environment 1:8 | et 130:24 |
| 232:8,17 262:10 | edited 12:3,8 | encoura | 308:18 | Eurofins 15:10,12 |
| 262:15 | effect 23:1 | 23: | environmenta | evaluate 62:15 |
| dust 74:24 | effective 178 | ends 294: | 1:4 6:9,14,24 | 99:22 116:16 |
| E | effectively 256: | 298 | 53:17 130:17 | 130:11 193:2 |
|  |  | energy 201:15 | 134:9,22 138:16 | evaluated 271:21 |
| e $2: 2$ 4:1, 11 9:7 | eight 24:22 46:9,9 | engineer 56:2 | 149:14,18 153:3 | 272:10 |
| 108:12,12,12 | 46:10,15 59:18 | 57:9 65:8 74:1 | 153:6,22 154:11 | evaluating 13:1 |
| 141:2,2 147:13 | 62:20 181:11 | 75:7 104:22 | 154:16 173:21 | 22:19 34:16 |
| 147:13,13,16,16 | 316:7 | 138:9 226:11 | 181:9,12 182:3 | evaluation 32:13 |
| 150:12 151:13 | either 109:9 | 285:1,18 293:22 | 185:2 287:3 | 33:6 34:17 |
| 151:13,13,13,18 | 142:16 228:18 | engineering 33:5 | EPA 99:9,20,24 | 35:15 44:3 |
| 266:23 | 281:2 287:22 | 51:6 66:8 74:20 | 100:7,20 123:12 | 58:11 60:14 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 99:3 115:6 | excerpt 66:20 | 285:13 286:21 | 110:15 | 141:1 143:14 |
| :---: | :---: | :---: | :---: | :---: |
| evening 318:4 | excerpts 7:21 | 288:2 290:8 | extend 302:24 | 161:3,10 170:9 |
| event 213:15 | excess 85:7 | 299:7 300:4,6 | 303:5 | 170:11 179:12 |
| eventually 34:16 | excited 186:11 | 303:15 304:17 | extends 109:12 | 187:18 216:22 |
| Evergreen 24:2 | exclusive 47:10 | 305:14,19,21 | 216:12 292:20 | 220:4 293:23 |
| everybody 6:3 | exclusively 251 : | 314:10,18 | 293:17 | fairly 49:22 |
| 128:22 | excuse 57:18 | 316:22 317:12 | extension 135:9 | 137:16 138:1 |
| evidence 5:7 68:6 | 108:22 112:11 | 317:14 | 203:13 | Faith 2:2 6:22 |
| 107:9 232:22 | 14:14 135:15 | exhibits 50:10,15 | extent 154:23 | fall 83:17 152:2 |
| 246:17 263:4 | 136:21 141:4 | 55:7 107:4 | 188:6 292:1 | 152:13 |
| 305:15 317:15 | 151:22 167:13 | 108:1 147:4 | extra 249:23 | falls 102:3 |
| exact 60:10 | 168:1 199:18 | 185:3,14 276:10 |  | false 29:14,15 |
| 122:22 244:13 | 222:15 259:11 | 304:9 | F | familiar 33:23 |
| exactly 17:7 21:16 | 266:14 289:22 | exist 179:23 | F-A-B 243:16 | 65:5 79:2,5,11 |
| 137:15 157:3 | 291:4 | existed 169:21 | FAB 242:16, 16, 22 | 79:12 99:14 |
| 182:9,10 184:19 | exhibit 4:13 5:1,8 | 198:10 281:9 | 243:15,17 244:3 | 102:24 149:22 |
| 206:5 251:12 | 5:18 8:1,3 9:11 | existing 51:21 | 244:5,23 245:3,4 | 150:4,10,11,18 |
| 257:6 301:12 | 66:15 67:8 68:2 | 208:3,8 211:19 | 245:5,9 280:8 | 162:24 163:9 |
| 304:4 | 68:5,19,23 69:2 | 211:24 212:12 | facetious 203:1 | 174:17 187:4,6,7 |
| examination 4:2 | 69:6 106:11,21 | 248:18 287:8 | 252:21 253:23 | 188:1,14,18 |
| 151:7 | 106:22,23 107:1 | 301:18 | facilitate 29:13 | 247:19 252:14 |
| example 14:21 | 107:8 114:5 | exists 288:15 | 119:15 134:15 | familiarity 174:10 |
| 85:9 87:15 88:6 | 117:3 124:14,21 | exit 165:11 | facilities 118:23 | 188:10 223:15 |
| 99:20 100:17 | 133:24 139:3,4 | exits 165:2 | 165:24 166:4,21 | far 27:20 57:3 |
| 115:21 116:9 | 139:15 141:6 | expand 59:16 | 167:24 169:20 | 85:3 110:19 |
| 119:5 129:6 | 148:17,19 177:3 | expected 191:12 | 246:7 | 225:23 |
| 156:13 157:24 | 177:5 181:4 | expecting 191:13 | facility 162:9 | fashion 119:20 |
| 158:16 160:21 | 184:22 191:3 | experience 66:7 | 165:3 169:8,10 | fast 86:6 224:20 |
| 168:6,23 240:2 | 194:8,9,11 | 181:12 182:3,12 | 169:17 201:8 | fbugel@gmail.c... |
| excavate 208:3,8 | 196:22 197:1 | 184:6 291:21 | 216:7 | 2:6 |
| exceed 30:17,18 | 200:1,3 223:3,13 | expert 22:5 | fact 53:15 105:10 | feasible 303:7,11 |
| 143:22 | 223:15,18 230:5 | 276:12 288:20 | 111:12 117:14 | February 180:19 |
| exceedances 18:4 | 230:9,19,19 | 289:10 | 120:6 123:4 | 239:14 |
| 81:5 105:8,16 | 232:21,24 | experts 287:16 | 188:20 208:20 | federal 19:8 21:6 |
| 106:8 110:24 | 233:20,21,23 | explain 18:24 20:1 | 223:4 224:1 | 25:11,15,21,22 |
| Exceedences | 237:24 238:2,6,7 | 21:3 24:17 25:7 | 243:10 281:8 | 25:24 27:24 |
| 105:3 | 238:9 240:2,4 | 26:7,22 28:2 | 282:15 | 28:5,19 29:24 |
| exceeding 272:22 | 245:10 246:14 | 36:14 39:10 | factor 29:13 | 30:1,5,11,17 |
| Excellent 127:16 | 246:16,19 247:4 | 42:5 43:23 | facts 286:24 | 31:9,20 58:21 |
| exception 89:18 | 261:16 263:3,12 | 45:13 46:3 51:1 | failed 88:8 183:20 | 59:4,17 60:6 |
| 161:13,14 171:4 | 266:16 269:2,15 | 55:21 58:7 62:1 | failing 181:18,20 | 76:10 77:2 78:5 |
| exceptions 161:22 | 269:22 275:4 | 94:21 99:8 | Failure 181:5 | 78:7,10 81:11 |
| 161:24 162:12 | 277:10,15 278:2 | 100:5 101:23 | fair 50:12 57:12 | 87:3 98:24 |
| 172:18,23,24 | 278:8 281:13 | 117:9 | 74:22 93:15,21 | 105:12 116:13 |
| 173:4 | 283:16 284:4 | explanation | 102:12 104:11 | 120:23 121:16 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 121:22 122:6,11 | 219:10,13 | 145:6 214:12 | 32:18 45:12 | 221:23 |
| :---: | :---: | :---: | :---: | :---: |
| 122:17,24 124:3 | 248:11 295:11 | 215:10 216:11 | 46:8 56:18 | floor 208:4 280:20 |
| 145:5,10 149:18 | figured 267:16 | 291:4,14 292:11 | 81:15 96:19 | flow 13:5 14:21,23 |
| 157:11 170:14 | figures 10:7 32:16 | filled 101:9 | 97:19 101:20 | 21:19,21 22:20 |
| 201:20 218:8 | 73:7 91:11 94:3 | fills 119:4 138:2 | 111:9 116:10 | 23:5,7,8 42:6,13 |
| 230:12,21 231:9 | 273:19 286:16 | filter 123:3 | 136:21 137:2,6 | 44:17 85:23 |
| 232:2,3 255:23 | file 167:14 304:19 | filtered 54:17,17 | 137:19 142:19 | 94:10 95:7 |
| 256:5 303:2 | filed 157:5 201:6 | 55:10 | 147:15 151:17 | 133:11,20 210:8 |
| 308:22 313:13 | 201:10,15,17 | final 78:18 103:22 | 152:7 164:17 | 211:20 212:12 |
| 315:18,18,22,24 | 203:12,15,19 | 142:14 145:15 | 180:20 181:4 | flowing 12:24 |
| feedback 258:13 | 204:14,20,24 | 207:11 238:2,16 | 190:6 198:11 | 35:6 43:6 86:4,7 |
| feeder 110:20 | 205:21 208:7,10 | 239:16,19 240:3 | 201:14 203:23 | flows 15:1 |
| feel 34:24 71:14 | 208:21 211:6 | 240:5,12 271:17 | 210:15,23 | fluctuate 40:22 |
| 106:5 | 214:9 230:12,24 | 271:19 308:9,17 | 214:12 216:19 | 41:11 |
| feet $20: 1434: 7$ | 231:9 235:8 | 313:8 315:9 | 219:11,13 223:3 | fluvial 131:9 |
| 47:17 85:7 | 248:2 250:9,10 | finalized 83:3 | 223:5,22 231:22 | fly 21:24 |
| 111:8,11 112:16 | 250:17 251:1 | 135:12 253:8 | 237:15 247:8 | focus 45:19 92:10 |
| 125:11,23 126:3 | 253:5 258:5 | financial 18:10 | 248:15 255:11 | focuses 119:13 |
| 126:8,17,20 | 261:6,9,10,21 | 319:12 | 255:17 256:14 | folks 276:24 |
| 127:15 128:1,4,7 | 263:23 264:11 | find 34:7,23 47:13 | 256:15,16 262:9 | follow 31:6 |
| 129:14 136:17 | 264:16,22 | 51:16 89:5 | 274:12 275:4 | follow-on 82:21 |
| 215:17 216:12 | 267:23 275:6,11 | 114:4 191:1 | 307:1 | followed 80:4 |
| 217:3 218:18 | 285:16 286:22 | 232:16 246:12 | fishing 104:6 | following 54:4 |
| 219:1 220:17,18 | 301:4 302:9 | 254:16 288:8 | fit 251:12 | 56:6 168:8 |
| 220:23 221:8,13 | 304:21 306:8 | finding 155:23 | fits 144:11 | 197:13 |
| 222:19 224:23 | files 165:23 166:7 | 193:17 247:12 | five 15:22,23 | follows 9:6 124:4 |
| 225:7 226:3,7,13 | 166:20 | 248:3,4 263:22 | 20:14 34:6 | 147:15 151:17 |
| 227:7 | filing 212:17 | 300:17,18 | 46:15 67:16 | 273:18 |
| fell 132:6 | 223:11 247:9 | fine 24:15 37:13 | 68:8,10 124:9 | font 43:1 |
| felt 189:9 | 253:6,11 254:22 | 84:2 86:12 | 125:23 145:20 | footprint 309:6 |
| fewer 226:2,5 | 285:3,12 301:14 | 97:20 101:3 | 145:24 155:21 | 311:9 |
| field 23:18 55:10 | filings 157:10,21 | 121:12,21 | 185:7 271:14 | foregoing 319:3,6 |
| 56:15 124:11 | fill 37:1, 11, 12, 22 | 124:18 125:12 | 293:24 294:4 | forget 102:6 |
| 300:20,23 | 38:18,22 39:2,3 | 126:20 129:24 | 306:24 316:7 | forgive 158:18 |
| figure 32:18 33:20 | 39:12,12,16 | 129:24 171:24 | 318:3 | 247:16 256:13 |
| 36:7,12 37:5 | 41:10 47:6,18 | 214:13 237:21 | fixed 46:22 97:12 | 268:21 278:22 |
| 38:1,4,4,9,18,20 | 80:5,17 91:22 | 243:22 291:15 | flag 27:8 | 294:17 306:7 |
| 41:14,16 42:3,3 | 92:23 97:19 | finger 101:6 | flash 19:19 | form 79:20 254:14 |
| 43:15,18,24 | 104:16 118:24 | finished 140:22 | flip 39:23 50:22 | former 19:18 |
| 75:17 91:11,12 | 119:3,11 122:17 | 294:7 | 53:23 91:1 | 21:24 44:13 |
| 91:19,20 92:9 | 123:7 128:24 | firm 23:24 104:21 | 227:18 | 114:7 212:24 |
| 93:4,20 94:13,15 | 129:2,8,19 130:4 | 104:21 | flip-flop 85:14 | 213:7,18,21 |
| 94:20,21 134:3,6 | 130:5,12,14,20 | firms 155:21 | flipping 65:3 | 219:23 234:6 |
| 134:7 135:10 | 131:4 136:24 | first 9:6 14:5 | 91:10 98:2 | 235:2,7 236:10 |
| 139:20,23 140:2 | 137:4,7,21 138:1 | 18:21 28:6 | 131:17 221:16 | 236:15 238:3,21 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 239:4 240:16 | framework | 57:1 66:17,18,23 | Gen 120:1,2 133:6 | 152:17 153:3,10 |
| :---: | :---: | :---: | :---: | :---: |
| 241:11 242:3 | 117:16 | 67:10,22 70:21 | 135:23 136:20 | 165:23 166:7,19 |
| 243:6,15,17 | frankly 223:1 | 99:10 105:17 | 137:10 152:15 | 169:22 170:21 |
| 245:18 292:17 | FRANZETTI 3:2 | 106:13,14 | 152:22 179:13 | 171:16 172:8,12 |
| 292:20 293:1,18 | frequency 29:1,16 | 107:18 108:11 | 186:2 188:16 | 173:23 174:24 |
| formerly 15:11 | frequently 56:16 | 108:13 124:23 | 196:22 198:10 | 175:20 176:10 |
| forth 89:21 | freshly 254:13 | 133:22 140:6,11 | 201:12 231:3 | 177:16 178:18 |
| 193:21 221:17 | front 9:11,23 39:1 | 140:15 141:6 | Gen's 136:9,14 | 179:2,20,21 |
| 221:24 | 69:6 127:4 | 143:16 145:4 | general 42:13 | 180:7 181:19 |
| forum 22:22 59:3 | 132:3 148:16 | 146:8,9 151:8,9 | 50:3 83:21 92:2 | 182:4,7 186:5,12 |
| forward 257:24 | 202:15 238:2,9 | 154:23 155:3 | 99:2,23 117:23 | 186:20 191:20 |
| 287:7 | 238:10 263:15 | 159:21 161:7,16 | 132:18,19,21 | 192:22 193:10 |
| found 30:19 90:3 | 278:7 287:20 | 162:20 165:5,15 | 133:1,4,11 | 194:21,23 195:9 |
| 90:20 217:2 | 300:11 306:1 | 166:3,11 167:1 | 134:12 144:6 | 197:10,17 |
| 218:17 237:19 | fugitive 74:24 | 168:2,7 174:6,14 | 162:12 173:20 | 203:12,17 |
| 275:7,9 | fulfill 84:20 | 179:4,17,19 | 181:8,9 183:14 | 204:18 205:13 |
| foundation 99:10 | 121:22 122:13 | 181:21 183:23 | 183:22 184:16 | 207:1 209:1,7,11 |
| 99:13 162:20 | 143:11 187:9 | 184:3 186:14 | 280:5 288:18 | 209:15 213:14 |
| 165:15 167:3 | 189:10 | 187:10 188:5 | generally $17: 16$ | 228:1,12 229:4 |
| 201:24 202:2 | fulfilling 121:24 | 192:6,23 195:18 | 19:9 34:24 | 229:11 230:21 |
| 217:10,17,19 | 188:3 193:13,24 | 198:23 201:24 | 42:16 43:19 | 235:19 236:23 |
| 223:1 224:9 | 286:3 | 205:9 216:15 | 94:9 100:1 | 237:11 239:3,18 |
| 250:15 276:6 | full 119:10 174:12 | 217:5 218:1 | 102:5 117:10 | 246:3 247:11 |
| 286:18 296:20 | 203:23 255:11 | 222:21 223:21 | 154:4,14 157:22 | 249:17,19 250:2 |
| foundries 47:12 | 255:17 256:14 | 224:14 226:19 | 159:14 160:13 | 250:10 252:17 |
| 119:5 | 317:2 | 226:24 230:6,7 | 160:14 161:4,11 | 253:11 255:1,12 |
| foundry 44:13 | fully 38:24 181:5 | 231:14,18,20,21 | 161:21 170:4 | 257:13 261:6 |
| 47:12 119:6 | function 178:9 | 241:4,12 242:6 | 171:3 173:6 | 264:21 265:6,16 |
| four 1:14 29:8 | funny 145:21 | 245:11,12 | 174:17 175:13 | 267:8,9,23 268:5 |
| 46:15 47:16 | further 44:18 | 250:14 261:17 | 195:22 199:17 | 274:3,9,15,17 |
| 126:17 138:13 | 48:19 76:18 | 261:18 262:18 | 238:15 252:16 | 282:9 297:11,23 |
| 148:5 155:6 | 84:20 107:10 | 269:18,20 | generate $30: 8$ | 298:7 301:17 |
| 156:18,23 158:9 | 109:19 140:11 | 275:23 276:20 | 65:24 204:5 | 303:4 304:11,24 |
| 170:20 171:16 | 140:14 146:5 | 277:12,13 | generated 33:18 | 307:22 308:12 |
| 174:1,16,16 | 214:1 319:9 | 281:20 284:5,16 | 52:10 61:2 62:6 | 309:1,4 311:8 |
| 199:18 260:20 | furthest 34:8 | 285:5 286:7,11 | 65:2,9 116:11 | 315:14 |
| 281:18 291:7,8 | 144:2 | 286:18 287:11 | generating 178:3 | Generation's |
| 306:23 | future 260:2 | 287:14 288:5,6 | 180:4,8,21 | 133:12 201:21 |
| fourth 61:23 | fuzzy 188:15 | 292:1 296:20 | 181:13 214:21 | 204:23 205:6,18 |
| 138:15 260:17 |  | 303:16,17 310:4 | 218:11 300:16 | 205:18 206:10 |
| 260:20,21 | G | 310:9 314:19 | generation 1:11 | 207:18 208:7 |
| fragment 61:22 | G 9:2 | 317:9,10 | 7:5 14:12 15:9 | 229:17 235:6 |
| fragments 214:16 | Gale 3:4 4:5 7:3,3 | $\boldsymbol{\operatorname { g a p }} 51: 22$ | 22:1 64:3 78:6 | 238:21 240:16 |
| 291:17 | 30:20 32:21 | gears 117:4 | 134:14,24 140:4 | 241:3,10 242:2 |
| frame 161:14 | 43:13,17 56:10 | 119:22 | 151:3,21 152:2 | 244:21 246:19 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 287:8 297:20 | 187:1,16 188:24 | 76:19 89:23 | 108:14,15 | 228:10,14 |
| :---: | :---: | :---: | :---: | :---: |
| 298:4 308:3 | 189:18 223:4 | 92:15,16 100:20 | 109:12 130:17 | groundwater |
| 309:9,24 311:7 | 224:1 271:8 | 113:11 122:12 | 255:14 256:4 | 12:24 13:2,5 |
| 311:13 313:12 | 287:17 294:16 | 134:20 189:24 | goodness 214:19 | 14:1,21,21,23,23 |
| 313:16 315:21 | Gnat's 67:6 | 198:5 221:7 | 228:7 | 15:1,18 16:11 |
| geologist 126:13 | 189:11 | 231:2 252:10 | gosh 306:23 | 18:5 20:2,5,13 |
| 130:12 131:3 | go 13:15 18:16 | 304:10 | gotten 50:23 | 21:8,14,19,21 |
| 221:6 222:23 | 30:2 36:19 37:9 | going 7:24 16:10 | governing 154:17 | 22:2,14 23:4,19 |
| 224:17,24 | 37:16 38:1 | 26:11,14,15 32:7 | 154:22 155:6 | 23:20 24:1,20 |
| 289:24 | 39:19 44:18 | 33:20 35:14 | 156:17,22 | 25:10 27:19,23 |
| geologists 308:1 | 47:12 48:19 | 36:2 45:2,6,8 | gradient 12:24 | 28:6,10,15,20 |
| geology 12:22 | 58:1 59:1 65:17 | 50:20 52:19 | grain 128:15,16 | 29:5,20,23 30:8 |
| 45:16,17 74:4 | 68:18 70:24 | 53:13 60:4 | granted 151:11 | 30:18 31:16 |
| 214:5 | 71:5 92:19 | 61:17 63:8 | 248:7,9 | 34:6 35:5 42:6 |
| geomembrane | 95:13 100:8,23 | 68:22 69:20 | grassy 300:19,23 | 43:5 44:16 |
| 280:24 281:4 | 107:13 111:15 | 70:24 73:18 | gravel 37:14 | 51:19 54:8 56:4 |
| Geosyntec 33:14 | 112:13 115:22 | 91:1 92:13 | 97:20 125:18 | 58:11 74:8 |
| geotextile 260:23 | 117:15,19 122:3 | 102:22 103:21 | 129:3,8 130:20 | 75:13 76:20 |
| 260:24 282:4,5 | 122:8,8 133:23 | 106:21 107:23 | 130:23,23 131:5 | 77:2,4 84:3,4 |
| getting 32:9 45:14 | 136:17 137:12 | 112:22 117:4 | 131:7,8,9,14 | 85:2,4,12,13,23 |
| 57:3 177:1 | 137:18 142:20 | 121:17,18,19,20 | 214:14 291:16 | 86:3,7,13,14 |
| Gibson 95:23 | 142:21 148:7 | 123:1,2,21 124:5 | gravel-sided | 87:7 88:2,12 |
| Giess-Pfleger | 154:7 159:8 | 124:7 126:12,16 | 131:13 | 93:8,17 94:10 |
| 14:10 | 173:5,6 184:5 | 156:13 165:20 | gravel-sized | 98:22 109:7 |
| give 68:12 89:3 | 190:5,8 196:12 | 174:10 178:7 | 131:11 | 111:5,13 115:16 |
| 100:13 115:21 | 210:1 212:2 | 180:16 185:3 | gravelly 129:1,1 | 115:18 116:2 |
| 170:6 182:9 | 213:24 215:21 | 194:8 201:13 | 130:13 131:4 | 120:2 133:6,10 |
| 213:2 231:17 | 217:18 219:4 | 203:22 207:6, | gray 126:14 221:9 | 133:20 135:4 |
| 233:8 249:2 | 221:15,20 | 209:6 210:6 | great 9:24 22:11 | 140:3 143:21 |
| 285:19 307:1 | 222:14 223:4 | 215:23 219:8 | 36:5,5 45:5 | 156:18 170:13 |
| given 230:11 | 225:17 226:16 | 220:23 221:16 | 49:11 125:19 | 171:15 175:2,8,8 |
| gives 61:4 208:15 | 231:19 244:20 | 222:21 226:20 | 139:8 140:16 | 175:10 188:17 |
| giving 191:14 | 248:7 249:3 | 232:15,16 | 149:7,12,21 | 188:21 189:19 |
| glad 25:19 | 250:5,8 256:21 | 233:20 236:8,9 | 150:24 175:20 | 193:18 195:12 |
| glanced 104:9 | 256:22 260:9,10 | 237:22 245:2 | 177:23 194:7 | 198:12,14 199:7 |
| glass 84:12 | 266:13,14 280:3 | 253:9 257:24 | 217:15 299:15 | 218:23,24 |
| Gnat 4:3 7:8,9 9:9 | 283:9,10,11,20 | 275:24 276:16 | greater 226:6,7,13 | 270:14,23 |
| 30:24 67:12 | 294:23,24 299:1 | 279:11 281:8 | Green 275:1,11 | 271:12 272:20 |
| 69:5 72:1 96:11 | 299:2,19 307:3 | 283:10,12 287:7 | 275:20 276:3,7 | 272:22 |
| 106:23 107:19 | 309:15 311:5,20 | 299:17 303:21 | Green's 276:14 | group 120:19,20 |
| 108:14 113:20 | 312:13 318:2 | 304:14 310:11 | Greg 2:9 6:18 | 253:3 |
| 132:10 135:13 | God 268:9,22 | 310:15 311:8 | greg.wannier@ | grouping 102:11 |
| 137:23 140:22 | goes 11:21 13:14 | 317:22 | 2:15 | groups 6:14 66:9 |
| 141:5 146:11 | 46:6 47:16 48:9 | good 6:2 9:9,10 | ground 20:20 | groups' 185:2 |
| 155:17 186:3,23 | 50:24 75:20 | 62:9 67:5 | 21:18 35:5 | guess 8:11 22:20 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 41:6 56:22 | 148:9,12 151:8 | 299:2,9,13,19,23 | 8:14,17 13:6,9 | 230:6,17 231:1 |
| :---: | :---: | :---: | :---: | :---: |
| 68:21 80:20 | 151:10 159:23 | 303:16 304:14 | 13:20 22:8,10 | 231:14,16,19 |
| 100:10,22 | 161:17 162:21 | 305:2,4,10 | 30:23 50:13 | 232:11,13,15 |
| 130:19 136:22 | 163:23 164:3 | 310:13,17,20 | 52:14 56:12 | 233:4,10,14 |
| 137:8 143:1 | 166:5,16 167:6 | 311:2 314:14 | 57:4,24 58:4 | 241:6,15,19,22 |
| 144:13 156:6 | 167:10 168:9,14 | 317:1,11,16,20 | 63:15,19 66:17 | 242:9 245:11,21 |
| 168:2 180:22 | 169:13 171:18 | 318:1 | 67:2,10,14,20,23 | 246:11,21 247:1 |
| 181:21 182:19 | 171:23 172:3 | hand 7:10 136:5 | 68:7,14,18 70:21 | 249:4,8 250:18 |
| 188:14 222:24 | 174:7,20 179:6 | 147:6 319:14 | 71:7,9,20 76:5 | 250:21 261:17 |
| 242:19 244:15 | 179:18,24 182:8 | handed 148:14 | 77:19,22 80:14 | 261:18 262:9,11 |
| 251:24 284:24 | 184:1,7 185:1,5 | handful 156:15 | 95:12,17,21 96:1 | 262:19,24 270:1 |
| 295:2 316:6 | 185:9,11,17,21 | handled 285:6 | 96:5 105:19 | 270:5 275:23 |
| guidance 100:1 | 186:15 187:12 | handling 235:7 | 106:13,19 | 276:16,19 |
| 285:20 | 188:11 189:15 | happen 89:1 | 107:12,16 108:6 | 277:12,14,19 |
| GWPS 272:9,16 | 190:16,20 192:7 | 229:21 231:12 | 108:10 133:16 | 279:4,14 283:1 |
|  | 192:11,13,16 | 268:19 | 134:1 140:7,8,13 | 283:21,24 285:8 |
| H | 193:2,6 196:1,6 | happened 198:9 | 140:16,20,24 | 286:12 287:12 |
| H 4:11 9:2 147:13 | 199:1 202:4 | 206:5,19 | 146:6,10,13,17 | 287:21 288:5,6 |
| 147:13 151:13 | 205:14 212:4,8 | hard 41:22 42:24 | 146:22 147:2,10 | 288:24 289:5,18 |
| 151:13 | 216:20,23 | 91:11 258:12 | 148:9,12 151:8 | 289:22 290:12 |
| habit 239:19 | 217:11,14,20 | hardens 79:16 | 151:10 159:23 | 290:16 292:3 |
| 240:12 | 221:20 222:4 | hashed 134:20 | 161:17 162:21 | 294:8 295:3 |
| half 47:16 122:23 | 223:7 224:12,15 | hate 239:12,13 | 163:23 164:3 | 296:24 297:4 |
| 126:17 128:7 | 226:22 227:1 | 314:9 | 166:5,16 167:6 | 299:2,9,13,19,23 |
| 192:17 202:24 | 230:6,17 231:16 | HDP 314:4 | 167:10 168:9,14 | 303:16 304:14 |
| 221:12,14 | 231:19 232:11 | HDPE 66:4,7,9,11 | 169:13 171:18 | 305:2,4,10 |
| 240:19 242:21 | 232:13,15 233:4 | 178:22 183:20 | 171:23 172:3,5 | 310:13,17,20 |
| 262:1 | 233:10,14 241:6 | 209:12,17 | 174:7,20 179:6 | 311:2 314:14 |
| Halloran 1:15 6:1 | 241:15,19,22 | 249:22 250:12 | 179:18,24 182:8 | 317:1,3,11,16,20 |
| 6:3 7:6,15 8:5 | 242:9 245:11,21 | 255:2,13 260:24 | 184:1,7 185:1,5 | 318:1 |
| 8:14,17 13:6,9 | 246:11,21 247:1 | 265:6 268:7,15 | 185:9,11,17,21 | hearings 54:18 |
| 22:8,10 30:23 | 249:4,8 250:18 | 280:23 281:4 | 186:15 187:12 | 55:15 83:7 |
| 56:12 57:4,24 | 250:21 261:17 | 282:5,11 307:23 | 188:11 189:15 | 158:17 278:21 |
| 58:4 63:15,19 | 262:11,19,24 | 308:1,2,4 314:5 | 190:16,20 | 279:11 |
| 66:17 67:2,20,23 | 270:1,5 276:16 | 314:5 | 191:11 192:7,11 | heavily 35:2 |
| 68:7,14,18 71:7 | 276:19 277:12 | head 100:9 | 192:13,16 193:2 | heavy 119:7 |
| 71:9,20 77:19,22 | 277:14,19 279:4 | header 18:18 | 193:6 196:1,6 | held 158:18 166:8 |
| 95:12,17,21 96:5 | 283:1,21,24 | 103:6 104:5 | 199:1 202:4 | 319:4 |
| 105:19 106:13 | 285:8 286:12 | heading 103:8 | 205:14 212:4,8 | help 23:21,22 32:5 |
| 106:19 107:12 | 287:12,21 288:5 | hear 164:12,17 | 216:20,23 | 36:1 62:24 |
| 107:16 108:6,10 | 288:24 289:5,18 | 191:12,13 | 217:11,14,20 | 100:4 191:1,1 |
| 133:16 140:8,13 | 289:22 290:12 | heard 223:14 | 221:20 222:4 | 215:23 |
| 140:16,20,24 | 290:16 292:3 | 259:5 | 223:6,7,21 | helpful 92:8 |
| 146:6,10, 13,17 | 294:8 295:3 | hearing 1:15 6:1,3 | 224:12,15 | helpfully 292:15 |
| 146:22 147:2,10 | 296:24 297:4 | 6:5 7:6,15 8:5 | 226:19,22 227:1 | helping 99:22 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 199:19 | 118:24 119:7 | ID 4:12 46:3,5 | 121:11 133:1 | impoundment |
| :---: | :---: | :---: | :---: | :---: |
| helps 101:19 | 124:10 | 48:13,15,21 49:5 | 134:23 138:16 | 21:15,18 162:17 |
| 130:10 | Honor 7:17 57:20 | 97:7 136:1,22 | 140:4 149:14 | 163:16,19,20 |
| hereof 319:6 | 107:11 148:8 | 137:1,5 | 150:19 151:16 | 164:14,15,19 |
| hereunder 319:14 | 151:5 174:9 | idea 255:4 259:5 | 152:3 160:15,19 | 165:2,3,10 168:7 |
| Hi 147:18 | 179:8 188:9 | 268:9,10 270:17 | 161:21 166:13 | 169:4 209:3 |
| high 40:18,20 | 190:13 192:9 | 283:5 294:21 | 166:20,21 167:2 | 237:15 248:13 |
| 178:21 | 193:4 205:12 | 304:19 305:7 | 177:17 178:22 | 255:19,22,24 |
| high-density | 217:9 223:8 | ideally 60:1 | 180:19 181:7,23 | 258:14,16 |
| 255:13 | 230:15 232:12 | identification 8:4 | 183:11,14 | 300:24 309:11 |
| higher 28:14 | 233:8,18 245:23 | 46:6 69:3 | 191:21 194:24 | 310:2 311:15,17 |
| 40:12,15 88:3 | 249:2 262:23 | 124:22 148:20 | 197:10,17 | 314:7 |
| 93:22 102:2,9 | 276:9 283:20 | 177:7 184:24 | 207:11 208:24 | impoundments |
| highest 93:16 | 286:20 289:3 | 194:13 197:3 | 209:4,5 245:15 | 35:17 120:15,15 |
| highlighted 38:8 | 290:15 299:1,6 | 200:4 233:21,24 | 248:20 255:20 | 120:24 123:18 |
| hire 155:17 | 299:16,18 304:3 | 247:5,8 263:13 | 261:6 309:11 | 134:21 148:4 |
| hired 152:1 279:2 | 310:14 311:1 | 278:3,7 300:4,7 | 310:3 311:15 | 163:11,14 |
| 279:7 | hoops 289:14 | 305:18,22 | 317:4 | 164:22 169:23 |
| hiring 159:3 | hope 196:17 | identified 16:9 | image 42:9,19 | 169:24 171:2 |
| 186:23 187:8,16 | 279:19 | 19:10 27:3 | imagine 64:10 | 204:4 258:19,20 |
| 188:2 198:15 | horizontal 36:11 | 35:23 44:12,15 | 83:7 | 309:22 |
| historic 54:15 | Horton 6:11 | 46:11,13 67:16 | immediate 172:19 | impounds 163:16 |
| 106:16 132:21 | hour 122:23 | 129:16 134:14 | immediately | in-house 159:1 |
| 145:6 146:2 | household 218:14 | 228:2 230:13 | 14:11 16:17 | inadvertently |
| historical 12:5 | housekeeping | 273:12 274:3,9 | 35:22 49:21 | 98:15 |
| 54:7 55:4 | 107:19 277:4 | 276:5 | 51:21 162:4,1 | inapplicability |
| 105:13 117:12 | humans 282:19 | identifies 134:7 | 198:5 | 247:12 248:4 |
| 209:12,16 246:7 | hundreds 157:16 | identify 26:10 | impact 179:15 | 263:22 300:17 |
| 250:11 254:5 | 157:19 293:7 | 34:22 40:8 | impacted 118:10 | 300:18,22 |
| 265:6 282:11 | hydrogeologic | 44:11 49:6 71:1 | 118:10 119:7,8 | inch 65:19,20 |
| 307:22 308:4 | 12:16,22 73:23 | 97:8 117:17 | 209:17 | 226:14 |
| historically 41:9 | 138:17 | 198:21 226:10 | impacting 35:5 | inches 65:22 80:4 |
| 79:17,21 80:11 | hydrogeology | 273:21 276:3 | impacts 22:20 | 80:5,5,16,17,17 |
| history 81:5 105:3 | 23:19 45:16,18 | identifying 46:7 | 117:13 | 104:15,16,16 |
| 105:8 106:7 | 74:5 214:5 | 130:12 | implement 117:19 | Incised/Slope |
| 168:22 | 287:1 | IEPA 138:17 | 117:19 118:1,16 | 74:13 |
| hit 134:3 | hydrograph 40:4 | 149:13 172:8,11 | Implementation | include 10:5 13:1 |
| hold 26:17 221:17 | Hypalon 280:19 | 250:1,3 | 244:4 | 13:12 35:10,11 |
| 222:2 233:2 | 280:21 281:3 | II 53:17 183:13 | implemented | 37:1,14 75:17 |
| 263:8 | hypothetical | Illinois 1:1,17 2:4 | 61:11 | 91:23 96:21 |
| holding 26:4 | 30:22 | :8 6:4 9:5 | implications 48:1 | 153:12 189:20 |
| honest 172:21 |  | 15:13 56:2 58:9 | 56:22 | 198:15 |
| 228:7,23 268:9 | I | 110:10,18,22 | important 34:15 | included 13:19 |
| honestly 56:18 | ice 122:20 | 111:9,18 117:8 | 35:17 246:8 | 14:15 50:9 55:3 |
| 79:24 111:1 | icon 36:23 39:12 | 120:19,20 | impound 311:18 | 76:9 87:2 90:24 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 98:9,10 122:5,6 | 117:15,16 | 118:21 257:22 | intermixed 129:14 | 235:15 264:5,12 |
| :---: | :---: | :---: | :---: | :---: |
| 122:7 172:7,11 | 118:23 119:4,17 | installed 14:9 47:3 | interpret 23:22 | 278:14,23 285:3 |
| 196:15 199:5 | 131:5,13 138:1 | 51:6,9,9,10,13 | interpretations | 98:15,16,18 |
| 214:15 255:6 | industrial-gene... | 52:1 76:1,7 | 32:3 | 306:13 |
| 291:17 | 138:2 | 84:19,24 96:2 | interpreting 39:8 | involvement |
| includes 24:14,21 | industry 47:11 | 97:2 280:18 | interrupt 70:22 | 8:11 69:12,14 |
| 26:20 50:7 55:2 | 130:6,8 | 294:15 295:20 | 186:8 252:7 | 69:21 72:2 |
| 64:19 77:1,6 | infiltration 127:3 | 309:10 310:1 | interval 46:23 | involves 231:9 |
| 83:12 84:6 | information 12:5 | installing 313:17 | intervals 97:13 | involving 158:3 |
| 86:20,24 87:6 | 12:19 14:18 | instances 172:13 | interwell 28:7,16 | 172:14 173:11 |
| 88:19 98:5 | 18:2,9 24:9,11 | 172:14 298:14 | 61:24 62:4 63:4 | isolated 21:18 |
| 99:19 297:19 | 24:13 25:10,20 | 298:16 | 63:688:10 | issue 107:22 |
| including 49:14 | 25:22 33:8,17 | institutional | intimately 235:15 | 113:21 123:20 |
| 67:14 75:21 | 44:19,21 47:4 | 118:16 | intrawell 62:1,10 | 124:8 141:9 |
| 103:21 183:6 | 49:16,18 50:13 | intake 111:7 | 62:13,18,23 63:5 | 143:7 154:12 |
| incorporated | 54:13 55:4 56:3 | 144:20,22 | introduce 6:15 | 156:18 174:2 |
| 183:8 | 57:14 67:13 | integrity 2:18 7:1 | 199:24 233:20 | 231:10 261:8 |
| incorrect 309:19 | 68:2 74:17 | 199:20 | 300:3 305:17,18 | issued 76:15 |
| increase 116:15 | 82:14 91:5 | intend 239:4 | introduced 6:13 | 123:12 209:5 |
| 116:22 | 92:10 97:23 | 257:11 258:1 | 50:18 | 261:23 |
| increases 271:14 | 100:2 104:23 | 265:6,11 307:24 | introductio | issues 62:14 154:6 |
| increasing 29:15 | 106:16 109:7 | 308:11, 12 309:5 | 11:19 216:2 | 287:10 305:1 |
| indented 280:12 | 135:19 160:4 | 313:20 | introductor | Item 178:7 313:5 |
| indicate 101:10 | 262:7 293:9 | intended 59:16 | 139:9 | items 59:8 |
| 101:18 125:6 | informed 159:13 | 83:13 143:3,10 | investigate 80: |  |
| 128:2 228:9 | 175:11 176:1,14 | 236:23 237:11 | investigation | J |
| indicated 8:7 | inherent 124:11 | 255:16 | 117:17 124:1 | value 27:8 |
| 74:15 227:19 | initial 25:16 59:16 | intending 99 | investigation/re... | January 91:13 |
| 255:17 271:13 | 62:20 134:8 | 249:17,20 | 14:11 | jars 122:17,19 |
| 276:11 293:1,1 | 139:5 234:22,22 | intends 257:1 | invoices 172:21 | Jennifer 3:3 7:4 |
| 315:15 | initially $28: 22$ | 265:16 287:4 | 172:22 | jn@ nijmanfran... |
| indicates 225:10 | 218:7 248:9 | 307:22 | involved 10:19,19 | 3:10 |
| indicating 227:6,7 | initiate 201:7 | intent 241 | 11:11 17:21,24 | job 153:1 |
| indication 129:9 | 203:13 | 257:23 266:7 | 33:4,6 72:9,12 | jogged 229:2 |
| 131:21 132:3,5,8 | inlet 110:20 | intention 240:16 | 72:16 73:14 | Joliet 108:17,22 |
| indicators 19:6 | input 24:10,12 | 242:3,15,24 | 74:18,23 104:4,7 | 108:23 109:2,19 |
| individual 37:17 | inputs 104:24 | 266:4 308:4 | 104:19 154:12 | 110:5 113:24 |
| 38:2 77:15 | inset 38:5 | 309:20 315:21 | 157:3 159:2,4,16 | 129:7 153:12 |
| 202:15 | inspect 144:12 | intentions 235:6 | 159:19 160:8 | 168:5,23 175:2 |
| individually 13:20 | inspections 162:5 | interest 317:2 | 161:2,4,11,21 | 175:22 197:11 |
| 62:17 | 162:9 | 319:12 | 162:7 166:1,9,23 | 197:19 |
| individuals 271:6 | install 183:20 | interested 71:3,6 | 170:1 186:23 | Josh 74:18 75:5,9 |
| 276:13 287:3 | 207:13 265:22 | Interesting 56:20 | 187:21 188:2 | 104:22 138:9 |
| industrial 35:3,4 | 313:21 | interim 204:9 | 195:11 223:9 | Joshua 75:6 |
| 35:19 117:11,13 | installation | 206:3 | 229:8 230:20 | July 19:4 |

L.A. Court Reporters, L.L.C.

312-419-9292

| jumping 289:14 | 74:21 78:20 | 283:17 287:24 | labeled 36:24 | 125:7 127:4 |
| :---: | :---: | :---: | :---: | :---: |
| June 213:9,12 | 79:4,15 82:5 | 288:22 289:6,20 | 212:12,20 | 130:12 131:24 |
| 295:13,20,21,23 | 83:6,20 89:1 | 290:3,6,8 292:6 | 219:18 260:19 | 249:23 261:1,2 |
| 316:14,18,19 | 90:23 92:7 93:5 | 293:22 294:18 | 261:16 266:20 | 280:18 282:6,7 |
| jurisdiction 232:3 | 95:12,15 99:22 | 301:12 302:5 | 281:9,23 284:11 | layers 46:10,12,15 |
|  | 104:9,19,20 | 305:6 308:6 | 284:23 291:9,14 | 46:17,19,22 |
| K | 109:4,9 110:23 | 316:2 317:6,16 | 291:23 292:17 | 97:12 260:15,22 |
| Kari 1:21 196:7 | 117:9,12 118:1 | knowledge 57:15 | 295:11,12 | 282:3 292:21,23 |
| 292:5 297:1 | 118:12 119:4,11 | 67:7 106:24 | 305:18 315:4 | laying 217:10 |
| 299:3 319:2,22 | 120:11,13,14 | 108:3 168:22 | labeling 200:1 | leach 297:24 |
| keep 13:7 43:14 | 122:22,22,23 | 174:13 209:10 | 239:19 263:16 | 298:8 |
| 77:19 101:5 | 123:18,23 124:2 | 209:14 211:7 | laboratory 15:6,8 | leachate 258:2,21 |
| 169:14 206:3 | 124:6 128:18,20 | 212:16 214:8 | 15:10 | 265:23 |
| 221:23 231:7 | 128:21,22 | 230:24 264:15 | lack 108:2 224:8 | lead 101:8,16 |
| 240:13 278:21 | 129:16,18 130:8 | 274:7 276:23 | 291:6 292:15 | 153:21 154:3 |
| 299:17 | 130:24 131:1,8,9 | 296:17 297:9 | laid 217:17,18 | leads 257:21 |
| kg@nijmanfra... | 131:10 136:1,3,3 | knowledgeable | lake 111:23 | leaking 34:18 |
| 3:11 | 136:15 137:16 | 195:15 198:19 | 112:11,11,17,19 | learning 180:15 |
| kicks 120:23 | 142:19 144:24 | known 81:5 105:3 | 134:21 | leave 301:17 |
| 121:11 | 145:11 147:3 | 105:8 106:7 | land 134:9,22 | 307:22 |
| kilogram 81:24 | 149:1 159:15,15 | knows 128:22 | language 181:16 | leaving 103:10 |
| 116:9 117:1 | 172:3 177:9 | KPRG 10:13,19 | 181:17 182:13 | 239:5 |
| kind 34:19 61:10 | 182:8 184:8 | 10:21 11:1,8,24 | large 49:22 | led 244:15,15 |
| 68:1 81:8 90:14 | 185:12 188:15 | 11:24 17:16,17 | 118:23,24 216:5 | left 7:7 152:14 |
| 120:7 131:7 | 188:15 191:1,18 | 17:21,23 23:4 | 247:17 298:13 | 203:5 225:23 |
| 145:18 154:9 | 192:11 193:20 | 34:3 51:10 52:1 | larger 29:6 45:15 | 284:20 290:23 |
| 162:6 182:10 | 194:15 195:16 | 57:10,13 58:16 | 45:18,24 48:8 | 294:1 |
| 188:15 | 199:4 206:17 | 65:7 69:12,21 | 59:23 60:12 | left-hand 290:24 |
| knew 198:9 296:6 | 209:6 211:11 | 70:3,18 72:1,15 | 63:1 123:19 | legacy 123:17 |
| know 6:12,15 | 213:18,20 | 73:5,14 74:15 | 138:18 286:21 | 124:3 |
| 10:21 11:2,5,1 | 214:22 215:13 | 75:2,5 76:1 80:9 | largest 103:22 | legal 56:11 57:2,5 |
| 11:16 12:5 | 215:13 216:8 | 81:6 103:6 | 104:1 | 179:5,11 181:21 |
| 13:14,18 17:5,6 | 218:8,9,14 224:5 | 104:5 139:2 | LASALLE 3:6 | 181:22 183:24 |
| 18:3 23:6,8,20 | 224:7,11 225:1 | 271:18 273:21 | late 68:9 181:1 | 184:3,9 261:20 |
| 33:8 34:15,19,21 | 226:15 227:17 | 284:13 286:16 | LAUGHRIDGE | legend 36:24 |
| 35:18 37:18 | 228:7 230:13 | 287:16,17 | 3:4 4:5 | 39:13 101:20 |
| 39:6 40:10,17 | 234:23,24 236:1 | Kristen 3:4 4:5 | law 1:4 6:23 | let's 58:1 68:18 |
| 46:6 47:2,7 | 236:20 239:24 | 7:3 | 166:20,21 167:2 | 85:9 87:15 |
| 49:14,21 50:16 | 250:24 252:23 |  | 205:10 230:12 | 89:13 95:13,13 |
| 55:2,3,13 56:9 | 253:14 255:5 | L | 232:3 244:11,15 | 95:14 107:13 |
| 59:2,5,8 60:8,15 | 259:13,15 262:5 | L 147:13 151:13 | 310:3 311:15 | 115:21 122:3,4 |
| 61:2 62:13 65:7 | 262:12,15 | L-E-A-C-H | laws 244:15 | 127:16 138:19 |
| 65:9,24 66:6,8 | 266:13 268:16 | 297:24 | lay 202:2 | 165:8 184:20 |
| 66:10 67:3,3 | 273:15 274:8 | lab 26:11,15, 18, 19 | layer 47:6,16 | 196:21 213:24 |
| 70:20 72:7,17 | 282:20,20,22 | 27:1 | 65:19,20,21 | 219:4 221:15 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 222:14 225:17 | 296:7 297:16 | 281:3 282:10 | 217:4 218:17,19 | 89:13 94:14 |
| :---: | :---: | :---: | :---: | :---: |
| 226:16,17 242:9 | limits 62:1 77:16 | liners' 248:20 | 218:19 228:14 | 100:3 101:6,20 |
| 250:8 252:3 | 87:6,21 | lines 75:20 93:20 | 272:9 291:16,23 | 112:10 115:23 |
| 254:17 260:9,10 | line 36:11 39:7 | 111:17 113:12 | 292:12 | 117:23 125:20 |
| 263:9,9 266:13 | 48:21 61:23 | 281:18 306:24 | $\log 38: 2$ 46:8,16 | 125:21 126:6 |
| 266:14 283:9,9 | 97:19 113:8 | 307:3 | 51:11 52:3,6,7 | 128:6 129:18 |
| 283:10 299:2,19 | 123:3 137:19 | liquid 163:21 | 52:14,17 127:16 | 136:12,18,21 |
| 302:2 318:2 | 142:6 144:4 | 164:1,16,19 | 127:18 128:18 | 137:13 141:5 |
| letter 195:5 | 198:5,5,7,7 | list 19:2,6,7 | 129:18 130:16 | 142:2 145:1 |
| 256:15 | 212:24 227:7 | 120:19 148:4 | 131:16,19 132:4 | 158:2 207:24 |
| level 38:17,19,20 | 242:21,23,23 | 169:24 189:20 | 132:9 220:6,11 | 211:9 212:19 |
| 39:21 41:2,7,7,9 | 243:1,2,9 258:17 | 190:7,8 196:13 | 222:15 224:22 | 214:11,23 |
| 41:11,14,16 | 260:14,17,20,21 | 199:4,7 296:10 | 226:21 | 226:18 235:22 |
| 81:11 92:4,22 | 266:24 276:1 | listed 120:19 | logging 126:13 | 236:2 244:3 |
| 93:1 94:24 95:4 | 288:3 292:19 | 227:4,9 273:3 | logs 13:17,18 | 248:14 260:14 |
| 124:1 127:13 | 293:12,13 | lists 15:20 | 37:17 45:21 | 265:8,12 271:17 |
| 224:23 293:14 | lined 280:23 | liter 29:21 | 47:2 49:16 50:7 | 271:19 281:17 |
| 293:16,17 | liner 65:13 66:9 | literally 157:19 | 50:8,11,17 51:16 | 284:11 285:21 |
| levels 13:2 23:9,10 | 66:11 79:7,18 | 253:18 | 52:8,10 53:20,24 | 286:21 290:5,21 |
| 39:5,18,20 40:2 | 80:4,10,23,24 | lithium 88:14,15 | 67:15 97:1,4 | 291:12 292:14 |
| 40:6,9,21 42:7 | 104:12,18 105:1 | 89:16 | 98:4,5,8 129:7 | 295:15 304:15 |
| 85:2 93:23 | 178:22 183:20 | little 9:15,18 17:9 | 131:16 223:2,24 | looked 46:9 48:9 |
| 94:23 270:15,23 | 199:20 208:3,8 | 23:12 28:16 | 224:6 227:12,19 | 71:1 123:14 |
| 272:22 273:3,23 | 209:12,17,19,20 | 29:18 41:22 | 228:3,5,9 229:12 | 141:13 256:15 |
| 274:4,4,10,19 | 209:22 248:10 | 45:9 90:6 94:1 | long 103:21 | looking 28:19,21 |
| liability 191:3,11 | 248:12 249:14 | 95:1,2,11 110:19 | 122:24 270:18 | 35:14 41:3,16 |
| 191:12 194:8 | 249:18 255:2,13 | 120:8 191:16 | 273:14,16 | 43:15 52:2 |
| 231:1 246:3 | 255:16,21,24 | 302:1 | 301:13 317:17 | 71:17 84:9 |
| 296:23 304:12 | 260:14,21,24 | LLC 7:5 | longer 27:7 45:9 | 95:10 102:4,5 |
| License 1:22 | 265:22,23 268:7 | LLC's 247:11 | 54:24 113:24 | 110:23 111:4 |
| licensed 56:2 | 268:15 280:14 | LLP 3:2 | 114:1,2 121:18 | 113:13 123:8 |
| life 117:14 144:16 | 280:19,24 281:4 | local 15:12 45:19 | 121:19 188:7 | 128:17 131:4,19 |
| limestone 261:2 | 282:2,5,11,16 | 49:17,20,21 | 264:24 303:22 | 137:19 139:20 |
| 282:7 | 301:18,23 307:5 | 135:19 | 311:17 | 141:16 143:21 |
| limit 26:18,23,24 | 307:7,23 308:2,4 | locate 34:23 | look 9:21 20:8 | 145:19 190:2 |
| 27:3,4,6,12,12 | 308:11,13,20 | located 14:11 | 23:15 24:16 | 191:2 212:11 |
| 87:11,21 114:15 | 314:5,6 | 16:15,17 38:6 | 30:2 31:14 32:8 | 236:9,22 246:1 |
| 114:24 115:1,2,4 | liners 66:4,7,9 | 43:3 47:8,22,22 | 35:24 37:17,20 | 256:20 269:14 |
| 116:8,13,18 | 79:22,24 80:12 | 48:4 137:15 | 39:20 42:23 | 281:14 286:15 |
| 195:23 | 248:19 249:22 | 292:11 | 43:1,2 44:8 47:8 | looks 39:14 41:23 |
| limitations 107:24 | 250:3,12 251:3 | location 48:17 | 47:20 48:20 | 50:23 85:17 |
| 230:8 | 254:5 255:13,14 | 49:7 97:8 111:7 | 51:2 60:19 | 97:21 128:23 |
| limited 90:12 | 256:2,8 258:2,21 | 136:3,6 | 62:10,16,18 | 177:12,18 |
| 183:7 216:6 | 262:8 265:2,7,11 | locations 92:2 | 70:16,23 71:13 | 221:10 226:13 |
| 230:9 262:22 | 265:21 280:22 | 214:15 216:17 | 72:4 84:1 85:18 | 268:22 271:2 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 272:24 293:6 | managed 124:8 | 178:23 209:8 | 153:4 182:11 | 279:10,17 |
| :---: | :---: | :---: | :---: | :---: |
| 300:15 | management | 241:11 250:12 | 319:4 | mentions 278:20 |
| loose 47:17 137:4 | 119:15 134:18 | 260:15 267:10 | meant 149:1,4,5 | merely 223:16 |
| 137:7 | 140:3 | 282:3 296:18 | 272:16 274:12 | met 190:3 |
| losing 306:7 | manager 275:11 | 297:8,12 315:15 | measured 38:20 | metal 55:12 |
| lost 191:16 196:4 | managers 186:24 | materials 91:23 | 272:22 | 248:17 256:3 |
| 259:12 267:15 | 187:2 | 127:15 161:5 | measurements | 265:1,18 266:11 |
| 268:11 | $\boldsymbol{\operatorname { m a p }} 34: 7$ 39:21 | 171:12 242:4 | 25:12,16 | metals 119:7 |
| lot 12:4,19 60:9 | 42:6,20 43:10,19 | 260:22 266:3,5 | measures 119:12 | 271:14 |
| 70:22 93:20 | 47:20 49:9 | 267:24 268:7 | 19:14 | method 26:15,17 |
| 125:4 129:6 | 126:6 136:6 | 314:5 | mechanical 319:4 | 26:18,23 27:1,11 |
| 134:1 137:24 | 219:11,14,17 | math 284:22 | mechanism 251:7 | 60:11 |
| 138:2 144:7 | 295:13 296:1,3,4 | matrix 21:9 | media 252:1 | methods 77:10,15 |
| 153:5 251:24 | 296:7 | 129:11,12 | medium 37:13 | Michael 1:16 |
| 256:12 262:7 | maps 23:8 95: | matter 8:12 | 125:13 128:8,11 | Michelle 95:23 |
| 300:12 | March 25:17 | 107:19 123:4 | 128:14,18,19 | Michigan 111:23 |
| lots 203:1 252:1 | 270:9 273:14 | 181:7 232:10 | 129:12 130:1,5,5 | 112:11,20 |
| 279:2,2 | mark 148:17 | 247:19 252:22 | 214:14 291:15 | middle 317:8 |
| low 122:16 309:5 | marked 4:12 5:1 | 261:22 319:4,13 | meet 76:14 119:20 | midway 207:7 |
| 309:9 310:1,10 | 8:4 41:10 69:2 | matters 181:12 | 198:20 | Midwest 1:11 7:5 |
| 310:11 311:9,13 | 124:22 148:19 | 287:5 | meeting 279:15 | 15:9 22:1 64:2 |
| 311:18 314:8 | 177:6 184:23 | maximum 41:21 | 279:16 280:5,13 | 78:6 113:20 |
| lower 38:5 41:8 | 194:12 197:2 | mean 39:4 47:9 | 280:16 | 119:24 120:2 |
| 88:11 101:7,15 | 199:24,24 200:3 | 55:1 59:22 66:3 | meetings 158:17 | 133:6,11 134:14 |
| 102:2,9 115:20 | 219:23 220:9 | 105:7 112:16 | 158:18,22 | 134:23 135:15 |
| 116:24 | 233:20,23 | 115:3 117:13 | 278:21,24 | 135:23 136:9,14 |
| lunch 140:19 | 245:10 247:4,7 | 120:4 130:17 | 279:17 | 136:19 137:10 |
| 146:15,19 | 260:11 263:12 | 131:23 132:2 | Megan 2:10 4:9 | 140:4 151:2,21 |
| Lundy 64:1 65:2 | 263:15,16 278:2 | 135:22 136:6 | 6:20 147:18 | 152:1,15,17,22 |
| 65:8 139:7 | 278:7 290:23 | 137:12 149:9 | megan.wachs | 153:3,10 165:23 |
| 141:23 143:5 | 291:13 293:24 | 157:1 163:20 | 2:16 | 166:7,19 169:22 |
|  | 294:3 295:16 | 168:3 182:2,21 | member 95:23,23 | 170:21 171:16 |
| M | 300:3,6 305:21 | 184:5 189:7,8 | 155:12 158:12 | 172:8,12 173:22 |
| M 1:16 9:7 108:12 | marker 221:18 | 208:16 209:24 | members 155:14 | 174:24 175:20 |
| 141:2 147:16 | 225:9 | 217:8 223:1 | memorized 190:7 | 176:10 177:16 |
| 151:18 | masters 120:4 | 229:7,8,21 | 196:14 254:14 | 178:18 179:2,13 |
| ma'am 274:21 | 122:2 | 243:15 249:16 | memory 199:6 | 179:20,21 |
| machine 316:2 | material 38:18 | 265:20 272:19 | 208:17 229:2,7 | 181:19 182:4,7 |
| magnifying 84:12 | 46:23 79:11,18 | 289:5,7 290:13 | 252:23 253:24 | 186:2,5,12,19 |
| magnitude 88:11 | 81:20 82:18 | 291:22 294:23 | 268:11 270:19 | 188:16 191:20 |
| mail 173:10 | 97:14 127:6 | 308:10 | mentioned 25:19 | 192:22 193:9 |
| main 15:12 | 128:24 129:2,3 | meaning 48:3 | 75:4 83:4 86:21 | 194:20,23 195:8 |
| major 284:22 | 129:10 132:1 | 286:22 | 106:15 117:7 | 196:21 197:10 |
| making 118:5 | 163:17,21 164:1 | means 21:4 41:6 | 186:20 199:13 | 197:17 198:9 |
| 121:9 | 175:21 176:11 | 73:2,11 74:7 | 224:1 278:20 | 201:12,21 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 203:12,16 | 205:10 216:18 | moments 257:10 | 261:15 268:24 | 51:8 |
| :---: | :---: | :---: | :---: | :---: |
| 204:17,23 205:5 | 217:6 285:6 | monitor 188:16 | 269:1 277:9,23 | MW-9 75:17 |
| 205:13,17,18 | mischaracterizes | 188:21 195:12 | 287:24 288:2 | MWG 5:1 177:3,3 |
| 206:10 207:1,18 | 105:18 241:5,13 | monitored 118:2 | 299:7 303:14 | 177:5 184:20,22 |
| 208:6 209:1,7,11 | misrepresent | 145:24 | 316:21,22 | 191:12 194:8,11 |
| 209:15 213:14 | 239:13 | monitoring 13:2 | moved 180:18,23 | 197:1 207:8 |
| 227:24 228:12 | misrepresentati... | 14:2,6,14,16 | 277:4 | 256:6 264:22 |
| 229:4,10,16 | 56:23 | 15:18 20:4,5,9 | movement 21:8 | 280:13 |
| 230:21 231:3 | missing 199:10 | 20:15 28:24 | moving 39:2 | MWG's 185:3 |
| 235:5,19 236:23 | misspeak 27:14 | 36:18 38:11,13 | 66:20 127:7 | MWG13-15_11... |
| 237:11 238:20 | 59:2 | 40:5 42:14,23 | Multiple 278:19 | 135:16 |
| 239:3,18 240:16 | misspoke 165:19 | 51:10,19 56:5, | municipal 130:15 | MWG13-15_11... |
| 241:2,10 242:2 | misstated 200:13 | 59:6,7 75:13 | mute 260:8 | 138:6 |
| 244:21 246:2,19 | 200:20 | 77:2,5 81:10 | MW 41:7 51:5 | MWG13-15_11... |
| 247:11 249:17 | misstates 161:7 | 84:18 86:13,18 | 52:2 287:7 | 138:22 |
| 249:19 250:2,10 | 187:10 198:23 | 87:3 110:22 | MW-01 48:21 | MWG13-15_70... |
| 252:17 253:11 | 205:9 241:13 | 111:2 112:15 | 97:18 | 114:11 |
| 254:8 255:1,12 | mistake 66:16 | 113:8 114:23 | MW-02 90:8 | MWG13-15_79... |
| 257:13 261:6 | 282:19 | 115:22 120:24 | MW-07 43:2,6, | 127:18 |
| 264:21 265:5,15 | mistakenly 280:13 | 121:4,5,8 135:22 | MW-08 42:24 | MWG13-15_79... |
| 267:8,9,23 268:5 | mistakes 124:12 | 186:4 187:3 | 43:1,6,7 | 131:17 |
| 274:3,9,15,17 | misunderstandi... | 189:19 193:19 | MW-1 50:21 51:5 | MWWG13 |
| 282:9 287:7 | 254:3 | 195:12,19,23 | 75:17 84:6 | 127:19 |
| 297:11,20,23 | mixed 126:15 | 198:12,14 199:7 | 86:14 88:20 |  |
| 298:4,7 301:17 | 129:21 138:3 | 199:13 219:11 | 89:24 90:7 98:5 | N |
| 303:4 304:10,24 | mixture 119:3,4 | 219:14,16,19 | MW-11 34:6,8 | 4:1 9:2,7,7,7 |
| 307:22 308:3,12 | model 12:21 22:23 | 220:12 222:9,16 | 52:3 85:6,18 | 108:12,12 141:2 |
| 309:1,4,8,24 | 23:23,23 24:7 | 224:22 225:19 | MW-12 52:22 | 141:2 147:13,16 |
| 311:7,8,12 | modeler 23:20 | 225:24 294:14 | 98:6 | 147:16 151:13 |
| 313:11,16 | modeling 22:18 | 295:12,16,19 | MW-13 75:21,24 | 151:18,18 |
| 315:13,21 | 23:17 24:8 | 296:11,15 | 84:9 85:10 | N-505 1:16 |
| milligram 116:24 | models 23:4,16 | monthly 19:14,21 | MW-14 53:1 | N-P-D-E-S 168:24 |
| milligrams 29:21 | 24:4 | months 239:6 | 75:21 101:8, | name 6:3 33:2 |
| 81:24 116:9 | MODFLOW 24:5 | 244:6 | MW-15 53:3 | 66:11 147:18,19 |
| mind 162:4,15 | modified 240:4,6 | $\boldsymbol{m o o t} 260: 8$ | 75:22 76:1 84:7 | 202:14 244:13 |
| 172:19 198:11 | 257:9 301:21,23 | 261:19 | 85:18 | 256:17 |
| 229:15,22 | MOHAWK 2:3 | morning 6:2 9:9 | MW-16 15: | amed 75: |
| 274:21 297:17 | moist 126:2,15,21 | 9:10 108:15,15 | 53:5 | narrative 11:21 |
| 297:18,22 | 127:10 128:11 | 138:10 | MW-2 48:5 50:21 | native 125:17 |
| minimum 76:14 | molybdenum | motivated 25 | 88:15,20 89:14 | 127:15 128:11 |
| minute 100:13 | 89:16 270:15,2 | move 6:8 57:6 | MW-3 41:20 | 129:20,20,24 |
| 107:13 141:8 | 272:8 | 66:14,24 106:1 | 50:21 | 131:7,8 |
| 190:14 233:3 | moment 89:3 | 138:20 151:5 | MW-5 50:24 51:1 | atural 118 |
| minutes 249:3,5 | 140:7 212:3 | 192:10 223:20 | 51:5 | 127:14 131:14 |
| mischaracteriza... | 249:2 | 230:4 245:9 | MW-6 50:24 51:1 | nature 69:19 |

L.A. Court Reporters, L.L.C.

312-419-9292

| near 47:23 112:11 | 91:16 123:13,14 | 226:23 272:7 | 78:3 88:4 | 304:18 305:12 |
| :---: | :---: | :---: | :---: | :---: |
| 112:20 132:11 | 123:15 169:9,19 | notes 33:12 81:23 | 137:20 219:5 | 310:12 317:10 |
| 275:2 293:11 | 191:14 194:9 | 129:12 | 290:23 294:21 | obligation 71:15 |
| 296:15 | 207:8 232:24 | notice 90:11 129:9 | numerical 23:16 | observations |
| nearest 111:7,9 | 258:6 268:7 | 194:19 197:9 | 23:17 24:7 | 102:20 |
| 117:24 | 281:4 | 47:9 253:7,8 | numerous 304:1 | observing 126:12 |
| necessarily 24 | niceties 223: | 262:13 | 308:16 | obtained 45:22 |
| 28:1 30:8 35:23 | niche 23:19 | noticed 94:18 | NW 2:20 | obtaining 175:1 |
| 53:13 54:23 | night 17:10 | notwithstanding | 0 | 207:10 |
| 92:1 104:6 | Nijman 3:2,3 | 260:10 | 0 | obviously 17:8 |
| 161:6 163:14 | 22:4 140:21 | November 40:7 | O 9:7,7,7 108:12 | 25:3 44:16 47:2 |
| 176:15,16 220:3 | 185:4,7,10 | 93:2,11 127:1 | 141:2,2 147:16 | 223:23 |
| 221:11 | 217:23 262:21 | 201:18 207:17 | 151:18,18 | oc- $37: 14$ |
| necessary 61:24 | 281:14 | 235:24 236:5 | o'clock 1:18 | occasion 158:3 |
| 224:8 261:24 | nine 46:15,17 | 237:24 238:4 | OAKLAND 2: | occasional 37:2,15 |
| 264:24 266:7 | Nishioka 3:5 | 241:9,18 242:1 | oath 7:11 | occasionally $55: 18$ |
| need 23:12 24:16 | nitty-gritty | 242:15 257:8,23 | object 71:2 | 55:20 |
| 84:1 109:24 | 288:19 | 263:23 | 181:21 188:5 | occur 213:15 |
| 111:14 147:3,4 | non-CCR 204:6 | NPDES 168:24 | 216:15 217:5 | 229:8 265:10 |
| 168:12 169:21 | non-engineering | 169:1 | 222:21,24 | occurred 179:2 |
| 169:22 171:1 | 79:15 | NRG 152:5,8,13 | 275:24 288:8 | 183:16 267:19 |
| 175:5,24 204:3 | noncompliant | 152:14,17,18 | 310:4,9 | 288:14 |
| 209:19 213:12 | 254:5 | 156:2,8 173:2 | objected 289:12 | occurring 109:24 |
| 226:1,4,8,11 | north 36:19,20 | 173:24 174:4,15 | objection 22:4 | 135:11 |
| 246:9 252:2,11 | 76:9 82:23 | 174:22 179:10 | 30:20 56:10 | occurs 218:23 |
| 254:16 261:24 | 84:20 86:19 | 201:15 | 57:1 99:10 | October 141:24 |
| 263:5,6 270:18 | 103:2 110:19 | number 4:12 | 105:17 106:14 | 143:8 177:24 |
| 287:5 293:22 | 144:2 220:3 | 28:24 29:16 | 107:23 133:14 | 204:1 206:1,6 |
| 294:2 308:19 | 236:24 237:8 | 30:2 31:24 | 151:9 154:23 | 312:19 315:5 |
| 315:16 | 240:23 242:22 | 46:11 48:15,20 | 159:21 161:7,16 | off-site 35:19 50:2 |
| needed 76:15 | 243:1 | 48:21,21 49:6,9 | 162:20 165:5,15 | offer 5:17 290:4,9 |
| 213:11 248:16 | north-sou | 50:9 76:14 89:8 | 166:3,11 167:2,3 | 290:11,15,18 |
| 253:20 | 126:7 | 97:3,8 134:4 | 168:2 174:6 | 292:5 294:7,9,11 |
| needs 250:2 | northeast 108:17 | 136:2 139:21 | 179:4 182:1 | 295:2,4,5 298:22 |
| network 1:6 7:2 | 109:13,17 | 141:15 156:12 | 183:23 186:14 | 299:11 |
| 14:6 20:5,6 | northern 240:20 | 175:23 178:6 | 187:10 192:6,23 | offered 7:20 |
| 36:18 40:5,6 | 242:16 | 183:4,4 203:23 | 192:24 195:18 | offhand 80:19 |
| 51:20 56:5,5,18 | northwest 34:9 | 206:24 262:7 | 198:23 201:24 | 177:9 |
| 86:18 | 92:16,16 220:1 | 264:19 304:20 | 205:9 223:13,22 | office 75:7 136:8 |
| never 109:5 | note 6:9 67:6 | 305:7 307:1 | 226:21 241:4,12 | 181:8 183:13 |
| 153:24 259:5 | 88:10 182:12 | 311:24 314:18 | 241:13 242:7 | officer 1:15 6:1,4 |
| 277:19,20,21,21 | 197:12 292:6 | 314:20 | 246:14 250:14 | 7:6,15 8:5,14,17 |
| 277:22 280:14 | 305:6,11 | numbered 114:10 | 277:13 285:5 | 13:6,9 22:8,10 |
| new 67:16 80:22 | noted 90:8,9 | 181:4 | 286:7,18 292:1 | 30:23 56:12 |
| 84:18,23 86:21 | 108:7 130:16 | numbers 44:1 | 296:20 303:17 | 57:4,24 58:4 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 63:15,19 66:17 | 242:9 245:11,21 | 271:18 274:11 | 106:7,10 108:6 | 197:16,22 198:2 |
| :---: | :---: | :---: | :---: | :---: |
| 67:2,10,20,23 | 246:11,21 247:1 | 275:8 279:7 | 109:16 114:8, 12 | 198:13 199:23 |
| 68:7,14,18 70:21 | 249:4,8 250:18 | 280:3 281:12 | 114:21 116:7 | 200:9 201:5,10 |
| 71:7,9,20 77:19 | 250:21 261:17 | 296:2 306:23 | 124:13,24 125:3 | 201:16,20 |
| 77:22 95:12,17 | 261:18 262:11 | 316:21 | 125:4,9,19 | 202:18 203:6,11 |
| 95:21 96:5 | 262:19,24 270:1 | okay 7:15 8:16 | 127:21 128:6,10 | 205:5 206:14,15 |
| 105:19 106:13 | 270:5 275:23 | 10:11,24 11:6,17 | 128:14,17 134:5 | 206:23 207:17 |
| 106:19 107:12 | 276:16,19 | 12:14 13:1 16:7 | 135:13,17,18 | 208:19 209:1,6 |
| 107:16 108:6,10 | 277:12,14,19 | 16:20 17:11,15 | 136:1,13 137:5 | 210:4,13,17,22 |
| 133:16 134:1 | 279:4 283:1,21 | 17:19 18:7,10 | 137:18 138:7,19 | 211:5,9,22 212:2 |
| 140:7,8,13,16,20 | 283:24 285:8 | 19:5,11,23 20:19 | 138:23 139:8,13 | 212:11,15,19,23 |
| 140:24 146:6,10 | 286:12 287:12 | 21:10 24:3,9 | 139:18,22 | 213:4,7,17,24 |
| 146:13,17,22 | 287:21 288:5,6 | 25:6,18 26:2 | 141:10,17,19 | 214:7,11,11 |
| 147:2,10 148:9 | 288:24 289:5,18 | 27:15 29:19 | 142:1 143:14 | 215:5,10,15 |
| 148:12 151:8,10 | 289:22 290:12 | 31:12,22 32:14 | 144:3 145:4 | 216:10 217:2,13 |
| 153:22 154:1 | 290:16 292:3 | 33:15,19 34:12 | 147:4 148:6,23 | 217:22 218:16 |
| 159:23 161:17 | 294:8 295:3 | 36:5 38:4 39:10 | 149:3,12,21 | 218:21 219:3,4 |
| 162:21 163:23 | 296:24 297:4 | 39:17 40:1,21 | 150:4,18,24 | 219:16,19,22 |
| 164:3 166:5,16 | 299:2,9,13,19,23 | 41:13 42:1,18 | 151:4,20 152:4 | 220:4,4,14,20 |
| 167:6,10 168:9 | 303:16 304:14 | 44:5,21 45:2,5 | 152:11,18,21 | 221:3,12,15 |
| 168:14 169:13 | 305:2,4,10 | 45:11 46:2,5 | 153:12,21 154:2 | 222:9,14,18 |
| 171:18,23 172:3 | 310:13,17,20 | 48:5,11,18,22,24 | 154:15 156:7,10 | 224:15 225:5,6,8 |
| 172:5 174:7,20 | 311:2 314:14 | 49:3,11,17 50:1 | 156:16 157:4,13 | 225:15,17,17,18 |
| 179:6,18,24 | 317:1,4,11, 16,20 | 50:4,20 52:2,4 | 157:23 159:9,9 | 225:22 226:5,9 |
| 182:8 184:1,7 | 318:1 | 52:19,23 53:9,21 | 159:16,16 160:7 | 226:16,22 |
| 185:1,5,9,11,17 | official 262:13 | 56:20 57:17 | 160:18 161:24 | 227:11,11 |
| 185:21 186:15 | oh 18:15 30:6 | 58:16 59:11 | 162:16 163:3 | 229:20 230:3 |
| 187:12 188:11 | 39:21 63:17 | 60:7 61:6,19 | 164:9,24 165:7,7 | 232:11,14 |
| 189:15 190:16 | 64:14 103:24 | 63:2,7 64:13 | 165:9,22 168:12 | 233:14,19 234:4 |
| 190:20 191:11 | 104:1 109:22 | 65:10 66:3,12,23 | 168:18 169:7,16 | 234:11,14 235:1 |
| 192:7,11,13,16 | 114:19 124:24 | 67:9 69:11,18 | 171:7 172:10 | 235:5,12,19,23 |
| 193:2,6 196:1,6 | 134:2 138:4 | 70:5,19 74:22 | 174:4 176:10,16 | 236:3,7,15,21 |
| 199:1 202:4 | 139:21 141:10 | 75:11 76:11,17 | 176:24 177:11 | 237:3,17,21 |
| 205:14 212:4,8 | 141:15,17 164:6 | 78:12,15,24 79:7 | 178:2,7,15 | 238:1,13,16,19 |
| 216:20,23 | 165:18 169:16 | 80:20 81:3,13 | 180:17 181:3 | 239:1,3,18 241:1 |
| 217:11,14,20 | 171:21 185:9 | 83:9,24 84:12 | 184:20 185:9,12 | 241:9,21 242:1 |
| 221:20 222:4 | 189:6,15 191:10 | 85:3,15,21 86:10 | 186:9,10,22 | 243:19,21 |
| 223:7,21 224:12 | 200:10 206:13 | 86:20 88:14 | 187:7,24 189:5 | 244:17,19 245:7 |
| 224:15 226:20 | 207:15 214:19 | 89:9 91:1,9 | 190:6,13 191:2 | 245:7 246:18 |
| 226:22 227:1 | 222:1 225:5 | 92:20 93:6,24 | 191:19,24 192:3 | 247:7,21 248:14 |
| 230:6,17 231:14 | 238:12 243:12 | 95:5,17 98:2,10 | 192:9,12,15,15 | 248:22 249:1,1 |
| 231:16,19 | 243:16,20,24 | 98:17 99:4,6,12 | 193:20 194:7,9 | 250:20 251:19 |
| 232:11,13,15 | 253:21 259:11 | 100:5 101:3,14 | 194:17,22 195:2 | 252:3,13 253:21 |
| 233:4,10,14 | 260:18,18 269:6 | 102:21,24 104:2 | 195:7,7 196:21 | 254:17,19,23 |
| 241:6,15,19,22 | 269:21 271:18 | 104:11 105:2,15 | 196:22 197:7,12 | 255:10 256:21 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 256:23 257:18 | ones 198:6 227:21 | 303:20 307:6 | 99:19 | 255:17 260:9,11 |
| :---: | :---: | :---: | :---: | :---: |
| 259:13 260:9 | onsite 50:2 | 311:5,21 | page 11:18,19 | 260:19 266:20 |
| 261:5,13 262:11 | open 145:11 | others' 109:13 | 12:12 13:24 | 269:22 270:20 |
| 262:18 263:8 | operate 309:21 | outcome 319:13 | 15:4,15 16:21,24 | 271:4 273:19 |
| 264:2,5 265:19 | operating 18:18 | outdated 234:5,7 | 18:17 20:7,8 | 275:17 281:10 |
| 266:13,19,22 | 51:24 81:16 | 245:13,18 | 21:1 24:14,17 | 281:10,23 284:4 |
| 267:22 268:5,24 | 121:7 139:5,16 | 312:15 | 25:5,19 26:2 | 290:23 293:5,6,9 |
| 269:13 270:11 | 155:18 158:19 | outfall 165:10,10 | 27:17 32:15 | 302:3 306:24 |
| 270:14,18,21 | 169:1,3 239:8,11 | 165:13 | 33:21 36:6,10 | 307:1,2 312:6 |
| 271:11 272:4,15 | 257:4 259:23 | outfalls 163:12 | 39:24 42:3 | 314:18 319:6 |
| 272:18,21 | 288:11 316:4,8 | 164:22 165:9 | 43:16,22 45:10 | paged 127:18 |
| 273:11 274:7,13 | operation 155:19 | outlier 90:19 99:9 | 50:5 52:3,17,21 | pages 11:22 36:11 |
| 275:10,14,20 | 174:13 255:9 | 99:21 100:6,19 | 53:10,14 54:5 | 39:24 67:1,3 |
| 276:22 277:2,3 | operational 32:12 | 101:8,10,16,19 | 57:18 59:11,13 | 86:23 90:20 |
| 278:5,10,17 | 32:12 | 101:21,24 102:1 | 63:15,18 64:14 | 92:8 94:4 |
| 279:10 280:3,9 | operations 153:7 | 102:16 | 64:16 65:5,10 | 133:24 139:9 |
| 281:7 283:9,14 | 171:2 | outliers 89:19 | 69:9,9 73:19,20 | 230:10,14 262:4 |
| 284:3,10,15,19 | operators 160:3 | outline 292:22,24 | 73:20 74:10,11 | 268:22 279:20 |
| 285:15 290:10 | 167:14 | outlined 100:1 | 75:1,11,12 76:19 | 293:7 300:13 |
| 290:16 291:12 | opine 182:9,10 | 209:2 | 76:19,19 77:9 | 303:18 |
| 293:8 294:6,6,19 | opinion 22:5,5 | outside 27:6 102:3 | 78:1,16 81:4,4 | paid 152:16 |
| 295:15 296:5,14 | 30:21 56:11 | 123:17 219:22 | 81:13 82:8,8 | paper 57:21 99:1 |
| 298:24 299:12 | 112:21 113:18 | 294:9 297:14 | 83:9,10,24 84:1 | 148:2,3 |
| 300:2,9,14 | opportunity $22: 13$ | 298:1,8,19 | 84:10 85:22 | paragraph 61:23 |
| 301:16 302:2,8 | 68:13 80:9 | overall 14:18 | 87:5 89:8,12,12 | 80:3,22 202:8 |
| 302:11,20,23 | 161:5 | 49:23 138:17 | 90:7 91:3,4,4,11 | 203:23 216:2 |
| 303:13 305:10 | opposed 32:13 | overflow 212:24 | 91:20 92:9 93:6 | 248:15 255:11 |
| 305:17,24 306:3 | 77:2 | 213:5,8,11 | 94:13,14 96:12 | 271:18,19 |
| 306:8,16,22 | opposing 7:19 | 236:16 | 96:20,20 98:3,3 | 275:14 280:12 |
| 307:14,21 309:4 | 304:8 | overhead 113:12 | 98:18 99:5 | 302:17 |
| 309:8,23 310:9 | option 117:18 | overlap 121:3 | 101:5,6,12 | parallel 144:23 |
| 310:19 311:12 | options 117:18 | overlapping 92:23 | 102:23 103:6,9 | parameter 19:2 |
| 311:20 312:1,2 | 308:21 | overrule 290:4 | 104:13 105:3,4 | 26:12,13 30:7 |
| 313:2,15 314:9 | order 29:8 76:14 | overruled 188:12 | 114:17 131:17 | 61:5 196:15 |
| 314:17,24 315:5 | 88:11 159:5 | 202:5 | 135:15 141:7,7 | parameters 19:8,9 |
| 315:13 316:12 | 261:23 287:9 | oversee 193:21 | 142:2,6 178:6,16 | 28:21,22 29:1 |
| 316:12,17,20,20 | 296:22 304:11 | oversees 287:15 | 181:4 183:1,4 | 35:8,10,13 60:10 |
| old 34:10 110:20 | organic 130:15 | overtalk 209:24 | 195:3 197:13 | 87:13 89:14 |
| 117:12,15,16 | organization | owners 160:3 | 201:14 202:15 | 120:18 121:5,6 |
| 119:4 | 174:13 | 167:14 | 207:7 208:1 | 121:15 196:14 |
| omitted 98:16 | original 260:23 | owns 153:11 | 211:16,17 | paraphrased |
| once 22:24 84:24 | 261:7 266:14,18 |  | 215:12 218:22 | 272:1 |
| 235:21 253:22 | 266:19 280:17 | P | 222:3 224:1,1 | Park 15:13 |
| 259:21 260:1,3 | 280:19 281:2 | package 58:20 | 225:4,13 244:3 | parse 184:8 |
| one-inch 226:14 | 282:4 301:21 | 88:19 89:1 90:4 | 247:8,10 255:11 | parsing 143:2 |

L.A. Court Reporters, L.L.C.

312-419-9292

| part 11:15,18 13:4 | particular 32:6 | 123:6 162:2 | 255:1,6 257:2 | 122:20 135:2 |
| :---: | :---: | :---: | :---: | :---: |
| 14:10,15 17:17 | 100:16 102:10 | 206:3 231:10 | 260:11 263:10 | 167:19 169:18 |
| 26:9 33:5,16 | 104:6 105:10 | periodic 178:12 | 263:20,21 264:2 | 278:6 300:10 |
| 34:15,16 36:15 | 115:7,11,13 | permanent 178:8 | 264:22,23 | placement 167:24 |
| 44:3 45:14,15 | 129:18 132:4 | 235:8 | 266:15 267:9 | 168:1,3 |
| 51:13,19 53:21 | 154:5,16,20 | permission 301:17 | 268:6 269:15 | places 41:3 118:19 |
| 54:1,12 66:6 | 216:6 | permit 18:18 | 277:6,10 281:9 | 163:11 165:1 |
| 67:14 83:21,23 | parties 319:10,12 | 22:17 26:10 | 281:10,24 282:9 | 166:8 294:4,5 |
| 87:2 99:18 | partners 7:4 | 33:17 36:16 | 283:6 300:15,22 | placing 118:9 |
| 110:1 118:9 | parts 10:23 11:13 | 44:4,24 45:15 | 301:4,16,21 | 169:4 303:7 |
| 123:18,19 | 39:15,15 71:13 | 49:24 51:24 | 302:9 306:5 | plain 181:16 |
| 130:11 131:12 | 71:14,15 106:23 | 56:1 76:7,8 | 307:7 311:21 | Plaines 109:3,6 |
| 134:17,24 | 150:14 237:14 | 81:16 82:21 | 316:24 | 110:4 113:16 |
| 138:18 140:2 | pass 124:3 | 98:13,23,24,24 | petitions 267:20 | plan 10:23 17:3 |
| 150:4,10,11,14 | passed 17:8 | 110:1 139:5,6,16 | phase 53:17 185:4 | 17:12 26:9 |
| 150:19,21 156:8 | 145:19 239:7 | 155:18 158:19 | 185:15 191:3 | 63:14,23,24 64:7 |
| 157:21,23 158:7 | 244:13 | 158:20 159:17 | 194:9 223:3,3,5 | 64:20,21 70:17 |
| 158:16 159:11 | passing 36:4 | 160:16 165:12 | 223:24 231:1 | 70:17 72:5 |
| 159:20 160:2,10 | Patrick 51:6 | 166:1,10,23 | 246:3 | 74:24 78:21 |
| 160:15,19,22 | pattern 37:5 | 167:14,20 169:3 | phrase 114:23 | 79:1,3,6 103:1,5 |
| 161:2,22 167:13 | pay 152:18 186:24 | 178:19 207:11 | 119:23 120:3 | 103:17 118:15 |
| 167:13,13 169:3 | PCB 1:10 6:5 | 208:23 245:4,14 | pick 245:24 | 118:15 139:3,4 |
| 169:16 170:2 | 304:20 | 278:11 282:14 | picking 293:5,6 | 139:10,12 |
| 174:22 186:18 | PDF 32:18 53:22 | 283:10 288:11 | pictures 63:1 | 141:11,21,23 |
| 197:14 200:24 | PE 66:11 235:14 | 294:24 | piece 131:14 | 142:6,7,11,13,15 |
| 207:1 216:11 | 285:24 | permits 83:4 | 148:1,3 | 142:18,23 204:8 |
| 223:11 227:5 | people 6:13 | 165:24 166:8,12 | pieces 67:13 | 206:4,7 207:16 |
| 230:12 234:18 | 156:10 175:3,24 | 166:13,14,20 | 130:14,14,15 | 207:18,21 208:7 |
| 235:17 236:11 | 176:13 275:16 | 167:22 168:24 | pink 43:1 134:20 | 208:11,13 234:5 |
| 240:22 244:16 | 275:21 310:20 | 168:24 169:1,1,2 | 135:7 | 234:8,23 235:1 |
| 248:5 250:13 | percent 102:5 | 169:22 209:4,5 | pipes 165:1 | 235:17,20,23 |
| 252:4,14 254:4 | 115:7,11,13 | permitting 168:23 | place 78:17 | 236:21,22 |
| 254:13 258:3,4 | 154:13 160:12 | personal 108:3 | 103:10 105:14 | 237:10 238:3,17 |
| 258:17 268:6,17 | 170:5,22 172:16 | personally 12:9 | 123:2 124:1 | 239:9,10,16 |
| 289:24 301:1,2 | 172:17 208:1 | 23:20 72:19 | 167:15 169:8 | 243:12 244:3 |
| 301:16 302:9 | 240:3 298:10 | 228:24 | 176:2 216:7 | 245:10,16 |
| 312:24 314:24 | percentage 170:7 | personnel 95:22 | 221:17 225:23 | 254:24 255:6,9 |
| partial 107:24 | 173:9 | perspective | 237:9,12 239:5 | 258:20 265:9,9 |
| participate 64:23 | percolation | 105:11 109:8 | 240:17,19 241:2 | 308:8,8 312:16 |
| 202:18 234:14 | 118:11 | pertinent 51:18 | 241:11 242:4 | 312:18,23 |
| 301:7 | perfect 310:23 | perused 64:4 | 243:3 268:7 | 313:12,16 315:3 |
| participated | performed 53:18 | petition 246:19 | 299:16 307:23 | 315:14 |
| 195:8 | 195:16 267:12 | 247:11,22,24 | 308:9,24 315:23 | planned 206:11 |
| particle 128:15,23 | 271:12 | 252:18 253:10 | 319:5 | 267:2 |
| particles 131:6,12 | period 93:17 | 253:12 254:18 | placed 32:4 57:22 | planning 68:8 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 153:6 | pocket 127:5 | 309:10,10 310:1 | 130:10 | 257:4,24 263:22 |
| :---: | :---: | :---: | :---: | :---: |
| plans 14:2 75:14 | point 7:9 20:21 | 310:2,12 311:9 | possibly 47:22 | 274:20 275:12 |
| 120:14 207:9 | 25:14 43:18 | 311:10, 13,14,19 | 69:23 70:1 72:3 | 275:16,22 |
| 208:18 238:21 | 47:21 49:1,10 | 313:17,20,22,23 | 221:18,22 | 276:14,24 |
| 241:3 246:6,8 | 102:1 110:7 | 314:8,8 315:3,14 | post 162:5 | 277:11 278:12 |
| 252:23 257:10 | 124:8,11 127:15 | 315:22 | post-closure 17:12 | 281:23 294:15 |
| 258:15 264:13 | 128:4 130:3,4 | pond's 307:7 | 64:20,21 72:5 | 296:11 298:9,11 |
| 265:13 304:13 | 144:13 206:7 | ponds 14:7 16:5 | 79:1,3,5 256:8 | 298:13,19 304:5 |
| 315:19,20 316:5 | 207:5,6,15 | 35:22 36:17 | post-hearing | Powerton's |
| 316:6 | 209:19 214:12 | 37:7 42:15,15 | 290:13 | 193:16 207:9 |
| plant 49:21 | 216:8 225:10 | 76:9,12 78:5,7 | Post-It 221:23 | 234:6 |
| 110:21 114:3 | 236:13,17 | 82:7,9,18 84:19 | post-retrofit | poz-o-pac 79:8,12 |
| 153:10 186:24 | 239:14 255:7 | 86:19 91:16 | 265:13 | 80:4,6,12,17,18 |
| 187:2 216:3 | 285:22 290:7 | 94:18 103:2 | posted 83:8 | 104:15,16 |
| 231:5 316:9 | 294:22 316:6 | 121:8,15 146:3 | 208:14 | 260:23 261:7 |
| plants 47:10 | pointed 257:20 | 178:8,10,11 | potable 44:3,9 | 280:14,18,21 |
| 136:18 153:7,8,9 | 262:4 292:15 | 199:17,18 | 136:16 | 281:3 282:4,10 |
| 153:23 154:6,12 | pointing 85:15 | 231:13 237:9,11 | potential 116:14 | 282:15,24 |
| 155:7 156:18,23 | points 93:13 | 237:13 243:6 | 116:21 120:11 | practical 251:22 |
| 158:4,6,9 159:10 | 207:8 220:24 | 257:15 288:17 | 124:9 132:21 | practically 34:23 |
| 160:10 173:12 | POLICY 1:5 | 304:13 313:12 | 271:22 272:11 | practices 174:11 |
| 174:2,5,11,16 | Pollution 1:1 6:4 | pool 61:4,13,15,18 | 273:11 | Prairie 1:5 7:1 |
| 199:19 259:23 | 9:5 151:16 | 74:20 87:17,18 | potentially 23:15 | preceding 52:16 |
| 287:1 | 317:4 | 88:7,16 89:24 | 82:24 145:19 | 94:15 |
| play 202:21 | polyethylene | pooled 88:21 | potentiometric | precipitate 178:10 |
| played 10:13 | 178:22 255:13 | 122:3 | 94:6,19 | precipitation |
| 285:11 | pond 16:6,6 21:20 | pooling 60:23 | power 47:10 | 19:15,17,21 39:2 |
| playing 180:9 | 21:20 65:14,15 | 87:12 | 114:3 204:5 | 39:5 83:12,17 |
| please 13:7 77:20 | 78:16,17 80:23 | portion 109:12 | Power-193:16 | 126:23 127:3 |
| 110:17 114:10 | 80:24 81:20,21 | 221:10 240:19 | Powerton 110:9 | precisely 231:11 |
| 115:23 117:4 | 82:6,6,12,13 | 240:20 242:16 | 111:18 114:2 | preclude 118:10 |
| 139:17,24 147:1 | 87:7,9 89:13 | 242:22,23 243:2 | 143:17 144:20 | pred 114:24 |
| 148:3 159:24 | 90:7 91:6,6 | 248:1 | 153:17 173:5,6,9 | prediction 62:1 |
| 184:11 190:24 | 92:11,15,17,19 | portions 118:24 | 175:14 176:4 | 87:6,11,21,21 |
| 192:8 196:7 | 103:9,9 112:15 | position 126:7 | 178:3,8,21 180:4 | 114:15 115:1,2,4 |
| 205:15 210:1 | 124:16 141:12 | 188:23 189:2,11 | 180:7,21 181:13 | 116:7,18,23 |
| 213:3 215:21 | 141:21,24 208:4 | 189:22 204:24 | 183:19 184:14 | preliminary 31:8 |
| 233:6 237:5 | 236:24 237:1 | 205:6,19 206:11 | 186:1 192:4 | 103:1,19 139:4 |
| 238:24 241:20 | 240:22 241:1 | 286:5,23,24 | 195:10 196:12 | 139:12 141:11 |
| 242:12 249:3 | 243:8 301:18,23 | 304:8 309:9,24 | 200:12 201:8 | 141:20,23 |
| 255:8 275:8 | 301:24 302:13 | 311:8,13,16 | 204:1,6 215:11 | 142:12,17,18,22 |
| 283:1 297:1 | 302:18 303:1,8 | positives 29:14,15 | 216:5,7 218:18 | 143:12 315:2 |
| 312:13 | 303:20 306:6 | possible 10:24 | 235:3 236:12,12 | preparation 82:20 |
| plus 112:16 | 307:5,23 308:2,5 | 11:3 14:18 | 238:3,22 243:7 | 159:17 160:9,19 |
| 121:16 | 308:9 309:2,5,6 | 30:15 60:3 | 247:13 248:6 | 166:1,10,23 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 170:1 202:19,22 | 240:21 266:16 | 71:22 107:20 | 290:11,15,18 | 272:7 |
| :---: | :---: | :---: | :---: | :---: |
| 230:20 264:6,9 | 288:10 | 108:11 147:11 | 292:6 294:7,10 | provides 35:2 |
| 278:15,18 301:8 | previusly 4:14 | 202:5 224:16 | 294:11 295:2,4,5 | 49:9 89:10,21 |
| 306:14 | primarily 22:19 | 233:16 247:2 | 298:22 299:11 | 97:7 98:19,21 |
| prepare 56:16 | 59:3 120:24 | 249:9 292:8 | properties 119:16 | 99:20 100:2 |
| prepared 58:17 | 156:16,21 | 299:24 | property 20:17 | 103:16 117:16 |
| 58:21 81:6 | primary 155:5 | proceeding | 34:9 35:4,18 | providing 62:9 |
| 100:10 226:9 | 155:10 | 156:19,24 | 47:23 117:15,17 | provisions 183:6 |
| 232:24 239:17 | prime 284:14,21 | 231:11 246: | 117:24 118:20 | public 81:10 83:6 |
| 288:19 | principal 23:3 | 262:1 276:11 | 129:4,5 133:12 | 158:17,17,18 |
| preparing 73:15 | 287:17 | 288:9 | 135:4 136:10,14 | 278:20,21,24 |
| 82:15 | print 24:15 32:19 | PROCEEDINGS | 136:20 137:10 | 279:10,14,15,15 |
| presence 13:13 | 84:2 86:12 | 1:14 318:5 | proposal 68:12 | 279:16,17 280:4 |
| 15:12 | 207:23 | process 123:3 | 159:7 | publication |
| present 28 | printed 32 | 158:1 207:10 | proposed 18:4,5 | 123:12,14 |
| presented 82:17 | 247:17 254:15 | 234:18 | 27:19 28:5,14 | 235:16 |
| preservation 26:4 | 290:22 | produced 149:10 | 30:18,21 40:6 | publish 160:4 |
| 26:17 | printouts 9 | 231:6,23 276:10 | 56:6 87:7 88:2 | published 160:9 |
| preservative 32:4 | prior 36:4 72:13 | 284:13 286:16 | 88:12 123:16 | 235:20,24 |
| preserve 107:21 | 73:22 75:3 | 289:11,17 | 135:8 145:8,10 | 312:23 |
| president 173:21 | 158:18 211:1 | 304:24 | 145:15 212:1 | pull 95:3 115:10 |
| 182:7 | 230:8 | producing 316:11 | 254:24 259:2 | 139:15 209:19 |
| press 232:24 | probability | production 104:8 | 307:8 | pulled 12:3 33:17 |
| presumably 19:17 | 115:12 | 231:21 | prose 224 | 136:7 |
| 54:11 83:17 | probably 30:3 | professional 56:2 | protect 29:14 | pulling 10:22 97:1 |
| 98:10 | 31:13 32:20 | 66:7 138:9 | protection 18:5 | 143:5 209:20 |
| presume 149:5 | 47:22 50:9,14 | 285:1,18,18 | 27:20,23 28:6,11 | mp 32:10 |
| 312:15,20 | 68:11 70:8 | 308:16 | 28:15,20 29:6,20 | purge 122:15,16 |
| presumptively | 124:6 126:22 | profile 65:14,15 | 29:23 30:9,18 | purple 212:20 |
| 230:22 | 127:2 136:7 | program 15:18 | 31:16 74:13 | purpose 143:7 |
| pretty 30:3 | 152:1 157:8 | 29:10 51:11,12 | 87:7 88:3,13 | 202:10 255:16 |
| 124:10 126:24 | 159:8 180:22 | 76:21,21 77:3,6 | 138:16 149:14 | 256:10 302:23 |
| 130:17 187:4 | 181:1 188:18 | 99:23 101:1 | 149:18 181:10 | 307:12 309:16 |
| prevents 161:4 | 224:5,7 234:16 | 106:8 117:7,8,10 | 249:23 272:20 | 309:18 |
| previous 13:20 | 234:17 235:15 | 117:14,20,21 | 272:23 | purposes 16:14,16 |
| 18:2 50:12 52:9 | 253:7 264:11 | 122:5,6,7 133:2 | protective 308:18 | 30:17 79:23 |
| 54:18 56:3 | 268:13 279:2 | 134:17 232:2 | provide 12:20 | 170:13,16 200:1 |
| 80:14 81:10 | 285:21 293:6 | programs 121:9 | 14:18 36:16 | 263:16 |
| 95:7 185:15 | problem 71:11 | 123:10 124:6,9 | 51:23 83:21 | pursuant 9:3 |
| 230:18 314:11 | 141:18 | 145:20 146:1 | 102:19 120:21 | 25:21 151:14 |
| previously 5:1 8:3 | problems 53:23 | prohibited 244:13 | 130:9 | 160:10 183:9 |
| 41:4 52:1 | 293:4,4 | Project 2:18 7:1 | provided 13:17 | 204:5 230:12 |
| 124:21 134:9 | procedural 9:4 | projected 23:1 | 46:17,19 56:3 | 232:1 |
| 177:6 184:23 | 151:15 223:17 | promise 293:11 | 81:9 90:15 | put 22:1,24 26:8 |
| 194:12 197:2 | proceed 7:16 8:8 | proof 5:17 290:4,9 | 98:16 248:20 | 99:1,7 100:9 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 105:14 107:23 | 273:20,21 | 270:21 | 69:18 95:10 | 177:4 189:2 |
| :---: | :---: | :---: | :---: | :---: |
| 117:3 124:17 | 274:12 280:16 | re-direct 140:19 | 100:9,24 130:1 | 191:4,16 194:10 |
| 265:21 283:20 | 295:14 297:1 | re-line 178:19 | 156:14 162:7 | 196:22 200:7 |
| 287:17,19 | 311:6 316:13 | re-lined 199:18 | 231:7 245:19 | 234:2 238:13 |
| putting 223:14 | questioning 206:2 | re-visit 258:15 | 252:21 283:12 | 247:15,18 |
| 289:13 | 276:1 | react 79:20 | 316:1 | 263:17 269:10 |
| Q | questions 17:2 | read 7:21 33:10 | reason 98:8 | 278:8 286:6 |
| Q | 31:8 69:19 93:7 | 61:22 91:12 | 100:19 101:1 | 300:10 302:8 |
| QA 190:8 196:15 | 107:11 108:16 | 97:18 100:24 | 111:21 122:12 | 305:24 312:2,14 |
| 199:6 | 112:24 140:12 | 160:23 168:15 | 123:21 143:4 | 312:17 |
| qualification | 140:14 146:5 | 168:17,19 178:7 | 144:21 175:5,24 | recognizing |
| 262:22 | 236:10,19 287:7 | 178:13,17 | 245:19 253:17 | 121:13 |
| qualify 52:11 | 288:4 289:11 | 182:23 196:4,7,8 | 253:19 257:7 | recollection |
| 78:10 | quick 31:14 | 198:4 199:22 | reasoning 89:21 | 204:13,16 |
| quality $14: 21,23$ | quicker 67:4 | 203:20,24 | 90:15 259:18 | 237:23 238:1,20 |
| 15:5,6 16:11 | quite 18:14,15 | 204:10 210:10 | 268:17 | 256:10,24 264:4 |
| 35:5,7 36:1 55:5 | 56:18 66:1 | 210:11 214:16 | reasons 56:7 | 274:5 276:23 |
| 62:7,20 86:14 | 79:24 111:1 | 215:12 216:9 | 89:24 113:5 | 296:12 298:21 |
| 111:13 115:18 | 118:24 124:10 | 221:6 222:23 | 143:20 144:17 | recommending |
| 156:18 189:11 | 131:11 144:10 | 225:1 237:2,4 | 251:24 252:1 | 193:18 |
| quantitative | 167:21 168:8 | 238:23,23 | 304:5 | record 6:2,6,9,16 |
| 23:13 | quits 318:3 | 248:10 252:19 | recall 63:5 80:15 | 8:13 50:10 53:8 |
| Quarles 21:11 | quote 188:19 | 252:22 253:17 | 108:18,23 | 58:1,3,5 64:12 |
| quarry 129:4 | 214:12 | 253:18 254:10 | 111:24 116:1 | 67:24 68:15,17 |
| 131:8 |  | 254:12 255:5 | 119:23 228:21 | 68:19 93:18 |
| quarter 190:5,7,8 | R | 256:18 257:20 | 229:1,19 234:20 | 95:14,20 96:2,6 |
| 196:14,14 199:6 | R 9:2,2, $7108: 12$ | 261:2 265:2 | 274:22 289:1 | 101:24 103:5 |
| 199:6 | 108:12 141:2,2 | 267:5 268:15,23 | 298:12,14,16,17 | 107:13,17,23 |
| quarterly 29:7 | 147:13,16 | 271:3,23 273:13 | recalled 112:6 | 108:5 140:10 |
| 59:7,9,18 77:1,4 | 151:13,18 | 289:24 297:1,2 | recalling 125:7 | 145:14 146:14 |
| 120:16,22 | radium 89:17 | 302:14,16 307:9 | receipt 203:18 | 146:18 147:20 |
| question 13:22 | radius 44:2,8 | 313:9,24 | 204:19 | 148:7,11,13 |
| 14:13 22:21 | rail 242:21,23,23 | reading 20:12 | receive 170:12,19 | 168:19 185:14 |
| 31:13 99:4 | 243:1,2,9 | 63:3 198:6 | 170:24 171:12 | 190:17,21 191:7 |
| 100:22 104:23 | rain 118:11 | 206:3 224:17 | 171:14 172:20 | 196:8 200:23 |
| 110:3 111:16 | raise 7:10 147:5 | 237:18 248:3 | 173:10 | 212:3,5,7,9 |
| 112:18 114:20 | range 46:19 | 256:17 272:2 | received $236: 16$ | 213:15 217:12 |
| 127:21 130:19 | ranging 20:13 | reality 116:17 | 258:11,13 | 222:5,7 223:2 |
| 145:22 154:19 | 218:24 | 120:14 | 306:10 | 226:23 233:11 |
| 168:12,15,17 | Rao 6:10 | realize 247:17 | recency 314:1 | 233:15 239:8,11 |
| 169:12 183:18 | rationale 259:19 | 296:7 | receptors 117:24 | 244:1 246:7,22 |
| 189:24 211:14 | RCRA 150:2,5 | really 8:12 22:21 | recess 233:8 | 246:24 247:2 |
| 231:11 237:20 | 159:20 160:3 | 22:23 33:6 | recognize 19:5 | 249:3,5,7,9 |
| 242:7 245:1 | 170:2,3 | 54:19 55:13 | 36:12 42:24 | 262:8 270:2,4,6 |
| 256:23 265:14 | re-ask 114:20 | 60:17 62:24 | 121:18 122:2 | 281:12 283:20 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 283:23 284:1 | regard 153:6 | 120:9,11 123:23 | 229:9 235:13 | 173:17 190:3 |
| :---: | :---: | :---: | :---: | :---: |
| 288:3 289:10,14 | 155:18 194:19 | 140:5 143:24 | 244:12 245:13 | 196:16 273:4 |
| 289:16 293:10 | 258:24 | 144:10 145:12 | 253:2,16 257:6 | reported 1:21 |
| 297:2 299:1,3,5 | regards 13:21 | relatively 281:3 | 268:23 | 160:22 319:3 |
| 299:8,20,24 | region 45:18 | relaxed 8:6 | remembering | reporter 7:11 9:17 |
| 305:5 309:23 | regional 45:24 | release 156:22 | 254:21 | 147:6 169:11 |
| 314:13,15 | regs 160:23 | 271:23 272:12 | remiss 95:22 | 206:20 259:3,9 |
| 317:19,21,24 | regulated 16:5 | relevance 7:22 | remnants 215:6 | 317:18 |
| 318:2 | 34:18 35:1,8 | 174:6 288:8 | removal 118:4 | reporting 27:12 |
| records 213:13 | 36:21,22 44:2 | 303:18 | 159:9 176:11 | 87:3 159:19,22 |
| Recovery 149:23 | 112:17 271:23 | relevancy 71:2 | 248:20 254:5 | 159:22 160:15 |
| Recycling 256:16 | 272:12 273:5 | relevant 83:16 | 255:20,21,23 | 160:19 161:2,11 |
| red 38:8 220:24 | regulation 78:10 | 105:24 230:14 | 256:1 267:3 | 161:15,21 |
| 284:23 | 142:20 239:22 | 231:22,24 232:4 | 307:5 308:23 | reports 18:2 25:1 |
| redevelop 32:8 | regulations | 232:9,16 245:14 | 313:12 | 120:21 160:9 |
| redevelopment | 123:22 150:5 | 245:19 259:22 | removals 119:10 | 161:1 176:18 |
| 118:15 | 150:15,19 | 259:23 260:4 | remove 229:11 | 196:19 199:7 |
| redigest 285:23 | 170:14,17 | 261:20 288:9,12 | 236:23 242:15 | represent 216:4 |
| redirect 189:22 | 201:20 214:24 | 288:15,16 290:6 | 242:24 249:18 | 239:12 |
| refer 57:23 61:24 | 218:9,10 232:6 | 303:23 | 250:11 265:6,11 | representation |
| 114:16 150:1,14 | 250:6 251:12,14 | reliable 60:4 | 301:18 308:4,11 | 275:17 |
| 150:14,21 | 251:19 254:10 | relief 246:9 $251: 8$ | 314:4 | representative |
| 163:19 181:3 | 286:5 309:11 | 251:9,13 | removed 158:1,2 | 38:23 60:2 |
| 183:3,11 245:2 | 312:24 313:14 | relies 287:15 | 178:11 209:8,12 | 82:18 83:1,13 |
| 273:7 | 315:22,24 | rely $285: 18,19$ | 240:20 280:22 | 276:4 |
| reference 38:11 | regulators 1 | remain 267:4 | 296:18 313:6 | represented |
| 47:21 120:9 | 157:11 | remainder 67:8 | removing 315:15 | 204:18 207:1 |
| 183:8 215:6 | regulatory 154:6 | 73:9 107:1 | repeat 164:12 | 221:13 261:6,10 |
| referenced 306:4 | 246:2,10 251:8,9 | 151:6 | 279:22 | 268:6 282:10 |
| referencing 59:9 | 258:9 | remaining 78:17 | rephrase 22:9 | representing 2:23 |
| referral 181:7 | relate 48:2 76:12 | remarks 125:15 | 57:6 105:20 | 3:13 6:19,21,23 |
| referred 58:15 | related 120:1 | remedial 117:18 | 150:9 155:2 | 319:11 |
| 183:22 184:15 | 153:5 232:5,5 | remediation | 159:24 162:22 | represents 203:17 |
| referring 72:18 | 288:10 300:19 | 117:8 134:17 | 167:11 187:13 | repurpose 207:12 |
| 153:9 163:18 | 319:9,11 | remedies 118:2 | 193:3 205:15 | request 66:18 |
| 279:24 | relates 197:19 | remedy 6:5 118:1 | 216:24 241:16 | 67:11,17 106:17 |
| refers 142:2 163:3 | 231:11 302:17 | 118:9 190:11 | 241:20,23 | 106:22 159:7 |
| 164:15 | relating 214:4 | remember 11:22 | 250:19 310:22 | 231:23 240:4 |
| reflective 95:4 | relation 178:2 | 19:22 21:10,13 | replace 208:11 | 251:2 307:6,16 |
| refresh 204:12,15 | 259:1 | 21:16 63:12 | report 10:3 11:18 | requested 109:9 |
| 237:23 238:20 | relative 20:20 | 80:19 83:5 | 12:3 38:15 | 168:20 196:9 |
| 252:23 256:9,24 | 21:17 38:18 | 110:10,13,15 | 53:20 54:11 | 297:3 301:22 |
| 270:19 | 39:11 42:15 | 113:2 126:23 | 58:14 64:9 | requesting 201:6 |
| refreshing 238:1 | 45:16 47:9 | 143:18 145:7 | 69:13,22 75:8,9 | 256:6 268:18 |
| refurbish 207:9 | 104:23 105:9,10 | 204:21 206:2 | 78:16 83:19 | 314:2 |

L.A. Court Reporters, L.L.C.

312-419-9292

| requests 68:21 | 150:12 | restrict 169:4 | 279:1 | 119:22 126:8,23 |
| :---: | :---: | :---: | :---: | :---: |
| require 110:2 | resolve 142:20 | restricting 135:4 | reviewing 161:5 | 128:15 132:13 |
| 142:22 199:16 | Resource 149:23 | restriction 118:19 | 189:13 239:10 | 133:23 135:13 |
| 244:5 251:14 | respect 154:17 | restructure | 301:11 | 135:19,23 136:4 |
| 255:23 | 181:13 186:1 | 121:17 | revise 8:7,18 | 136:10,12,14 |
| required 21:6 | 188:24 192:4,5 | result 19:3 181:7 | 240:13 | 137:1 138:10,13 |
| 25:10,12 26:9 | 193:13 195:22 | 182:24 | revised 204:5 | 138:19 143:23 |
| 27:4 34:16 44:3 | 195:23 197:23 | results 23:22 | 208:13 234:9 | 145:13,21 |
| 55:24,24 56:9 | 198:14 204:13 | 24:20 81:20 | 258:4 | 146:18 147:6 |
| 58:17 119:11 | 204:16 231:5 | 85:6 170:12,19 | revision 141:24 | 165:20,21 |
| 157:4,14,20 | 235:6 238:21 | 170:24 171:3,10 | 143:6 239:20 | 166:19 167:22 |
| 158:8 162:4 | 249:12,14 | 171:14 | revisions 208:15 | 171:6 173:3 |
| 165:13 166:21 | 252:13 257:15 | retention 248:18 | revisited 8:11 | 177:2 178:5 |
| 167:23 170:2 | 280:5 304:5,8,13 | retired 316:14,16 | Richard 4:3 | 191:15 192:19 |
| 189:1 203:7,8,9 | respond 71:8 | 316:18 | 276:11,18 | 192:19,19,20 |
| 223:10,10 231:4 | 179:17 230:16 | retrofit 249:20 | rig 131:4 | 193:20 194:7 |
| 235:17 250:11 | 231:15 287:11 | 258:1,19,20 | right 6:2 7:7,10 | 196:21 199:23 |
| 251:10,13 258:3 | responded 110:14 | 265:10,16,19 | 10:3 11:4 12:6 | 200:6,19 210:4,5 |
| requirement 44:7 | Respondent 3:13 | 266:6 267:12,15 | 13:23 14:3 | 210:19,19 |
| 45:15 49:24 | 183:5,10 | 267:18,19,19 | 15:24 16:18,22 | 211:10,18 |
| 56:7 83:21 | response 17:4 | 278:11 280:6 | 19:12 20:12,19 | 212:20 213:24 |
| 98:24 143:11 | 72:12 215:24 | 282:14 | 25:5 27:10,20 | 217:22 219:3 |
| 162:6 250:7 | 231:23 277:7 | retrofitted 249:24 | 29:21 31:17 | 220:19 221:15 |
| 255:20 | responses 195:10 | 268:12,14 | 32:14,16 36:12 | 226:16 227:11 |
| requirements | responsibilities | 288:17 | 37:7 38:5 40:4 | 229:2,22 230:3 |
| 26:11 36:15 | 153:1 155:16 | retrofitting | 40:23 47:1,18 | 236:6,8 244:4 |
| 76:8,8 84:20 | 198:3,8,13 | 265:11 | 49:20 54:2,5 | 248:7 261:14 |
| 92:17 99:24 | responsibility | reuse 248:9,11 | 55:8,12 57:16 | 268:24 274:24 |
| 121:23,24 | 155:5,9 193:13 | 249:14 250:3 | 61:19 65:18,22 | 277:2 283:9 |
| 122:14 144:8 | 197:23 198:11 | 251:3 255:12 | 66:3 67:22 | 284:10,11 |
| 190:3 199:21 | 199:15 229:3 | 265:2 301:23 | 72:20 75:3 76:2 | 285:15 286:19 |
| 246:10 252:14 | responsible 10:2 | 307:5,6 308:1,1 | 76:23 77:3,11 | 287:23 294:9 |
| 258:9,17 314:3 | 154:16,21 | 314:7 | 80:2,6 81:1 82:1 | 298:24 303:13 |
| requires 158:17 | 155:22 156:17 | reused 249:23 | 82:12 83:2,20 | 318:2 |
| 160:3,15,22 | 156:21 160:11 | 303:21 | 84:4,14 85:3,19 | right-hand 46:18 |
| 167:14 254:4 | 160:18 180:3,7 | review 12:1,8 17:7 | 86:1,16,24 87:8 | 290:24 292:16 |
| 255:21 | 180:12,21 187:8 | 22:14 160:24 | 87:14,14 88:5,16 | 294:1 |
| requiring 103:22 | 187:16,20 188:1 | 162:8 213:13 | 88:22 89:6 90:5 | rise 41:9 |
| 104:1 124:6 | 188:3 193:17 | 224:6 236:20 | 91:24 92:23 | risk 117:23 |
| reread 13:16 | 199:10,19 | 239:7 285:15,17 | 93:2 94:7 95:9 | risk-based 117:22 |
| 254:1 256:19,22 | rest 110:3 188:18 | 306:17,18 | 96:1,6,24 97:5 | river 109:3,6 |
| residential 119:19 | 273:16 | reviewed 12:2,7 | 98:6,23 101:7,15 | 110:4,10,18,22 |
| 119:20 | restate 31:2 | 17:9 63:22 | 101:20 102:18 | 111:10,18 |
| residually 118:10 | restatement | 203:4 224:5 | 104:17 107:13 | 112:11 113:10 |
| residuals 149:6 | 187:18 | 234:11 264:11 | 113:9 114:4,9,17 | 113:16 144:2 |

L.A. Court Reporters, L.L.C.

312-419-9292

| Rivers 1:6 7:1 | 226:12,15 | 147:23 | 141:23 143:5 | scan 50:20 94:2 |
| :---: | :---: | :---: | :---: | :---: |
| $\boldsymbol{\operatorname { r o a d }} 2: 3$ 62:22 | 293:23 294:2 | S-H-E-A-L-E-Y | saturated 38:24 | scenarios 22:15 |
| 79:22 | rules 9:4 56:19 | 147:24 | 39:8 125:7 | 22:16 |
| robust 60:4 | 84:21 116:13 | safe 14:20 46:21 | 127:6,13 128:1,5 | scheduled 83:7 |
| 119:20 | 121:9 124:2 | 318:4 | 225:16 286:17 | scheme 257:4 |
| role 10:13 176:22 | 145:5 151:15 | saith 9:6 147:15 | saturation 225:10 | Scientist 6:9 |
| 202:21 203:1 | 154:17,21,24 | 151:17 | save 94:1 | scope 224:9 252:8 |
| 264:8 278:17 | 155:1,6 156:17 | Salk 6:11 | saw 63:4 96:20 | scratch 159:18 |
| 285:11 301:10 | 156:22 170:3,3 | sample 19:3 26:3 | 129:7 | 165:7 168:1 |
| 306:16 | 244:16 248:5 | 32:2,4 81:20 | saying 41:1 43:14 | 244:20 |
| roles 279:8 301:11 | 250:6 253:6 | 82:6,11 115:10 | 105:24 126:11 | screen 36:7 |
| room 1:16 147:3 | 287:8 303:2 | 116:15 120:15 | 146:2 | 124:18 |
| rotated 36:7 | 308:22 315:18 | 122:9,13 123:7,8 | says 14:5 16:2 | screening 99:9,9 |
| roughly 40:10,18 | 315:19 | 159:1 | 26:3 27:8 33:13 | 99:20 100:6,7,19 |
| round 25:13 | ruling 8:8,11,12 | sampled 123:5 | 39:21 47:17 | 100:20 101:8,16 |
| 116:10 | 8:15,18 107:24 | samplers 122:10 | 48:3 49:17 | scroll 39:22,23 |
| rounds 24:22 | 262:16 | samples 82:22 | 53:15 59:15 | 247:9 315:1,8 |
| 25:16 59:18 | run 99:17,19 | 122:3,24 123:2 | 65:12,18 66:1 | scrolling 41:15 |
| 62:21 | running 23:23 | 175:2,8,10 | 74:5 75:24 | 45:8 88:15 |
| routine 171:2 | runs 90:23 | 216:12 290:1 | 78:16 81:23 | sealed 122:19 |
| 204:2 | Russ 2:19 4:4,6 | sampling 24:23,23 | 85:4 97:19 | seams 37:14 |
| row 65:12 136:22 | 6:24,24 7:8,16 | 25:13 26:9 | 103:8 105:4 | 214:14 291:16 |
| 136:22 137:2 | 7:17 8:9,16 9:8 | 54:24 55:1 | 115:9 125:23 | season 126:24 |
| RUINING 1:7 | 9:19 13:6,8,11 | 59:18 76:20 | 126:2,3,22 128:7 | second 57:19 58:1 |
| rule 19:8,10 21:7 | 22:8,9,12 31:3 | 77:6 109:10 | 128:11 142:5,6 | 85:10 91:3 |
| 25:11,11,15,22 | 32:22 41:19 | 116:10,11 | 142:12 183:5 | 114:22 141:4 |
| 25:23 27:24 | 43:15 56:14 | 122:16 123:3 | 184:19 205:4,23 | 210:13 213:3 |
| 28:19 29:24 | 57:6,7 58:6 | 124:5 145:3 | 206:4 207:5 | 218:22 232:1 |
| 30:5,11 31:9,20 | 63:17,21 66:21 | 158:23 160:22 | 208:1 211:19,24 | 253:7,8 302:17 |
| 34:17 55:24 | 66:24 67:9 | 161:14 162:1 | 212:1 215:16 | 317:21 |
| 56:8 58:10,18,21 | 68:11,22 69:4 | 171:3 175:21 | 216:16 217:6 | secondary 178:20 |
| 59:5,17 60:6,9 | 71:7,8,11,22,23 | 176:2 | 218:20,22 219:2 | seconds 285:2 |
| 76:10,15 77:5 | 77:21,23,24 | sand 37:13 125:13 | 220:16,24 | section 9:4 10:3 |
| 78:6,7,10,13 | 95:13,16 96:8,9 | 125:17 126:21 | 222:20 237:6,8 | 10:14,21,21 11:7 |
| 92:18 105:12 | 99:11 105:20,21 | 128:8,11,14,19 | 237:16 243:10 | 11:10 12:11 |
| 106:4 108:2 | 107:10,19,21 | 128:19, 19,21,23 | 244:4,9 266:22 | 13:15 14:1,14 |
| 116:13 120:23 | 108:9 138:10,24 | 129:2,8,12,21 | 266:24 268:3,16 | 15:5,17,18 16:22 |
| 121:1,12,16 | 140:18 141:3 | 130:5,6 214:14 | 271:20 280:10 | 17:12,13,17,20 |
| 122:11,17,18 | 146:5,7 | 261:1 282:6 | 280:10,12 281:1 | 17:23 18:10,12 |
| 123:16 124:3,4 |  | 291:15 | 281:6 282:12,17 | 18:18 20:9 |
| 145:9,10 162:12 | S | sands 119:6 130:1 | 292:2 313:1,5 | 26:20 28:13 |
| 166:13,15 204:6 | S 4:11 9:7,7 141:2 | sandy 129:1,1,11 | 315:12 | 36:16 38:8 |
| 207:12 248:21 | 141:2 147:13,13 | 130:13 | scale 45:24 225:22 | 44:22,23 45:3 |
| 255:21,23 256:6 | 151:13, $13,18,18$ | Sargent 64:1 65:2 | 226:10,14 | 56:3 59:12 63:9 |
| ruler 226:1,4,8,12 | S-H-A-R-E-N-E | 65:8 139:7 | 293:24 294:3 | 63:11 64:8,23 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 65:1,3 69:13,20 | 113:14 114:15 | 270:24 272:8 | Sharene 4:8 147:1 | 134:8 290:24 |
| :---: | :---: | :---: | :---: | :---: |
| 69:22,24 70:2,5 | 125:10,23 128:7 | semantics 180:10 | 147:23 276:4 | 291:1 292:16 |
| 70:7,9,11,13,15 | 128:12,18 | semi-annual | sharply 94:19 | sides 36:21 294:1 |
| 72:2,6,8,15 73:3 | 130:13,14,20 | 28:23 59:6,9 | Shealey 4:8 147:1 | Sierra 1:3 2:8 |
| 73:12,19 74:11 | 131:6 137:20 | 77:3 121:19 | 147:18,23 | 6:19,19,21,21,23 |
| 74:12,21 75:3,16 | 142:8,23 148:1 | Senate 244:12 | 148:16,23 | sign 134:15 |
| 77:9 78:15 79:2 | 171:3 173:14 | send 204:6 205:24 | 184:10 189:16 | 181:18 182:20 |
| 79:7 81:4,7,16 | 190:10 195:3,6 | 206:7 | 200:6 221:21 | signatures 183:1 |
| 92:13,15 96:17 | 197:15 207:7 | sending 204:8 | 233:5,19 242:11 | signed 179:10 |
| 103:11 104:14 | 211:10 212:20 | senior 74:19 75:7 | 276:11 287:20 | 182:20,24 |
| 106:1 110:4 | 219:19 220:8,16 | 182:7 287:2 | 288:16 289:11 | 235:14 271:5 |
| 125:15 139:1,10 | 222:9,18,20 | sense 50:3 118:6 | 289:19,23 | significance |
| 142:2,17 151:15 | 224:21 225:7,8 | 119:12 | 290:21 | 295:24 |
| 183:13 237:15 | 225:16,19 | sent 159:5 182: | sheet 148: | significant 34:14 |
| 256:7 284:12,21 | 226:17 231:7 | sentence 14:5 | 152:9 | 60:21 61:7 |
| 290:19,22 | 273:24 287:19 | 61:22 101:21 | shoot 312:22 | 89:19,20 90:1,8 |
| 294:12 295:6 | 290:5,6,23 291:3 | 205:4 218:22 | shooting 26:19 | 90:9 116:14,22 |
| 298:23 313:7 | 291:8,13 292:16 | 237:16 255:18 | shore 111:23 | 271:13 273:3 |
| sections 7:23 | 292:19,22,22,24 | 256:14 | shoreline 112: | signify 94:22 |
| 10:14 17:20,22 | 293:12,21 | separate 121:2,9 | 143:17 | signing 179:14 |
| 36:19 38:6 | 295:16 318:4 | 144:14 | short 96:3 107:1 | silt 37:14 126:14 |
| 69:15 70:3 | seeing 32:6 35: | separated 46:22 | 161:14 162:2 | 221:9 |
| 72:11 74:14,20 | 50:21 62:15 | September 25:17 | 189:1,3,7,8 | similar 35:13 |
| 92:13,18 252:9 | 78:4 112:6,14 | 52:18,24 306:9 | 190:18 233:8,12 | 42:20 43:10,19 |
| 254:16 | 113:19 116:5 | sequence 258:11 | 280:12 299:21 | 73:24 76:21 |
| securing 195:11 | 142:21 213:2 | sequenced 210:12 | shorthand 243:17 | 77:13 80:24 |
| sediment 32:2,9 | seek 7:19 203:12 | series 36:18 78:2 | shout 172:2 | 82:6 85:24 |
| 108:21 144:4,7 | seeking 268:1 | 96:21 98:3 | show 20:13 40:2 | 88:21 91:21 |
| 144:11,16 | seeks 255:12 | serve 255:15 | 94:6,9 109:14 | 94:5 96:20 |
| sediments 109:2 | 307:4 | service 204:2,4 | showed 80:16 | 103:10 110:3 |
| 109:11 110:6 | seen 42:13 95:7 | 205:22 248:5,6,8 | 280:17 | 111:16 112:18 |
| 111:18 112:19 | 109:5 113:6 | 248:13 | shown 39:12 | 127:21 130:19 |
| 113:16 | 201:2 224:2 | set 42:11 86:11 | shows 18:24 19:14 | 193:15 195:10 |
| see 22:24 26:5 | seep 111:4 144:12 | 99:23 121:2,14 | 20:1 25:8 31:15 | 195:14 223:13 |
| 37:2,18 42:10,24 | seepage 21:3,7 | 123:1 158:21 | 36:14 38:5,10 | similarly 52:16 |
| 43:2,24 44:9 | 85:23 86:8 | 319:5 | 42:5 43:23 | 67:18 73:7 |
| 48:12 50:23 | seeps 109:5 112:6 | settling 178:20 | 45:13 47:5 49:9 | 130:22 298:17 |
| 55:18 59:8,12 | 112:10 113:6,14 | seven 20:14 34: | 65:21 81:19 | simple 158:16 |
| 60:13 61:1,7 | 113:19 143:21 | 46:15 47:17 | 85:22 86:6 | 163:15 209:23 |
| 64:16 65:12 | 144:10 | 26:19,20 128:7 | 88:20 91:15,22 | 210:2 255:9 |
| 72:4 79:8 85:4 | sees 174:19 | 239:6 312:22,22 | 92:4,9,22 93:8 | simply 28:18 36:2 |
| 97:24 102:16 | selected 309: | 316:7 | 127:23 140:2 | 138:21 231:22 |
| 103:24 104:23 | selecting 89:2 | shaded 291 | sic 215:17 | 258:18 |
| 105:5 110:5 | selections 90:16 | 292:15 | side 14:22,24 | single 223:5 |
| 111:14,17 | selenium 270:15 | shape 254:14 | 40:19 94:15,15 | 237:14 243:8 |

L.A. Court Reporters, L.L.C.

312-419-9292

Page 353

| sir 146:12 167:1 | 175:5 | 308:13,19 | 233:2 242:5,14 | 33:7 67:7 74:21 |
| :---: | :---: | :---: | :---: | :---: |
| 226:24 | six 46:15 67:16 | sole 181:6 | 243:16,24 | 105:14,16 |
| sit 162:12 171:6 | 155:21 260:15 | solid 82:3 101:21 | 244:24 247:16 | 106:24 163:24 |
| 188:19 194:6 | 260:22 282:3 | solids 89:16 | 252:7,20 257:19 | 192:24 228:15 |
| 206:9 213:12,17 | 306:24 307:3 | 100:21 | 259:3 260:2,18 | 228:18 279:5 |
| 216:3 229:14,18 | 312:22 | solutions 23:7,1 | 263:6 266:17 | speaking 117:10 |
| 229:24 240:15 | sixth 247:10 | solvents 119:8 | 269:3 270:21 | 199:17 |
| 265:5,10,15 | 266:24 | somebody 47:3 | 271:18,19 272:2 | specialist 176:23 |
| 273:24 274:2,20 | size 128:15,15,16 | 282:19 | 273:16,20 275:8 | specialized 23:18 |
| 282:21,23 283:4 | 128:24 131:5 | somewhat 41:23 | 279:7,13 281:12 | specializes 23:24 |
| 297:18,21 | skip 45:6 63:8 | 61:9 79:4 111:6 | 281:20 283:4,14 | specific 13:3 |
| 307:21 313:15 | 71:4 102:22 | 118:8 256:12 | 284:5,16 292:8 | 40:17 46:7 59:8 |
| site 12:16,23 | 127:16 | Sonitus 29:10 | 292:24 296:6,9 | 59:19 61:17 |
| 14:10,19,22,24 | skipping 18:14 | 90:23 | 301:20 305:5 | 78:12 100:19 |
| 16:12 20:17 | 134:1 | soon 253:6 | 307:15 309:14 | 103:24 123:22 |
| 22:15 34:10,13 | slag 19:19 21:24 | sorry 15:24 18:15 | 310:19 311:22 | 130:22 215:14 |
| 35:5,6 47:9 48:2 | 37:2,15 38:3 | 30:6 37:10 | 312:5,6,8 314:19 | 216:3 229:7 |
| 53:17 55:15 | 91:24 126:21 | 39:23 41:14 | 315:1 317:21 | 252:11 253:17 |
| 64:21 70:20 | 128:8 129:16,22 | 43:13 52:20 | sort 93:7 94:14 | 253:19 271:15 |
| 72:9,13 73:23,24 | 130:6 131:13 | 53:22 60:7 | 181:16 205:10 | 273:1 293:9 |
| 74:1,5 76:22,23 | slicing 236:11 | 63:17 65:4 | sorts 158:14 | specifically 13:14 |
| 83:16,18 86:15 | slight 28:3,9 94:11 | 66:15 77:21 | sought 203:10 | 13:21 22:19 |
| 97:4,7 98:20 | slightly 39:16 | 80:21 81:14 | 300:23 301:17 | 38:1 86:19 |
| 117:8,17 118:18 | 41:24 42:10,21 | 95:13 96:14 | sound 236:6 | 87:20 173:10,16 |
| 132:11,19,21 | 43:11,20 51:11 | 101:11 107:22 | source 35:21 | 193:17 203:3,4 |
| 134:12,13,17 | 54:16 120:18 | 108:11 114:16 | 114:6 118:4,6 | 206:2 |
| 144:24 168:6 | 121:23 126:14 | 114:18 132:6 | 119:14 252:11 | specification |
| 176:12 215:11 | 126:21 151:23 | 141:8,13,17 | 270:8,22 271:11 | 159:5 |
| 215:14 216:2,18 | 183:17 200:13 | 151:22 152:10 | 273:6,22,23 | specifications |
| 217:4 218:18 | slope 113:10,10 | 157:17 164:7,11 | 274:4,9,18,19 | 66:10 |
| 219:1,11,14,17 | slopes 267:4,11,24 | 165:18,19 | sources 132:22 | specifics 13:16 |
| 235:3 294:15 | 268:19 | 168:13 169:1 | 251:8 271:20,22 | specified 20:5 |
| 295:13,16,20 | sluicing 236:12 | 169:16 170:8 | 272:11 273:12 | 77:5 84:21 |
| 296:11 298:9,11 | small 291:9 | 171:21,22 180:9 | south 3:6 36:19 | specify 66:9 |
| 298:13 | smaller 28:24 29:1 | 184:13 185:6 | 36:20 76:9 | specifying 185:20 |
| site-specific | sneak 68:10 | 186:7,7,8 187:20 | 82:13,23 84:20 | speculate $23: 2$ |
| 215:16 251:11 | software 51:4 | 189:6 191:10,11 | 86:19 103:2 | speculating 98:12 |
| 251:23 | soil 13:13 50:2 | 192:24 196:5 | 237:1,8 240:23 | speculation |
| sites 48:1 117:11 | 51:20 74:7 | 200:15,17 203:1 | 242:23 243:2 | 133:15 179:5 |
| 117:13 120:6 | 171:11 175:21 | 203:9 206:20,22 | southeast 92:16 | spell 147:21 |
| 134:12,16 160:5 | Soil/Rock 220:15 | 208:15 209:24 | southeasterly 43:8 | spelling 259:12 |
| 170:21 171:16 | 222:19 226:18 | 210:9 215:22 | southern 240:19 | splitting 71:12 |
| 178:9 195:14 | 227:5 | 216:14 220:22 | 240:19 | spoken 266:16 |
| sitting 50:16 | soils 118:10 208:3 | 221:4,19 222:14 | spacial 60:19,20 | spot 99.7 |
| situation 174:22 | 208:9 209:16,21 | 226:19 228:16 | speak 9:17 27:5 | SRP 117:7,10,14 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 117:21 119:21 | stands 114:24 | 236:23 237:10 | stations 113:20 | 49:15 |
| :---: | :---: | :---: | :---: | :---: |
| 133:1 | 117:7 | 251:24 257:12 | 120:1,2 148:5 | stratigraphy 46:1 |
| stabilized 85:1 | start 6:18 10:7,9 | 261:19 268:11 | 171:1 174:18 | 46:10 49:18 |
| stack 114:5 | 18:17 27:5 73:8 | 280:13 282:15 | statistical 27:5 | 51:23 135:19 |
| staff 6:10 | 81:14 84:11,14 | statement 138:22 | 28:12 29:2,17 | stratography |
| stamp 56:17,24 | 122:10,15,16,21 | 181:14 182:5 | 58:10,20 62:19 | 215:16 |
| 57:2 261:22 | 123:1,3 182:14 | 183:19 276:15 | 87:16 88:8,18,19 | streamline 68:12 |
| 307:2 | 272:4 279:23 | 276:24 280:15 | 89:1 90:4 98:21 | STREET 2:11 3:6 |
| stamp-off 56:1 | 280:1 310:18 | 307:9 | 99:3,15,19 100:3 | strictly 62:19 |
| stamped 57:9 | started 55:1 85:1 | states 78:19 80:8 | 101:1 102:3,7 | 115:19 |
| 302:3 304:19,22 | 96:1 126:13 | 108:2 162:18 | 115:5,8 | stringent 144:8 |
| 306:11,12 | 152:14 253:6 | 163:1,7,8,9 | statistically 27:2 | strong 157:7 |
| stand 148:2 | starting 8:1 25:16 | 165:12 181:5 | 29:8 60:21 | 158:10 203:8,9 |
| 149:14 258:2 | 48:20 89:7 97:3 | 201:14 207:8 | 61:15 62:12 | strongly 223:11 |
| 276:17 | 98:17 | 208:2 212:24 | 89:18,20 90:1,7 | structure 118:13 |
| standard 8:6 23:6 | starts 11:18,19 | 216:19 239:15 | 90:9 102:13 | struggling 289:9 |
| 28:11,13,15 29:4 | 16:22 45:10 | 240:18 248:15 | 116:14,22 | study 138:18 |
| 29:20,24 30:9,13 | 48:21 50:5 | 260:14 264:21 | 271:13 273:2 | stuff 290:2,5 |
| 31:16 76:14 | 57:18 80:22 | 267:2 271:18 | statistics 60:1,1 | sub-docket |
| 87:23,24,24 88:3 | 96:19 105:3 | 275:14 281:19 | 62:4 | 145:11 |
| 88:12,13,13 | 113:10 270:19 | 282:2 307:4 | stenographic | subdivision |
| 111:2,5,6 115:20 | 280:2 | station 14:12 | 319:3 | 266:22 |
| 116:2,20,20 | state 19:10 21:6 | 24:21 45:23 | steps 209:2 | subdocket 123:24 |
| 117:1,1 118:2 | 25:11,12 26:1 | 83:14 96:23 | 304:10 | subject 16:2,3,4 |
| 130:6,9,10,18 | 29:4 48:15 49:8 | 109:2 110:10 | stick 165:8 | 16:18 68:20 |
| 144:4,11,11 | 58:10,17 76:8 | 111:19,24 | stipulate 223:19 | 106:11 158:7 |
| 246:20 247:12 | 77:5 78:13 | 112:10,20,23 | 224:13 288:2 | 163:4 183:12 |
| 247:23,24 | 81:11 84:21,21 | 113:1,17,24,24 | Stone 173:18 | 239:20 247:19 |
| 248:16 251:2,4,7 | 92:18 98:23 | 114:1 124:16 | stop 121:22,24 | submission 203:7 |
| 252:2,12,18 | 106:8 122:7,18 | 130:2 132:12,13 | 225:2 310:21 | 211:1 |
| 253:20 256:6 | 124:1,4,4 145:5 | 133:7 137:17 | stopped 237:19 | submit 178:18 |
| 263:21 264:22 | 145:12 147:19 | 153:16,18,19 | 253:22 | 252:17 |
| 268:2,18 277:11 | 157:5 170:17 | 173:16 178:3 | stopping 299:16 | submittal 52:12 |
| 281:9,10 282:9 | 196:13 216:10 | 180:4,8,21 | storage 163:11 | 257:23 |
| 300:16 305:7 | 218:9,10 244:11 | 181:13 192:1 | 166:22 167:23 | submittals 81:11 |
| 306:5 309:18 | 293:4 308:23 | 194:21 197:11 | 258:24 | 143:9 158:20 |
| 313:24 314:1,3 | 314:3 315:18,24 | 200:12 204:3 | store 167:15 266:2 | submitted 83:6 |
| standards 18:5 | State's 181:8 | 216:5 238:3,22 | 266:5 | 196:19 230:20 |
| 26:21 27:20,23 | 183:14 184:16 | 243:7 247:13 | stored 166:9 | 245:4,15 267:9 |
| 28:6,20 29:6 | stated 17:21 81:6 | 263:22 275:11 | 167:19 | 289:8 |
| 30:19 87:7 | 106:12 109:20 | 275:12,16,22 | stormwater 110:1 | submitting 234:18 |
| 111:14 115:16 | 125:6 139:2 | 278:12 300:16 | strategies 118:6 | 303:5 |
| 115:18 143:22 | 155:9 182:14 | 302:15 306:6 | strategy 119:13 | Subpart 150:12 |
| 144:9,15,17 | 190:10 206:14 | 309:22 312:16 | 134:18 | subscribed 319:14 |
| 252:4 272:20,23 | 206:16 236:18 | 316:13,15 | stratigraphic | subsection 260:13 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 260:18 281:18 | 31:4 45:14 | 48:8 | 39:7,9,11 48:20 | 246:3 274:16 |
| :---: | :---: | :---: | :---: | :---: |
| subsections 7:23 | 55:20,23 57:8 | sustained 56:13 | 49:13 65:23,24 | 297:23 298:8 |
| subsequent 24:23 | 58:9 62:8 64:6 | 161:18 162:22 | 66:2 69:8 70:24 | 299:22 304:11 |
| 61:24 105:4 | 66:1 89:3 95:16 | 166:17 174:8 | 71:4,18,19 72:23 | takes 45:9 102:20 |
| 273:19 | 101:12 105:22 | 186:16 187:13 | 72:24 77:11 | 123:6 |
| subsequently | 108:7 115:24 | 192:8 241:7 | 81:15 83:9 | talk 187:1 252:3,6 |
| 135:2 207:12 | 121:9 122:13 | 242:8 285:9 | 85:14 86:12 | 254:17 263:9 |
| 274:3 | 123:13 131:1 | 286:13 292:4 | 87:5 88:15 | talked 13:3 85:24 |
| subset 86: | 132:7 134:2 | swear 7:12 147:6 | 93:12 96:19 | 97:11 118:17 |
| substance 79:21 | 137:14 144:10 | switch 117:4 | 102:19 104:24 | 120:6 303:18 |
| substantially | 148:9 150:10 | 306:6 | 114:10,13,18 | talking 34:5 47:24 |
| 115:20 116:24 | 152:11 167:9 | switched 85:8 | 127:11,12,14,24 | 55:7 75:4 77:14 |
| substantive 317:5 | 172:21 174:21 | switching 119:22 | 130:2 | 91:5,15,21 |
| 317:7 | 181:15 182:12 | sworn 7:14 9:6 | tables 10:9 18:17 | 104:14 109:16 |
| substation | 189:14,15 | 147:9,15 151: | 18:19 55:6 | 119:24 138:24 |
| subterranean | 200:11,21 | synopsis 12:20 | 72:22 81:16 | 145:5,18 166:12 |
| 171:11 | 206:18 212:4 | system 14:2 21:19 | 104:19 | 166:14 174:15 |
| sufficient 56:6 | 221:5 222:1 | 32:12 75:13 | tabs 269:20 | 256:20 310:18 |
| 194:4 | 223:18 228:7 | 78:18 84:22 | tabulates 102:20 | talks 82:8 |
| sufficiently $88: 2$ | 242:19,20 | 127:8 236:11,12 | tailing 171:19 | $\boldsymbol{\operatorname { t a n }} 214: 13$ 291:14 |
| 102:2 195:15 | 243:23 249:4 | 257:15 258:7,24 | take 6:14 29:3 | tank 207:14 |
| 198:18 | 253:13 254:7 | 265:22 282:2 | 30:2 31:14 32:7 | 258:13 |
| suggest 109:24 | 259:17,20 | 308:9,17 313:8 | 39:19 45:8 | tanks 208:12 |
| 239:21 | 283:21 301: | 315:10 | 60:18 62:9 67 | 257:22,24 |
| suggests 1 | 309:17 | systems 258:3,22 | 68:8,13 70:16 | 259:21 260:4 |
| 127:24 129:19 | surface 144:8,15 | 260:15,21 | 72:4 85:9 87:1 | 267:17 |
| SUITE 2:12,20 | 156:23 162:18 | 265:23,23 | 89:13 95:14 | tanner 133:3 |
| 3:7 | 163:1,7 204:4 |  | 103:22 108:7 | tannery 14:10 |
| sulfate 115:23 | 217:3 255:16,19 | T | 114:24 117:16 | 20:17 34:10,10 |
| 116:2,8,20 11 | 255:22,24 | T 3:3 4:11 9:2,7,7 | 136:18 137:12 | 34:13 35:12 |
| sum 307:4 | 258:14,16 | 108:12,12 141:2 | 176:2 189:16 | 118:18 132:11 |
| summarizes 26:13 | 280:11 300:24 | 147:16,16 | 190:14 231:4 | 132:16,20,24 |
| summary 18:1,8 | 309:11,21 310:2 | 151:18 | 233:1 237:5 | 133:10 134:12 |
| 20:2 24:19,24 | 311:15,17 314:7 | tab 269:4,6,10,22 | 256:21 262:13 | TDS 89:16 |
| 26:3 51:12 81:9 | surge 178:20 | tabbed 269:23 | 270:18 275:8 | team 155:12,13,15 |
| 102:19 280:4,5 | 201:7,23 202:1 | 275:3 279:19 | 290:3,5,8,21 | 156:8 158:12 |
| supplemental | 212:21 213:8 | 302:6 | 299:10 304:15 | technical 141:9 |
| 25:9 | 222:12 248:16 | table 9:15,21 | 317:17 | technically 156:5 |
| support 25:4 56:4 | 255:3 256:3 | 18:21,22 19:11 | taken 1:15 39:18 | 303:7,11 |
| 76:7 | 264:24 265:7, | 19:12,24,24 | 51:3 80:12 82:6 | tedious 9:15 69:19 |
| supports 96:16 | 266:5 273:7 | 20:24 24:10,15 | 96:4 107:15 | tell 41:22 48:2 |
| sure 6:17 10:18 | 296:16 | 24:17,19 25:7 | 137:16 146:16 | 110:17 122:9 |
| 12:17 13:8 17:4 | surrounding | 26:3,7,8,13 | 158:9 190:19 | 126:5 131:12 |
| 19:7 21:5 24:19 | 179:15 254:21 | 27:17 29:20 | 216:13 228:5 | 137:23 148:2 |
| 25:9 26:24 28:3 | survey 45:21 48:8 | 31:15 38:21,24 | 231:3,3 233:13 | 152:24 162:7 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 186:24 198:7 | testify 200:22 | 41:13 42:1,18 | thanks 20:22 | 182:9 184:19 |
| :---: | :---: | :---: | :---: | :---: |
| 206:5,8 213:10 | 286:22 288:16 | 45:5 47:14 | 22:11 85:15 | 186:3 191:15 |
| 219:8 229:24 | 310:15 | 48:24 49:3,11 | 143:14 147:11 | 193:15 195:19 |
| 245:5 247:20 | testifying 21:11 | 50:4 52:13 53:9 | 192:8 294:10 | 200:13,20,23 |
| 252:9 262:6 | 22:7 276:12 | 57:17 58:5 63:2 | theme 245:24 | 218:7 244:24 |
| 286:15 | testimony 54:14 | 63:7,19 64:12 | thick 65:22 | 246:7,12 250:15 |
| telling 129:13 | 67:6 73:22 | 66:12 68:3 69:5 | 280:18 282:6 | 250:21 254:2 |
| 255:7 | 106:24 111:24 | 69:18 71:9,24 | thickness 65:19 | 257:13 258:10 |
| ten-year-old | 152:12 161:8 | 72:20 73:17 | 65:20 178:21 | 261:1 263:10 |
| 188:7 | 187:11,19 | 74:22 76:17 | thing 35:12 41:23 | 266:23 269:4 |
| tend 283:6 | 195:20 198:24 | 77:22 78:1,24 | 118:13 136:13 | 272:1 275:2 |
| tends 173:9 | 222:22 230:10 | 80:2 81:3 85:21 | 137:1 188:17 | 277:18 287:5 |
| term 119:1,2 | 241:5,14 262:22 | 86:10,20 90:17 | 198:10 203:3 | 294:6,16 298:20 |
| 125:5 129:17 | testing 59:13 | 91:9 92:20 | 232:17,19 240:7 | 299:1 317:17 |
| 148:24 149:8 | 60:15 108:21 | 93:24 95:9,18 | 240:10 262:6 | thinking 120:8 |
| 162:24 163:3,6,8 | 170:13,20 | 96:1,7,10 97:5 | 263:1 | 191:14 253:3,3 |
| 163:19 164:14 | 171:10,15 175:2 | 98:17 101:3 | things 12:7 71:1 | 255:9 |
| 199:22 214:23 | 175:7 187:17 | 102:21 103:4 | 74:8 99:22 | thinks 182:11 |
| 218:8 242:20 | 188:24 189:3,9 | 104:2,11 106:10 | 120:16 153:4,5 | third 47:16 65:17 |
| terminology | 271:13 | 106:19 107:6 | 158:13 192:10 | 85:11 89:14 |
| 239:22 278:22 | tests 61:1 87:16 | 108:7,9 114:19 | 198:9 199:21 | 202:7 260:14 |
| terms 26:11 118:4 | 88:8 89:11 | 117:3 124:13 | 227:9 239:19 | thoroughness |
| 183:10 187:9,18 | 99:15,17,21 | 131:15 132:10 | 240:13 251:22 | 55:3 |
| 188:4,6 189:10 | 297:24 | 132:19 135:6 | 252:10 257:10 | thought 8:10 |
| 193:14,24 | text 11:18,21 12:1 | 138:4,19 139:13 | 279:2 287:15 | 66:19 211:23 |
| 197:24 198:20 | 12:2,12 38:14 | 140:6 145:4 | 289:16 304:1,2 | 225:14 230:14 |
| 211:1 286:3 | 44:18,22,23 | 146:6,10,12,13 | 306:19 | 238:5 253:19 |
| test 15:10,11 | 54:10 58:14 | 147:5 151:10 | think 7:7 9:16,20 | 267:16 284:16 |
| 22:23 109:1 | 63:10 64:8 | 155:3 163:10 | 10:12 15:14 | 316:3 |
| 110:5 111:17 | 71:17 73:19 | 164:3 167:11 | 17:20 18:17,19 | thousands 268:22 |
| 112:19 113:15 | 96:17 103:11 | 168:18 185:17 | 22:21 24:16 | three 15:20,21 |
| 298:8 308:13,19 | 104:15 142:1 | 197:15 212:9 | 32:11,19 36:7,12 | 16:9 46:15 |
| testified 16:14 | texts 10:14 14:1 | 219:15 220:20 | 37:21 55:9 63:8 | 62:21 76:6 |
| 55:9,17 64:22 | thallium 270:16 | 226:24 227:1 | 66:14 67:5,16 | 84:18,23 103:8 |
| 67:12 83:2 | 271:1 272:8 | 231:18 232:19 | 78:3 91:12 | 122:1 123:10 |
| 155:17 186:3 | thank 7:7,16,17 | 232:23 233:16 | 95:24 112:13 | 173:12 192:17 |
| 187:15 195:21 | 9:24 10:11 11:6 | 233:18 243:18 | 125:21 130:11 | 202:24,24 242:7 |
| 223:9 230:22 | 12:10 13:9,23 | 259:9 262:17,19 | 131:3 138:21 | 248:19,23,24 |
| 240:22 245:12 | 15:3,24 16:20 | 263:1 269:8,11 | 145:23 147:4 | 249:12,15,18,20 |
| 245:16,17 | 17:11 19:5,11,23 | 277:14,24 | 152:6,16 155:19 | 256:8 258:12 |
| 261:19 285:11 | 20:7,19 24:3,14 | 290:17 292:6 | 157:24 160:22 | 261:7 265:16 |
| 286:2 287:2,14 | 25:18 26:22 | 294:9 299:3,13 | 162:11 163:6 | 281:18 291:3,4 |
| 287:20 288:21 | 27:10 31:22 | 299:15,24 | 171:5 172:18,23 | 306:23 |
| 289:23 294:16 | 32:14 33:19 | 305:12 310:23 | 172:24 175:4 | three-dimensio... |
| 303:19 304:1 | 36:5,23 39:22 | 317:11 | 179:12 181:20 | 23:15 |

L.A. Court Reporters, L.L.C.

312-419-9292

| three-quarters | tiny 207:23 210:7 | trace 220:24 | 32:6 77:7 86:24 | 297:8 303:18 |
| :---: | :---: | :---: | :---: | :---: |
| 269:3 302:5 | title 33:10 49:19 | track 156:13 | 121:16 | 306:23 308:21 |
| throw 246:13 | 74:12 141:22 | 306:7 | turn 6:15 9:15 | two-thirds 269:3 |
| tied 48:16 115:15 | 149:24 173:19 | training 226:11 | 20:24 25:5 | type 12:21 26:16 |
| 115:17 136:6 | 319:6 | transcript 1:14 | 33:20 42:2 | 31:24 33:8 |
| ties 41:23 | titled 238:2,18 | 319:7 | 43:22 53:10 | 79:18 117:22 |
| time 9:22 17:8 | 247:14 273:9 | transect 92:19 | 65:10 69:8 | 118:14 123:20 |
| 20:3 26:4,17 | today 50:16 | transient 38:21 | 73:18 92:8 | 129:3,8 131:5 |
| 42:14 56:18 | 113:21 148:2 | transport 22:18 | 94:13 96:11 | 134:20 304:4 |
| 59:20 62:8,12 | 152:19 158:5 | treat 151:5 | 101:5 114:9 | types 26:12 47:11 |
| 80:1 82:14 93:9 | 169:5 177:1 | treatment 178:10 | 124:14 125:1 | 144:16 291:3,4 |
| 94:2 95:4,11,11 | 188:19 194:6 | trend 59:13 60:15 | 131:15 134:3 | typical 119:5 |
| 121:22 122:22 | 201:3 206:9 | 60:17 61:6,7 | 135:14,14 138 | typically 222:23 |
| 123:6 125:20,21 | 213:12,17 | 90:1,8,9,13,19 | 139:19 141:7 | typo 93:5 |
| 126:19 140:12 | 229:14,18 230:1 | trends 89:20 90:6 | 184:20 195:3 |  |
| 140:15 145:20 | 230:11 234:12 | trial 185:15 | 197:13 207:22 | U |
| 151:5 161:14 | 240:15 252:24 | triangle 293:13 | 218:21 220:5 | U.S 181:9 |
| 162:2 164:18 | 257:11 259:24 | tried 7:19 231:4 | 244:2,19 247:10 | ubiquitous 119:1 |
| 170:22 179:10 | 265:5,10,15 | trigger 31:24 | 271:4 274:24 | 137:24 |
| 180:23 189:16 | 274:2,20 282:21 | 32:13 | 280:9 302:2 | Uh-huh 51:7 |
| 201:21 203:11 | 282:23 283:4 | trouble 41:15 | turned 162:1 | 59:21 130:21 |
| 203:15,18 | 286:2 307:21 | 224:17 254:20 | 231:8 | 253:1 260:12 |
| 204:14,19,24 | 318:3 | true 85:18 175:14 | turning 12:11 | 264:20 282:1 |
| 205:21 207:15 | told 148:15 288:7 | 176:4 211:5 | 13:24 15:4,14 | un- 232:9 |
| 208:10 211:6 | tomorrow 318:4 | 212:15 214:7 | 16:21 36:6 | unaffected 34:24 |
| 212:17 214:9 | tons 240:1 252:10 | 230:22,23 | 41:13 59:11 | uncertain 156:12 |
| 231:10 235:8 | tool 62:24 | 264:14 266:8 | 75:8,11 77:9 | 156:15 |
| 237:5 242:24 | top 39:9 47:5 78:2 | 298:20 319:7 | 78:1,15 81:3,13 | unconfined |
| 250:8,9 253:10 | 139:9 220:8,19 | truly 223:23 | 83:24 93:6 | 218:23 |
| 253:20 256:21 | 225:4 260:16,19 | try 7:20 16:10,11 | 135:15 255:10 | Underlying |
| 257:10,12 | 260:23 268:7 | 89:5 167:10 | two 11:13 23:7 | 280:11 |
| 259:17,20 261:5 | 282:4 290:22 | 224:20 237:23 | 44:12 46:14 | underneath 22:3 |
| 264:16 267:8,22 | topic 123:24 | 250:18 269:9 | 54:20 55:13 | 209:21 250:12 |
| 273:14 275:5,8 | 176:24 | 295:8 | 60:14,16,20 61:1 | 308:19 |
| 275:10,15,21 | topped 78:18 | trying 23:2 49:22 | 61:14 62:21 | understand 12:23 |
| 277:1,9 283:2 | topsoil 126:14 | 53:23 62:14 | 73:8 82:7 87:12 | 23:21 36:1 |
| 285:16 297:16 | total 54:18 55:11 | 143:15 144:14 | 88:4 100:10 | 45:19 62:24 |
| 301:13 316:1 | 55:16 89:15 | 151:24 172:1 | 121:8,9 124:5 | 105:23 107:2 |
| 317:17 319:5 | 100:21 105:11 | 192:10 202:2 | 126:10 128:20 | 149:8,15,19 |
| timeframe 54:24 | 121:3 | 252:20 286:20 | 202:23,24 207:7 | 150:2,16,22 |
| times 29:8 40:3 | totally 243:22 | Tukey's 99:8 | 243:6 249:3,5 | 152:12 163:20 |
| 41:8,9 51:3 | 269:7 | 100:6,18 101:8 | 253:4,4 257:9 | 167:23 177:20 |
| 234:10 240:14 | touch 157:16 | 101:16 | 262:4 271:5 | 181:14,18 |
| 242:7 | touched 117:5 | turbidity 25:12,15 | 276:7 281:18 | 182:21 209:23 |
| timing 161:4 | tough 155:8,10 | 25:16 31:16,23 | 283:5 296:19 | 215:5,8 217:17 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 241:18 246:4,9 | 165:11 | utility 113:11 | vice 172:10 | 183:2 184:4,17 |
| :---: | :---: | :---: | :---: | :---: |
| 254:2 260:7 | units 34:18 35:1,9 |  | 173:20 182 | 185:13,19,23 |
| 262:3 272:15 | 36:21 44:2,16 | - | cinity $14: 7$ | 186:17 187:14 |
| 285:23 286:10 | 46:7 81:24 83:1 | vague 159:21 | 36:17 45:22 | 188:9,22 189:23 |
| 287:22 289:9 | 160:4 218:11 | 165:5 166:3,11 | 96:22 145:2 | 190:13,22 191:8 |
| 291:22 292:10 | 271:23 272:12 | 167:3,7 168:3 | viewed 123:19 | 192:9,12,15,18 |
| understandable | 273:5 316:16,17 | 186:14 192:23 | violation 194:19 | 193:4,7 194:16 |
| 100:12 121:12 | universe 252:8 | 192:24 286:11 | 197:9 244:18 | 195:21 196:20 |
| understanding | University 15:13 | value 27:9 28:14 | violations 183:12 | 197:6 199:12 |
| 12:21,22 14:19 | unreasonable | :17 62: | 183:15,21 | 200:5 202:1,9 |
| 30:10 32:1 35:2 | 289:15 | 102:8 109:15 | visa 90:14 | 205:12,16 |
| 37:10 45:24 | unsaturated 39:3 | 14:14 115:8,9 | visually 51:2 | 206:21 212:2,10 |
| 48:4 49:23 | 132:1 | 115:13 116:2,12 | 144:12 | 216:21,22,24 |
| 66:19 78:9,22 | upcoming 145:8 | 116:23 | voice 13:7 77:20 | 217:1,8,13,16,22 |
| 82:16 83:22 | updated 234:13 | values 61: | 169:14 | 218:4 222:1,8 |
| 123:15 144:18 | 312:21 | 102:6,10 | volume 228:1,13 | 223:8 224:19 |
| 145:16 150:8,13 | upfront 28:23 | Van 95:23 | 298:19 309:5,9 | 227:3 230:3,15 |
| 160:2 163:16 | upgradient 15:20 | Vanessa 6:10 | 310:1,11 311:9 | 230:18 232:12 |
| 167:18 169:20 | 16:7 20:16 | va | 311:14,18 314:8 | 232:14,23 233:7 |
| 174:12,21 179:1 | 35:22 44:16 | variability $60: 1$ | voluminous | 233:17 234:1 |
| 179:11,14,22 | 62:7,8 87:12 | 60:20,22 | 303:24 304:9 | 241:8,17,21,24 |
| 182:23 183:18 | 115:9 132:12 | 61:16 | voluntarily | 243:4 245:8,22 |
| 194:4 201:22 | 133:19 | variants 95:6 | 134:15 | 245:23 246:18 |
| 210:2 224:10 | upgrandient | various 7:23 13 | vs $1: 10$ | 247:6 249:1,10 |
| 235:11 291:20 | 87:19 | 60:2, |  | 250:16,20,23 |
| 307:11 308:15 | upper 65:12 80:23 | 46:12 60:24 | W | 259:7,10 261:12 |
| 310:8 | 104:24 | 71:577:15 | W-2012-000 | 262:23 263:7,14 |
| understood 12:10 | upwards 215:16 | 79:19,23 87: | 97:9 | 268:21 269:19 |
| 44:8 47:14 64:6 | use 15:8 16:10 | 89:11 91:22 | W-202 194:19 | 269:21 270:7 |
| 144:13 173:17 | 23:4,24 29:10 | 93:9 119:24 | Wachspress 2:1 | 276:9,21 277:2,8 |
| 182:5 250:10 | 1:10 49:6 60:2 | 120:3 | 4:9 6:20,20 | 277:17,21 278:4 |
| 273:6 303:4 | 61:8 62:13 66:7 | veers 94:19 | 146:20,21,24 | 279:9 281:16,22 |
| 304:7 | 97:8 120:3 | velocity $21: 4,7,8$ | 147:17,19 148:6 | 283:8,19 284:2,7 |
| undertake | 134:9,22 135:4 | 21:14 22:2 | 148:14,21 151:4 | 284:18 285:10 |
| 229:11 | 143:7 148:24 | 85:23 86:8 | 151:19 155:2,4 | 286:14,19 |
| unfair 289 | 149:7,13,17 | verify 38:2 | 160:1 161:9,19 | 287:22,23 289:2 |
| unhelpful 269:7 | 164:13 177:19 | VERMONT 2:20 | 162:22,23 164:1 | 289:3,7,20 |
| unified 100:1 | 182:13 226:10 | versa 90:14 | 164:8 165:6,17 | 290:10,14,20 |
| uniquely 102:9 | 243:17 248:13 | 172:10 | 166:6,17,18 | 292:9 294:13 |
| unit 16:2,3,4,5,18 | 251:5 256:8 | verse 188:20 | 167:8,9,12 168:4 | 295:9 296:22 |
| 36:3,4,22 112:17 | 257:24 266:4 | versus 28:12 59 | 168:16 169:6,15 | 297:10 298:24 |
| 162:10 214:21 | uses 119:16 | 62:21 101:2 | 171:19,21 172:1 | 299:6,12,15 |
| 227:20 | USGS-based 24:7 | 121:17 131:7,13 | 172:6 174:9,23 | 300:1,8 303:13 |
| United 162:18 | usually 27:7 | 144:17 | 177:10 179:8 | 304:3,23 305:3 |
| 163:1,7,8,9 | 119:17 130:17 | vertically $127: 7$ | 180:1,2 182:2 | 305:16,23 310:7 |


| 310:14,19,24 | WASHINGTON | 163:7,9 165:11 | Weaver 22:6 | went 11:12 13:19 |
| :---: | :---: | :---: | :---: | :---: |
| 311:4 314:16,21 | 2:21 | Waukegan 14:12 | website 11:15 | 34:20 50:12 |
| 316:20 | wasn't 104:19 | 19:15,22 24:20 | 25:23,24 208:14 | 51:20 95:2 |
| wait 18:15 164:11 | 105:24 123:11 | 30:16 49:18 | 262:12 304:16 | 217:9 224:3,10 |
| 200:10 206:3 | 179:20 229:8 | 73:24 76:22 | WEBSTER 2:11 | 262:8 303:8 |
| 281:20 309:17 | 238:5 256:17,19 | 77:7,14 81:19 | week's 162:9 | weren't 17:4 |
| walk 109:20,22 | 260:4 272:2 | 85:24 87:11 | weekly $162: 5$ | 22:19 61:13 |
| 111:15 144:19 | waste 130:15 | 91:22 93:8 94:5 | weight 108:3 | 104:4 106:1 |
| 144:20 | 131:5 156:23 | 96:21 97:7,12 | welcome 146:19 | 206:18 |
| walked 112:2 | 309:5,9 310:1,12 | 98:4,19 111:23 | 269:13 | west 14:7,11,24 |
| 113:5 | 311:9,14,19 | 112:10,20 | well-known 24:7 | 15:2 16:6 21:20 |
| walking 108:17 | 314:8 | 113:23 118:18 | wells 13:2 14:9,14 | 34:11 35:4 |
| 109:18 110:9 | wastestreams | 124:16 130:2 | 14:16 15:20,21 | 36:20,21 37:6 |
| 111:23 112:24 | 204:7,9 205:24 | 132:11,13 | 16:8,8,10,11,15 | 44:17 86:4 |
| 143:17 144:10 | 206:8 303:8 | 136:16 139:5,6 | 16:17 20:4 28:4 | 94:10,20 109:19 |
| 144:12 145:1 | wastewater 266:2 | 153:15,16 | 30:16 31:10 | 118:18 124:15 |
| 223:16 309:19 | water 23:9,10 | 175:16 176:6 | 34:22 35:16 | 124:16 133:20 |
| walkovers 109:4 | 32:2 35:6,7,24 | 184:21 191:24 | 37:18,18 38:11 | 134:8,12 220:3,4 |
| walks 110:2 | 36:4 38:17,19,20 | 192:5 194:1 | 38:14 40:3,5,23 | 222:11 301:24 |
| Walter 173:18 | 38:21,22,24 39:4 | 195:11,22 | 42:23 43:3 44:9 | 302:14 307:5,23 |
| Wannier 2:9 6:17 | 39:7,9,11,18,20 | 196:11,13 | 44:12,20 46:12 | 308:2 309:6,10 |
| 6:18 | 39:21 40:2,6,8 | 300:16 302:14 | 47:3 48:9,12,23 | 310:1 311:10 |
| want 6:8 9:21 | 40:21 41:2,7,7,9 | 306:6 309:22 | 49:1,13,14,15 | 313:6,16,22,23 |
| 16:14,16 29:13 | 41:11,14,15,21 | 312:16 316:4,13 | 51:5,10,12,16,17 | 314:1 |
| 32:7 57:5 59:2 | 42:7 55:4 62:7 | 316:17,24 | 51:18,18,21,23 | western 34:9 |
| 60:2 61:15,21 | 62:20 84:10 | way $12: 23$ 45:6 | 52:8,11 61:7 | 113:1 |
| 62:7,9,16 68:9 | 87:23 88:12 | 55:2 57:13 | 62:6 75:16,21,24 | wet $125: 5,6,10,13$ |
| 84:2 102:8 | 92:4,22 93:1,22 | 66:22 71:21 | 76:5,6,11,13,15 | 125:23 126:3,17 |
| 104:4 109:17 | 94:23,24 95:4 | 89:5 94:20 | 84:6,9,19,24,24 | 126:24 127:22 |
| 114:4,9 117:18 | 96:24 111:2 | 118:22 127:4, | 86:15,18,21 | 131:20,21 |
| 122:11,12 | 117:1 118:21 | 180:13 208:1 | 87:12,19 88:7 | wetting 39:1 |
| 124:14 125:1,19 | 120:19,20 | 210:12 221:8,1 | 91:15,16 93:9,16 | 127:4 132:3 |
| 128:6 130:4 | 126:23 127:7,1 | 229:2 253:23 | 93:23 96:24 | whatnot 32:10 |
| 133:23 134:2 | 127:12,14,24 | 254:14 255:9 | 97:2,4 98:5 | 118:4 |
| 135:13,21 | 130:2 136:16 | 269:4 275:1 | 110:22,23 111:2 | whichever 242:17 |
| 136:12 138:4 | 143:22 144:4,8,9 | 277:24 288:19 | 112:15 113:9 | white 32:20 |
| 142:10 146:1 | 144:15,15 | 302:5 | 114:23 116:19 | Wie 95:24 |
| 174:12 215:13 | 162:16 163:4,12 | we're 68:14 71:3 | 118:21 120:16 | Wiedenhaupt |
| 221:17 226:12 | 163:15 165:1,11 | 71:21 107:22 | 120:24 121:14 | 1:21 319:2,22 |
| 226:15 237:4 | 165:18 211:20 | 145:19 222:4 | 136:19 137:19 | willing 215:3 |
| 254:11 283:19 | 211:24 212:12 | 233:11,15 | 143:24 144:1,23 | 288:1 |
| wanted 145:13 | 248:5,6,8 286:17 | 246:21 249:5 | 145:1 271:15 | ILMETTE 2:4 |
| 243:23 | 293:14,16 | 270:1 275:24 | 273:1 294:14 | indow 27:7 |
| warning 261:2 | waters 156:23 | we've 13:3 35:3 | 295:16,19 | winter 152:3 |
| 282:7 | 162:18 163:1,4,7 | 42:13 70:22 | 296:11 | Wisconsin 75:7 |

L.A. Court Reporters, L.L.C.

312-419-9292

| withdrawn | 144:5 151:2,20 | 74:15 139:3 | yellow 134:8 | 17:17 51:8 63:9 |
| :---: | :---: | :---: | :---: | :---: |
| 248:22,23 | 151:23 152:1,17 | 262:6 | уep 20:22 89:4 | 63:11,13 64:8 |
| 249:12 252:21 | 152:21,24 158:6 |  | 90:17 | 70:15 78:15 |
| 253:22 257:6 | 159:5 175:6 | X | yesterday 6:7 7:7 | 94:13 102:23 |
| 260:7 262:2 | 189:12,22 190:9 | X 4:1,11 9:7 | 8:7 9:16,21 10:1 | 103:11 126:3 |
| 267:21 268:10 | 193:22,24 | 108:12 141 | 16:13 17:1 | 127:15 138:20 |
| withdrew 248:1 | 195:16,24 | 147:16 151:18 | 34:19 54:14 | 139:10,11 142:2 |
| witness 4:2 7:13 | 198:20 252:1 | Y | 55:9,18 63:12 | 142:17 222:19 |
| 9:3 22:5 31:1 | 259:22,22 260:5 | $\frac{Y}{Y 147: 13151: 13}$ | 66:16 83:3 | 225:2 227 |
| 133:18 140:17 | 274:14 | Y 147:13 151:13 | 108:15 110:8 | 295:21 |
| 140:23 146:12 | worked 11:8,8 | yeah 6:17 8:9 9:20 | 111:22 117:5 | 10-2 64:14 |
| 146:23 147:8,14 | 66:4,5 127:10 |  | 119:23 123:11 | 10.92 85:10 |
| 151:6,14 164:5 | 143:4 192:17 | 41:20 44:1 $47 \cdot 19$ 48.14 | 125:5 223:14 | 100 126:8 154:13 |
| 168:11,18,21 | 275:16,22 | $\begin{aligned} & \text { 47:19 48:14 } \\ & 50: 855: 20,20 \end{aligned}$ | Z | 160:12 170:5,22 |
| 177:8 182:18 | 276:24 | 50:8 55:20,20 | $\mathbf{Z}$ | 172:16,17 226:7 |
| 184:12 188:13 | working 127:4 | 57:8,24 66:21 <br> 95:6, $101 \cdot 12$ | zone 126:18 140:3 | 240:3 298:10 |
| 189:17 194:14 | 152:13 155:23 | 95:6,9 101:12 | zoomed 92:10 | 100-page 230:11 |
| 196:3,10 197:4 | 192:14 274:8 |  | 0 | 1004 2:3 |
| 199:3 202:6 | 276:13 |  |  | 101.6268 |
| 221:22 222:2 | worried 57:5 | $\begin{aligned} & 140: 20141: 10 \\ & 141: 18147: 22 \end{aligned}$ | $\begin{array}{\|l\|} \hline \mathbf{2 2 0 : 1 7 , 1 8} \\ 222: 19227: 6 \end{array}$ | 101.626(e) 108:2 |
| 223:15 230:19 | worries 185:22 | 141:18 147:22 | 222:19 227:6 | 107 5:10 |
| 233:2,6,9 242:13 | 311:3 312:9 | 159:23 162.3 |  | 108 4:5 |
| 259:4 263:5 | wouldn't 52:13 | 159:23 162:3 | 0.033 87:22 | 10th 295:13,20,23 |
| 276:18 277:16 | 237:13 251:17 |  | $0.05102: 7$ | 11 10:17 17:12 |
| 277:23 279:6 | 267:18 286:5 | 169:13 173:2, | 0.06 65:22 | 20:10,15 51:12 |
| 283:3 286:10,20 | wow 312:7,8 | 17 | 005312.7 | 51:19 64:13,15 |
| 287:5,18 295:7 | write 64:4 74:19 |  | 08 | 72:2 79:2 104:3 |
| 297:6 310:15 | 79:5 104:10 | 8:12 | 1 | 204:7 296:15 |
| 314:11 | 106:1 142:16 |  | 1 | :00 68 |
| wondering 21:23 | 148:22 152:9 |  | $40: 19 \quad 69: 13$ | 11:05 95:15 96:7 |
| wood 37:2 130:14 | 245:3,6 264:10 | 237:22 240:1 | $76: 9,982: 22,23$ | 1100 2:20 111:11 |
| word 142:18 | writing 10:2 | 237:22 240:1 | $84: 19,2086: 19$ | 110637 11:19 |
| 143:12 149:4 | 69:13,22 |  | 86:19 87:1 | 110647 12:13 |
| 157:7 158:10 | written 63:13,2 |  | 88:7,10 89:12 | 110651 13:24 |
| 203:9 225:16 | 64:5 69:16 | 295:23 296:8,13 298:20 302:1 | $90: 13 \text { 103:2,2 }$ | 110656 15:4 |
| 242:17 243:11 | 139:10,12 | 298:20 302:1 | 114:10,18 | 110657 15:1 |
| 243:13 | 141:11,20,23 | year 29:8 | $135: 22,23$ | 110658 16:21,23 |
| wording 142:23 | 142:5,7,11,12, | year 29:8 years 50:11 60:5,8 | $141: 24143$ | 142:3 |
| 142:24 | 142:17,22,23 | years 50:11 60:5,8 | 185:4 295:11 | 110663 18:17 |
| words 143:2 251:6 | 184:15 254:15 | 62:21,21 120:10 $181: 11182 \cdot 3,11$ | 185:4 295:11 | 10667 20:8 |
| 251:7 256:13 | 275:15,21 | 1:11 182:3, | $\begin{aligned} & \mathbf{0 1 . 0 2} \\ & 151: 1 \end{aligned}$ | 110669 21:1 |
| 257:14 | 282:19 315:2 |  | 1-something $73: 8$ | 0670 24:1 |
| wore 7:11 | wrong 240:7,10 | 216:9 25 | 1-something 73:8 | 0673 25:5 26 |
| work 14:9 64:2 | 278:22 312:6 | 258:12 276:8 | $\text { 1:30 } 146:$ | 110674 27:17 |
| 120:1,2 134:11 | wrote 10:18 73:5 | 312:22 316:7 | 1:30 146:19 10 3:6 10:17 16:22 | 110675 32:15 |

L.A. Court Reporters, L.L.C.

312-419-9292

| $11067833: 21$ | 80:4,5,5,16,17 | 125778 96:12,14 | 240:2 | 18 76:19 137:2 |
| :---: | :---: | :---: | :---: | :---: |
| 110679 36:10 | 80:17 91:11 | 125780 96:20 | 1402 4:19 5:12 | 219:1 280:13 |
| 110683 39:24 | 104:14,15,15,16 | 125783 98:3 | 233:21,23 | 184 5:4 |
| 41:18,20 | 125:11 296:16 | 1258 101:11 | 245:10 246:14 | 18th 1:17 91:13 |
| 110684 42:3 | 12-inch 261:1 | 125805 98:18 | 246:16 | 19 17:20 72:11 |
| 110686 43:16 | 280:18 282:6 | 125820 89:8 | 1403 4:20 5:13 | 280:15 |
| 110687 43:18 | 12(a) 232:6 | 125822 90:7 | 246:19 247:4,8 | 194 5:5 |
| 110688 134:4 | 123865 302:4 | 125824 89:12 | 261:16 263:3 | 197 5:2 |
| 110689 43:22 | 124 4:14 | 125849 99:5 | 266:16,19 | 1998 53:19 |
| 110855 45:10 | 12405 312:12 | 125853 101:7,13 | 277:16,18 | 1N 78:16 80:24 |
| 110861 50:5 | 124054 312:5,10 | 101:14 | 281:13,15,24 | 82:9,18 87:8,9 |
| 110876 52:17 | 124055 311:24 | 126011 102:23 | 1404 4:21 263:10 | 89:13 90:7 91:6 |
| 110877 52:3 | 312:4 313:3 | 126012 103:6 | 263:12,16 277:5 | 91:16 92:11,15 |
| 110878 52:20 | 124091 307:2 | 126019 104:13 | 277:10,15 | 103:9 |
| $11088453: 11$ | 124135 264:19 | 126022 105:4 | 1405 4:22 5:19 | 1S 78:17 80:23 |
| 110907 54:5 | 12591:12 | 13 11:7 17:20,23 | 278:2,5,8 283:16 | 82:9,18,22 91:6 |
| 110924 57:18 | 125617 69:10 | 72:8 81:4 95:2 | 283:16 284:4 | 91:17 94:18 |
| 110929 59:12 | 125627 74:11 | 98:8 105:2 | 285:13 288:2 | 103:9 |
| 111063 141:14 | 125628 73:20 | 129:14 | 299:7 | 1st 19:4 316:14 |
| 111162 63:18 | 125632 75:12 | 13-15 1:10 6:5 | 1406 4:23 5:14 |  |
| 111163 141:8,16 | 125633 76:19 | 317:7 | 300:4,6 303:15 | 2 |
| 315:2 | 125637 77:9 | 1300 2:12 | 304:17 305:14 | 2 10:15 18:22 |
| 111166314:18,22 | 125638 78:2 | 1315 114:5 | 311:22,23 | 46:13,14 47:5,8 |
| 315:9 | 125639 82:8 | 1330 4:14 124:14 | 316:22 | 48:7 69:22 |
| 111185 64:16 | 125640 81:5 | 124:21 | 1407 4:24 5:15 | 72:23 82:13 |
| 111192 65:5 | 125644 81:15 | 1331 4:15 5:9 8:1 | 305:19,21 | 87:19 88:8 |
| 111193 65:10 | 125645 83:10 | 8:3 9:11 66:15 | 316:22,23 | 90:13 100:17 |
| 1131 66:15 | 125646 84:1 | 68:2,3,5,19 | 317:12,14 | 110:23 136:13 |
| 117 279:22 295:8 | 125649 84:10 | 108:1 133:24 | 141 4:6 | 136:22 143:24 |
| 295:8,11 | 125650 85:22 | 139:3,4 141:6 | 147 4:9 | 255:17 |
| 11712 284:6 | 125652 86:23 | 314:10 | 148 4:17 | 2.0 237:15 |
| 117121 284:4,8,19 | 125653 86:23 | 1332 4:16 5:10 | 15 40:7 51:13 | 20 11:10,22 72:15 |
| 117204 295:1 | 125655 87:5 91:4 | 68:23 69:2,6 | 84:10 98:8 | 139:9 224:23 |
| 11721 283:11 | 125656 91:7 | 106:11,22 107:8 | 128:1,4 181:1 | 225:7 294:19 |
| 284:17 | 12566 81:14 | 108:1 139:15 | 228:19 | 316:2 |
| 117211 280:1 | $12566091: 12$ | 14 18:10 51:13,19 | 1500 136:17 | 200 4:18 |
| 117214 279:20,24 | 125661 91:20 | 72:11 84:9 98:8 | 16 40:18 51:24 | 20005 2:21 |
| 280:9 | 125663 92:9 | 160:23,24 181:1 | 216:12 217:3 | 2010 14:8 224:7 |
| 11th 201:23 | 125665 93:7 | 233:20 244:6 | 218:18 | 227:12,24 228:4 |
| 205:24 253:5 | 125666 94:4 | 14-day 161:1 | 16-mil 280:23 | 228:17,18 |
| 263:23 264:23 | 125669 94:14 | 1400 4:17 148:17 | 17 75:11 220:23 | 243:10 280:23 |
| 301:5 303:1,3,12 | 125670 94:4 | 148:19,22 | 221:8,13 269:2 | 2011 55:2 |
| 12 10:17,18,18,21 | 125671 139:21 | 1401 4:18 5:11 | 269:15,22 | 2012 152:10,12 |
| 17:20 51:13 | 125688 94:16 | 199:24 200:1,3 | 177 5:3 | 177:24 179:22 |
| 65:4,4 72:6 79:7 | 1257 96:13 | 230:5 232:21 | 17th 306:9 | 179:22 180:4 |

L.A. Court Reporters, L.L.C.

312-419-9292

| 182:13 | 2022 91:13 235:24 | 143:8 153:13 | 85:9 94:24 | 647 5:4 184:20,22 |
| :---: | :---: | :---: | :---: | :---: |
| 2012-00058 | 236:4,5 237:24 | 168:5,23 175:2 | 110:23 111:8 | 191:3,13 |
| 194:20 | 238:4 241:9,18 | 197:11,19 | 115:13,22 116:7 | 656 5:5 194:8,11 |
| 2014 152:2,14 | 242:1,15 316:18 | 290-294 5:19 | 122:4,5,8 143:24 | 68 5:9 |
| 179:21 180:8 | 316:19 | 295-298 5:20 | 183:4 219:20 | 69 4:16 48:9 49:15 |
| 182:15 | 2023 1:17 319:15 | 296-8800 2:22 | 220:12 227:22 |  |
| 2015 20:3 120:23 | 204 295:10 | 29th 315:5 | 227:23 | $\frac{7}{751: 8700: 22}$ |
| 152:3 180:19,24 | 21 20:4 25:17, | 2nd 52:18 | 5(a) 178:7 | $751: 870: 9100: 22$ |
| 186:2 | 39:21 40:7 | 2S 81:21 94:19 | 5(e) 178:16 | 271:4 |
| 2016 236:17 | 52:18,24 121:11 |  | 183:21 | 70544 114:18 |
| 312:19 313:11 | 266:20 294:20 | 3 | 5.965 29:21 | 78 52:22 222:14 |
| 315:13,17 316:3 | 21--03 305:11 | 3 19:8 28:22 | 5/21 293:15,20,21 | 78832 203:23 |
| 2017 52:14 76:5 | 21-03 317:3 | 30:12 37:20 | 5:00 318:4 | 78841 206:24 |
| 228:20 229:10 | 21(d) 232:6 | 69:24 94:24 | 500 85:7 | 78855 207:22 |
| 296:17 | 210 280:2,3 | 110:23 137:2,9 | 54 215:17 | 78890 210:7 |
| 2019 213:9,12 | 2101 2:11 | 143:24 270:20 | $550111: 8$ | 212:11 |
| 234:9,13,19 | $214279: 23$ | 313:5 | $552181: 5$ | 78891 211:12 |
| 235:2,10 236:10 | 23 58:11 | 3.0315:9 | 554 178:6 | 78896 214:1 |
| 236:13,21,22 | 232 5:11 | 3:10 233:15 | 555 183:4 | 78901 219:4 |
| 237:10 243:11 | 233 4:19 | 30 160:24 285:2 | 581.88 85:12 | 221:16 225:17 |
| 244:3,7,11 245:9 | $2478: 16$ 217:3 | 300 4:23 | 584 40:18,19 | 78913 220:5 |
| 270:9 273:14 | 218:18 | 305 4:24 5:14 | 41:24 | 78915 222:15 |
| 294:15 | 24.5 216:12 | 30th 207:17 257:8 | 586 40:20 | 78916 225:4 |
| 202 2:22 | 246 5:12 | 257:23 |  | 78917 226:17 |
| 2020 42:7 201:6 | 247 4:20 | 312 2:5 3 | 6 | 7th 53:19 |
| 201:18 204:1 | 24th 84:11,15 | 317 5:15 | $637: 2170: 774: 11$ |  |
| 206:6 207:17 | 85:10 177:24 | 32 219:1 $3497 \cdot 3$ | 74:12 89:10 | $84: 15 \text { 26:20 51:8 }$ |
| 240:5,6 244:7,10 | 25 81:4 | 34 97:3 | 183:4 191:3 | 84:15 26:20 51:8 |
| 244:20 257:8,23 | 2500-foot 44:1 | $350226: 3$ | 275:14 |  |
| 2021 19:4 20:4 | 251-5250 3:9 | 3600 3:7 | 6-inch 261 | $\begin{aligned} & \text { 210:18 222:9,16 } \\ & 224: 22 \text { 227:22 } \end{aligned}$ |
| 40:9 41:8 58:12 | 257 150:5,10,14 | 4 | 282:6 6 6.2.3.1 208.2 | $227: 23 \text { 252:10 }$ |
| 76:1 84:11,15 | 157:21 159:20 | 4 6:5 15:23 19:8 | 6.2.3.1 208:2 $60 \text { 48:9 49:12 }$ | $260: 11,19$ |
| 85:10 92:5 93:2 93:11 141:24 | $\begin{aligned} & 160: 3,10170: 2 \\ & 235: 17 \text { 312:24 } \end{aligned}$ | $46.515: 23 ~ 19.8$ 28:21 30:4 70:2 | 60 48:9 49:12 60-mil 178:21 | 281:10,11,23 |
| 143:8 201:23 | 257.102(c) $313: 7$ | 94:24 95:1 | 281:4 | 800 252:9 |
| 204:8 205:2,7,20 | 25th 270:9 | 110:23 111:10 | 60091 2:4 | 845 150:19 157:23 |
| 205:24 206:6,12 | 263 4:21 5:13 | 137:5,9 143:24 | 60603 3:8 | 158:7,16 160:15 |
| 248:2 250:9 | 26th 116:10 | $4.0244: 4$ | $\mathbf{6 2 0} 87: 24111: 13$ | 160:20,22 161:2 |
| 253:5,9 263:24 | 27 137:5 | 40 208:1 | 115:15 116:2,20 | 161:22 167:14 |
| 264:23 267:18 | 278 4:22 | 400 116:21,24 | 232:6 | 169:3,3,7,16 |
| 295:13,20,21 | 282 48:21 | 26:6 | 620.410(a) 199:5 | 244:16 248:5 |
| 301:5 303:1,3,12 | 282-9119 2:5 | 2:14 | 626 5:2 196:22 | 252:4,9,14 254:4 |
| 306:9 311:21,21 | 29 108:17,23 | 45 96:22 | 197:1 | 254:14 258:3,4 |
| 315:6,18 | 109:19 110:5 | 5 | 6348.21 | 258:17 301:1,2 |
| 2021-003 305:9 | 129:7 141:24 | $\overline{\mathbf{5 3 5 : 2 1 3 7 : 1 9 ~ 7 0 : 5}}$ | 636 5:3 177:3,5 | $\begin{aligned} & \mathbf{8 4 5 . 2 3 0 ( d ) ( 2 ) ( J )} \\ & 142: 21 \end{aligned}$ |

L.A. Court Reporters, L.L.C.

312-419-9292

L.A. Court Reporters, L.L.C.

312-419-9292


[^0]:    L.A. Court Reporters, L.L.C.

[^1]:    L.A. Court Reporters, L.L.C.

[^2]:    L.A. Court Reporters, L.L.C.

[^3]:    L.A. Court Reporters, L.L.C.

[^4]:    L.A. Court Reporters, L.L.C.

[^5]:    L.A. Court Reporters, L.L.C.

[^6]:    L.A. Court Reporters, L.L.C.

[^7]:    L.A. Court Reporters, L.L.C.

[^8]:    L.A. Court Reporters, L.L.C.

[^9]:    L.A. Court Reporters, L.L.C.

[^10]:    L.A. Court Reporters, L.L.C.

[^11]:    L.A. Court Reporters, L.L.C.

[^12]:    L.A. Court Reporters, L.L.C.

[^13]:    L.A. Court Reporters, L.L.C.

[^14]:    L.A. Court Reporters, L.L.C.

[^15]:    L.A. Court Reporters, L.L.C.

[^16]:    L.A. Court Reporters, L.L.C.

[^17]:    L.A. Court Reporters, L.L.C.

[^18]:    L.A. Court Reporters, L.L.C.

[^19]:    L.A. Court Reporters, L.L.C.

[^20]:    L.A. Court Reporters, L.L.C.

[^21]:    L.A. Court Reporters, L.L.C.

[^22]:    L.A. Court Reporters, L.L.C.

[^23]:    L.A. Court Reporters, L.L.C.

[^24]:    L.A. Court Reporters, L.L.C.

[^25]:    L.A. Court Reporters, L.L.C.

[^26]:    L.A. Court Reporters, L.L.C.

[^27]:    L.A. Court Reporters, L.L.C.

[^28]:    L.A. Court Reporters, L.L.C.

[^29]:    L.A. Court Reporters, L.L.C.

[^30]:    L.A. Court Reporters, L.L.C.

[^31]:    L.A. Court Reporters, L.L.C.

[^32]:    L.A. Court Reporters, L.L.C.

[^33]:    L.A. Court Reporters, L.L.C.

[^34]:    L.A. Court Reporters, L.L.C.

[^35]:    L.A. Court Reporters, L.L.C.

[^36]:    L.A. Court Reporters, L.L.C.

[^37]:    L.A. Court Reporters, L.L.C.

[^38]:    L.A. Court Reporters, L.L.C.

[^39]:    L.A. Court Reporters, L.L.C.

[^40]:    L.A. Court Reporters, L.L.C.

[^41]:    L.A. Court Reporters, L.L.C.

[^42]:    L.A. Court Reporters, L.L.C.

[^43]:    L.A. Court Reporters, L.L.C.

[^44]:    L.A. Court Reporters, L.L.C.

[^45]:    L.A. Court Reporters, L.L.C.

[^46]:    L.A. Court Reporters, L.L.C.

[^47]:    L.A. Court Reporters, L.L.C.

[^48]:    L.A. Court Reporters, L.L.C.

[^49]:    L.A. Court Reporters, L.L.C.

[^50]:    L.A. Court Reporters, L.L.C.

[^51]:    L.A. Court Reporters, L.L.C.

[^52]:    L.A. Court Reporters, L.L.C.

[^53]:    L.A. Court Reporters, L.L.C.

[^54]:    L.A. Court Reporters, L.L.C.

[^55]:    L.A. Court Reporters, L.L.C.

[^56]:    L.A. Court Reporters, L.L.C.

[^57]:    L.A. Court Reporters, L.L.C.

[^58]:    L.A. Court Reporters, L.L.C.

[^59]:    L.A. Court Reporters, L.L.C.

[^60]:    L.A. Court Reporters, L.L.C.

[^61]:    L.A. Court Reporters, L.L.C.

[^62]:    L.A. Court Reporters, L.L.C.

[^63]:    L.A. Court Reporters, L.L.C.

[^64]:    L.A. Court Reporters, L.L.C.

[^65]:    L.A. Court Reporters, L.L.C.

[^66]:    L.A. Court Reporters, L.L.C.

[^67]:    L.A. Court Reporters, L.L.C.

[^68]:    L.A. Court Reporters, L.L.C.

[^69]:    L.A. Court Reporters, L.L.C.

[^70]:    L.A. Court Reporters, L.L.C.

[^71]:    L.A. Court Reporters, L.L.C.

[^72]:    L.A. Court Reporters, L.L.C.

[^73]:    L.A. Court Reporters, L.L.C.

[^74]:    L.A. Court Reporters, L.L.C.

[^75]:    L.A. Court Reporters, L.L.C.

[^76]:    L.A. Court Reporters, L.L.C.

[^77]:    L.A. Court Reporters, L.L.C.

[^78]:    L.A. Court Reporters, L.L.C.

[^79]:    L.A. Court Reporters, L.L.C.

[^80]:    L.A. Court Reporters, L.L.C.

[^81]:    L.A. Court Reporters, L.L.C.

