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STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO OIL)
CONSERVATION COMMISSION)
EVIDENTIARY HEARING)
)
)
) No. 24912
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)

Record of proceedings in the
hearing of the above-entitled cause, in the City of
Sanfa Fe, County of Lee, State of New Mexico, before
Victoria D. Rocks, CSR, Notary Public, commencing at
10:00 o'clock a.m., on the 17th day of January,
2025, A.D.

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I-N-D-E-X

WITNESS: ROSA ROMERO

Direct Examination by MR. TREMAINE: 287 - 319

Cross-Examination by MR. MOELLENBERG: 319 - 324

Redirect Examination by MR. TREMAINE: 324 - 325

Cross-Examination by DR. AMPOMAH: 325 - 332

Cross-Examination by COMMISSIONER RAZATOS: 332 - 335

WITNESS: BRANDON POWELL

Direct Examination by MR. TREMAINE: 336 - 399

Cross-Examination by MR. MOELLENBERG: 402 - 417

Cross-Examination by DR. AMPOMAH: 417 - 427

Cross-Examination by MR. BLOOM: 429 - 431

Cross-Examination by COMMISSIONER RAZATOS: 432 - 436

1 COMMISSIONER RAZATOS: This is the Oil
2 Conservation Commission meeting that is a
3 continuation from yesterday January 16 and 17, 2025.

4 We are here in case number 24912, which is
5 the application of Apache Corporation for an
6 adjudicatory hearing to contest the Division's
7 conditions of approval on Apacheche Corporation's
8 County, New Mexico.

9 This is an evidentiary hearing. We will
10 finish up. Just to make sure, are all parties here?

11 MR. MOELLENBERG:

12 MR. MOELLENBERG: Apache is present, ready to
13 go.

14 COMMISSIONER RAZATOS: Mr. Tremaine.

15 MR. TREMAINE: Jesse Tremaine for the Oil
16 Conservation Division, again attending virtually.

17 COMMISSIONER RAZATOS: Can we also just show
18 that the commissioners are here as well.

19 COMMISSIONER AMPOMAH: Dr. William Ampomah,
20 present.

21 COMMISSIONER BLOOM: Good morning. Greg Bloom,
22 B-l-o-o-m, designee of the commissioner of public
23 lands.

24 COMMISSIONER RAZATOS: As I said yesterday, I

1 am Gerasimos Razatos. I am the acting Division
2 director for the OCD, and I am also Commission
3 Chair, and I am present as well.

4 Yesterday we finished with the Apache
5 witnesses. Just to make sure, Mr. Moellenberg, are
6 you all complete with everything you wanted to
7 present?

8 MR. MOELLENBERG: Yes. Mr. Chair, as far as
9 our direct. As I indicated yesterday, it's possible
10 we may have some rebuttal and then again we talked
11 about the possibility yesterday of how to deal with
12 the supplemental conditions.

13 COMMISSIONER RAZATOS: So we'll deal with that
14 later. As far as your direct, you guys --

15 MR. MULLENBERG: As far as our direct, we're
16 complete and ready to move on.

17 COMMISSIONER RAZATOS: Mr. Tremaine, are you
18 ready?

19 MR. TREMAINE: We are ready. Mr. Chair, I
20 would like to update the Commission.

21 The parties have been at work discussing
22 some next steps to I think hopefully address some of
23 the concerns raised by OCD earlier in the hearing.
24 And so it's my expectation that when we get to that

1 point, I believe we're going to be able to withdraw
2 OCD Exhibit 9. The original conditions are
3 included in the slide show for Mr. Powell. So I
4 think that will work. We do feel the need to
5 continue expressing OCD's concerns with the sampling
6 reports. We're going to go through the evidence as
7 we have prepared to present it, but I do expect some
8 at least temporary resolution on the part of it.

9 And I think we could resolve that objection
10 and hopefully position this hearing for a potential
11 order on the original conditions as we have
12 discussed.

13 COMMISSIONER RAZATOS: So if I am understanding
14 correctly, Mr. Moellenberg, both of you, we may not
15 have to continue this case further on Monday.

16 MR. MOELLENBERG: That could be based on what
17 Mr. Tremaine has said. If the Division withdraws
18 the supplemental conditions, that may resolve this
19 issue, and we can go on to the rest of it and see
20 how it goes.

21 COMMISSIONER RAZATOS: We'll carry on.
22 Mr. Tremaine, we're ready for your witness.

23 MR. TREMAINE: Thank you, Mr. Chair,
24 Commissioners and other parties. The Oil

1 Conservation Division calls Rosa Romero.

2 COMMISSIONER RAZATOS: Ms. Romero, we'll have
3 the court reporter swear you in. The witness has
4 been sworn in. Mr. Tremaine, you may begin.

5 ROSA ROMERO,
6 called as a witness herein, having been first duly
7 sworn, was examined upon oral interrogatories and
8 testified as follows:

9 DIRECT EXAMINATION

10 BY MR. TREMAINE:

11 Q. Good morning, Ms. Romero. Could you tell
12 us where do you work and what is your job title?

13 A. My name is Rosa Romero. I am the OCD's
14 environmental bureau chief for approximately the
15 last two and a half to three years.

16 Q. Are you testifying today on behalf of the
17 Oil Conservation Division?

18 A. Yes.

19 Q. And did you prepare a resume for
20 submission in this hearing?

21 A. I did.

22 Q. Is that labeled as OCD Exhibit number 1?

23 A. Yes.

24 Q. Is that resume true and accurate to the

1 best of your knowledge?

2 A. Yes.

3 Q. Could you please briefly describe your
4 work experience for the Commission.

5 A. I have a bachelors in science in wildlife
6 with primary research in aquatic health habitat.

7 Upon graduating from Western New Mexico
8 University, I was employed with the U.S.D.A. forest
9 service in a large scale aquatic surface water
10 habitat management position. From there I also
11 worked for the New Mexico environment department as
12 an environmental specialist.

13 While I had a wide range of duties, my
14 primary other focus was ground water protection,
15 waste water management and participated in large
16 scale rule changes and regulatory compliance with
17 the ground water issues.

18 I was also employed at the State
19 Engineer's office where I reviewed hydrologic
20 reports. I did some hydrologic modeling and
21 generally served as a water master for the southeast
22 basin until my employment here at OCD.

23 Q. Ms. Romero, in your various roles how many
24 site characterizations or investigations

1 approximately have you reviewed or conducted?

2 A. Hundreds. I would be hard pressed to put
3 a specific number on that. We didn't keep track of
4 those, but a significant number of via either
5 permitting, reviewing, those kinds of reports and,
6 that sort of thing.

7 Q. Have you ever testified before the Oil
8 Conservation Commission before?

9 A. I have not.

10 MR. TREMAINE: Mr. Chair, I would like to share
11 screen to lay the foundation for a couple of
12 exhibits.

13 COMMISSIONER RAZATOS: Give him access, please.

14 BY MR. TREMAINE:

15 Q. Ms. Romero, I am directing you to my
16 shared screen. Do you see that?

17 A. Yes.

18 Q. Is that the exhibit that we referenced as
19 Exhibit 1, your resume?

20 A. Yes.

21 Q. Did you also prepare a time line
22 presentation in preparation for this hearing?

23 A. I did.

24 Q. And is this OCD Exhibit number 2, which I

1 have on the screen here?

2 A. Yes.

3 Q. We're going to come back to this one. OCD
4 Exhibit number 5 labeled as of February 9, 2021
5 report, do you recognize this document?

6 A. I do.

7 Q. Was this prepared by you or your staff in
8 preparation for the hearing by pulling it from the
9 OCD permitting website?

10 A. Yes.

11 Q. I would like to move on to Exhibit 6
12 labeled Scope of Work for Additional Investigation
13 Exhibit 6 from May 9.

14 Do you recognize this document?

15 A. Yes.

16 Q. Similarly, was this prepared or packaged
17 by you or your staff in preparation for the hearing?

18 A. Yes.

19 Q. And was this pulled from OCD permitting?

20 A. I believe this one was pulled via e-mail,
21 but it is available on permitting.

22 Q. Thank you. A quick clarifying question on
23 this one. Did you hear testimony yesterday talking
24 about a May 8, 2024 report or document submitted by

1 Apache?

2 A. Yes.

3 Q. And this one is labeled by OCD as May 9th,
4 correct?

5 A. Yes.

6 Q. Just to clarify for the record, we're
7 talking about the same document?

8 A. It is the same document.

9 Q. Exhibit number 7 we have labeled as
10 October 23, 2023, Apache PD work plan.

11 Do you recognize this document?

12 A. Yes.

13 Q. And is this the same document that was
14 referenced yesterday as Apache's response to OCD's
15 conditions of approval?

16 A. Yes.

17 Q. And was this document prepared for hearing
18 by you or your staff?

19 A. Yes.

20 Q. Are the exhibits that we discussed,
21 Exhibit 2, 5, 6 and 7 true and accurate to the best
22 of your knowledge?

23 A. Yes.

24 Q. Are there any corrections or changes that

1 you need to make to any of the exhibits before we
2 begin?

3 A. No.

4 MR. TREMAINE: Mr. Chair, I move admission of
5 OCD Exhibits 1, 2, 5, 6, and 7.

6 COMMISSIONER RAZATOS: Mr. Moellenberg, any
7 objection to that?

8 MR. MOELLENBERG: No objection subject to
9 there's a long narrative on the site history, and I
10 would just mention the fact that there probably are
11 some specific communications that may be the best
12 evidence of that as opposed to these notes. But no
13 objection to their admission.

14 COMMISSIONER RAZATOS: They will be admitted,
15 Mr. Tremaine.

16 MR. TREMAINE: Thank you, Mr. Chair.

17 BY MR. TREMAINE:

18 Q. Ms. Romero, I'm going to move back to OCD
19 Exhibit number 2. Could you please summarize for
20 the Commission what this exhibit is and the purpose
21 of the exhibit?

22 A. The purpose of the exhibit was just to
23 highlight key communications. The chronological
24 events as from OCD's perspective. Much of this

1 information is probably a duplicate from what we
2 already heard from Apache. So it is not intended
3 to go into a lot of detail on these specifics over
4 technical details. It's a time line.

5 Q. What I would like to do is move through
6 the presentation kind of slide by slide. So I'm
7 directing you to page seven of the packet.

8 This is OCD Exhibit 20007. Ms. Romero,
9 could you please summarize the significance and
10 importance of the information contained on this
11 slide?

12 A. As stated previously, some of this is
13 paraphrased and some of this is quotes from some of
14 these reports.

15 This is intended to be more of a
16 summary. So here we have some direct quotes from
17 the remediation plan. This was the original
18 reporting of the spill. As stated in the plan, it
19 was due to a corroded isolation valve, reported as a
20 major incident.

21 At this time the report only indicated
22 that it was a soil impact.

23 Q. Ms. Romero, on slide 8, page 8, please
24 summarize the contents of this slide.

1 A. These were the initial test sampling
2 results from the soil impact directly after the
3 incident occurred.

4 It does show that we have some elevated
5 chloride levels above corrosive criteria at that
6 time.

7 Q. Please summarize the contents of slide
8 nine.

9 A. This is reference to what was originally
10 proposed in their remediation plan. To summarize,
11 it was a deep soil excavation core sampling.

12 There were some monitoring wells
13 proposed at that time, liner installation, back
14 filling procedures. At this time there was no
15 ground oil concern, oil impact only.

16 Q. At this point in time, was OCD's approval
17 of installation in the liner consistent with OCD
18 practice?

19 A. At that time, yes.

20 Q. Moving on, please summarize the contents
21 of slide ten.

22 A. This was some addendums that were made to
23 the original remediation plan. Adjustments from the
24 original plan, sampling expansions. Just approaches

1 for chloride containment.

2 As previously stated in testimony heard
3 yesterday, there's a lot of general legal statements
4 of liability that are included in all these e-mails
5 as well as original one.

6 Q. At this time, is it accurate to indicate
7 that we were seeing chloride results elevated above
8 the remediation threshold?

9 A. Yes. This addendum in particular was more
10 centered around the excavation, what portions were
11 getting excavated in order to dig out the chlorides
12 that were being seen on samples.

13 Q. Move on to the continued slide to
14 summarize the information on slide 11.

15 A. There is the closure report that was
16 previously referenced. The closure report again
17 really only indicated that we were looking at soil
18 contamination at the time.

19 Confirmation was done via an email with
20 a former employee. There were small amounts of
21 toluene in some of the samples, but at the time the
22 small amounts were not something that would have had
23 any major qualifiers.

24 We had some qualifier issues that were

1 outside of the lab control limits, but overall if
2 this was a soil remediation only situation it would
3 have achieved closure at that point.

4 Q. At the time of the remediation closure
5 report, I believe you just said that if it was the
6 soil remediation it would have been closed.

7 Is it accurate to state that absent
8 subsequent information related to ground water
9 impact, this site likely would have been closed?

10 A. The site was actually closed based on the
11 information they had available to them at the time.

12 Q. Move on to slide 12. Please summarize the
13 information here in 12.

14 A. This was annual ground water monitoring.
15 Again, these were brief, brief portions of it that
16 we wanted to highlight.

17 This was initially after the closure of
18 the C 141, part 429 incident. There were some
19 indications that some sampling didn't occur at the
20 windmill, but there were renaming issues. The
21 highlight here is we're seeing chloride
22 concentrations increasing, and the toluene analysis
23 was not detected, but also exceeded lab control
24 limits.

1 Q. Moving on, please summarize the contents
2 of slide 13.

3 A. This was the next sampling event that
4 occurred. Primary thing we're see here is chloride
5 concentrations were now being detected above the
6 regulatory limits in two and four as well as the
7 windmill.

8 The sample was analyzed. Outside of
9 the whole time we see issues with sampling again.
10 TDS for the windmill was listed incorrectly on
11 reports that were submitted. The actual TDS lab
12 sample results were I believe 794, not the 781 as
13 indicated in their documentation.

14 Q. And moving on, please summarize slide 14
15 for us.

16 A. This was the next sampling event. This
17 occurred approximately a year later. Chain of
18 custody was not included in the laboratory
19 analytical report for the sampling event, but we
20 continue to see chloride elevations in the same
21 locations.

22 Q. And the excerpts on this slide, the maps
23 that are pulled, these are pulled directly from that
24 annual ground water monitoring report?

1 A. Yes. These have all been pulled from
2 Apache's information.

3 Q. And at that time am I understanding this
4 correctly that these are the four monitoring wells
5 that were in place up to the date in February of
6 2022?

7 A. Yes.

8 Q. I'm going to move into a new stage here.
9 Please summarize for the Commission how OCD first
10 started communicating with the landowner?

11 A. Just real brief. I didn't want to go into
12 extreme detail on the communications that were had,
13 just to show that we did have raised concern about
14 the site conditions and the sampling results.

15 At that time there was no observed
16 leaks, no petroleum smell. So there was no reason
17 to think that we didn't close things appropriately.
18 But we were also looking at potential impacts and
19 just kind of spurred OCD to look at the site and
20 surrounding area in more detail.

21 Q. Is it accurate to state that at that
22 first communication OCD assessed the site for
23 ongoing surface releases?

24 A. We did.

1 Q. Moving on to the next slide, slide 16,
2 please summarize the next step in the process.

3 A. This is a continuation of some of those
4 communications. Again, we were really just looking
5 at expanding the area that we had originally been
6 looking at to pinpoint where the concerns were.

7 Q. Was this the point in time when OCD began
8 realizing that there was a ground water concern as
9 opposed to ongoing or a new surface release concern?

10 A. Yes, this is where conversations started.

11 Q. Moving on to slide 17, please summarize
12 the next step or the results of those initial
13 conversations.

14 A. Further efforts in soil and ground water
15 investigation, we had confirmed chloride in all of
16 the additional wells at that point.

17 So they did further vertical
18 delineation at the original site location and placed
19 two additional monitoring wells.

20 Q. These additional labeled on the map like
21 this SP locations, what do those reflect?

22 A. There were some naming issues back then.
23 So I believe those were the additional because they
24 changed them from SP to TMW, but we see the

1 corrections on the next slide.

2 Q. Moving on to that next slide, slide 18,
3 please summarize that to the Commission.

4 A. The BHs were additional bore holes. The
5 SPs were soil analytical results. And the TMWs here
6 on the additional wells were above and below the
7 original site.

8 So OCD did not initially receive
9 confirmation that five and six were drilled until
10 the scope of work for additional work were received
11 in May of 2023. So they did drill the wells. We
12 just didn't have communication on that until later.

13 Q. So in the previous flag, communications
14 started in June and picked up in July of 2022,
15 correct?

16 A. Yes.

17 Q. Once we get to this stage of the slide,
18 it's really in January of 2023 when we have the
19 initial additional wells going into place?

20 A. Yes.

21 Q. I'm going to move on to slide 19. Please
22 summarize the contents of this slide.

23 A. This is just a short comparison of the
24 ground water monitoring reports received in 2022.

1 Again, this is short versions.

2 We did see some issues with the chain of
3 custody again. So some of the sampling name changes
4 and totals, samples collected. There's
5 discrepancies with naming.

6 This is maybe some of the confusion of
7 number TMW. We have all named them something
8 different it appears.

9 Q. On the previous slide, Ms. Romero, you
10 indicated that there was confirmation that certain
11 bore holes put in in January, is this when that
12 occurred?

13 A. Somewhere in between. We didn't actually
14 get the reports of those results until the
15 additional scope of work came in in this annual
16 report, yes.

17 Q. Moving along to slide 20. Please
18 summarize this content for the Commission.

19 A. At this point OCD required to meet
20 virtually with Apache and their consultant.

21 The high chloride in some of the
22 exterior wells were not really making sense. So we
23 discussed adding an additional four wells.

24 We discussed what type of sampling would

1 be needed in those. We're looking at exterior
2 boundaries at this point. However, the meeting did
3 end well. Everybody agreed on the placement of
4 those wells during that meeting, just didn't really
5 have any answers to any of our questions at that
6 point.

7 Q. Is it accurate to state that at this point
8 in time the delineation had not expanded far beyond
9 the original release site?

10 A. No, we had not looked far beyond the
11 original release site.

12 Q. Moving on to slide 21, please summarize
13 this slide for us.

14 A. Let's see. This was a brief summary of
15 the analytical results from the previous meeting.
16 Chain of custody indicates samples collected were
17 not preserved for hydrochloride detects.

18 It does not include toluene results, but
19 we also continue to see chloride contamination, and
20 we were notified that they would be doing additional
21 sampling.

22 Q. At this point in time we're a year out
23 from when the communications really picked up,
24 correct?

1 A. Yes.

2 Q. The sampling at that point in time had
3 still not really expanded beyond the original
4 investigation or site of investigation?

5 A. Only slightly.

6 Q. Moving on to slide 22, please summarize
7 the contents here for us.

8 A. Upon reviewing the results, OCD requested
9 an additional meeting with Apache. This is just a
10 summary, but what I wanted to really highlight so
11 that we really emphasized that we needed a
12 comprehensive delineation.

13 Follow the outside boundaries and
14 drilling schedules, analytical results. We were
15 starting to see results that would indicate that
16 possibly we had a secondary release. And we were
17 pushing for that comprehensive delineation to answer
18 that question or not.

19 We did not get any clean answers from
20 the sampling that occurred, but we did really stress
21 the need for that comprehensive delineation. It was
22 discussed yesterday. This is the point in which
23 Apache agreed to the 11 through 16 wells. OCD also
24 insisted on number 17. Also important to note that

1 17 has been the highest to date.

2 Q. To reiterate, just to clarify, from that
3 meeting did Apache propose those wells except for 17
4 or was that agreed to at the meeting?

5 A. It was agreed to during the meeting. And
6 also attached the scope of work via e-mail. They
7 also submitted, it was a short e-mail proposing
8 those additional wells.

9 OCD responded by e-mail and requested
10 17 as the additional one.

11 Q. That TMW 17 was requested by OCD in the
12 response to the early November scope of work from
13 Apache?

14 A. Yes.

15 Q. As we work through the presentation up to
16 now how would you characterize OCD's level of
17 concern as you started to get additional
18 information?

19 A. At this point OCD was very concerned. It
20 was again stressed that the comprehensive
21 delineation would be absolutely necessary for
22 decision making processes.

23 Q. I would like to move to slide 23. Please
24 summarize this one for us.

1 A. Just a very brief, we did have some
2 additional landowner contact at that time. Apache
3 stated previously did install additional wells
4 beyond the ones that we were required.

5 We did see the highest levels in
6 well 17. But with all the additional wells that we
7 saw, we saw additional impacts in significant
8 numbers of them.

9 Q. Did the information you received during
10 this date range alleviate any of OCD's concerns with
11 the site?

12 A. No. At this time I felt we had probably
13 more questions than we did previously. The sporadic
14 chloride results that we were getting impacts
15 different wells was not making sense, especially in
16 comparison with the flow maps that we had been
17 provided.

18 Q. As we look at the date range September 4,
19 2023, getting to January of 2024 did OCD have any
20 concerns or give any consideration to the time line
21 involved of all these communications?

22 A. We did press multiple time lines. We were
23 following up via e-mail. We were pushing for things
24 to move quickly before.

1 Q. In your experience and under part 29, what
2 is OCD's baseline expectation for a site
3 characterization for a new release absent any
4 extenuating circumstances or extensions?

5 A. 90 days.

6 Q. 90 days?

7 A. Yes.

8 Q. I would like to move to slide 24. Please
9 summarize this next slide for us.

10 A. After reviewing the results, again, we
11 requested an additional meeting. We indicated to
12 Apache that we're still unknown with our boundaries
13 and still unknown if we had any cause. Still
14 unknown if we had any definite modeling.

15 The report received included sampling
16 results, but did not provide any plans for any
17 additional anything at that point. So we were
18 raising concerns for what next steps would look
19 like.

20 Q. Did Apache -- I believe you just indicated
21 that Apache didn't provide additional delineation
22 plans at this point? Did I understand that
23 correctly?

24 A. Yes.

1 Q. Did Apache want to continue ground water
2 monitoring for some period of time?

3 A. They did. It was not specified in this
4 particular report. They just indicated that they
5 would continue monitoring.

6 Q. At this point in time in reviewing the
7 samples and results that OCD had available, did you
8 feel that OCD was able to reasonably identify
9 potential sources of contamination that were showing
10 up in their sample results?

11 A. I did not.

12 Q. I would like to move to the next slide,
13 25. Please summarize this one for us.

14 A. So at this time Apache proposed an
15 additional scope of work. The scope of work was
16 again intended to locate those external boundaries.

17 They proposed four additional
18 monitoring wells and continued to monitor the
19 existing wells. Some of those were intended for
20 background.

21 Q. At that time that scope of work from April
22 of 2024, was OCD satisfied with the efficacy of that
23 scope of work?

24 A. At this time OCD instead of approving or

1 denying followed up with an additional meeting. The
2 concern was that this would not likely give us
3 enough detail to make a decision.

4 Q. Moving on to slide 26. Please summarize
5 the slide and OCD's response to that April scope of
6 work.

7 A. We had the conversation that we would plan
8 on approving the additional wells they proposed, but
9 we also indicated that more drilling was needed,
10 that we were willing to work with anything
11 additional that they might add to the scope of work
12 while in the field as needed to fully delineate.

13 Q. At this time at the meeting in May, I see
14 here in your summary the statement that OCD felt it
15 was necessary to document and issue formal
16 requirements.

17 How would you characterize OCD's view of
18 the situation and how it was handling the response
19 at this point?

20 A. Most of the conversations and
21 communications were happening via e-mail. At this
22 point we felt it necessary to have a more formal
23 record of the conversations and the proposed scopes
24 that were being submitted. So we requested that

1 everything be handled through OCD online permitting.

2 Q. I would like to move on to slide 27.

3 Please summarize this one for us, Ms. Romero.

4 A. So Apache did come back and propose wells
5 and sampling to occur after the discussion about
6 delineation at that meeting.

7 They did agree to do all 31 and 03
8 constituent at the windmill well.

9 Q. We have talked about this earlier, the
10 May 9, 2024 report.

11 A. The scope of work, yes.

12 Q. This is the scope of work we reference in
13 OCD Exhibit 6 and also contained in Apache's
14 exhibit?

15 A. Yes.

16 Q. Just to clarify for the record here. I
17 think we're moving on to slide 27. If you can
18 please summarize this one for us -- strike that.

19 You just answered this question. I
20 interjected with the other slide. Is there anything
21 else that you feel is necessary to clarify for the
22 Commission that is contained on this slide?

23 A. Not at this time.

24 Q. Moving on to slide 28. Please summarize

1 the contents here for the Commission.

2 A. Again, we have a comparison from previous
3 reports. This was an overview of the scope of work
4 we have seen to date. Chloride concentrations.

5 The more wells we're looking at, the
6 larger the extent of chloride contamination.

7 Q. So up to this point in time as I
8 understand the slide, every time you got more wells
9 we get more chloride hits.

10 Up to this point have the samples
11 satisfied OCD's concern in delineating the external
12 perimeter of the impacted area?

13 A. We have not.

14 Q. I would like to move on to slide 29. If
15 you could, please summarize this one for us.

16 A. It is a continuation of the previous
17 slide. We do continue to have chain of custody
18 issues, some improper conversions and so our
19 decision making is still unclear at this point.

20 Q. Thank you. Moving on to slide 30. Please
21 summarize or describe the follow-up meeting as a
22 result of that information on the last slide.

23 A. Brief conversations. OCD did communicate
24 that what was provided would not be sufficient to

1 make any additions on the site and that a
2 comprehensive and complete delineation has not been
3 provided to date.

4 We did not believe the scope of work was
5 sufficient to be able to do that. As this was
6 submitted now via permitting, we indicated that we
7 would approve or deny that application via
8 permitting and indicated that conditions of approval
9 would likely be attached if it was to be approved.

10 Q. Ms. Romero, did you attend the hearing
11 yesterday?

12 A. I did.

13 Q. Did you hear testimony or review the
14 submissions to the effect that Apache may have felt
15 that there was an agreement as a result of these May
16 discussions?

17 A. To some extent. We communicated well
18 during the meeting. It was agreed upon that they
19 were willing to work with OCD in what we wanted to
20 see as far as what that delineation looked like.

21 I felt that OCD communicated
22 effectively that we were looking for that complete
23 delineation and looking for a wider scope to be able
24 to obtain that.

1 Q. Do you feel that it was communicated
2 effectively during this period of time that OCD
3 wouldn't necessarily -- that OCD may approve the
4 submission with conditions of approval?

5 A. We did.

6 Q. Earlier in your testimony you had
7 indicated that OCD had started transitioning to
8 document and issue approvals to the OCD permitting
9 rather than less formal communications.

10 Was this a continuation of that effort?

11 A. Yes.

12 Q. Moving on to slide 31. Please summarize
13 the contents of this slide as -- actually let me ask
14 you, is this representative of OCD's response to
15 that May 8th or 9th scope of work?

16 A. Yes. We pulled these out because reading
17 them off of our OCD permitting is not as easy --
18 it's a note format.

19 My team was taxed with providing
20 rationale for each individual well. I'm not going
21 to go into the rationale in super detail today
22 because my deputy director, Brandon Powell, will be
23 going over that later on.

24 But OCD's conditions of approval were

1 aimed at complete delineation, and this was pulled
2 from permitting some of the rationale that we
3 obtained.

4 Q. So from your review leading up to this
5 approval of the scope of work with conditions of
6 approval and based on what Apache had submitted in
7 the scope of work, if OCD were going to transition
8 to approve a remediation plan that isolated or
9 removed potential contamination, and again, based on
10 what Apache had submitted, would OCD know where it
11 was necessary to complete that remedial work?

12 A. I don't believe so, no.

13 Q. The wells listed here, I believe you
14 referenced this, but these are simply the wells that
15 were conditioned in the conditions of approval which
16 Apache subsequently objected to?

17 A. Yes.

18 Q. And just to clarify for the Commission,
19 you had indicated that the conditions are difficult
20 to read on the OCD website. Is that right?

21 A. It's a different formatting. This was
22 just easier to list them all.

23 Q. I'm trying to just clarify for everyone
24 how the conditions are oriented. So as a result of

1 OCD's interest in documenting the next steps
2 formally through permitting, the conditions of
3 approval when they're entered, are those documented
4 on the incident page or somewhere else?

5 A. They are documented on the incident page.

6 Q. Did that appear on the page in a
7 particular field or how does that appear?

8 A. It does. It's an annotation to whatever
9 approval that was given.

10 Q. So this is simply copying that information
11 out and expanding it for the Commission's review?

12 A. Just for readability.

13 Q. All right. I would like to move on to
14 slide 32. We're now in August. Please summarize
15 the contents here for us.

16 A. When OCD proposed the additional wells,
17 this was some excerpts from Apache's response in
18 which they objected to the additional wells that we
19 had indicated.

20 They did provide their rationale for
21 some of them and did indicate that they were willing
22 to add the additional two wells instead of the OCD
23 requested wells.

24 Q. And upon review, did OCD feel that

1 response to that approval would provide important
2 adequate delineation?

3 A. We did not.

4 Q. How did OCD respond to that?

5 A. We requested an additional meeting.

6 Q. I would like to move on to slide 33.

7 Please summarize the contents here for the
8 Commission.

9 A. Again, a brief summary of the additional
10 meeting. Mr. Powell did go through the additional
11 wells and provided the rationale for the placement
12 of those wells.

13 Apache at that time did agree to a
14 revised plan, that they would do revisions and
15 resubmit to OCD.

16 Q. And did Apache ultimately submit a revised
17 plan or scope of work?

18 A. They did.

19 Q. And is that represented on slide 34?

20 A. It is.

21 Q. Please summarize the content of slide 34
22 for the Commission.

23 A. They added the soil boring proposals.
24 They increased from the five wells to an additional

1 two, which would have been seven total, less than
2 half of what OCD had requested.

3 Q. And again, like the last one, did OCD feel
4 that that response was adequate to fully delineate
5 the site?

6 A. It did not.

7 Q. And this discussion was happening in
8 September of 2004?

9 A. Yes.

10 Q. Did OCD have any ongoing concerns
11 regarding the lapse of time during these
12 discussions?

13 A. Yes.

14 Q. And how did OCD respond to the additional
15 ground water delineation work plan?

16 A. At this point it had been approximately
17 two and a half years since we originally started
18 working on this project. So we did not feel that
19 this was adequate.

20 Q. Moving on to slide 35. I think I jumped
21 ahead of you with my question. Please summarize
22 slide 35 for the Commission.

23 A. This is fairly self explanatory. This was
24 directly from Apache's proposed additional wells.

1 The one circled on the map are the additional ones
2 that they agreed to in their scope of work.

3 Q. Moving to slide 36. Please summarize
4 OCD's review and response to the additional
5 delineation work.

6 A. I won't go into a lot of detail because I
7 was not on this conversation. But Brandon, our
8 director, Brandon Powell, in communication with our
9 legal counsel did not feel that this was a good
10 faith effort and gave the option to comply with our
11 conditions or let us know if we were going to
12 hearing.

13 Q. And as far as your participation in the
14 back and forth discussions, this was kind of the end
15 point for that pending Apache's decision in response
16 to our ultimatum, for lack of a better word?

17 A. Yes. My reviews were for more the
18 technical capacity. This is when it expanded to our
19 legal.

20 Q. We have moved through the slides. Just to
21 reiterate, Ms. Romero, contents of these slides that
22 we have summarized, this is excerpts and paraphrases
23 from the other exhibit represented both in that --
24 that we have admitted and that Apache has admitted,

1 correct?

2 A. Yes, paraphrased from the environmental
3 bureau's perspective.

4 Q. So a couple of real high level questions
5 to clarify over the presentation. Between 2019 when
6 the first release was reported and July of 2022, was
7 OCD aware of or did OCD identify any ground water
8 impacts?

9 A. I believe the initial sampling results
10 showed an increase in chloride, but at that time it
11 had not proved high enough to fall under a ground
12 water investigation. Probably post 2022, when we
13 saw higher numbers that would lead us to that path.

14 Q. So prior to discussions and review of the
15 sampling in 2022, the information available to OCD,
16 did it provide a basis for which OCD would have
17 required additional investigation?

18 A. Can you rephrase that.

19 Q. I'm trying to zero in on when OCD makes
20 the decision to expand the investigation. So I'm
21 wondering from -- go ahead.

22 A. From the original sampling of the original
23 first two and then four wells, the increased
24 chloride and the continuing increasing chloride

1 coupled with the increasing chloride from the
2 windmill well led us into further investigation.

3 Q. So the initial sampling and remediation
4 events, would that have warranted ongoing ground
5 water monitoring with Apache?

6 A. Not necessarily. The soil excavation --
7 theoretically, the soil excavation was closed
8 because of sampling done at that time.

9 MR. TREMAINE: I think these are all my
10 questions on direct, Ms. Romero. Mr. Chair, the
11 witness is available for cross-examination.

12 COMMISSIONER RAZATOS: Excellent. Thank you.
13 Mr. Moellenberg. Please don't forget to turn on
14 your mic.

15 MR. MOELLENBERG: Thank you for the reminder.

16 CROSS-EXAMINATION

17 BY MR. MULLENBERG:

18

19 Q. Thank you very much for your testimony
20 today. I have just a few questions for you.

21 If you can turn to -- let me make sure
22 that I got the right slide. It's slide 22 at the
23 bottom. Do you have that in front of you? I think
24 we could do this quickly without pulling it up on

1 the screen.

2 A. I believe so.

3 Q. There's a reference to an e-mail dated
4 November 29, 2023, and it says received from legal
5 counsel.

6 Do you know what legal counsel that was
7 in particular? Do you know if that was the
8 landowner's legal counsel?

9 A. I believe it was the landowner's legal
10 counsel. I don't have that in front of me. It was
11 not me who originally received this e-mail.

12 This was through at the time our acting
13 director, Dylan Fuge, but I believe it was their
14 counsel that reached out to him.

15 Q. And my next question related to a comment
16 that you made, and I think it was regarding your
17 testimony on slide 25.

18 And you said I believe at this point,
19 and I think that we're in April of 2024, OCD did not
20 have enough detail to make a decision. Could you
21 clarify for us what kind of a decision OCD would
22 have been considering at that time?

23 A. The decision being is this another release
24 that needs to be removed to OCD, that OCD needs to

1 point out. Is this a ground water case that OCD
2 needs to request official documentation on.

3 Really, not enough information to
4 provide any direction or to follow our regulation.

5 Q. Thank you for that. Ms. Romero, slide
6 number 30 refers to a follow-up meeting on May 16 of
7 2024.

8 And then my understanding is that
9 subsequent to that the next communication was OCD
10 transmitting its conditions of approval. Is that
11 consistent with your recollection and understanding?

12 A. Yes.

13 Q. Is there any particular reason for the
14 time frame between the May 16th meeting and the
15 July 24th communication regarding the couple of
16 months time frame there?

17 A. We needed significant research on the
18 rationale for each individual placement.

19 Q. And then getting to the last slide,
20 number 36, which discusses the time period after
21 communications between Apache and the Division
22 regarding the conditions of approval, I believe in
23 one of his questions to you Mr. Tremaine referred to
24 that as an ultimatum.

1 In your view, is that an accurate
2 characterization?

3 A. No. In my view, I don't believe it was an
4 accurate characterization. At this time personally
5 we had been willing to communicate and work with
6 Apache.

7 At that time a good faith effort, we
8 were willing to discuss placement of wells to some
9 extent. But as previously communicated, we were not
10 willing to back off on the comprehensiveness of
11 what we were looking for.

12 Q. And that would describe your disagreement
13 with Mr. Tremaine's use of the word ultimatum?

14 A. I would not call that an ultimatum.

15 Q. Up until this point in time, during all of
16 the back and forth between Apache and OCD, would you
17 characterize the discussions as being cooperative?

18 A. For the most part, yes.

19 Q. And up until this point in time, can you
20 point to any particular instance when Apache had not
21 agreed to particular requests for investigation by
22 the Division?

23 A. I feel that it was the Division requesting
24 -- continually having to request more work.

1 Q. Is it fair to say during this entire time
2 up again to this September of 2024 meeting that both
3 Apache and the Division were trying to interpret and
4 address a great deal of information that was being
5 collected at the site?

6 A. We started with trickling information, and
7 it did increase over time at OCD's request.

8 Q. Just a point as to your testimony
9 regarding a transition from informal communications
10 to recording information on the Division's website
11 regarding particular incidents. And I believe that
12 took place in around April or May of 2024.

13 Doesn't the Division post e-mail
14 communications between the Division and an operator
15 into the incident file on the OCD website?

16 A. At the time and probably to date we still
17 can't confirm or we can't say yes, it is
18 definitively related to the original incident.

19 So there was some question whether this
20 should be considered a new incident or not. At this
21 time we are uploading all of those emails for
22 documentation purposes.

23 We have gotten those uploaded, but
24 originally I think that was why things were

1 happening informally because we were not sure that
2 it was related to the original incident.

3 MR. MOELLENBERG: Thank you. That is all the
4 questions that I have, Ms. Romero. Thanks again for
5 your testimony.

6 COMMISSIONER RAZATOS: Mr. Tremaine, was there
7 anything that you wanted to redirect with?

8 REDIRECT EXAMINATION

9 BY MR. TREMAINE:

10 Q. Do you recall Mr. Moellenberg just asked
11 you a question about why it took from May 16, 2024
12 until July of 2024 for OCD to issue the conditions
13 of approval. Do you recall that question?

14 A. Yes.

15 Q. Is it typical practice for OCD and the
16 environmental bureau in particular to define the
17 terms of an extensive delineation for the operator?

18 A. No.

19 Q. So is it typical for OCD to provide such
20 an extensive list of conditions or list of
21 additional specific sampling points or wells or
22 anything of that nature?

23 A. No. Typically the expectation is that the
24 operator consult will provide that to us.

1 Q. In your opinion, had OCD repeatedly
2 expressed the need for a significantly more
3 comprehensive delineation plan to Apache over the
4 previous meetings and discussions?

5 A. I feel that was communicated in every
6 discussion.

7 MR. TREMAINE: No further questions.

8 COMMISSIONER RAZATOS: Thank you. Let's turn
9 to the Commissioners. Commissioner Bloom, let's
10 start with you.

11 COMMISSIONER BLOOM: No questions.

12 COMMISSIONER RAZATOS: Commissioner Ampomah.

13 CROSS-EXAMINATION

14 BY COMMISSIONER AMPOMAH:

15 Q. Thank you, Ms. Romero, for your testimony.
16 I do have a couple of questions for you. The first
17 one is on your slide 15.

18 You talked about there was a closure to
19 the soil remediation. Now, my question is that is
20 OCD's inspector inspected the site to make sure that
21 the remediation plan and everything was followed
22 before the closure was one that was permitted?

23 A. This was a very standard site or so we
24 thought at that point. We don't inspect every site

1 that was -- closures are typically done via
2 laboratory analysis, soil sampling results.

3 Q. So no?

4 A. No.

5 Q. Now, prior to the closure, was the lab
6 results from the soil sampling, did they show that
7 the chloride was in normal range that was acceptable
8 to OCD?

9 A. Contaminated soils were excavated. There
10 were some contamination left in place, hence the
11 need for the liner. The liner utilized to protect
12 chloride from washing further down, but it did meet
13 closure criteria to close.

14 Q. It met the closure criteria to close?

15 A. Yes.

16 Q. Now, let me ask what is the responsibility
17 of OCD with regard to what would help operators to
18 identify the source of contamination?

19 A. I misunderstand. Can you repeat that.

20 Q. My question is what is the responsibility
21 of OCD with regard to identifying the source of
22 contamination?

23 A. OCD, unless it's a surface contamination
24 OCD doesn't have the equipment to fully investigate

1 in a situation like this.

2 Q. So is it correct that OCD relies heavily
3 on the operator for the source of the contamination?

4 A. Yes.

5 Q. Now, based on the testimony that we have
6 gone through yesterday and today, one big question
7 still hangs around that I really want your take on.

8 Is Apache responsible for full
9 delineation and remediation even if it cannot be
10 established that the contamination occurred as a
11 result of the Apache known release that was reported
12 to the OCD?

13 A. Apache is the only oil field, they are the
14 only operator who has lines, wells in that
15 particular vicinity.

16 So while it may not be a part of the
17 original release, maybe it could be, we don't know.
18 But if it is not, whatever else is out there is
19 still Apache.

20 Q. So as of 2022 or as of let me say May 16,
21 2024, has OCD visited the remediation site?

22 A. Yes.

23 Q. So in your testimony you talk about OCD
24 demonstrated that the proposed well was not

1 sufficient to provide complete delineation.

2 Can you provide more information on
3 that?

4 A. I am not going to go into a super amount
5 of detail because Mr. Powell's testimony will likely
6 cover that significantly.

7 Q. Thank you. Now, on page 31 of your
8 testimony, you say that drilling of all wells is
9 required to commence within 90 days from this date
10 of approval. That was the last statement before the
11 table.

12 So is it the position of OCD that all
13 the wells listed from 30 to 43 all need to be
14 drilled at once immediately 90 days after the
15 approval?

16 A. Typically mobilization, you get one drill
17 rig out there, and they do them one after the other.

18 I really think we were just looking for
19 a commitment, a deadline. Previously we had other
20 deadlines in relation to these wells, and we've been
21 flexible. But it is a way of insuring ongoing
22 communication.

23 Q. So was OCD flexible with regard to the
24 approach or once you have a rig on site you have to

1 drill all these wells or there is a flexibility on,
2 let's say, state wise approach?

3 A. I don't believe we had that conversation,
4 but I believe that would be better suited for
5 Mr. Powell to answer.

6 Q. Now, let's say when OCD determined that
7 there is a probable, let's say possible ground water
8 contamination, that was way back in 2022, why did
9 OCD not move into ground water remediation efforts?

10 A. It needs to be fully investigated before
11 ground water remediation efforts. If we start
12 remediation efforts, anything, a pump and treat, if
13 we have an active release that is still actively
14 contaminating, that is not going to do us any good.

15 We really needed to determine where that
16 was coming from before anything else could take
17 place.

18 Q. So as of 2022 up to now, there has not
19 been an established complete source of release, I
20 guess. Is that a fair statement?

21 A. I do not have enough information to answer
22 that, no.

23 Q. Do you have enough information to say
24 whether there has been a full delineation of the

1 contamination on the site?

2 A. No.

3 Q. Now, on September 24, 2024, why did OCD
4 feel that the additional seven wells that Apache
5 proposed were not adequate?

6 A. Again, that would have to be answered by
7 Mr. Powell.

8 Q. Let me ask anyway. How confident is OCD
9 that the additional 14 wells that we attached a
10 condition will fully eliminate the contamination?

11 A. Mr. Powell will go into details.

12 Q. Now, let me ask does the statewide
13 approach -- it has been established through the
14 hearing that there was a good coordination between
15 OCD and Apache.

16 So does OCD support a statewide
17 approach to continue to address this problem?

18 A. I believe so.

19 Q. So yesterday we went through the Apache
20 C 4.1. I don't know if you want to refresh your
21 memory on that.

22 A. Can somebody bring it up.

23 Q. So the green dots show what OCD is
24 proposing. The blue balls is what Apache is

1 proposing. Have you reviewed this map?

2 A. To some extent.

3 Q. Do you believe Apache's proposed well
4 locations and that of OCD proposed well locations
5 are optimized to get the best results that OCD is
6 looking for?

7 A. I think there are still some discrepancies
8 with this map that leads to additional questions.
9 Obviously, some of that was addressed yesterday and
10 typos that they were indicating were a lot of
11 errors.

12 I believe that some locations could be
13 negotiated to some extent, but as I look at this, I
14 still have a lot of questions when it comes down to
15 it.

16 Q. Do you believe OCD and Apache can work
17 together starting with this particular map to come
18 to an optimized well location to help get the
19 answers that OCD is looking for?

20 A. I do.

21 Q. Would you prefer that -- let's say would
22 you prefer that option or is OCD asking the
23 Commission to make that determination?

24 A. I don't think I am equipped to answer that

1 one. I think that would be a Brandon question.

2 Q. So based on your testimony, you talked
3 about new additional information as a result of
4 let's say an initiative by OCD.

5 So I want to ask you was there any
6 initiative that was more or less started by Apache
7 that you feel like they are fully committed to
8 addressing this problem?

9 A. I do not feel that they put in the effort
10 that we were looking for.

11 COMMISSIONER AMPOMAH: Thank you for your time.

12 COMMISSIONER RAZATOS: I have a couple of
13 questions.

14 CROSS-EXAMINATION

15 BY MR. RAZATOS:

16 Q. As stated in the September of 2024 -- and
17 forgive me. I believe I switched screens here, so
18 bear with me.

19 Slide 34 that Apache proposed, the five
20 wells plus the two additional, which is of what the
21 OCD proposed. I just want to reiterate, and this
22 may be a Mr. Powell question. I realize we've been
23 asking you a lot of those today. I apologize for
24 that.

1 Why do you feel that the Apache seven
2 wells are not sufficient?

3 A. Mr. Powell will go into significant
4 detail.

5 Q. I just want to make sure that we didn't
6 cross anything there. There was an intonation
7 yesterday that the OCD stopped communication.

8 Can you explain at your level when
9 communication stopped? I think we got the
10 impression that it stopped earlier in the year than
11 what your time line is showing. Can you kind of
12 tell us when communication stopped, in your opinion?

13 A. That final meeting that I attended, let's
14 figure out what slide that was. It would have been
15 late August.

16 Really, the conversation centered around
17 we went through significant detail working on the
18 map. Conversation centered around rationale. We
19 really expressed what we were looking for and what
20 we needed.

21 And when the the plan that came back it
22 did not reflect any of that conversation. I think
23 communication ceased.

24 Q. Another thing Mr. Moellenberg had asked

1 you. You had mentioned in your testimony that
2 between May of 2024 through July of 2024, and I
3 believe this is slide number, I want to say 31.
4 It's where you stated about the wells and the
5 rationale behind them.

6 You stated you needed significant
7 rationale to be able to propose these wells. Why
8 was there significant rationale needed?

9 A. Because typically this is not OCD's
10 responsibility. They have a consultant. But in
11 this circumstance we felt they needed a push.

12 Q. You said OCD had the consultant?

13 A. Apache had a consultant. OCD did not.

14 Q. It caught my attention as well. This was
15 the phrase that was used, ultimatum. And you said
16 you did not think it was an ultimatum.

17 What did you feel it was that was
18 presented from the OCD to Apache?

19 A. Again, I feel we were willing to negotiate
20 to some extent on locations, but we were looking for
21 a comprehensive plan, a complete plan. Short of
22 getting that, there was nothing left to review.

23 Q. And lastly in the questioning that
24 Commissioner Ampomah had, you were talking about, I

1 believe it showed the relief, it was Apache C.41.

2 This last one with all of the wells showing
3 on it, you stated that you felt that some locations
4 could potentially be negotiated, but that you still
5 have a lot of questions. So the OCD is willing to
6 work at going through some of these wells, is that
7 what you meant?

8 A. I believe so.

9 COMMISSIONER RAZATOS: I don't have any other
10 questions for Ms. Romero. Mr. Moellenberg or
11 Mr. Tremaine?

12 MR. TREMAINE: Nothing further, Mr. Chair.

13 COMMISSIONER RAZATOS: Mr. Tremaine?

14 MR. TREMAINE: Nothing.

15 COMMISSIONER RAZATOS: Thank you. We
16 appreciate it. We've been at it for about an hour
17 and 20 plus minutes.

18 If we could take a ten minute break, come
19 back at 10:30 and pick up again.

20 (Recess)

21 COMMISSIONER RAZATOS: This is an adjudicatory
22 hearing to contest the approval on Apache's scope of
23 work for the additional investigation in Lee County,
24 New Mexico. This is an evidentiary hearing.

1 We just finished listening to the OCD's
2 first witness. So Mr. Tremaine, I believe you have
3 another witness, correct?

4 MR. TREMAINE: Yes, that is correct. If I may,
5 the Division calls Mr. Brandon Powell.
6 Mr. Tremaine, your witness has been sworn in.
7 Please proceed.

8 BRANDON POWELL,
9 called as a witness herein, having been first duly
10 sworn, was examined upon oral interrogatories and
11 testified as follows:

12 DIRECT EXAMINATION

13 BY MR. TREMAINE:

14 Q. Good morning. Please state your name for
15 the record.

16 A. Brandon Powell.

17 Q. Mr. Powell, where do you work and what is
18 your job title?

19 A. I work in the Oil Conservation Division's
20 Aztec office. My job title is the Deputy Director.

21 Q. Are you testifying today on behalf of the
22 Oil Conservation Division?

23 A. I am.

24 MR. TREMAINE: I would like to start by

1 directing your attention to exhibits, and I would
2 like to share the screen for that, Mr. Chair.

3 BY MR. TREMAINE:

4 Q. Mr. Powell, did you prepare a curriculum
5 vitae for submission in this hearing?

6 A. I did.

7 Q. Is that what is labeled as Exhibit 3 and
8 displayed on the share screen right now?

9 A. It is.

10 Q. And this exhibit was prepared by you?

11 A. It was.

12 Q. Is it necessary to make any corrections or
13 updates to this exhibit that you are aware of?

14 A. Not that I'm aware of.

15 Q. All right. Did you also prepare a visual
16 aid presentation in preparation for this hearing?

17 A. I did.

18 Q. Is this what's labeled as Exhibit 4?

19 A. It is.

20 Q. And you prepared this exhibit?

21 A. I did.

22 Q. And is it true and accurate to the best of
23 your knowledge?

24 A. It is.

1 MR. TREMAINE: At this time, Mr. Hearing
2 Examiner, I would move admission of OCD Exhibit
3 number 3 and OCD number 4.

4 MR. MOELLENBERG: No objections.

5 COMMISSIONER RAZATOS: They have been admitted.
6 Thank you.

7 BY MR. TREMAINE:

8 Q. Mr. Powell, I would like to start off by
9 running through your presentation slide by slide and
10 providing a summary for the Commission here. So I'm
11 going to OCD Exhibit 4-0041, slide 41 in the exhibit
12 packet.

13 Could you please summarize the intended
14 purpose of this visual aid presentation for the
15 Commission?

16 A. This slide was set up as an overview of
17 the site as a whole, how we got here, what the
18 Division is doing. And I will go through it in more
19 detail in kind of why we're here today.

20 So summarizing it, this presentation
21 provides information received from Apache's history
22 of investigations in the area. A couple of things
23 I'll point out in that statement to date, a lot of
24 the information we're depending on came from Apache,

1 what Apache has done.

2 We're not disputing the prior soil
3 samples. I know that there's some corrections and
4 some COCs, those kinds of things. Overall, we're
5 looking at the information from Apache being correct
6 and complete. And that is the information we used
7 to make our decisions from.

8 We'll talk briefly basic rules and
9 principals of Part 29, which is the spill rule. A
10 couple of metrics to point out that the
11 investigation release area currently is over four
12 million square feet or approximately 94 acres. This
13 area contains a contaminated area of approximately
14 2.6 million square feet or approximately 60 acres.

15 Both areas have the potential to grow
16 until the site is fully delineated and abatement can
17 start on the release. The chloride ground water
18 limit is 250 milligrams per liter or background. I
19 have here that the contaminated area is over 20
20 times that limit.

21 Based on the results that we received on
22 the 8th of this month that is now, I believe, over
23 50 times that limit based on the current sampling
24 results.

1 Apache's ground water flows and
2 concentration contours drastically change after new
3 wells are set showing additional corrections needed.
4 The ground area continues to potentially degrade or
5 spread while Apache delays action. Again, this is
6 evident since we received the information in
7 January how several wells have degraded over that
8 amount of time.

9 The goal of the OCD is not to make any
10 final determinations. The actions are to continue
11 to expedite the delineation of the release, which is
12 one of the very first steps that should be taken
13 when classifying a release, a step Apache has taken
14 years to perform so far and has not yet
15 accomplished.

16 Going a little further in detail, there
17 was a lot of discussion about delineation and what
18 delineation means. I believe Apache is correct when
19 they state the north, south, east and west borders
20 are delineated. While not fully delineated, I think
21 we're close to delineating the exterior borders of
22 the release.

23 One of the keys to properly remediate
24 something and properly take the next steps is to

1 identify interior boundaries as well, which includes
2 finding your highest level of chloride, your highest
3 level of impact. I have reviewed probably thousands
4 either directly and indirectly of remediations. I
5 have reviewed hundreds of ground water abatement
6 plans over the years in the 18 years I've been with
7 the OCD.

8 One of the things you have to delineate
9 is where your concentrations are so then you could
10 properly plan a remediation step. Without knowing
11 where those concentrations are, it's hard to place
12 recovery wells or remediation wells in efficient
13 areas to effectively start that remediation.

14 On smaller ground water it is typically
15 easier and quicker to find, but the sheer mass of
16 this area makes that difficult. I'll dive into that
17 more as we go through the rest of the presentation
18 and why we selected the wells we did.

19 One other note. It's been mentioned a
20 couple of times that the Division or that Apache had
21 half of what OCD did as far as their conditions.
22 One time line I want to point out and make sure
23 we're all on the same page at, the overview is a
24 good place to put that. The OCD added 14 wells as

1 conditions to the original or to the five that
2 Apache had in May. So that is a total of 19 wells
3 that the Division was expecting to be drilled.

4 When Apache came back with the September
5 plan, they had a total of seven. So the Division
6 was looking at 19, and Apache came back with seven.
7 So that is well more than half. I'll let everybody
8 else do the math. There's a substantial difference
9 between 19 and seven. Talking more about the
10 communication chain I think is important in the
11 overview as well, why we got to where we did.

12 When OCD received the March of 2024
13 report, that report didn't propose any additional
14 investigatory actions other than continued sampling
15 in the area. If my memory serves me correctly,
16 Apache stated they want to monitor for an additional
17 year before they took additional actions.

18 And that discussion, OCD pressed that
19 they wanted more comprehensive investigation. So
20 Apache came back in April with four additional
21 wells. There was a subsequent meeting to that. OCD
22 again pressed that they wanted more comprehensive
23 investigation. Apache came back with five wells.
24 So only one additional well was added in May.

1 To help expedite the process, OCD took
2 that May report, they added the additional 14 wells,
3 the COAs, for a total of 19 wells that OCD was
4 looking to drill in the area. Apache submitted the
5 information that Rosa previously showed stating that
6 they wanted to meet and see if we could find common
7 ground.

8 So we met with Apache, and we again
9 emphasized the fact that we wanted a more
10 comprehensive plan. Apache assured us that they
11 would go back, review OCD's conditions and come back
12 with the more comprehensive plan. When they came
13 back with the more comprehensive plan in September
14 they went from five wells to seven wells. So they
15 added two of the additional 14 wells OCD was looking
16 for, which is not in my opinion a good faith effort
17 to address the concerns that was shown by those
18 additional 14 wells.

19 Each one of those wells had specific
20 reasoning why OCD wanted those. So two wells in
21 addition to what OCD had already reviewed I felt was
22 not a good faith effort. And I felt that
23 negotiations at that point had stalled.

24 Yes, there was an additional boring

1 around the original release point, around the
2 junction box in addition to that. And that may be
3 helpful with soil abatement. But to understand
4 ground water and concentrations of the area, I felt
5 that that was not a good faith effort at that point
6 and that negotiations had stalled.

7 So it was under my decision to contact
8 our legal counsel at that point and give Apache
9 essentially three options. They had the option of
10 either complying with the COAs, taking this to
11 hearing or the Division would look at a notice of
12 violation for failure to comply.

13 If you want to call that an ultimatum,
14 I'm fine with that statement, but it gave those
15 three options to comply. At the end of the day for
16 this release site, Apache is the responsible party
17 that OCD holds for this. The cleanup, the
18 investigation it should not be OCDs's burden to go
19 out and push and push and push. It should be
20 Apache's burden to go out and perform this
21 investigation.

22 And even though Apache in several
23 meetings has been cooperative, has added wells where
24 we have asked them to do, it has constantly been

1 OCD's push to get them in the room to have the
2 discussions to add those wells, to add those things
3 because original plans don't have those.

4 I say that, that is not from the release
5 when it originally happened in 2019. That's when we
6 started looking at the ground water concerns
7 starting in 2022 moving forward.

8 And those conversations were very
9 successful early on. It wasn't until that September
10 date that really those negotiations stalled, and OCD
11 felt time was of the essence. So instead of
12 continuing to belabor setting additional meetings,
13 again, two wells out of the 14 additional wells that
14 OCD approved or had as COAs did Apache pick up.

15 So to expedite that process, that is why
16 I gave the directive to legal staff to cancel
17 further meetings. So I just wanted to clear that up
18 upfront.

19 Q. Mr. Powell, you've given us an extensive
20 summary to go through. I want to examine a few of
21 these points with you before we move into the
22 presentation, like at the summary level.

23 You had referenced concentration
24 delineation. I believe you compared or contrasted

1 that to the next step of remediation. So can you
2 clarify for the Commission what you mean by
3 concentration delineation as the stage that we've
4 been in and what, in your opinion, the next
5 necessary step is going to be in response to this
6 incident?

7 A. So concentration delineation, really what
8 we're looking at at this point is understanding
9 where the chlorides are and at what levels.

10 So you find the core of your mass
11 contaminants from the core of your areas. Then you
12 can start looking at what remediation looks like.
13 Is it 20 recovery wells, is it two? You really
14 start looking at what that looks like.

15 The well that Apache proposed in their
16 plan, TMWs 27 was upgrade from the largest mass of
17 chloride that we had seen. Would it affect 27 from
18 an area of exposure? Possibly, but we don't know if
19 17 is the highest contamination point or if it's
20 down another 200 feet or 400 feet. We just don't
21 have that information yet.

22 So 27 may or may not effectively have an
23 effect. Is there an ongoing release. You could be
24 pumping out water as fast as it's being

1 contaminated. So understanding those particular
2 aspects are key. Soil columns, that is one of our
3 additional conditions we added to this. In each new
4 monitor wells, we're asking for composite samples
5 every 5 feet from the surface to the ground water to
6 see if we encounter another chloride contaminated
7 area in the soil that could be adding to this
8 situation because several of the wells that were
9 drilled to date did not have that level of
10 investigation.

11 So we could have drilled through another
12 core of contaminated soil and not known it. So
13 understanding that information, that is going to be
14 key to understanding how big an impact we're going
15 to have. How we look at recovery wells, how many
16 recovery wells we're looking for.

17 And those parameters are going to be key
18 if Apache and others wants to model it. Models are
19 based on key inputs. If you don't have key inputs
20 you typically don't have models, and I am not a
21 modeling expert, and I don't pretend to be, but I do
22 know you have to have proper concentrations to be
23 able to properly model.

24 if you would have modeled off of the

1 March report, that model would probably have been
2 totally different than if you modeled it off of the
3 January report because concentrations in key areas
4 went up two to eight times in key wells.

5 So looking at chloride loads in an area,
6 those models would have been vastly different on
7 overall levels of impact in those areas. And
8 something to point out when you're looking at
9 understanding that, when you're talking chloride
10 versus hydrocarbons because that was something that
11 Apache testified to earlier, they stated that there
12 would be more immediate concern if you were talking
13 free phase product.

14 Well, chloride is not free phase, but
15 chloride contaminates an entire water column. It
16 doesn't float on top, it contaminates an entire
17 water column because it is a dissolved constituent.
18 So you're not talking about contamination in the
19 inches or feet of a water column, you're talking
20 about a contaminated water column through the entire
21 column of that.

22 So understanding those constituents, how
23 far that is, where the highest levels are really key
24 to understanding what those next steps are.

1 Q. Mr. Powell, I think one last question
2 before we get into the next slides. What is the
3 significance, in your opinion, of OCD specifically
4 requiring TMW 17?

5 A. So OCD in the last events specifically
6 required TMW 17. And to be honest, it was in an
7 area that just didn't have prior information. And
8 it was a larger area in between those two wells. So
9 we required 17 to kind of close that gap, to see if
10 it was homogeneous in between the two monitor wells
11 that were mentioned in that COA or if there was
12 something different.

13 I think Apache's witness did a really
14 good job in providing that sometimes contaminants in
15 ground water, you have a gradient, but you can have
16 flows through that gradient in different areas. So
17 17 was to close a potential pathway or flow through
18 an area just to see if there was something there.
19 And lo and behold, we found the highest contaminated
20 well to date.

21 Q. At the time that was required, did OCD
22 expect in any way that you were going to get the
23 levels or the hit that we got for chloride or TDS?

24 A. We did not.

1 Q. I would like to move into the next couple
2 of areas of slides. I'm going to refer you to
3 slides 42, 43, 44, 45, 46. And without getting into
4 any legal determination, I'm going to ask you were
5 these provided for the Commission and the parties'
6 information as the relevant sections of statute and
7 rule that OCD relies upon in consultation with
8 counsel to respond to incidents and spills?

9 A. It is. Before we move along, I would like
10 to pull up 43 if you don't mind as a general
11 awareness.

12 Q. What is significant on slide 43?

13 A. 43 talks about one of the key aspects of
14 Part 29, which is site assessment and
15 characterization.

16 This is one of the platforms that OCD
17 needs to be able to understand a release, the
18 significance of the release, and the area of impact
19 that a release has. So this is one of the things in
20 Part 29 which is referred to as a spill rule that is
21 a very significant portion of that rule as to being
22 able to characterize the release as a whole.

23 And its full characterization, not just
24 delineation, but characterizing the release as a

1 whole so you know what your remediation plan is at
2 that point. So if you look at subsection C, the
3 characterization should come in with a proposed
4 remediation plan.

5 At this point in time, we don't have a
6 full characterization of the site to even propose a
7 remediation plan.

8 Q. So moving on from the authority into what
9 we have labeled as a current state of monitoring
10 wells. I'm going to direct you to slide 48,
11 Mr. Powell.

12 And please tell the Commission why this
13 slide is provided and briefly summarize the
14 significance of the slide.

15 A. I'll do that and then I have a favor I'll
16 ask. So this map was to give an overview of the
17 site as a whole, where we're at today. And I
18 apologize, the red lettering did not come out very
19 readable when we created it into an exhibit, but it
20 was to give the area as a whole what we're dealing
21 with, where we're seeing high areas.

22 And it's essentially what Apache had
23 shown in earlier exhibits. On this map, I'm going
24 to note the aqua blue color starting at TMW 7.

1 That's the junction box that Apache referred to
2 multiple times.

3 That is where the original release was
4 that OCD became aware of in 2019 that Apache took
5 actions on. So that release OCD seen at that time
6 through Apache's presentations was a soil only
7 release. The soil was investigated.

8 The soil was sampled. There was
9 extensive work done by Apache in that area. And all
10 that work was approved by OCD, and I will give
11 credit to Apache for taking those actions because
12 they followed all the procedures on a soil event
13 that OCD required and are typical processes.

14 The one thing I will point out in
15 monitor well seven, that is the area of the junction
16 box that originally was discovered. There's several
17 mentions that maybe there was historical releases in
18 that same junction box over the years that we just
19 didn't catch that may have contaminated ground
20 water.

21 The size of the plume of chloride
22 contamination we're looking at in this area is so
23 large I would be shocked if during the original
24 excavation in that area, if the chloride load was

1 from that area, that you would have enough
2 infiltration over the years to push the chloride low
3 enough where you would have not detected it in
4 monitor well seven area during original excavation.

5 So that is one of the flags that we had
6 especially when we keep seeing higher and higher
7 numbers. If you had that much produced water
8 flowing in that specific area over a large amount of
9 time you would have thought the soil concentrations
10 would have been so high that it would have required
11 additional delineation and action in that area.

12 One of the other things that was
13 discussed in excess was the high levels we're seeing
14 in the January 8th report. Maybe it was due to rain
15 and ground water flow because of that.

16 One of the things that has been
17 determined in this area, if you look at the
18 southernmost part of that aqua area is essentially a
19 tight land area where all that water in that area
20 flows to.

21 So that is where you have water
22 infiltration at. That water infiltration is west of
23 several of the key wells that increased, which
24 includes TMW 14 on the easterly boundaries. It's

1 west of TMW 17. And the flow in that area
2 theoretically should be flowing towards the windmill
3 west, towards the southwest.

4 So that is where your water influx
5 should be sitting. That is where you would have
6 your water infiltration at from your rain events
7 because I am not an expert, but I think you're
8 probably looking at inches of rain in the southeast
9 part of the state and not feet of rain.

10 So your infiltration, unless you get
11 ahead to push contaminants is very minor for
12 infiltration because the rain hits, it soaks in. It
13 heats up and evaporates. So unless you get water
14 accumulating in an area to cause a head to push
15 contaminants down infiltration is less likely in the
16 southeast part of the state just because they don't
17 get the rainfall event.

18 That was something that was discussed in
19 extense in the prior hearing in 2008 and 2013 when
20 looking at levels regarding that rule making. That
21 is why I am familiar generally with that concept.

22 Q. Mr. Powell, a couple of clarifying
23 questions to bring this to a head. If I am
24 understanding you correctly, OCD has a concern that

1 if there was a prior or a larger release from the
2 original release site near TMW seven, OCD is not
3 seeing an indication that there are ongoing or
4 release in the form of chlorides.

5 There are the not sampling to indicate
6 that there is chloride that is reaching the ground
7 water, correct?

8 A. That's correct. It is my opinion that if
9 there was chloride contamination to the extent we
10 just seen in the January report, we should have seen
11 it in that original excavation.

12 Q. Likewise, am I understanding that another
13 flag for OCD is that surface water flows downhill,
14 and we're not seeing an indication of concentration
15 of contaminants in the wells nearest to what's known
16 to OCD to be the lowest lying area related to the
17 original release site?

18 A. So to clarify that statement, water flows
19 downhill. And what we extrapolate from that, the
20 water flows the natural topography water channels in
21 area which has been determined to follow that path.

22 Once it sits, that's where you're going
23 to get potentially mounding from influx of water.
24 Those kinds of things, infiltration. We're not

1 seeing the mounding in the maps around TW-1, nine or
2 ten or even five. And those are the areas closest
3 to what has previously been determined as the
4 collection area for rain events in that area.

5 We're seeing it further to the north and
6 to the east around TMW 4, which is essentially
7 upgrading it from that collection area.

8 Q. Thank you. Are there any other items of
9 significance that we need to point out for the
10 Commission on this?

11 A. Not on this map, but I would like to go to
12 Apache's revised map because this map was intended
13 to be current state at the site.

14 And with the January information that
15 was submitted to us, this is no longer a current
16 state map. So I would like to go to this map here
17 on the screen.

18 Q. So for the record I'm going to direct you
19 to page three of what is Apache Corporation's notice
20 of errata. And this is page three labeled as Apache
21 Exhibit C 4.1.

22 Mr. Powell, could you please summarize
23 the significance of this slide that you had
24 previously referenced?

1 A. So this slide kind of shows everything,
2 the current state. I think Apache did a great job
3 in trying to summarize a lot of information in a
4 single slide. So I want to go through that.

5 There are several points I would like to
6 make as we go through that. So bear with me. So I
7 think this is a really important map that Apache
8 provided. I want to start with some of the wells
9 that we've seen increases on this map. The first
10 well I'm going to bring up is TMW 17. That's the
11 hottest well we've seen continuously to date.

12 At this sampling event, which was in
13 October, the chloride levels at that well went from
14 5680 to 14,900. That is almost a tripling of
15 chloride load in TMW 17. That is at a level not
16 previously seen in this entire area.

17 So if that chloride load came from
18 somewhere, it was an area that was not previously
19 detected, showing that original area of
20 investigation was insufficient in identifying your
21 core contaminants.

22 Moving to TMW 14, which is to the east
23 of 17, that water quality in chloride alone went
24 from 1810 to 7,790. So again, several

1 multiplication factors have increased. Again, at 14
2 that is at a level not previously seen in this area.
3 So again, if that level of contaminants was in the
4 area previously, the investigation was not complete
5 enough to identify a significant chloride plume
6 moving through the area.

7 Moving down to TMW 15, which is in
8 between those two, TMW 15 went from 2,160 to 7,160.
9 The very same statements regarding that well.

10 Q. I would like to summarize on this point,
11 Mr. Powell. You've heard the testimony throughout
12 the rest of the hearing, correct?

13 A. Yes.

14 Q. And have you reviewed the materials and
15 the prior reports submitted by Apache?

16 A. I have.

17 Q. Have you heard or read anything that
18 explains the change in the sample results?

19 A. I have not.

20 Q. I believe you had referenced TMW 5. Please
21 explain to the Commission the significance of the
22 map at TMW 5.

23 A. I have two wells I would like to explain a
24 little more, 5 and 18. So on five, and this is an

1 area getting close to the windmill.

2 So it went from 2,980 to 3,990. It's
3 an increase of a thousand milligrams per liter,
4 which is a lot lower than the other ones that I
5 previously mentioned. But it's significant because
6 you're getting closer to being up gradient from a
7 windmill and going up by a factor of a thousand
8 milligrams per liter, which is more up gradient than
9 the current surface concern in the area.

10 And then TMW 18 is very significant as
11 well because that went from 908 to 7,820 and why
12 that is so significant is because that's your
13 southernmost well that had a significant increase.
14 And why that is significant is because, again, we
15 didn't see those levels before any samplings, and it
16 is downgraded from all of our potential sources.

17 Again, chlorided don't float on top of
18 the water, they infiltrate an entire water column.
19 So for it to get to 18 through those gradients, it
20 would have had to move through 17 and 15 to get from
21 the original release area as described by Apache to
22 get to 18.

23 And you're talking several hundred feet
24 of movement through an entire water column to get to

1 18. That is not typical in a ground water case to
2 see that much movement in that short amount of time.
3 And I understand that's a difference between March
4 and October. So that is several months.

5 But when you're talking movement in
6 hydrology, that is an extremely fast movement in a
7 very short time. And that is one of the additional
8 reasons why the OCD is concerned that there may be
9 another source because movement from seven through
10 17 and through 18 in that short amount of time is
11 highly unusual.

12 Q. Mr. Powell, is there anything else of
13 significance to highlight for the Commission on this
14 map before we move back to your presentation?

15 A. I would like to point out a couple more
16 things. So the windmill, if you look at the
17 chloride contouring that is drawn on the map, you
18 see the windmill contouring that goes around 10,
19 around one and to the windmill as far as a chloride
20 level.

21 That is not super surprising because
22 drawing water will create a vacuum effect that will
23 pool concentrations in, but it's pulling from an
24 area to the east of it.

1 That means it's pulling contaminants
2 essentially towards it. We don't know how close
3 that movement is. And as we know from 18 in this
4 area, movement can happen rapidly. Again, 18 went
5 from 908 to 7,820. So that movement in this area
6 for some reason can happen extremely fast.

7 I know we talked about water quality
8 with different witnesses going through, but I want
9 to state I pulled averages on the windmill to see
10 where it was trending. In 2019, an average of
11 245.5. In 2020, it averaged 280.5. 2021, 251.
12 2022, 233. All of those were indicative of
13 background. 2023 it jumped to 359. 2024, it
14 averaged 505.5. So it's almost now doubled what it
15 originally started at.

16 The last sampling itself was 540. So in
17 2023, the trending started going in the wrong
18 direction, and we don't know how fast that is going
19 to change because look how fast the TMW 18 changed.
20 So we need to get an idea of what is going on with
21 the overall chloride load in the area, what the
22 risks to the area are so we could look at what we're
23 going to do for remediation.

24 I have one last thing I would like to

1 point out in the map. Look at the circle around
2 TMW 17, the 10,000. That is a fairly large circle
3 as far as contaminants over ten thousand. Again, we
4 heard Apache's expert talk about yes, you have
5 gradient, but you could have individual flow
6 patterns. You could have those kinds of things.
7 You could fit that entire circle between TMW 17
8 roughly following the gradient between TMW 16 and
9 TMW 18.

10 Between TMW 19 and TMW 18 and between
11 TMW 24 and TMW 23, you have hundreds of feet in
12 between those two wells, and that is why the OCD
13 required those wells. TMW 36, TMW 40 and TMW 41.
14 So that follows similar to what we did with TMW 17
15 the flow gradient in the area down gradient of 17 in
16 areas that could be missing again high
17 concentrations of contamination.

18 There's two wells on this map that
19 with Apache's addition may no longer be needed, and
20 I would like to point those out because the other
21 wells OCD evaluated in their evaluation before they
22 added the conditions of approval.

23 So Apache added TMW 30 to this. So that
24 essentially if you got 26 and 30 added there we

1 probably don't need 38 any longer or at least not at
2 this time. If you scroll up a little to the top of
3 the map, so originally OCD proposed TMW 31 in that
4 area.

5 Apache has since come back and proposed
6 TMW 29. So one of those wells is probably no longer
7 needed. If you follow the gradient arrow in the
8 area TMW 13 is your contaminated well that is close
9 on the northern edge.

10 Theoretically 31 is more in the climb of
11 the gradient than 29 is, but you don't need both of
12 those wells. Only one of those wells are likely
13 needed.

14 Q. Mr. Powell, if you would like to clarify
15 for the record, I imagine this is obvious on the
16 screen, but when you say TMW 30 as proposed by
17 Apache, you're referring to this well in the
18 southerly part of the state, but part of the map --
19 but that was actually labeled by OCD as TMW 39, and
20 you're not referring to the TMW 30 proposed by OCD
21 at the top of the map, is that correct?

22 A. That's correct.

23 Q. I want to make sure we're clear because we
24 have overlapping numbering in the proposals for the

1 wells. I believe that Apache's witness Mr. Graham,
2 has explained this.

3 A. The rest of the wells that OCD requested
4 as COAs, OCD is still requesting to fill in those
5 gaps in the investigation of where the most
6 concentration chloride columns are at.

7 So we can then take the next step for
8 remediation. Those wells are still potentially
9 hundreds of feet from the closest well. So we're
10 not talking small areas, and I will go into that
11 more. We're talking large areas that this gap fills
12 as far as what we need.

13 Q. Mr. Powell, I think I'm going to
14 transition back to the presentation now. I would
15 like to move to the overflow of Apache's ground
16 water flows and direct you to OCD Exhibit 4-0050.

17 I think you had referenced some of this
18 in your summary, but could you please point out for
19 the Commission, what in your opinion in reviewing
20 these reports is significant about these excerpts
21 from Apache's reports?

22 A. Yes. And there's a couple of details to
23 point out as well. So from a high level, these are
24 the ground water flow maps in the area based on each

1 sampling event that Apache has taken. These come
2 from Apache's reports that were taken as factual.

3 These are not maps that OCD created.
4 These are maps that Apache provided. So I want to
5 call your attention on each of the maps specifically
6 to TMW 4. So the map on the left, in 2022, the
7 direction around four is not showing a high pressure
8 area, and it is showing flow in the same gradient
9 we're seeing today.

10 And that was based on the number of
11 wells they had at that time. In the right map I
12 just highlighted the area of the 2022 area, in the
13 December of 2023 area in that yellow box. Again, no
14 abnormalities shown around four. There's some
15 shifts in gradient in specific areas. But again,
16 we're just getting more gradient information in the
17 area. And we are seeing slight shifts, but not
18 major shifts in the area. If we go to the next
19 slide I could further elaborate on that.

20 Q. Please do.

21 A. In this slide, I am re-showing the 2023
22 map and the gradient shown there that was just in
23 the prior slide. I am comparing that to the March
24 of 2024 map.

1 You see the area around four
2 specifically, all of a sudden you have what is
3 considered on a mounding effect where four instead
4 of being part of the grading of the area, generally
5 you're seeing four as a mound at this point or a
6 high spot in the water, which is an abnormality from
7 all the prior sampling events, which is highly
8 significant.

9 The other thing to also note in the 2024
10 event that is kind of an abnormality is the gradient
11 around the windmill is showing now kind of a
12 southeast flow, but if you remember the chloride
13 rings that were on Apache's map showing the chloride
14 moves towards the windmill, that would be contrary
15 to what they're showing in the March of 2024 map as
16 far as gradient flow.

17 Q. Mr. Powell, we heard some testimony.
18 You're saying mounding. We're on the same point. I
19 heard from that testimony yesterday some testimony
20 and some questions about mounding at TMW 4.

21 Do any of these maps give you any
22 concern about mounding in that location?

23 A. So TMW 4 gives me a high concern for that
24 area. It's up gradient to where you have ground

1 water influx. It didn't show in previous sampling
2 events. All of a sudden it popped up in the
3 March 2024 report as an abnormality.

4 When they went back and resampled in
5 October of 2024, that mounding is still there. So
6 it's not just an incorrect calculation around four.
7 It's a continuation of mounding in that general area
8 which gives me concern that there may be an active
9 release in that area and that could also be part of
10 why you're seeing the major jumps in chloride
11 loading in TMW 17 and nearby wells.

12 Q. I am going to move on to the next slide,
13 Mr. Powell. What is on slide 52?

14 A. Slide 52, again is that March of 2024
15 report on the flow paths. Again, I think that we
16 hit it in the prior one. It's just a more blowup
17 area shows the flow paths. To note, number 13 is
18 contaminated. If you look from the flow path, I
19 think we talked about that.

20 The prior witnesses talked about that
21 extensively, so I won't dive into that. I think
22 some of the up gradient wells that OCD and Apache
23 proposed is going to vent that out more to see if
24 that was caused from a cross gradient flow or from

1 potentially another source up gradient from that
2 well.

3 Q. I'm going to go on to the chloride
4 concentrations, the contours. We're moving on to
5 slide 54.

6 Mr. Powell, what is depicted on this
7 slide?

8 A. So the concentration contours from
9 sampling events that Apache has taken in the area
10 and how they have evolved over time.

11 So if you look at the concentration
12 contour maps as we have gained more information as
13 time has gone on, we have seen shifts in what those
14 contour maps have done because we have learned more
15 information with the area. There has been some
16 increases, but up until this point they were not
17 massive increases, they were slow progressions. The
18 TMW-5 found a high contaminant level.

19 It was kind of at that point that it
20 really spurred the thousand chloride, hey, there's
21 something else going on potentially out there.
22 TMW-6 being over that thousand. That was
23 concerning. Some of those other levels prior to
24 that as could be discussed were above potential

1 background, but they were nominally above
2 background.

3 So we were taking some time to
4 understand that. So as we hit five and six, those
5 levels went up, which spurred us to look at it
6 further.

7 Q. Mr. Powell, I'm going to direct you to
8 slide 55. Is this the continuation of the same
9 contours from the previous slide from a later date?

10 A. It is. This is as information has
11 progressed. So you look at the left hand side.
12 This is December of 2023. It's the chloride contour
13 maps provided at that time. And then on the right
14 is the March 14, 2024 chloride map from that
15 sampling event.

16 As you could see, even in that time
17 period, there was shifts in chloride contouring that
18 Apache provided showing that there were changes
19 potentially going on in the area that we didn't
20 understand why it was changing or the chlorides were
21 moving. Why they were contouring quite the way they
22 were. You have wells increasing and decreasing.

23 So 14 was one of the wells that we
24 pointed out previously that went over 7,000

1 chlorides. Well, in December it was 2500 and March
2 of 2024, it dropped to 1810. So it was trending
3 down before it rended back up.

4 So because of that in the area, there's
5 movement of the chloride that we don't fully
6 understand at this point. You look at 18, which was
7 the key well I pointed out previously in December of
8 2023 it was 2000 and in 2024 it was 908. So it was
9 trending at decreasing before. Then it trended at
10 increasing.

11 Typically, when you have a chloride
12 plume moving through water or contamination plume in
13 general you're going to see the plumb move through,
14 and it is going to go up until the plume moves all
15 the way through. Then it will go down.

16 Unless you have multiple plumes moving
17 through an area, multiple events sources moving
18 through an area you shouldn't see a lot of
19 variability. As the plume is moving through, you
20 would see an increase until it moved through and
21 then you would see a decrease unless you're on the
22 outer edges of a plume. As the plumb goes in and
23 out, you could potentially see some of those rise
24 and fall, but again we're looking at extremely high

1 levels in some of these areas.

2 And if you are on the outskirts of a
3 plume, that's concerning. 18 rising and falling
4 like it has could be indicative we're on the
5 outskirts of a major plume. Whether that is to the
6 east or west I don't know. Or it could be that
7 we're tracking multiple plumes through this area.

8 Q. Mr. Powell, there's been extensive
9 testimony and questions about this concept of a
10 chloride plume in the ground water.

11 If chlorides are getting into ground
12 water, in your experience what are the basic
13 mechanisms for those chlorides even getting to
14 ground water in the first place?

15 A. So I have not seen anything proposed by
16 Apache that this area has natural chloride
17 concentrations. So the way the chloride would be
18 getting to water would be coming from a source
19 infiltrating down through the soils to get to the
20 water or flowing from somewhere up gradient into the
21 area.

22 Our reviews showed Apache's
23 infrastructure was the only infrastructure in the
24 area that would carry or produce water. If you have

1 natural gas, for instance, it's not going to carry
2 or produce water.

3 If it is, it's going to be at minimal
4 amounts. So initial reviews by OCD showed that
5 Apache had all the infrastructure in this area that
6 could contribute to produce water. So the pathways
7 would be potentially be from a release unknown
8 exactly where or at what time period because we
9 haven't fully identified that area yet. And
10 infiltrating into the soil to get into the ground
11 water and then flowing into the ground water column.

12 Q. Is it possible that there is a pocket or
13 pockets of chlorides in the soil that are leaching
14 into the ground water, but there is not an
15 additional ongoing release?

16 A. It's possible. The changes that we have
17 seen in January 8 in the chloride levels are
18 concerning. For that much additional chloride to
19 leach into the ground, I don't think it's possible
20 from a preexisting release that is not active unless
21 we didn't previously identify the core of that
22 plume.

23 If we didn't identify the core of that
24 plume, then it could be the plume moving through.

1 If TMW 17 previously identified the core of that
2 plume, then I don't see how you could have leached
3 that much chloride into the water and then have it
4 move to that extent from a prior release.

5 So in my opinion, it's one of those two
6 actions that are probably at play is either you
7 didn't identify it previously or you have something
8 else adding to the area, which is a concern.

9 Q. On that point, Mr. Powell, if there's a
10 core area of chloride contamination not previously
11 identified in soil that just leached into the ground
12 water through some events, what would be the
13 necessary remediation step needed and ongoing steps
14 to contain that contamination?

15 A. So if you got a chloride column in the
16 soil that is leaching into the ground water table,
17 you have to address that to stop that leaching
18 because it will have infiltration over time, and
19 that was one of the conditions we added to the
20 conditions of approval was for all future monitoring
21 wells to be drilled taking samples, composite
22 samples every 5 feet to see if we drilled through
23 something that is contaminated.

24 At this point there are several of these

1 wells, we drilled these test wells and it wasn't
2 something that OCD asked for before, and it was not
3 a concern previously. We thought we knew the source
4 until we didn't.

5 We could have drilled TMW 4 or 5 or
6 TMW 17 for that matter through a chloride column in
7 the soil and we don't know it because that is not
8 something that previously was being performed.

9 I think we are probably looking at a
10 chloride column whether around the junction box or
11 somewhere else that we didn't previously fully
12 define because even if there's no additional
13 chloride leaching into the ground water at the
14 moment, the release size of the water had to be so
15 massive that that soil is still contaminated because
16 you didn't remediate around the junction box in an
17 area large enough to remediate an area that would
18 have caused this scale of contamination.

19 Q. Now, Mr. Powell, the other potential that
20 we just discussed was an ongoing release. If
21 there's an ongoing release causing this ground water
22 contamination, what are the immediate response
23 actions that are necessary to contain that release?

24 A. Shutting off the source. A lot of these

1 are in near pipelines. So that was one of the
2 things in discussion with Apache, and it was a
3 condition that we had previously.

4 I think we're going to work with Apache
5 separate from this hearing to address with the new
6 operator of the area to look at pressure testing
7 those lines in the area just to insure that it's not
8 a current ongoing release because that is a number
9 one priority.

10 If it is an ongoing release, shutting
11 off that source. So then we could mitigate what's
12 already been released.

13 Q. So based on that the immediate response
14 actions we've just discussed, regardless of the
15 potential source and forget what Apache has
16 submitted to this point, if OCD were to have to tell
17 Apache where to go digging to isolate or remove
18 contaminants or identify and prevent a source of
19 further contamination, based on these maps could you
20 tell Apache what they needed to do to prevent this
21 ongoing ground water contamination?

22 A. No idea. I couldn't tell you anywhere
23 inside of this exterior boundary where to go start
24 digging. And at the same point even on the ground

1 water remediation I couldn't tell you where the best
2 place to put a remediation well is at this point
3 because I don't know where the largest source of
4 contamination is.

5 We assume it is 17, but around 17 if
6 you look at the scale of this map, the closest well
7 is probably 300 feet away. So we don't know if 17
8 is the highest point in the area. We just know that
9 it's the highest point that we've seen to date.

10 Q. Mr. Powell, is there anything else of
11 significance on slide 55 to identify for the
12 Commission?

13 A. No, I think we pretty well covered it.

14 Q. I want to move on to the OCD's conditions
15 of approval. I am going to direct you to slide 57.

16 Mr. Powell, if you would please remind--
17 you provided some of this in the summary, but please
18 remind the Commission of when and why OCD issued the
19 conditions of approval?

20 A. So going over the time frame again, just
21 when and why, in March of 2024, we looked at the
22 report that Apache provided.

23 It provided no additional investigatory
24 actions other than continued sampling. That was a

1 concern. So we met with Apache and expressed that
2 concern. In April they came back. They proposed
3 four wells.

4 Again, OCD didn't feel that that was
5 sufficient enough and expressed our concern in that
6 meeting. And so in May, they increased it to five
7 wells. Again, OCD felt that making positive
8 traction was not what we were seeing based on the
9 level of concern that OCD had, and OCD expressed in
10 those meetings.

11 However, in May they gave the map. They
12 gave the five wells. We agreed to Apache we would
13 review those five wells and review the situation.
14 And internally I directed the staff to review those
15 and that if we had additional wells at that point we
16 would add them as conditions of approval just to
17 help expedite the process because between March and
18 May were a couple of months if we increased by one
19 or two wells each month, again, it's going to take
20 several meetings, a lot of staff time to get to
21 where we need.

22 So we took that report. We went back,
23 and we reviewed it and then we added conditions and
24 I expressly asked the staff to include the reasons

1 for each condition so we could make sure that Apache
2 understood why we were adding those wells in the
3 areas we were.

4 Q. Mr. Powell, when push comes to shove why
5 did OCD determine that it was necessary to
6 transition from asking for additional investigation,
7 delineation of wells, what have you through less
8 formal communication and moving into issuing
9 conditions of approval in a formal manner through
10 OCD permitting?

11 A. We just were not seeing the progress we
12 were hoping to see, to be frank, for the area. We
13 didn't go into May stating we wanted 14 additional
14 wells. We didn't explain that to Apache because we
15 didn't know exactly how many we were going to end up
16 with, but in those prior meetings we did emphasize
17 we wanted to see significant investigation in the
18 area because of the levels we were seeing were
19 concerning.

20 You're talking at that point we seen
21 5600 chlorides in TMW 17, which is multiple times
22 above the regulatory guidelines. You have several
23 hundred feet between it and the closest wells. So
24 there's a big area in that area that was a potential

1 concern, and we didn't know what it looked like.

2 And we were not seeing the progress in
3 those meetings that we were wanting to see as fast
4 as we wanted to see it because it was a concern to
5 see those kind of levels and ground water flows.

6 Again, I mentioned, we're not talking
7 about free phase product of hydrocarbons. We're
8 talking about a fully dissolved column of ground
9 water in the area because of chlorides. So that
10 could be tens of feet or hundreds of feet depending
11 on the water column.

12 I believe in this area is the Ogwala
13 (phonetic) formation. I'm not a geologist, but I
14 believe I saw that in one of the reports, which is
15 a major water source in that area, and we have a
16 major impact at that point that we're monitoring.

17 Q. Was there a point in time when OCD became
18 concerned that due to how things progressed to date,
19 it may need to transition from a collaborative
20 process to an enforcement posture?

21 A. So that point came after we issued the
22 COAs and back and forth with Apache. We tried to
23 negotiate those COAs in good faith to again look at
24 additional wells in the area to properly address our

1 concerns. And when they came back and just added
2 two wells, so they went from five to seven. So
3 again, with our COAs and those original five, we
4 were at 19. They came back with seven.

5 I didn't feel that was a good faith
6 effort at that point. So that is when it
7 transitioned to a potential enforcement action or
8 they had to comply with the COAs as previously
9 provided.

10 Q. Mr. Powell, several of these slides in a
11 row are continuations of conditions of approval. I
12 want to ask generally, we have talked at length,
13 both parties have talked about the map, particularly
14 Apache's very useful CD dash 4.1.

15 Is there anything else we need to
16 discuss of significance in the text of these
17 conditions of approval?

18 A. So I think that we already addressed the
19 changes that I think the division looks at with the
20 additional Apache wells that would affect the
21 conditions that OCD had for the conditions of the
22 nearby wells in those areas.

23 So I would scroll down to slide 60,
24 which starts the additional conditions and why those

1 were added. Condition two and up to date.

2 It is a map showing proposed monitor
3 wells and the statement of work, that map I would
4 say was accomplished with what Apache provided in
5 this hearing. But it would have to be updated as we
6 go forward. Quarterly monitoring collected to the
7 present, summary table and lab analysis are
8 sufficient.

9 I would mention in 2024, Apache took two
10 samples or had two major sampling events in March
11 and then in October. So that is not a quarterly
12 sampling event even though that is what had been
13 proposed. I understand there was a lot of
14 negotiations in between there.

15 Some part of that probably got lost in
16 those negotiations, but I do think that it's
17 appropriate to point out in 2024 we did not have
18 quarterly sampling events.

19 Q. Could I stop you before moving on and ask
20 to clarify, based on the fourth quarter sampling
21 results and your review of that information we have
22 already discussed, some of the numbers jumped up
23 quite a bit.

24 Do you believe that quarterly sampling

1 time frame is still appropriate?

2 A. I think it is. I think we probably need
3 to communicate in a quicker manner between the
4 parties. Once that sampling takes effect I think
5 OCD getting some of the raw data may be helpful
6 because of what we're seeing.

7 For example, the last sampling that we
8 received January 8th, the chloride in the TDS was
9 sampled, and the report was generated in October.
10 If I remember correctly, looking at the page from
11 Apache's exhibit, that report was generated by the
12 lab on October 31.

13 So Apache had the raw data roughly
14 around that period showing that those wells
15 extremely increased in the area. And as testified
16 to yesterday, there was no actions taken by Apache
17 once that was discovered.

18 Q. I believe we had some discussion yesterday
19 about likely delayed response due in part to the
20 timing of the sampling between chlorides and TDS
21 results and 3103 results.

22 So I want to ask you is there anything
23 in the conditions of approval for the wells that we
24 just discussed that require additional 3103

1 constituent monitoring?

2 A. So there is, and that kind of touches on
3 condition four and five. One of the things that was
4 detected, and I believe it was TMW 17 was cyanide
5 above regulatory limits.

6 So that assessment needs to be done in
7 the wells surrounding that to see if those are also
8 contaminated to that point. We have seen some early
9 barium hits in the windmill. Looking at that again,
10 we believe that was a conversion error, and it
11 wasn't above standards, but we have seen some
12 exceedances in the 3103 based in the January
13 sampling event.

14 It wasn't addressed in our prior
15 conditions addressed here. So it would be something
16 I would expect Apache and OCD to discuss in future
17 sampling events going forward because of that
18 constituent.

19 Q. Is there anything else of significance
20 that needs to be pointed out in the remainder of the
21 conditions approval on this slide?

22 A. I think we hit the samplings for composite
23 samples as they drill. Drilling commencement within
24 90 days. I think we hit all of those in previous

1 slides.

2 Q. I am going to move on, and we're going to
3 talk about some of the well locations. Some of this
4 you addressed in your summary, Mr. Powell. So if
5 we're going over material unnecessary, feel free to
6 move us along.

7 I want to ask you on slide 62, we have
8 seen this map before. What's the significance or
9 importance of including this map again on this
10 slide?

11 A. So we are kind of changing gears again
12 from the conditions. We're going to look at the
13 site holistically again.

14 Again, this was the most up to date map
15 that I thought was out there when we created the
16 slides. So it's just to bring the Commission's
17 attention back to the area in general.

18 Q. Then moving on, we have two maps here on
19 slide 63. Please explain why these were included
20 for the Commission.

21 A. So these I actually took Apache's map. I
22 took their scale and I tried to depict the areas
23 that we were looking at as far as size.

24 These are general areas. I put them up

1 as squares because it's easiest because you could
2 always cut off some small corners. But really on
3 the left-hand side I took the outer northern limits
4 and southeast and west limits and seen the wells
5 that we had impact in to depict the beige color on
6 the left.

7 So you're looking at an area 1950 feet
8 tall by 1340 feet wide. The area on the right in
9 the pink, that is on the outside of that is the
10 additional area that we have investigated to date
11 showing clean samples that we have seen to date,
12 showing that the investigative level is slightly
13 above the area we're at.

14 You notice the beige square on the
15 bottom of the map does go to the edge of the pink
16 area, showing that we do not have a buffer on the
17 southernmost limits of the impact.

18 Q. So do you recall during earlier testimony
19 I believe one of Apache's witnesses indicated they
20 felt that the external, the perimeter of the quote,
21 unquote, chloride plume had been delineated.

22 Do you recall something to that effect?

23 A. I do.

24 Q. Do you agree that the beige box here

1 represents that we likely have a handle on the
2 exterior perimeter of the chloride plume in ground
3 water on the north, east and west sites?

4 A. A couple of caveats. The east and west
5 site, I would agree. We're not looking to continue
6 exterior delineation there.

7 I think on the north side TMW 13 did
8 have an elevated level. There is no current wells
9 potentially directly up gradient from TMW 13. It's
10 kind of on the northeast corner of the tan box for
11 reference. So there's no wells directly upgrading
12 it to that, so that potentially could move up.

13 And then the southern limit is not fully
14 defined at this point because TMW 23, I believe,
15 and it's hard to read this map, was over a thousand
16 chlorides.

17 Q. So in terms of the strictly horizontal
18 extent of the plume currently, there needs to be
19 further delineation to the southern extent until we
20 get to background.

21 Is that a fair characterization?

22 A. It is. And the wells, OCD, and I will hit
23 that a little further. The wells OCD proposed west
24 of 23 and I believe east of 23 is 25 down on the

1 bottom sufficient because 25 is one point several
2 hundred feet away.

3 And you're talking about hundreds of
4 feet to the east of 23 that could be contaminated
5 and hundreds of feet west of 23 before you get to 24
6 that could be contaminated. So I don't know if 25
7 is going to detect that or not because it's one
8 point several hundred feet away.

9 So that is why the OCD, and I will show
10 shortly proposed additional wells in those areas.

11 Q. In that case, I will move to slide 64.
12 Mr. Powell, what is represented on this slide?

13 A. So this slide was an attempt to provide
14 the Commission with some scale. Sometimes when
15 we're talking about sites that are out in the middle
16 of nowhere it's hard to relate scale and understand
17 what you're looking at. So on this as an overlay of
18 where we're sitting today as a reference, in the
19 bottom left hand corner you see the 1220 South
20 St. Francis Drive address in that scale.

21 So that is the Wendell Chino building
22 and its parking lot. As you could see, that is a
23 small piece of the overall scale of what we're
24 dealing with today. So if the Commission wants to

1 understand truly the area we're looking at it
2 includes several state buildings, includes a soccer
3 field. It goes by Trader Joe's. It's a massive area
4 looking at that scale.

5 So that is what the left picture shows
6 is that general scale for the Commission's
7 understanding of what we're dealing with at this
8 site. The right picture identifies where all the
9 wells are currently located. So the blue wells are
10 the blue points that are showing where existing
11 wells that were testing clean in March were.

12 The red wells are wells that we're
13 testing above chloride levels at that time. I did
14 miss two wells on this. I missed the windmill well,
15 which is directly below the three blue wells on the
16 west side that are in a line. So it's about where
17 your curser is right now where you moved it. So the
18 windmill well is right there.

19 And I did miss TMW 27, which is the
20 proposed well by Apache that is directly north of 17
21 slightly. And I did pick it up in further slides,
22 so I will show that shortly just as far as where
23 TMW 27 is.

24 But if you look at that scale as far as

1 what we're dealing with, downgrading of 17, we have
2 half of the state building that is around 17. We've
3 got the tax building south of that road. We have
4 all of that parking lot in that state building and
5 the Chino building that doesn't have a single well
6 in it for scale.

7 So you have a massive area down gradient
8 of your most contaminated well without a single well
9 in it. So I think this just gives an overall
10 understanding of the size of scale of the area we're
11 looking at.

12 Q. Mr. Powell, how common is it that you have
13 come across this in reviewing site characterization
14 and delineations that have dealt with impacted area
15 of this size?

16 A. I would say that it's extremely uncommon.
17 Typically you're looking at areas the size of a well
18 pad, slightly bigger than that as it moves.

19 You catch things fairly quickly. When
20 it surfaces, so ground water impacts are more
21 limited. So something of this size I would say is
22 more uncommon.

23 Q. Have you heard or read anything in the
24 materials leading up to this hearing that explained

1 the volume of produced water that would be necessary
2 to be released to impact an area of this size?

3 A. I don't, and I don't know that we could
4 calculate that today because we don't know the
5 maximum levels.

6 We don't know the extent of the plumes
7 where those contours really are because we're
8 hundreds of feet in between there. I think it would
9 be hard to identify. I would say that it's massive,
10 but I don't know to what extent or even if it can be
11 calculated today.

12 Q. Mr. Powell, I'm going to move on to the
13 next slide, number 65. What is depicted on this
14 slide?

15 A. Again, this is trying to show scale to the
16 Commission. Ground water flows, I used the March
17 ground water flows because that was the most up to
18 date when I created this slide.

19
20 I overlaid that with the area in
21 Santa Fe here where we are just for understanding
22 what it looks like with the wells that are here
23 today on the left hand map. So you look at TMW 17,
24 it's flowing the ground water flow in the area goes

1 south to southwest and that is an impacted area.

2 You look at 18 again, it sticks to the
3 southwest. So the contamination we're seeing at 18
4 today, the TMW, and I can't read it, the very bottom
5 right in the middle would not be directly down
6 gradient, it would be down and across.

7 And 18 is now a significant concern in
8 the area. It includes -- and again, I'm staying on
9 the left hand side. It includes the proposed wells
10 except for TMW 27, as I previously mentioned where
11 Apache proposed to put in wells in the general
12 vicinity of these wells.

13 As you could see, there's nothing to the
14 west of 18 which is the ground water flow of the
15 area. There is really nothing more proposed to the
16 south of 17 along that gradient.

17 So there's some things to the east and
18 that will help define that area, but there's still
19 major gaps in that area. Again, 17 is your highest
20 area. It is an area that OCD focused on extensively

21 On the right side with the yellow dot
22 with the circle on it where OCD proposed additional
23 wells, you could see there's down gradient of 17
24 with one actually at the bottom being down gradient

1 17 and 18.

2 There's a well east. That is 25, but I
3 could be wrong. To see if that chloride
4 contamination extends east of that well because,
5 again, we have one point in the middle of hundreds
6 of feet. The ones around 27 are trying to identify
7 the extent of that plume and to see if we're dealing
8 with the most concentrated areas at 17 or if we're
9 at an outer edge of that concentrated area. Again,
10 trying to identify the situation like came up in the
11 January 8th permit where levels extremely rose in
12 between sampling events. Is that something that was
13 there all along or is that something new.

14 We don't know because we didn't have
15 enough wells in between to show if there was
16 previously chloride in the area that high or if this
17 all new chloride impact.

18 Q. Mr. Powell, the last couple of exhibits
19 have been overlays of multiple maps. So I want to
20 ask for clarification for the Commission.

21 How and what did you use to prepare these
22 slides?

23 A. So the gradient maps and the overall site
24 map I pulled from Apache's information. The scale

1 of the maps of those maps I measured used Apache
2 scale to get the dimensions in the boxes.

3 Then I applied the general dimensions
4 of the boxes using Google Earth. And the scale on
5 it to get the overview of where we're at today to
6 get the general area to show the Commission what
7 that really looks like.

8 Q. Mr. Powell, I'm going to go to slide 66,
9 another set of overlaid maps. Please describe the
10 contents of these slides for the Commission.

11 A. So the left hand slide is basically what
12 we just went through. So I will skip that.

13 The right-hand slide is to go over where
14 OCD picked additional wells. I apologize. I didn't
15 number these. But just for general reference, those
16 are the wells that OCD had, and the conditions again
17 as previously discussed for Apache's TMW 30 well.

18 The proposed well just slightly north
19 and a little east of that one, OCD feels that that
20 may no longer be needed.

21 Q. May I interject. When you say these wells
22 represented here, are you referring to the bull's
23 eye red and yellow dots are the approvals?

24 A. That's correct.

1 Q. Where my curser is above TMW 30, is that
2 the well you were referencing that may be able to be
3 removed?

4 A. Correct.

5 Q. Or moved?

6 A. Or moved, that is correct. And I would
7 say the same thing around TMW 29 to the east of 29,
8 I would say.

9 Other than that, OCD still feels the
10 rest of the wells are needed for the reasons given
11 in the proposal. And those wells, for the most part
12 there are one or two towards the outer edges are not
13 to define the outer edges of delineation, it's to
14 truly understand what we've got inside of that outer
15 edge delineation.

16 You could see that there's four wells
17 kind of directly around 17. To understand, are we
18 on the edge of a plume on 17 or in the middle of it.
19 It's kind of interesting. I picked this before the
20 January 8th report came out, but you have a well
21 between 14 and 15. That is going to help define
22 where that contamination is there.

23 Again, 14 or 15 dramatically rose in
24 between here. If I was to pick one today, I would

1 pick one north of 14 as well because of the impact
2 levels we saw at 14. Maybe something between 14 and
3 31 because directly up gradient between 14 and 31
4 you're looking at an area 500 or 600 feet. So the
5 wells I proposed here that we proposed other than
6 the two wells mentioned, I still feel are needed in
7 the area to properly investigate where the chloride
8 columns are as of today.

9 Q. It's fair to say Mr. Powell that these
10 wells are proposed in order to enable OCD to say
11 with some degree of confidence where a line has to
12 be shut off or where they have to dig or take some
13 other remedial action?

14 A. I can't even state with confidence that
15 we'll know that after drilling these wells. I think
16 these are the wells that are needed for that next
17 step, but as far as where to shut off the line,
18 where to put in remediation wells, these should help
19 with that process.

20 But there may be some more fine tuning
21 there. That is something we could ask Apache and
22 their consultant after drilling these wells and get
23 those levels. Are we confident to go in and start
24 remediation in the area or is there another gap.

1 I think up to this point that's the
2 problem that there are more questions than we can
3 answer where we can't start that remediation.

4 This is an attempt to get some
5 information so maybe we could start down the
6 remediation path and remove this site out of 29 into
7 30 so we could truly start looking at ground water
8 remediation.

9 Q. Earlier you referenced that most site
10 characterizations and delineations that you reviewed
11 have been closer to the size of a well pad, and I
12 think we have heard some testimony to the effect of
13 Apache believes that the number of wells is abnormal
14 and not reasonable in their opinion.

15 Would you agree that for an impacted
16 area the size of a well pad 40 monitoring wells
17 could potentially be excessive?

18 A. I would say yes. Are the wells we're
19 proposing abnormal, absolutely. Is the area I think
20 we're covering abnormal, absolutely. Are they
21 excessive? I don't think so.

22 I think at the end of the day we're
23 probably going to have more wells in the area.
24 Hopefully they are all recovery wells, and we don't

1 have to continue investigation, and we could start
2 down the remediation path.

3 But I think these wells are necessary.
4 Could there be one or two wells in this area that
5 don't provide significant information? That is
6 possible. But even if you show the similar
7 information, you give a definite area of knowing
8 that is what it is in the area as far as
9 quantitatively.

10 It's all going to be information to
11 identify how big of an area you're looking at, and
12 the attempt was to hopefully get enough information
13 where we could move down the path because again,
14 chlorides are moving through an entire water column
15 as Apache -- and I hate to keep bringing it up.
16 Apache mentioned if it was free phase hydrocarbons
17 they mentioned they may be more attentive to it.
18 Chlorides are dissolve phase. So you're
19 contaminating an entire column as it moves through.
20 I see this as being as much of an immediate concern
21 as several feet of free phase hydrocarbons moving
22 through the area.

23 Q. In your experience while the number of
24 wells may be abnormal, is it OCD's position that

1 they are commensurate with the size of the impacted
2 area?

3 A. It is. I would clarify that. If we would
4 have known how big the area was originally, we could
5 have probably redesigned this into a perfect world,
6 and it would look different. But it has been
7 continued ongoing process of trying to collect
8 information, and I think that is what the Division
9 is attempting to do here.

10 Q. I would like to now draw your attention to
11 slide 67.

12 COMMISSIONER RAZATOS: Mr. Tremaine, may I
13 interject. Is this a good transition spot maybe for
14 a lunch break?

15 MR. TREMAINE: Actually, I was just on
16 autopilot. We're done with the presentation. Slide
17 67 is a different exhibit. So I think we could come
18 back and wrap up with a couple of questions and then
19 make Mr. Powell available for cross-examination.

20 COMMISSIONER RAZATOS: Why don't we stop for
21 lunch. Let's come back at 1:10.

22 (Recess)

23 COMMISSIONER RAZATOS: We're back on record for
24 case 24912. Again, this is the application for

1 Apache Corporation for an adjudicatory hearing to
2 contest the Division's conditions of approval on
3 Apache Corporation's scope of work for additional
4 investigation in Lee County, New Mexico. It is an
5 evidentiary hearing.

6 Mr. Tremaine, we left off with you and your
7 witness, Mr. Powell. So we'll let you continue from
8 here.

9 MR. TREMAINE: Thank you, Mr. Chair.

10 BY MR. TREMAINE:

11 Q. Mr. Powell, we've gone extensively through
12 your slide deck now, and I want to ask in summation
13 if at this point in time and after everything you've
14 heard during the course of this hearing leading up
15 to this hearing, when you look at this matter from
16 an enforcement and regulatory standpoint, do you
17 still believe it is necessary that as a result of
18 this hearing, there is an order issued with
19 definitive investigation requirements with the
20 certain deadlines?

21 A. I do.

22 MR. TREMAINE: Mr. Chair, I don't have any
23 further questions, I would like to kind of wrap up
24 the discussion of our rebuttal exhibits.

1 COMMISSIONER RAZATOS: Sure.

2 MR. TREMAINE: So you may have noticed we
3 skipped OCD rebuttal Exhibit 8. We believe that the
4 discussion yesterday with Apache's witnesses
5 adequately addressed the questions and that
6 presentation is not necessary. OCD rebuttal 8 is
7 withdrawn.

8 We also as previously discussed are
9 withdrawing OCD Rebuttal Exhibit 9. I want to make
10 quite clear for the record that we've had what I
11 think this morning are our good faith discussions
12 about how to respond to the fourth quarter
13 monitoring report that has some time sensitive
14 things.

15 I won't represent that the parties are in
16 full agreement on every detail of that, but it's my
17 understanding we have a path forward over the next
18 couple of weeks for immediate response actions. But
19 we do not withdraw the entire content of Rebuttal
20 Exhibit 9. What I mean by that is OCD still relies
21 on and requests those original conditions of
22 approval.

23 The additional ones are what is withdrawn,
24 but all are contained within that same document. So

1 I want to clarify that. With that, it's my belief
2 the appropriate next step is to, one, tender
3 Mr. Powell for cross-examination and then proceed to
4 close this matter. If there are any further and
5 second order, if there is any further action
6 necessary OCD would handle that separate and apart
7 from this case.

8 COMMISSIONER RAZATOS: Okay. So just to make
9 sure that we understand, you are going to be
10 omitting Rebuttal number 8 and part of number 9. Is
11 that what I understood, Mr. Tremaine?

12 MR. TREMAINE: Yes.

13 COMMISSIONER RAZATOS: Mr. Moellenberg, do you
14 understand the same? We're having some technical
15 issues here.

16 MR. MOELLENBERG: I think I understand what
17 Mr. Tremaine is proposing, and we didn't have a
18 chance to talk about it, but I think I get the gist
19 of it.

20 I get the gist of his proposal. So we are
21 ready to proceed with cross-examination unless there
22 is anything before that.

23 COMMISSIONER RAZATOS: Mr. Tremaine, you had a
24 few questions or you're done?

1 MR. TREMAINE: No. My questions are complete.
2 Mr. Powell is available for cross-examination and
3 questions from the Commission.

4 COMMISSIONER RAZATOS: Mr. Moellenberg.

5 MR. MOELLENBERG: Thank you, Mr. Chairman.

6 CROSS-EXAMINATION

7 BY MR. MOELLENBERG:

8

9 Q. Good afternoon. It is Mr. and not Dr.?

10 A. It is Mr.

11 Q. Mr. Powell, thank you very much for your
12 testimony. I have a few questions for you.

13 I would first like to -- I don't know if
14 we could pull this up. Turn to, I guess it's page
15 4-0043. It's your exhibit with a copy of
16 19.15.29.11.

17 A. I don't have that in front of me. If you
18 want to pull it up.

19 Q. I think we can do that. I believe we have
20 this page pulled up now. Are you able to see that,
21 Mr. Powell?

22 A. I am.

23 Q. And this is the part of the rules that
24 discuss the requirements for site assessment and

1 characterization, is that right?

2 A. That is correct.

3 Q. So turning your attention to the first
4 paragraph here, would you agree with me that the
5 lead into this section says, and I am now reading
6 from sort of the middle.

7 I guess the second line under .11, the
8 responsible party must assess soils both vertically
9 and horizontally for potential environmental
10 impacts?

11 A. Yes.

12 Q. And that is kind of the lead into this
13 whole section, right?

14 A. Yes.

15 Q. And then the next part that you have on
16 this exhibit is subsection A. It talks about
17 characterization of the release.

18 Would you agree that is kind of the
19 operative language here?

20 A. Yes.

21 Q. Again, this is the lead in to this is
22 about soils. Then we get to subsection C, which
23 says if the Division determines that more
24 information is needed to understand the character of

1 the release, and it potential impacts on fresh water
2 public health and the environment the Division may
3 request the responsible party submit additional
4 information.

5 Have I read that correctly?

6 A. Correct.

7 Q. So there is nothing else in the quoted
8 language that you provided here that talks about
9 water or ground water. Would you agree with me on
10 that?

11 A. Yes. I think having an understanding how
12 this works with 191530, it would be prudent.

13 Typically on a release you identify the
14 release point, the soils of the release, their
15 delineation both horizontally and vertically what
16 impacts those as stated in the top environmental
17 impact from any major or minor release containing
18 liquids. From there what their impact is on fresh
19 water.

20 I would state at this site we're kind of
21 working backwards because we have the impact to
22 fresh water, but we don't know where that soil
23 impact is. So we're still performing outside
24 characterization of the soils along with the water.

1 But we're working backwards because we have the
2 impact to the water, but we don't know where the
3 soil impact is at this point.

4 Q. And that statement makes sense to me and
5 perhaps explains a little bit of the confusion here
6 from at least a legal standard where we found, I
7 guess, as you would say it some potential ground
8 water impact, but we don't know where they're coming
9 from. Would you agree with that?

10 A. That would be correct.

11 Q. And, of course, if you have a unknown
12 source you have some challenges characterizing the
13 source. Right?

14 A. Exactly, right.

15 Q. But at any rate I think that we're in
16 agreement that section 19.15.29.11 doesn't really
17 say much about ground water or water
18 characterization?

19 A. No, because typically once a site is
20 characterized as having ground water impact and
21 assessed to have that, then it's transitioned over
22 30. At that point this transaction has not happened
23 at this site because we did not finish the
24 characterization under 11.

1 Q. So if we move ahead a couple of pages to
2 4-0045, and this part of your exhibit covers
3 19.15.29.12 NMACK, correct?

4 A. Correct.

5 Q. There's a sentence at the end here that
6 says if the director determines that the release has
7 caused water pollution in excess of the standards
8 and requirements of 19.15.30 AC, the director may
9 notify the responsible parties that an abatement
10 plan may be required pursuant to 19.15.30 NMACK. Is
11 that a correct reading of that sentence?

12 A. Yes.

13 Q. Is it fair to say that there's been no
14 determination by the Division at this point, at
15 least formally that the release has caused water
16 pollution in excess of the standards and
17 requirements of 19.15.30?

18 A. At this point I have not requested the
19 director to do that because I don't feel we have the
20 information to require an abatement program at this
21 point based on the site characterizations we have.

22 So that is why I haven't requested to
23 move it to 30 just because of that lack of
24 information to be able to abate the site as it is

1 right now.

2 Q. Fair enough. Do you recall during your
3 testimony this morning talking about some of the
4 monitoring wells required under the Division's
5 conditions of approval in the areas of the highest
6 chloride concentrations?

7 A. Yes.

8 Q. And do I recall correctly that -- well,
9 would it be fair to characterize your testimony in
10 that regard as indicating that those wells are not
11 needed to delineate the outer boundaries of the
12 chloride plume?

13 A. That would be correct. That would be to
14 investigate the concentrations internally of that.

15 Q. Right, and is it a fair characterization
16 of your testimony that you feel the need for
17 additional characterization in this area of the
18 highest chloride concentrations to be needed to
19 begin to assess how to move toward remediation?

20 A. That would be correct. I think to
21 clarify, when you say the areas of the highest
22 chloride concentrations, it would be the areas of
23 the highest currently known chloride concentrations
24 because they have changed even between March and

1 October sampling.

2 Those levels have changed dramatically.
3 So we didn't know where the areas of highest
4 chloride concentration were in the March report that
5 we responded the conditions to.

6 Q. Fair enough. So basically you're limiting
7 your answer to the data that is available. And I
8 guess the highest chloride concentrations as shown
9 by the current mapping?

10 A. Correct. We're trying to get enough
11 information that we could possibly move to the
12 abatement section of 30.

13 Q. But that concept of collecting information
14 for potential future remediation is not really
15 addressed in 19.15.29.11 NMACK, is it?

16 A. Generally yes, because it goes over the
17 site characterizations both horizontally and
18 vertically.

19 We still at this point, like I said,
20 haven't found the source of the soil contamination.
21 We continue to get more questions than we have
22 answers for. So I would say holistically the site
23 is not characterized enough to know where the
24 highest chloride impacts are or where truly the

1 source of where those impacts came from.

2 Q. But I guess going back to our earlier
3 discussion of 19.15.29.11, I think we agree that the
4 responsible party must assess soils both vertically
5 and horizontally for potential environmental impact,
6 isn't that right?

7 A. That's correct. Can we go back to that
8 slide?

9 Q. Certainly. That is 43.

10 A. So in C, I would point out the first
11 sentence that if the Division determines more
12 information is needed to understand the character of
13 the release and its potential impact on fresh water,
14 we're still determining that potential impact on
15 fresh water.

16 And we don't know the soil source. So
17 the site is still being characterized under 2911
18 because we don't know its potential impact on water
19 at this point.

20 Q. Right, but if I understand kind of the
21 overall discussion of the process here, one of your
22 criticisms of Apache is that it hasn't, let's say,
23 initiated additional investigation at least to the
24 degree that the Division would like. Correct?

1 A. It was more a statement of fact of
2 processes to -- you know, I wouldn't say it's a
3 criticism overall of Apache, but it was a statement
4 of occurrences to this point.

5 Q. But when we look at subsection C that you
6 just mentioned, that sentence ends, and I'm talking
7 about the first sentence of subsection C, the
8 Division may request the responsible parties submit
9 additional information, is that correct?

10 A. That's correct.

11 Q. Mr. Powell, do you recall your testimony
12 regarding the Division requesting of Apache in
13 around I believe November of 2023 to drill a
14 monitoring well location -- I'm sorry, do you recall
15 your testimony regarding the Division's request of
16 Apache to drill a monitoring well in the location of
17 what's currently identified as well TMW 17?

18 A. So I didn't testify to that. I believe
19 Ms. Romero did, but I'm aware of that general
20 statement.

21 Q. I thought I recalled you testified
22 earlier, but that's fine.

23 A. If I did I don't remember. I'm aware of
24 it. I would be happy to answer any questions

1 regarding it.

2 Q. I think the statement that I had in my
3 notes that you made is that at that point in time
4 the Division didn't have any particular reason to
5 suspect that there might be very high chloride
6 concentrations in that particular area.

7 Do you recall that?

8 A. I do. We didn't know what we were going
9 to get out of 17. We had a sample result further
10 east that had a chloride contamination and a sample
11 further west and an extremely large area in between.
12 And we were just closing the gap.

13 Q. Apache, in fact, did not object to a
14 drilling of a well in that location and, in fact
15 proceeded to install that well in the November of
16 2023 drilling campaign, is that correct?

17 A. That is correct. Apache complied with all
18 requests for additional wells up until the COAs in
19 May.

20 Q. Sorry for the delay, Mr. Powell. I'm
21 looking through my notes. I know I have one other
22 topic of questions, but I don't have a lot more. I
23 am trying to avoid missing anything.

24 A. No worries, there's a lot to go over.

1 Q. I think a couple of areas. So I would
2 like to turn to your slides beginning with 4-0064.
3 If you can pull those up for me, please.

4 Just to explain this a little bit
5 further, on this slide number 64 and the following
6 two slides, 65 and 66, they show some significant
7 buildings and development on this map, is that
8 right?

9 A. That's correct. These are for scale, our
10 understanding of scale. It's the Wendell Chino
11 building that we are in today in the bottom left
12 hand corner of that map and is identified as the
13 1220 South St. Francis Drive.

14 Q. Correct. I think you have explained this
15 well to the Commission, but I want to make sure that
16 it's clear for the record. I think that, in fact,
17 you simply superimposed an image of the area around
18 this building, probably Google Maps, around the site
19 of EBDU 37, is that right?

20 A. Correct, for an understanding of scale.

21 Q. You don't mean to suggest in any way that
22 there is any actual buildings or residential or
23 commercial development of any type on this site,
24 correct?

1 A. Correct.

2 Q. Do you know where the nearest location of
3 any residential or commercial development might be
4 with respect to this area around the EBDU number 37
5 well?

6 A. I did not. Our typical charge is looking
7 at ground water quality as a whole. It's not to
8 identify the residences.

9 Q. I would like to now turn to your
10 Exhibit 4-0057, which is the conditions of approval.
11 I want to clarify for the record how some of your
12 testimony fits with this.

13 So in this document we have a series of,
14 at least it begins with several parts of a condition
15 one. I think that they're labeled condition 1A
16 through 1-N. And each of those parts of condition 1
17 refers to a particular monitoring well location and
18 number that OCD has prescribed. Right?

19 A. That is correct.

20 Q. I believe in your testimony you had
21 identified two wells that in combination with the
22 wells proposed by Apache could be eliminated in your
23 view, is that right? Do you recall that?

24 A. That is correct.

1 Q. Is one of those wells identified on this
2 document the conditions of approval the well
3 identified in part B, that is 1-B of this list with
4 the well identifier of TMW 31?

5 A. I would have to see a map because I don't
6 have that in front of me.

7 Q. Let's pull the C 4.1 figure up.
8 Mr. Powell, can you see this Exhibit C-4.1?

9 A. I can, and I made a note between 12 and 2.
10 so that would be the well.

11 Q. So the well TMW 31 shown in the upper
12 right of this Apache Exhibit C 4.1 is the same as
13 would be referenced in condition 1-B of the
14 conditions of approval?

15 A. That would be correct.

16 Q. The other one if I recall correctly from
17 your testimony would be a well identified in the
18 conditions of approval as TMW 38. And in
19 particular, conditions of approval 1-I.

20 So let's see if we could find that on
21 the map.

22 A. That would be what is marked on this map
23 as TMW 38.

24 Q. So it would be the well with green TMW 38

1 in the lower right hand corner.

2 So based on what we have just talked
3 about, Mr. Powell, based on your testimony part 1-B
4 of the conditions of approval and part 1-I of the
5 conditions of approval referring to wells TMW 31 and
6 TMW 38 respectively could be dropped from the
7 Commission's consideration of the Division's
8 conditions of approval?

9 A. That would be correct.

10 Q. The other thing I would like to point out
11 here for clarity, back to the conditions for
12 approval document is at the end of that, in part 1-M
13 and 1-N, would you agree there are duplicates,
14 TMW 42 well identifiers?

15 A. Yes. That should be 42 and 43. I
16 apologize.

17 Q. And I guess just to be clear what these
18 are, under part one in the first TMW 42 indicates
19 it's at some location between TMW 25 and 26.

20 Can we see if we could find that on the
21 map?

22 A. I think that might be labeled on the map
23 TMW 31 in quotation marks.

24 Q. Okay. So if we're going to include well

1 identifiers, I'm just thinking of the form of a
2 Commission order depending on what the Commission
3 decides to do. But the Commission should perhaps
4 consider at least in the conditions of approval
5 TMW 42 being the well identified on Apache's figure
6 C-4.1 as that well in blue with an identifier TMW 31
7 with 42 in parentheses.

8 And then let's see if we can find the
9 other one. The other one must be up to the north
10 because it is indicated as being between TMW 13 and
11 22. That would be the one labeled TMW 43.

12 Q. And on this map, so perhaps Mr. Graham has
13 clarified that for us, okay. Mr. Powell, you
14 mentioned I believe with regard to the samplings
15 conducted this past October of a lab report dated
16 October 31. Do you recall that?

17 A. I do.

18 Q. Do you recall that there is actually a
19 series of I believe four different lab reports
20 reporting from the October sampling?

21 A. I do.

22 Q. Would you agree with me or we could pull
23 it up that those dates of the lab reports run from
24 October 30 to December 5?

1 A. That sounds correct, yes. I think I
2 specifically referred to the TDS and chloride
3 sampling which is that lab report I was talking
4 about I believe was generated on October 31st.

5 That is not in my exhibits. If you
6 want to look at them further I believe it's in your
7 Exhibit C.

8 Q. Thank you. I think you're correct.

9 MR. MOELLENBERG: Mr. Powell, thank you again
10 for your testimony. That is all the questions I
11 have.

12 COMMISSIONER RAZATOS: Mr. Tremaine, did you
13 have any redirect?

14 MR. TREMAINE: No redirect, Mr. Chair.
15 Mr. Powell is available for Commissioners.

16 COMMISSIONER RAZATOS: Excellent. I started
17 with Commissioner Bloom last time. I will start
18 with you, Commissioner Ampomah.

19 MR. AMPOMAH: I do have a couple of questions.

20 CROSS-EXAMINATION

21 BY DR. AMPOMAH:

22 Q. So the first question that I do have, if
23 we could bring up the Apache Exhibit C 4.1.

24 Based on your testimony, I really

1 really do understand this map perfectly now. So if
2 you look at the extent of our reach, we have TMW 21
3 still recording some elevated numbers. TMW-22,
4 still. You do have B 289.

5 If you go to the other side, I am
6 trying to look at the extent of boundaries. So TMW
7 12, 400. So as you go through it on the other side,
8 probably on the west side you have TMW 3,183. And
9 you have 66, 171. But as you go down, it gets up to
10 TMW 19. It gets to 907 TMW 24.

11 So my question is do the wells proposed
12 by OCD or Apache more or less address the extent of
13 the boundary of the potential contamination?

14 A. The incident of the OCD wells is to try to
15 address the extent of the contamination. Will they?
16 I don't know, especially on the southern boundaries
17 there are three wells extending down in that area.

18 We don't know what we're going to find at
19 this point. There may need to be additional
20 investigation down in that area as we find more. To
21 the north, I think the wells north of TMW 13 will
22 identify those. The eastern boundaries, the 284 on
23 TMW 21, we believe that could be background levels
24 at this point based on what we were seeing in the

1 windmill well.

2 One note in the windmill well in those
3 westerly wells, those potentially could have been
4 impacted by rain influx. So rain water would
5 potentially be cleaner water than what would be
6 naturally in that ground water zone just because
7 it's picking up contaminants, that may be why the
8 western edge is fresher than the eastern edge.

9 Q. So if you go down to TMW 19. So OCD is
10 proposing TMW 40. Now, TMW 19 is right at the
11 external boundary to the west.

12 So why not TMW 40 on the other side of
13 TMW 19 to see if we could nail down the boundary?

14 A. The intent of TMW 40 was to see if there
15 was a plume coming down below TMW 17 and to try to
16 measure the extent of what that plume may be. But
17 you are correct, TMW 19 being at 907, there may be
18 something westerly as well that may be needed to
19 fully delineate that.

20 Q. So you do have the TMW 18, and you've also
21 proposed TMW 36. So I believe that TMW 34 or the 36
22 being combined with the 18 if you are prioritizing
23 where to place the wells, I feel that 40 can
24 probably move to the other side for us to really

1 nail down on the boundary, but I don't know if the
2 36 and then the 18 can address the 17 questions or
3 not?

4 A. So a couple of things to look at when
5 you're looking at 40 in relation to the wells you
6 mentioned ground water flow direction is in a south,
7 southwest flow.

8 Eighteen is directly south, actually
9 offset a little to the east of 17. So the ground
10 water flow from 17 depending on the plume and the
11 underground characteristics could skirt the edge of
12 18.

13 And 18 as a reminder from the March
14 sampling to the current sampling went from 900 to
15 7800. So we don't know if it's on the exterior
16 boundaries of a plume or if it's actually in the
17 center of a plume wherein the plume goes down
18 through 40 and could end up being directly down
19 gradient from 17.

20 Q. So you want to still keep the TMW 40 at
21 the current location?

22 A. I believe it would be prudent to keep TMW
23 40 just to see where that flow because the distance
24 between TMW 19 and TMW 18 I believe is roughly 600

1 feet. So it's quite a large area and so that would
2 just close the gap between those two to understand
3 what we're dealing with in that area.

4 Q. Based on your testimony, I want to confirm
5 that OCD's position is that the seven wells that
6 Apache proposed is just not enough?

7 A. Correct. And just for understanding, of
8 those seven wells, five wells is what OCD also
9 considered and then added 14 to.

10 So only two of Apache's wells were not
11 considered in the original COAs. And those were the
12 wells that OCD is going to draw Apache replaced,
13 found an equivalent area for those wells.

14 So OCD with the five and the 14
15 additional was looking at 19 were Apache's
16 resubmittal had seven.

17 Q. So also just to clarify, your testimony is
18 that in your condition of approval 42 wells, only
19 two wells, the one listed on 1-B and 1-I is the one
20 that OCD is willing to drop?

21 A. That's correct. And I should caveat that.
22 At the end of the day it's the Commission's decision
23 if they want to take the rest. But OCD's preference
24 would be to keep the others.

1 Q. Then you brought up another good point.
2 So let me ask you the same question that I asked
3 earlier.

4 So on this particular map, do you
5 believe that -- let's say combining OCD well
6 locations, proposed locations and that of Apache
7 locations, do you believe that something else can be
8 done to optimize to make it more effective or you
9 believe OCD's location is more or less okay?

10 A. I think some of the other options that are
11 out there are more difficult to use until you have
12 proper input such as modeling and those kinds of
13 things because the drastic change between the March
14 sampling event and the sampling event that was
15 reported in January, it would have been hard to use
16 other methods to do that.

17 I think that there's some spot methods
18 that can be used, but those are single points in
19 time. As far as drilling down auguring, looking at
20 soil samples, I think to understand what's going on
21 in the ground water column, the additional wells are
22 needed to assess what the ground water impact is.

23 And then by doing some investigation in
24 the soil as those are placed you may inadvertently

1 find maybe where some other soil impacts are to
2 start looking at that. There were some clay lenses.
3 It could be that chloride traversed some of those
4 clay lenses and maybe we could find that in the soil
5 investigation during the creation of those wells.

6 Q. It appears that OCD did a lot of work to
7 fully come up with the conditions of approval. Now,
8 with the new information that is more or less not
9 included in your condition of approval, let me ask
10 is there anything that could have been different
11 assuming you are right in the conditions of approval
12 let's say from the latest data that you have?

13 A. I think with the latest data I don't know
14 that I would add many other wells. I think it
15 proved some of the concerns that OCD had that we
16 don't fully understand the areas yet because of the
17 drastic changes.

18 So it showed the concerns OCD had. I
19 think the locations are still necessary. I took the
20 Chair's concern between 17 and the windmill that we
21 don't have a lateral definition there. I take your
22 concern at TMW 19 that we don't have anything to the
23 west at that point. But other than that, I don't
24 know that I would change any of the others, but I

1 think that it did highlight the concern that OCD had
2 was valid.

3 Q. So in the 19, 15, 29, 11C, should the
4 Division request additional information, it must be
5 done in writing to the responsible party 30 days
6 from receipt of the current transition report or
7 remediation plan.

8 What specific information the Division
9 is requesting and the reasons why the additional
10 information is needed. So from your condition of
11 approval I see you provide some reasons, but were
12 they discussed with Apache or is it detailed enough
13 for a party to know for each of these wells that OCD
14 is proposing, the reasons behind that?

15 A. I think in the prior meetings we had with
16 Apache and those conditions combined, I believe
17 Apache should have understood the reasons behind
18 those conditions in meetings leading up to that.

19 We were pretty clear that we wanted a
20 more robust or comprehensive investigation in the
21 area to further understand it. And that paired with
22 where we placed the wells and the statements in
23 those conditions provided that reasoning.

24 Q. Aside from the condition one, do you have

1 any sense of Apache's contesting 2 to 8, are they
2 contesting any of them?

3 A. The way I took it when they resubmitted in
4 September and only added 2 wells, that other than 38
5 and the other well up above, they contested all of
6 them. So of the 14, I took it as they contested 12
7 of the others.

8 Q. Now, condition number two.

9 A. I haven't heard where they contested any
10 of those other conditions.

11 Q. So specifically one?

12 A. No.

13 Q. Is OCD open to statewide deployment of
14 these wells or do you want them all drilled within
15 90 days?

16 A. The preference would be as all of them
17 drilled within the single deployment so we could get
18 information as quickly as possible.

19 Based on the January 8th sampling
20 events, it's apparent that the ground water in the
21 area is degrading quickly. We don't understand why
22 it's degrading.

23 So the ask would be instead of doing a
24 staged investigation that we would do this in one

1 deployment.

2 Q. So in the event that the Commission
3 doesn't more or less agree to all, let's say the
4 ones that OCD is proposing, what impact will it have
5 as it relates to doing your job?

6 A. I think the impact would be depending on
7 what well the Commission didn't agree on. It could
8 delay action in a particular area. It would be up
9 to the Commission to do it.

10 If a certain well was picked and the
11 Commission said I don't think this one is needed at
12 this time, we would lose that data point. And then
13 if it's determined we need that data point at a
14 later time it would delay getting that data point.

15 Q. Did Apache present let's say a written
16 response on each of these wells that OCD is
17 requesting the rebuttal on each of these wells
18 individually?

19 A. I don't remember if their response in
20 August included each well individually. I think it
21 was more of a holistic reservation of appeal and
22 disagreement with the conditions.

23 Q. So there's no record showing let's say,
24 for example, why Apache would not agree to A-1, A-C,

1 1-D, all the way to the end?

2 A. It's my understanding that Apache found
3 out the outer limits were delineated, and the
4 anterior boundaries didn't need any further
5 delineation is my understanding.

6 COMMISSIONER AMPOMAH: Thank you for your time.

7 COMMISSIONER RAZATOS: Commissioner Bloom.

8 COMMISSIONER BLOOM: Thank you, Mr. Chair,
9 maybe a couple of questions here just so we're
10 headed procedural matters that could influence my
11 questions for Mr. Powell.

12 Mr. Chair, have we given any thought to what
13 we're looking at next? Are we going to ask the
14 parties for oral closings or will they be coming
15 back with written closings? Do we anticipate
16 deliberating today?

17 I think these are all things we need to
18 discuss, and I think we have seen perhaps through
19 this hearing the sides have come to some
20 understanding on certain aspects of OCD's requests.
21 I am wondering if taking time having written
22 closings and perhaps time for the sides to talk, if
23 that would be helpful.

24 These are all things we want to hear from

1 both sides about. But I just want to check on this
2 before we get too much further.

3 COMMISSIONER RAZATOS: It's a very good
4 question. Our legal counsel for the OCD is absent
5 today. He had a prior commitment. I think we will
6 have to kind of put a little bit of a recess under
7 the NMACK, under 19, 15, 4.

8 We have to continue to be able to deliberate.
9 I want to make sure that we have our legal counsel
10 with us when we're doing that. We could always ask
11 for some closing statements if that is what you as
12 commissioners want as well.

13 I was going to open the question up for you.
14 We have to majority agree to be able to continue and
15 make sure that the record is officially closed
16 before we continue all of that. So I think at this
17 point in time, Commissioner Bloom, you ask your
18 questions that are pertinent to Mr. Powell. I think
19 I gave you an idea of where we're thinking of going.
20 But I think we should ask the question so we could
21 at least finish with Mr. Powell and then we can
22 proceed with the rest if that makes sense to you as
23 well.

24 COMMISSIONER BLOOM: Very good. Thank you,

1 Mr. Chair. Just a few questions for you,
2 Mr. Powell. Thank you for your testimony today.

3 CROSS-EXAMINATION

4 BY COMMISSIONER BLOOM:

5 Q. Mr. Powell, Mr. Moellenberg was exploring
6 with you aspects of 19.15.29.11. And it seems to
7 suggest that assessing water is not perhaps required
8 or authorized here.

9 Perhaps monitoring wells can't be
10 required in this section. I think you addressed
11 that, but I wanted to ask you that specifically.

12 A. I think it is a fairly common practice
13 with the Division when investigating a release, they
14 start with 29, especially when you are looking at
15 water starting with the initial investigation.
16 Typically that happens through soil investigation
17 and then moves into water investigatory wells. I
18 remember calling them monitoring well, but, we are
19 calling them investigatory wells. We're monitoring,
20 but investigating the impact in the area.

21 It's common when looking at impact to an
22 area under 29. I would agree that once we get past
23 that initial investigation and we move on to more
24 actual monitoring of overall status in an area and

1 looking at abatement that that needs to fall under
2 30. But I don't know that we are there at this
3 point.

4 Q. Do you feel if the soil sampling doesn't
5 get you the delineation characterization that you
6 need that a logical next step of the requirement to
7 get delineation or characterization would
8 necessitate investigatory or monitoring wells?

9 A. I think looking at such a large area I
10 think it's got to be twofold. I think you have to
11 look at the soil and look at the monitor wells.

12 If we don't find the soil information
13 with Apache's bore hole that they are proposing and
14 the sampling of the monitor wells that we required,
15 if we don't find a possible source in those I think
16 we have to continue investigating the ground water
17 and look at potential other investigatory pathways
18 for the soil itself.

19 Q. We mentioned 1950, 30. I read it, but I
20 don't work with it every day. How does that enter
21 the picture here?

22 A. So 30 is how the Division applies to WQCC,
23 water quality conditions and abatements and those
24 kind of things.

1 So once you have a confirmed ground
2 water case and you're looking at then moving on to
3 abatement of that area of that contamination source,
4 30 walks you through that process.

5 Q. I'm sure Mr. Tremaine will address this in
6 his closing, but we heard considerable testimony
7 regarding the spill, the five year history, the
8 recent increases in chloride and TDS levels.

9 We've heard statements from both sides
10 that characterization delineation of the release are
11 not -- the releases has not been characterized or
12 delineated. It's not well understood. We've heard
13 you say that you would be okay, and correct me if
14 I'm wrong here, if the Apache suggested wells 29 and
15 30 would work for the OCD rather than the locations
16 that you had.

17 I'm wondering what ruling is the OCD
18 asking the Commissioner for after the discussion we
19 had?

20 A. I think the ruling is to uphold the
21 conditions of approval absent the two wells, 1-B and
22 1-I.

23 COMMISSIONER BLOOM: Thank you, Mr. Powell, no
24 further questions.

1 COMMISSIONER RAZATOS: Thank you, Commissioner
2 Bloom. I do have a few questions before we actually
3 go through all of it.

4 CROSS-EXAMINATION

5 BY MR. RAZATOS:

6 Q. On number two under conditions continued
7 you say current and up to date site map showing
8 proposed monitoring wells in the scope of work, and
9 the additional, I think you have a typo there. One
10 says 13 and then you have the number 14 next to it.
11 Still wants the 14 wells plus or minus the two that
12 you discussed?

13 A. That is correct.

14 Q. So that should be 14.

15 A. For clarification, that is likely a typo
16 in the conditions of approval that is online as
17 well. I just transposed that into this.

18 Q. I just wanted to make sure. Thank you for
19 you testimony, we appreciate it today.

20 You started off in your direct with
21 Mr. Tremaine, that you mentioned that basically the
22 majority of the external boundary is pretty much
23 set. It's not the most perfect delineation, but
24 pretty much know how far, of course. Commissioner

1 Ampomah said on the one side and the the west site
2 needs more on that aspect.

3 Part of the reasons you're asking for all
4 of the wells to be entered, you stated that we need
5 to be able to see the chloride concentrations within
6 the area and delineate that area so that we can have
7 proper remediation.

8 Can you kind of explain that to us?

9 A. So understanding where your concentration
10 loads are is part of the key of abatement when you
11 look at the next step because you don't want to set
12 remediation wells where they are going to be the
13 least effective.

14 If you're updating it from your source
15 and your ground water is going another way, you're
16 fighting nature basically. So if you have a better
17 understanding of where your concentrations are that
18 next step of abatement and where you set those
19 wells, so you are going with the natural flow in the
20 area and you're going with the natural contours, and
21 it makes it where that abatement can be more
22 efficient.

23 COMMISSIONER RAZATOS: Ms. Catalanos, please
24 put up C 4.1. Put it where the TMW 17 is in the

1 middle of the page.

2 BY COMMISSIONER RAZATOS:

3 Q. I will ask you the same questions I asked
4 Mr. Graham, Apache's witness, as well. Apache is
5 also saying that TMW 27 would be a place that is
6 right just a little south or southeast of the TMW 4
7 would be a good place to be able to see what's going
8 on not only around that mounding of TMW 4, but also
9 what potentially is coming off of seven, which is
10 above from the original and let us know what is
11 going on with 17.

12 And they also proposed in that instance
13 to put in a pump test there. Do you think that that
14 would be something that would be logical to put up
15 in that region?

16 A. So to perform a pump test, if the source
17 is above you, it's not a bad thing to do a pump test
18 in that area. It is going to show what the area
19 responds to.

20 I think originally TMW 27 was going in
21 and monitoring three to five years. And they didn't
22 state that additional well would be put in place
23 during that time. That is a long time just to do a
24 pump test and monitor without doing any other

1 actions as far as abatement.

2 So if TMW 27 is used as a pump test to see
3 the effect in the area, there is going to be a
4 higher concentration of wells around that so you
5 could see hydraulically how it responds. Some other
6 areas don't have that concentration of wells. That
7 is why I'm assuming they didn't pick another area
8 because they couldn't monitor those outside wells as
9 well. So it makes sense to do a pump test where you
10 have monitoring points, but that wouldn't be the
11 extent of any remediation points.

12 Q. I will also ask you as I asked Mr. Graham
13 the emphasis was put when we first started the
14 hearing yesterday that this Commission is tasked to
15 protect the people and citizens of New Mexico and
16 protect the land of the state of New Mexico.

17 As was stated with the numbers that were
18 submitted with the October testing done by Apache
19 TMW 17 kind of has skyrocketed. 14,900 is what it
20 states. The windmill is slated as was brought out
21 to water cattle.

22 Do you feel that a monitoring well needs
23 to be between 17 and the windmill to see what
24 potentially could be creeping over to that windmill?

1 A. I think I addressed that in my direct. To
2 kind of readdress, I think that was a concern that
3 the Chair brought, and I think it's a very valid
4 concern especially with how quickly the water
5 degraded in the other wells.

6 It was very alarming how quickly it
7 degraded and if there was another well in the area
8 it could identify a plume and two, it could be
9 identified as a well even if it's not in the plume
10 that could be monitored for risk heading that way.

11 COMMISSIONER RAZATOS: That was the last
12 question I had for this witness. Any other
13 questions, Mr. Tremaine or Mr. Moellenberg?

14 MR. TREMAINE: No followup from the OCD.

15 MR. MOELLENBERG: I have nothing further.

16 COMMISSIONER RAZATOS: Mr. Powell, thank you.
17 I appreciate it. Mr. Tremaine, this was your last
18 witness, correct?

19 MR. TREMAINE: This was. We are done.

20 COMMISSIONER RAZATOS: Okay. Mr. Moellenberg,
21 you had mentioned there was the potential you may
22 want to put individuals back up. Is that still
23 something that you wanted for rebuttal?

24 MR. MOELLENBERG: Thank you, Mr. Chair. We

1 discussed that at lunch. And I think that we are
2 complete in terms of the evidentiary record here.

3 I don't think we have any further testimony
4 to present.

5 COMMISSIONER RAZATOS: Again, Mr. Tremaine, for
6 the record, are you complete with what you want to
7 present?

8 MR. TREMAINE: Correct.

9 MR. MOELLENBERG: I think at this point -- do
10 you have a question, Commissioner?

11 COMMISSIONER AMPOMAH: I want to ask if Apache
12 can respond to the question that I posed to
13 Mr. Powell, that if there is a written record
14 rebutting on the wells, that OCD is proposing in the
15 condition of approval, if there is any information
16 that could be provided to the commissioner or if
17 not, that is okay too.

18 MR. MOELLENBERG: Mr. Chair, I guess I would
19 submit that the testimony yesterday primarily of
20 Mr. Graham intended to cover that and address those
21 particular issues and add Apache's view on the
22 additional wells.

23 So I think that we're complete on that. The
24 correspondence in the record from last summer also

1 provides some additional information on that. I
2 would suggest that you focus on Mr. Graham's
3 testimony.

4 Did you have any other questions,
5 Commissioner Bloom?

6 COMMISSIONER BLOOM: No further questions.

7 COMMISSIONER RAZATOS: So I think at this point
8 what we do is basically close the record for the
9 evidentiary part of it as was brought out earlier,
10 then how do we proceed.

11 I stated without our legal counsel here
12 today I think that we do need to do a continuance.
13 I did not want to do a continuance. That will take
14 a month. This is maybe a week or two maximum to get
15 schedules together so that we can deliberate and go
16 over the information with our counsel and then be
17 able to provide an order because in the end that is
18 what's requested, right, to have an order for the
19 parties to be able to proceed. So as I stated, I
20 would like to state that we put in a motion for
21 continuance under 1915.1.

22 Commissioner Bloom and Commissioner Ampomah,
23 you both agree then we set up a date for within a
24 week or two where we can be able to meet. Now, of

1 course, the question was do we get some kind of
2 closing statement from both parties.

3 I'll throw it out to Apache and to the OCD.
4 Would you all be able to provide a closing statement
5 in a relatively short period of time?

6 MR. MOELLENBERG: Mr. Chair, from my standpoint
7 yes. I think it would be useful, and we'd
8 appreciate the opportunity to submit a closing
9 statement. I would further suggest that the parties
10 be allowed to present suggested forms of orders. I
11 won't rule out the possibility that we might even be
12 able to present you an agreed form of order.

13 I can't obviously guarantee that would happen
14 and I haven't discussed that with Mr. Tremaine, but
15 you never know. Sometimes that helps everyone out
16 particularly given that we have got some new
17 information that I think both parties are still
18 considering.

19 Since the conditions of approval were
20 entered, we have talked about doing some additional
21 things. And I think from Apache's perspective, we
22 would appreciate the opportunity to see if we could
23 work out at least as much as we can work out and
24 potentially avoid your need to sort through lists of

1 20 or so different wells. There's a lot of technical
2 aspects of this.

3 From my perspective, I would like to make
4 your job as easy for you as we possibly can. So
5 bottom line is yes, I would appreciate the
6 opportunity for closing statements. I'd appreciate
7 the opportunity for the parties to present either
8 their own suggested forms of order for you to
9 consider which again the idea being help you sort
10 out some of the details and if we can agree on one,
11 all the better.

12 COMMISSIONER RAZATOS: Mr. Tremaine.

13 MR. TREMAINE: I haven't thought about what I
14 would suggest. Procedurally I haven't thought that
15 quite through, but if there's an opportunity to
16 submit a joint form of order, which I think we'll be
17 able to determine if possible pretty quickly early
18 next week I suspect. Then it may be possible to
19 submit that in lieu of closing.

20 If there is a stipulation -- I don't think we
21 need to prepare closings. My only hesitation with
22 taking this to a short deadline for written closing
23 is that the finding of fact order with respect to a
24 two day record and thousands of records could be an

1 onerous task for all of the parties.

2 I respectfully suggest we give it a week or
3 two deadline and like a page limit. Something like
4 that. So we are working with summary arguments and
5 appropriate references because we could quite easily
6 go overboard there and take up a lot of time. So I
7 think in terms of doing a verbal closing or written
8 closing I'll serve at the pleasure of the
9 Commission.

10 Commissioner Ampomah, you had a question?

11 COMMISSIONER AMPOMAH: No, I didn't have a
12 question. I have a statement. I support the
13 statement from Apache. If they would work together
14 that would be awesome.

15 COMMISSIONER RAZATOS: Commissioner Bloom, any
16 thoughts from you?

17 COMMISSIONER BLOOM: Thank you, Mr. Chair. No,
18 this seems like a very pragmatic type resolution.
19 The sides can meet if they can come to us with a
20 joint order. If not, then separate written closing
21 statements would be very helpful.

22 Mr. Tremaine mentioned a page limit. We
23 have certainly done that in the past. I don't
24 remember what we limited them to. It might have

1 been ten r on 15 pages. Correct me if I'm wrong. I
2 think this looks like a good idea for a path
3 forward.

4 COMMISSIONER RAZATOS: I actually was also
5 thinking a page limit if a consensus could not be
6 reached. Mr. Tremaine, since you mentioned I'm going
7 to ask you what were you thinking for a page limit?

8 MR. TREMAINE: Ten.

9 COMMISSIONER RAZATOS: Mr. Moellenberg, is that
10 something doable?

11 MR. MOELLENBERG: I think so. I kind of had
12 the same thing in mind, and Mr. Tremaine mentioned
13 findings of fact and conclusions of law.

14 I hadn't really thought about that. I was
15 thinking more of a wrap up closing and proposed
16 again possibly a stipulated form of order
17 potentially a couple of separate ones if we're going
18 to get this to findings and conclusions, that
19 raises the specter of a longer time period and
20 longer document.

21 I can't say I fully considered whether those
22 are necessary or not. But at the outset of this
23 discussion I was not thinking that was particularly
24 necessary.

1 COMMISSIONER RAZATOS: Mr. Tremaine, I want to
2 give you a chance to response.

3 MR. TREMAINE: I'm happy to hear that. We've
4 kind of go in a lot of different directions with
5 some of these. And those can get quite long. I was
6 worried about this overlapping with some other
7 filing and cases we're working on and needing to
8 submit a 50 page document.

9 So I think wrap it up with closing argument
10 ten pages in about two weeks. If we can't in
11 advance stipulate to a joint form of order that
12 would be great.

13 COMMISSIONER RAZATOS: I think we're all on the
14 same page on this one. I do realize that for state
15 government next week it is a short week because of
16 the holiday on Monday. So that may need to expand
17 by plus or minus a day.

18 So if I understand, both parties if we took
19 it out one week to be able to kind of get something,
20 is that doable so we could deliberate on the second
21 week or do you need two solid weeks to be able to
22 get your paperwork together?

23 So if we do it one week from today, today is
24 the 17th of January. It would take us to the 24th.

1 You guys would be able to submit it by the 24th or
2 do you need through the 31st? Mr. Moellenberg?

3 MR. MOELLENBERG: Mr. Chair, I think we could
4 submit something by next Friday. I don't know that
5 we could get to -- I think that short a time frame
6 reduces the likelihood of having enough time to try
7 to get to a stipulated form of order.

8 So from my perspective there would be an
9 advantage for a longer time frame to try to do that.

10 COMMISSIONER RAZATOS: Would the 31st suffice
11 for that?

12 MR. MOELLENBERG: I think the 31st would give
13 us a fair chance of getting to that. You never know
14 how folks' schedules are. We're talking about a lot
15 of people here. I think that there's a fair chance
16 if we can't get to something like that by the 31st.

17 COMMISSIONER RAZATOS: You'll let the
18 Commission know, Mr. Tremaine, that the 31st is
19 agreeable with you as well?

20 MR. TREMAINE: The 24th is the time given staff
21 schedules.

22 COMMISSIONER RAZATOS: That's why I offered
23 both dates. So let's get your closing statements
24 and/or stipulated orders by the 31st to the

1 Commission and then Commissioner Bloom and
2 Commissioner Ampomah and myself and Mr. Rubin, we
3 could do the deliberations and then get an order out
4 to the parties.

5 Commissioner Bloom, are you available that
6 first week of February?

7 COMMISSIONER BLOOM: Yes, I may have more
8 availability if I can deliberate virtually. I have
9 some availability on the 3rd and the 6th in
10 Santa Fe. And the following week, the 12th and the
11 15th or so.

12 COMMISSIONER AMPOMAH: I teach on Thursday. So
13 the third would work and if I can do it virtually
14 I'm more flexible.

15 COMMISSIONER RAZATOS: I'm not sure about the
16 virtual nature. There's certain aspects of the Open
17 Meetings Act that we do have to maintain. I will
18 run that by Mr. Rubin as well, but right now I think
19 the 3rd would be something that would work for all
20 three of us if that is okay. I will start with
21 that.

22 COMMISSIONER RAZATOS: We'll try for the 3rd so
23 we could get an answer as fast as possible. And OCD
24 will be able to in the interim work in the

1 background and come to a resolution as well, which
2 makes it easier for everybody at that point. Thank
3 you for this particular evidentiary hearing.

4 MR. MOELLENBERG: Thank you, Mr. Chair.

5 MR. TREMAINE: Thank you, Mr. Chair.

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1 STATE OF ILLINOIS)

2) ss:

3 COUNTY OF C O O K)

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0	1340 385:8		19.15.29.11 405:16 408:15 409:3
03 309:7 084-002692 447:20	14 297:14 330:9 341:24 343:2,15,18 345:13 353:24 357:22 358:1 369:14,23 378:13 394:21 394:23 395:1,2 395:2,3 421:9 421:14 425:6 432:10,11,14		19.15.29.11. 402:16 429:6
1	14,900 357:14 435:19		19.15.29.12 406:3
1 281:11 287:22 289:19 292:5 356:1 413:16,16 414:3,13,19 415:3,4,12,13 421:19,19 426:24 427:1 431:21,22	141 296:18	171 418:9	19.15.30 406:8 406:10,17
10 360:18	15 325:17 358:7,8 359:20 394:21,23 424:3 428:7 442:1	17th 280:12 443:24	1915.1. 438:21 191530 404:12
10,000 362:2	15th 445:11	18 300:2 341:6 358:24 359:10 359:19,22 360:1,10 361:3 361:4,19 362:9 362:10 370:6 371:3 391:2,3 391:7,14 392:1 419:20,22 420:2,12,13,24	1950 385:7 430:19
10:00 280:12	16 284:3 299:1 303:23 321:6 324:11 327:20 362:8		1:10 398:21
10:30 335:19	1675 282:4		1a 413:15
11 295:14 303:23 403:7 405:24	16th 321:14		2
110 281:11	17 284:3 299:11 303:24 304:1,3,10,11	1810 357:24 370:2	2 289:24 291:21 292:5 292:19 414:9 425:1,4
11c 424:3			2,160 358:8 2,980 359:2
12 296:12,13 414:9 418:7 425:6			2.6 339:14
1220 281:8 387:19 412:13			20 301:17 335:17 339:19 346:13 440:1
1239 282:7			
12754 447:19			

<p>200 346:20 2000 370:8 20007 293:8 2004 316:8 2008 354:19 2013 354:19 2019 318:5 345:5 352:4 361:10 2020 361:11 2021 290:4 361:11 2022 298:6 300:14,24 318:6,12,15 327:20 329:8 329:18 345:7 361:12 365:6 365:12 2023 291:10 300:11,18 305:19 320:4 361:13,17 365:13,21 369:12 370:8 410:13 411:16 2024 290:24 305:19 307:22 309:10 320:19 321:7 323:2,12 324:11,12 327:21 330:3 332:16 334:2,2 342:12 361:13 365:24 366:9</p>	<p>366:15 367:3,5 367:14 369:14 370:2,8 376:21 381:9,17 2025 280:13 284:3 447:16 21 302:12 418:2,23 218 281:21 22 303:6 319:22 416:11 418:3 23 291:10 304:23 362:11 386:14,24,24 387:4,5 233 361:12 24 306:8 330:3 362:11 387:5 418:10 245.5. 361:11 24912 280:5 284:4 398:24 24th 321:15 443:24 444:1 444:20 25 307:13 320:17 386:24 387:1,6 392:2 415:19 250 339:18 2500 370:1 251 361:11 2523 281:18</p>	<p>26 308:4 362:24 415:19 27 309:2,17 346:16,17,22 388:19,23 391:10 392:6 434:5,20 435:2 28 309:24 280.5. 361:11 284 418:22 287 283:4 289 418:4 29 306:1 310:14 320:4 339:9 350:14 350:20 363:6 363:11 394:7,7 396:6 424:3 429:14,22 431:14 2911 409:17</p> <hr/> <p style="text-align: center;">3</p> <hr/> <p>3 337:7 338:3 3,183 418:8 3,990 359:2 30 310:20 321:6 328:13 362:23,24 363:16,20 393:17 394:1 396:7 405:22 406:23 408:12 416:24 424:5 430:2,19,22 431:4,15</p>	<p>300 376:7 31 309:7 312:12 328:7 334:3 363:3,10 382:12 395:3,3 414:4,11 415:5 415:23 416:6 416:16 3103 382:21,24 383:12 319 283:4,4 31st 417:4 444:2,10,12,16 444:18,24 32 314:14 324 283:4,5 325 281:15 283:5,5 33 315:6 332 283:5,6 335 283:6 336 283:8 34 315:19,21 332:19 419:21 35 316:20,22 359 361:13 36 317:3 321:20 362:13 419:21,21 420:2 37 412:19 413:4 38 363:1 414:18,23,24 415:6 425:4</p>
--	---	--	---

[39 - abatement]

39 363:19	427 283:9	6	80202 282:4
399 283:8	429 283:9	6 290:11,13	87501 281:4,12
3rd 445:9,19,22	296:18	291:21 292:5	281:15,18,21
4	43 328:13	309:13 368:22	282:8
4 305:18	350:3,10,12,13	60 339:14	87505 281:8
337:18 338:3	409:9 415:15	380:23	8th 312:15
356:6 365:6	416:11	600 282:4	339:22 353:14
366:20,23	431 283:9	395:4 420:24	382:8 392:11
374:5 428:7	432 283:10	62 384:7	394:20 425:19
434:6,8	436 283:10	63 384:19	9
4-0041 338:11	44 350:3	64 387:11	9 286:2 290:4
4-0043 402:15	45 350:3	412:5	290:13 309:10
4-0045 406:2	46 350:3	65 390:13	400:9,20
4-0050 364:16	48 351:10	412:6	401:10
4-0057 413:10	4th 447:15	66 393:8 412:6	90 306:5,6
4-0064 412:2	5	418:9	328:9,14
4.1 414:7,8,12	5 290:4 291:21	67 398:11,17	383:24 425:15
416:6	292:5 347:5	6th 445:9	900 420:14
4.1. 330:20	358:20,22,24	7	907 418:10
356:21 380:14	368:18 373:22	7 291:9,21	419:17
417:23 433:24	374:5 416:24	292:5 351:24	908 359:11
40 362:13	50 339:23	7,000 369:24	361:5 370:8
396:16 419:10	443:8	7,160 358:8	94 339:12
419:12,14,23	500 395:4	7,790 357:24	9th 291:3
420:5,18,20,23	505.5. 361:14	7,820 359:11	312:15
400 346:20	52 367:13,14	361:5	a
418:7	54 368:5	7800 420:15	a.d. 280:13
402 283:8	540 361:16	781 297:12	a.m. 280:12
408 281:3	55 369:8	794 297:12	abate 406:24
41 338:11	376:11	8	abatement
362:13	5600 378:21	8 290:24	339:16 341:5
417 283:8,9	5680 357:14	293:23,23	344:3 406:9,20
42 350:3	57 376:15	372:17 400:3,6	408:12 430:1
415:14,15,18		401:10 425:1	431:3 433:10
416:5,7 421:18			

[abatement - additional]

<p>433:18,21 435:1 abatements 430:23 able 286:1 307:8 311:5,23 334:7 347:23 350:17,22 394:2 402:20 406:24 428:8 428:14 433:5 434:7 438:17 438:19,24 439:4,12 440:17 443:19 443:21 444:1 445:24 abnormal 396:13,19,20 397:24 abnormalities 365:14 abnormality 366:6,10 367:3 above 280:9 294:5 295:7 297:5 300:6 368:24 369:1 378:22 383:5 383:11 385:13 388:13 394:1 425:5 434:10 434:17 absent 296:7 306:3 428:4</p>	<p>431:21 absolutely 304:21 396:19 396:20 ac 406:8 acceptable 326:7 access 289:13 accomplished 340:15 381:4 accumulating 354:14 accurate 287:24 291:21 295:6 296:7 298:21 302:7 322:1,4 337:22 447:14 achieved 296:3 acres 339:12,14 act 445:17 acting 285:1 320:12 action 340:5 353:11 380:7 395:13 401:5 426:8 actions 340:10 342:14,17 352:5,11 373:6 374:23 375:14 376:24 382:16 400:18 435:1 active 329:13 367:8 372:20</p>	<p>actively 329:13 actual 297:11 412:22 429:24 actually 296:10 301:13 312:13 363:19 384:21 391:24 398:15 416:18 420:8 420:16 432:2 442:4 adam 281:11 add 308:11 314:22 345:2,2 377:16 423:14 437:21 added 315:23 341:24 342:24 343:2,15 344:23 347:3 362:22,23,24 373:19 377:23 380:1 381:1 421:9 425:4 addendum 295:9 addendums 294:22 adding 301:23 347:7 373:8 378:2 addition 343:21 344:2 362:19 additional 290:12 299:16</p>	<p>299:19,20,23 300:4,6,10,19 301:15,23 302:20 303:9 304:8,10,17 305:2,3,6,7 306:11,17,21 307:15,17 308:1,8,11 314:16,18,22 315:5,9,10,24 316:14,24 317:1,4 318:17 324:21 330:4,9 331:8 332:3,20 335:23 340:3 342:13,16,17 342:20,24 343:2,15,18,24 345:12,13 347:3 353:11 360:7 372:15 372:18 374:12 376:23 377:15 378:6,13 379:24 380:20 380:24 382:24 385:10 387:10 391:22 393:14 399:3 400:23 404:3 407:17 409:23 410:9 411:18 418:19 421:15 422:21 424:4,9 432:9</p>
--	--	--	---

[additional - apache]

<p>434:22 437:22 438:1 439:20 additions 311:1 address 285:22 323:4 330:17 343:17 373:17 375:5 379:24 387:20 418:12 418:15 420:2 431:5 437:20 addressed 331:9 380:18 383:14,15 384:4 400:5 408:15 429:10 436:1 addressing 332:8 adequate 315:2 316:4,19 330:5 adequately 400:5 adjudicatory 284:6 335:21 399:1 adjustments 294:23 admission 292:4,13 338:2 admitted 292:14 317:24 317:24 338:5 advance 443:11 advantage 444:9</p>	<p>affect 346:17 380:20 afternoon 402:9 agrankin 281:13 agree 309:7 315:13 385:24 386:5 396:15 403:4,18 404:9 405:9 409:3 415:13 416:22 426:3,7,24 428:14 429:22 438:23 440:10 agreeable 444:19 agreed 302:3 303:23 304:4,5 311:18 317:2 322:21 377:12 439:12 agreement 311:15 400:16 405:16 ahead 316:21 318:21 354:11 406:1 aid 337:16 338:14 aimed 313:1 alarming 436:6 alleviate 305:10</p>	<p>allowed 439:10 amount 328:4 340:8 353:8 360:2,10 amounts 295:20,22 372:4 ampomah 283:5,9 284:19 284:19 325:12 325:14 332:11 334:24 417:18 417:19,21 427:6 433:1 437:11 438:22 441:10,11 445:2,12 analysis 296:22 326:2 381:7 analytical 297:19 300:5 302:15 303:14 analyzed 297:8 annotation 314:8 annual 296:14 297:24 301:15 answer 303:17 329:5,21 331:24 396:3 408:7 410:24 445:23 answered 309:19 330:6</p>	<p>answers 302:5 303:19 331:19 408:22 anterior 427:4 anticipate 427:15 anyway 330:8 apache 284:5 284:12 285:4 291:1,10 293:2 301:20 303:9 303:23 304:3 304:13 305:2 306:12,20,21 307:1,14 309:4 311:14 313:6 313:10,16 315:13,16 317:24 319:5 321:21 322:6 322:16,20 323:3 325:3 327:8,11,13,19 330:4,15,19,24 331:16 332:6 332:19 333:1 334:13,18 335:1 338:24 339:1,5 340:5 340:13,18 341:20 342:2,4 342:6,16,20,23 343:4,8,10 344:8,16,22 345:14 346:15</p>
--	---	--	---

[apache - area]

347:18 348:11 351:22 352:1,4 352:9,11 356:19,20 357:2,7 358:15 359:21 362:23 363:5,17 365:1 365:4 367:22 368:9 369:18 371:16 372:5 375:2,4,15,17 375:20 376:22 377:1,12 378:1 378:14 380:20 381:4,9 382:13 382:16 383:16 388:20 391:11 393:1 395:21 396:13 397:15 397:16 399:1,3 409:22 410:3 410:12,16 411:13,17 413:22 414:12 417:23 418:12 421:6,12 422:6 424:12,16,17 426:15,24 427:2 431:14 434:4 435:18 437:11 439:3 441:13 apache's 291:14 298:2 309:13 314:17	316:24 317:15 331:3 335:22 338:21 340:1 344:20 349:13 352:6 356:12 362:4,19 364:1 364:15,21 365:2 366:13 371:22 380:14 382:11 384:21 385:19 392:24 393:17 400:4 416:5 421:10 421:15 425:1 430:13 434:4 437:21 439:21 apacheche 284:7 apart 401:6 apologize 332:23 351:18 393:14 415:16 apparent 425:20 appeal 426:21 appear 314:6,7 appearances 281:1 282:2 appears 301:8 423:6 application 284:5 311:7 398:24 applied 393:3	applies 430:22 appreciate 335:16 432:19 436:17 439:8 439:22 440:5,6 approach 328:24 329:2 330:13,17 approaches 294:24 appropriate 381:17 382:1 401:2 441:5 appropriately 298:17 approval 284:7 291:15 294:16 311:8 312:4,24 313:5,6,15 314:3,9 315:1 321:10,22 324:13 328:10 328:15 335:22 362:22 373:20 376:15,19 377:16 378:9 380:11,17 382:23 383:21 399:2 400:22 407:5 413:10 414:2,14,18,19 415:4,5,8,12 416:4 421:18 423:7,9,11 424:11 431:21	432:16 437:15 439:19 approvals 312:8 393:23 approve 311:7 312:3 313:8 approved 311:9 345:14 352:10 approving 307:24 308:8 approximately 287:14 289:1 297:17 316:16 339:12,13,14 april 307:21 308:5 320:19 323:12 342:20 377:2 aqua 351:24 353:18 aquatic 288:6,9 area 298:20 299:5 310:12 338:22 339:11 339:13,13,19 340:4 341:16 342:15 343:4 344:4 346:18 347:7 348:5 349:7,8,18 350:18 351:20 352:9,15,22,24 353:1,4,8,11,17 353:18,19,19
--	---	--	---

[area - aware]

354:1,14 355:16,21 356:4,4,7 357:16,18,19 358:2,4,6 359:1,9,21 360:24 361:4,5 361:21,22 362:15 363:4,8 364:24 365:8 365:12,12,13 365:17,18 366:1,4,24 367:7,9,17 368:9,15 369:19 370:4 370:17,18 371:7,16,21,24 372:5,9 373:8 373:10 374:17 374:17 375:6,7 376:8 378:12 378:18,24,24 379:9,12,15,24 382:15 384:17 385:7,8,10,13 385:16 388:1,3 389:7,10,14 390:2,20,24 391:1,8,15,18 391:19,20,20 392:9,16 393:6 395:4,7,24 396:16,19,23 397:4,7,8,11,22	398:2,4 407:17 411:6,11 412:17 413:4 418:17,20 421:1,3,13 424:21 425:21 426:8 429:20 429:22,24 430:9 431:3 433:6,6,20 434:18,18 435:3,7 436:7 areas 339:15 341:13 346:11 348:3,7 349:16 350:2 351:21 356:2 362:16 364:10,11 365:15 371:1 378:3 380:22 384:22,24 387:10 389:17 392:8 407:5,21 407:22 408:3 412:1 423:16 435:6 argument 443:9 arguments 441:4 arrow 363:7 aside 424:24 asked 324:10 333:24 344:24 374:2 377:24	422:2 434:3 435:12 asking 331:22 332:23 347:4 378:6 431:18 433:3 aspect 433:2 aspects 347:2 350:13 427:20 429:6 440:2 445:16 assess 403:8 407:19 409:4 422:22 assessed 298:22 405:21 assessing 429:7 assessment 350:14 383:6 402:24 assume 376:5 assuming 423:11 435:7 assured 343:10 attached 304:6 311:9 330:9 attempt 387:13 396:4 397:12 attempting 398:9 attend 311:10 attended 333:13 attending 284:16	attention 334:14 337:1 365:5 384:17 398:10 403:3 attentive 397:17 auguring 422:19 august 314:14 333:15 426:20 authority 351:8 authorized 429:8 autopilot 398:16 availability 445:8,9 available 290:21 296:11 307:7 318:15 319:11 398:19 402:2 408:7 417:15 445:5 avenue 281:21 average 361:10 averaged 361:11,14 averages 361:9 avoid 411:23 439:24 aware 318:7 337:13,14 352:4 410:19 410:23
--	--	--	---

[awareness - bore]

<p>awareness 350:11</p> <p>awesome 441:14</p> <p>aztec 336:20</p>	<p>bad 434:17</p> <p>balls 330:24</p> <p>barium 383:9</p> <p>based 286:16 296:10 313:6,9 327:5 332:2 339:21,23 347:19 364:24 365:10 375:13 375:19 377:8 381:20 383:12 406:21 415:2,3 417:24 418:24 421:4 425:19</p> <p>baseline 306:2</p> <p>basic 339:8 371:12</p> <p>basically 393:11 408:6 432:21 433:16 438:8</p> <p>basin 288:22</p> <p>basis 318:16</p> <p>bear 332:18 357:6</p> <p>beatty 282:3</p> <p>began 299:7</p> <p>beginning 412:2</p> <p>begins 413:14</p> <p>behalf 287:16 336:21</p> <p>behold 349:19</p> <p>beige 385:5,14 385:24</p>	<p>belabor 345:12</p> <p>belief 401:1</p> <p>believe 286:1 290:20 296:5 297:12 299:23 306:20 311:4 313:12,13 318:9 320:2,9 320:13,18 321:22 322:3 323:11 329:3,4 330:18 331:3 331:12,16 332:17 334:3 335:1,8 336:2 339:22 340:18 345:24 358:20 364:1 379:12 379:14 381:24 382:18 383:4 383:10 385:19 386:14,24 399:17 400:3 402:19 410:13 410:18 413:20 416:14,19 417:4,6 418:23 419:21 420:22 420:24 422:5,7 422:9 424:16</p> <p>believes 396:13</p> <p>best 288:1 291:21 292:11 331:5 337:22 376:1</p>	<p>better 317:16 329:4 433:16 440:11</p> <p>beyond 302:8 302:10 303:3 305:4</p> <p>bhs 300:4</p> <p>big 327:6 347:14 378:24 397:11 398:4</p> <p>bigger 389:18</p> <p>bit 381:23 405:5 412:4 428:6</p> <p>bloom 283:9 284:21,21 325:9,11 417:17 427:7,8 428:17,24 429:4 431:23 432:2 438:5,6 438:22 441:15 441:17 445:1,5 445:7</p> <p>blownup 367:16</p> <p>blue 330:24 351:24 388:9 388:10,15 416:6</p> <p>borders 340:19 340:21</p> <p>bore 300:4 301:11 430:13</p>
b			
<p>b 284:22 414:3 414:3,13 415:3 418:4 421:19 431:21</p> <p>bachelors 288:5</p> <p>back 290:3 292:18 294:13 299:22 309:4 317:14 322:10 322:16 329:8 333:21 335:19 342:4,6,20,23 343:11,11,13 360:14 363:5 364:14 367:4 370:3 377:2,22 379:22 380:1,4 384:17 398:18 398:21,23 409:2,7 415:11 427:15 436:22</p> <p>background 307:20 339:18 361:13 369:1,2 386:20 418:23 446:1</p> <p>backwards 404:21 405:1</p>			

[boring - chair]

<p>boring 315:23 343:24</p> <p>bottom 319:23 385:15 387:1 387:19 391:4 391:24 412:11 440:5</p> <p>boundaries 302:2 303:13 306:12 307:16 341:1 353:24 407:11 418:6 418:16,22 420:16 427:4</p> <p>boundary 375:23 418:13 419:11,13 420:1 432:22</p> <p>box 281:18 344:2 352:1,16 352:18 365:13 374:10,16 385:24 386:10</p> <p>boxes 393:2,4</p> <p>brandon 283:7 312:22 317:7,8 332:1 336:5,8 336:16</p> <p>break 335:18 398:14</p> <p>brief 296:15,15 298:11 302:14 305:1 310:23 315:9</p>	<p>briefly 288:3 339:8 351:13</p> <p>bring 330:22 354:23 357:10 384:16 417:23</p> <p>bringing 397:15</p> <p>broadway 282:4</p> <p>brought 422:1 435:20 436:3 438:9</p> <p>buffer 385:16</p> <p>building 387:21 389:2,3 389:4,5 412:11 412:18</p> <p>buildings 388:2 412:7,22</p> <p>bull's 393:22</p> <p>burden 344:18 344:20</p> <p>bureau 287:14 324:16</p> <p>bureau's 318:3</p> <p>business 447:8</p> <p>bwenergylaw... 282:5</p>	<p>426:24 433:24 447:3</p> <p>c.41. 335:1</p> <p>c.s.r. 447:5,19</p> <p>cail 365:5</p> <p>calculate 390:4</p> <p>calculated 390:11</p> <p>calculation 367:6</p> <p>call 322:14 344:13</p> <p>called 287:6 336:9</p> <p>calling 429:18 429:19</p> <p>calls 287:1 336:5</p> <p>campaign 411:16</p> <p>cancel 345:16</p> <p>capacity 317:18</p> <p>carry 286:21 371:24 372:1</p> <p>case 284:4 286:15 321:1 360:1 387:11 398:24 401:7 431:2</p> <p>cases 443:7</p> <p>catalano 282:7</p> <p>catalanos 433:23</p>	<p>catch 352:19 389:19</p> <p>cattle 435:21</p> <p>caught 334:14</p> <p>cause 280:9 306:13 354:14</p> <p>caused 367:24 374:18 406:7 406:15</p> <p>causing 374:21</p> <p>caveat 421:21</p> <p>caveats 386:4</p> <p>cd 380:14</p> <p>ceased 333:23</p> <p>center 420:17</p> <p>centered 295:10 333:16 333:18</p> <p>certain 301:10 399:20 426:10 427:20 445:16</p> <p>certainly 409:9 441:23</p> <p>certified 447:7</p> <p>chain 297:17 301:2 302:16 310:17 342:10</p> <p>chair 285:3,8 285:19 286:23 289:10 292:4 292:16 319:10 335:12 337:2 399:9,22 417:14 427:8 427:12 429:1</p>
	<p>c</p>		
	<p>c 296:18 330:20 351:2 356:21 403:22 409:10 410:5,7 414:7 414:8,12 416:6 417:7,23</p>		

[chair - clean]

<p>436:3,24 437:18 439:6 441:17 444:3 446:4,5 chair's 423:20 chairman 402:5 challenges 405:12 chance 401:18 443:2 444:13 444:15 change 340:2 358:18 361:19 422:13 423:24 changed 299:24 361:19 407:24 408:2 changes 288:16 291:24 301:3 369:18 372:16 380:19 423:17 changing 369:20 384:11 channels 355:20 character 403:24 409:12 characteristics 420:11 characterizati... 306:3 322:2,4 350:15,23 351:3,6 386:21 389:13 403:1</p>	<p>403:17 404:24 405:18,24 407:15,17 430:5,7 431:10 characterizati... 288:24 396:10 406:21 408:17 characterize 304:16 308:17 322:17 350:22 407:9 characterized 405:20 408:23 409:17 431:11 characterizing 350:24 405:12 charge 413:6 check 428:1 chicago 447:8 chief 287:14 chino 387:21 389:5 412:10 chloride 294:5 295:1,7 296:21 297:4,20 299:15 301:21 302:19 305:14 310:4,6,9 318:10,24,24 319:1 326:7,12 339:17 341:2 346:17 347:6 348:5,9,14,15 349:23 352:21 352:24 353:2</p>	<p>355:6,9 357:13 357:15,17,23 358:5 360:17 360:19 361:21 364:6 366:12 366:13 367:10 368:3,20 369:12,14,17 370:5,11 371:10,16,17 372:17,18 373:3,10,15 374:6,10,13 382:8 385:21 386:2 388:13 392:3,16,17 395:7 407:6,12 407:18,22,23 408:4,8,24 411:5,10 417:2 423:3 431:8 433:5 chlorided 359:17 chlorides 295:11 346:9 355:4 369:20 370:1 371:11 371:13 372:13 378:21 379:9 382:20 386:16 397:14,18 chris.moander 281:9</p>	<p>christopher 281:7 chronological 292:23 circle 362:1,2,7 391:22 circled 317:1 circumstance 334:11 circumstances 306:4 citizens 435:15 city 280:9 447:8 clarification 392:20 432:15 clarified 416:13 clarify 291:6 304:2 309:16 309:21 313:18 313:23 318:5 320:21 346:2 355:18 363:14 381:20 398:3 401:1 407:21 413:11 421:17 clarifying 290:22 354:22 clarity 415:11 classifying 340:13 clay 423:2,4 clean 303:19 385:11 388:11</p>
---	---	---	---

[cleaner - commissioner]

<p>cleaner 419:5 cleanup 344:17 clear 345:17 363:23 400:10 412:16 415:17 424:19 climb 363:10 close 298:17 326:13,14 340:21 349:9 349:17 359:1 361:2 363:8 401:4 421:2 438:8 closed 296:6,9 296:10 319:7 428:15 closer 359:6 396:11 closest 356:2 364:9 376:6 378:23 closing 411:12 428:11 431:6 439:2,4,8 440:6,19,22 441:7,8,20 442:15 443:9 444:23 closings 427:14 427:15,22 440:21 closure 295:15 295:16 296:3,4 296:17 325:18</p>	<p>325:22 326:5 326:13,14 closures 326:1 coa 349:11 coas 343:3 344:10 345:14 364:4 379:22 379:23 380:3,8 411:18 421:11 cocs 339:4 collaborative 379:19 collect 398:7 collected 301:4 302:16 323:5 381:6 collecting 408:13 collection 356:4,7 color 351:24 385:5 column 348:15 348:17,19,20 348:21 359:18 359:24 372:11 373:15 374:6 374:10 379:8 379:11 397:14 397:19 422:21 columns 347:2 364:6 395:8 combination 413:21</p>	<p>combined 419:22 424:16 combining 422:5 come 290:3 309:4 331:17 335:18 343:11 351:3,18 363:5 365:1 389:13 398:17,21 423:7 427:19 441:19 446:1 comes 331:14 378:4 coming 329:16 371:18 405:8 419:15 427:14 434:9 commence 328:9 commencem... 383:23 commencing 280:11 commensurate 398:1 comment 320:15 commercial 412:23 413:3 commission 280:1,3 284:2 285:2,20 288:4 289:8 292:20 298:9 300:3</p>	<p>301:18 309:22 310:1 313:18 315:8,22 316:22 331:23 338:10,15 346:2 350:5 351:12 356:10 358:21 360:13 364:19 376:12 376:18 384:20 387:14,24 390:16 392:20 393:6,10 402:3 412:15 416:2,2 416:3 426:2,7 426:9,11 435:14 441:9 444:18 445:1 commission's 314:11 384:16 388:6 415:7 421:22 commissioner 283:6,10 284:1 284:14,17,19 284:21,22,24 285:13,17 286:13,21 287:2 289:13 292:6,14 319:12 324:6 325:8,9,11,12 325:12,14 332:11,12 334:24 335:9</p>
--	---	---	---

[commissioner - concerns]

335:13,15,21 338:5 398:12 398:20,23 400:1 401:8,13 401:23 402:4 417:12,16,17 417:18 427:6,7 427:7,8 428:3 428:17,24 429:4 431:18 431:23 432:1,1 432:24 433:23 434:2 436:11 436:16,20 437:5,10,11,16 438:5,6,7,22,22 440:12 441:10 441:11,15,15 441:17 442:4,9 443:1,13 444:10,17,22 445:1,2,5,7,12 445:15,22 commissioners 284:18 286:24 325:9 417:15 428:12 commitment 328:19 428:5 committed 332:7 common 343:6 389:12 429:12 429:21	communicate 310:23 322:5 382:3 communicated 311:17,21 312:1 322:9 325:5 communicating 298:10 communication 298:22 300:12 317:8 321:9,15 328:22 333:7,9 333:12,23 342:10 378:8 communicati... 292:11,23 298:12 299:4 300:13 302:23 305:21 308:21 312:9 321:21 323:9,14 compared 345:24 comparing 365:23 comparison 300:23 305:16 310:2 complete 285:6 285:16 311:2 311:22 313:1 313:11 328:1 329:19 334:21 339:6 358:4	402:1 437:2,6 437:23 447:14 compliance 288:16 complied 411:17 comply 317:10 344:12,15 380:8 complying 344:10 composite 347:4 373:21 383:22 comprehensive 303:12,17,21 304:20 311:2 325:3 334:21 342:19,22 343:10,12,13 424:20 comprehensi... 322:10 concentrated 392:8,9 concentration 340:2 345:23 346:3,7 355:14 364:6 368:8,11 408:4 433:9 435:4,6 concentrations 296:22 297:5 310:4 341:9,11 344:4 347:22	348:3 353:9 360:23 362:17 368:4 371:17 407:6,14,18,22 407:23 408:8 411:6 433:5,17 concept 354:21 371:9 408:13 concern 294:15 298:13 299:8,9 304:17 308:2 310:11 348:12 354:24 359:9 366:22,23 367:8 373:8 374:3 377:1,2 377:5,9 379:1 379:4 391:7 397:20 423:20 423:22 424:1 436:2,4 concerned 304:19 360:8 379:18 concerning 368:23 371:3 372:18 378:19 concerns 285:23 286:5 299:6 305:10 305:20 306:18 316:10 343:17 345:6 380:1 423:15,18
---	--	---	---

[conclusions - contamination]

<p>conclusions 442:13,18</p> <p>condition 330:10 375:3 378:1 381:1 383:3 413:14 413:15,16 414:13 421:18 423:9 424:10 424:24 425:8 437:15</p> <p>conditioned 313:15</p> <p>conditions 284:7 285:12 286:2,11,18 291:15 298:14 311:8 312:4,24 313:5,15,19,24 314:2 317:11 321:10,22 324:12,20 341:21 342:1 343:11 347:3 362:22 373:19 373:20 376:14 376:19 377:16 377:23 378:9 380:11,17,21 380:21,24 382:23 383:15 383:21 384:12 393:16 399:2 400:21 407:5 408:5 413:10</p>	<p>414:2,14,18,19 415:4,5,8,11 416:4 423:7,11 424:16,18,23 425:10 426:22 430:23 431:21 432:6,16 439:19</p> <p>conducted 289:1 416:15</p> <p>confidence 395:11,14</p> <p>confident 330:8 395:23</p> <p>confirm 323:17 421:4</p> <p>confirmation 295:19 300:9 301:10</p> <p>confirmed 299:15 431:1</p> <p>confusion 301:6 405:5</p> <p>consensus 442:5</p> <p>conservation 280:1,3 281:6 284:2,16 287:1 287:17 289:8 336:19,22</p> <p>consider 416:4 440:9</p> <p>considerable 431:6</p>	<p>consideration 305:20 415:7</p> <p>considered 323:20 366:3 421:9,11 442:21</p> <p>considering 320:22 439:18</p> <p>consistent 294:17 321:11</p> <p>constantly 344:24</p> <p>constituent 309:8 348:17 383:1,18</p> <p>constituents 348:22</p> <p>consult 324:24</p> <p>consultant 301:20 334:10 334:12,13 395:22</p> <p>consultation 350:7</p> <p>contact 305:2 344:7</p> <p>contain 373:14 374:23</p> <p>contained 293:10 309:13 309:22 400:24</p> <p>containing 404:17</p> <p>containment 295:1</p>	<p>contains 339:13</p> <p>contaminant 368:18</p> <p>contaminants 346:11 349:14 354:11,15 355:15 357:21 358:3 361:1 362:3 375:18 419:7</p> <p>contaminated 326:9 339:13 339:19 347:1,6 347:12 348:20 349:19 352:19 363:8 367:18 373:23 374:15 383:8 387:4,6 389:8</p> <p>contaminates 348:15,16</p> <p>contaminating 329:14 397:19</p> <p>contamination 295:18 302:19 307:9 310:6 313:9 326:10 326:18,22,23 327:3,10 329:8 330:1,10 346:19 348:18 352:22 355:9 362:17 370:12 373:10,14</p>
---	---	---	--

[contamination - counsel]

<p>374:18,22 375:19,21 376:4 391:3 392:4 394:22 408:20 411:10 418:13,15 431:3 content 301:18 315:21 400:19 contents 293:24 294:7 294:20 297:1 300:22 303:7 310:1 312:13 314:15 315:7 317:21 393:10 contest 284:6 335:22 399:2 contested 425:5 425:6,9 contesting 425:1,2 continually 322:24 continuance 438:12,13,21 continuation 284:3 299:3 310:16 312:10 367:7 369:8 continuations 380:11 continue 286:5 286:15 297:20 302:19 307:1,5</p>	<p>310:17 330:17 340:10 386:5 397:1 399:7 408:21 428:8 428:14,16 430:16 continued 295:13 307:18 342:14 376:24 398:7 432:6 continues 340:4 continuing 318:24 345:12 continuously 357:11 contour 368:12 368:14 369:12 contouring 360:17,18 369:17,21 contours 340:2 368:4,8 369:9 390:7 433:20 contrary 366:14 contrasted 345:24 contribute 372:6 control 296:1 296:23 conversation 308:7 317:7 329:3 333:16</p>	<p>333:18,22 conversations 299:10,13 308:20,23 310:23 345:8 conversion 383:10 conversions 310:18 cook 447:8 cooperative 322:17 344:23 coordination 330:14 copy 402:15 copying 314:10 core 294:11 346:10,11 347:12 357:21 372:21,23 373:1,10 corner 386:10 387:19 412:12 415:1 corners 385:2 corporation 284:5 399:1 corporation's 284:7 356:19 399:3 correct 291:4 300:15 302:24 318:1 327:2 336:3,4 339:5 340:18 355:7,8</p>	<p>358:12 363:21 363:22 393:24 394:4,6 403:2 404:6 405:10 406:3,4,11 407:13,20 408:10 409:7 409:24 410:9 410:10 411:16 411:17 412:9 412:14,20,24 413:1,19,24 414:15 415:9 417:1,8 419:17 421:7,21 431:13 432:13 436:18 437:8 442:1 corrections 291:24 300:1 337:12 339:3 340:3 correctly 286:14 298:4 306:23 342:15 354:24 382:10 404:5 407:8 414:16 corresponden... 437:24 corroded 293:19 corrosive 294:5 counsel 317:9 320:5,6,8,10,14</p>
--	--	---	---

[counsel - decreasing]

<p>344:8 350:8 428:4,9 438:11 438:16 county 280:10 284:8 335:23 399:4 447:3,8 447:10 couple 289:11 318:4 321:15 325:16 332:12 338:22 339:10 341:20 350:1 354:22 360:15 364:22 377:18 386:4 392:18 398:18 400:18 406:1 412:1 417:19 420:4 427:9 442:17 coupled 319:1 course 399:14 405:11 432:24 439:1 court 287:3 courts 447:10 cover 328:6 437:20 covered 376:13 covering 396:20 covers 406:2 create 360:22 created 351:19 365:3 384:15 390:18</p>	<p>creation 423:5 credit 352:11 creeping 435:24 criteria 294:5 326:13,14 criticism 410:3 criticisms 409:22 cross 283:4,5,6 283:8,9,9,10 319:11,16 325:13 332:14 333:6 367:24 398:19 401:3 401:21 402:2,6 417:20 429:3 432:4 csr 280:11 current 339:23 351:9 356:13 356:15 357:2 359:9 375:8 386:8 408:9 420:14,21 424:6 432:7 currently 339:11 386:18 388:9 407:23 410:17 curriculum 337:4 curser 388:17 394:1</p>	<p>custody 297:18 301:3 302:16 310:17 cut 385:2 cyanide 383:4</p> <hr/> <p style="text-align: center;">d</p> <hr/> <p>d 280:11 283:1 427:1 447:5,19 dalva 282:6 dana 281:20 daniel 281:3 dash 380:14 data 382:5,13 408:7 423:12 423:13 426:12 426:13,14 date 298:5 304:1 305:10 305:18 310:4 311:3 323:16 328:9 338:23 345:10 347:9 349:20 357:11 369:9 376:9 379:18 381:1 384:14 385:10 385:11 390:18 432:7 438:23 dated 320:3 416:15 dates 416:23 444:23 day 280:12 344:15 396:22 421:22 430:20</p>	<p>440:24 443:17 447:16 days 306:5,6 328:9,14 383:24 424:5 425:15 de 281:15 282:7 deadline 328:19 440:22 441:3 deadlines 328:20 399:20 deal 285:11,13 323:4 dealing 351:20 387:24 388:7 389:1 392:7 421:3 dealt 389:14 december 365:13 369:12 370:1,7 416:24 decides 416:3 decision 304:22 308:3 310:19 317:15 318:20 320:20,21,23 344:7 421:22 decisions 339:7 deck 399:12 decrease 370:21 decreasing 369:22 370:9</p>
---	--	---	---

[deep - dig]

<p>deep 294:11</p> <p>define 324:16 374:12 391:18 394:13,21</p> <p>defined 386:14</p> <p>definite 306:14 397:7</p> <p>definition 423:21</p> <p>definitive 399:19</p> <p>definitively 323:18</p> <p>degrade 340:4</p> <p>degraded 340:7 436:5,7</p> <p>degrading 425:21,22</p> <p>degree 395:11 409:24</p> <p>delay 411:20 426:8,14</p> <p>delayed 382:19</p> <p>delays 340:5</p> <p>deliberate 428:8 438:15 443:20 445:8</p> <p>deliberating 427:16</p> <p>deliberations 445:3</p> <p>delineate 308:12 316:4 341:8 407:11 419:19 433:6</p>	<p>delineated 339:16 340:20 340:20 385:21 427:3 431:12</p> <p>delineating 310:11 340:21</p> <p>delineation 299:18 302:8 303:12,17,21 304:21 306:21 309:6 311:2,20 311:23 313:1 315:2 316:15 317:5 324:17 325:3 327:9 328:1 329:24 340:11,17,18 345:24 346:3,7 350:24 353:11 378:7 386:6,19 394:13,15 404:15 427:5 430:5,7 431:10 432:23</p> <p>delineations 389:14 396:10</p> <p>demonstrated 327:24</p> <p>denver 282:4</p> <p>deny 311:7</p> <p>denying 308:1</p> <p>department 281:2 288:11</p> <p>depending 338:24 379:10</p>	<p>416:2 420:10 426:6</p> <p>depict 384:22 385:5</p> <p>depicted 368:6 390:13</p> <p>deployment 425:13,17 426:1</p> <p>deposes 447:6</p> <p>deputy 312:22 336:20</p> <p>describe 288:3 310:21 322:12 393:9</p> <p>described 359:21</p> <p>designee 284:22</p> <p>detail 293:3 298:12,20 308:3 312:21 317:6 320:20 328:5 333:4,17 338:19 340:16 400:16</p> <p>detailed 424:12</p> <p>details 293:4 330:11 364:22 440:10</p> <p>detect 387:7</p> <p>detected 296:23 297:5 353:3 357:19 383:4</p>	<p>detects 302:17</p> <p>determination 331:23 350:4 406:14</p> <p>determinations 340:10</p> <p>determine 329:15 378:5 440:17</p> <p>determined 329:6 353:17 355:21 356:3 426:13</p> <p>determines 403:23 406:6 409:11</p> <p>determining 409:14</p> <p>development 412:7,23 413:3</p> <p>dhardy 281:22</p> <p>difference 342:8 360:3</p> <p>different 301:8 305:15 313:21 348:2,6 349:12 349:16 361:8 398:6,17 416:19 423:10 440:1 443:4</p> <p>difficult 313:19 341:16 422:11</p> <p>dig 295:11 395:12</p>
--	---	---	--

[digging - drastically]

<p>digging 375:17 375:24</p> <p>dimensions 393:2,3</p> <p>direct 283:4,8 285:9,14,15 287:9 293:16 319:10 336:12 351:10 356:18 364:16 369:7 376:15 432:20 436:1</p> <p>directed 377:14</p> <p>directing 289:15 293:7 337:1</p> <p>direction 321:4 361:18 365:7 420:6</p> <p>directions 443:4</p> <p>directive 345:16</p> <p>directly 294:2 297:23 316:24 341:4 386:9,11 388:15,20 391:5 394:17 395:3 420:8,18</p> <p>director 285:2 312:22 317:8 320:13 336:20 406:6,8,19</p> <p>disagreement 322:12 426:22</p>	<p>discovered 352:16 382:17</p> <p>discrepancies 301:5 331:7</p> <p>discuss 322:8 380:16 383:16 402:24 427:18</p> <p>discussed 286:12 291:20 301:23,24 303:22 353:13 354:18 368:24 374:20 375:14 381:22 382:24 393:17 400:8 424:12 432:12 437:1 439:14</p> <p>discusses 321:20</p> <p>discussing 285:21</p> <p>discussion 309:5 316:7 325:6 340:17 342:18 375:2 382:18 399:24 400:4 409:3,21 431:18 442:23</p> <p>discussions 311:16 316:12 317:14 318:14 322:17 325:4 345:2 400:11</p> <p>displayed 337:8</p>	<p>disputing 339:2</p> <p>dissolve 397:18</p> <p>dissolved 348:17 379:8</p> <p>distance 420:23</p> <p>dive 341:16 367:21</p> <p>division 281:6 284:16 285:1 286:17 287:1 287:17 321:21 322:22,23 323:3,13,14 336:5,22 338:18 341:20 342:3,5 344:11 380:19 398:8 403:23 404:2 406:14 409:11 409:24 410:8 410:12 411:4 424:4,8 429:13 430:22</p> <p>division's 284:6 323:10 336:19 399:2 407:4 410:15 415:7</p> <p>dlm 282:8</p> <p>doable 442:10 443:20</p> <p>document 290:5,14,24 291:7,8,11,13 291:17 308:15 312:8 400:24</p>	<p>413:13 414:2 415:12 442:20 443:8</p> <p>documentation 297:13 321:2 323:22</p> <p>documented 314:3,5</p> <p>documenting 314:1</p> <p>doing 302:20 338:18 422:23 425:23 426:5 428:10 434:24 439:20 441:7 447:7</p> <p>dot 391:21</p> <p>dots 330:23 393:23</p> <p>doubled 361:14</p> <p>downgraded 359:16</p> <p>downgrading 389:1</p> <p>downhill 355:13,19</p> <p>dr 283:5,9 284:19 402:9 417:21</p> <p>dramatically 394:23 408:2</p> <p>drastic 422:13 423:17</p> <p>drastically 340:2</p>
---	---	---	--

[draw - enforcement]

<p>draw 398:10 421:12</p> <p>drawing 360:22</p> <p>drawn 360:17</p> <p>drill 300:11 328:16 329:1 343:4 383:23 410:13,16</p> <p>drilled 300:9 328:14 342:3 347:9,11 373:21,22 374:1,5 425:14 425:17</p> <p>drilling 303:14 308:9 328:8 383:23 395:15 395:22 411:14 411:16 422:19</p> <p>drive 281:8 387:20 412:13</p> <p>drop 421:20</p> <p>dropped 370:2 415:6</p> <p>drubin 281:4</p> <p>due 293:19 353:14 379:18 382:19</p> <p>duly 287:6 336:9 447:6</p> <p>duplicate 293:1</p> <p>duplicates 415:13</p>	<p>duties 288:13</p> <p>dylan 320:13</p> <hr/> <p style="text-align: center;">e</p> <hr/> <p>e 283:1 290:20 295:4 304:6,7 304:9 305:23 308:21 320:3 320:11 323:13</p> <p>earlier 285:23 309:9 312:6 333:10 348:11 351:23 385:18 396:9 409:2 410:22 422:3 438:9</p> <p>early 304:12 345:9 383:8 440:17</p> <p>earth 393:4</p> <p>easier 313:22 341:15 446:2</p> <p>easiest 385:1</p> <p>easily 441:5</p> <p>east 340:19 356:6 357:22 360:24 371:6 386:3,4,24 387:4 391:17 392:2,4 393:19 394:7 411:10 420:9</p> <p>easterly 353:24</p> <p>eastern 418:22 419:8</p>	<p>easy 312:17 440:4</p> <p>ebdu 412:19 413:4</p> <p>edge 363:9 385:15 392:9 394:15,18 419:8,8 420:11</p> <p>edges 370:22 394:12,13</p> <p>effect 311:14 346:23 360:22 366:3 382:4 385:22 396:12 435:3</p> <p>effective 422:8 433:13</p> <p>effectively 311:22 312:2 341:13 346:22</p> <p>efficacy 307:22</p> <p>efficient 341:12 433:22</p> <p>effort 312:10 317:10 322:7 332:9 343:16 343:22 344:5 380:6</p> <p>efforts 299:14 329:9,11,12</p> <p>eight 348:4</p> <p>eighteen 420:8</p> <p>either 289:4 341:4 344:10 373:6 440:7</p>	<p>elaborate 365:19</p> <p>elevated 294:4 295:7 386:8 418:3</p> <p>elevations 297:20</p> <p>eliminate 330:10</p> <p>eliminated 413:22</p> <p>email 295:19</p> <p>emails 323:21</p> <p>emnrd.nm 281:9</p> <p>emnrd.nm.gov 281:9</p> <p>emphasis 435:13</p> <p>emphasize 378:16</p> <p>emphasized 303:11 343:9</p> <p>employed 288:8,18</p> <p>employee 295:20</p> <p>employment 288:22</p> <p>enable 395:10</p> <p>encounter 347:6</p> <p>ends 410:6</p> <p>enforcement 379:20 380:7</p>
---	--	--	--

[enforcement - exhibits]

<p>399:16 engineer's 288:19 enter 430:20 entered 314:3 433:4 439:20 entire 323:1 348:15,16,20 357:16 359:18 359:24 362:7 397:14,19 400:19 entitled 280:9 environment 288:11 404:2 environmental 287:14 288:12 318:2 324:16 403:9 404:16 409:5 equipment 326:24 equipped 331:24 equivalent 421:13 ernest 281:17 errata 356:20 error 383:10 errors 331:11 especially 305:15 353:6 418:16 429:14 436:4</p>	<p>essence 345:11 essentially 344:9 351:22 353:18 356:6 361:2 362:24 established 327:10 329:19 330:13 evaluated 362:21 evaluation 362:21 evaporates 354:13 event 297:3,16 297:19 352:12 354:17 357:12 365:1 366:10 369:15 381:12 383:13 422:14 422:14 426:2 events 292:24 319:4 349:5 354:6 356:4 366:7 367:2 368:9 370:17 373:12 381:10 381:18 383:17 392:12 425:20 everybody 302:3 342:7 446:2 evidence 286:6 292:12</p>	<p>evident 340:6 evidentiary 280:3 284:9 335:24 399:5 437:2 438:9 446:3 evolved 368:10 exactly 372:8 378:15 405:14 examination 283:4,4,5,5,6,8 283:8,9,9,10 287:9 319:11 319:16 324:8 325:13 332:14 336:12 398:19 401:3,21 402:2 402:6 417:20 429:3 432:4 examine 345:20 examined 287:7 336:10 examiner 338:2 example 382:7 426:24 excavated 295:11 326:9 excavation 294:11 295:10 319:6,7 352:24 353:4 355:11 exceedances 383:12</p>	<p>exceeded 296:23 excellent 319:12 417:16 except 304:3 391:10 excerpts 297:22 314:17 317:22 364:20 excess 353:13 406:7,16 excessive 396:17,21 exhibit 286:2 287:22 289:18 289:19,24 290:4,11,13 291:9,21 292:19,20,21 292:22 293:8 309:13,14 317:23 337:7 337:10,13,18 337:20 338:2 338:11,11 351:19 356:21 364:16 382:11 398:17 400:3,9 400:20 402:15 403:16 406:2 413:10 414:8 414:12 417:7 417:23 exhibits 289:12 291:20 292:1,5</p>
---	---	--	--

[exhibits - fe]

<p>337:1 351:23 392:18 399:24 417:5 existing 307:19 388:10 expand 318:20 443:16 expanded 302:8 303:3 317:18 expanding 299:5 314:11 expansions 294:24 expect 286:7 349:22 expectation 285:24 306:2 324:23 expecting 342:3 expedite 340:11 343:1 345:15 377:17 experience 288:4 306:1 371:12 397:23 expert 347:21 354:7 362:4 383:16 explain 333:8 358:21,23 378:14 384:19 412:4 433:8</p>	<p>explained 364:2 389:24 412:14 explains 358:18 405:5 explanatory 316:23 exploring 429:5 exposure 346:18 expressed 325:2 333:19 377:1,5,9 expressing 286:5 expressly 377:24 extending 418:17 extends 392:4 extense 354:19 extensions 306:4 extensive 324:17,20 345:19 352:9 371:8 extensively 367:21 391:20 399:11 extent 310:6 311:17 322:9 331:2,13 334:20 355:9</p>	<p>373:4 386:18 386:19 390:6 390:10 392:7 418:2,6,12,15 419:16 435:11 extenuating 306:4 exterior 301:22 302:1 340:21 375:23 386:2,6 420:15 external 307:16 310:11 385:20 419:11 432:22 extrapolate 355:19 extreme 298:12 extremely 360:6 361:6 370:24 382:15 389:16 392:11 411:11 eye 393:23</p>	<p>395:9 406:13 407:2,9,15 408:6 444:13 444:15 fairly 316:23 362:2 389:19 429:12 faith 317:10 322:7 343:16 343:22 344:5 379:23 380:5 400:11 fall 318:11 370:24 430:1 falling 371:3 familiar 354:21 fane 281:14 far 285:8,14,15 302:8,10 311:20 317:13 340:14 341:21 348:23 360:19 362:3 364:12 366:16 384:23 388:22,24 395:17 397:8 422:19 432:24 435:1 fast 346:24 360:6 361:6,18 361:19 379:3 445:23 favor 351:15 fe 280:10 281:4 281:8,12,15,18</p>
		f	
		<p>fact 292:10 343:9 410:1 411:13,14 412:16 440:23 442:13 factor 359:7 factors 358:1 factual 365:2 failure 344:12 fair 323:1 329:20 386:21</p>	

[fe - form]

<p>281:21 282:8 390:21 445:10 february 290:4 298:5 445:6 447:16 feel 286:4 307:8 309:21 312:1 314:24 316:3 316:18 317:9 322:23 325:5 330:4 332:7,9 333:1 334:17 334:19 377:4 380:5 384:5 395:6 406:19 407:16 419:23 430:4 435:22 feels 393:19 394:9 feet 339:12,14 346:20,20 347:5 348:19 354:9 359:23 362:11 364:9 373:22 376:7 378:23 379:10 379:10 385:7,8 387:2,4,5,8 390:8 392:6 395:4 397:21 421:1 felt 305:12 308:14,22 311:14,21 334:11 335:3</p>	<p>343:21,22 344:4 345:11 377:7 385:20 field 308:12 314:7 327:13 388:3 fighting 433:16 figure 333:14 414:7 416:5 file 323:15 filing 443:7 fill 364:4 filling 294:14 fills 364:11 final 333:13 340:10 find 341:15 343:6 346:10 414:20 415:20 416:8 418:18 418:20 423:1,4 430:12,15 finding 341:2 440:23 findings 442:13 442:18 fine 344:14 395:20 410:22 finish 284:10 405:23 428:21 finished 285:4 336:1 firm 281:17 first 287:6 298:9,22 318:6</p>	<p>318:23 325:16 336:2,9 340:12 357:9 371:14 402:13 403:3 409:10 410:7 415:18 417:22 435:13 445:6 447:6 fit 362:7 fits 413:12 five 300:9 315:24 332:19 342:1,23 343:14 356:2 358:24 369:4 377:6,12,13 380:2,3 383:3 421:8,14 431:7 434:21 flag 300:13 355:13 flags 353:5 flexibility 329:1 flexible 328:21 328:23 445:14 float 348:16 359:17 flow 305:16 349:17 353:15 354:1 362:5,15 364:24 365:8 366:12,16 367:15,17,18 367:24 390:24</p>	<p>391:14 420:6,7 420:10,23 433:19 flowing 353:8 354:2 371:20 372:11 390:24 flows 340:1 349:16 353:20 355:13,18,20 364:16 379:5 390:16,17 focus 288:14 438:2 focused 391:20 folks 444:14 follow 303:13 310:21 321:4,6 355:21 363:7 followed 308:1 325:21 352:12 following 305:23 362:8 412:5 445:10 follows 287:8 336:11 362:14 followup 436:14 foregoing 447:12,13 forest 288:8 forget 319:13 375:15 forgive 332:17 form 355:4 416:1 439:12</p>
--	--	--	---

[form - go]

<p>440:16 442:16 443:11 444:7 formal 308:15 308:22 312:9 378:8,9 formally 314:2 406:15 format 312:18 formation 379:13 formatting 313:21 former 295:20 forms 439:10 440:8 forth 317:14 322:16 379:22 forward 345:7 381:6 383:17 400:17 442:3 found 349:19 368:18 405:6 408:20 421:13 427:2 foundation 289:11 four 297:6 298:4 301:23 307:17 318:23 339:11 342:20 365:7,14 366:1 366:3,5 367:6 377:3 383:3 394:16 416:19</p>	<p>fourth 381:20 400:12 frame 321:14 321:16 376:20 382:1 444:5,9 francis 281:8 387:20 412:13 frank 378:12 free 348:13,14 379:7 384:5 397:16,21 fresh 404:1,18 404:22 409:13 409:15 fresher 419:8 friday 444:4 front 319:23 320:10 402:17 414:6 fuge 320:13 full 327:8 329:24 350:23 351:6 400:16 fully 308:12 316:4 326:24 329:10 330:10 332:7 339:16 340:20 370:5 372:9 374:11 379:8 386:13 419:19 423:7 423:16 442:21 further 286:15 299:14,17 319:2 325:7</p>	<p>326:12 335:12 340:16 345:17 356:5 365:19 369:6 375:19 386:19,23 388:21 399:23 401:4,5 411:9 411:11 412:5 417:6 424:21 427:4 428:2 431:24 436:15 437:3 438:6 439:9 future 373:20 383:16 408:14</p> <hr/> <p style="text-align: center;">g</p> <hr/> <p>g 281:11 gained 368:12 galistoeo 281:3 gallagher 282:6 gap 349:9 364:11 395:24 411:12 421:2 gaps 364:5 391:19 gas 372:1 gears 384:11 general 295:3 350:10 367:7 370:13 384:17 384:24 388:6 391:11 393:3,6 393:15 410:19 generally 288:21 354:21</p>	<p>366:4 380:12 408:16 generated 382:9,11 417:4 geologist 379:13 gerasimos 285:1 getting 295:11 305:14,19 321:19 334:22 350:3 359:1,6 365:16 371:11 371:13,18 382:5 426:14 444:13 gist 401:18,20 give 289:13 305:20 308:2 344:8 351:16 351:20 352:10 366:21 397:7 441:2 443:2 444:12 given 314:9 345:19 394:10 427:12 439:16 444:20 gives 366:23 367:8 389:9 gknet.com 282:8,9 go 284:13 286:6,19 293:3 298:11 312:21</p>
--	---	--	---

[go - guadalupe]

<p>315:10 317:6 318:21 328:4 330:11 333:3 338:18 341:17 343:11 344:18 344:20 345:20 356:11,16 357:4,6 364:10 365:18 368:3 370:14,15 375:17,23 378:13 381:6 385:15 393:8 393:13 395:23 409:7 411:24 418:5,7,9 419:9 432:3 438:15 441:6 443:4 goal 340:9 goes 286:20 360:18 370:22 388:3 390:24 408:16 420:17 going 286:1,6 290:3 292:18 298:8 300:19 300:21 312:20 312:23 313:7 317:11 328:4 329:14 335:6 338:11 340:16 346:5 347:13 347:14,17 349:22 350:2,4</p>	<p>351:10,23 355:22 356:18 357:10 359:7 361:8,17,18,20 361:23 364:13 367:12,23 368:3,21 369:7 369:19 370:13 370:14 372:1,3 375:4 376:15 376:20 377:19 378:15 383:17 384:2,2,5,12 387:7 390:12 393:8 394:21 396:23 397:10 401:9 409:2 411:8 415:24 418:18 421:12 422:20 427:13 428:13,19 433:12,15,19 433:20 434:7 434:11,18,20 435:3 442:6,17 good 284:21 287:11 317:9 322:7 329:14 330:14 336:14 341:24 343:16 343:22 344:5 349:14 379:23 380:5 398:13 400:11 402:9 422:1 428:3,24</p>	<p>434:7 442:2 google 393:4 412:18 gotten 323:23 gov 281:9 government 443:15 gradient 349:15,16 359:6,8 362:5 362:8,15,15 363:7,11 365:8 365:15,16,22 366:10,16,24 367:22,24 368:1 371:20 386:9 389:7 391:6,16,23,24 392:23 395:3 420:19 gradients 359:19 grading 366:4 graduating 288:7 graham 364:1 416:12 434:4 435:12 437:20 graham's 438:2 great 323:4 357:2 443:12 green 330:23 414:24 greg 284:21</p>	<p>ground 288:14 288:17 294:15 296:8,14 297:24 299:8 299:14 300:24 307:1 316:15 318:7,11 319:4 321:1 329:7,9 329:11 339:17 340:1,4 341:5 341:14 343:7 344:4 345:6 347:5 349:15 352:19 353:15 355:6 360:1 364:15,24 366:24 371:10 371:11,14 372:10,11,14 372:19 373:11 373:16 374:13 374:21 375:21 375:24 379:5,8 386:2 389:20 390:16,17,24 391:14 396:7 404:9 405:7,17 405:20 413:7 419:6 420:6,9 422:21,22 425:20 430:16 431:1 433:15 grow 339:15 guadalupe 281:11</p>
---	--	--	--

[guarantee - holistic]

<p>guarantee 439:13</p> <p>guess 329:20 402:14 403:7 405:7 408:8 409:2 415:17 437:18</p> <p>guidelines 378:22</p> <p>guys 285:14 444:1</p>	<p>happening 308:21 316:7 324:1</p> <p>happens 429:16</p> <p>happy 410:24 443:3</p> <p>hard 289:2 341:11 386:15 387:16 390:9 422:15</p> <p>hardy 281:20</p> <p>hart 281:10</p> <p>hate 397:15</p> <p>head 354:14,23</p> <p>headed 427:10</p> <p>heading 436:10</p> <p>health 288:6 404:2</p> <p>hear 290:23 311:13 427:24 443:3</p> <p>heard 293:2 295:2 358:11 358:17 362:4 366:17,19 389:23 396:12 399:14 425:9 431:6,9,12</p> <p>hearing 280:3,9 284:6,9 285:23 286:10 287:20 289:22 290:8 290:17 291:17 311:10 317:12</p>	<p>330:14 335:22 335:24 337:5 337:16 338:1 344:11 354:19 358:12 375:5 381:5 389:24 399:1,5,14,15 399:18 427:19 435:14 446:3 447:15</p> <p>heats 354:13</p> <p>heavily 327:2</p> <p>help 326:17 331:18 343:1 377:17 391:18 394:21 395:18 440:9</p> <p>helpful 344:3 382:5 427:23 441:21</p> <p>helps 439:15</p> <p>hesitation 440:21</p> <p>hey 368:20</p> <p>high 301:21 318:4,11 351:21 353:10 353:13 362:16 364:23 365:7 366:6,23 368:18 370:24 392:16 411:5</p> <p>higher 318:13 353:6,6 435:4</p>	<p>highest 304:1 305:5 341:2,2 346:19 348:23 349:19 376:8,9 391:19 407:5 407:18,21,23 408:3,8,24</p> <p>highlight 292:23 296:16 296:21 303:10 360:13 424:1</p> <p>highlighted 365:12</p> <p>highly 360:11 366:7</p> <p>hinkle 281:20</p> <p>hinklelawfir... 281:22</p> <p>historical 352:17</p> <p>history 292:9 338:21 431:7</p> <p>hit 349:23 367:16 369:4 383:22,24 386:22</p> <p>hits 310:9 354:12 383:9</p> <p>holds 344:17</p> <p>hole 430:13</p> <p>holes 300:4 301:11</p> <p>holiday 443:16</p> <p>holistic 426:21</p>
h			
<p>h 282:7</p> <p>habitat 288:6 288:10</p> <p>half 287:15 316:2,17 341:21 342:7 389:2</p> <p>hand 369:11 385:3 387:19 390:23 391:9 393:11,13 412:12 415:1</p> <p>handle 386:1 401:6</p> <p>handled 309:1</p> <p>handling 308:18</p> <p>hangs 327:7</p> <p>happen 361:4,6 439:13</p> <p>happened 345:5 405:22</p>			

[holistically - increased]

<p>holistically 384:13 408:22</p> <p>holland 281:10</p> <p>hollandhart.c... 281:13</p> <p>homogeneous 349:10</p> <p>honest 349:6</p> <p>hopefully 285:22 286:10 396:24 397:12</p> <p>hoping 378:12</p> <p>horizontal 386:17</p> <p>horizontally 403:9 404:15 408:17 409:5</p> <p>hottest 357:11</p> <p>hour 335:16</p> <p>hundred 359:23 378:23 387:2,8</p> <p>hundreds 289:2 341:5 362:11 364:9 379:10 387:3,5 390:8 392:5</p> <p>hydraulically 435:5</p> <p>hydrocarbons 348:10 379:7 397:16,21</p> <p>hydrochloride 302:17</p>	<p>hydrologic 288:19,20</p> <p>hydrology 360:6</p> <p style="text-align: center;">i</p> <p>idea 361:20 375:22 428:19 440:9 442:2</p> <p>identified 372:9 373:1,11 410:17 412:12 413:21 414:1,3 414:17 416:5 436:9</p> <p>identifier 414:4 416:6</p> <p>identifiers 415:14 416:1</p> <p>identifies 388:8</p> <p>identify 307:8 318:7 326:18 341:1 358:5 372:21,23 373:7 375:18 376:11 390:9 392:6,10 397:11 404:13 413:8 418:22 436:8</p> <p>identifying 326:21 357:20</p> <p>illinois 447:1,9</p> <p>image 412:17</p> <p>imagine 363:15</p>	<p>immediate 348:12 374:22 375:13 397:20 400:18</p> <p>immediately 328:14</p> <p>impact 293:22 294:2,15 296:9 341:3 347:14 348:7 350:18 379:16 385:5 385:17 390:2 392:17 395:1 404:17,18,21 404:23 405:2,3 405:8,20 409:5 409:13,14,18 422:22 426:4,6 429:20,21</p> <p>impacted 310:12 389:14 391:1 396:15 398:1 419:4</p> <p>impacts 298:18 305:7,14 318:8 389:20 403:10 404:1,16 408:24 409:1 423:1</p> <p>importance 293:10 384:9</p> <p>important 303:24 315:1 342:10 357:7</p>	<p>impression 333:10</p> <p>improper 310:18</p> <p>inadvertently 422:24</p> <p>inches 348:19 354:8</p> <p>incident 293:20 294:3 296:18 314:4,5 323:15 323:18,20 324:2 346:6 418:14</p> <p>incidents 323:11 350:8</p> <p>include 302:18 377:24 415:24</p> <p>included 286:3 295:4 297:18 306:15 384:19 423:9 426:20</p> <p>includes 341:1 353:24 388:2,2 391:8,9</p> <p>including 384:9</p> <p>incorrect 367:6</p> <p>incorrectly 297:10</p> <p>increase 318:10 323:7 359:3,13 370:20</p> <p>increased 315:24 318:23 353:23 358:1</p>
---	--	--	--

[increased - interpret]

<p>377:6,18 382:15 increases 357:9 368:16,17 431:8 increasing 296:22 318:24 319:1 369:22 370:10 indicate 295:6 303:15 314:21 355:5 indicated 285:9 293:21 295:17 297:13 301:10 306:11,20 307:4 308:9 311:6,8 312:7 313:19 314:19 385:19 416:10 indicates 302:16 415:18 indicating 331:10 407:10 indication 355:3,14 indications 296:19 indicative 361:12 371:4 indirectly 341:4 individual 312:20 321:18 362:5</p>	<p>individually 426:18,20 individuals 436:22 infiltrate 359:18 infiltrating 371:19 372:10 infiltration 353:2,22,22 354:6,10,12,15 355:24 373:18 influence 427:10 influx 354:4 355:23 367:1 419:4 informal 323:9 informally 324:1 information 293:1,10 295:14 296:8 296:11,13 298:2 304:18 305:9 310:22 314:10 318:15 321:3 323:4,6 323:10 328:2 329:21,23 332:3 338:21 338:24 339:5,6 340:6 343:5 346:21 347:13 349:7 350:6</p>	<p>356:14 357:3 365:16 368:12 368:15 369:10 381:21 392:24 396:5 397:5,7 397:10,12 398:8 403:24 404:4 406:20 406:24 408:11 408:13 409:12 410:9 423:8 424:4,8,10 425:18 430:12 437:15 438:1 438:16 439:17 infrastructure 371:23,23 372:5 initial 294:1 299:12 300:19 318:9 319:3 372:4 429:15 429:23 initially 296:17 300:8 initiated 409:23 initiative 332:4 332:6 input 422:12 inputs 347:19 347:19 inside 375:23 394:14</p>	<p>insisted 303:24 inspect 325:24 inspected 325:20 inspector 325:20 install 305:3 411:15 installation 294:13,17 instance 322:20 372:1 434:12 insufficient 357:20 insure 375:7 insuring 328:21 intended 293:2 293:15 307:16 307:19 338:13 356:12 437:20 intent 419:14 interest 314:1 interesting 394:19 interim 445:24 interior 341:1 interject 393:21 398:13 interjected 309:20 internally 377:14 407:14 interpret 323:3</p>
---	---	--	--

[interrogatories - know]

<p>interrogatories 287:7 336:10</p> <p>intonation 333:6</p> <p>investigate 326:24 395:7 407:14</p> <p>investigated 329:10 352:7 385:10</p> <p>investigating 429:13,20 430:16</p> <p>investigation 290:12 299:15 303:4,4 318:12 318:17,20 319:2 322:21 335:23 339:11 342:19,23 344:18,21 347:10 357:20 358:4 364:5 378:6,17 397:1 399:4,19 409:23 418:20 422:23 423:5 424:20 425:24 429:15,16,23</p> <p>investigations 288:24 338:22</p> <p>investigative 385:12</p> <p>investigatory 342:14 376:23</p>	<p>429:17,19 430:8,17</p> <p>involved 305:21</p> <p>isolate 375:17</p> <p>isolated 313:8</p> <p>isolation 293:19</p> <p>issue 286:19 308:15 312:8 324:12</p> <p>issued 376:18 379:21 399:18</p> <p>issues 288:17 295:24 296:20 297:9 299:22 301:2 310:18 401:15 437:21</p> <p>issuing 378:8</p> <p>items 356:8</p> <p style="text-align:center">j</p> <p>january 280:12 284:3 300:18 301:11 305:19 340:7 348:3 353:14 355:10 356:14 372:17 382:8 383:12 392:11 394:20 422:15 425:19 443:24</p> <p>jesse 281:7 284:15</p> <p>jessek.tremaine 281:9</p>	<p>job 287:12 336:18,20 349:14 357:2 426:5 440:4</p> <p>joe's 388:3</p> <p>joint 440:16 441:20 443:11</p> <p>july 300:14 318:6 321:15 324:12 334:2</p> <p>jumped 316:20 361:13 381:22</p> <p>jumps 367:10</p> <p>junction 344:2 352:1,15,18 374:10,16</p> <p>june 300:14</p> <p>justice 281:2</p> <p style="text-align:center">k</p> <p>k 281:7 447:3</p> <p>keep 289:3 353:6 397:15 420:20,22 421:24</p> <p>kennedy 282:6</p> <p>key 292:23 347:2,14,17,19 347:19 348:3,4 348:23 350:13 353:23 370:7 433:10</p> <p>keys 340:23</p> <p>kind 293:6 298:19 317:14 320:21 333:11</p>	<p>338:19 349:9 357:1 366:10 366:11 368:19 379:5 383:2 384:11 386:10 394:17,19 399:23 403:12 403:18 404:20 409:20 428:6 430:24 433:8 435:19 436:2 439:1 442:11 443:4,19</p> <p>kinds 289:5 339:4 355:24 362:6 422:12</p> <p>knew 374:3</p> <p>know 313:10 317:11 320:6,7 327:17 330:20 339:3 346:18 347:22 351:1 361:2,3,7,18 371:6 374:7 376:3,7,8 378:15 379:1 387:6 390:3,4 390:6,10 392:14 395:15 402:13 404:22 405:2,8 408:3 408:23 409:16 409:18 410:2 411:8,21 413:2 418:16,18</p>
---	--	---	--

[know - line]

<p>420:1,15 423:13,24 424:13 430:2 432:24 434:10 439:15 444:4 444:13,18 knowing 341:10 397:7 knowledge 288:1 291:22 337:23 known 327:11 347:12 355:15 398:4 407:23</p>	<p>landowner 298:10 305:2 landowner's 320:8,9 lands 284:23 language 403:19 404:8 lapse 316:11 large 288:9,15 352:23 353:8 362:2 364:11 374:17 411:11 421:1 430:9 larger 310:6 349:8 355:1 largest 346:16 376:3 lastly 334:23 late 333:15 lateral 423:21 latest 423:12 423:13 law 281:17 442:13 lay 289:11 leach 372:19 leached 373:2 373:11 leaching 372:13 373:16 373:17 374:13 lead 318:13 403:5,12,21 leading 313:4 389:24 399:14</p>	<p>424:18 leads 331:8 leaks 298:16 learned 368:14 led 319:2 lee 280:10 282:3 335:23 399:4 left 326:10 334:22 365:6 369:11 385:3,6 387:19 388:5 390:23 391:9 393:11 399:6 412:11 legal 295:3 317:9,19 320:4 320:6,8,9 344:8 345:16 350:4 405:6 428:4,9 438:11 length 380:12 lenses 423:2,4 lettering 351:18 level 304:16 318:4 333:8 341:2,3 345:22 347:9 357:15 358:2,3 360:20 364:23 368:18 377:9 385:12 386:8 levels 294:5 305:5 346:9</p>	<p>348:7,23 349:23 353:13 354:20 357:13 359:15 368:23 369:5 371:1 372:17 378:18 379:5 388:13 390:5 392:11 395:2,23 408:2 418:23 431:8 liability 295:4 license 447:20 lieu 440:19 likelihood 444:6 likely 296:9 308:2 311:9 328:5 354:15 363:12 382:19 386:1 432:15 likewise 355:12 limit 339:18,20 339:23 386:13 441:3,22 442:5 442:7 limited 389:21 441:24 limiting 408:6 limits 296:1,24 297:6 383:5 385:3,4,17 427:3 line 289:21 293:4 305:20 333:11 341:22</p>
I			
<p>I 281:7,17 282:6 284:22 lab 296:1,23 297:11 326:5 381:7 382:12 416:15,19,23 417:3 labeled 287:22 290:4,12 291:3 291:9 299:20 337:7,18 351:9 356:20 363:19 413:15 415:22 416:11 laboratory 297:18 326:2 lack 317:16 406:23 land 353:19 435:16</p>			

[line - mails]

<p>388:16 395:11 395:17 403:7 440:5 liner 294:13,17 326:11,11 lines 305:22 327:14 375:7 liquids 404:18 list 313:22 324:20,20 414:3 listed 297:10 313:13 328:13 421:19 listening 336:1 lists 439:24 liter 339:18 359:3,8 little 340:16 358:24 363:2 386:23 393:19 405:5 412:4 420:9 428:6 434:6 llp 281:10,20 lo 349:19 load 352:24 357:15,17 361:21 loading 367:11 loads 348:5 433:10 locate 307:16 located 388:9</p>	<p>location 299:18 331:18 366:22 410:14,16 411:14 413:2 413:17 415:19 420:21 422:9 locations 297:21 299:21 331:4,4,12 334:20 335:3 384:3 422:6,6 422:7 423:19 431:15 logical 430:6 434:14 long 292:9 434:23 443:5 longer 356:15 362:19 363:1,6 393:20 442:19 442:20 444:9 look 298:19 305:18 306:18 331:13 344:11 347:15 351:2 353:17 360:16 361:19,22 362:1 367:18 368:11 369:5 369:11 370:6 375:6 376:6 379:23 384:12 388:24 390:23 391:2 398:6 399:15 410:5</p>	<p>417:6 418:2,6 420:4 430:11 430:11,17 433:11 looked 302:10 311:20 376:21 379:1 looking 295:17 298:18 299:4,6 302:1 310:5 311:22,23 322:11 328:18 331:6,19 332:10 333:19 334:20 339:5 342:6 343:4,15 345:6 346:8,12 346:14 347:16 348:5,8 352:22 354:8,20 370:24 374:9 382:10 383:9 384:23 385:7 386:5 387:17 388:1,4 389:11 389:17 395:4 396:7 397:11 411:21 413:6 420:5 421:15 422:19 423:2 427:13 429:14 429:21 430:1,9 431:2 looks 346:12,14 380:19 390:22</p>	<p>393:7 442:2 lose 426:12 lost 381:15 lot 293:3 295:3 317:6 331:10 331:14 332:23 335:5 338:23 340:17 357:3 359:4 370:18 374:24 377:20 381:13 387:22 389:4 411:22 411:24 423:6 440:1 441:6 443:4 444:14 low 353:2 lower 359:4 415:1 lowest 355:16 lunch 398:14 398:21 437:1 lying 355:16</p>
m			
<p>m 284:22 415:12 made 294:22 320:16 411:3 414:9 mail 290:20 304:6,7,9 305:23 308:21 320:3,11 323:13 mails 295:4</p>			

[maintain - mentioned]

<p>maintain 445:17</p> <p>major 293:20 295:23 365:18 367:10 371:5 379:15,16 381:10 391:19 404:17</p> <p>majority 428:14 432:22</p> <p>make 284:10 285:5 292:1 308:3 311:1 319:21 320:20 325:20 331:23 333:5 337:12 339:7 340:9 341:22 357:6 363:23 378:1 398:19 400:9 401:8 412:15 422:8 428:9,15 432:18 440:3</p> <p>makes 318:19 341:16 405:4 428:22 433:21 435:9 446:2</p> <p>making 301:22 304:22 305:15 310:19 354:20 377:7</p> <p>management 288:10,15</p> <p>manner 378:9 382:3</p>	<p>map 299:20 317:1 331:1,8 331:17 333:18 351:16,23 356:11,12,12 356:16,16 357:7,9 358:22 360:14,17 362:1,18 363:3 363:18,21 365:6,11,22,24 366:13,15 369:14 376:6 377:11 380:13 381:2,3 384:8 384:9,14,21 385:15 386:15 390:23 392:24 412:7,12 414:5 414:21,22 415:21,22 416:12 418:1 422:4 432:7</p> <p>mapping 408:9</p> <p>maps 297:22 305:16 356:1 364:24 365:3,4 365:5 366:21 368:12,14 369:13 375:19 384:18 392:19 392:23 393:1,1 393:9 412:18</p> <p>march 342:12 348:1 360:3</p>	<p>365:23 366:15 367:3,14 369:14 370:1 376:21 377:17 381:10 388:11 390:16 407:24 408:4 420:13 422:13</p> <p>marked 414:22</p> <p>marks 415:23</p> <p>mass 341:15 346:10,16</p> <p>massive 368:17 374:15 388:3 389:7 390:9</p> <p>master 288:21</p> <p>material 384:5</p> <p>materials 358:14 389:24</p> <p>math 342:8</p> <p>matter 374:6 399:15 401:4</p> <p>matters 427:10</p> <p>maximum 390:5 438:14</p> <p>mckee 282:3</p> <p>mean 346:2 400:20 412:21</p> <p>means 340:18 361:1</p> <p>meant 335:7</p> <p>measure 419:16</p> <p>measured 393:1</p>	<p>mechanisms 371:13</p> <p>meet 301:19 326:12 343:6 438:24 441:19</p> <p>meeting 284:2 302:2,4,15 303:9 304:3,4 304:5 306:11 308:1,13 309:6 310:21 311:18 315:5,10 321:6 321:14 323:2 333:13 342:21 377:6</p> <p>meetings 325:4 344:23 345:12 345:17 377:10 377:20 378:16 379:3 424:15 424:18 445:17</p> <p>memory 330:21 342:15</p> <p>mention 292:10 381:9</p> <p>mentioned 334:1 341:19 349:11 359:5 379:6 391:10 395:6 397:16 397:17 410:6 416:14 420:6 430:19 432:21 436:21 441:22 442:6,12</p>
--	---	---	--

[mentions - moves]

<p>mentions 352:17</p> <p>met 326:14 343:8 377:1</p> <p>methods 422:16,17</p> <p>metrics 339:10</p> <p>mexico 280:1,2 280:10 281:2,4 281:6,8,12,15 284:8 288:7,11 335:24 399:4 435:15,16</p> <p>mic 319:14</p> <p>middle 387:15 391:5 392:5 394:18 403:6 434:1</p> <p>milligrams 339:18 359:3,8</p> <p>million 339:12 339:14</p> <p>mind 350:10 442:12</p> <p>minimal 372:3</p> <p>minor 354:11 404:17</p> <p>minus 432:11 443:17</p> <p>minute 335:18</p> <p>minutes 335:17</p> <p>missed 388:14</p> <p>missing 362:16 411:23</p>	<p>misunderstand 326:19</p> <p>mitigate 375:11</p> <p>moander 281:7</p> <p>mobilization 328:16</p> <p>model 347:18 347:23 348:1</p> <p>modeled 347:24 348:2</p> <p>modeling 288:20 306:14 347:21 422:12</p> <p>models 347:18 347:20 348:6</p> <p>moellenberg 282:6 283:4,8 284:11,12 285:5,8 286:14 286:16 292:6,8 319:13,15 324:3,10 333:24 335:10 338:4 401:13 401:16 402:4,5 402:7 417:9 429:5 436:13 436:15,20,24 437:9,18 439:6 442:9,11 444:2 444:3,12 446:4</p> <p>moment 374:14</p> <p>monday 286:15 443:16</p>	<p>monitor 307:18 342:16 347:4 349:10 352:15 353:4 381:2 430:11,14 434:24 435:8</p> <p>monitored 436:10</p> <p>monitoring 294:12 296:14 297:24 298:4 299:19 300:24 307:2,5,18 319:5 351:9 373:20 379:16 381:6 383:1 396:16 400:13 407:4 410:14 410:16 413:17 429:9,18,19,24 430:8 432:8 434:21 435:10 435:22</p> <p>montezuma 281:21</p> <p>month 339:22 377:19 438:14</p> <p>months 321:16 360:4 377:18</p> <p>morning 284:21 287:11 336:14 400:11 407:3</p> <p>motion 438:20</p>	<p>mound 366:5</p> <p>mounding 355:23 356:1 366:3,18,20,22 367:5,7 434:8</p> <p>move 285:16 290:11 292:4 292:18 293:5 295:13 296:12 298:8 300:21 304:23 305:24 306:8 307:12 309:2 310:14 314:13 315:6 329:9 338:2 345:21 350:1,9 359:20 360:14 364:15 367:12 370:13 373:4 376:14 384:2,6 386:12 387:11 390:12 397:13 406:1,23 407:19 408:11 419:24 429:23</p> <p>moved 317:20 370:20 388:17 394:5,6</p> <p>movement 359:24 360:2,5 360:6,9 361:3 361:4,5 370:5</p> <p>moves 366:14 370:14 389:18 397:19 429:17</p>
---	--	--	--

[moving - northeast]

<p>moving 294:20 297:1,14 299:1 299:11 300:2 301:17 302:12 303:6 308:4 309:17,24 310:20 312:12 316:20 317:3 345:7 351:8 357:22 358:6,7 368:4 369:21 370:12,16,17 370:19 372:24 378:8 381:19 384:18 397:14 397:21 431:2</p> <p>mullenberg 285:15 319:17</p> <p>multiple 305:22 352:2 370:16,17 371:7 378:21 392:19</p> <p>multiplication 358:1</p>	<p>narrative 292:9</p> <p>natural 355:20 371:16 372:1 433:19,20</p> <p>naturally 419:6</p> <p>nature 324:22 433:16 445:16</p> <p>near 355:2 375:1</p> <p>nearby 367:11 380:22</p> <p>nearest 355:15 413:2</p> <p>necessarily 312:3 319:6</p> <p>necessary 304:21 308:15 308:22 309:21 313:11 337:12 346:5 373:13 374:23 378:5 390:1 397:3 399:17 400:6 401:6 423:19 442:22,24</p> <p>necessitate 430:8</p> <p>need 286:4 292:1 303:21 325:2 326:11 328:13 356:9 361:20 363:1 363:11 364:12 377:21 379:19 380:15 382:2</p>	<p>407:16 418:19 426:13 427:4 427:17 430:6 433:4 438:12 439:24 440:21 443:16,21 444:2</p> <p>needed 302:1 303:11 308:9 308:12 321:17 329:15 333:20 334:6,8,11 340:3 362:19 363:7,13 373:13 375:20 393:20 394:10 395:6,16 403:24 407:11 407:18 409:12 419:18 422:22 424:10 426:11</p> <p>needing 443:7</p> <p>needs 320:24 320:24 321:2 329:10 350:17 383:6,20 386:18 430:1 433:2 435:22</p> <p>negotiate 334:19 379:23</p> <p>negotiated 331:13 335:4</p> <p>negotiations 343:23 344:6 345:10 381:14</p>	<p>381:16</p> <p>never 439:15 444:13</p> <p>new 280:1,2,10 281:2,4,6,8,12 281:15 284:8 288:7,11 298:8 299:9 306:3 323:20 332:3 335:24 340:2 347:3 375:5 392:13,17 399:4 423:8 435:15,16 439:16</p> <p>nine 294:8 356:1</p> <p>nm 281:18,21 282:8</p> <p>nmack 406:3 406:10 408:15 428:7</p> <p>nmdoj.com 281:4</p> <p>nominally 369:1</p> <p>normal 326:7</p> <p>north 340:19 356:5 386:3,7 388:20 393:18 395:1 416:9 418:21,21</p> <p>northeast 386:10</p>
n			
<p>n 281:11 283:1 413:16 415:13</p> <p>nail 419:13 420:1</p> <p>name 287:13 301:3 336:14</p> <p>named 301:7</p> <p>naming 299:22 301:5</p>			

[northern - ocd]

<p>northern 363:9 385:3 notary 280:11 447:5 note 303:24 312:18 341:19 351:24 366:9 367:17 414:9 419:2 notes 292:12 411:3,21 notice 344:11 356:19 385:14 noticed 400:2 notified 302:20 notify 406:9 november 304:12 320:4 410:13 411:15 number 284:4 287:22 289:3,4 289:24 290:4 291:9 292:19 301:7 303:24 321:6,20 334:3 338:3,3 365:10 367:17 375:8 390:13 393:15 396:13 397:23 401:10,10 412:5 413:4,18 425:8 432:6,10 numbering 363:24</p>	<p>numbers 305:8 318:13 353:7 381:22 418:3 435:17</p> <hr/> <p style="text-align: center;">o</p> <hr/> <p>o 284:22,22 447:3,3 o'clock 280:12 object 411:13 objected 313:16 314:18 objection 286:9 292:7,8,13 objections 338:4 observed 298:15 obtain 311:24 obtained 313:3 obvious 363:15 obviously 331:9 439:13 occur 296:19 309:5 occurred 294:3 297:4,17 301:12 303:20 327:10 occurrences 410:4 ocd 285:2,23 286:2 287:22 288:22 289:24 290:3,9,19 291:3 292:5,18</p>	<p>293:8 294:17 298:9,19,22 299:7 300:8 301:19 303:8 303:23 304:9 304:11,19 305:19 307:7,8 307:22,24 308:14 309:1 309:13 310:23 311:19,21 312:2,3,7,8,17 313:7,10,20 314:16,22,24 315:4,15 316:2 316:3,10,14 318:7,7,15,16 318:19 320:19 320:21,24,24 321:1,9 322:16 323:15 324:12 324:15,19 325:1 326:8,17 326:21,23,24 327:2,12,21,23 328:12,23 329:6,9 330:3 330:8,15,16,23 331:4,5,16,19 331:22 332:4 332:21 333:7 334:12,13,18 335:5 338:2,3 338:11 340:9 341:7,21,24</p>	<p>342:12,18,21 343:1,3,15,20 343:21 344:17 345:10,14 349:3,5,21 350:7,16 352:4 352:5,10,13 354:24 355:2 355:13,16 360:8 362:12 362:21 363:3 363:19,20 364:3,4,16 365:3 367:22 372:4 374:2 375:16 376:18 377:4,7,9,9 378:5,10 379:17 380:21 382:5 383:16 386:22,23 387:9 391:20 391:22 393:14 393:16,19 394:9 395:10 400:3,6,9,20 401:6 413:18 418:12,14 419:9 421:8,12 421:14,20 422:5 423:6,15 423:18 424:1 424:13 425:13 426:4,16 428:4 431:15,17</p>
--	---	--	--

[ocd - outside]

<p>436:14 437:14 439:3 445:23 ocd's 286:5 287:13 291:14 292:24 294:16 304:16 305:10 306:2 308:5,17 310:11 312:14 312:24 314:1 317:4 323:7 325:20 334:9 336:1 343:11 345:1 376:14 397:24 421:5 421:23 422:9 427:20 ocds's 344:18 october 291:10 357:13 360:4 367:5 381:11 382:9,12 408:1 416:15,16,20 416:24 417:4 435:18 offered 444:22 office 288:19 336:20 official 321:2 officially 428:15 offset 420:9 ogwala 379:12 oil 280:1,2 281:6 284:1,15 286:24 287:17</p>	<p>289:7 294:15 294:15 327:13 336:19,22 okay 401:8 415:24 416:13 422:9 431:13 436:20 437:17 445:20 omitting 401:10 once 300:17 328:14,24 355:22 382:4 382:17 405:19 429:22 431:1 onerous 441:1 ones 305:4 317:1 359:4 392:6 400:23 426:4 442:17 ongoing 298:23 299:9 316:10 319:4 328:21 346:23 355:3 372:15 373:13 374:20,21 375:8,10,21 398:7 online 309:1 432:16 open 425:13 428:13 445:16 operative 403:19</p>	<p>operator 323:14 324:17 324:24 327:3 327:14 375:6 operators 326:17 opinion 325:1 333:12 343:16 346:4 349:3 355:8 364:19 373:5 396:14 opportunity 439:8,22 440:6 440:7,15 opposed 292:12 299:9 optimize 422:8 optimized 331:5,18 option 317:10 331:22 344:9 options 344:9 344:15 422:10 oral 287:7 336:10 427:14 order 286:11 295:11 395:10 399:18 401:5 416:2 438:17 438:18 439:12 440:8,16,23 441:20 442:16 443:11 444:7 445:3</p>	<p>orders 439:10 444:24 oriented 313:24 original 286:2 286:11 293:17 294:23,24 295:5 299:18 300:7 302:9,11 303:3 318:22 318:22 323:18 324:2 327:17 342:1 344:1 345:3 352:3,23 353:4 355:2,11 355:17 357:19 359:21 380:3 400:21 421:11 434:10 originally 294:9 299:5 316:17 320:11 323:24 345:5 352:16 361:15 363:3 398:4 434:20 outer 370:22 385:3 392:9 394:12,13,14 407:11 427:3 outlook.com 281:19 outset 442:22 outside 296:1 297:8 303:13</p>
---	---	--	--

[outside - performing]

<p>385:9 404:23 435:8 outskirts 371:2 371:5 overall 296:1 339:4 348:7 361:21 387:23 389:9 392:23 409:21 410:3 429:24 overboard 441:6 overflow 364:15 overlaid 390:20 393:9 overlapping 363:24 443:6 overlay 387:17 overlays 392:19 overview 310:3 338:16 341:23 342:11 351:16 393:5 own 440:8</p>	<p>padilla 281:17 281:17 padillalawnm 281:19 page 293:7,23 314:4,5,6 328:7 341:23 356:19,20 382:10 402:14 402:20 434:1 441:3,22 442:5 442:7 443:8,14 pages 406:1 442:1 443:10 paired 424:21 paperwork 443:22 paragraph 403:4 parameters 347:17 paraphrased 293:13 318:2 paraphrases 317:22 parentheses 416:7 parking 387:22 389:4 part 286:8 296:18 306:1 322:18 327:16 339:9 350:14 350:20 353:18 354:9,16</p>	<p>363:18,18 366:4 367:9 381:15 382:19 394:11 401:10 402:23 403:15 406:2 414:3 415:3,4,12,18 433:3,10 438:9 participated 288:15 participation 317:13 particular 295:9 307:4 314:7 320:7 321:13 322:20 322:21 323:11 324:16 327:15 331:17 347:1 411:4,6 413:17 414:19 422:4 426:8 437:21 446:3 particularly 380:13 439:16 442:23 parties 284:10 285:21 286:24 350:5 380:13 382:4 400:15 406:9 410:8 427:14 438:19 439:2,9,17 440:7 441:1 443:18 445:4</p>	<p>parts 413:14,16 party 344:16 403:8 404:3 409:4 424:5,13 paseo 281:15 282:7 past 416:15 429:22 441:23 path 318:13 355:21 367:18 396:6 397:2,13 400:17 442:2 paths 367:15 367:17 pathway 349:17 pathways 372:6 430:17 patterns 362:6 pc 282:3 pd 291:10 pending 317:15 people 435:15 444:15 peralta 281:15 282:7 perfect 398:5 432:23 perfectly 418:1 perform 340:14 344:20 434:16 performed 374:8 performing 404:23</p>
p			
<p>pa 281:17 282:6 packaged 290:16 packet 293:7 338:12 pad 389:18 396:11,16</p>			

[perimeter - point]

<p>perimeter 310:12 385:20 386:2</p> <p>period 307:2 312:2 321:20 369:17 372:8 382:14 439:5 442:19</p> <p>permit 392:11</p> <p>permitted 325:22</p> <p>permitting 289:5 290:9,19 290:21 309:1 311:6,8 312:8 312:17 313:2 314:2 378:10</p> <p>personally 322:4</p> <p>perspective 292:24 318:3 439:21 440:3 444:8</p> <p>pertinent 428:18</p> <p>petroleum 298:16</p> <p>phase 348:13 379:7 397:16 397:18,21</p> <p>phonetic 379:13</p> <p>phrase 334:15 348:14</p>	<p>pick 335:19 345:14 388:21 394:24 395:1 435:7</p> <p>picked 300:14 302:23 393:14 394:19 426:10</p> <p>picking 419:7</p> <p>picture 388:5,8 430:21</p> <p>piece 387:23</p> <p>pink 385:9,15</p> <p>pinpoint 299:6</p> <p>pipelines 375:1</p> <p>place 298:5 300:19 323:12 326:10 329:17 341:11,24 371:14 376:2 419:23 434:5,7 434:22</p> <p>placed 299:18 422:24 424:22</p> <p>placement 302:3 315:11 321:18 322:8</p> <p>plan 291:10 293:17,18 294:10,23,24 308:7 313:8 315:14,17 316:15 325:3 325:21 333:21 334:21,21 341:10 342:5</p>	<p>343:10,12,13 346:16 351:1,4 351:7 406:10 424:7</p> <p>plans 306:16 306:22 341:6 345:3</p> <p>platforms 350:16</p> <p>play 373:6</p> <p>pleas 315:21</p> <p>please 288:3 289:13 292:19 293:9,23 294:7 294:20 296:12 297:1,14 298:9 299:2,11 300:3 300:21 301:17 302:12 303:6 304:23 306:8 307:13 308:4 309:3,18,24 310:15,20 312:12 314:14 315:7 316:21 317:3 319:13 336:7,14 338:13 351:12 356:22 358:20 364:18 365:20 376:16,17 384:19 393:9 412:3 433:23</p> <p>pleasure 441:8</p>	<p>plumb 370:13 370:22</p> <p>plume 352:21 358:5 370:12 370:12,14,19 370:22 371:3,5 371:10 372:22 372:24,24 373:2 385:21 386:2,18 392:7 394:18 407:12 419:15,16 420:10,16,17 420:17 436:8,9</p> <p>plumes 370:16 371:7 390:6</p> <p>plus 332:20 335:17 432:11 443:17</p> <p>po 281:18</p> <p>pocket 372:12</p> <p>pockets 372:13</p> <p>point 286:1 294:16 296:3 299:7,16 301:19 302:2,6 302:7,22 303:2 303:22 304:19 306:17,22 307:6 308:19 308:22 310:7 310:10,19 316:16 317:15 320:18 321:1 322:15,19,20</p>
--	---	---	---

[point - prescribed]

323:8 325:24 338:23 339:10 341:22 343:23 344:1,5,8 346:8,19 348:8 351:2,5 352:14 356:9 358:10 360:15 362:1 362:20 364:18 364:23 366:5 366:18 368:16 368:19 370:6 373:9,24 375:16,24 376:2,8,9 377:15 378:20 379:16,17,21 380:6 381:17 383:8 386:14 387:1,8 392:5 396:1 399:13 404:14 405:3 405:22 406:14 406:18,21 408:19 409:10 409:19 410:4 411:3 415:10 418:19,24 422:1 423:23 426:12,13,14 428:17 430:3 437:9 438:7 446:2 pointed 369:24 370:7 383:20	points 324:21 345:21 357:5 388:10 422:18 435:10,11 pollution 406:7 406:16 pool 360:23 popped 367:2 portion 350:21 portions 295:10 296:15 posed 437:12 position 286:10 288:10 328:12 397:24 421:5 positive 377:7 possibility 285:11 439:11 possible 285:9 329:7 372:12 372:16,19 397:6 425:18 430:15 440:17 440:18 445:23 possibly 303:16 346:18 408:11 440:4 442:16 post 318:12 323:13 posture 379:20 potential 286:10 298:18 307:9 313:9 339:15 349:17 359:16 368:24	374:19 375:15 378:24 380:7 403:9 404:1 405:7 408:14 409:5,13,14,18 418:13 430:17 436:21 potentially 335:4 340:4 355:23 364:8 368:1,21 369:19 370:23 372:7 386:9,12 396:17 419:3,5 434:9 435:24 439:24 442:17 powell 283:7 286:3 312:22 315:10 317:8 329:5 330:7,11 332:22 333:3 336:5,8,16,17 337:4 338:8 345:19 349:1 351:11 354:22 356:22 358:11 360:12 363:14 364:13 366:17 367:13 368:6 369:7 371:8 373:9 374:19 376:10,16 378:4 380:10 384:4 387:12 389:12 390:12	392:18 393:8 395:9 398:19 399:7,11 401:3 402:2,11,21 410:11 411:20 414:8 415:3 416:13 417:9 417:15 427:11 428:18,21 429:2,5 431:23 436:16 437:13 powell's 328:5 practice 294:18 324:15 429:12 pragmatic 441:18 preexisting 372:20 prefer 331:21 331:22 preference 421:23 425:16 preparation 289:22 290:8 290:17 337:16 prepare 287:19 289:21 337:4 337:15 392:21 440:21 prepared 286:7 290:7,16 291:17 337:10 337:20 prescribed 413:18
--	--	--	--

[present - proposed]

<p>present 284:12 284:20 285:3,7 286:7 381:7 426:15 437:4,7 439:10,12 440:7</p> <p>presentation 289:22 293:6 304:15 318:5 337:16 338:9 338:14,20 341:17 345:22 360:14 364:14 398:16 400:6</p> <p>presentations 352:6</p> <p>presented 334:18</p> <p>preserved 302:17</p> <p>press 305:22</p> <p>pressed 289:2 342:18,22</p> <p>pressure 365:7 375:6</p> <p>pretend 347:21</p> <p>pretty 376:13 424:19 432:22 432:24 440:17</p> <p>prevent 375:18 375:20</p> <p>previous 300:13 301:9 302:15 310:2 310:16 325:4</p>	<p>367:1 369:9 383:24</p> <p>previously 293:12 295:2 295:16 305:3 305:13 322:9 328:19 343:5 356:3,24 357:16,18 358:2,4 359:5 369:24 370:7 372:21 373:1,7 373:10 374:3,8 374:11 375:3 380:8 391:10 392:16 393:17 400:8</p> <p>primarily 437:19</p> <p>primary 288:6 288:14 297:4</p> <p>principals 339:9</p> <p>prior 318:14 326:5 339:2 349:7 354:19 355:1 358:15 365:23 366:7 367:16,20 368:23 373:4 378:16 383:14 424:15 428:5</p> <p>prioritizing 419:22</p>	<p>priority 375:9</p> <p>probable 329:7</p> <p>probably 292:10 293:1 305:12 318:12 323:16 341:3 348:1 354:8 363:1,6 373:6 374:9 376:7 381:15 382:2 396:23 398:5 412:18 418:8 419:24</p> <p>problem 330:17 332:8 396:2</p> <p>procedural 427:10</p> <p>procedurally 440:14</p> <p>procedures 294:14 352:12</p> <p>proceed 336:7 401:3,21 428:22 438:10 438:19</p> <p>proceeded 411:15</p> <p>proceedings 280:8 447:9,12 447:15</p> <p>process 299:2 343:1 345:15 377:17 379:20 395:19 398:7</p>	<p>409:21 431:4</p> <p>processes 304:22 352:13 410:2</p> <p>produce 371:24 372:2,6</p> <p>produced 353:7 390:1</p> <p>product 348:13 379:7</p> <p>program 406:20</p> <p>progress 378:11 379:2</p> <p>progressed 369:11 379:18</p> <p>progressions 368:17</p> <p>project 316:18</p> <p>proper 347:22 422:12 433:7</p> <p>properly 340:23,24 341:10 347:23 379:24 395:7</p> <p>proposal 394:11 401:20</p> <p>proposals 315:23 363:24</p> <p>propose 304:3 309:4 334:7 342:13 351:6</p> <p>proposed 294:10,13 307:14,17</p>
--	---	---	---

[proposed - questions]

<p>308:8,23 314:16 316:24 327:24 330:5 331:3,4 332:19 332:21 346:15 351:3 363:3,5 363:16,20 367:23 371:15 377:2 381:2,13 386:23 387:10 388:20 391:9 391:11,15,22 393:18 395:5,5 395:10 413:22 418:11 419:21 421:6 422:6 432:8 434:12 442:15 proposing 304:7 330:24 331:1 396:19 401:17 419:10 424:14 426:4 430:13 437:14 protect 326:11 435:15,16 protection 288:14 proved 318:11 423:15 provide 306:16 306:21 314:20 315:1 318:16 321:4 324:19 324:24 328:1,2</p>	<p>387:13 397:5 424:11 438:17 439:4 provided 305:17 310:24 311:3 315:11 350:5 351:13 357:8 365:4 369:13,18 376:17,22,23 380:9 381:4 404:8 424:23 437:16 provides 338:21 438:1 providing 312:19 338:10 349:14 prudent 404:12 420:22 public 280:11 284:22 404:2 447:6 pull 350:10 402:14,18 412:3 414:7 416:22 pulled 290:19 290:20 297:23 297:23 298:1 312:16 313:1 361:9 392:24 402:20 pulling 290:8 319:24 360:23</p>	<p>361:1 pump 329:12 434:13,16,17 434:24 435:2,9 pumping 346:24 purpose 292:20 292:22 338:14 purposes 323:22 pursuant 406:10 push 334:11 344:19,19,19 345:1 353:2 354:11,14 378:4 pushing 303:17 305:23 put 289:2 301:11 332:9 341:24 376:2 384:24 391:11 395:18 428:6 433:24,24 434:13,14,22 435:13 436:22 438:20</p>	<p>430:23 quantitatively 397:9 quarter 381:20 400:12 quarterly 381:6,11,18,24 question 290:22 303:18 309:19 316:21 320:15 323:19 324:11,13 325:19 326:20 327:6 332:1,22 349:1 417:22 418:11 422:2 428:4,13,20 436:12 437:10 437:12 439:1 441:10,12 questioning 334:23 questions 302:5 305:13 318:4 319:10,20 321:23 324:4 325:7,11,16 331:8,14 332:13 335:5 335:10 354:23 366:20 371:9 396:2 398:18 399:23 400:5 401:24 402:1,3 402:12 408:21</p>
		q	
		<p>qualifier 295:24 qualifiers 295:23 quality 357:23 361:7 413:7</p>	

[questions - recall]

<p>410:24 411:22 417:10,19 420:2 427:9,11 428:18 429:1 431:24 432:2 434:3 436:13 438:4,6 quick 290:22 quicker 341:15 382:3 quickly 305:24 319:24 389:19 425:18,21 436:4,6 440:17 quite 369:21 381:23 400:10 421:1 440:15 441:5 443:5 quotation 415:23 quote 385:20 quoted 404:7 quotes 293:13 293:16</p>	<p>range 288:13 305:10,18 326:7 rankin 281:11 rapidly 361:4 rate 405:15 rather 312:9 431:15 rationale 312:20,21 313:2 314:20 315:11 321:18 333:18 334:5,7 334:8 raw 382:5,13 razatos 283:6 283:10 284:1 284:14,17,24 285:1,13,17 286:13,21 287:2 289:13 292:6,14 319:12 324:6 325:8,12 332:12,15 335:9,13,15,21 338:5 398:12 398:20,23 400:1 401:8,13 401:23 402:4 417:12,16 427:7 428:3 432:1,5 433:23 434:2 436:11 436:16,20</p>	<p>437:5 438:7 440:12 441:15 442:4,9 443:1 443:13 444:10 444:17,22 445:15,22 reach 418:2 reached 320:14 442:6 reaching 355:6 read 313:20 358:17 386:15 389:23 391:4 404:5 430:19 readability 314:12 readable 351:19 readdress 436:2 reading 312:16 403:5 406:11 ready 284:12 285:16,18,19 286:22 401:21 real 298:11 318:4 realize 332:22 443:14 realizing 299:8 really 295:17 299:4 300:18 301:22 302:4 302:23 303:3 303:10,11,20</p>	<p>321:3 327:7 328:18 329:15 333:16,19 345:10 346:7 346:13 348:23 349:13 357:7 368:20 385:2 390:7 391:15 393:7 405:16 408:14 417:24 418:1 419:24 442:14 reason 298:16 321:13 361:6 411:4 reasonable 396:14 reasonably 307:8 reasoning 343:20 424:23 reasons 360:8 377:24 394:10 424:9,11,14,17 433:3 rebuttal 285:10 399:24 400:3,6 400:9,19 401:10 426:17 436:23 rebutting 437:14 recall 324:10 324:13 385:18 385:22 407:2,8</p>
r			
<p>r 281:3 442:1 rain 353:14 354:6,8,9,12 356:4 419:4,4 rainfall 354:17 raised 285:23 298:13 raises 442:19 raising 306:18</p>			

[recall - remainder]

<p>410:11,14 411:7 413:23 414:16 416:16 416:18 recalled 410:21 receipt 424:6 receive 300:8 received 300:10,24 305:9 306:15 320:4,11 338:21 339:21 340:6 342:12 382:8 recent 431:8 recess 335:20 398:22 428:6 recognize 290:5,14 291:11 recollection 321:11 record 280:8 291:6 308:23 309:16 336:15 356:18 363:15 398:23 400:10 412:16 413:11 426:23 428:15 437:2,6,13,24 438:8 440:24 447:14 recording 323:10 418:3</p>	<p>records 440:24 recovery 341:12 346:13 347:15,16 396:24 red 351:18 388:12 393:23 redesigned 398:5 redirect 283:5 324:7,8 417:13 417:14 reduces 444:6 refer 350:2 reference 294:9 309:12 320:3 386:11 387:18 393:15 referenced 289:18 291:14 295:16 313:14 345:23 356:24 358:20 364:17 396:9 414:13 references 441:5 referencing 394:2 referred 321:23 350:20 352:1 417:2 referring 363:17,20 393:22 415:5</p>	<p>refers 321:6 413:17 reflect 299:21 333:22 refresh 330:20 regard 326:17 326:21 328:23 407:10 416:14 regarding 316:11 320:16 321:15,22 323:9,11 354:20 358:9 410:12,15 411:1 431:7 regardless 375:14 region 434:15 regulation 321:4 regulatory 288:16 297:6 378:22 383:5 399:16 reiterate 304:2 317:21 332:21 relate 387:16 related 296:8 320:15 323:18 324:2 355:16 relates 426:5 relation 328:20 420:5 relatively 439:5</p>	<p>release 299:9 302:9,11 303:16 306:3 318:6 320:23 327:11,17 329:13,19 339:11,17 340:11,13,22 344:1,16 345:4 346:23 350:17 350:18,19,22 350:24 352:3,5 352:7 355:1,2 355:4,17 359:21 367:9 372:7,15,20 373:4 374:14 374:20,21,23 375:8,10 403:17 404:1 404:13,14,14 404:17 406:6 406:15 409:13 429:13 431:10 released 375:12 390:2 releases 298:23 352:17 431:11 relevant 350:6 relief 335:1 relies 327:2 350:7 400:20 remainder 383:20</p>
--	---	--	--

[remedial - resolution]

<p>remedial 313:11 395:13</p> <p>remediate 340:23 374:16 374:17</p> <p>remediation 293:17 294:10 294:23 295:8 296:2,4,6 313:8 319:3 325:19,21 327:9,21 329:9 329:11,12 341:10,12,13 346:1,12 351:1 351:4,7 361:23 364:8 373:13 376:1,2 395:18 395:24 396:3,6 396:8 397:2 407:19 408:14 424:7 433:7,12 435:11</p> <p>remediations 341:4</p> <p>remember 366:12 382:10 410:23 426:19 429:18 441:24</p> <p>remind 376:16 376:18</p> <p>reminder 319:15 420:13</p> <p>remove 375:17 396:6</p>	<p>removed 313:9 320:24 394:3</p> <p>renaming 296:20</p> <p>rended 370:3</p> <p>repeat 326:19</p> <p>repeatedly 325:1</p> <p>rephrase 318:18</p> <p>replaced 421:12</p> <p>report 290:5,24 293:21 295:15 295:16 296:5 297:19,24 301:16 306:15 307:4 309:10 342:13,13 343:2 348:1,3 353:14 355:10 367:3,15 376:22 377:22 382:9,11 394:20 400:13 408:4 416:15 417:3 424:6 447:9</p> <p>reported 293:19 318:6 327:11 422:15 447:11</p> <p>reporter 287:3 447:7</p>	<p>reporting 293:18 416:20</p> <p>reports 286:6 288:20 289:5 293:14 297:11 300:24 301:14 310:3 358:15 364:20,21 365:2 379:14 416:19,23</p> <p>represent 400:15</p> <p>representative 312:14</p> <p>represented 315:19 317:23 387:12 393:22</p> <p>represents 386:1</p> <p>request 321:2 322:24 323:7 404:3 410:8,15 424:4</p> <p>requested 303:8 304:9,11 306:11 308:24 314:23 315:5 316:2 364:3 406:18,22 438:18</p> <p>requesting 322:23 364:4 410:12 424:9 426:17</p>	<p>requests 322:21 400:21 411:18 427:20</p> <p>require 382:24 406:20</p> <p>required 301:19 305:4 318:17 328:9 349:6,9,21 352:13 353:10 362:13 406:10 407:4 429:7,10 430:14</p> <p>requirement 430:6</p> <p>requirements 308:16 399:19 402:24 406:8 406:17</p> <p>requiring 349:4</p> <p>resampled 367:4</p> <p>research 288:6 321:17</p> <p>reservation 426:21</p> <p>residences 413:8</p> <p>residential 412:22 413:3</p> <p>resolution 286:8 441:18 446:1</p>
---	---	---	--

[resolve - rule]

<p>resolve 286:9 286:18 respect 413:4 440:23 respectfully 441:2 respectively 415:6 respond 315:4 316:14 350:8 400:12 437:12 responded 304:9 408:5 responds 434:19 435:5 response 291:14 304:12 308:5,18 312:14 314:17 315:1 316:4 317:4,15 346:5 374:22 375:13 382:19 400:18 426:16,19 443:2 responsibility 326:16,20 334:10 responsible 327:8 344:16 403:8 404:3 406:9 409:4 410:8 424:5 rest 286:19 341:17 358:12</p>	<p>364:3 394:10 421:23 428:22 resubmit 315:15 resubmittal 421:16 resubmitted 425:3 result 310:22 311:15 313:24 327:11 332:3 399:17 411:9 results 294:2 295:7 297:12 298:14 299:12 300:5 301:14 302:15,18 303:8,14,15 305:14 306:10 306:16 307:7 307:10 318:9 326:2,6 331:5 339:21,24 358:18 381:21 382:21,21 resume 287:19 287:24 289:19 review 311:13 313:4 314:11 314:24 317:4 318:14 334:22 343:11 377:13 377:13,14 381:21</p>	<p>reviewed 288:19 289:1 331:1 341:3,5 343:21 358:14 377:23 396:10 reviewing 289:5 303:8 306:10 307:6 364:19 389:13 reviews 317:17 371:22 372:4 revised 315:14 315:16 356:12 revisions 315:14 rig 328:17,24 right 313:20 314:13 319:22 337:8,15 365:11 369:13 385:8 388:8,17 388:18 391:5 391:21 393:13 403:1,13 405:13,14 407:1,15 409:6 409:20 412:8 412:19 413:18 413:23 414:12 415:1 419:10 423:11 434:6 438:18 445:18 rings 366:13 rise 370:23</p>	<p>rising 371:3 risk 436:10 risks 361:22 rmckee 282:5 road 389:3 robust 424:20 rocks 280:11 447:5,19 roles 288:23 romero 283:3 287:1,2,5,11,13 288:23 289:15 292:18 293:8 293:23 301:9 309:3 311:10 317:21 319:10 321:5 324:4 325:15 335:10 410:19 room 345:1 rosa 283:3 287:1,5,13 343:5 rose 392:11 394:23 roughly 362:8 382:13 420:24 row 380:11 rubin 281:3 445:2,18 rule 288:16 339:9 350:7,20 350:21 354:20 439:11</p>
--	--	--	--

[rules - see]

<p>rules 339:8 402:23 ruling 431:17 431:20 run 416:23 445:18 running 338:9 ryan 282:3</p>	<p>301:24 302:21 303:2,20 306:15 309:5 318:9,15,22 319:3,8 324:21 326:2,6 339:23 342:14 355:5 357:12 361:16 365:1 366:7 367:1 368:9 369:15 376:24 381:10,12,18 381:20,24 382:4,7,20 383:13,17 392:12 408:1 416:20 417:3 420:14,14 422:14,14 425:19 430:4 430:14</p>	<p>saying 366:18 434:5 says 320:4 403:5,23 406:6 432:10 447:6 scale 288:9,16 374:18 376:6 384:22 387:14 387:16,20,23 388:4,6,24 389:6,10 390:15 392:24 393:2,4 412:9 412:10,20 schedules 303:14 438:15 444:14,21 science 288:5 scope 290:12 300:10 301:15 304:6,12 307:15,15,21 307:23 308:5 308:11 309:11 309:12 310:3 311:4,23 312:15 313:5,7 315:17 317:2 335:22 399:3 432:8 scopes 308:23 screen 289:11 289:16 290:1 320:1 337:2,8 356:17 363:16</p>	<p>screens 332:17 scroll 363:2 380:23 second 401:5 403:7 443:20 secondary 303:16 section 403:5 403:13 405:16 408:12 429:10 sections 350:6 see 286:19 289:16 297:4,9 297:20 299:24 301:2 302:14 302:19 303:15 305:5 308:13 311:20 343:6 347:6 349:9,18 359:15 360:2 360:18 361:9 366:1 367:23 369:16 370:13 370:18,20,21 370:23 373:2 373:22 378:12 378:17 379:3,4 379:5 383:7 387:19,22 391:13,23 392:3,7 394:16 397:20 402:20 414:5,8,20 415:20 416:8 419:13,14</p>
<p>s</p>	<p>365:1 366:7 367:1 368:9 369:15 376:24 381:10,12,18 381:20,24 382:4,7,20 383:13,17 392:12 408:1 416:20 417:3 420:14,14 422:14,14 425:19 430:4 430:14</p>	<p>samplings 359:15 383:22 416:14 sanfa 280:10 santa 281:4,8 281:12,15,18 281:21 282:8 390:21 445:10 satisfied 307:22 310:11 saw 305:7,7 318:13 379:14 395:2</p>	
<p>s 281:8,20 293:15 saint 281:8 samantha 282:7 samantha.cat... 282:9 sample 297:8 297:12 307:10 358:18 411:9 411:10 sampled 352:8 382:9 samples 295:12 295:21 301:4 302:16 307:7 310:10 339:3 347:4 373:21 373:22 381:10 383:23 385:11 422:20 sampling 286:5 294:1,11,24 296:19 297:3,9 297:16,19 298:14 301:3</p>			

[see - signature]

<p>420:23 424:11 433:5 434:7 435:2,5,23 439:22 seeing 295:7 296:21 351:21 353:6,13 355:3 355:14 356:1,5 365:9,17 366:5 367:10 377:8 378:11,18 379:2 382:6 391:3 418:24 seems 429:6 441:18 seen 295:12 310:4 346:17 352:5 355:10 355:10 357:9 357:11,16 358:2 368:13 371:15 372:17 376:9 378:20 383:8,11 384:8 385:4,11 427:18 selected 341:18 self 316:23 sense 301:22 305:15 405:4 425:1 428:22 435:9 sensitive 400:13</p>	<p>sentence 406:5 406:11 409:11 410:6,7 separate 375:5 401:6 441:20 442:17 september 305:18 316:8 323:2 330:3 332:16 342:4 343:13 345:9 425:4 series 413:13 416:19 serve 441:8 served 288:21 serves 342:15 service 288:9 set 338:16 340:3 393:9 432:23 433:11 433:18 438:23 setting 345:12 seven 293:7 316:1 330:4 333:1 342:5,6 342:9 343:14 352:15 353:4 355:2 360:9 380:2,4 421:5 421:8,16 434:9 several 340:7 344:22 347:8 352:16 353:23 357:5,24</p>	<p>359:23 360:4 373:24 377:20 378:22 380:10 387:1,8 388:2 397:21 413:14 shaheen 281:14 shaner 281:20 share 289:10 337:2,8 shared 289:16 sharon 281:14 sheer 341:15 shifts 365:15 365:17,18 368:13 369:17 shocked 352:23 short 300:23 301:1 304:7 334:21 360:2,7 360:10 439:5 440:22 443:15 444:5 shorthand 447:7,11 shortly 387:10 388:22 shove 378:4 show 284:17 286:3 294:4 298:13 326:6 330:23 367:1 387:9 388:22 390:15 392:15 393:6 397:6 412:6 434:18</p>	<p>showed 318:10 335:1 343:5 371:22 372:4 423:18 showing 307:9 333:11 335:2 340:3 357:19 365:7,8,21 366:11,13,15 369:18 381:2 382:14 385:11 385:12,16 388:10 426:23 432:7 shown 343:17 351:23 365:14 365:22 408:8 414:11 shows 357:1 367:17 388:5 shut 395:12,17 shutting 374:24 375:10 side 369:11 385:3 386:7 388:16 391:9 391:21 418:5,7 418:8 419:12 419:24 433:1 sides 427:19,22 428:1 431:9 441:19 signature 447:19</p>
---	---	--	---

[significance - soil]

<p>significance 293:9 349:3 350:18 351:14 356:9,23 358:21 360:13 376:11 380:16 383:19 384:8</p> <p>significant 289:4 305:7 321:17 333:3 333:17 334:6,8 350:12,21 358:5 359:5,10 359:12,13,14 364:20 366:8 378:17 391:7 397:5 412:6</p> <p>significantly 325:2 328:6</p> <p>similar 362:14 397:6</p> <p>similarly 290:16</p> <p>simply 313:14 314:10 412:17</p> <p>single 357:4 389:5,8 422:18 425:17</p> <p>site 288:24 292:9 296:9,10 298:14,19,22 299:18 300:7 302:9,11 303:4 305:11 306:2 311:1 316:5</p>	<p>323:5 325:20 325:23,24 327:21 328:24 330:1 338:17 339:16 344:16 350:14 351:6 351:17 355:2 355:17 356:13 384:13 386:5 388:8 389:13 392:23 396:6,9 402:24 404:20 405:19,23 406:21,24 408:17,22 409:17 412:18 412:23 432:7 433:1</p> <p>sites 386:3 387:15</p> <p>sits 355:22</p> <p>sitting 354:5 387:18</p> <p>situation 296:2 308:18 327:1 347:8 377:13 392:10</p> <p>six 300:9 369:4</p> <p>size 352:21 374:14 384:23 389:10,15,17 389:21 390:2 396:11,16 398:1</p>	<p>skip 393:12</p> <p>skipped 400:3</p> <p>skirt 420:11</p> <p>skyrocketed 435:19</p> <p>slated 435:20</p> <p>slide 286:3 293:6,6,11,23 293:24 294:7 294:21 295:13 295:14 296:12 297:2,14,22 299:1,1,11 300:1,2,2,17,21 300:22 301:9 301:17 302:12 302:13 303:6 304:23 306:8,9 307:12 308:4,5 309:2,17,20,22 309:24 310:8 310:14,17,20 310:22 312:12 312:13 314:14 315:6,19,21 316:20,22 317:3 319:22 319:22 320:17 321:5,19 325:17 332:19 333:14 334:3 338:9,9,11,16 350:12 351:10 351:13,14 356:23 357:1,4</p>	<p>365:19,21,23 367:12,13,14 368:5,7 369:8 369:9 376:11 376:15 380:23 383:21 384:7 384:10,19 387:11,12,13 390:13,14,18 393:8,11,13 398:11,16 399:12 409:8 412:5</p> <p>slides 317:20 317:21 349:2 350:2,3 380:10 384:1,16 388:21 392:22 393:10 412:2,6</p> <p>slight 365:17</p> <p>slightly 303:5 385:12 388:21 389:18 393:18</p> <p>slow 368:17</p> <p>small 295:20,22 364:10 385:2 387:23</p> <p>smaller 341:14</p> <p>smell 298:16</p> <p>soaks 354:12</p> <p>soccer 388:2</p> <p>soil 293:22 294:2,11 295:17 296:2,6 299:14 300:5</p>
---	--	---	---

[soil - state]

<p>315:23 319:6,7 325:19 326:2,6 339:2 344:3 347:2,7,12 352:6,7,8,12 353:9 372:10 372:13 373:11 373:16 374:7 374:15 404:22 405:3 408:20 409:16 422:20 422:24 423:1,4 429:16 430:4 430:11,12,18 soils 326:9 371:19 403:8 403:22 404:14 404:24 409:4 solid 443:21 somebody 330:22 sorry 410:14 411:20 sort 289:6 403:6 439:24 440:9 sounds 417:1 source 326:18 326:21 327:3 329:19 360:9 368:1 371:18 374:3,24 375:11,15,18 376:3 379:15 405:12,13</p>	<p>408:20 409:1 409:16 430:15 431:3 433:14 434:16 sources 307:9 359:16 370:17 south 340:19 387:19 389:3 391:1,16 412:13 420:6,8 434:6 southeast 288:21 354:8 354:16 366:12 385:4 434:6 southerly 363:18 southern 386:13,19 418:16 southernmost 353:18 359:13 385:17 southwest 354:3 391:1,3 420:7 sp 299:21,24 specialist 288:12 specific 289:3 292:11 324:21 343:19 353:8 365:15 424:8 specifically 349:3,5 365:5</p>	<p>366:2 417:2 425:11 429:11 specifics 293:3 specified 307:3 specter 442:19 spencer 281:14 spencerfane.c... 281:16 spill 293:18 339:9 350:20 431:7 spills 350:8 sporadic 305:13 spot 366:6 398:13 422:17 spread 340:5 sps 300:5 spurred 298:19 368:20 369:5 square 339:12 339:14 385:14 squares 385:1 ss 447:2 sshaheen 281:16 st 387:20 412:13 staff 290:7,17 291:18 345:16 377:14,20,24 444:20 stage 298:8 300:17 346:3</p>	<p>staged 425:24 stalled 343:23 344:6 345:10 standard 325:23 405:6 standards 383:11 406:7 406:16 standpoint 399:16 439:6 start 325:10 329:11 336:24 338:8 339:17 341:13 346:12 346:14 357:8 375:23 395:23 396:3,5,7 397:1 417:17 423:2 429:14 445:20 started 298:10 299:10 300:14 304:17 312:7 316:17 323:6 332:6 345:6 361:15,17 417:16 432:20 435:13 starting 303:15 331:17 345:7 351:24 429:15 starts 380:24 state 280:1,2,10 281:6 288:18 296:7 298:21</p>
---	---	---	--

[state - summarizing]

<p>302:7 329:2 336:14 340:19 351:9 354:9,16 356:13,16 357:2 361:9 363:18 388:2 389:2,4 395:14 404:20 434:22 435:16 438:20 443:14 447:1,9 stated 293:12 293:18 295:2 305:3 332:16 334:4,6 335:3 342:16 348:11 404:16 433:4 435:17 438:11 438:19 statement 308:14 328:10 329:20 338:23 344:14 355:18 381:3 405:4 410:1,3,20 411:2 439:2,4 439:9 441:12 441:13 statements 295:3 358:9 424:22 428:11 431:9 440:6 441:21 444:23 states 435:20 statewide 330:12,16</p>	<p>425:13 stating 343:5 378:13 status 429:24 statute 350:6 staying 391:8 step 299:2,12 340:13 341:10 346:1,5 364:7 373:13 395:17 401:2 430:6 433:11,18 steps 285:22 306:18 314:1 340:12,24 348:24 373:13 sticks 391:2 stipulate 443:11 stipulated 442:16 444:7 444:24 stipulation 440:20 stop 373:17 381:19 398:20 stopped 333:7 333:9,10,12 street 281:3,11 stress 303:20 stressed 304:20 strictly 386:17 strike 309:18 subject 292:8</p>	<p>submission 287:20 312:4 337:5 submissions 311:14 submit 315:16 404:3 410:8 437:19 439:8 440:16,19 443:8 444:1,4 submitted 290:24 297:11 304:7 308:24 311:6 313:6,10 343:4 356:15 358:15 375:16 435:18 subsection 351:2 403:16 403:22 410:5,7 subsequent 296:8 321:9 342:21 subsequently 313:16 substantial 342:8 successful 345:9 sudden 366:2 367:2 suffice 444:10 sufficient 310:24 311:5 328:1 333:2</p>	<p>377:5 381:8 387:1 suggest 412:21 429:7 438:2 439:9 440:14 441:2 suggested 431:14 439:10 440:8 suite 282:4 suited 329:4 summarize 292:19 293:9 293:24 294:7 294:10,20 295:14 296:12 297:1,14 298:9 299:2,11 300:3 300:22 301:18 302:12 303:6 304:24 306:9 307:13 308:4 309:3,18,24 310:15,21 312:12 314:14 315:7,21 316:21 317:3 338:13 351:13 356:22 357:3 358:10 summarized 317:22 summarizing 338:20</p>
---	---	--	---

[summary - testimony]

<p>summary 293:16 302:14 303:10 308:14 315:9 338:10 345:20,22 364:18 376:17 381:7 384:4 441:4</p> <p>summation 399:12</p> <p>summer 437:24</p> <p>super 312:21 328:4 360:21</p> <p>superimposed 412:17</p> <p>supplemental 285:12 286:18</p> <p>support 330:16 441:12</p> <p>sure 284:10 285:5 319:21 324:1 325:20 333:5 341:22 363:23 378:1 400:1 401:9 412:15 428:9 428:15 431:5 432:18 445:15</p> <p>surface 288:9 298:23 299:9 326:23 347:5 355:13 359:9</p> <p>surfaces 389:20</p> <p>surprising 360:21</p>	<p>surrounding 298:20 383:7</p> <p>suspect 411:5 440:18</p> <p>swear 287:3</p> <p>switched 332:17</p> <p>sworn 287:4,7 336:6,10 447:6</p> <p style="text-align: center;">t</p> <p>t 281:14</p> <p>table 328:11 373:16 381:7</p> <p>take 327:7 329:16 335:18 340:24 364:7 377:19 395:12 421:23 423:21 438:13 441:6 443:24</p> <p>taken 340:12 340:13 365:1,2 368:9 382:16</p> <p>takes 382:4</p> <p>talk 327:23 339:8 362:4 384:3 401:18 427:22</p> <p>talked 285:10 309:9 325:18 332:2 361:7 367:19,20 380:12,13 415:2 439:20</p>	<p>talking 290:23 291:7 334:24 342:9 348:9,12 348:18,19 359:23 360:5 364:10,11 378:20 379:6,8 387:3,15 407:3 410:6 417:3 444:14</p> <p>talks 350:13 403:16 404:8</p> <p>tall 385:8</p> <p>tan 386:10</p> <p>task 441:1</p> <p>tasked 435:14</p> <p>tax 389:3</p> <p>taxed 312:19</p> <p>tds 297:10,11 349:23 382:8 382:20 417:2 431:8</p> <p>teach 445:12</p> <p>team 312:19</p> <p>technical 293:4 317:18 401:14 440:1</p> <p>tell 287:11 333:12 351:12 375:16,20,22 376:1</p> <p>temporary 286:8</p> <p>ten 294:21 335:18 356:2</p>	<p>362:3 442:1,8 443:10</p> <p>tender 401:2</p> <p>tens 379:10</p> <p>terms 324:17 386:17 437:2 441:7</p> <p>test 294:1 374:1 434:13 434:16,17,24 435:2,9</p> <p>testified 287:8 289:7 336:11 348:11 382:15 410:21</p> <p>testify 410:18</p> <p>testifying 287:16 336:21</p> <p>testimony 290:23 295:2 311:13 312:6 319:19 320:17 323:8 324:5 325:15 327:5 327:23 328:5,8 332:2 334:1 358:11 366:17 366:19,19 371:9 385:18 396:12 402:12 407:3,9,16 410:11,15 413:12,20 414:17 415:3 417:10,24</p>
---	--	--	--

[testimony - time]

<p>421:4,17 429:2 431:6 432:19 437:3,19 438:3 testing 375:6 388:11,13 435:18 text 380:16 thank 286:23 290:22 292:16 310:20 319:12 319:15,19 321:5 324:3 325:8,15 328:7 332:11 335:15 338:6 356:8 399:9 402:5,11 417:8,9 427:6 427:8 428:24 429:2 431:23 432:1,18 436:16,24 441:17 446:2,4 446:5 thanks 324:4 theoretically 319:7 354:2 363:10 thing 289:6 297:4 333:24 352:14 361:24 366:9 394:7 415:10 434:17 442:12 things 298:17 305:23 323:24</p>	<p>338:22 339:4 341:8 345:2 350:19 353:12 353:16 355:24 360:16 362:6 375:2 379:18 383:3 389:19 391:17 400:14 420:4 422:13 427:17,24 430:24 439:21 think 285:22 286:4,9 298:17 309:17 316:20 319:9,23 320:16,19 323:24 328:18 331:7,24 332:1 333:9,22 334:16 340:20 342:10 349:1 349:13 354:7 357:2,7 364:13 364:17 367:15 367:19,21 372:19 374:9 375:4 376:13 380:18,19 381:16 382:2,2 382:4 383:22 383:24 386:7 389:9 390:8 395:15 396:1 396:12,19,21 396:22 397:3</p>	<p>398:8,17 400:11 401:16 401:18 402:19 404:11 405:15 407:20 409:3 411:2 412:1,14 412:16 413:15 415:22 417:1,8 418:21 422:10 422:17,20 423:13,14,19 424:1,15 426:6 426:11,20 427:17,18 428:5,16,18,20 429:10,12 430:9,10,10,15 431:20 432:9 434:13,20 436:1,2,3 437:1,3,9,23 438:7,12 439:7 439:17,21 440:16,20 441:7 442:2,11 443:9,13 444:3 444:5,12,15 445:18 thinking 416:1 428:19 442:5,7 442:15,23 third 445:13 thought 325:24 353:9 374:3 384:15 410:21</p>	<p>427:12 440:13 440:14 442:14 thoughts 441:16 thousand 359:3 359:7 362:3 368:20,22 386:15 thousands 341:3 440:24 three 287:15 344:9,15 356:19,20 388:15 418:17 434:21 445:20 threshold 295:8 throw 439:3 thursday 445:12 tight 353:19 time 289:21 293:4,21 294:6 294:13,14,16 294:19 295:6 295:18,21 296:4,11 297:9 298:3,15 299:7 302:8,22 303:2 305:2,12,20,22 307:2,6,14,21 307:24 308:13 309:23 310:7,8 312:2 315:13 316:11 318:10</p>
--	--	---	--

[time - traversed]

<p>319:8 320:12 320:22 321:14 321:16,20 322:4,7,15,19 323:1,7,16,21 332:11 333:11 338:1 340:8 341:22 345:11 349:21 351:5 352:5 353:9 360:2,7,10 363:2 365:11 368:10,13 369:3,13,16 372:8 373:18 376:20 377:20 379:17 382:1 388:13 399:13 400:13 411:3 417:17 422:19 426:12,14 427:6,21,22 428:17 434:23 434:23 439:5 441:6 442:19 444:5,6,9,20 times 339:20,23 341:20 348:4 352:2 378:21 timing 382:20 title 287:12 336:18,20 tmw 299:24 301:7 304:11 349:4,6 351:24</p>	<p>353:24 354:1 355:2 356:6 357:10,15,22 358:7,8,20,22 359:10 361:19 362:2,7,8,9,10 362:10,11,11 362:13,13,13 362:14,23 363:3,6,8,16,19 363:20 365:6 366:20,23 367:11 368:18 368:22 373:1 374:5,6 378:21 383:4 386:7,9 386:14 388:19 388:23 390:23 391:4,10 393:17 394:1,7 410:17 414:4 414:11,18,23 414:24 415:5,6 415:14,18,19 415:23 416:5,6 416:10,11 418:2,3,6,8,10 418:10,21,23 419:9,10,10,12 419:13,14,15 419:17,20,21 419:21 420:20 420:22,24,24 423:22 433:24 434:5,6,8,20</p>	<p>435:2,19 tmws 300:5 346:16 today 287:16 312:21 319:20 327:6 332:23 336:21 338:19 351:17 365:9 387:18,24 390:4,11,23 391:4 393:5 394:24 395:8 412:11 427:16 428:5 429:2 432:19 438:12 443:23,23 together 331:17 438:15 441:13 443:22 toluene 295:21 296:22 302:18 took 323:12 324:11 342:17 343:1 352:4 377:22 381:9 384:21,22 385:3 423:19 425:3,6 443:18 top 348:16 359:17 363:2 363:21 404:16 topic 411:22 topography 355:20</p>	<p>total 316:1 342:2,5 343:3 totally 348:2 totals 301:4 touches 383:2 toward 407:19 towards 354:2 354:3 361:2 366:14 394:12 track 289:3 tracking 371:7 traction 377:8 trader 388:3 transaction 405:22 transcribed 447:12 transcript 447:14 transition 313:7 323:9 364:14 378:6 379:19 398:13 424:6 transitioned 380:7 405:21 transitioning 312:7 transmitting 321:10 transposed 432:17 traversed 423:3</p>
--	--	--	--

[treat - understanding]

<p>treat 329:12 tremaine 281:7 283:4,5,8 284:14,15,15 285:17,19 286:17,22,23 287:4,10 289:10,14 292:4,15,16,17 319:9 321:23 324:6,9 325:7 335:11,12,13 335:14 336:2,4 336:6,13,24 337:3 338:1,7 398:12,15 399:6,9,10,22 400:2 401:11 401:12,17,23 402:1 417:12 417:14 431:5 432:21 436:13 436:14,17,19 437:5,8 439:14 440:12,13 441:22 442:6,8 442:12 443:1,3 444:18,20 446:5 tremaine's 322:13 trended 370:9 trending 361:10,17 370:2,9</p>	<p>trickling 323:6 tried 379:22 384:22 tripling 357:14 true 287:24 291:21 337:22 447:14 truly 388:1 394:14 396:7 408:24 try 418:14 419:15 444:6,9 445:22 trying 313:23 318:19 323:3 357:3 390:15 392:6,10 398:7 408:10 411:23 418:6 tuning 395:20 turn 319:13,21 325:8 402:14 412:2 413:9 turning 403:3 tw 356:1 two 287:15 297:6 299:19 314:22 316:1 316:17 318:23 332:20 343:15 343:20 345:13 346:13 348:4 349:8,10 358:8 358:23 362:12 362:18 373:5</p>	<p>377:19 380:2 381:1,9,10 384:18 388:14 394:12 395:6 397:4 412:6 413:21 421:2 421:10,19 425:8 431:21 432:6,11 436:8 438:14,24 440:24 441:3 443:10,21 twofold 430:10 type 301:24 412:23 441:18 typical 324:15 324:19 352:13 360:1 413:6 typically 324:23 326:1 328:16 334:9 341:14 347:20 370:11 389:17 404:13 405:19 429:16 typo 432:9,15 typos 331:10</p>	<p>344:13 unclear 310:19 uncommon 389:16,22 under 306:1 318:11 344:7 403:7 405:24 407:4 409:17 415:18 428:6,7 429:22 430:1 432:6 438:21 underground 420:11 understand 306:22 310:8 344:3 350:17 360:3 369:4,20 370:6 381:13 387:16 388:1 394:14,17 401:9,14,16 403:24 409:12 409:20 418:1 421:2 422:20 423:16 424:21 425:21 443:18 understanding 286:13 298:3 321:8,11 346:8 347:1,13,14 348:9,22,24 354:24 355:12 388:7 389:10 390:21 400:17 404:11 412:10</p>
		u	
		<p>u.s.d.a. 288:8 ultimately 315:16 ultimatum 317:16 321:24 322:13,14 334:15,16</p>	

[understanding - water]

412:20 421:7 427:2,5,20 433:9,17 understood 378:2 401:11 424:17 431:12 university 288:8 unknown 306:12,13,14 372:7 405:11 unnecessary 384:5 unquote 385:21 unusual 360:11 update 285:20 updated 381:5 updates 337:13 updating 433:14 upfront 345:18 upgrade 346:16 upgrading 356:7 386:11 uphold 431:20 uploaded 323:23 uploading 323:21 upper 414:11 use 322:13 392:21 422:11 422:15	used 334:15 339:6 390:16 393:1 422:18 435:2 useful 380:14 439:7 using 393:4 utilized 326:11	virtual 445:16 virtually 284:16 301:20 445:8,13 visited 327:21 visual 337:15 338:14 vitae 337:5 volume 390:1	342:19,22 343:6,9,20 345:17 378:13 378:17 379:4 424:19 429:11 432:18 436:23 wanting 379:3 wants 347:18 387:24 432:11 warranted 319:4 washing 326:12 waste 288:15 water 288:9,14 288:15,17,21 296:8,14 297:24 299:8 299:14 300:24 307:1 316:15 318:7,12 319:5 321:1 329:7,9 329:11 339:17 340:1 341:5,14 344:4 345:6 346:24 347:5 348:15,17,19 348:20 349:15 352:20 353:7 353:15,19,21 353:22 354:4,6 354:13 355:7 355:13,18,20 355:20,23 357:23 359:18 359:18,24
	v		
	vacuum 360:22 valid 424:2 436:3 valve 293:19 variability 370:19 various 288:23 vastly 348:6 vent 367:23 verbal 441:7 versions 301:1 versus 348:10 vertical 299:17 vertically 403:8 404:15 408:18 409:4 vicinity 327:15 391:12 victoria 280:11 447:5,19 view 308:17 322:1,3 413:23 437:21 violation 344:12	w	
		walks 431:4 want 298:11 307:1 327:7 330:20 332:5 332:21 333:5 334:3 341:22 342:16 344:13 345:20 357:4,8 361:8 363:23 365:4 376:14 380:12 382:22 384:7 392:19 399:12 400:9 401:1 402:18 412:15 413:11 417:6 420:20 421:4,23 425:14 427:24 428:1,9,12 433:11 436:22 437:6,11 438:13 443:1 wanted 285:6 296:16 303:10 311:19 324:7	

[water - wendell]

360:1,22 361:7 364:16,24 366:6 367:1 370:12 371:10 371:12,14,18 371:20,24 372:2,6,11,11 372:14 373:3 373:12,16 374:13,14,21 375:21 376:1 379:5,9,11,15 386:3 389:20 390:1,16,17,24 391:14 396:7 397:14 404:1,9 404:9,19,22,24 405:2,8,17,17 405:20 406:7 406:15 409:13 409:15,18 413:7 419:4,5 419:6 420:6,10 422:21,22 425:20 429:7 429:15,17 430:16,23 431:2 433:15 435:21 436:4 way 328:21 329:8 349:22 369:21 370:15 371:17 412:21 425:3 427:1 433:15 436:10	we've 328:20 332:22 335:16 346:3 357:9,11 375:14 376:9 389:2 394:14 399:11 400:10 431:9,12 443:3 website 290:9 313:20 323:10 323:15 week 438:14,24 440:18 441:2 443:15,15,19 443:21,23 445:6,10 weeks 400:18 443:10,21 wells 294:12 298:4 299:16 299:19 300:6 300:11,19 301:22,23 302:4 303:23 304:3,8 305:3 305:6,15 307:18,19 308:8 309:4 310:5,8 313:13 313:14 314:16 314:18,22,23 315:11,12,24 316:24 318:23 322:8 324:21 327:14 328:8 328:13,20	329:1 330:4,9 332:20 333:2 334:4,7 335:2 335:6 340:3,7 341:12,12,18 341:24 342:2 342:21,23 343:2,3,14,14 343:15,18,19 343:20 344:23 345:2,13,13 346:13 347:4,8 347:15,16 348:4 349:8,10 351:10 353:23 355:15 357:8 358:23 362:12 362:13,18,21 363:6,12,12 364:1,3,8 365:11 367:11 367:22 369:22 369:23 373:21 374:1,1 377:3 377:7,12,13,15 377:19 378:2,7 378:14,23 379:24 380:2 380:20,22 381:3 382:14 382:23 383:7 385:4 386:8,11 386:22,23 387:10 388:9,9 388:11,12,12	388:14,15 390:22 391:9 391:11,12,23 392:15 393:14 393:16,21 394:10,11,16 395:5,6,10,15 395:16,18,22 396:13,16,18 396:23,24 397:3,4,24 407:4,10 411:18 413:21 413:22 414:1 415:5 418:11 418:14,17,21 419:3,23 420:5 421:5,8,8,10,12 421:13,18,19 422:21 423:5 423:14 424:13 424:22 425:4 425:14 426:16 426:17 429:9 429:17,19 430:8,11,14 431:14,21 432:8,11 433:4 433:12,19 435:4,6,8 436:5 437:14 437:22 440:1 wendell 387:21 412:10
---	---	---	---

[went - yesterday]

<p>went 330:19 333:17 343:14 348:4 357:13 357:23 358:8 359:2,11 361:4 367:4 369:5,24 377:22 380:2 393:12 420:14</p> <p>west 340:19 353:22 354:1,3 371:6 385:4 386:3,4,23 387:5 388:16 391:14 411:11 418:8 419:11 423:23 433:1</p> <p>westerly 419:3 419:18</p> <p>western 288:7 419:8</p> <p>wide 288:13 385:8</p> <p>wider 311:23</p> <p>wildlife 288:5</p> <p>william 284:19</p> <p>willing 308:10 311:19 314:21 322:5,8,10 334:19 335:5 421:20</p> <p>windmill 296:20 297:7 297:10 309:8 319:2 354:2 359:1,7 360:16</p>	<p>360:18,19 361:9 366:11 366:14 383:9 388:14,18 419:1,2 423:20 435:20,23,24</p> <p>wise 329:2</p> <p>withapache 379:22</p> <p>withdraw 286:1 400:19</p> <p>withdrawing 400:9</p> <p>withdrawn 400:7,23</p> <p>withdraws 286:17</p> <p>witness 283:3,7 286:22 287:3,6 319:11 336:2,3 336:6,9 349:13 364:1 399:7 434:4 436:12 436:18</p> <p>witnesses 285:5 361:8 367:20 385:19 400:4</p> <p>wondering 318:21 427:21 431:17</p> <p>word 317:16 322:13</p> <p>work 285:21 286:4 287:12 288:4 290:12</p>	<p>291:10 300:10 300:10 301:15 304:6,12,15 307:15,15,21 307:23 308:6 308:10,11 309:11,12 310:3 311:4,19 312:15 313:5,7 313:11 315:17 316:15 317:2,5 322:5,24 331:16 335:6 335:23 336:17 336:19 352:9 352:10 375:4 381:3 399:3 423:6 430:20 431:15 432:8 439:23,23 441:13 445:13 445:19,24</p> <p>worked 288:11</p> <p>working 316:18 333:17 404:21 405:1 441:4 443:7</p> <p>works 404:12</p> <p>world 398:5</p> <p>worried 443:6</p> <p>worries 411:24</p> <p>wozniak 282:3</p> <p>wqcc 430:22</p> <p>wrap 398:18 399:23 442:15</p>	<p>443:9</p> <p>writing 424:5</p> <p>written 426:15 427:15,21 437:13 440:22 441:7,20</p> <p>wrong 361:17 392:3 431:14 442:1</p> <hr/> <p style="text-align: center;">x</p> <hr/> <p>x 283:1</p> <hr/> <p style="text-align: center;">y</p> <hr/> <p>year 297:17 302:22 333:10 342:17 431:7</p> <p>years 287:15 316:17 340:14 341:6,6 352:18 353:2 434:21</p> <p>yellow 365:13 391:21 393:23</p> <p>yesterday 284:3,24 285:4 285:9,11 290:23 291:14 295:3 303:22 311:11 327:6 330:19 331:9 333:7 366:19 382:16,18 400:4 435:14 437:19</p>
---	---	---	---

[zero - zone]

z	
zero	318:19
zone	419:6