IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF IOWA
EASTERN DIVISION

NUHN INDUSTRIES, LTD.,
Plaintiff,
vs. File No. 3:22-cv-00015-SMR-HCA
BAZOOKA FARMSTAR, LLC,
Defendant.

REMOTE VIDEO ZOOM DEPOSITION OF
BENNY D. PUCK

DATE: December 5, 2024
TIME: 9:00 a.m. CT
PLACE: Videoconference

REPORTED BY: NANCY G. GISCH, RMR, CRR, CLR, CRC
(Via videoconference)

The videoconference deposition via Zoom of BENNY D. PUCK, taken on December 5, 2024, commencing at approximately 9:00 a.m. CT, before Nancy G. Gisch, Registered Merit Reporter, Certified Realtime Reporter, Certified LiveNote Reporter, Certified Realtime Captioner, a notary public in and for the State of Wisconsin.

A P P E A R A N C E S

(All appearances via videoconference)

On Behalf of the Plaintiff:

SCOTT E. YACKEY, ESQ.
syackey@harnessip.com
Harness IP
5445 Corporate Drive
Suite 200
Troy, Michigan 48098
469-777-5423

(Appearances continued on next page.)

On Behalf of the Defendant:

TAYLOR R. STEMLER, ESQ.
tstemler@merchantgould.com
Merchant & Gould PC
150 South Fifth Street
Suite 2200
Minneapolis, Minnesota 55402
612-332-5300

Also Present:

Ian Nuhn
Brian Ciccone, Videographer

I N D E X

WITNESS: BENNY D. PUCK PAGE

EXAMINATION BY MR. STEMLER..... 9, 246
EXAMINATION BY MR. YACKEY..... 160, 260

EXHIBITS MARKED AND REFERRED TO:
EXHIBIT DX 55..... 20
Declaration of Benny D. Puck
PUCK0000149 through
PUCK0000151
EXHIBIT DX 56..... 28
Declaration of Benny D. Puck
PUCK0000152 through
PUCK0000159
EXHIBIT DX 57..... 31
Video
Exhibit A Puck Agitation Boat
EXHIBIT DX 58..... 33
Video
Puck Lagoon Agitation Boat and
MobileStar Pump Control

(Exhibits continued on next page.)

EXHIBIT DX 59..... 36
Video
Puck Lagoon Agitation Boat --
Jeremy Puck
EXHIBIT DX 60..... 37
Video
Puck Agitation Boat --
Ben Puck
EXHIBIT DX 61..... 39
Video
Puck Agitation Boat -- Front
EXHIBIT DX 62..... 45
Photographs
PUCK0000045 through
PUCK0000056
EXHIBIT DX 63..... 65
Agitation Boats Patents Pending
EXHIBIT DX 64..... 75
Operators Manual
Agitation Boats
EXHIBIT DX 65..... 91
Photographs
PUCK0000004 through
PUCK0000053
(Exhibits continued on next page.)

EXHIBIT DX 66..... 94
Photographs
PUCK0000001, attachments
EXHIBIT DX 67..... 97
Photographs
PUCK0000048, attachments
EXHIBIT DX 68..... 109
Video
PUCK0000054
EXHIBIT DX 69..... 112
Video
PUCK0000057
EXHIBIT DX 70..... 120
North American Manure Expo
BAZ15 028010 through
BAZ15 028033
EXHIBIT DX 71..... 125
Photographs
UOWM0000007, attachments
EXHIBIT DX 72..... 131
Arial photos
BAZ15 0193511 through
BAZ15 0193513

(Exhibits continued on next page.)

EXHIBIT DX 73..... 140
Declaration of Ian Nuhn
In Support of Patent Owner's Response

EXHIBITS PREVIOUSLY MARKED AND REFERENCED:

EXHIBIT DX 3..... 195
EXHIBIT DX 4..... 227
EXHIBIT DX 33..... 60

(Original exhibits attached to original transcript; copies to counsel.)

P R O C E E D I N G S

VIDEOGRAPHER: Stand by, please.

Good morning. We are going on the record at 9:00 a.m. Central Daylight Time on December 2024.

This is Media Unit No. 1 of the video-recorded deposition of Ben Puck, taken by counsel for defendant in the matter of Nuhn Industries, Limited, versus Bazooka Farmstar, LLC, filed in the United States District Court for the Southern District of Iowa, Case No. 3:22-cv-00015-SMR-HCA.

This deposition is being held via remote Zoom.

My name is Brian Ciccone, representing Veritext Legal Solutions. And I am the videographer.

The court reporter is Nancy Gisch, also from Veritext Legal Solutions.

Will the attorneys please identify themselves for the record.

MR. STEMLER: Yep. This is Taylor Stemler, from the law firm Merchant & Gould, PC. And I'm appearing today representing Defendant Bazooka Farmstar, LLC.

MR. YACKEY: This is Scott Yackey from the law firm of Harness IP on behalf of Plaintiff Nuhn Industries, Limited.

And with me today is also Ian Nuhn, with Plaintiff Nuhn Industries, Limited.

VIDEOGRAPHER: Thank you. Will the court reporter please swear in the witness.

BENNY D. PUCK,

duly sworn, was examined and testified as follows:

VIDEOGRAPHER: You may proceed.

EXAMINATION

BY MR. STEMLER:

Q. Mr. Puck, would you mind stating your full name for the record.

A. Benny Duane Puck.

Q. Okay. And do you mind if I call you Ben today?

A. Please do.

Q. Ben, do you understand that your testimony today is under oath and that it has the same effect as if you were in a courtroom, in front of a judge or a jury?

A. I do.

Q. I will attempt to make my questions today clear, but if I do not do so and you do not

understand me, please go ahead and ask me to rephrase or repeat the question. And I'll go ahead and do so.

If you do go ahead and answer, we'll go -- we'll assume that you've understood the question.

Does that make sense?

A. Yes, it does.

Q. So the testimony today is being recorded by a court reporter. And because of that it's important that you and I both speak audibly, rather than, you know, shaking or nodding our heads.

So please go ahead and answer the question just with a simple yes or no, if that's what the question calls for.

Does that make sense?

A. Yes, it does.

Q. It's also important today that, because we have this court reporter on the line -- that you and I do not speak over each other. So I'd ask that, you know, you please wait until I finish my full question before answering.

And, likewise, you know, I'll wait for you to finish speaking before I ask you a question.

Does that make sense?
A. Yes, it does.
Q. Ben, is there any reason that you can't give fair and accurate testimony here today?
A. No, there's not.
Q. Thank you.
Ben, can you please tell me just a bit about who you are and why you're here today.
A. My name is Ben Puck. I'm here to be a part of the deposition. My deposition is -- is my knowledge to knowing about the floating agitation device.
Q. Ben, where are you from?
A. Manning, Iowa.
Q. And where are you today?
A. I'm at my home in Manning -- south of Manning, Iowa, three miles.
Q. Who do you work for?
A. I'm recently retired from Puck Custom Enterprises, so I am self-employed.
Q. And -- and what is Puck Custom Enterprises?
A. It was basically a business that we put together in 1998, formalized it, as we were taking on operations of pumping liquid manure,

continuing to -- pumping liquid manure, baling alfalfa hay, and doing other good -- other services for the farmers in an area that needed our -- needed services.

Q. You said "we started it." Who -- who did you mean by that?

A. My wife, Kathy, and I.

Q. And how long have you worked for Puck -- Puck Custom Enterprises?

A. We basically started this in 1979 with my brother and -- and our two wives. And 1after several years we had basically designed -- decided to separate. And have been pumping manure, farming -- those types of things -- ever since.

In 1998 we kind of formalized it as a corporation.

Q. So do you have an estimate of how many years you've worked for Puck Custom Enterprises?

A. 40? 45, right now.

Q. You're pretty proud of the company that you built?

A. Yes, I am. Yes, I am.

Q. What kind of work did you do while you were at Puck -- at -- sorry. I guess -- strike

that.

You know -- I've -- I was referring to Puck Custom Enterprises. Will you understand if I refer to Puck Custom Enterprises as "Puck" today?

A. Yes, I -- yes, I will.

Q. What kind of work did you do while you were at Puck, Ben?

A. I was the CEO of the company. We helped the -- helped the application side of putting liquid manure onto the soil, educating the farmers about the benefits of it.

Tried to innovate some new products to bring to the market, to -- to alleviate the problems that we had in the industry.

And those types of things.

Q. And, as the CEO, did you have a hand in just about every aspect of the company?

A. Yes, I did.

Q. What kind of products did Puck work on?

A. We worked on -- first -- first thing that we worked on was a hose cart. The second thing was a four-wheel drive swinger, booster pumps, pump bypasses, control systems for the -- for the pumps, as the industry started to grow, both in

the swine -- mostly swine in this area, but we had several large dairies that came into this area. We tried to solve their -- their storage needs.

We found that, of course, every -- everything -- everything on scale had changed a lot in the last 20, 25 years and that we needed to address some new challenges.

Q. When you say Puck worked on these products, what did that entail?

A. We entailed [sic] making it work quicker, faster, trying to increase the productivity because the industry is growing that much quicker.

Giving opportunity to our customers to be able to get more done in a shorter amount of time.

And so we spend a lot of time on understanding friction losses, pump curves, horsepower relationships, trying to build a customer -- helped build -- help the customer build a business plan that was survivable, that would actually allow them to stay in business.

Q. And, to clarify, did -- did Puck design any of these products?

A. We did. We -- we designed a -- an improved hose cart.

We designed a -- a swing pipe on the back of a -- of a tractor that would allow the -- the tractor to turn more -- amicable in the field. Make it quicker on the ends, to apply less waste on the ends so we can use them as nutrients.

Improve the amount of flow to the field, to alleviate the time that it took to previously pump the liquid to the field.

And gave a -- a little bit of a larger plate for the commercial applicators to work from.

Q. Did Puck manufacture any of these products?

A. We did. We -- we started building products that we could not find on the market, you know, in the early 90s, and through when we formalized the business as Puck Custom Enterprise in 1998. And we continued to work on them.

And as we continued to grow, we found some success from people that were seeking that same problem -- you know, answers to the problems that we were trying to -- to find.

And we were asked to build some equipment

for them, as well. And so that, kind of, started the -- the opportunity.

And, of course, labor makes a big difference. So my son, Jeremy, came back from college. He had been working the operation, of course, obviously, since he was old enough to drive a tractor and understood the industry. And it was a good -- great time for to us start to grow.

Q. Did Puck manufacture and sell any of these products itself?

A. We did.

Q. I'm sorry. Strike that.

Did Puck market and sell these products?

A. Yes, we did. We marketed and sold these products.

We -- we were encouraged to go to some manure -- manure demonstrations, to show off our product, to see how they would compare, to learn how the rest of the industry were using their products.

You learn by seeing sometimes and by doing.

And we -- I have a huge passion for this industry and have a huge passion for helping

anybody to be -- be successful in this industry.

Q. To that point, I -- I think you -- you kind of touched on this just a minute ago, but could you explain a little bit about why you got into this industry.

A. We got into this industry in the 1980s -- we were looking for off-farm -- off-farm income because eighteen- -- the 1980s were a difficult time, to say the least. And we needed off-farm income to survive out here -- or at least it seemed as though -- that we did.

And so we had a -- a need in our area, because people were building hog confinements to bring the pigs from outside inside. And they produced a liquid manure that normally needed about -- anywhere from a four- to six-week cycle time to pump and clean these buildings out.

And as the industry continued to grow and it started to go vertical, you know, these little two-, three-hundred head buildings turned into being thousand-head buildings, to 3,000-head sites, to even larger than that across the map.

And this created a lot of challenges and new problems, especially with the regular -- regulatory coming in to say that we needed to be

able to place this -- this -- this manure and treat it as a nutrient and to be able to minimize runoff to the -- to the great streams and waters of any state that we would happen to be applying to.

Q. Are you familiar with liquid manure?

A. Yeah.

Q. How familiar?

A. I am very, very familiar with liquid manure. I have been around it for now over 45 years. I've consulted, seen it in, basically, most all the northern and half of the southern states of North America, and Russia, China, Croatia. All -- everywhere.

Q. Have -- have you ever seen a liquid-manure lagoon?

A. Yes, I have.

Q. How many liquid-manure lagoons would you say you've seen?

A. I would say we're way north of a thousand.

Q. Ben, have you ever heard of Bazooka Farmstar, LLC?

A. Yes, I have.

Q. Are -- are they a competitor of yours?

A. They are -- they are a competitor of ours.

They are also a participant in our industry. And they -- and they also provide products that our industry requires.

Q. Do you work for Bazooka Farmstar, LLC?

A. No. I do not.

Q. Have you heard of Nuhn Industries, Limited?

A. Yes, I have.

Q. Are they a competitor of yours?

A. They also work in this industry. Yes, they are a competitor of ours. They also work in this industry to provide products to -- to folks that seek their needs.

Q. Do you work for Nuhn Industries, Limited?

A. No, I do not.

Q. Are you aware of any litigation going on between Bazooka Farmstar, LLC and Nuhn Industries, Limited?

A. I -- I am aware of this -- of this situation, of -- of both of the boats -- not to a huge extent.

Q. Are you -- or is Puck Custom Enterprises involved in any of that litigation?

A. Not that I am aware of, no, we are not.

Q. I'd like to turn to a document here that

I'm going to share on my screen.

MR. STEMLER: And before I move on, I'll state for the record, too, that Ben will review and sign the dec- -- the deposition transcript

(Deposition Exhibit No. 55 introduced.)

Q. (By Mr. Stemler, continuing) Ben, I'm sharing a document up on my screen.

Do you see this document?

A. Yes, I -- yes, I do.

Q. Do you recognize this document?

A. Yes, I do.

Q. What is it?

A. That's my declaration.

Q. Did you sign this document?

A. Yes, I did.

Q. Is this your signature on page Puck 151 of this document?

A. Yes, it is.

Q. I'd like to ask you a few questions about some of the topics that are discussed in this document.

Is that okay?

A. Yes. Yes, you may.

Q. Ben, how old are you?

A. I'm 66.

Q. And you said you live in Manning, Iowa. Is that right?

A. Yes, I do. On a farm south of Manning, Iowa, to clarify it.

Q. Could you please read paragraph 2 of this declaration out loud.

A. "I am the founder of Puck Custom Enterprises, Incorporated (Puck). I started Puck in 1979. Since then Puck has been designing and manufacturing pumps and pumping equipment for various industries, including firefighting, field transport, agricultural industries. And I have been working with pumps for 45 years."

Q. Are those statements all true and correct, in paragraph 2?

A. Yes, they are.

Q. Could you please read paragraph 3 for me.

A. "I am the inventor of lifted" -- excuse me.

"I am the inventor listed on U.S. Patent Application Publication No. 2014/0112093 U.S. Patent No. 946,274 [sic] and U.S. Patent 9,572,297.

Q. Thank you.

And I -- I think you may have misread the second patent number there. Do you mind reading that --

A. All right. Yes. Second patent number is 9,462,741.

Q. And are those statements listed there, in paragraph 3, that you just read true and -- true and accurate?

A. Yes, they are.

Q. Would you please read paragraph 4 for me.

A. "In 2012 I was employed by Puck and involved in new product development, including development of pumps that are used for firefighting and pumps that are used for pumping liquid manure."

Q. Is that statement true and accurate?

A. Yes, it is.

Q. Does Puck currently supply pumps that are used in the firefighting industry?

A. Yes, they do.

Q. Are those pumps similar to the purposes that it supplies to the manure industry?

A. They are.

MR. YACKEY: Objection; form.

A. (Continuing) Yes, they are.

Q. How are those pumps similar?
A. They both require high head pressures and they -- they both will move liquid -- or move liquid with a very high efficiency.
Q. Is there anything different about those pumps?
A. There can be. Virtually very little difference.
Q. Are those pumps typically the same color?
A. Not necessarily. Will not have anything to do with the -- the -- the performance of the pump.
Q. Does Puck typically paint those pumps it supplies to the firefighting industry red?
A. Yes. To their request.
Q. Is that typically one of the only significant differences between the manure pumps that it supplies and the firefighting pumps that it supplies?
MR. YACKEY: Objection; form.
A. (Continuing) There are very few differences. There can be a model difference with having a cutter in- -- installed in several of the models of pumps.
Q. Will you please read paragraph 5.

A. "Through my many years in the industry I personally" -- "I personally am familiar with various pumps, including centrifugal pumps, positive displacement pumps, their structure, how they operate, and their capabilities.

"I am personally familiar with the pumps used for liquid manure and pumps used for firefighting, 2012 and before."

Q. And is that statement true and correct?

A. Yes, it is.

Q. How are you familiar with pumps that were used for firefighting back in 2012?

A. We were -- we were actually looking at -- we were actually involved with the state fire marshal at that time. And -- and they -- they were inquiring on how we could help -- our industry could help the firefighting industry.

And we did a -- a practice burn at a school in Mount -- Mount Carmel, Iowa, with the state fire marshal, and continued to look into pumps for them and -- and consult with them.

Q. And did you use any of Puck's pumps for firefighting at that time?

A. We -- we absolutely did. We set up a drag-hose system from a creek using a boom truck

to source the water from the water source, which was the creek, about a mile away. And we fed five -- five fire trucks putting the fire out continuously.

Q. Could you please read paragraph 6 for me.

A. "High-pressure/high-volume pumps available in 2012 for pumping the water from lakes and streams for firefighting are capable of pumping liquids with suspended solids, especially if the suspended solids have a total content of about 5 percent or less.

"Such pumps could pump liquid with even higher solid content. Such pumps are capable of pumping liquid manure (mixtures of water and animal waste with a total solid contents less than 5 percent).

"Such pumps could also pump mixtures of water and animal waste with even higher solid contents."

Q. Ben, are you aware of any requirement for a lower threshold that mixtures of water and animal waste must have to still be considered liquid manure?

MR. YACKEY: Objection; form.

Q. (By Mr. Stemler, continuing) Strike that

question. Let me rephrase it, please.

Ben, are you aware of any lower requirement for the percentage of total solids of animal manure that a mixture of water and animal waste needs to have in order to be considered liquid manure?

MR. YACKEY: Objection; form.

Q. (By Mr. Stemler, continuing) You may answer, Ben.

A. No, I don't.

I think that the difference is what you would step your -- step into is a -- how much urine is in it. And that would be talking about a specific gravity change, which would be my -- which, in my opinion, would be very, very minute.

Q. What is the most dilute form of liquid manure that you've ever seen?

A. Probably 99.99 percent.

Q. And can you please clarify; is that 99.5 percent water and .5 percent total solids?

A. Yes.

Legally -- legally, the State of Iowa would call liquid manure or a -- or waste something that, if you -- if someone would urinate or defecate in a pond or in a liquid --

in a liquid-manure pit, would now be classified differently.

Q. You mentioned that most dilute form of liquid manure being 99.5 percent water and .5 percent total solids.

In your opinion, are there any high-pressure, high-volume pumps that were available in 2012 that would not have been able to pump that most dilute form of liquid manure?

A. I would --

MR. YACKEY: Object to form.

A. (Continuing) None.

Q. Could you please repeat that, Ben.

A. I would have not known of any that would have had that -- that restriction, no.

Q. Could you please read paragraph 7 for me, Ben.

A. "Agricultural irr-" -- "irrigation pumps are also capable of pumping liquids with suspended solids, especially liquids with a total solid content of less than 5 percent.

"Agricultural irrigation pumps, which are water pumps, are commonly used to pump liquid manure and were" -- "and were commonly used to pump liquid manure prior to 2012."

Q. Is that a true and accurate statement?
A. Yes, it is.
Q. Ben, are you being compensated for your time today?
A. No, I am not.
Q. Have you ever been compensated for your time spent in connection with this proceeding?
A. No, I have not.
Q. I'd like to share another document. I'll pull it up here.
(Deposition Exhibit No. 56 introduced.)
Q. (By Mr. Stemler, continuing) Ben, I'm sharing another document now.
Do you see this?
A. Yes, I do.
Q. Do you recognize this document?
A. Yes, I do.
Q. What is it?
A. This is my declaration.
Q. Did you sign this document?
A. Yes, I did.
Q. Is this your signature?
A. Yes, it is.
Q. For the record, I'm pointing to the signature on page Puck 159 of Defendant's

Exhibit 56.

And I'd like to ask you a few questions about this document now. Could you please read paragraph 4 of this document for me.

A. "In 2012 I was employed by Puck and involved in new product development, including the design, development, production, public use, public display, and marketing efforts of the Puck agitation boat, which was designed and built in 2011.

"An image of the Puck agitation boat dated September 19, 2012 is shown below in Exhibit A."

Q. Is that a true and correct statement?

A. Yes, it is.

Q. Ben, could you please read paragraph 5 for me.

A. "Prior to 2013, it was Puck's standard business practice to publicly post videos of its products to Puck's YouTube channel to generate public interest in" -- "in its products."

Q. Is that a true and correct statement?

A. Yes, it is.

Q. Would you please read paragraph 6.

A. "The Puck agitation vehicle was the subject of numerous pub- -- publicly posted

videos on Puck's YouTube channel prior to 2013."

Q. And is that a true and correct statement?

A. Yes, it is.

Q. Please do the same thing with paragraph 7.

A. "Exhibit A is a video that truthfully and accurately depicts and describes the Puck agitation boat. Exhibit A was uploaded to YouTube" -- "-Tube and publicly listed and available on September 19, 2012, at Puck Enterprises, Inc., Puck agitation boat -- 2012, YouTube September 19, 2012."

I'll go -- I'll --

Q. You can skip the link.

A. Thank you.

"Exhibit A has remained publicly searchable and available on YouTube. Included below is a true and accurate screenshot of Exhibit A."

Q. Is that a true and correct statement?

A. Yes, it is.

Q. And that link that you skipped, is that -- that's the link that's shown in paragraph 7 of your declaration, Defendant's Exhibit 56.

Right?

A. Yes, it is.

Q. I'm going to pull up a copy of that video.
(Deposition Exhibit No. 57 introduced.)
Q. (By Mr. Stemler, continuing) Ben, I'm sharing a video on my screen that's been marked as Defendant's Exhibit 57.
Does this appear to be the video of Exhibit A referenced in your declaration?
A. Yes, it is.
Q. Is this a true and correct copy of that video?
A. Yes, it -- yes, it is.
Q. Thank you.
Ben, do you know who would have uploaded this video?
A. I believe I do.
Q. Would it have been someone who worked at Puck?
A. Yes.
Q. Was this video uploaded to Puck's YouTube channel?
A. Yes.
Q. Was there somebody at Puck that managed that YouTube channel?
A. Yes.
Q. Who was that person?

A. Her name now is Nancy -- Nancy Trapolino.
Q. And how do you know her?
A. She's my daughter.
Q. Was it her job to upload marketing videos to Puck's YouTube channel?
A. Yes, it was.
Q. Marketing videos like the one in Exhibit A?
A. Yes.
Q. Would Nancy have uploaded the video of Exhibit A to Puck's YouTube channel?
A. Yes.
MR. YACKEY: Objection; form.
Q. (By Mr. Stemler, continuing) Ben, I'm showing you now paragraph 8 of Exhibit 56 of -- of Defendant's Exhibit 56.
Can you please read this paragraph of -- this paragraph 8.
A. "Exhibit B is a video that truthfully and accurately depicts and describes Puck agitation boat. Exhibit B was uploaded to YouTube and publicly listed and available on December 28, 2011 at Puck Enterprises, Inc., Puck Lagoon Agitation Boat and MobileStar Pump Control, YouTube December 28, 2011.

"Since then the video of Exhibit B has remained publicly searchable and available on YouTube. Included below is a true and accurate screenshot of Exhibit B."

Q. Is that a true and correct statement?

A. Yes, it is.

Q. I'm going to pull up the video of Exhibit B.

(Deposition Exhibit No. 58 introduced.)

Q. (By Mr. Stemler, continuing) Ben, I'm pulling up the video.

Can you see this video?

A. Yes, I can.

Q. Is this video the video of Exhibit B referenced in your declaration?

A. Yes, it is.

Q. I'm going to scroll to a -- minute one, six seconds into the video, and play it. There is a gentleman that is speaking on the video.

Do you see this gentleman?

A. Yes, I do.

Q. Who is this man?

A. That is Jeremy Puck.

Q. And who is he?

A. He's my son.

Q. And did Jeremy work for Puck Custom Enterprises back when this video was taken?
A. Yes, he did.
Q. What was his job?
A. He was a sales manager.
Q. Was he involved with the Puck agitation boat?
A. Absolutely.
Q. Why did Puck create the video of Exhibit B?
A. To further -- to further communicate with our customers the -- the platform of, you know, the MobileStar, which turned into LightSpeed. And to show how all of our tools could be linked together for greater efficiencies.
Q. Was this a marketing video?
A. Yes.
Q. And I'll back up. I -- did Puck create the video of Exhibit B?
A. Yes.
Excuse me. That was not created by -- by Puck. That was actually created by Manure Manager magazine.
Q. They filmed the video?
A. Yes.

Q. And then did they provide the video to Puck?

A. Yes, they did.

Q. And Puck subsequently uploaded the video to its YouTube channel?

A. Yes.

Q. Can you state the time periods during which your daughter, Nancy, was responsible for managing the Puck YouTube channel?

A. Yes.

Q. What were those time periods?

A. 2010 until 2019.

Q. And would Puck -- I'm sorry.

And would Nancy have uploaded the video of Exhibit B to Puck's YouTube channel?

A. Yes.

Q. I'm scrolling now to paragraph 9 of Defendant's Exhibit 56.

Could you please read paragraph 9 for me, Ben.

A. "Exhibit C is a video that truthfully and accurately depicts and describes the Puck agitation boat. Exhibit C was uploaded to YouTube and publicly listed and available on August 10, 2011, at Puck Enterprises,

Incorporated, Puck agitation boat -- Jeremy Puck, YouTube, August 10, 2011.

"Exhibit C has remained publicly searchable and available on YouTube. Including -- included below is a true and accurate screenshot of Exhibit C."

Q. And are those statements true and correct?

A. Yes.

Q. I've pulled up and going to play here Defendant's Exhibit 59.

(Deposition Exhibit No. 59 introduced.)

Q. (By Mr. Stemler, continuing) Do you recognize this video?

A. Yes.

Q. Is this a true and correct copy of Exhibit C referenced in your declaration?

A. Yes.

Q. And is this -- we spoke about Jeremy Puck just a minute ago. Is this the same Jeremy Puck shown here at 16 seconds into the video?

A. Yes, it is.

Q. Did Puck upload this video to its YouTube channel?

A. Yes, they did.

Q. And would Nancy have been the one who

would have uploaded this video to Puck's YouTube channel?

A. Yes.

Q. Back to your declaration, Ben.

Could you please read paragraph 10 of Defendant's Exhibit 56.

A. "Exhibit D is a video that truthfully and accurately depicts and describes the Puck Agitation Boat. Exhibit D was uploaded to YouTube and publicly listed and available on July 9" -- "29, 2011 at Puck Enterprises, Agitation Boat -- Ben Puck, YouTube July 29, 2011.

"Since then the video of Exhibit D has remained publicly searchable and available on YouTube. Included below is a true and accurate screenshot of Exhibit D."

Q. And are those statements true and correct?

A. Yes, they are.

(Deposition Exhibit No. 60 introduced.)

Q. (By Mr. Stemler, continuing) Ben, I've introduced an Exhibit 60 here. I'm showing it up on my screen.

Do you see this video?

A. Yes, I do.

Q. Is this video a true and correct copy of the video of Exhibit D referenced in your declaration?
A. Yes, it is.
Q. Do you see the gentleman shown here at 14 seconds into the video?
A. Yes, I do.
Q. And who is that man?
A. That is Ben Puck.
Q. Is that you?
A. That is me.
Q. And did you have any involvement in designing this boat that's shown here behind you?
A. Yes.
Q. Did you invent that boat?
A. Yes, I did.
Q. Is this also a marketing video created by Puck?
A. And --
Q. I'm sorry. Is this also a marketing video used by Puck?
A. Yes, it is.
Q. And did Puck upload this video to its YouTube channel?
A. Yes, they did.

Q. And would Nancy have been the one who would have uploaded -- uploaded this video to Puck's YouTube channel?

A. Yes, she was.

Q. Going back to your declaration. I am at paragraph 11 of Exhibit 56.

Could you please read that paragraph for me, Ben.

A. "Exhibit E is a video that truthfully and accurately depicts and describes the Puck agitation boat. Exhibit E is -- was -- was uploaded to YouTube and publicly listed and available on September 9, 2011, at Puck Enterprises, Incorporated, Puck Agitation Boat -- Front Cannon. August 30, '11, YouTube September 9, 2011.

"Since then, this video of Exhibit E has remained publicly searchable and available on YouTube. Included below is a true and accurate screenshot of Exhibit E."

Q. Are those true and accurate statements?

A. Yes, they are.

(Deposition Exhibit No. 61 introduced.)

Q. (By Mr. Stemler, continuing) Ben, I'm sharing on my screen a video that's been marked

as Exhibit 61.

Is this a true and accurate copy of the video of Exhibit E to your declaration?

A. Yes, it is.

Q. Is this a marketing video used by Puck?

A. Yes, it is.

Q. And did Nancy upload this video to Puck's YouTube channel?

A. Yes, she did.

Q. Ben, each of these videos includes a caption listed below it. Could you please read the caption from the first video, Exhibit A.

A. "Puck agitation boat on a dairy lagoon. Three underwater nozzles create a vertical agitation to bring solids from the bottom of lagoon into suspension for pump out. A nozzle above the surface of the water is used to clean up the banks and remove thick crusts."

Q. Is that a true and accurate statement?

A. Yes, it is.

Q. Turning now to paragraph 8. Looking at the screenshot of Exhibit B in your declaration.

Could you please read that caption included there.

A. "Jeremy Puck discusses Puck's newest

products, an Agitation Boat for manure lagoons and MobileStar's internet-based control for pump units. Puck offers a full line of drag-hose equipment for liquid manure."

Q. Is that a true and accurate statement?

A. Yes, it is.

Q. Turning to paragraph 9 of your declaration. Looking at the screenshot of Exhibit C.

Could you please read the caption listed there.

A. "Jeremy Puck explains the benefits of Puck's agitation boat."

Q. Is that a true and accurate statement?

A. Yes, it is.

Q. Turning to paragraph 10. Looking at the screenshot of Exhibit D.

Could you please read the caption lists there.

A. "Ben Puck talks about Puck's lagoon" -- "lagoon agitation boat."

Q. Is that a true and accurate statement?

A. Yes, it is.

Q. Turning to paragraph 11. Looking at the screenshot of Exhibit E.

Could you please read the caption listed there.

A. "Puck's Agitation Boat 2067 on a dairy lagoon using the front cannon."

Q. Is that a true and accurate statement?

A. Yes, it is.

Q. Thank you.

Like to turn to paragraph 12 of this declaration. Could you please read that paragraph.

A. "As shown in the videos above, the Puck agitation boat included a pump that was arranged approximately along the centerline of the vehicle, forward of the rear of the vehicle.

"This arrangement of the pump was beneficial as it positioned the pump at a location on the vehicle such that the center of gravity of the vehicle was located toward the center of the vehicle. This improved the stability of the vehicle while floating."

Q. Is that a true and accurate statement?

A. Yes, it is.

Q. Could you please read paragraph 13.

A. "Similarly, the Puck agitation boat engine was arranged on the vehicle forward of the pump

and rearward of the rear" -- "of the front nozzle.

"This arrangement of the engine, pump and nozzle was beneficial as it caused the components to be positioned such that the weight of the engine and the pump could be more evenly distributed along the length of the vehicle such that the center of gravity of the vehicle was located towards the center of the vehicle. This improved the stability of the vehicle while floating."

Q. Is that a true and accurate statement?

A. Yes, it is.

Q. Could you please read paragraph 14.

A. "The Puck agitation boat was" -- "also included a pump intake pipe with an inlet that was positioned along the underside of the vehicle.

"Positioning the inlet in this location was beneficial and efficient because it allowed for the pump to suck liquid-manure supernate [sic] from underneath the vehicle."

Q. Is that a true and accurate statement?

A. Yes, it is.

Q. Ben, could you describe, generally, in

your opinion, where a desirable center of gravity for a floating vehicle would be located?

A. It would have to -- it would have to take into consideration how much thrust the nozzles would put down as if you were to shut off the rear nozzles, front nozzles, and -- and be able to navigate and balance that -- that.

As -- as well understood, you know, you have a brief amount of time from the -- the weight of the liquid inletting the pump and the nozzles releasing that amount of weight at a velocity.

Q. Generally, would that center of gravity -- would one want that center of gravity to be located near the middle of the vehicle?

A. Yes.

Q. You mentioned the engine and the position of the engine on the vehicle.

Can you describe what components that engine on the Puck agitation vehicle powered.

A. We used a John -- at that time, we used a John Deere engine with a Cornell pump directly mounted to the engine via coupler.

Q. So the engine powered that pump?

A. Yes. Turned the shaft that turned the

impeller.

Q. Did that pump in- -- include an intake pipe?

A. Yes, it did. It was fabricated or -- it was fabricated by -- by Puck.

Q. And did that intake pipe include a -- a flexible end positioned at the end of it?

A. Yes, it did.

Q. And where was the end of the intake pipe located when the vehicle was floating on a liquid-manure lagoon?

A. It would be approximately six inches above the -- the rails of the bottom of the boat, which are the skids that we used to slide it in and out.

Q. Would it be in the liquid-manure lagoon?

A. Excuse me. I didn't understand.

Q. Would the -- would the end of the intake pipe be positioned below the surface of the liquid-manure lagoon?

A. Oh, yes. Approximately 24, 27 inches.

Q. I'd like to share another exhibit here. I'll pull it up on my screen.

(Deposition Exhibit No. 62 introduced.)

Q. (By Mr. Stemler, continuing) Ben, I'm

sharing on my screen a document with several images. I'll flip through them so that you can see all of them. And then I'd like to ask you a few questions about these images.

Do you recognize these images?

A. Yes.

Q. What are they?

A. Those were some of the very first attempts at agitating a -- a dairy lagoon. And those are the two boats that we put together to accomplish that.

Q. And do these pictures truthfully and accurately depict those two boats that you put together to accomplish that?

A. Yes.

Q. Do you know who took these pictures?

A. Yes.

Q. Who?

A. Jeremy did.

Q. When did Jeremy take these pictures?

A. Approximately 2004 -- '3 or '4.

Q. Is that a- --

A. I don't remember.

Q. Is that around --

A. That's a rough -- rough guess.

Q. Is that a- -- 2003 or '4 around the time that Puck created these vehicles?
A. Yes.
Q. Scrolling through these pictures, I see that there are separate vehicles that are shown in these images.
Are these all the same design -- vehicle design that is shown in these images?
MR. YACKEY: Objection; form.
A. (Continuing) They are.
Q. Let me rephrase that, Ben. Sorry.
Do all of these pictures -- images depict the same vehicle design?
MR. YACKEY: Objection; form.
Q. (By Mr. Stemler, continuing) You may answer.
A. They -- they depict a design that -- that was attempted to solve our problem.
Q. Sure.
And, I mean, if I'm looking at, for example, the image of Puck 46 and the image of Puck 47 --
A. Yes.
Q. -- are -- are those the same design?
A. Those are the same vehicle, yes.

Q. Okay. Are these -- is it -- are these two images just showing different sides of the same vehicle?

A. Yes.

Q. I see.

Could you please describe the different components that are shown in this picture? And I -- I'm referring to the picture of Puck 46.

A. The -- what you're seeing is a -- a flotation device that has two SUPER 150 Doda pumps mounted on -- on either side -- on both sides, with a diesel engine. They are -- they are operating two hydrostat wheel motors to be able to turn the impeller through the drive shaft down to the centrifugal pump.

Q. Can you describe what this black thing is on the bottom of this vehicle, right above the trailer.

A. Well, several days before that -- that was welded together, it was called a fuel tank.

Q. And was this a -- why did you put this fuel tank on the vehicle?

A. We -- we basically needed a -- you know, this is very -- I don't know -- very experimental.

And so we came up with a floating device that would displace the weight that we calculated we needed. And we found out that a third full of a 2,200 -- 2,500-gallon fuel tank welded together would accomplish that.

And that's what we did.

Q. So is this -- this black portion served as the float -- floatable body of the vehicle?

A. Yes, it did.

Q. You mentioned that this vehicle included a -- I believe a Doda SUPER 150 pump. Could you describe where those pumps are located or -- or could you describe on this picture where that pump is?

A. The pump basically has sat with the -- with the hitch mount on the outboard sides of the horizontal tank that was welded to the front part of the bottom tank.

Q. Is the pump this silver thing that's positioned above the black vehicle body?

A. Yes, it is.

Q. Did Puck make any modifications to that pump to use it on the vehicle?

A. Yes, we did. We removed the 90-degree -- 90-degree gearbox at the very top. And we made

an adaptor plate. And then we placed a hydrostat wheel motor to drive the impeller.

Q. You said you replaced a 90-degree gearbox.

Could you explain a little bit more about what that 90-degree gearbox was or how the Doda SUPER 150 pump was originally constructed.

MR. YACKEY: Objection; form.

Q. (By Mr. Stemler, continuing) You may answer, Ben.

A. It was -- it was originally purchased as a PTO unit. And the -- the three-point arms went back onto that frame that is still there and picked the pump up.

And as you -- you placed it into a deep pit and you lowered it down, you would then connect the PTO to the tractor PTO so it would en- -- en- -- enable its function.

Q. And so you removed the PTO input and placed that hydrostat wheel motor, instead, to drive the drive shaft of the pump.

Is that right?

A. Yes, because there would be no way to fashion a PTO shaft to the power source on that -- on that vehicle.

Q. Was that a relatively simple modification?

A. Yes, it was an extremely easy -- we've done that with several prior trucks using those -- those types of pumps on deep pits. And so we're quite familiar with that -- with that pump and availability and the cost versus benefit.

It was a -- it was -- it was a very popular pump of the day. Easy to part -- source parts for. And it was easy to fabricate that, with our knowledge of -- of diesel engines and hydrostat transmissions.

Q. Is that hydrostat transmission a hydraulic transmission?

A. Yes, it is.

Q. Could you describe a little bit more about why you made this modification to the pump.

A. Simply makes it functional. We -- we did not have any room for PTO shafts. The hydrostat motor was being driven by a comparable hydrostat, so, basically, engine crankshaft speed was nearly the same on that impeller.

That impeller liked to run around 15 to 16 hundred RPM. And we were able to do that with an engine running two-thirds, three-quarters of the RPM range open.

And -- and the engine had enough horsepower to run both pumps at the very same time, as it was making -- building about 140 to 50 horsepower.

And these were viewed as 65-, 70-horsepower requirement units. And we had two of them. And we were successful in doing that.

Q. Did that hydrostat transmission enable greater flexibility in the position of the pump on the vehicle?

A. Yes. It -- it absolutely made it completely and totally usable because, as the picture would demonstrate, the -- the stem or the hydraulic motor would -- would -- would stand about eight feet higher. And then we'd drop it down into the water to be able to pull the solids off the bottom of the lagoon.

Q. Could you describe how this -- strike that.

So, I mean, this picture shows the -- the pump raised and the vehicle on a trailer.

And when this vehicle was placed in a lagoon, can you describe how that pump would be positioned as to performance pumping purpose.

A. So, as you see, the silver part of that

picture is the Doda pump. And that would -- it would be -- it's -- it's viewed right now almost horizontal.

And as you would put it into the water, once you had launched the boat, you would stand those vertically up and then lower the pump down to the depth of the water as far as -- or as deep as you can in the lagoon.

And this would pick the solids up from the pump that was behind this, in your previous photos, that would be ran -- that was actually a Houle -- a SUPER -- SUPER pump that would cut the solids loose right at the heel of these two Dodas.

And we actually pulled a hose in the water at that time to send it directly to the shore and out to the field.

Q. And the confirmed -- when you're talking about the Houle pump and, you know, the -- this operation you've just explained, that's shown in the image of Puck 45 on my screen.

Right?

A. That's correct.

So the -- the -- what you see on that gray portion of that conglomeration was a Cat engine

with a snap clutch running a Doda downstepped PTO turning the Houle three-point SUPER pump. And it was configured in that -- in that regard.

Q. And that's -- that's on the vehicle with this yellow handrail that you're talking about.

Right?

A. That's correct.

Q. Do you know who the man is that's on that vehicle?

A. Yes, I do.

Q. Who is it?

A. That is Ben Puck.

Q. Yourself?

A. Yes.

Q. So you said before all of these images in this Exhibit 62 depict the same vehicle that -- this -- I guess, this black vehicle is the same vehicle in all these images?

A. Yes, it is.

Q. And I'm turning now to Puck 47.

Is this also a Doda pump?

A. That's the -- that's the -- yes, it is.

Q. And this is just the other Doda pump that's positioned on the other side of the vehicle?

A. That's correct, yes.
Q. Could the -- so what's this -- strike that.
Once the Doda pump is positioned in a vertical orientation, can it be lowered to, basically, any variable depth below the vehicle?
A. Yes.
So when it is lowered completely down, it would be in the water approximately eight feet.
And when it's completely raised, as you see it there, it can be -- it can be stowed, ready for towing.
And it may -- it would make it safe to pull down the road -- or safer to pull down the road because it would be about 11 feet tall at that point, off the ground.
Q. And could it also be raised to a position just below the floatable vehicle body?
A. Yes, yep.
So as the lagoon would do down, we could raise that up to be able to continue to the removal of -- of liquid from the lagoon.
Q. Could you describe the components of the Doda pump that are -- that is shown here in the picture of Puck 46.

A. Yes.

So when you start from the right-hand part of the Doda pump, that -- that would be the inlet.

It would have a cutter that would do some mild cutting of the solids going up into a forward vein impeller that -- Doda used a unique volute that would actually wind the liquid around -- around before it would push it up to the vertical pipe.

And if you were not pushing it through the vertical pipe, it would send it to a -- a valve that would give you the nozzles to do some agitation, if you were not pumping directly out to the field or to a wagon or to a drag-hose system.

Q. And is that nozzle you've referring to this tapered gray structure positioned right above this flexible blue conduit at the top of the pump?

A. Yes, it is.

Q. Did the Doda pump include a pump housing?

A. Yeah.

The pump housing is the -- is, basically, the volute and pump housing is integral. And so

the pump housing actually holds the volute, if you will. It's -- it's integral.

Q. Is the pump housing this wider cylindrical portion --

A. Yes.

Q. -- at the far right of the pump in this picture of Puck 46?

A. Yes, it is.

And it's driven with that drive shaft that comes from the center of that -- of that pump unit, all the way up to the hydraulic motor.

Q. And when you say "it's driven," what specifically is driven by that drive shaft?

A. The impeller. The impeller is mounted inside that volute.

Q. Inside the pump housing?

A. Yes.

Q. Where exactly is the inlet to the pump housing?

A. It would be -- it would be just left of your -- of your cursor, of your arrow.

Q. And, for the record, is that the far right portion of the pump shown here in Puck 46?

A. Yes, it is.

Q. Would that be located at the bottom of the

housing when this pump is positioned in a vertical orientation?

A. Yes, it is.

Q. What orientation would the drive shaft be positioned in when the pump is pumping and the pump housing is arranged in the liquid manure?

A. It would be --

MR. YACKEY: Objection to form.

Q. (By Mr. Stemler, continuing) One more time, Ben.

A. It would be -- it would be vertical.

It could be diagonal, as well, because of the flexibility of the hydraulic -- hydraulic hoses. But we would -- we would normally run it vertically, in that situation.

I can expand on that, if you'd like, but that -- that's the right answer.

Q. Thank you. That's fine.

Did the Doda pump have to be primed?

A. No. It was submerged.

Q. Can you explain why the Doda pump did not need to be primed.

A. Yes.

The liquid would -- would fill that cavity and it would be immediately available for the

impeller to place it up -- to -- to the direction that you would like the liquid to go -- it would be either out of the nozzle or at the very top of the pump, to -- to complete its -- its -- its purpose of either filling a hose or load stand or whatever you'd like to do with it -- transfer it -- the liquid.

Q. Is there a reason that you decided to place the Doda pump in this position in the vehicle?

A. For -- for setting it into the water, it made it much easier. And for mobilizing it on the road, made it much, much safer.

Q. Did the position of the pump impact the stability of the vehicle while it was floating at all?

A. Very little. Very, very little, because, basically, the -- the two pumps offset either one's weight because they are identical.

And we would set, you know, one in without changing the weight, other than what the -- the water it would displace in the liquid is the only thing that would change its weight. So it would stay very balanced.

Q. Is there a reason that you did not orient

both pumps to be hanging off the left side of the vehicle and instead positioned them to be hanging off the right of the vehicle shown here in Puck 46?

A. Yes. Because the suction of the -- of the -- of the -- of the liquid would pull the nose up and would pull the -- the back of the boat down. And so positioning it directly in front of the -- of that -- that gap, because the floating device is shaped as a T, made it the most logical place to put it.

Q. Would positioning the pump off the rear of the vehicle -- or, I guess, the left of the vehicle as shown here in this image -- would that have negatively impacted the stability of the vehicle?

A. Absolutely, because you -- you would change the -- the weight distribution from the left to the right as you would extend it out to set it.

Q. And so that's part of the reason why you placed the pump where you did?

A. Yes.

Q. Let's show another image here.

(Previously marked Deposition Exhibit

No. 33 introduced.)

Q. (By Mr. Stemler, continuing) Ben, I'm showing a document that's been marked as Defendant's Exhibit 33.

And I'm going to scroll way down in this document to what's labeled with page No. BAZ15 0001325.

Do you see this document that's shown here?

A. Yes, I do.

Q. Do you recognize this document?

A. It -- it is amongst many of my memories of when we were first looking at what was available in the marketplace.

Q. When was that?

A. Oh, that's a long time ago. I do not recall.

Q. Any idea how many years ago it would have been?

A. I would -- I would say that these types of vehicles were available from 2005 to 2010. And we were constantly seeking ideas and/or products that we could -- that we -- either better our product or we could purchase.

Q. What kind of ideas were you looking for?

A. Looking for -- we were looking for something that was cost-effective, would -- would meet our design points of our application equipment, and things that would return a high return on investment.

Q. And was this around the time that you were designing the Puck agitation vehicle?

A. Yes.

Q. Does this document truthfully and accurately depict one of these agitation -- one of these vehicles that you were investigating?

MR. YACKEY: Objection; form.

A. (Continuing) Yes.

Q. I am scrolling in on a picture that's shown in the upper right-hand corner of the document.

A. Yep.

Q. Do you see this picture?

A. Yes.

Q. Do you recognize the pump that's attached to the vehicle in this picture?

A. Yes, I do.

Q. Do you know what type of pump that is?

A. Absolutely not sure, but it's a SUPER 150 Doda. It's identical to the ones we were using.

Q. And how -- how do you know that that's a SUPER 150 Doda?

A. It's a very unique volute.

Q. And when you say "volute," what is that?

A. That would be the bottom half of that pump, whereas you'd have an inlet side that is facing the water in this picture, and then it has that snail shell swirl to bring it up.

There are -- there were -- Doda was one of -- and they are -- they are a subsidiary company that broke off. I believe that -- that that was -- that shared that, but it was a Doda-style pump. No doubt about it.

Q. And so you -- just to clarify, you are sure that is this is a Doda 150 pump?

A. Yes, I am.

Q. Is this the same type of pump that you used on the early prototype models of the boat that we were just looking at in Defendant's Exhibit 62?

MR. YACKEY: Objection; form.

Q. (By Mr. Stemler, continuing) You may answer.

A. Yes, it is. Yes, it is.

Q. And did you use that pump to pump liquid

manure?
A. Yes. We used that pump extensively in several items, in addition to the -- that prototype boat that you had seen.
Q. Was that before 2013?
A. Yes. We had probably used that pump in 1986.
Q. Was the Doda -- were others in the industry familiar with the Doda 150 pump?
A. Yes.
Q. And -- I'm sorry -- the Doda SUPER 150 pump?
A. Yes.
Q. Was the Doda SUPER 150 pump widely used in the industry to pump liquid manure?
A. At that time, it was.
MR. STEMLER: I -- I'd like to take a quick break. We can go off the record.
Is that okay with you, Scott?
MR. YACKEY: Yes, that's fine.
VIDEOGRAPHER: Time is approximately 10:18 a.m. We are going off the video record.
(Recess from 10:18 a.m. to 10:25 a.m.)
VIDEOGRAPHER: Stand by, please.
Time is approximately 10:25 a.m. We are

back on the video record.

Go ahead.

Q. (By Mr. Stemler, continuing) All right. Welcome back, Ben.

A. Thank you.

Q. I am going to pull up another document on the screen here.

(Deposition Exhibit No. 63 introduced.)

Q. (By Mr. Stemler, continuing) Do you recognize this document, Ben?

A. Yes, I do.

Q. What is this document?

A. This is a flier that we put out in the -- for marketing purposes about our agitation boat.

Q. And when you say "we," you're referring to Puck Custom Enterprises. Right?

A. Puck Custom Enterprises; yes, I am.

Q. Is this a true and accurate copy of that flier?

A. Yes, it is.

Q. Did Puck ever publicly distribute this flier?

A. Every chance we had an opportunity to; yes, we did.

Q. Does this flier depict the Puck agitation

boat that was marketed and created before 2013?
A. Yes.
Q. Did Puck distribute this flier before 2013?
A. Yes, we did.
Q. Do you know who made this document?
A. Yes, I do.
Q. Who is that?
A. Nancy Puck.
Q. Was Nancy Puck responsible for creating marketing materials for Puck?
A. Yes, she is. Yes, she was.
Q. How did Nancy get the information to put in this document?
MR. YACKEY: Objection; form.
A. (Continuing) She actually -- we actually went over it. She intimately knew our product -- product line and was able to extrapolate this as a sales -- sales -- a -- a flier.
Q. What was -- what was her role in the company?
A. She was in charge of marketing.
Q. Was manufacturing and selling manure agitation equipment a regularly conducted activity of Puck?

A. Yes.
Q. And was preparing product documentation for Puck's manure agitation products a regular practice of selling its manure agitation products?
A. Yes.
Q. Did that product documentation include product brochures like this one?
A. Yes, it did.
Q. Did it include owner's manuals for its products?
A. Yes, it did.
Q. And did it include marketing materials -- marketing videos like the ones referenced in your declaration that we went over earlier?
A. Yes, it did.
Q. Does this -- does this document truthfully and accurately describe Puck's agitation boat?
A. Yes, it does.
Q. Page two of this document shows several different models, you know, labeled "PCE Models."
Do you see that portion?
A. Yes, I do.
Q. Were these models of the Puck agitation boat available before 2013?

A. Yes, they were.
Q. Do you know what the difference between those models was?
A. Yes, I do.
Q. Can you speak a little bit about the differences between the different models.
A. We built the 4010 boat for very large lagoons. And we used a Cornell 10NNT at a capacity of about 7500 gallons a minute.
And we used several other -- other pumps, which was a -- the 6NHTB19. That boat would have preferred to use as a lead pump off the water.
The 3067s would have been a high horse- -- or a high horsepower boat that would have been used for agitation -- preferred more -- more so for agitation.
The 2067s could be used in the -- in the 1067 for light agitation.
What we tried to do with the last two boats was to try to make them light enough to be able to be put in and out of concrete tanks.
Q. Would you say the primary differences between these different models were the pump model and the engine model on the vehicle?
A. Yes.

Q. Were there -- can you think of any other differences between the different models?

A. We could -- we could -- we could -- we could put MobileStar on them. We could -- we could, you know, link them to a -- the LightSpeed -- which turned into LightSpeed.

So we could -- we could control the pump engine RPM, open gates, shut the gates from the -- absolutely the tractor cab in the field, if you were going to shove a line down or using, like, preferably the 4069 boat as the lead pump.

All these boats could be equipped and could provide that same opportunity if it was properly equipped.

Q. Otherwise, did all these pumps include a -- or I'm sorry. Otherwise, did all these boats include a engine on them?

A. Yes, they did.

Q. And did that engine power a pump?

A. Yep.

MR. YACKEY: Object to form.

A. (Continuing) They were -- they were all directly attached to the pump.

Q. Did they all include a front agitation cannon?

A. Yes, they did.
Q. And did they all include nozzles for directing the vehicle in a manure lagoon?
A. Yes, they did.
Q. What kind of pump was on the Puck agitation boats?
A. We actually featured up to three different models, which would be the 6NHTB17, 6NHTB19, and then 10NNT.
Q. Were all these models available before 2013?
A. Yes, they were.
Q. Were they all publicly used before 2013?
A. Yes, they were.
Q. Were they all sold before 2013?
A. Yes, they were.
Q. Did you ever consider using any other types of pumps when you were designing the Puck agitation vehicle?
A. We -- we considered a lot of things in the -- we -- we -- we basically fell back on -- was the basis of -- we wanted to get -- we wanted to have a high-efficiency pump, high head pump because we wanted to make as much pressure as we could when we needed to make it to be able to hit

the bottom of the lagoon, to bring up the solids.

And you can do that through either flow or you can do that through pressure or a combination of the two.

And we still needed -- our customer base still required a way to load a wagon and/or feed a drag-hose system. And these made excellent choices to be able to go and agitate while we're laying out the houses in the -- in the drag-hose system, to be able to agitate, bring them to shore, and use one of the -- possibly the two boats that would -- would -- would have at a launch site to be a -- a lead pump to go into the drag-hose system.

Q. Did you ever consider using a Houle pump on the Puck boat?

A. Yes, we did.

Q. Did you ever consider using a Nuhn pump on the Puck boat?

A. Yes, we did.

Q. Why did you ultimately decide to use the Cornell pump?

A. Because -- because we had a -- we had a pump company that built a very robust product out of materials that were necessary in the dairy

industry that, when Sam was involved, we had -- we had to use some high nickel, high -- you know, a very hard metal type of an impeller to get good serviceability and good life out of them.

And they offered -- they -- they offered that opportunity.

They also offered us the opportunity to be able to have a -- basically, measured values, which is NPSH of the pump, the net pressure suction head of the pump, the total dynamic head of the pump.

We had a bearing case that was rated by ASAE at 18,000 hours.

We thought we would have better opportunity with a -- a pump that -- that was very robust and that we actually could predict the outcome of it.

Q. It sounds like some of the considerations you're mentioning relate to the longevity of the pump, perhaps.

Is that accurate?

A. Not only the longevity -- yes, that's correct.

But not only the longevity, but we -- we could put together predictable friction losses in

the drag-hose system and/or loading times on load stand.

Q. You mentioned, for example, certain types of, perhaps, reinforced components, like a -- nickel-plated and color, for example.

A. Yeah.

Q. Do you think that a pump without such an impeller would be able to pump liquid manure?

A. All pumps will be able to satisfy the need of pumping the liquid manure. It's the amount of abrasiveness that will shorten its life.

And underneath a high-pressure type of a pump, the abrasiveness of the -- of the manure becomes remarkable to the point where it -- it just limited the amount of downtime we had when we used higher -- higher resistant -- resistant pumps to the abrasion that we -- we were suffering.

Q. Sure.

If -- if you were to have used the Nuhn pump on the Puck vehicle, where would you have placed the Nuhn pump?

MR. YACKEY: Objection; form.

Q. (By Mr. Stemler, continuing) You may go ahead.

A. Directly behind the -- the engine.
Q. And why would you have placed the pump there?
A. Because the -- the -- the pump would have an incredible amount of suction. And so you'd want that suction to be drawn down squarely on the flotation devices which you would find in the center of the vehicle.
And it would also protect the pump from the outlying solids that would be coming toward the -- the vehicle, in the water.
And so it basically captures the solids and holds them away from the pump, to a -- to a -- to a certain extent, and allows more water to come into the pump, to mix with the solids that will escape and find its way to the pump.
And so the flotation devices actually worked as blockage to limit that in a very, very, very nice way.
Q. How is the Cornell pump powered by the engine on the Puck vehicle?
A. It was direct -- directly coupled -- coupled to the engine and most of the -- the rest of the pumps.
Because the impeller was vertical, rather

than horizontal, we would prime the motor, we would prime the pump. And we would use a small vacuum pump to prime it.

And, thus, the NPSH of the pump became very, very important.

Q. Could you have used a hydraulic transmission to have powered the pump?

A. Yes, we could have.

Q. Ben, I'm going to show you a -- another document here.

(Deposition Exhibit No. 64 introduced.)

Q. (By Mr. Stemler, continuing) Do you see this document, Ben?

A. Yes, I do.

Q. Do you recognize this document?

A. Yes, I do.

Q. What is it?

A. That's an owner -- owner's -- it's an operator's manual for the agitation boats.

Q. For the Puck agitation boats?

A. Yes.

Q. Do you know who created this document?

A. Yes.

Q. Who is that?

A. That would be Nancy -- Nancy Puck, my

daughter.
Q. Is this a true and -- true and accurate copy of the Puck owner's manual created by Nancy Puck?
A. Yes, it is.
Q. Do you know when this document was created?
A. Not exactly. I would say early 2010.
Q. Before 2013?
A. Yes.
Q. And is this the same Nancy Puck that created the brochure that we just looked at in Exhibit 30 -- 63?
A. Yes.
Q. Does this document truthfully and accurately describe Puck's agitation boat products that were publicly used and offered for sale before 2013?
A. Yes.
Q. Was this document specific to any particular model of Puck's agitation boat?
A. This document was -- was -- was used over the -- all the models because mostly the models all operated the same way.
Q. Were all of those models remote control?

A. Yes.
Q. Was this document distributed to any members of the public?
A. After the purchase of the boat, yes.
Q. So was this document distributed to every purchaser of the Puck boat?
A. Yes.
Q. Before 2013?
A. Yes.
Q. Do you have any estimate for how many times this document was publicly distributed?
A. I would say around 250 times.
Q. Do you have any estimate for how many times this document was publicly distributed before 2013?
A. I would say 75 to 80 times.
Q. Turning to page 7 of this document.
And when I'm saying "page 7" -- I'm sorry -- I'm referring to page 7 that's included in the page numbering -- the internal page numbering of the document, page 9 of the PDF.
Ben, can you please read the first safety message on this page.
A. It says, "Do not ride."
Have to expand it for me a little bit

more.

Q. Yeah, I -- that's -- that's sufficient.

Why --

A. Okay.

Q. Why did you include that safety message?

A. It was becoming -- it was becoming more aware that there was safety issues with -- with the gases that were coming off the lagoons.

There's a lot of speculation for why that was, but we want -- we needed to make a statement, to know that there is a liability and that it was dangerous to ride the -- the boat.

Q. And going to the next page, internal page numbering page 8.

Can you please read the text that's highlighted by my cursor.

A. "Remember, being on a lagoon is extremely dangerous and it should be avoided at all times."

Q. Is that referring to the same dangers that you just explained a minute ago?

A. Yes.

Q. Specifically about the harmful gases emitted by a liquid-manure lagoon?

A. Yes.

Q. Scrolling next to internal pagination

page 9.

Can you please describe what's shown here at the bottom of this page of the document.

A. It refers to the loading and unloading of the -- of the vehicle.

Q. Can you describe what the loading portion of this process would entail.

A. We would hook the front of the boat that had the -- the tie-down chains -- would be -- would be draped over the front of the boat. And we would hook it up to the winch on the trailer and pull it onto the trailer.

Q. How would you hook -- how would you hook the winch cable up to the boat, specifically?

A. So it had a hook on it. And the boat itself had a chain that was attached to the lower corner of that -- of the -- where you see the cable, coming from the winch on the right-hand -- the -- the "to load" picture -- graphic.

And it would -- it would be draped across where the -- it is circled on the front of the -- the upper corner of the -- top of the boat, on the front end.

And it would lay down. And we'd pull it -- on it to pull from the bottom part of the

boat or the skids, up onto the trailer.
Q. So would somebody usually have to somehow grab that chain on the vehicle while it's in the liquid-manure lagoon?
A. Yes.
MR. YACKEY: Objection; form.
Q. (By Mr. Stemler, continuing) One more time, Ben.
A. Yes.
You would go down and you would quickly pull that off and hook it to a chain and -- and pull the boat out with a -- probably a tractor and/or a payloader or any device like that.
Q. Would you have to get quite close to the liquid-manure lagoon to do so?
A. You physically would have --
MR. YACKEY: Object to form.
A. (Continuing) You'd have to be down on the bank of the lagoon to be able to reach it. So you were not necessarily standing directly over the top of the liquid manure.
Q. Did anybody complain -- ever complain to you about having to get so close to the liquid-manure lagoon?
A. No, not really.

Q. How long did it usually take to remove the Puck boat from a liquid-manure lagoon?
A. About five minutes.
Q. You ever slip while getting near a liquid-manure lagoon?
MR. YACKEY: Objection; form.
A. (Continuing) As far as falling into the liquid manure? Sorry?
Q. Yeah. Have -- have you ever fallen into the liquid manure?
A. Yes.
Q. Was that unpleasant?
A. It's not my favorite thing to do.
Q. Can you describe how that happened.
A. As we were coming down, I -- I -- I -- there were some solids that were on the -- on the clay side bank. And it just -- simply just slipped and fell down into the -- the liquid that was just underneath the -- the boat, as I was coming up to it, while it was parked on the bank, to secure the chain.
Q. I have a couple more questions about the specific parts of the boat that I'd like to ask you, Ben.
A. Sure.

Q. Go up to this picture here.

So I am going to ask several questions. And with each of these questions I'm going to be referring to the -- the manure agitation boats that Puck publicly sold or publicly used before 2013.

Does that make sense?

A. Yes.

Q. Did the Puck vehicle have an engine?

A. Yes.

Q. And what did -- what components of the vehicle did that engine provide power to?

A. It -- it provided power to a hydraulic system -- about a six-gallon-a-minute hydraulic system that ran off the timing cover of the engine that did all the -- all the utility hydraulics.

And then it also powered the -- the -- the pump directly.

Q. When you say "the utility hydraulics," what hydraulics are those?

A. That would be the gate to open and shut the front cannon, the gate that would open and shut access to the -- the downward front steer cannon, and open and shut a gate to the back two

cannons that were under the water, that provided the thrust.

Q. So was that -- was that engine connected to a hydraulic pump then?

A. Yes, it was.

Q. How was it connected to the hydraulic pump?

A. Via the timing cover. How -- on the engine there's a timing cover adapter. It's a -- it's actually a pad. And you can bolt the small pump up to that. And that would be an open-center hydraulic system.

Q. Can you describe some of the components of the fluid pump that was -- you know, the -- the manure -- Cornell pump that was included on the Puck vehicle?

A. Some of the components that we could add to it or we could order with it would be a cutter pump or diameter of the impeller. Sometimes we would use a four-cylinder engine on -- very small engines -- or very -- very small boats that we would use a -- a trimmed impeller on the -- on those pumps.

The larger pumps we used a full 17-inch impeller. And, of course, that would drastically

change the NPSH in the -- the total dynamic head.
Q. Did all of the Cornell pumps include an impeller?
A. Yes.
Q. Did they all have a fluid inlet?
A. Yes, they did.
Q. Did they all have a pump housing?
A. Yes, they did.
Q. What drove the rotation of the impeller?
A. The crankshaft of the engine, through a rubber coupler. Through a shaft that was carried by two bearing -- two very robust bearings. And then the -- impeller was mounted vertically.
Q. Was there a -- I -- I think we spoke earlier about the intake pipe that fed the -- the rest of the Cornell pump.
Do you remember speaking about that?
A. Yes.
Q. Did that intake pipe have a bottom fluid inlet?
A. Yes, it did.
Q. Where did the fluid go after it left the Cornell pump on the Puck vehicle?
A. It came up the right-hand side of the -- the vehicle, by the engine. And -- and basically

it -- it shared a fluid delivery system that would allow the liquid to either go to the rear or go to the front of the machine, to be used as -- as propellant for the machine to move in the water.

Q. Can you speak a little bit about -- I guess, were there outlets or how -- how -- how did the fluid propel the vehicle?

A. It would -- basically through the velocity.

So to move the vehicle into the water, you would point the back two guns that would be thrusting backward or rearward -- rearward at about a 45-degree angle. And that would -- that would pull the boat backward.

And then you would open the front gate. That would steer the gun left or -- would open the front gate. That would steer the vehicle left or right. And you're choosing.

And then you could turn the vehicle around. You could back it up to the bank. And you could shoot -- you could close those two gates and open the front cannon to be able to en- -- entice all the solids -- once you start making a hole in the -- in -- in front of it,

you'll actually push the liquid down into a -- a lowered area, start to circulate the water. And there will be a -- they will invite the solids in and allow them to be broken up.

Q. Did the -- did the Puck vehicle include any outlets -- fluid outlets?

A. The front cannon was used either to agitate with or used to load wagons with the load stand or used to send liquid to the field through a -- via a -- a drag -- or a main line hose to drag those operations.

Q. I'm looking here at Exhibit 64, page -- internal pagination page 1. There's a picture of the Puck vehicle here.

Is that front cannon you're referring to --

A. Yes.

Q. -- the cannon on the far right end side of the boat shown in this picture?

A. That's correct.

Q. Would that front cannon be located above the surface of the liquid-manure lagoon while this vehicle is floating?

A. Yes.

Q. Did the Puck vehicle include any nozzles?

A. Yes.
Q. How many?
A. Three -- actually, four; one for the cannon, one for the steer, and two for the thrust.
Q. And did that Cornell pump direct fluid through all of those nozzles?
A. It could, yes.
Q. Depending on which gate valves were open?
A. Yes.
Q. Were those nozzles movable?
A. Yes. Three of the -- three of the four were.
COURT REPORTER: Scott, did you say something? Pardon me.
MR. YACKEY: I said objection; form.
Q. (By Mr. Stemler, continuing) How were those nozzles movable?
A. Through a -- a remote control device that was handheld from the shore you could remove -- you could move the back two thrusting nozzles, as well as the steering nozzle.
Q. What specific -- what -- what components specifically on the vehicle were responsible for moving the nozzles?

A. The back two thrusting -- actually, all four were actually responsible for moving the vehicle from time to time.

Q. And -- sorry. I -- let me rephrase.

What -- what components on the vehicle were responsible for moving the position of the nozzles?

A. Hydraulic cylinders. So there was two hydraulic cylinders on -- on the machine that would set the angle of the back two nozzles; the one hydraulic cylinder that would set the angle of the front steering nozzle.

Q. Can you describe what portions of the vehicle were remote control.

A. The rear nozzles were remote control. The front nozzle was remote control. The front cannon was remote control. The vacuum pump was remote control. The engine RPM was remote control. The lights were remote control.

Q. And when you said those nozzles were remote control, specifically what parts of the nozzles? The -- were the gate valves remote control?

A. Yes, the gate valves, remote -- remote control, as well as the angle of the nozzles were

remote control.

Q. And, specifically, that would be the angle of that front steering nozzle and the rear two propulsion nozzles.

Right?

A. Yes.

Q. Okay. How did you decide where on the -- on the vehicle to locate the vehicle engine and the vehicle pump?

A. We needed --

MR. YACKEY: Objection; form.

A. (Continuing) We needed to take into consideration how the -- the boat would look and how it would operate in the liquid to satisfy the rest of it turning over, failing, sinking.

And so we took consideration of the length of the vehicle -- vehicle to be able to place the front nozzle so it would not flip it backward; and placed the back two nozzles so it would not flip it forward; and when we used the front cannon alone, how it would react to the vehicle and still keep it solid and sound.

And it was just a -- a balancing act. And we really needed to make the -- the vehicle wider, as well as longer, to -- to shore up

its -- its stability in the water.

Q. Was the location of the engine and the pump selected to produce the desired center of gravity for the vehicle?

A. Absolutely. Absolutely.

And it -- it became a -- an anchoring point, to the point where if we did not have enough flotation or if we didn't make -- not make the -- the vehicle long enough, we would never be able to have that stability if it was not -- if the center of gravity was not found.

Q. Was the center of gravity of the vehicle located along the centerline of the vehicle?

A. Very -- very, very close to it.

Q. And when I'm saying "the centerline," I'm referring to the longitudinal centerline.

A. Yes. It was -- it's about 200 pounds -- well, several hundred pounds nose-heavy by purpose, because of the front cannons and the downward steer.

Q. How many pounds was the Puck vehicle?

A. It ran -- depending on which model we -- we are talking about, we made models anywhere from 4,500 pounds to almost 10,000 pounds.

Q. Sure.

Was it -- so you said it's about 200 pounds nose-heavy. Was the -- was the center of gravity along the longitudinal centerline -- so left to right, about -- about at the middle of the vehicle?

A. Yes. Yes.

Q. I'm going to show another document now.

(Deposition Exhibit No. 65 introduced.)

Q. (By Mr. Stemler, continuing) Ben, I'm showing a document on my screen.

Do you see this document?

A. Yes, I do.

Q. I'm going to scroll through it so you can see all the pictures included in this document.

Do you recognize the pictures in this document?

A. Yes, I do.

Q. What are they?

A. Those are pictures of the -- of earlier boats, prior to 2010.

Q. Do you know about when these pictures were taken?

A. I would say about 2008, 2009.

Q. Was this vehicle ever publicly used?

A. It was used -- yes, we used it in our own

operation for several years.

Q. Before 2013?

A. Yes.

Q. We were speaking earlier about the characteristics of the vehicle and what it included.

I see here that this vehicle does not include a front cannon. Right?

A. No. It did not.

Q. Other than the front cannon, did it include all the same characteristics that we just discussed with reference to the production model of Puck's vehicle?

A. It -- it -- it operated the -- the front steering cannon and the rear thrusting cannons exactly the same way.

This is actually an early model that had fixed flotation devices and was a bit narrow, if that makes sense.

Q. It does.

Is there anything else that was different about this version of the vehicle that comes to mind?

A. It could -- you know, it -- it could not fold up. And -- and so we were 12-foot wide in

transporting it.

Q. Was this vehicle also remote control?

A. Yes, it was.

Q. I'm scrolling to Bates Number page Puck 44. Do you see this picture?

A. Yes, I do.

Q. Do you see the man shown standing on this vehicle?

A. Yes, I do.

Q. Do you know who that man is?

A. Yes, I do.

Q. Who is it?

A. That's Ben Puck.

Q. And that's you. Right?

A. Yep. Yes.

Q. Were you wearing any personal protective equipment in this picture?

A. No, I was not.

Q. Why not?

A. Because I'm a risk-taker.

Q. Did you commonly wear personal protection -- protective equipment around liquid-manure lagoons?

A. The -- when we became abundantly aware of the gases, we used a -- we later used a pendant

to point out the hydrogen sulfide.

Q. And that indicated if the concentration of the hydrogen sulfide gases were too high?

A. That's right.

Q. I'm going to share another document.

Sorry. Real quick.

Do these -- do these pictures all truthfully and accurately depict the early model of the Puck agitation boat that Puck created?

A. Yes.

(Deposition Exhibit No. 66 introduced.)

Q. (By Mr. Stemler, continuing).

Ben, I'm showing another document up on my screen. Do you see it?

A. Yes, I do.

Q. I'm going to scroll through this document to show you the different pictures that are shown here and then ask you a few questions about this document.

Ben, have you seen these pictures before?

A. Yes, I have.

Q. What do these pictures show?

A. The development of the -- the boats that we -- we had put wings on so that we could fold them up and transport them more efficiently.

Q. Do you know where these pictures were taken?
A. Yes, I do.
Q. Where is that?
A. They were in the -- the new PCE shop.
Q. When you say "PCE shop," you're talking about Puck. Right?
A. Yes.
Q. Are you shown in any of these pictures?
A. Yes, I am.
Q. I'm looking at picture Puck 2.
A. Yep.
Q. Are you shown in this picture, Ben?
A. I am the guy in the -- the dirty brown coat off to the far right.
Q. Do you know why these pictures were taken?
A. Just to document our progress in our shop.
Q. Do you know who took these pictures?
A. I -- I don't know for sure.
Q. Do you have a guess who took them?
A. Yes, I do.
Q. Who is that?
A. Jeremy took them.
Q. Do these pictures truthfully and accurately depict the Puck vehicle in various

stages of assembly?
A. Yes.
Q. Do you know when these pictures were taken?
A. No.
Q. Do you have an estimate of when these pictures were taken?
A. 2010.
Q. Were these pictures taken before 2013?
A. Yes.
Q. How do you know that?
A. Because that's a brand-new shop. We hadn't got the upstairs done yet. And the building is spectacularly clean. And that is -- when we just moved in there, we had new items -- we had windows and the walls that were put in after -- after the building was up. And there -- I -- I do not see them.
Q. When did you purchase the building?
A. In 2009 we started construction.
Q. And do you know about when the building was complete or built?
A. It was -- it was finished in February to March of 2010.
Q. All right. I have another few pictures

I'd like to show here.

(Deposition Exhibit No. 67 introduced.)

Q. (By Mr. Stemler, continuing) Ben, I have on my screen another document. Do you see this document?

A. Yes, I do.

Q. I'm going to scroll through the pictures that are shown in this document and then ask you a few questions about them.

Ben, have you seen these pictures before?

A. Yes.

Q. What are they?

A. Those are pictures of various boats that were produced.

Q. Do you know when these pictures were taken?

A. Could have been anywhere from 2009 to 2012.

Q. Before 2013?

A. Yes. That, actually, is a picture of one of the first -- we called it, affectionately, the baby boat. It was a very, very small boat used to be able to go into concrete tanks that we had in our area, to agitate them. And that one featured a very small four-cylinder engine and a

very small Cornell pump.

Q. And you're referring to the pictures shown in Puck 48 of Exhibit 67. Right?

A. Yes, I am.

Q. Do these pictures truthfully and accurately depict the Puck vehicle that was publicly sold and used before 2013?

A. Yes.

Q. I'm going to scroll to picture Puck 145.

Ben, did Puck's vehicle include a front cannon?

A. Yes, it did.

Q. What was the purpose of that front cannon?

A. To break up solids and to propel the -- the -- the vehicle.

And, also, to move the solids that you created while the -- the vehicle sat relatively in a small area, it would get the liquid so thick that we actually had to move it so it could have water to -- to continue to mix.

We'd actually get it so thick that we had to move it away from underneath the boat. And so to do that we just shot it to another spot. That would displace the water in the direction that you were shooting it, to bring the water back to

the -- the -- the vehicle so you could continue to mix.

Q. What is this component shown here in this picture? It looks to be a long conduit with white text stating -- saying "Boat 2067 C."

A. That's the fluid delivery system. And that ran up the right-hand side of the engine, to the desired length and -- and T'd to the left on the front of the engine, to the front gun, to the front nozzle, steering nozzle that was down in the water, or it would continue all the way through, to the front cannon. It would also go to the back of the boat and supply liquid to the back two nozzles.

Q. Looking at the very front of that conduit that says "Boat 2067 C." Can you describe what this tapered structure is at the very front of the conduit.

A. That was a -- it's a nozzle. We used that as a nozzle.

Q. And what -- what did that nozzle do?

A. It -- it took -- it took the -- the desired flow from the fluid deliver -- delivery system and it accelerated it. And so we would probably be able to see 16 to 18 hundred gallons

a minute on that particular unit, going forward, at about 70 to 80 pounds of pressure. And it would change that velocity in that tube from about 30 to 35 feet per second to about 85 to 90 feet per second.

Q. Was that the function of that nozzle?

A. Yes. To accelerate the velocity of the liquid.

Q. And what was the result produced by that nozzle?

A. Thrust.

MR. YACKEY: Object to form.

A. (Continuing) First of all, it's thrust.

And, second of all, it made it -- made it more -- made it -- enabled the liquid that was thrusted to -- to -- to cut up the -- the solids that were laying on the front, you know, laying -- laying -- still floating on the surface.

Q. I'm going to scroll to another portion of this document, Bates-labeled Puck 131.

Ben, can you describe how the front cannon shown here is different from the front cannon that we just looked at in Puck 145.

A. It has been removed. And it -- and it

just shows that we can now hook that up to a hose or we can use it like that. It's just an open-ended gate. And then we can change the length of the -- of the nozzle or the cannon, if we -- if we'd choose to.

Q. Does this boat include a nozzle?

A. Yes, it does.

Q. I'm sorry. Does this front cannon include a nozzle?

A. Yes, it does. This picture just does not show it. The -- the can -- the nozzle actually is standing upright on a holder just to the right. It's the black piece that is -- right there -- is standing right there.

Q. Oh, I see. Right here?

A. Yep.

Q. Does this open end function differently than the nozzle that we just discussed in --

A. That.

Q. -- the other picture?

A. Yes.

MR. YACKEY: Objection; form.

Q. (By Mr. Stemler, continuing) How does this -- how does this open end function differently?

A. That would take the liquid. And it would not accelerate the liquid. And it would not have as much thrust. And, therefore, it would not do very much agitation, nor would it provide very much backward thrust.

Q. So would this produce a different result than that nozzle that we looked at in the earlier picture?

MR. YACKEY: Objection; form.

Q. (By Mr. Stemler, continuing) One more time, Ben.

A. Totally. It would -- it would change the performance of the boat and the using of that nozzle at that point.

Q. I'd like to go to another picture here.

Ben, I'm pulling up a picture labeled Puck 124 on my screen. Do you see this picture?

A. Yes, I do.

Q. Do you see the fluid inlet shown in this picture?

A. Yes, I do.

Q. And that's the fluid inlet to the pump?

A. Yes, it is.

Q. Where is that fluid inlet located?

A. About six inches -- six to eight inches

above -- above the skids of the boat.
Q. Is that the orange structure shown here in about the middle of the figure -- or --
A. Yes --
Q. -- picture?
A. -- it is.
Q. And behind that orange structure, can you describe what's shown in this, kind of, triangular-shaped black structure.
A. So we referred to that as the yoke. And it would be moved forward or backward with the hydraulic cylinder. And those two nozzles provided the thrust for the boat to move backward or forward or to continue to agitate. And that could be used in any one of those configurations.
Q. So that yoke that you're referring to, that's the port- -- the black portion directly above those gray rings that are shown?
A. Yes.
Q. Two gray rings?
A. Yes.
Q. Was that yoke pivotable?
A. Yes, yep. It moved with the hydraulic cylinder. We would use that -- that yoke and that in -- like, say we'd bring it up to the

shore. And we would have that completely submerged under the water. And we would use it as an agitator -- likened a lagoon pump, when no one was around to tend it.

Q. So --

A. Does --

Q. It does.

Did that yoke -- the fluid run through that yoke?

A. Yes, it did.

Q. Can you describe how fluid ran through that yoke.

A. So the -- the -- the pressure was created by the pump, brought upward through that orange hose, into the centrifugal pump. And the centrifugal pump fed the fluid delivery system on the right hand of the engine and sent the liquid back to those two nozzles.

And when we used it as a, you know, we -- we had to go, like, lay -- lay hose out. We had to do whatever we had to do. We would continue the agitation process by driving the nose up against the bank and shooting those straight back to continue the agitation process when it's unattended and, therefore, that would all be

submerged.

Q. Is that yoke located directly behind the inlet to the fluid pump?

A. Yes, it is.

MR. YACKEY: Objection; form.

Q. (By Mr. Stemler, continuing) Is the yoke located along the longitudinal centerline of the vehicle?

A. Yes, it is.

Q. Do you see this muck line that's shown here on the black frame portion of the vehicle and then on the yoke, as well?

A. Yes, I do.

Q. Is that muck line formed from those portions of the vehicle being submerged?

A. Yes, they are.

Q. I'm going to scroll up to -- picture labeled as Puck 48.

Ben, is this a true and accurate depiction of the Puck vehicle that was sold before 2013?

A. Yes.

Q. Are all the pictures in this document true and accurate depictions of the Puck vehicle that was sold before 2013?

A. Yes.

Q. Are the -- are the floats here perfectly level?

A. No. Not at all.

Q. Why not?

A. Because the hydraulics are seeping on it. These are things that we learned -- learned through doing. They were supposed to be locked out and they -- they seeped a little bit.

And it was just because of a lack of not tying the corners down. And on this vehicle I can -- I can tell you that I remember that.

We didn't have a chain to tie at -- the corners of the flotation devices down. We solely relied on the -- on the hydraulic cylinders.

And at this point it was seeping a little bit. The vehicle was still operating just fine and -- and operating as normal, but those were art -- that was art that was added to the subsequent vehicles that we -- we produced.

This one actually was set, you know -- was a very, very small vehicle. It's only about 12 foot long and, roughly, about -- I don't know -- 10 foot wide unopened up. It was to be set in concrete tanks and slurry stores and those types of things.

Q. Did those -- those floats are kind of angled in, like, a V-shape shown in this picture. Right?

A. Yes.

Q. Could those floats be angled even further?

A. Yes.

Q. And could the vehicle still operate in liquid manure while those floats were raised even further up?

A. Yes.

Q. How high do you estimate those floats could have been raised while the vehicle was still operating?

MR. YACKEY: Objection; form.

A. (Continuing) It could have probably been at about a 25- to 30-degree angle.

Q. Have you ever operated the boat with those floats raised slightly in a V-shaped configuration?

A. Yes.

Q. Before 2013?

A. Yes.

Q. Did the boat operate fine?

A. It actually -- there is -- there's a point, like where you see it there, it turns

quicker. It -- it gets around a little bit better, actually, when it's a -- when they are not flat because you don't have the drafting underneath the -- the rippled edges going over the -- the -- creating additional draft. It worked fine. It really did. Worked -- worked just fine.

Q. When the floats were raised, would the boat sit lower in the water?

A. Yes, they will.

Q. Why is that?

A. Obviously, you move the displacement of the -- of the weight down into the water a little bit further. And you're just using and sacrificing a little bit of the angulation, the air capture underneath the flotation devices.

Q. Have you ever seen those floats raised to the point where that yoke that we were discussing is partially submerged?

A. Absolutely.

Q. Did you ever see that happen before 2013?

A. Yes.

Q. Was that publicly done before 2013?

MR. YACKEY: Objection; form.

A. (Continuing) I believe it was.

Q. I'm going to show another video quick here.

(Deposition Exhibit No. 68 introduced.)

Q. (By Mr. Stemler, continuing) And I've introduced the video that's been labeled as Exhibit 68.

Do you see that video up on my screen?

A. Yes, I do.

Q. I'm going to enlarge it.

Do you still see it?

A. Yes, I do.

Q. Do you recognize this video?

A. Yes, I do.

Q. What is this video showing?

A. It shows the -- the agitation boat with the front cannon.

Q. The Puck agitation boat?

A. Yes.

Q. Do you know when this video -- video was taken?

A. It was -- I do not remember the date.

Q. Would it have been before 2013?

A. I believe it was.

Q. Does this video truthfully and accurately depict the Puck vehicle that was sold and

publicly used before 2013?

A. Yes, it does.

Q. Let's scroll to a later portion of this video.

Can you describe what's been shown in this portion of the video, Ben. And -- and, specifically, I'm at 26 seconds into the video.

A. The boat is being used with a front cannon. And it would -- and we were in a very large lagoon. And we were -- we were moving the liquid, trying to find where the clear water was, where the solids were.

And, obviously, you can see a couple of those -- we used to call them alligators or turtlebacks -- showing up right there by it.

And trying to research how to go about agitating this, again, where -- where we start at.

Q. Was that front cannon providing any thrust?

A. That was a -- that was entirely moving the entire vehicle. And it was moving it very, very quickly.

Q. Now, I'm going to play this video, starting from 20 -- about 20 seconds in.

Does that front cannon cause the rear of the vehicle to dip below the lagoon at all?

A. Absolutely does. That was actually causing the -- the -- the vehicle to go in further -- is because it was tripping over and cutting off the tops of the -- the solids that it was running into.

Q. And shown in this portion of the video, do you see any portion of the coupler that is submerged?

A. There --

Q. I'm sorry. The -- the -- video -- that is submerged in this video?

COURT REPORTER: Pardon me. Pardon me.

Taylor, if you could repeat the question. There were a couple voices.

MR. STEMLER: Yeah. Sorry about that.

Q. (By Mr. Stemler, continuing) Ben, do you see any portion of the yoke on the vehicle that is submerged in this portion of the video?

MR. YACKEY: Objection; form.

A. (Continuing) The rear coupler at that point is submerged under the -- under the water.

Q. And when you're saying "the rear coupler," are you talking about the portion of the yoke?
A. The rear yoke. I'm sorry.
Q. Did you ever see the rear yoke become submerged due to the propulsion provided by that front cannon while the vehicle was operating before 2013?
A. Yes.
Q. Would that submerged couple- -- would that submerged yoke function to keep any floating solid material away from the bottom fluid opening in the intake pipe for the pump?
A. Yes, it would.
MR. YACKEY: Objection; form.
Q. (By Mr. Stemler, continuing) One more time, Ben.
A. Yes, it would.
Q. I have a -- one more video I'd like to share and then I can take a quick break.
(Deposition Exhibit No. 69 introduced.)
Q. (By Mr. Stemler, continuing) Ben, I've introduced Exhibit 69 here. I'm going to show it up on my screen.
Do you see this video?
A. Yes, I do.

Q. Have you seen this video before?
A. Yes, I have.
Q. Do you know when this video was taken?
A. Yes, I think I do.
Q. Was it before 2013?
A. I think it was two- -- yes, it was.
Q. When do you think it was?
A. 2011.
Q. What is this video showing?
A. Agitation boat moving the solids around the -- the top of the lagoon.
Q. Does this video truthfully and accurately depict the Puck vehicle that was publicly used before 2013?
A. Yes.
Q. Can you describe what this structure is, shown here, kind of, in the top right portion of the frame at 32 seconds in, in the video.
A. Yes. That is a lagoon pump feeding a load stand to load a wagon.
Q. Is that a shore-operated lagoon pump?
A. It is a lagoon pump -- yes. There would be a man in that tractor cab.
Q. And he's the one that's causing this lagoon pump to -- to pump?

A. Yes.
Q. Had you ever seen the Puck vehicle and a lagoon pump being publicly used together before 2013?
A. Yes.
MR. STEMLER: All right. I'd like to go off the record.
VIDEOGRAPHER: Time is approximately 11:34 a.m. We are going off the video record.
(Recess from 11:34 a.m. to 12:06 p.m.)
VIDEOGRAPHER: Stand by, please.
The time is approximately 12:06 p.m. We are back on the video record.
Go ahead.
Q. (By Mr. Stemler, continuing) Welcome back, Ben.
A. Thank you.
Q. I'd like to ask you a couple more questions about the Puck vehicle back in 2013.
First, do you -- do you know or remember how much money the Puck agitation vehicle costed back in 2013?
A. Not offhand.
Q. Do you have an estimate?
A. About $62,000.

Q. Was that an expensive piece of equipment for farmers?
A. Yes, it was.
Q. Did farmers tend to pay pretty close attention to the price of the vehicle?
A. Yes, they were.
Q. And did Puck do its best to try to keep the cost of that vehicle at a reasonable price point?
A. Yes, we did.
Q. Did Puck try to make its products relatively simple to service and maintain?
A. Yes.
Q. Why was that?
A. Because we were users of our own product. And downtime is -- you just -- you know, we used -- we always used the term, we're not running the cash registers when we're not running liquid down the hose.
And any time we -- we suffer downtime or we could build a bridge to get to the -- you know, keep going, we would -- we would try our best to be able to do that.
You know, we have a relatively short period of time to get a lot of work done. And

the goal that we had, as a company, was to be able to put people in the position to get more work done in a shorter amount of time.

Q. Did -- what types of liquid-manure reservoirs did Puck typically place its vehicle in?

A. Basically, we were -- it was designed to -- to take care of the solids that were in large concrete tanks. These concrete tanks could range anywhere from probably a hundred thousand gallons to maybe two to three million gallons, depending on -- on -- on, you know, the size of the -- of the site.

And, also, you know, in the dairy industry, we had -- we had -- our customers had two 15-million-gallon cells or a 30-million-gallon cell.

Our other dairy customer had two 35-million-gallon cells that were 6650 feet long, basically 300 feet wide, and about 32 feet deep.

And our challenge was to try to get the solids out of that so we -- so they could re- -- resume capacity that they needed.

Q. How did Puck typically place the -- its manure agitation vehicle in that type of load

unit?

A. We basically pulled it alongside the -- the bank and we -- we pushed it in with the same tractor we pulled it out of, because we had a tractor there that was basically a hose humper, or a tractor with a loader on it, when we pulled wagons. And so we had those apparatuses that were -- they come along with us anyway.

Q. Did Puck frequently use the crane to move the vehicle?

A. When it was a concrete tank we craned them in.

And slurry stores were -- were -- were plentiful at that time to the -- the Murphy Brown site in our area. It wasn't uncommon to see slurry stores. And to be able to get to the -- the solids out of the slurry stores was -- was difficult.

We -- we had a boom truck that could reach over the outside edge. We could try to move it around.

Of course, hooked to a hose you're tethered. You have to stop application to be able to move it.

We could really have -- we always had

problems with getting to the very, very center of those lagoons -- those slurry stores.

And so we -- we -- we thought that -- you know, that one boat that we spent some time on, that we -- just before we broke for lunch -- that was what its purpose was for, is to take a relatively small crane and be able to put it in a slurry store and --

Q. Did --

A. -- utilize.

Q. Did Puck ever consider putting wheels on its agitation vehicle back before 2013?

A. Of course. And we actually put wheels underneath that. You know, on your first set of slides that we had the -- the gray -- the gray apparatus hooked up to that -- that steel tank -- unfortunately, for that -- it.

So we put wheels on it to try to mobilize it from -- from site to site. And that worked out. It worked out okay.

Typically, we -- we saw that we -- pull the wheels down to pull it out of the lagoon, we actually just indented and -- and penetrated the side of the lagoon a little bit more. And didn't find it to be a huge advantage at all.

We had very few lagoons that had a ramp, you know, that was con- -- concrete or that was sured up. You know, the industry is very young yet, still trying to find its way. And -- and those accommodations were just not made back at that time.

Q. Why -- what were some of the other reasons that Puck did not put wheels on its vehicles?

A. We didn't want to compromise the -- basically, the hubs and the bearings and those types of things with the -- with that environment. It was always difficult to be able to pull our lagoon pumps out and mobilize them without having some sort of a wheel bearing issue.

Q. Did Puck ever find that it might be more expensive to place wheels on its vehicle?

A. It would definitely add a lot of cost to it.

Q. Sure.

And would it complicate the serviceability at all?

A. Yes. If -- any time -- any time that we could have a delay from site to site -- and that's why we -- we were trying to concentrate on

several things. Of course, the cost of the vehicle, mobilizing the vehicle.

We were able to build an 8,000-pound vehicle that could be mobilized with three-quarter-ton pickup, because our customers had those types of things.

In twenty -- back in the early 2000s and up until probably 2015 it was not common to see a lot of manure applicators in our area or in this part of the Midwest that had access to semis that were always going back and forth to try to retrieve additional equipment.

So we tried to move very stealthfully, you know, in a way that -- that -- you know, very, very purposeful. And so we felt that this is the -- this is the best way to do it for our needs.

Q. Was part of Puck's business model with this vehicle basically intending to keep this vehicle light enough to be transported with a traditional automobile?

A. Yes. Yes, it was.

Q. I'm going to show another document. I have...

(Deposition Exhibit No. 70 introduced.)

Q. (By Mr. Stemler, continuing) I've marked here Defendant's Exhibit 70. And -- and I'm going to share it on my screen.

Do you see this exhibit, Ben?

A. Yes, I do.

Q. Do you recognize this document?

A. Yes, I do.

Q. What is this document?

A. This is a -- a -- this is basically a flier for the 2012 professional applicator -- app- -- app- -- for North American Manure Expo. Excuse me.

Q. Did Puck ever attend trade shows back before 2013?

A. Absolutely. Yes, we did.

Q. Did you ever attend trade shows with Puck?

A. Yes, I did.

Q. Why did Puck attend trade shows?

A. To -- to try to find more things to -- that -- that we needed for our own business, which was still largely manure application at that time. And trying to see what -- the technologies that were being accepted, being embraced at that time.

And -- well, trying to sell some pots and

pans at the very same time.

Q. Did Puck ever bring its products to trade shows?

A. Yes.

Q. Did you personally attend the 2012 North American Manure Expo?

A. Yes, I did.

Q. Do you remember where that was held?

A. Yes. That was at Prairie du Sac, Wisconsin. Was at the -- we called it the Badger mil- -- Badger munitions site.

Q. Is that the USDA Dairy Forage Research Center?

A. Yes, it is.

Q. What types of companies went to this trade show?

A. Most everybody who were a part of this industry attended that trade show. That was related to the Midwest activity, which is dairy and -- mostly dairy, in Wisconsin, and -- and some swine, but mostly dairy.

Q. What was the general nature of products that were shown at this trade show?

A. It was a vast array of hose carts, booster pumps, different types of pumps from proprietary

manufacturers, lagoon pumps. Featured several boats at that point. We, I think, were one of three boats that were demonstrated that particular day.

Q. Did you exhibit any product at the 2012 North American Manure Expo?

A. Yes, we did. We exhibited a 2067 boat for demonstration purposes.

Q. And is that one of the boats that we looked at in those pictures earlier?

A. Yes.

Q. Did the Puck agitation boat ever receive media attention before the 2012 North American Manure Expo?

A. Yes, we did. I believe we had been in several publications. And, obviously, there's the winter shows that we -- we were -- we were at and -- and displayed either the boat or literature.

Q. Did Puck advertise with the 2012 North American Manure Expo?

A. Yes, we did.

Q. I'm turning to page BAZ15 0028021 of Exhibit 70.

And looking at the top of this page, is

that an example of one of Puck's advertisements?
A. Yes, it is.
Q. Do you ever recall seeing this document?
A. Yes, I have.
Q. Before 2013?
A. Yes, several times. That was our -- that was our issue for publication and in fliers.
Q. I'm turning to page BAZ15 0028013.
Ben, did Puck sponsor the 2012 North American Manure Expo?
A. Yes, we did.
Q. Did Puck have a booth at the 2012 North American Manure Expo?
A. Yes, we did.
Q. Do you recall if it was close to Nuhn's booth -- booth?
A. I believe we were -- we were -- we were in that vicinity of it.
Q. I'm looking at page BAZ15 0028027.
Ben, do you remember what booth number the Puck booth was at?
A. Obviously, offhand I don't, but it looks like we were in Booth Nos. 408 and 409.
Q. And do you see where this document indicates Sundstrom Pit Pumping was located at?

A. Yes. It actually was next to us, at 407.
Q. Do you see where this document states that Nuhn Industries, LTD was located at?
A. Yes. It looks like it was in 406.
Q. I'm going to pull up another document.
(Deposition Exhibit No. 71 introduced.)
Q. (By Mr. Stemler, continuing) Ben, I've introduced an Exhibit 71 up on my screen.
Do you see this document?
A. Yes, I do.
Q. I'm going to scroll through the pictures shown in this document so that you can see them.
MR. YACKEY: Taylor, you're moving through these awfully quick. I assume you'll pause on certain ones if the witness needs to look more closely at some of these pictures.
MR. STEMLER: That's right.
Q. (By Mr. Stemler, continuing) Ben, have you seen these pictures before?
A. Yes, I have.
Q. Are these pictures a true and accurate depiction of the 2012 North American Manure Expo that you attended?
A. Yes, they are.
Q. I'm going to scroll down to picture

UOWM 0000580. Do you see this picture?
A. Yes, I do.
Q. Does this picture depict your booth at the 2012 North American Manure Expo?
A. Yes, it does.
Q. Where was your booth in this picture?
A. Directly above your cursor.
Or do you see the white camper that's --
Q. Yeah.
A. -- camper?
And we worked out of that. And our booth would have been from that point to -- off to the right-hand side.
Q. Like, that blue tent?
A. Yes.
Q. Do you see Nuhn's booth in this picture?
A. Yes, I do.
Q. Where is Nuhn's booth?
A. It is directly adjacent ours, to the left.
Q. With this big red piece of -- pieces of equipment?
A. Yes.
Q. Do you see Sundstrom's booth in this picture?
A. I believe he has the blue tent on the

other side.

Q. Do you see Sundstrom's boat in this picture?

A. Yes, I do.

Q. Where is that boat?

A. It is directly to the left-hand side of the -- of the Nuhn booth. It's in the aisle, actually. Parked out -- out there.

Q. Right -- right behind Nuhn's booth?

A. Yes.

Q. Is that this orange piece of equipment right to the --

A. Yes.

Q. -- left of the --

A. I believe that that is.

Q. Okay. How can you tell?

A. I -- I -- I recognize -- it just -- it just looks like Ernie's boat on a trailer. That's, basically, kind of, hidden behind a lagoon pump there.

Q. I'm going to turn back to the -- Defendant's Exhibit 70, the North American Manure Expo brochure.

Do you see the map that's shown here on picture -- on page BAZ15 0028028?

A. Yes, I do.
Q. And do you see booths 406, 407, 408, and 409 depicted in this map?
A. Yes, I do.
Q. And are all those booths in a line next to each other?
A. Yes, they are.
Q. Is that how you remember the twenty- -- the layout of the 2012 North American Manure Expo?
A. Yes, I -- yes, it is.
Q. When you were at the North American Manure Expo, did you walk around the trade show to look at the other booths?
A. As much as I could. I tried to get around to everything I could find -- find.
Q. Do you recall visiting the Sundstrom booth?
A. Yes.
Q. Do you recall visiting the Nuhn booth?
A. I believe I did. I think I talked to Ian's dad.
Q. Do you recall having this setup depicted here in this picture of UW- -- UOWMN 580?
A. Yes.

Q. Sorry, Ben.
A. Yes, I do.
Q. So you recall Puck's booth being outdoors?
A. Yes.
Q. And near the Nuhn and Sundstrom booths?
A. Yes.
Q. Do you recall anybody visiting the Puck booth?
A. We had quite a -- we had quite a lot of people come through that day.
Q. How many would you guess?
A. I would say over a hundred.
Q. Were people interested in the Puck boat?
A. Yes, they were.
Q. Did a lot of people come look at the Puck boat?
A. Yes, they did.
Q. Did you get a chance to speak with every single person that visited the Puck booth?
A. I'm sure I had -- I'm sure I did not speak to everybody.
Q. Were a lot of people looking at the Puck boat?
A. Yes.
Q. Were people free to take pictures of the

Puck boat?
A. Yes.
Q. Were people free to inspect the Puck boat?
A. Yes.
Q. Do you recall looking at Sundstrom's boat?
A. Yes.
Q. Were you free to inspect Sundstrom's boat?
A. Yes.
Q. Were you free to take pictures of Sundstrom's boat?
A. Yes.
Q. Going to turn back to the document of Exhibit 70. And I'm scrolling up to page BAZ15 0028027.

Next to the Puck Custom Enterprises indicator, do you see what it states -- states there in red, Puck -- Ben?
A. "Agitation Boat."
Q. And did Puck demonstrate its agitation boat at this show?
A. Yes, we did.
Q. Did Puck have one of its agitation boats at its booth?
A. Yes.
Q. Did the -- did the agitation boat that

Puck brought to the 2012 North American Manure Expo have a front nozzle?

A. Yes, it did.

Q. How do you know?

A. Because we actually brought a complete boat and a -- it was used in a demonstration.

Q. I'm going to scroll up to page BAZ15 0028024 of this document.

And I'm looking at this section with the header "Lagoon Agitation Demonstrations."

Ben, do you see the portion under this header that states, "Boat with remote control vertical agitation"?

A. Yes, I do.

Q. Did that refer to the Puck boat demonstration?

A. It would have, yes.

Q. Do you recall the shape of the demonstration lagoon that Puck conducted its demonstration in?

A. Yes. It was a -- triangular in shape and it was a -- it was a -- one of the rare ones that actually had a semi -- semi or complete con- -- concrete lining in it.

Q. I'm introducing another exhibit.

(Deposition Exhibit No. 72 introduced.)

Q. (By Mr. Stemler, continuing) Ben, I've introduced Defendant's Exhibit 72. Do you see this document?

A. Yes, I do.

Q. I'm going to scroll through the pages of this document so you can see them.

Does this document truthfully and accurately depict the demonstration lagoon that Puck conducted its demonstration within?

A. Yes, it does.

Q. Now, this document includes a few measurements. And I'm -- I'm turning to the measurement on page BAZ15 0193512.

And I'm scrolling in so you can see the lagoon.

The document indicates that the -- one of the -- the document indicates that the longest side of the lagoon has a total distance of 259 feet long.

Does that align with how you remember the size of the lagoon being?

MR. YACKEY: Objection; form.

A. (Continuing) Yes, it does.

Q. Ben, do you remember the longest side of

the lagoon being about 260 feet long?
A. Yes, I do.
MR. YACKEY: Objection; form.
Q. (By Mr. Stemler, continuing) Sorry. Ben, let me ask it one more way.
Do you remember how long the longest side of the lagoon was, approximately?
A. It was, roughly, 260 feet long.
Q. Ben, do you remember the total perimeter of the lagoon being about 650 feet long?
A. Yes.
Q. Flipping back to Defendant's Exhibit 70. And I am scrolling to a -- it will be page BAZ15 0028025.
Do you see this page?
A. Yes, I do.
Q. Do you see this advertisement located at the bottom of this page?
A. Yes, I do.
Q. What does this advertisement appear to be advertising?
A. A lagoon pump.
Q. Made by who?
A. Nuhn. The "Header Series Lagoon Pump."
Q. Do you see the white text towards the top

of that advertisement?
A. Yep.
"See our pump in action at the North America Manure Expo."
Q. Do you recall seeing that pump in action at the North American Manure Expo?
A. Yes, I do.
Q. Do you remember any other companies that were at the North American Manure Expo?
A. I believe that a -- Patz were there and so was Houle, for lagoon pumps.
Q. And -- and Sundstrom?
A. Ernie Sundstrom and Chris -- Chris Lindstrom.
Q. Scrolling up to -- or I'm flipping back to Exhibit 71. And I am on page UOWM 0- -- I'm sorry -- UOWM 7 and UOWM 9.
What are these two pages showing, Ben?
A. Those are the Puck agitation boat.
Q. Is that the boat that you brought to the manure expo?
A. Yes, it is.
We actually brought two boats to the manure expo; one to demonstrate and one to be at the booth.

Q. I'm scrolling down to pages U- -- UOWM 133 and UOWM 134.

Do you see those two pages?

A. Yes, I do.

Q. Can you describe to me what's shown in these pictures.

A. This is a Deutsche tractor hooked up to a Nuhn header lagoon pump. And Ian Nuhn is having a conversation. And I don't -- don't know the person he's talking to.

Q. Is that Ian Nuhn shown in the red shirt there?

A. It appears to be.

Q. Have you met Ian Nuhn before?

A. Yes, I have.

Q. And does this look like Ian Nuhn?

A. Yes, it is.

Q. I'm showing a couple of pictures here; picture UOWM 136, 137, and 146.

Do you see those three pictures, Ben?

A. Yes, I do.

Q. What's shown in those pictures?

A. That is a -- Ernie Sundstrom's boat.

Q. Were you aware of the Sundstrom boat back in 2012?

A. Yes, I was.
Q. Were you aware of Sundstrom's boat before 2012?
A. Ernie has -- had been working on a boat for a year or two. So yes, I was aware.
Q. I'm going to scroll now to page UOWM 0000148.
Do you see this picture?
A. Yes, I do.
Q. What's shown in this picture?
A. Basically, a lot of very interested people watching the agitation demonstration.
Q. And are -- does this picture show the demonstration lagoon?
A. Yes, it does.
Q. Are those people close to the demonstration lagoon?
A. Very close.
Q. How close would you estimate?
A. They are standing behind a chain-link fence that is about 30 feet directly in front of them.
Q. Is this a true and accurate depiction of that manure lagoon?
A. Yes.

Q. I'm going to show a couple of pictures here. The first one is -- you're at UOWM 0000223.

Do you see this picture?

A. Yes, I do.

Q. Would you describe what's shown in this picture.

A. Our 2067 boat is directly -- it looks like it's directly aside the Nuhn agitation header pump.

Q. Is that Nuhn agitation header pump right behind the Puck boat?

A. Yes, it is.

Q. Do you recognize any of the people in this picture?

A. I see Ian along the far fence. And he is talking to another person. To call him out, I -- I don't think I could call him out.

Q. Does he appear to be looking in the direction of the Puck boat?

A. Yes.

Q. I'm going to scroll down to page UOWM 0000716.

Can you describe what's shown in this picture.

A. Yes. That is, also, the boat that

is -- is nearer than the -- the new lagoon pump with onlookers seeming to be very, very interested.

Q. Do you recognize any of the onlookers in this picture?

A. Oh, I couldn't call them out. I know that there's a lot of -- lot of -- lot of peripheral applicators there.

I do see Ian on the adjacent bank.

Q. Next to the Nuhn lagoon pump?

A. Yes.

Q. I'm going to scroll down to page UOWM 0000733.

Do you see what's shown in this picture?

A. Yes.

Q. Can you describe what's shown in this picture.

A. That is the beginning of the agitation of the -- the boat as it appears.

Q. Can you describe the pieces of equipment that are shown in this picture.

A. It would be the Nuhn -- Nuhn lagoon pump, which is -- if it is -- if it's running, it -- it has got the nozzle under the water.

Typically we only had, like, a few minutes

to be able to demonstrate each piece of equipment, because there are, I believe, six pieces to demonstrate. And I could be wrong about that, but I believe that there were six, possibly seven.

And I believe he just got done with his demonstration.

Q. And then the Puck boat is shown in this, as well. Right?

A. Yes.

Q. How far away would you estimate the Puck boat is from the Nuhn lagoon pump?

A. I would guess that we are probably 80 to a hundred feet away.

Q. Turning to UOWM 0000738.

Do you see what's shown in this picture, Ben?

A. Yes.

Q. What is that?

A. That's the 2067 boat, using the front cannon to back -- or to mix the -- the floating solids on that lagoon.

Q. And would you say that front cannon is operating properly in this picture?

A. Yes.

Q. Ben, I'm turning to page UOWM 0000364.
Do you see this picture?
A. Yes, I do.
Q. Can you describe what's shown in this picture.
A. This is a -- a -- let's see. It looks like six gentlemen looking at the Nuhn header pump.
Q. Do you see Ian Nuhn shown in this picture?
A. Yes, I do.
Q. And where is he?
A. He is in the right-hand part of the men standing, talking. In the red shirt.
Q. Do you see any other pieces of equipment shown in this picture?
A. Yes, I do.
Q. What other pieces of equipment do you see?
A. We see a -- we seen the -- the Sundstrom boat in the background, on a trailer.
Q. Is that the orange and green piece of equipment directly behind Ian Nuhn?
A. Yes, it is.
Q. I'm going to pull up another document here.
(Deposition Exhibit No. 73 introduced.)

Q. (By Mr. Stemler, continuing) Ben, I've introduced the document as Defendant's Exhibit 73.

Do you see this document?

A. Yes, I do.

Q. Have you seen this document before?

A. I believe I have.

Q. Have you seen this document before yesterday?

A. No, I have not.

Q. Do you know what this document is?

A. This is a litigation between the two companies, Bazooka Farmstar and Nuhn Industries.

Q. I'll represent to you that this is a declaration that was submitted by Ian Nuhn in one of the IPR proceedings that's involving Nuhn's patents before the United States Patent and Trademark Office.

A. Oh, okay.

Q. I'm turning to paragraph 12 of this document.

Ben, could you please read to me what's written here in paragraph 12.

A. "I attended the 2012 North American Manure Expo show in Prairie du Sac, Wisconsin, at which

I saw a demonstration of Puck Enterprises's (Puck) Manure Agitation Boat.

"I noticed that the Puck's Manure Agitation Boat was not performing very well; in fact, it performed so poorly that it was spraying the crowd with manure.

Q. Would you agree with the statements made in paragraph 12?

A. No, I do not.

Q. Why not?

A. The -- the -- the boat was -- operator error sprayed the -- the -- the crowd with liquid manure. The boat actually acted as it -- as it should. And it was my fault that we sprayed those people on the -- on the shoreline.

Q. Did the boat perform as it should have?

A. Yes, it did.

Q. It was purely operator error?

A. It was my operator error.

Q. Ben, could you please read paragraph 13 for me.

A. "After the 2012 North American Manure Expo, I heard complaints from others about the Puck boat, including that the pump would clog, the pump would not handle manure in lagoons, and

that someone was seriously injured while attempting to clean the pump.

"I also heard complaints that the Puck boat would get stuck in the manure lagoon when trying to pull it out."

Q. Do you agree with the statements made in this paragraph?

A. Partially.

Q. What parts do you agree with?

A. The boat would be stuck in the lagoon because the lagoon was empty or -- I don't know. It does not have a way to propel itself back out.

Q. When the lagoon no longer has fluid in it?

A. Yes.

Q. Would you --

A. It was -- it -- if it couldn't float anymore, it was -- it was going to be at that point where you ran out of water.

Q. Would Nuhn's product have the same problem?

A. With the wheels on it, it should be able to get at least to the side of the shore. And the claim is that it will drive itself out.

Q. Do you agree with that claim?

A. I have -- I would agree that if the side

of the ramp was seriously compacted or it was a concrete ramp -- I would agree that it would probably drive itself out.

Q. Do you think if it wasn't compacted it wouldn't be able to drive itself out?

A. I had -- I had -- I -- I guess -- I think I'm using Ian's words that he said, that a -- a rental car would pull it out, if you did.

Q. Do you know of anybody being seriously injured while attempting to clean the pump on the Puck vehicle?

A. The serious -- the most serious injury I have understood was that the person reached into the pump to inspect it and subsequently cut his finger off because the engine was not shut down and the pump was still running.

And -- and we used a cutter pump. And he actually reached in far enough, which is quite a ways, and managed to -- to -- to hurt himself.

Q. Did Puck advise its customers to turn off the vehicle before attempting to service it?

A. We -- we make that a primary -- a part of all the discussion; that any service that is done on the -- on the vehicle needs to have the engine shut off.

Q. So would this person likely have been not following those instructions for servicing the vehicle?

A. Yes.

Certainly was not qualified or paying any attention to what he was doing at that particular time.

I -- I don't know if -- in my car's owner's manual it says that I should take it out of gear when I'm trying to change a tire.

Q. And this was a similar situation to that?

A. I'm sorry for the poor analogy, but yes.

Q. Turning to paragraph 16.

Sorry. Strike that.

Ben, could you please read paragraph 18 to me.

A. "A typical lagoon has a berm that requires navigation both up and then back down, whereas Puck design required a trailer to launch the boat.

"Compounding this difficulty was the fact that the terrain around the lagoon is often muddy and wet.

"A typical problem with Puck's boat was that it would get stuck on the bank or enter the

lagoon too quickly and nosedive under the liquid."

Q. Do you agree with the statements made in paragraph 18 here relating to the typical problem with Puck's boat?

A. We used the boat -- or the trailer to launch the boat, if you wanted to. We -- we -- we basically used a -- the -- the idea that you use a tractor or a -- a payloader to push it into the liquid.

The terrain around the lagoon is often muddy, it's wet -- is correct.

"Typical problem with the Puck boat is that it would get stuck on the bank or enter the lagoon too quickly and nosedive under the liquid."

We, basically, have always pushed the boat in backward, so its front nose didn't go under, because that's where the radiator, the control units, and those types of critical assets are held.

And I don't know of anybody that tried to do that. Not saying as they couldn't, but I don't know of anybody that was told to do it that way.

Q. So you would have never launched the boat nose first?

A. No. Definitely not.

Q. And, because of that, you wouldn't have nose-dived the boat under the liquid?

A. No.

Q. Could you please read the paragraph 20 that's shown up here on my screen.

A. "The Lagoon Crawler -- specifically adapted for particular purpose of disrupting the crust and recirculating liquid manure in a manure lagoon, where the vehicle can drive into, out of, and navigate through the manure lagoon by wireless remote control -- solved these considerable deficiencies."

Q. Was the Puck vehicle specially adapted for the particular purpose of disrupting the trust -- crust and recirculating liquid manure in a manure lagoon?

A. Yes, it was.

Q. And was it able to navigate through a manure lagoon by wireless remote control?

A. Yes, it was.

Q. Could you please read paragraph 27 for me.

A. "My market research indicates that the

Puck boat occupied about 95 percent of the manure-pumping boat market when Nuhn first introduced Lagoon Crawler prototype at the 2013 North American Manure Expo.

"Fast-forward today, my market research indicates that the market share for Nuhn's Lagoon Crawler has totally eclipsed the market share for Puck's pumping boat.

"Based on my" --

Q. Sorry. You can read that.

A. Well, "Based on" -- "on my" -- I don't know where it goes at that point -- "my research, and setting aside Bazooka's copycat Wolverines, I estimate that the Nuhn's Lagoon Crawler constitutes at least 90 percent of the manure-pumping boat market as of December 23" -- "of" -- "of December 2023 -- we were -- we made close to -- Lagoon Crawlers in 2023, whereas Puck occupies less than 10 percent of the manure-pumping boat market or even less if one considers Bazooka's copycat Wolverine sales.

"My research estimates that Puck market share today is conservative, as based on my research. I estimate that Puck is now making less than X amount of boats per day" -- "per

year."

Sorry.

Q. Do you recall ever telling Ian Nuhn how many boats you sold per year?

A. I don't recall that.

Q. Do you recall anybody else at Puck sharing that information with Ian Nuhn?

A. I can't speak for everybody at Puck. Sorry. I -- I don't know that.

Q. But you don't recall anybody doing that?

A. No.

Q. Do you have an estimate for how much of the manure-pumping boat market Puck's boat occupied in 2013, before the Lagoon Crawler launched?

A. Ian was probably correct. I -- I would say probably -- maybe 85 percent. I think that there was a lot of knockoffs, a lot of one-offs.

I think we encouraged people to go out and -- and utilize different types of equipment to be able to solve the -- the agitation needs.

We -- we quite often helped anybody that we could in solving these problems.

And there just wasn't a market for -- the -- the industry didn't have a value for --

for agitation boats at the time they came out.

The industry had a market for new attractors and lagoon pumps and those -- and operational costs were -- but everyone was -- everyone should have been skeptical about anything new and about all the turnoff, trials, and tribulations that come along with something new.

Q. Do you have any estimate for how much of the manure boat-pumping market Puck held in 2015?

A. I would say that we were holding probably 60, 70 percent of that market at that point.

Q. How about in 2018?

A. I really think it dropped off severely -- probably 15 to 20 percent.

Q. Okay. Why do you think Puck lost market share over those past -- over those years?

A. I think that we brought a new product to market. I think we encouraged some short-line equipment companies to get into that market. We did not continue to -- to chase that market.

We -- what we thought we had built at that time was still viable. It was a -- it was a really good tool to have in the toolbox.

Nuhn Industries has done a nice job of

bringing people on. They -- they were offering a new product.

We did not continue to build that product until -- well, actually, we're just waiting to see if a -- the Nuhn Crawler looks like it's standing a very, very good market share. Looks like they've been challenged by Bazooka for whatever reason. And --

Q. Why did -- why did Puck -- why did Puck start to move away from its agitation boat?

A. We -- we -- we became just inundated with a large-flow liquid-transfer systems in the -- the fracking industry. In the liquid-manure industry. We were so much more profitable building booster pumps, mobile communications for those industries. New -- newer hose carts.

You know, we -- we just -- it's -- it's work over time to us. We moved the industry from a thousand gallons a minute back in, like, 2008, '9, until we've got customers now doing over -- almost 5,000 gallons a minute in flow.

That's taken a lot of assets. It's taken a -- a -- a lot of ability to order these types of engines and pump packages and put those together.

You know, it's a -- if -- if -- if the customer was getting it done with Bazookas, with the Nuhn Crawler, with the Puck boat, with -- there's been several other attempts of this type of thing -- and they are happy with that, we think we have bigger fish to fry, truthfully.

Q. It says Puck significantly shifted its resources towards those higher-profit products?

A. They weren't necessarily individually higher profit. It was that they were -- that we could -- we could turn them much quicker in the -- in the amount of area that we had.

And so we start utilization -- utel- -- utilizing floor space; you're looking at how many components I can put together in a efficient manner.

We felt that, you know, we're -- we really do believe in efficiency. And if we're going to believe in efficiency -- that's why we never started building lagoon pumps and -- and why we've never looked at other -- other sources of products that are on the line.

These companies do a good job at providing what's needed. And there's no sense of recreating the wheel.

So what we did is brought an industry -- we brought the industry something that it truly needed.

Q. Sure.

A. And if these companies can do it better, I -- my hat's off to them.

Q. I'm turning to paragraph 30 of your declaration.

Can you please read paragraph 30.

A. Yeah.

MR. YACKEY: Just a quick clarification. This -- this is not Mr. Puck's declaration. I think you referred to it as his.

MR. STEMLER: Thanks, Scott. I -- I misspoke.

Q. (By Mr. Stemler, continuing).

I'm turning to paragraph 30 of Exhibit 73.

Could you please read the first sentence of this paragraph then.

A. Sure.

"But, in reality, when the Lagoon Crawler is controlled to enter a man-" -- "a manure lagoon, the combination of churning and" -- "ground engaging the wheels and the displacement of the Crawler's floatable vehicle body disrupts

and" -- "by crushing the crust, creating a pocket or opening, comprising of crushed portions of the crust within" -- "within which the Crawler can start to operate the pump without the pump being clogged by severe crust.

"I did not expect that churning wheels of the Lagoon Crawler would help navigate the Lagoon Crawler through thick sludge" --

Q. That's good.

A. -- "where the Puck boat would often get stuck and other pumps would not work."

Q. Did Puck's vehicle create a pocket for the pump to operate in when the vehicle was floating?

A. Yes. Because the -- the -- the strategic part of it was that the -- you know, the -- the suction part of the pump was down underneath the crust. And that the crust could not get to the pump suction inlet only but through the back that the -- the -- the back yoke.

And so when you push it -- when you -- when you back it in, and you prime it -- and, of course, you're going to push a lot of the solids back, away from it.

And you'll get that -- get that thing primed. Turned around.

And that's when you slide that back -- back of the boat up against the bank and you create that big pocket with that front gun.

And -- and using the high head pump, we're able to do that.

Hope that makes sense.

Q. It does. Thank you.

I'm turning to paragraph 32 now.

And looking at -- at -- it looks like there's two paragraphs after 32. The second paragraph doesn't include a paragraph number.

Could you please read that second paragraph.

A. Sure.

"And, again, while I expected my Lagoon Crawler invention to perform for manure lagoon agitation purpose, I did not expect that it would agitate a manure lagoon in significantly less time than when using multiple stand-alone pumps.

"For example, I know from my experience in the industry that it was typical for farmers to rent standalone manure pumps to agitate a lagoon; that is, using a tractor to transport them around the perimeter of the lagoon.

"The convention was to" -- "The convention

was to rent four pumps to agitate one lagoon.

"After the Lagoon Crawler came out, farmers began renting a single Lagoon Crawler instead of four pumps to agitate one lagoon in about the same amount of time it would take using four pumps.

"Not only this, but the Lagoon Crawler did a better job. And less fuel is consumed by the Lagoon Crawler because four fuel-burning tractors are no longer needed."

Q. When you launched the Puck agitation boat, did farmers begin renting a single Puck agitation boat instead of four pumps to agitate a lagoon in about the same amount of time?

A. Yes.

Q. And would that result in less fuel being consumed?

A. Considerably less.

Q. And did the Puck agitation boat do just as good or a better job of agitating the lagoon than those four tractor-mounted pumps?

A. At the end of the day, when the lagoon is empty, everybody is happy. And we emptied a lot of lagoons.

And, you know, I -- I reiterate. The

reason why our lagoon -- floating lagoon boat was brought to market is because we could not get those -- we could not get a lagoon empty using lagoon pumps. And so we needed a different way to do it.

And this actually provided the safety of the art to be used in a new manner.

And so, obviously, when you're the first kid on the block or you -- you try real hard to do something, people are going to throw something at you, like, "well, you know it just doesn't work as well. It will plug up all the time."

Well, I'm telling you that I'm the guy that used to stand on the back of the boat. I know all too well how well they could -- how easily they could plug. We solved a lot of those problems.

Do they still continue to plug?

You know, maybe, maybe not.

But what I can tell you is that when you can save 14, 15 hundred dollars of diesel fuel a day, instead of running four lagoon pumps, it becomes a big deal. And I was -- I was not a bit afraid to work for that -- for that money and -- and do a better job for my customer at the very

same time.

Q. Ben, have you ever sought a license from Nuhn?

A. No.

Q. Do you know if Puck has ever sought a license from Nuhn?

A. I don't know that.

Q. If Puck were to have sought a license from Nuhn, do you have any idea as to what technology they would have been seeking a license to?

A. It would be to look at that -- the quad or the triple-header pump that -- that was used.

It's still kind of a -- a mystery to me. I think -- I think the pump works very, very, very well. I don't have any problem with it.

It's just a -- it -- it does not provide a lot of evidence for knowing where the shut-off is at the head without doing a lot of our own research and development.

And I think it's a -- I -- I don't know why it's not a good product. It's -- it's a very good product.

Q. Thank you.

Turning back to this other document, Defendant's Exhibit 71. You know, we've flipped

through several of these pictures.

Can you please confirm, are these pictures all true and accurate depictions of the 2012 manure expo?

A. Yes, they are.

MR. YACKEY: Objection; form.

A. (Continuing) Yes, they are.

Q. Thank you.

Ben, do all liquid-manure lagoons contain a crust?

A. No, they don't.

Q. Have you ever seen a liquid-manure lagoon that does not have a crust?

A. Yes, I have.

Q. How many would you say?

A. I would say 70 to 80 percent of our lagoons in our area do not contain a crust because they are swine lagoons. And the crust would be minimal to say the least. Maybe inches.

Q. Thank you.

MR. STEMLER: All right. I will pass the witness.

MR. YACKEY: Do you mind if we take a quick break, just because I -- I think we're probably nearing the hour and a half media unit

time.

MR. STEMLER: Yeah, that sounds good.

VIDEOGRAPHER: The time is approximately 1:12 p.m. We are going off the video record.

(Recess from 1:12 p.m. to 1:23 p.m.)

VIDEOGRAPHER: Stand by, please.

Time is approximately 1:23 p.m. We are back on the video record.

Go ahead.

MR. YACKEY: I believe I am up now. Is that correct, Taylor?

MR. STEMLER: You got it.

MR. YACKEY: All right.

EXAMINATION

BY MR. YACKEY:

Q. Thank you, Mr. Puck, for being here today.

My name is Scott Yackey. I'm an attorney here on behalf of Nuhn Industries.

You understand that you are still under oath today. Correct?

A. I do.

Q. All right. And during any of the breaks did you communicate with anyone about the deposition today?

A. Not at all.
Q. Okay. All right.
So I am going to share on my screen, if I can do this, what was previously marked as -- if it's too small, just please let me know. I can always make it --
A. I can make this out. That's just fine. Thank you.
Q. Okay. So Defendant's Exhibit 64.
And I believe you said this is the operator's manual for Puck's agitation boats.
Is that correct?
A. Yes, it is.
Q. And was this the operator's manual for all of Puck's agitation boats that it sold?
A. I believe that it was.
Q. Or at least was -- is representative of all of them?
A. Yes.
Q. Okay. So if we go down to page 17. And this is page 17 of the PDF itself.
Do you see the picture here on this page that says "Parts"?
A. Yes, I do.
Q. Which -- can you identify on here where

the liquid-manure pump is on the Puck boat?
A. Yes, I -- I can. It's a -- it's a -- it's a -- coupled to Number 17.
Q. And what's -- what's 17?
A. That would be the suction inlet pipe.
Q. Okay.
A. Suction.
Q. The -- is this, right here, part of the -- is this the liquid-manure pump?
A. Yes, it is.
Q. This, sort of --
A. Yep.
Q. -- that's fluid --
A. That's it.
Q. And what kind of pump was that?
COURT REPORTER: Just a reminder -- pardon me, Scott. You guys are talking over each other.
MR. YACKEY: Yes.
COURT REPORTER: And the audio will cut out. If you could, give each other a little space.
Thank you.
MR. YACKEY: Will do.
Q. (By Mr. Yackey, continuing) So this --

this blue-ish-teal pump is the liquid-manure pump on the Puck.

Is that correct?

A. Yes, it is.

Q. And what kind of pump did Puck use on its manure -- on its lagoon agitation boats?

A. That's a closed impeller.

Q. Okay. Can you explain what a closed impeller is for me.

A. Yes.

That means that -- that we -- a closed impeller has a suction cover. And so that -- that pump had a suction cover that forced the liquid to go through the impeller to be expelled to the outside of the volute to create pressure.

Q. And where -- where was the suction cover --

A. It --

Q. -- on this pump?

A. That is bolted to Number 17.

Q. Okay. And are there different types of impellers used in liquid-manure pumps?

A. Yes, there are.

Q. So this was a closed impeller. Correct?

A. Yep. Yes, it is.

Q. What are the other -- sorry.

What are the other types of impellers that are used?

A. You have an open-faced impeller that typically has no suction cover. It could have a partial suction cover, but doesn't really have a suction cover.

Q. Are the -- are closed impeller pumps generally more efficient than open impeller pumps?

A. That is where the word "efficiency" can be manipulated. And so efficiency is really the design point of getting work done, with all due respect.

And a closed impellered pump will create more pressure because the liquid goes through the impeller, not off the end of it.

And so we use that style of pump to create more total dynamic head or pressure with less diesel fuel.

Q. So that's more total dynamic head and less diesel fuel -- fuel used as compared to an open impeller pump?

A. Yes.

Q. Okay. And where is the pump housing of

the pump that's on the Puck boat?
A. The pump housing is -- is a -- is the face cover in the bearing -- the -- in the bearing -- the bearing section of the -- of the shaft. That is directly --
Q. Is that --
A. -- left-hand side of that.
Right there.
Q. Is it --
A. Yeah.
Q. -- this -- this part that includes the impeller inside of it?
A. The very -- the belt -- the -- the -- the bearing housing on -- I -- I -- could you repeat your question, please.
Q. Yes, I could.
Is this the -- is this what you would call the pump housing of the pump that was on the Puck boat?
MR. STEMLER: Objection; form.
A. (Continuing) That -- that could -- could be called that. It's called -- actually, the technical word is "volute."
Q. Volute.
And --

A. On mine.
Q. Okay. And is the impeller inside the -- the volute or pump housing?
A. Yes, it is.
Q. So was this volute on Puck's boat ever submerged in the liquid manure when the boat was floating?
A. No.
Q. And you said the impeller is inside the volute. Correct?
A. Yes. That's correct.
Q. Was the impeller ever submerged in the liquid-manure lagoon when the Puck boat was floating?
A. No.
Q. Who made the liquid-manure pump on the Puck agitation boats?
A. Cornell --
MR. STEMLER: Objection; asked and answered.
A. (Continuing) I'm sorry. Cornell Industries.
Q. And what does this -- this black piece here and then this hose coming down?
MR. STEMLER: Objection; form.

A. (Continuing) That's the suction -- suction hose that goes down to the -- below the surface of the water, to bring liquid up to the pump.

Q. And do you consider this -- this component to be part of the pump?

MR. STEMLER: Objection; form.

A. (Continuing) It's an integral part of the fluid inlet system.

Q. Is this a -- is this something that Corn- -- is the -- this flexible pipe -- is that something that Cornell made?

A. No, it's not.

Q. Did Puck make it?

A. Yes.

Q. Okay. Do you consider that -- this black pipe here -- to be part of the pump housing?

MR. STEMLER: Objection; form.

A. (Continuing) No. I would still -- I would still say it's the -- the suction inlet of the pump -- of -- of the liquid -- of the fluid delivery system.

Q. So why did Puck choose to use the pump that it did, rather than a submersible liquid-manure pump?

A. So that if we ran into opportunities --

restate that question for me, please.

Q. Why did -- why did Puck choose to use the pumps that it did on the agitation boat instead of a submersible liquid-manure pump?

A. We felt --

MR. STEMLER: Objection; form.

A. (Continuing) We felt that we needed the high head pressure to be able to complete the mission of -- of agitation.

And so with the high head pump, we would find that more unique with a closed impellered pump so that we could -- we could agitate into the deeper part of the lagoon more effectively.

And to --

Q. So --

A. -- for other uses, which would be, like, you know, feeding a drag-out system, for loading a wagon several hundred feet away, which we'd hook up to a load stand.

Q. Did you ever consider using a submersible liquid-manure pump on its agitation boats?

A. We did.

There physically is a -- is a -- is a -- a limitation of area to be able to get the pump down into the water. And if we brought anything

up to the pump that would close it off -- and the -- the things that we ran into in the dairy industry was, we would run into a -- you know, the -- the dairy mattresses, the cow mattresses that would sometimes get flushed out into the lagoon.

And on the swine side, we'd run into sorting gates, we would run into hog hides -- those types of things -- that the -- the pump would -- would suck up.

And so what we did, is, we put the impeller so that we could actually get at the impeller, to clean it out.

If it was submerged, it would require another apparatus to -- to pull it back up out of the water.

And, typically, it's -- it's -- it's a little bit more messy to be able to pull one out, because you're standing in front of the pump. And -- and to be able to extract that -- that lodged -- that lodged piece into it.

Whereas -- unfortunately, you give up something to get something else, if you understand -- you know.

That's why when I -- when we have it

inside the pump, we reach down into it, all the -- all the dirtiness is basically below my elbow. And -- and below, rather than being over my person, to -- to -- to work on it.

Because the activity that -- if a pump was plugged, still needs to be unplugged to make the -- the machine useful.

Q. So did you encounter a lot of plugging with the pumps on Puck's boats?

A. We did. We -- we encountered a lot of plugging with -- with every pump, in every step of the way.

We -- all our -- our vertical agitation pumps that we used, which at that time were Doda and Houle in this area, would get plugged.

Take the PTO shaft off, pull them up, clean them out. Clean the -- the clean the pump out. Reinstall. We get artificial insemination straws. We get all kinds of garbage, you know.

I can't believe how many -- how many cans of Diet Mountain Dew the hogs drink, but it's -- it's an enormous amount. And we pull them out all the time.

And so what we wanted to do was be able to make something that was -- if we had to clean it,

if we had to filter it, as you will, that it was done as quickly -- and the turnaround time was as fast as -- as we could -- we could.

And so we happened to stay with something very simple and something that we could deal with.

So let's say the boat plugged up. Boats plug up. Our boat plugs up. We clean it out. Two minutes, we're back running again.

If we -- if we unplug a vertical pump that we take out of a lagoon or if we've got to extract the boat out and then crawl up underneath the boat to look at the -- the impeller overhead, it takes a long time for them things to stop dripping before you pull that all back out.

And so we were managing the area -- that we could get somebody to actually work on it.

And so when we had the -- when we had the top off of our pump that -- you know, the suction part of it, that cap -- that cap would come off.

With one hand -- because that's all I could fit in there -- I could extract those things out of that pump 99 percent of the time. And it would take maybe two minutes to do it.

And I could put it back together and I

could go again.

So we were trying to keep it, you know -- it -- it sounds like a silly rule, but it's -- it's the KISS method.

Right?

Keep it simple, stupid.

We tried to keep this as simple -- because there was a -- because we were trying to build a bridge from -- from keeping everyone safe to figuring out what the next technology would be that we could afford to be able to be implemented at a later time. And training people how -- how this all works.

Pumps -- I mean, we -- we've -- we had drag-hose equipment. We were using drag-hose equipment to load wagons from a mile and a half away back in the day.

We would plug the pump up at the site.

What did we have to do?

We had to unhook all the pump -- all the hoses. We had to shut down gate valves. And we made a stinking mess when we uncoupled all the hoses. It was just a -- you know, it was just everywhere.

And we're supposed to like that

thing -- that type of stuff.

We really don't. This is our job.

And we need to figure out how to do our job so it -- so that in -- so we can make the circle of people that we hire a larger circle.

And if we gave them something that they wouldn't lease -- you know, I guess, I -- I've never complained about anything in my life.

And I should take my glasses off so I can wink at you.

It's not the fact.

We start putting in the long hours. It's like, well, you know, the pump plugged again. Okay.

So what are going to do with it?

Well, one thing you're not going to do is he should not be wearing all the liquid that needs to go to the field on his person.

So we'd stop. Unplug it. Try to make those -- those areas cleaner and -- and -- and -- and a better work environment to work in.

And so when we're in a deep pit, we'll pull up -- we'll pull up sorting gates. We'll plug off a hose -- we'll plug -- plug off a pump and it will just shut it off.

We'll pull up those dairy beds. We'll pull up -- like I said, pop cans. You name it, it's in those lagoons. Tumbleweeds.

Certain times of the year they go right through the pump. Sometimes they just don't go through at all. And rhyme or reason to that? I -- I'd like to write a book about it some day. We don't have the time today.

But plugs pump -- or pumps plug. And we just wanted to make it easy so that that turnaround time would happen.

And we then wouldn't lay on our back and look up at the pump. It has to -- it has to come out and it has to be in -- in a cleaned -- clean area.

Nobody is going to clean that pump out. The volunteer list -- the line of people coming from the field to come help you clean that pump out is pretty short.

Just trying to enable the situation that you can actually deal with.

Does that make sense?

Q. Yeah, that makes sense.

A. Thank you.

Q. So you -- you listed off a number of, you

know, solid items that you would find in the liquid manure.

Was that pretty common? The -- the cow bedding, the, you know, gates, the --

A. Yeah.

Q. -- Mountain Dew cans? Was that a pretty common experience for you?

A. It was not --

MR. YACKEY: Objection --

A. (Continuing) It was -- it was -- certainly was not -- not without a day that went by that you didn't encounter something like that.

And here is the important part of that. And -- and the reason why we use, like, a -- so the -- the feeder pump would be an open-faced impeller pump to -- just to -- to -- to walk you through the -- the thought process.

The idea was that we were going to use an open-faced impellered pump to feed the pump that was on the boat.

Right?

What that does is it takes additional horsepower. And what that does is it sizes -- it sizes the -- the particulate, if you will, because a large particulate will not go through

the pump.

If we can get that particulate through that pump, then we make pressure, we're happy. We're doing our happy dance.

If the -- the particulate is too large, it will partially plug that pump for a moment or a second or completely.

Now, there's a lot of tricks that we could do with the boat that we would -- so we'd shut the gates on the boat, for example. Shut the gates off. That -- that pump was -- was only -- only being able to get maybe 10, 15 gallons a minute into itself.

But it would produce. It would produce at 90 to a hundred pounds of pressure.

And then you just quickly open all the gates. And -- and it would actually pull that chunk either deeper into the -- into the volute, which is bad, or it would actually expel it.

And so the lack of understanding of how a pump works and how you can manipulate pumps was probably the bigger part of the learning process for our customers to become successful.

And as soon as we got past -- shall I show you how I can pat myself on the back?

As soon as I got past our -- myself being the sales staff and then we had -- we hired sales staff who did not have any time or effort on -- on being around these types of apparatus is -- is the moment that we knew we couldn't sell it, because no one knew what -- no one had any experience of knowing what they were talking about.

Q. So you -- I think you mentioned, like, a feed pump?

A. Yeah, a feeder pump.

Q. A feeder pump.

A. So we use, like, a lagoon pump -- the old art -- the old art was, we'd use a lagoon pump to feed a high-pressure pump in a drag-hose system to go to the field.

Okay?

What the -- the lagoon pump would do, it was -- it would size the particulate -- because the garbage was still in that lagoon, if we could get to it.

And it would size the particulate, send it into the -- the high-pressure pump, which was a closed impellered pump.

We just happened to use a very large

closed impellered pump for our -- for our -- our agitation boat.

If that makes sense.

Well, sometimes you would still plug that -- that -- that high head pump up because the inlet was so small.

We used to use a product called a 4 NHTB. And it's a -- a 200 horsepower is what would be required to be able to run a 4 NHTB high -- high head pressure to the field, you know. So we could make 170, -75 pounds of -- of line pressure to take us as far as -- until the next booster pump or until the drag hose would happen.

Does that make sense?

Q. It does.

A. And so -- so what we were doing is, we -- we didn't want to screen them -- the -- the solids. We wanted -- we wanted them out of the lagoon.

So we plugged up the boats every time we'd go to a new lagoon, because we were using -- always used lagoon pumps because that was a prior art. There's nothing wrong with a lagoon pump. And -- and they never plugged up.

Right?

Well, of course they didn't plug up, because the solids that -- the solids in the large place -- the -- the large things that were in the lagoon were not in proximity of that lagoon box.

We went and found them with the boats. All the boats went out and found them.

What -- whose boat? I don't care whose boat.

We went out and found all the garbage. We brought them to shore. We cleaned the lagoon out. We found more capacity for our -- our customers.

We just happened to use a high head pump -- pump because we wanted to use it in several different ways. And we used them in all those ways. That's why we -- we liked that pump.

Q. So would you have used that -- that -- that --

MR. STEMLER: Scott, do you mind if we take a short break whenever you've got a sec?

MR. YACKEY: I guess we could.

Any reason why?

MR. STEMLER: A bathroom break.

MR. YACKEY: Can I ask my next

question and then --

MR. STEMLER: Yeah.

MR. YACKEY: -- then we can take a short -- short break.

MR. STEMLER: Yep.

Q. (By Mr. Yackey, continuing) So would you have used, like, a, you know, water pump or an irrigation pump in Puck's boat?

A. No.

Q. Why not?

A. They are not efficient enough. They don't hit the high head pressure.

And so -- so let's just say that most of the manure pumps are between 65 and 70 percent efficient with energy.

Okay?

So a diesel -- a gallon of diesel fuel is our measurement of energy out here.

Roughly -- and I know we can -- we can dispute this up and down, but I'm -- I'm within a very small firecracker of being correct on this.

You get 20 horsepower out of a gallon of diesel fuel.

So if I would use a -- a 35 percent efficient pump instead of the 75 percent

efficient pump, it requires twice as much energy or I get half as much work done.

Q. Makes sense.

A. And that's -- that's why we use a -- a high-energy -- or a high-efficiency pump that plugs, because we are getting more energy out of it to be able to make more -- either pressure or flow. You can have one or the other. Or you got to subsidize both -- subsidize both of them.

Q. Okay. So if you had used a lagoon pump on the Puck boat, you'd have to use more diesel?

A. Horsepower.

Q. More horsepower?

A. Yeah.

So we put more -- more engine on it. A bigger engine that's going to use more horsepower, going to use more diesel fuel.

Correct?

Q. Correct.

And would it create a lower PSI than the pump that Puck used?

A. The -- the caveat to that is it would create lower PSI or it would create lower flow, because you can have one or the other, but you can't have both.

Q. Okay.
A. The only way you can move the ball is you -- you got to have a higher efficiency pump to be able to overcome that.
Q. Okay.
MR. YACKEY: All right. We can take a quick break, Taylor.
MR. STEMLER: Thanks, Scott.
VIDEOGRAPHER: Time is approximately 1:50 p.m. We are going off the video record.
(Recess from 1:50 p.m. to 1:56 p.m.)
VIDEOGRAPHER: Stand by, please.
The time is approximately 1:56 p.m. We are back on the video record.
Go ahead.
Q. (By Mr. Yackey, continuing) Okay. We're all back from a break. Mr. Puck, did you discuss this deposition with anyone during your break?
A. No.
Q. All right. I'm going to share on my screen -- this was previously introduced as Defendant's Exhibit 63.
Can you see that?
A. Yes.
Q. Is it clear enough for you?

A. Yes, it is.
Q. All right. So I am now showing -- or -- or you can see predominantly the second page of Defendant's Exhibit 63.
Do you see that?
A. Yes.
Q. And there's a table here with different flow capacities and engine and horsepower amounts.
Do you see that?
A. Yes.
Q. What's the lowest flow capacity that the Puck agitation boats had?
A. The lowest?
MR. STEMLER: Objection; form.
A. (Continuing) Excuse me. Did -- could you repeat that question.
Q. Yeah.
What was the -- the lowest flow capacity that the Puck agitation boats had?
A. That question is very ambiguous.
Q. So I'm -- I'm looking at this table. And it's got a column that says "Flow Capacity." And it's -- you know, goes 7,500 gallons a minute, all the way down to --

A. That -- that --
Q. 3,000 --
A. Yes.
COURT REPORTER: If I could -- if you could speak one at a time, you would get a little better record.
There was an interruption during that question. You might want to repeat it.
I've got:
"So I'm -- I'm looking at this table. And it's got a column that says 'Flow Capacity.' And it's -- you know, goes 7,500 gallons a minute, all the way down to --"
Q. (By Mr. Yackey, continuing) -- all the way down to 3,750 gallons per minute.
Do you see that?
A. I see that.
Q. So --
MR. STEMLER: Misstates the evidence.
A. (Continuing) So we go by the curve -- the pump curve that's published by the manufacturer of the pump.
Q. So if I'm looking at the row for "BOAT 1067" --
A. Yes.

Q. -- and under the column "Flow Capacity," it lists "3,750 GPM."

Do you see that?

A. Yes.

Q. What's "GPM"?

A. Gallons per minute.

Q. Is that the -- what does that number represent?

A. That represents -- that represents the flow of that pump, that pump's curve at the -- that -- that represents the pump's flow, meaning the NPSH and the minimal amount of ex -- external flow.

Q. So would you have used a pump that had less than 3,750 gallons per minute flow capacity on the Puck agitation boat?

MR. STEMLER: Objection to form.

A. (Continuing) Yes, we would have on some other boats that we had put together prior to this.

Q. Can you tell me more about that.

A. So we would use a -- one of the -- that we called them, lovingly -- the baby boats. We used a 4x4x14 pump with a four-cylinder John Deere engine that was shown in a -- a -- in an exhibit

earlier.

And it would have probably -- it would have pumped about 11 to 12 hundred gallons a minute at about 60 pounds of pressure.

Q. Would you have used a pump -- sorry. I'll let you finish.

A. We would have used a small pump in making a very, very light vehicle to go into a small concrete tank and/or a slurry store.

Q. Would you have used a pump that pumped less than 600 gallons a minute?

MR. STEMLER: Objection; form.

A. (Continuing) I wouldn't know why.

Q. You wouldn't know why you would have used it?

A. No. No. The answer is no.

Q. Okay. And then do you see -- still on Exhibit -- Defendant's Exhibit 63.

Do you see the column in this table where it says -- the heading is "John Deere"?

And at the top it has a 9 liter, 375 horsepower for BOAT 4010.

And then all the way at the bottom of this table there's "BOAT 1067." And it lists a 6.8 liter, 185 horsepower John Deere.

Do you see that?
A. Yes.
Q. Would you have used an engine less than 185 horsepower?
MR. STEMLER: Objection; form.
Q. (By Mr. Yackey, continuing) -- agitation boat?
A. Yes.
Q. How -- how much less?
A. The four --
MR. STEMLER: Objection to form.
A. (Continuing) The four- -- the four-cylinder engines that we had used on those prototype small boats were rated at 90 horsepower.
Q. Would you have used a -- an engine that only had 75 horsepower?
MR. STEMLER: Objection; form.
A. (Continuing) No.
Q. Would you have used an engine that only had 35 horsepower?
MR. STEMLER: Objection to --
A. (Continuing) No.
MR. STEMLER: -- form.
Q. (By Mr. Yackey, continuing) Can you repeat

your answer, Mr. Puck.
A. No.
Q. Have you ever heard of a pump's providing a certain amount of power in the form of kilowatts?
A. Yes.
Q. So would you have used a pump that could deliver, at most, 40 kilowatts of power?
MR. STEMLER: Objection; form.
A. (Continuing) I would need to check the table and see what that related to.
Q. What if I asked it -- would you have used a pump that could deliver, at most, 50 -- 55 horsepower?
MR. STEMLER: Objection; form.
A. (Continuing) No.
Q. Why not?
A. It's work over time.
Q. Can you explain that a little more.
A. I get more work done in a shorter amount of time with more horsepower. It's the horsepower equation.
Q. So you would not have used a -- a 54-horsepower pump for a liquid-manure agitation boat?

A. No.
Q. So earlier today we looked at some exhibits of, I think, an early boat that you had built, that you said had a -- two Doda pumps?
A. Yes.
Q. Why did you not use those same style pumps on the Puck agitation boat that was eventually sold?
A. Because they ran about 35 percent -- 30 percent efficient.
Q. Is that each pump?
A. Yeah. Their efficiency was 30 percent of -- of the energy that -- that went into them.
Q. And so you wanted something with a higher efficiency?
A. Yes.
Q. And were you using those Doda pumps for agitating the liquid manure?
MR. STEMLER: Objection; form.
A. (Continuing) We were actually using the Doda pumps to size the particulate that we sent to the shore in that -- in that regard, in that video or that photograph that we shared.
And so the Doda did a better job of sizing the particulate going to the shore, which then

ran into a high head pump to go to the drag- hose system.

Q. I believe you also said you used a -- a Houle pump --

A. Yeah.

Q. -- mounted on a -- you know, a different boat?

A. Yes.

Q. Was that the one that was kicking up the solids?

A. Yes.

Q. At the bottom of the lagoon?

A. Yes.

MR. STEMLER: Objection --

MR. YACKEY: And no -- go ahead, Taylor.

MR. STEMLER: Sorry.

Objection; form.

Q. (By Mr. Yackey, continuing) So can you explain more of how that process worked with those two Houle pumps -- the Houle pump on the one barge and then the two Doda pumps on the other.

A. Yes.

The Houle pump would -- would bring up --

would move a massive amount of liquid through a nozzle -- a long, slope-nosed nozzle that would increase the velocity. And it would shoot at the heel of those other two Doda pumps.

The Houle pump would move a very large solid. It could take a big solid and bust it up some.

The Dodas would even break it up a little bit more because the inlet hole of the Doda was less than nine inches. And the inlet -- and the inlet to that Houle pump was, like, 12 inches.

And so it had a cavity that could handle a larger solid and then bust it and then send it up to those other two pumps that were near the bottom of the lagoon. And they would actually chew it one more time.

Q. So it was, like, a two-stage process?

A. Yes.

Q. So if I understand you correctly, the -- the Houle pump would suck up the larger solids in the liquid manure, break it up, shoot it out the nozzle.

And then the Doda pump could only handle the smaller solids.

Correct?

A. That's right.

Q. Okay. Did you ever use the Doda pump without also using the Houle pump?

A. Yes.

We used a -- Houle pumps at that time for lagoon agitation prior to the boats. And we also used a drag-hose system in that art.

And we found that when we bought a Balzer lagoon pump, it had a Doda pump on it. And we could stay running much, much longer using the -- the -- the Balzer pump than we could with the Houle.

The Houle would displace more liquid, but we were plugged up with our main pumps. Our high-pressure pumps at that time were only passing two-and-a-half- to three-inch solids. And so it would basically chew that up.

We would continue to use the Houle pumps around the outside perimeter of the lagoons, but we would feed it with that Doda pump.

Q. Was that the same -- same Doda pump -- was it the SUPER 150?

A. Yes, it was.

The Balzer used that pump on their lagoon pumps.

Q. And was that used on the edge of the lagoon or --

A. Yes.

Q. Did you use the Balzer pump on a barge?

A. We -- we did with those -- with that tin can, we called it. With that earlier -- earlier experimenting of a floating agitation, yes, we used the Doda pump.

Q. Okay. So I think you said -- or do you -- do you remember when this brochure was first made?

A. Not exactly, no.

MR. STEMLER: Are you referring to an exhibit, Scott?

MR. YACKEY: Oh, I'm sorry. I -- I stopped sharing my screen. I apologize. Give me one second.

Q. (By Mr. Yackey, continuing) All right. Can you see my screen now?

A. Yes.

Q. And so we're -- we're showing, again, Defendant's Exhibit 63.

Do you see a date anywhere on this exhibit?

A. Could you scroll back up, please.

Q. So right now I'm showing page 1. Do you want me to scroll down to page 2?
A. Please, yes.
Q. All right. Here is page 2.
A. No, I do not see a date on it.
Q. Do you think this was before 2013?
A. Yes, I do.
Q. Why do you say that?
A. Because we had just introduced the cutter pumps at that time. And that was one of the last group of boats -- that year was one of the last groups of boats that -- shortly after that we changed the remote controls on the boats and went to a belly pack joystick.
This was --
Q. So you know --
A. This was when MobileStar was the -- was the -- was the -- was the communication platform.
Q. Okay. Do you know when this photograph was taken that's on the flier here?
A. No, I don't know for sure.
Q. Do you know where this photograph may have been taken?
A. I think I do.
Q. Where do you think?

A. That was south of Mersed, California.
Q. And so what year do you think that was?
A. I don't remember for sure. It was -- it had to be 2013.
Q. Do you know when in 2013?
A. It looks like a -- it's always sunshiny in Southern California. I would say it was probably around July.
Q. Okay. So if this -- if I said that this exhibit -- or sorry -- this flier and this exhibit had a create date of September of 2013, does that sound about right?
A. Yes.
Q. Okay.
A. Or later.
Q. Later?
A. Prob- -- probably it would have been prepared for the 2014 sales year.
Q. So potentially later than September of 2013?
A. Yes.
Q. Okay. Give me one moment.
Sorry. I'm having a couple technical difficulties here. Give me one second.
(Previously marked Deposition Exhibit

No. 3 introduced.)

Q. (By Mr. Yackey, continuing) All right. I'm now -- I've now introduced Plaintiff's Exhibit 3 into the record.

Do you see this, Mr. Puck?

A. Yes, I do.

Q. And this is a printout from Puck's website. Do you see on the left-hand side the link here?

A. Yes, I do.

Q. Can you read that for me.

A. The -- the paragraph, you mean.

Q. No. Just the -- the web address.

A. Yes. Https//puck.comproductagitationboats [sic].

Q. Does this appear to be a printout from Puck's agitation boat's website?

A. Yes.

Q. So I've now scrolled to page 9 of this printout. Do you see where that is?

A. Yes.

Q. Do you see the heading, "Minimal Maintenance"?

A. Yes.

Q. Can you read the paragraph that's right

under there that starts "Puck's proven."

A. "Puck's proven performance is evident in the agitation boat's simple, powerful design with a pump that is easy to access for cleanout.

"Only two moving parts under the water and three grease points to maintain.

"This agitation boat is built to keep working day after day, decreasing downtime and keeping your operation flowing."

Q. So what were the two moving parts under the water that this paragraph refers to?

A. The front gun and the back -- the back gun. The back yoke.

Q. The --

MR. STEMLER: Scott, what -- sorry.

THE WITNESS: Sorry.

MR. STEMLER: Scott, I'd like to make an objection that this document has not been produced in this litigation and defendants have not been given any notice of plaintiff's intent to use this document.

This unfairly advantages us in this deposition -- disadvantages us.

MR. YACKEY: This is from Puck's publicly available website.

MR. STEMLER: Still, you should have produced in -- in advance of this deposition if you intended to use it.

MR. YACKEY: I -- I didn't know that I would be using it until I introduced it.

MR. STEMLER: Okay. I'm making the objection for the record.

MR. YACKEY: All right.

Q. (By Mr. Yackey, continuing) Let me regain my train of thought there, Mr. Puck.

You said that the only two moving parts under the water were the -- the rear yoke and the front gun.

Is that correct?

A. Yes. The front steering gun.

Q. The -- and that's different from the front cannon. Is that correct?

A. Yes.

Q. Okay. So were there any hydraulic lines under the water on Puck's agitation boat?

MR. STEMLER: Objection; form.

A. (Continuing) The -- the steering gun in the very front has two hydraulic hoses under the water.

Q. Was the hydraulic -- was there a hydraulic

actuator that moved that front gun?
A. A hydraulic cylinder.
Q. Was the hydraulic cylinder under -- in -- in the liquid manure when the boat was floating?
MR. STEMLER: Objection; form.
A. (Continuing) Just -- just right at surface level.
Q. Can you explain that.
A. Yes.
As the steering gun goes side to side to -- to create it, it's turned up -- up on the top of it with a -- with a short arm.
And so that cylinder that moves that short arm back to -- that turns the gun back and forth is right at surface level. The hydraulic hoses are actually attached to the hydraulic cylinder.
Q. Okay. So was that hydraulic cylinder in the liquid manure when the boat was floating?
MR. STEMLER: Objection; form.
A. (Continuing) That's a -- that's -- depends on how you were using the boat, yes.
Q. Was it designed to be above the liquid manure when the boat was floating?
MR. STEMLER: Objection; form.
A. (Continuing) No. Wasn't designed that

way. It was designed to be used close to the surface as possible.

Q. The front cannon on the Puck agitation boat?

A. Yes.

Q. Could it move relative to the boat?

MR. STEMLER: Objection; form.

A. (Continuing) It's fixed.

Q. Okay.

A. It moves the boat.

Q. But it doesn't move relative to the boat. Correct?

MR. STEMLER: Objection; form.

A. (Continuing) Can you give me another question.

Q. Right.

So the angle of the front gun does not change with respect to the boat. Correct?

A. Correct.

Q. Okay. So did Puck design the Puck agitation boat to minimize the number of components that were in the liquid manure when the Puck agitation boat was floating?

MR. STEMLER: Objection; form.

A. (Continuing) Yes.

Q. Why?
A. It's a hostile environment.
Q. Can you explain how it's a hostile environment.
A. It's corrosive. It's of a different pH.
Q. Is that one of the reasons why you didn't include wheels on the Puck agitation boat?
MR. STEMLER: Objection; form.
A. (Continuing) Not necessarily.
Q. I think earlier you said that -- with lagoon pumps that had wheels, that you saw issues with bearing hubs and seals after they had been submerged in the liquid manure?
Is that correct?
A. That's correct.
MR. STEMLER: Objection; misstates earlier testimony.
Q. (By Mr. Yackey, continuing) You said "that's correct"?
A. That's correct.
Q. What sort of issues did you see?
A. The tire actually being dislodged from the vehicle, from the lagoon pump.
Q. How -- how did that happen?
A. The -- the -- the bearings would lock up

and become hot, disintegrate. And you'd lose the hub and the tire.

Q. Do you know why the -- there -- that failure occurred?

MR. STEMLER: Objection; form, foundation.

A. (Continuing) They were put in a -- they were put in a hostile environment.

Q. So you considered the bearings locking up and the tire coming off a failure?

MR. STEMLER: Objection, form.

A. (Continuing) I -- it's less than a success.

Q. And was that due to them being submerged in the liquid manure?

MR. STEMLER: Objection; form.

Q. (By Mr. Yackey, continuing) Was that a "yes," Mr. Puck?

A. Yes.

Q. Okay. And did this influence your decision not to include wheels on the Puck agitation boat?

MR. STEMLER: Objection; form.

A. (Continuing) I -- we didn't -- we -- we -- we tried wheels on -- on a boat -- several

of them.

You take that much more weight and you put them on a tire that's not driven and your PSI of surface area of either the skid or the tire, to carry it, will have to be reckoned with.

So, for example, if I take a 8,000-pound boat and I put it on two, four, or six, eight wheels, I've got to carry that much weight per tire.

Those -- the -- the sides of most of the lagoons in our area, first of all, were not paved. They were not concreted. They did not -- none of them were afforded a ramp. And so, actually, we just drove the tire deeper into the side of the lagoon as you pulled it out, because of the wet nature of the sidewalls of the lagoon.

We did less damage pulling the -- the boat out on skids than we did with -- with tires tracking up the -- up the sides.

Q. And I think we looked at some photographs earlier, of early Puck designs.

Did any of those photographs show wheels on a Puck boat?

A. No, they did not.

Q. Are you aware of any photographs that show

wheels on a Puck boat?

A. I think there might be some that exist. We actually made a pair of boats for a customer up in northern Iowa that had -- you know, had launching wheels on it.

It was a total -- total waste of time. Exactly operated as we predicted. They impaled --

Q. Do you --

A. They impaled the side of the lagoon and pulled just as hard pulling it out that way as it did to slide it.

Q. Do you recall when that was?

A. Not exactly.

Q. Was it before 2013?

A. The tin can that -- that -- that gray piece of equipment that we see at the very first, you know, where the two pieces were bolted together -- it had a pair of wheels on it. And a pair of 385, 225 wheels on -- on the interior of it.

Never had a picture of it. We've not had a picture of it.

Q. And -- were just two wheels, you said?

A. Yes.

Q. Were they unpowered?
A. They were unpowered.
Q. Did -- for the lagoon that you mentioned in northern Iowa, did that damage the lagoon in any way, with the wheels?
MR. STEMLER: Objection; form. Objection; foundation.
A. (Continuing) It -- it made deeper ruts than what the -- the skid did, pulling them out.
Q. Okay. I want to go back to, sort of, more basics about, you know, pumping liquid manure.
Does it get harder or easier to pump as you agitate the lagoon?
MR. STEMLER: Objection; form.
A. (Continuing) The thicker the liquid manure, the harder it is to pump.
Q. Did the liquid manure get thicker as you were agitating it?
A. That was the goal. So we could get the -- the solids out of the bottom to regain storage of the lagoon.
Q. So did it take -- was it more of a load on the engine as you were agitating the lagoon?
MR. STEMLER: Objection; form.
A. (Continuing) Not necessarily, because

it -- the -- the thicker the manure got, the less pressure you could make with it.

As we had talked about earlier, you've got flow and pressure.

Q. Uh-huh.

A. And so less flow, less pressure. Horsepower requirement does not -- does not have to go up.

Q. Okay. Now, you said the goal was to -- to make the liquid manure thicker as you agitate it.

Correct?

MR. STEMLER: Objection; misstates earlier testimony. Objection; form.

A. (Continuing) The goal is to get it as -- as homogeneous as possible. So we took a little bit more solids at the beginning so we didn't have to deal with all the solids at the end.

Q. Okay. All right. I'm sharing on my screen now -- which was previously introduced -- Defendant's Exhibit 65.

Do you see that on your screen?

A. Yes, I do.

Q. And you see it's Bates-labeled Puck 4?

A. Yes, I do.

Q. Puck -- Puck 43?

A. Yes.
Q. Puck 44?
A. Yes.
Q. And Puck 53?
A. I believe so, yes.
Q. Did you say these were all before 2010?
MR. STEMLER: Objection; form.
A. (Continuing) The -- that vehicle was built before 2010. Whether that picture was taken after that, shortly after that -- I don't know when the picture was taken.
Q. But the -- the boat was built before 2010?
A. Yes.
Q. Do you know when the boat was built?
A. I mean, I'd say yes, but the date -- I don't know that. A -- a -- I can tell you the year.
Q. What year?
A. I would say 2008.
Q. And you said -- did you say that you used it as part of your business?
A. Yes.
Q. And was that in 2008?
A. Yes.
Q. And in 2009?

A. Yes.
Q. Okay.
A. We would use that boat for at least three to four years.
Q. Okay.
MR. YACKEY: All right. Do you mind if we take a five-minute break?
MR. STEMLER: Nope.
MR. YACKEY: All right.
VIDEOGRAPHER: 2:35 p.m. We're going off the video record.
(Recess from 2:35 p.m. to 2:45 p.m.)
VIDEOGRAPHER: All right. Stand by, please.
Time is approximately 2:45 p.m. We are back on the video record.
Go ahead.
Q. (By Mr. Yackey, continuing) Welcome back, Mr. Puck.
A. Thank you.
Q. Speak with anybody during your break?
A. No, I have not.
Q. All right. So I was asking some questions earlier about the liquid manure getting thicker as you -- as you pumped it, if you recall my

questions.
A. Yes.
Q. And I -- I may try to clarify some of my -- my questions for you or ask another one maybe in a better way.
Does -- does Puck track the load on the engine while you're agitating the liquid-manure lagoon?
A. We didn't to begin with, no.
What we looked at is time and fuel consumption.
Q. Okay. Do you now track the load on the engine during agitation?
A. The -- the Cat -- the new series Cat engines -- has that capability. And with the LightSpeed we can actually track that, yes.
Q. So do you see the load increasing throughout the course of agitation?
A. I don't --
MR. STEMLER: Object to form.
A. (Continuing) I don't know that because this -- this technology is -- basically the last two years we switched to Cat engines. And so I am not personally -- but I -- I -- I can give you an opinion of how that works, if you'd like.

Q. Sure.

A. So when -- when you look at a -- you -- you -- you've got gallons per minute. You got PSI. And you also have specific gravity and you have the fourth, which is viscosity.

And so -- so viscosity is -- is -- is the speed in which a liquid would flow, for example. Viscosity of an oil would be probably most likened, or milk, or whatever you want to call it.

But, you know, this -- therefore you can actually mix, like, limestone into -- into water and change it from 8 and a half pounds per gallon to maybe up to 10 to 11 pounds per gallon.

You can mix sand that they bed the cows in, up to, you know, I've seen 11 -- I've seen 10 and a half to 11 pounds per -- per gallon.

There's easy ways to measure that because, you know, these 7.48 gallons in a cubic foot. And simply a scale will tell you a lot of that, what you need to know.

Now, the problem is that when you take sand and you put it into a container that's been entrained and if you've been agitating that and you dump it out, now you -- there's a viscosity.

The sand does not have the same viscosity as water because water will come right off the top.

Does that make sense?

And the only thing that we would have to be able to glue it together is the liquid manure and/or the -- the -- the fibers in the liquid manure to hold it together, for it to hold.

Q. Okay.

A. And so -- so you when take all those things into consideration, you -- you look at -- at how much fuel you're burning and what you're getting done.

And -- and there's no way -- there really isn't much way around it, except use a very efficient pump with very good techniques.

Don't -- you leave a pump sit in a corner and all you're going to be doing is pumping water after a little while, because you're pushing the solids further away.

Anything with specific gravity higher than that, that has -- that is slower at that snail race coming back to the pump is now out of play.

And so we can pump -- you know, we can pump down a corner of a lagoon. And if we don't

move a lagoon pump or we don't move a boat, it doesn't do us any good.

The mobility is what does the agitation the greatest amount of good.

Q. Is that because you're able to pull up the solids around the entire lagoon?

MR. STEMLER: Object to the form.

A. (Continuing) And we -- and we keep them entrained that way.

I'm sorry. I spoke too soon.

Q. You're -- you're okay.

So before you were able to track the load through the new Cat engines, you -- did you track, sort of, the amount of gallons of diesel fuel that you were burning throughout the course of agitation?

A. Yes. But --

Q. Did you -- go ahead.

A. The -- so -- so we can track that. And we -- we have tracked that in the past. But the speed in which it goes to the field is the most important thing.

If we're pumping to the field at a thousand gallons a minute, we're pumping to the field at 3,000 gallons a minute, it makes that

lagoon -- or it makes that agitator -- or agitators take three times longer.

Does that make sense?

Q. Not exactly. Can you explain it a little more.

A. Yep.

I've got a hundred cookies. I've got three hands in the cookie jar and we're taking cookies out.

Or I've got one hand in the cookie jar.

It takes a lot less time for three cookies -- three hands to empty the cookie jar than it does one hand.

So in a thousand gallons a minute -- I've got a million-gallon container. And at a thousand gallons a minute, if I was 100 percent efficient, it should take me a thousand minutes.

Right?

Q. Uh-huh.

A. If I -- if I pump 3,000 gallons a minute, it should take me 333 minutes, if I was 100 percent efficient.

Q. Okay.

A. That makes sense?

Q. Yeah.

So what I'm wondering, though, is -- focusing on the Puck agitation boat in the liquid-manure lagoon.

A. Yes.

Q. As you were moving in the lagoon and agitating the liquid manure, did you see a increase in the amount of diesel fuel burned as you were continuing to agitate?

MR. STEMLER: Objection --

Q. (By Mr. Yackey, continuing) The rate of fuel consumption. Did that go up?

MR. STEMLER: Objection; form. Objection; foundation.

A. (Continuing) Probably some because -- but once we get -- get it suspended, to make the diesel fuel that we just burnt more valuable, our effort to get it to the field makes even less diesel -- diesel fuel be burnt.

Instead of running that lagoon pump for -- that boat for a thousand minutes, if we can move it -- if we can -- if we can run it for 330 minutes, then we got a million gallons to the field, we cut our fuel consumption by at least 200 percent.

Right?

So it's work over time. It's -- it's -- and that's just always work over time.

Q. Okay. You mentioned that there's sand in liquid manure?

A. Yes. A lot of the dairies will push out -- they bed with sand. And they basically will -- some of them used to use waterbeds and actually sand -- put sand around the waterbeds so that it keeps them settle- -- stead- -- steady.

And that sand will now get pushed out by the cows' activities in the free stall and gets pushed into the alley. And whether it's sucked up with a -- a vac truck or if they use a scraper system or a flush system, it finds its way to the lagoon.

Q. And so did that sand get sucked up by the pump on the Puck agitation boat?

A. Yes.

Q. Did that sand cause wear issues?

A. Yes. That's why we chose to use a -- a closed impellered pump that was made of a high nickel steel or, you know, hot -- very hard materials.

Q. So were there other components in the liquid manure that were similar to sand?

MR. STEMLER: Objection; form.

Q. (By Mr. Yackey, continuing) Let me restate my question.

Did farmers use other types of bedding materials, other than sand?

A. Yes.

Q. What types of bedding materials did they use?

A. Wood chips. Sometimes a -- straw. Anything -- anything that can actually be used as a bedding. Something to warm the animal, make the animal comfortable -- were used.

Q. And did all of that end up in the liquid manure?

A. Yep.

Q. And that would get sucked up by the pump -- the liquid-manure pump?

A. Yep.

MR. STEMLER: Objection; form.

Q. (By Mr. Yackey, continuing) And did the wood chips and the straw -- does that cause wear on the liquid-manure pumps?

MR. STEMLER: Objection --

A. (Continuing) Yep.

MR. YACKEY: -- form.

A. (Continuing) Yes, it did.
Q. So would you have used a -- a pump that's not designed for a liquid-manure environment with those bedding materials present?
MR. STEMLER: Objection to form. Objection to foundation.
A. (Continuing) Better -- better -- could you state that -- restate that.
Q. Sure.
So would you have used a -- a -- a pump that wasn't designed to be used in liquid manure in the Puck agitation boat?
MR. STEMLER: Objection; form. Objection; assumes --
A. (Continuing) What type of a pump is not designed to pump?
Q. All right. Let me restate my question.
In view of the bedding materials in the liquid manure --
A. Uh-huh.
Q. -- would you have used a pump that was not designed for use in liquid manure on your Puck agitation boat?
MR. STEMLER: Objection; form. Objection; foundation.

A. (Continuing) I -- I personally would have used anything but a string and a bucket.

Q. Okay.

A. I won't do that.

Q. I --

A. Our -- our -- our industry uses whatever is available and whatever makes sense. And -- and, you know, a -- we -- we use what's available.

And -- and that -- that's why the evolution of this industry is so important, to have innovation brought to it.

There is -- that -- as far as I'm concerned, there's no such thing as -- as a water or a manure pump. A pump is a pump that is -- is designed to deal with -- with the attributes that you're trying to overcome. That's all I know.

Q. Does -- does Cornell market a line of manure pumps?

MR. STEMLER: Objection; form. Objection; foundation.

Q. (By Mr. Yackey, continuing) Do you know -- do you know if Cornell markets a line of manure pumps?

A. They market a line of pumps that are used

in the manure industry.

Q. Okay. Were the flotation devices on Puck's agitation boat -- were those filled with foam?

A. No, they weren't.

Q. Were they ever filled with foam?

A. I -- I think we had several customers that -- that filled them with foam, but we -- on my watch, we -- we never filled one of them with foam.

Q. Was there a reason for that?

A. Yes.

Q. And what was the reason?

A. Weight. Foam is heavy.

Q. Okay. So you -- you didn't want to add foam because it increased the weight of the vehicle?

A. Yes.

Q. And why would that be bad, to increase the weight of the vehicle?

A. I'm trying to make it float.

Q. Okay.

A. So I would have to increase the amount of flotation devices that were required to get it to float and to perform correctly.

Q. Did the early Puck design that used the fuel tanks -- do you recall talking about that?
A. Yes.
Q. Was -- was there foam in those fuel tanks?
A. No. It -- there's diesel fuel in the -- in the fuel tanks.
Oh, oh, I'm sorry. I -- I misunderstood.
We were talking about the steel tank that was a fuel tank that I con- -- converted into a boat.
Correct?
Q. Correct.
A. Okay. No, there was no foam in it.
Q. Okay.
A. That was an open container.
Q. Okay. And then do you recall that on that early Puck design that used the two Doda pumps --
A. Uh-huh.
Q. -- those pumps appeared to be connected to hoses that were going away from the vehicle.
Is that correct?
A. Yes.
Q. And so was the -- was the Doda pump used to pump liquid manure out of the lagoon?
A. Yes. To shore.

Q. Okay. I think you testified earlier that Puck tried to make its products simple to maintain and use.

Is that correct?

A. Yes.

Q. Would have added -- would have adding wheels to Puck's boat added cost?

A. Of course.

Q. Would have -- would it have added complexity?

A. Yes.

Q. Would it have been more costly to maintain?

MR. STEMLER: Objection; form. Objection; foundation.

A. (Continuing) It would have -- it would have been something else to maintain.

Q. Would have added powered wheels to Puck's boat increased the cost of the Puck agitation boat?

A. Yes, it would have.

Q. Would have added -- adding powered wheels to Puck's boat increase the complexity of its boat?

A. It would have required a -- a hydraulic

system that was -- would be much more robust than the ones that require just a -- several hydraulic cylinders, yes.

Q. Would it have been more costly to maintain?

A. I don't know the maintenance cost of wheels, so I -- I can't accurately give you that answer.

Q. We looked at a bunch of photos earlier that I believe are from the 2012 manure expo.

A. Uh-huh.

Q. And Mr. Taylor -- or Mr. Stemler asked you numerous questions about those different photographs.

A. Yes.

Q. Did you take any of those photographs?

A. No.

Q. Did you see yourself in any of those photographs?

A. Yes.

Q. Do you know where those photographs came from?

A. Several sources.

Q. And what were those sources?

A. The Manure Manager magazine, as well as my

daughter, Nancy. Probably my son, Jeremy, was taking some photos.

Q. I'm going to share my screen real quick.

Do you see Defendant's Exhibit DX 71 on your screen?

A. Yes, I do.

Q. And so these are the photos that I was referring to. They have the -- UOWM Bates label on them?

A. Yes.

MR. STEMLER: Scott, do you mind if I interject, for the record, please?

I -- I don't -- I don't want Mr. Puck to be confused by your line of questioning.

These -- these -- these are not photos that have been provided to Bazooka's counsel. Bazooka's counsel obtained these pictures from a third-party source.

So I don't -- I don't think it's appropriate to be questioning him on -- Ben -- I don't think it's appropriate to be questioning Mr. Puck on the source of these photos.

MR. YACKEY: So you're representing that he is not the source of these photos?

MR. STEMLER: That's correct.

MR. YACKEY: Okay. That's what I was trying to get at in my line of questioning with Mr. Puck.

MR. STEMLER: Understood.

Q. (By Mr. Yackey, continuing) So is that correct, Mr. Puck, that you are not the source of these photographs in DX 71?

A. Yes, that's correct.

Q. And that you did not take these photographs?

A. I did not take those photographs.

Q. And your daughter, Nancy, and son, Jeremy, did not take these photographs?

A. I can't speak for that, no. I don't know that. I don't know where these photographs were sourced from.

Q. Okay. Earlier Mr. Stemler showed you a brochure of a -- of a vehicle that you said you had considered previously.

Do you recall seeing that --

A. Yes.

Q. -- that image?

MR. STEMLER: Objection; form. Objection; misstates earlier testimony.

Can you show the video you're -- you're

talking about or the picture you're talking about, Scott?

MR. YACKEY: Yeah, I will. I will in a moment.

Q. (By Mr. Yackey, continuing) Do you happen to know what the name of that vehicle was?

A. Not offhand, I do not.

Q. Okay. All right. I've now shown on my screen a previously introduced exhibit, Defendant's Exhibit 33.

Can you see that?

A. Yes, I can.

Q. Had you seen this exhibit prior to your deposition today?

A. No, I have not.

Q. I'm now on page BAZ15 0001326.

Do you see that?

A. Yes, I do.

Q. And I apologize. I'm actually going to scroll up one more -- one more page, to BAZ15 0001325.

Do you see that?

A. Yes, I do.

Q. Had you seen this --

A. I re- -- I -- I'm sorry.

Q. I'm sorry -- sorry for the pause.

Had you seen this document before your deposition today?

A. It seems as though I have. I -- I believe that I have. I've seen lots of different types of amphibious vehicles in the past.

Q. Can you recall specifically when you may have seen this document before today?

A. No, I can't. I would believe that ever since 1995 we've always been seeking something on the marketplace and understand how -- how and why people do things.

Q. But, sitting here today, you can't tell me when you may have seen this previously?

MR. STEMLER: Objection; asked and answered.

Q. (By Mr. Yackey, continuing) Is that a -- is that a no?

A. Not exactly, no. I -- I -- I would say that it was a long time ago, because I paid a lot more interest in this -- oh, prior to 2011, '12, than I have since because we, kind of, got what we got and we ran with it.

Q. I'm going to be introducing another exhibit here shortly.

(Previously marked Deposition Exhibit No. 4 introduced.)

Q. (By Mr. Yackey, continuing) All right. I've now introduced Plaintiff's Exhibit 4 on the screen.

Can you see that, Mr. Puck?

A. Yes, I can.

Q. And do you see in the bottom right-hand corner it says BAZ15 0001340?

A. Yes, I do.

Q. What does this appear to be?

A. That is the -- an early submission for a patent of the boat.

Q. And is this Publication No. US 2014/0112093?

A. It appears to be.

Q. And is this you listed as -- as the inventor?

A. Yes, it is.

Q. Okay. So I just want to ask you a few questions about -- about this exhibit.

All right. So this is Figure 1 of this patent publication. Have you seen this before?

A. I'm sure I have.

Q. Can you point out to me where the hydraulic pump is in Figure 1.

A. No, I can't.
Q. Okay. Do you know if there was a control manifold on what's shown in Figure 1?
MR. STEMLER: Objection; form.
A. (Continuing) There doesn't seem to be a call-out to it on this -- on this angle of this photo.
I can tell you where the hydraulic pump would have been, but you can't see --
Q. Okay. Where --
A. I -- it would be on the other side of the engine.
Q. Is it a -- can you see it in Figure 2?
A. Not at that angle, you cannot see the pump.
Q. And that's -- you're referring to the hydraulic pump?
A. I believe that's -- yes. That's what I was referring to.
MR. STEMLER: Scott, could you -- could you please identify which reference numbers the control manifold and the hydraulic pump are noted with in the specification in this patent application.
MR. YACKEY: I -- I can. I was

asking the witness if he could -- if he could find them for me, but I'm...

Q. (By Mr. Yackey, continuing) So this application -- if we go to -- give me one second.

If you look at paragraph 27. It says, "a hydraulic pump (54)."

Do you see that?

A. I'm not following it. Could you cursor it -- right up there. Okay.

Q. Yeah, let me see if I can --

A. 47.

Q. Exhibit Share is not allowing me to highlight it, but I'm going to attempt to highlight it with Zoom.

A. Okay. I see.

Q. I apologize. I struck through it.

A. Yep.

Q. Do you see where I am now?

A. I'm in that area now. Yes, I am.

Q. All right. So it -- you see where it references "a hydraulic pump (54)"?

A. Yes.

Q. And then "is coupled to a 12-volt battery (56)"?

A. Yes.

Q. So was the hydraulic pump powered by the 12-volt battery?

A. Yes, it was.

Q. And --

MR. STEMLER: Object to form.

A. (Continuing) The -- I misspoke earlier. It was powered by a 12-volt battery. We had two 12-volt batteries with pendant switches.

Q. What did those switches do?

A. Forward and backward, left and right. And so they were hooked to the remote control, to the relays.

And the first boats were -- were actually powered -- the hydraulic system was powered by portable 12-volt hydraulic pumps.

Q. Okay. And do you see in paragraph 25, where it says, "Coupled to the power source (36) is a liquid-manure pump, such as a slurry pump (38). In the preferred embodiment the slurry pump 38 is a Cornell Redi-Prime centrifugal pump capable of handling both solid and liquid material"?

A. Yes, I see that.

Q. Is that also representative of the Puck agitation boats that Puck sold?

A. Yes.
Q. And I'm now showing Figure 4 of the '093 application on the screen. And that's --
A. Yep.
Q. -- Bates-labled Number BAZ15 1344.
Do you see that?
A. I do.
Q. And is this the -- what you called earlier the volute --
A. The volute.
Q. -- with the -- the volute. Sorry.
That's the volute?
A. Yes.
Q. And is the impeller inside the volute?
A. Yes.
Q. And is the volute submerged in liquid manure when the boat shown in Figure 4 is floating in liquid manure?
A. No.
Q. And is the impeller submerged in liquid manure when the boat shown in Figure 4 is floating in liquid manure?
MR. STEMLER: Objection; form.
A. (Continuing) It's not below the water.
Is it submerged in the liquid manure?

Yep.
Q. How so?
A. Well, that liquid manure goes through that impeller, doesn't it? In that re- -- in that regard.
Q. So you --
A. How would the impeller move liquid manure if it was not submerged in the liquid manure?
Q. So are you saying because liquid manure is in contact with the impeller, that the impeller is submerged in liquid manure?
A. I -- I guess I'm just clarifying the -- the statement. I'm trying to.
And -- and yes, it would have to be submerged in liquid manure to move liquid manure.
Q. Does Puck have a fire division?
A. Yes.
Q. When did the fire division start?
MR. STEMLER: Objection; form.
Q. (By Mr. Yackey, continuing) If you know.
A. It could have -- it could have started in 2012 -- '11, '12, when we did that -- that burn with the state fire marshal in Mount Carmel, Iowa.
And recently Jeremy took a team of people

and equipment down to the large refinery fire down in Atlanta, Georgia, and put that out.

Q. Did -- did Puck start a -- like, a separate fire division in 2023?

A. I'm not sure how he capitalized it.

I know that there is marketing that is associated specifically for the fire industry.

Q. Can you explain a little bit about what that marketing is.

A. No. It's just details. Chrome wheels on stuff. Make it look -- look -- make it look pretty. You know, red -- red and black chrome sell. I mean, that's just marketing. People like the way that looks -- and the fire industry -- very well.

Q. So firefighters like the red color and the chrome wheels?

A. I -- I'm going to guess, yes. That's a guess, but I would say so.

Q. Probably a pretty educated guess. Most of the fire trucks I see have shiny chrome wheels and are bright red, so --

A. They -- they like it that way.

Q. Yeah.

Do you know if the -- do you know what

pumps are used in Puck's fire division?
A. Yes, I do.
Q. What are those pumps?
A. 6NHTB19 would be one of the first -- one of the first --
COURT REPORTER: Pardon me. Please -- please repeat that, a little slower.
A. (Continuing) 6NHTB 8020 -- 8020 pumps would be used, as well. Those are very high head, high-volume type pumps, depending on what they are looking for, as far as flow.
Q. And what's the 8020 pump?
A. That is a -- an impeller that is 20 inches in diameter will pass about a five-inch solid. It's a high head pump. That requires -- it's -- it's nice if you've got someplace north of 600 horsepower.
Q. Is that a pump that Cornell makes?
A. Yes.
Q. Okay.
A. We use it, also, in the manure industry to -- to pump, as well.
Q. So what did you do to prepare for your deposition today, Mr. Puck?
MR. STEMLER: Objection; calls for a

attorney-client privileged information.

Ben, you can go ahead and answer the question, but please do not discuss the -- the substance of any of the communications that we've had.

A. (Continuing) Taylor called me yesterday and -- and told me on how this was going to go.

Q. Do you recall about how long you spoke with Mr. Stemler?

A. Couple hours. I don't remember exactly the time. It went well.

Q. Did you meet with him prior to yesterday in preparation for your deposition?

A. Yesterday was the first day we had a Zoom call. We've had several phone calls prior to that. That's the first time that I -- I have seen Taylor.

Q. Do you recall about how long those prior phone calls were?

A. They were usually very short.

Q. Okay.

A. Inquiring about -- inquiring about whatever was -- was his interest of the -- of the call.

Q. Okay. And are the -- is Merchant & Gould

your attorneys?
A. Yes, they are.
Q. Do you recall when they became your attorneys?
A. I don't, off the top of my head. I believe it was June.
Q. Of 2024?
A. Yes.
Q. And you say you have not been compensated in any way for your testimony today.
A. No.
Q. Is that correct?
A. That's right. That's correct.
Q. And you have not been compen- -- sorry. Sorry to speak over you again.
A. No, I have not been compensated.
Q. And you've not been compensated for signing your two declarations in this case?
A. No, I have not.
Q. Do you know if Puck has been compensated in any way for your testimony?
A. The brief -- the brief conversations I've had with Jeremy were to find more photographs and to help Taylor fill his -- his needs for his customer. And that's -- that's really about it.

I know that Jeremy has nothing to do with -- with anything. To my knowledge. I've...

Q. Do you recall when you were first contacted by attorneys from Merchant & Gould?

A. No, I don't -- don't remember the date exactly. I don't.

Q. Have you had any communications with Bazooka about this case?

A. Not -- none at all.

Q. How about with any of the employees of Bazooka?

A. None at all.

Q. Have you had any communications with a company called Eldon C. Stutsman, Inc. --

A. No.

Q. -- regarding this case?

A. No, I have not.

Q. What about a company called Stutsman Holdings, Inc.?

A. No, I have not.

Q. Have you ever heard of any -- either of those companies?

A. Yes, I have.

Q. So have you heard -- you've heard of Eldon C. Stutsman, Inc.?

A. Yes, I have.
Q. What do they do?
A. They -- they are the -- they are the holding company of Bazooka Farmstar, as far as I understand.
They also run a trucking company. We actually buy small parts from them, like in the nature of stainless steel gates for the boats, those types of things. They are a -- we're a customer of theirs.
Q. Are you still -- is Puck still a customer of Eldon C. Stutsman?
A. In the last five years, I don't know that. I -- I would believe that they are, but I don't know that for sure.
Q. Do you know if Eldon C. Stutsman is also a -- a dealer that sells products of other companies?
MR. STEMLER: Objection; form. Objection; foundation.
A. (Continuing) I -- I'm well -- I'm well aware that they sell Houle and GEA.
Q. Is GEA G-E-A?
A. Yes.
Q. Okay. Was Stutsman -- Eldon C. Stutsman,

Inc. ever a dealer of Puck agitation boats?
A. No.
Q. How about Stutsman Holdings, Inc.? They ever --
A. No.
Q. -- dealer of Puck agitation boats?
A. No.
Q. Did -- did Puck Custom Enterprises sell its agitation boats through dealers?
A. Yes.
Q. Do you recall which dealers?
A. We sold boats through Redhand, in Canada.
All the rest of the boats, from my knowledge, had been sold from our retail -- or our service locations, as well as the factory here.
Q. And what are your service locations?
A. We have one up by Dubuque, one up by Sioux Falls, South Dakota. And now we have one in New York State.
Q. Okay. I've got a -- you know, a few questions sort of on -- on your background.
Did you go to college?
A. No, I didn't.
Q. Before working for Puck what was your job?

A. I graduated high school. I started farming that year.

I worked at a motorcycle service shop.

I worked for a welding shop in Audubon, Iowa.

I also sold and worked in a welding shop in Manning, Iowa.

Q. Okay. So how long have you been a farmer?

A. All my life.

Q. What do -- what do you normally farm?

A. We have about 400 acres of mostly alfalfa and small grains.

Q. Do you have any cattle?

A. We have a -- we have a handful of cattle. Not very many. We have, like, 12 head. Something to butcher.

Q. Sounds delicious.

A. It is. We just butchered three the other day.

Q. Do you have a manure lagoon on your own property?

A. I have a deep pit that has been sold to a -- a -- a -- integrator that we receive the liquid manure from for our crops.

Q. Okay. Have you seen the Bazooka

Wolverine?

A. Not in person, no, I have not.

Q. Have you seen it online?

A. Of course.

Q. What are your thoughts on the Bazooka Wolverine?

MR. STEMLER: Objection; form.

A. (Continuing) It looks like --

Q. Do you have any thoughts -- do you have any thoughts on the Bazooka Wolverine?

A. I think it's a- -- another -- it's another offering to the industry that certainly needs agitation in lagoons.

And the customer is always the one to get to make that decision.

Q. So your -- are you aware that Nuhn has at least one patent on its Lagoon Crawler?

A. I -- I -- I -- I don't know the -- the alertness to -- why I would care, truthfully. But I am not surprised at all.

Q. So is that a -- is that a yes or -- or a no?

Are you -- are you aware of any patent that Nuhn has on its Lagoon Crawler?

MR. STEMLER: Objection; foundation.

A. (Continuing) No. No, I am not.
Q. Are you aware that Bazooka is challenging the validity of Nuhn's patents on its Lagoon Crawler in this case?
A. Obviously --
MR. STEMLER: Objection; foundation.
A. (Continuing) Obviously, I -- I -- I -- I don't -- I don't know what they are after. I don't know what the end goal is here.
Q. If -- if Nuhn's patents were invalidated, do you know if Puck would start making and selling an amphibious agitation boat?
MR. STEMLER: Objection; form. Objection; foundation.
A. (Continuing) I -- I -- I don't -- I -- I always lack to see why people would want to -- this is an opinion, but I lack to see why people want to knock something else off.
And I don't know what Jeremy is going want to do it in the future.
I think that there's -- there's a lot of other ways to address it, as well as what -- the art that we -- that has been offered to the -- to the consumers of these products already.

I would probably walk us on thin ice here, but it's up to the customer, if they want wheels on their boat or not.

Q. Do you know if Puck uses a Hazen-Williams equation to factor if manure pumps pump harder when the liquid manure is thicker?

MR. STEMLER: Objection; form. Objection; foundation.

A. (Continuing) We used to use a correction factor for that.

Q. Can you explain what that means.

A. I think that that's a lot of proprietary knowledge that we earned very hard.

Q. The coefficient factor?

A. Yep.

Q. Is the Hazen-Williams equation one that's used in the industry?

MR. STEMLER: Objection; form. Objection; foundation.

A. (Continuing) We use it as a starting point.

MR. STEMLER: And, Scott, if -- if you want to keep asking about, you know, the -- the technical details of what Puck uses as part of its trade secrets, I -- I would like to

designate this portion of the transcript confidential and take Ian off the call.

MR. YACKEY: Well, I -- may I ask one more question? I'm not trying to probe what Puck considers as its trade secrets.

Is -- and -- and if the answer to this question is yes, it's a trade secret, then -- then we can -- you know, I can either stop my questions or we can have Ian -- Ian leave.

Q. (By Mr. Yackey, continuing) But is the Hazen-Williams equation -- is that -- is that part of Puck's trade secret?

A. Hazen-Williams is not a trade secret to anyone. That's -- that's a -- that's a -- that's a 150-year-old math equation that just is spelled out very simply.

And you can extrapolate the pluses and minuses from that all you want. You can change viscosities. You can change a -- specific gravities. And you can -- you can -- but it's a starting point. It's a starting point.

It's just like a starting point is for a pump curve. First of all, I have to have a pump curve. Then I can extrapolate how accurate that pump curve is with what I'm doing.

And if the physics are correct, I can get pretty close to -- to finding out what the end result of -- of -- of the energy I put into something and what I get back out of it.

Q. Okay.

MR. YACKEY: Do you mind if we go off the record and take a five-minute break?

MR. STEMLER: Nope.

That okay with you, Ben?

THE WITNESS: That's fine.

VIDEOGRAPHER: Time is approximately 3:43 p.m. We are going off the video record.

(Recess from 3:43 p.m. to 3:51 p.m.)

VIDEOGRAPHER: Stand by, please.

The time is approximately 3:51 p.m. We are back on the video record.

Go ahead.

Q. (By Mr. Yackey, continuing) Welcome back, Mr. Puck. Did you speak with anyone during the break about your deposition?

A. No, I did not.

Q. All right. Do you know if Puck has built a self-propelled amphibious agitation boat?

MR. STEMLER: Objection; form. Objection; foundation.

A. (Continuing) Yes.
Q. When -- when did -- do you know when Puck built that?
A. Several years ago.
Q. Can you give me any details about that boat?
A. I'd rather not.
Q. Did they publicly display that boat to anyone?
MR. STEMLER: Once again, Scott -- oh, never mind.
You can answer.
A. (Continuing) Not publicly, no.
Q. Does that boat still exist?
MR. STEMLER: Objection.
Scott, if you intend to keep asking about confidential company information, I'd like to designate this portion of the transcript confidential and have Mr. Nuhn dropped from the call.
MR. YACKEY: I've got no other questions on that.
I'll pass the witness.

EXAMINATION

BY MR. STEMLER:

Q. Okay. Ben, earlier today -- do you remember Scott -- I guess -- sorry -- Mr. Yackey asking questions about possibly replacing the Cornell pump on the Puck vehicle with a submersible impeller pump?

A. Yes.

Q. Are you aware of any advantages to submersible impeller pumps, generally?

A. The first one is obvious, which is it does not need to be primed.

Q. And how is that an advantage?

A. Because you do not lose the NPSH that pump requires. Most open-faced impeller pumps that will handle the solids do not require any -- any -- any type of a vacuum.

And so if you're going to hold the -- the impeller out of the water until the water gets to it, you need to prime it.

And then that would be a curve that could be found on the -- on the -- on the pump curve of the pump. And, specifically, it's the NPSH.

Q. Are there other advantages to submersible impeller pumps, in general, that you are aware of?

A. They could -- they could handle solids,

possibly, a little bit better -- it would handle solids better.

Q. Does that mean it might clog slightly less than a --

A. Yes.

Q. -- impeller pump with Cornell?

A. Yes.

Q. Would you consider it to have been, kind of, a design trade-off in terms of whether to use a submersible peller -- impeller pump as opposed to a Cornell pump on the Puck vehicle?

A. Yes.

Q. Earlier you made a joke about a -- pigs drinking Diet Mountain Dew.

Do you remember that?

A. I do. I'm sorry.

Q. Can you explain -- I -- people hate it, but I always have to make them explain jokes to me. And it makes the joke no longer funny.

And I'm going to ask you to do that here today. Could you explain that joke.

A. It is -- is -- it's -- it's all the other things that we've run into in the manure industry that -- that we -- we have troubles with.

As a matter of fact, the human -- the

human beings cause most all of our problems. We're the ones that drink the pop. We're the ones that drop the -- the -- you know, the sorting gates. We're the ones that allow garbage to go into the lagoons, the silage wrappers that are just adjacent to the lagoon usually, the tumbleweeds that go in there because we don't keep them concealed very well.

And so it's usually those types of things that we run into.

If you just gave me the problem to solve that the animal produced, I could do that.

Q. Do you find that the pumps typically pump the soda cans?

A. They will. Then they'll get stuck in the high-pressure pumps going to the field, they will get stuck in the distributors in the -- in the field, whether they be going through a drag-hose system, going through the back of a wagon, or out the back of a truck.

Q. So the pumps -- the pumps clog from the cans occasionally?

A. They do.

And, personally, I would just as soon have the -- the -- have the -- you know, the -- the --

the perfect thing would be that you would have, like, a Doda open-faced pump feed a high-pressure pump the size particulate.

Unfortunately, there's not enough horsepower budget to be able to run two pumps five feet away from each other.

Q. You're saying the Doda pump is particularly good at pump- -- at -- you said sizing the particulate. Can you explain what that means.

A. Yes.

Because -- because the inlet is down to around nine inches or so, and because there's either a four- or a six-vein option, it chops that -- it gives us -- gives us more opportunity to chop up that particulate and size it.

Unfortunately, when you're dealing with a -- silage wrap and those types of things, plastic just doesn't care. And plastic will -- will wrap up on a pump and -- and deem it -- deem it either useless or take away a lot of its advantage.

And at that point you need to deal with it. To deal with it is -- is why we -- we fashioned our pump the way it is on our -- on our

agitation boat, in particular.

How other people want to deal with it is absolutely their art and their -- and I respect what they are looking for and what they can provide to the customer.

Q. That the Doda pump handles particulates particularly well?

A. It does. The only problem with the Doda pump is it can't keep up with the -- the large centrifugal pump that we have, as far as feeding it. And so what it -- it turns into being the -- the blockage of flow to that larger pump.

Q. It just doesn't produce -- it's not as much of a high-volume pump, maybe?

A. That's right. And so it would take a very, very large -- very good high-volume pump to be able to feed the high-head pump that we have on the boat to chop it up and -- and provide that particulate.

And when we're in that environment, you need to have positive pressure into the back of the high head pump.

And I'm -- and you're going -- you're going to catch me talking out of both sides of my mouth, but I'm not, because NPSH needs to be

respected.

That's -- net pressure suction head is -- is the distance a -- a pump can move the liquid before water cavitates.

And, obviously, we're not pumping water. We've -- we've got some -- we've got other gases in the -- in the -- in the water.

And so if we're not positively feeding that higher head pump, we will do damage to the pump.

Q. Earlier you and Mr. Yackey were discussing, kind of, the combination action with the Houle pump and the Doda pump that was used in the earlier prototypes that Puck created.

Do you remember that?

A. Yes.

Q. Was that Houle pump required in order for the Doda pump to be able to pump?

A. Not at all. They are -- they were separated by 10, 15 foot of water between the two. So one did not directly interact with the other one.

All the one did was homogenize and break it up and enable a better environment for the Doda to work in, in that regard.

Q. It was intended just to optimize the agitation and pumping process?

A. Yes.

Q. Okay. I'm going to show another document quick.

Ben, I'm showing Defendant's Exhibit 63. Do you see this document?

A. Yes, I do.

Q. Earlier you were speaking with Mr. Yackey and you discussed that this document may have been created sometime in 2013.

Is that right?

A. Yes.

Q. Does this -- maybe aside from the addition of the cutter feature on the Cornell pump, does this document otherwise truthfully and accurately describe the Puck agitation vehicles that were sold before 2013?

A. Yes.

Q. Earlier you and -- you and Mr. Yackey were speaking about whether or not the dock sections for the Puck vehicle were filled with foam.

Do you remember that?

A. I do.

Q. And you mentioned that the Puck vehicle

generally did not use foam-filled dock sections.
A. They do not.
MR. YACKEY: Objection; form.
Q. (By Mr. Stemler, continuing) I believe you mentioned that you had another customer that may have filled the dock sections with foam?
A. Yes.
Q. Do you know why they would have want- -- wanted to do that?
A. Obviously, they talked to somebody that told them that would be a wise idea.
Q. Could you think of any advantages to having a foam-filled dock section?
A. I guess it would reduce the risk of it taking on water completely and submerging the vehicle.
Q. Sure.
And can you speak a little bit more about how the foam might have assisted with that.
A. If it makes up that space --
MR. YACKEY: Objection; form.
A. (Continuing) If it's a -- you know, X amount of weight per cubic foot, I -- I believe -- and I don't know what that number is, but it subtracts from the -- the -- the math that

we -- that we used to be able to put down so many cubic feet in water to support the weight of the vehicle so it floats.

Q. So if, you know, for example, one of -- if you had a -- a float that maybe had been compromised or punctured --

A. Sure.

Q. -- are you saying that, you know, in some cases that foam may enable the boat to float even if, you know, that puncture had occurred?

A. Sure.

Q. Did -- did the dock sections that Puck used in its vehicle include a -- subchambers within the dock sections?

A. Yes.

And we used many of them. So if you compromised one, you'd have to compromise two or three of them on -- on one side or the other for it to actually fail.

Q. So just -- just to make sure it's absolutely clear for the record, if you were to puncture a point in the dock section, it would only fill a small portion of the dock section.

Is that what you're saying?

A. That's right.

Q. Okay. And when I say "it," I'm referring to the fluid that that dock section is floating on.

A. Uh-huh.

I could elaborate on -- just a little bit more. If -- if there was ever a puncture, it would come from the bottom. With the dock sections being sealed, it's very nature -- very little water would come up into it.

Q. Could you have built a manure-agitation boat using foam-filled floats?

A. Of course.

Q. Would it maybe have just been a heavier boat?

A. It would have.

Q. And larger?

A. And larger.

Q. And would that perhaps have made the boat more difficult to transport using a conventional vehicle rather than a semi?

A. Our -- yes, it would have.

Our challenges were obvious. We would have to push the boat in and pull it out. Adding weight to it was -- was -- was not a good idea.

Q. When -- okay. I'm going to pull up

another document.

I guess before I do so, Ben, would you -- would you have considered it to have been a design trade-off to have used foam-filled floats versus nonfilled -- -foam-filled floats on the Puck vehicle?

MR. YACKEY: Objection; form.

A. (Continuing) I -- I guess we could have used whatever we wanted to use. We just have to design for it, whether or not they are foam-filled or not.

With the amount of boats that were out there that were not foam-filled, the evidence is overwhelming, it's not a necessary -- not a necessity.

Q. Okay. I'm going to pull -- pull up another document.

Ben, I'm pulling up Defendant's -- or I'm sorry -- Plaintiff's Exhibit 4. Sorry.

There we go.

Can you see this document?

A. Yes. Yes, I can.

Q. I'm scrolling down to Figure 4 of this document.

A. Yes.

Q. Sorry. Bear with me. I'm trying to rotate it.

Ben, we spoke earlier about how the manure lagoon may become thicker at -- after agitation.

Do you remember speaking about that?

A. Yes.

Q. Specifically, you were speaking about that with Mr. Yackey?

A. Yep.

Q. When you're first pumping liquid manure using the Puck vehicle, do you tend to draw -- I guess -- strike that.

Is it -- in your experience, do liquid-manure lagoons tend to have solids that settle to the bottom of the lagoon?

A. Yes.

Q. And would you typically refer to that bottom layer as a sludge layer?

A. Yes.

Q. And might you refer to the layer above that layer as a supernatant layer?

A. Yes.

Q. Using the Puck boat -- strike that.

Would it make sense to you to refer to this portion of the figure labeled with Reference

No. 130 as the sludge layer?
A. Yes.
Q. And this portion of the lagoon labeled with 128 as the supernatant layer?
A. Yes.
Q. When you're using this Puck vehicle, would you typically draw the supernatant layer -- draw from the supernatant layer when you begin agitation?
A. Absolutely.
Q. Why is that?
A. So that you have a higher velocity liquid that can be shot down to the bottom and brought back up. And then you start the -- the mixing process.
You can't pick the supernat- -- or the sludge up off the bottom and -- and do a really good job of mixing it --
Q. Is that --
A. -- to the point where you can make it fluid enough to be able to send it to -- tractor, wagon, truck, drag-hose system -- whatever.
Q. Is that supernatant layer quite watery?
A. It can be.
MR. YACKEY: Objection; form.

Q. (By Mr. Stemler, continuing) Would --
A. It can be.
Q. Would you still consider that supernatant layer to be liquid manure?
A. Yes. Definitely.
Q. And could that supernatant layer be pumped using a conventional irrigation pump?
MR. YACKEY: Objection; form.
A. (Continuing) It could be.
MR. STEMLER: I'd like to take a quick five-minute break, if that's okay with everybody.
MR. YACKEY: That's fine with me.
MR. STEMLER: Okay.
VIDEOGRAPHER: Okay. The time is approximately 4:12 p.m. We're going off the video record.
(Recess from 4:12 p.m. to 4:16 p.m.)
VIDEOGRAPHER: Stand by, please.
The time is approximately 4:16 p.m. We are back on the video record.
Go ahead.
MR. STEMLER: Pass the witness.

EXAMINATION

BY MR. YACKEY:

Q. All right. So just a couple clarification questions.

And I'm going to share on my screen -- this is Defendant's Exhibit 62, which was shown earlier today.

Do you see it, Mr. Puck?

A. Yes, I do.

Q. Okay. I wanted to clarify -- or get a clarification on a couple of answers from earlier today. I think when I was asking you some questions about the Houle pump and the Doda pumps on these two boats shown on Puck 45 -- I thought you had mentioned that the nozzle of the Houle pump, sort of, fed into the Doda pumps.

A. No. I'm sorry.

To clarify that, that pump was actually independent of the Doda's. And it -- and it -- it was skimming near the bottom of the lagoon. And it was shooting down at the heel of those two pumps. So they were not connected at all.

What they were doing -- what that Doda -- what the Houle was doing -- excuse me -- the -- the Houle. The one that is on the -- the gray machine with the yellow handrails was swinging

back and forth, cutting the -- the bottom loose for the two Dodas to then pick it up, put it entrained, in the hose, and send it to shore.

And so my effort in -- to explain why we'd use the two sizing pumps, if you will, was to take the large chunks, cut it up, send it to a- -- another open-faced impeller that will take a little bit smaller bite.

And that made it very, very smooth -- be able to take it all the way to the -- to the application tractor in the field without plugging up the -- the subsequent booster pumps.

Q. So the -- was it -- it was the Houle pump that broke up the larger chunks?

A. I believe so, yes.

Q. And then was the --

A. -- would pick up those chunks, resize them, and then send them to the -- to the shore.

Q. Okay. And you said the heel of the pump?

A. Uh-huh.

Q. What does that -- what does that mean?

A. That -- that -- that means -- I'm referring to the volute of the Houle pump at the bottom of the lagoon -- or near the bottom of the lagoon.

Q. So the heel, like a -- a -- part of the pump?

A. It's -- it's the -- the volute of the pump or the -- or the -- the bottom of the pump.

Q. Okay.

A. It has the impeller in -- with -- inside of it.

Q. And then how far was the nozzle on the Houle pump away from the Doda pumps?

A. I would say eight to ten feet.

Q. Okay. And did these two boats shown in -- on Puck 45 of DX 62 -- do they move in the liquid-manure -- -manure lagoon?

A. Yes. They actually -- was used with cable. And, as you can see, there's a cable that comes off the front and off the rear of the gray boat. And there was an oarable motor that would -- that you could move or wind -- wind up so that you could move the -- the boats. So they were entrained to go back and forth.

And so we put an anchoring vehicle on each end and just move the anchoring vehicles, but we could -- we could drive this back and forth through the lagoon.

Q. And did you -- you said that was you on

this silver -- yellow pan -- it looks --
A. It's --
Q. -- yellow handrail boat?
A. Yes.
Q. And did you, like, move levers to move along the cable?
A. Yes. I ran a -- a small Char-Lynn hydraulic motor off the utility pump. That would raise and lower and open the -- the -- you know, the gates on the Houle pump and -- as well as point the nozzles back and forth, to bring the liquid to the two Doda pumps.
Q. So was there a control panel on that silver-ish boat?
A. Yes, there was.
Q. And you operated that while on the boat?
A. Yes.
Q. Okay. And would you consider the agitated contents of a liquid-manure lagoon to be liquid manure?
A. Yes, I would.
MR. YACKEY: I'll pass the witness.
MR. STEMLER: I don't believe I have any further questions. So we'll review and sign the transcript.

VIDEOGRAPHER: Time is approximately 4:23 p.m. We are going off the video record.

Off the record.

COURT REPORTER: Taylor, you'd like a transcript made?

MR. STEMLER: Yes, please. We'll -- we'll reach out to you with instructions.

COURT REPORTER: Sounds good.

MR. STEMLER: Thank you.

COURT REPORTER: And, Scott, you would like a transcript?

MR. YACKEY: Yes, please.

(Deposition concluded at 4:24 p.m.)

REPORTER'S CERTIFICATE
STATE OF WISCONSIN

I hereby certify that I reported the videoconference deposition of BEN PUCK, who appeared remotely before me on December 5, 2024, and that the witness was by me first duly sworn to tell the whole truth;

That the testimony was transcribed by me to the best of my ability and is a true record of the testimony of the witness; that the right to read and sign was reserved.

That the cost of the original has been charged to the party who noticed the deposition, and that all parties who ordered copies have been charged at the same rate for such copies;

That I am not a relative or employee or attorney or counsel of any of the parties, or relative or employee of such attorney or counsel;

That I am not financially interested in the action and have no contract with the parties, attorneys, or persons with an interest in the action that affects or has a substantial tendency to affect my impartiality.

WITNESS MY HAND AND SEAL THIS 9th of December, 2024.



Nancy G. Gisch, RMR, CRR, CLR, CRC
Notary Public, State of Wisconsin
My commission expires on 11/13/28

Veritext Legal Solutions
1100 Superior Ave
Suite 1820
Cleveland, Ohio 44114
Phone: 216-523-1313

December 13, 2024

To: Mr. Stemler

Case Name: Nuhn Industries LTD v. Bazooka Farmstar LLC

Veritext Reference Number: 7025856

Witness: Benny D. Puck Deposition Date: 12/5/2024

Dear Sir/Madam:

Enclosed please find a deposition transcript. Please have the witness review the transcript and note any changes or corrections on the included errata sheet, indicating the page, line number, change, and the reason for the change. Have the witness' signature notarized and forward the completed page(s) back to us at the Production address shown above, or email to production-midwest@veritext.com.

If the errata is not returned within thirty days of your receipt of this letter, the reading and signing will be deemed waived.

Sincerely,
Production Department

NO NOTARY REQUIRED IN CA

DEPOSITION REVIEW
CERTIFICATION OF WITNESS

ASSIGNMENT REFERENCE NO: 7025856
CASE NAME: Nuhn Industries LTD v. Bazooka Farmstar LLC
DATE OF DEPOSITION: 12/5/2024
WITNESS' NAME: Benny D. Puck

In accordance with the Rules of Civil Procedure, I have read the entire transcript of my testimony or it has been read to me.

I have made no changes to the testimony as transcribed by the court reporter.

_____ _____
Date Benny D. Puck

Sworn to and subscribed before me, a Notary Public in and for the State and County, the referenced witness did personally appear and acknowledge that:

They have read the transcript;
They signed the foregoing Sworn Statement; and
Their execution of this Statement is of their free act and deed.

I have affixed my name and official seal

this _____ day of_____, 20____.

_____
Notary Public

_____
Commission Expiration Date

DEPOSITION REVIEW
CERTIFICATION OF WITNESS

ASSIGNMENT REFERENCE NO: 7025856
CASE NAME: Nuhn Industries LTD v. Bazooka Farmstar LLC
DATE OF DEPOSITION: 12/5/2024
WITNESS' NAME: Benny D. Puck

In accordance with the Rules of Civil Procedure, I have read the entire transcript of my testimony or it has been read to me.

I have listed my changes on the attached Errata Sheet, listing page and line numbers as well as the reason(s) for the change(s).

I request that these changes be entered as part of the record of my testimony.

I have executed the Errata Sheet, as well as this Certificate, and request and authorize that both be appended to the transcript of my testimony and be incorporated therein.

_____ _____
Date Benny D. Puck

Sworn to and subscribed before me, a Notary Public in and for the State and County, the referenced witness did personally appear and acknowledge that:

They have read the transcript;
They have listed all of their corrections in the appended Errata Sheet;
They signed the foregoing Sworn Statement; and
Their execution of this Statement is of their free act and deed.

I have affixed my name and official seal this _____ day of_____, 20____.

_____
Notary Public

_____
Commission Expiration Date

ERRATA SHEET

VERITEXT LEGAL SOLUTIONS MIDWEST

ASSIGNMENT NO: 7025856

PAGE/LINE(S) / CHANGE /REASON

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____ _____

Date Benny D. Puck

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____

DAY OF _____, 20_____ .

_____

Notary Public

_____

Commission Expiration Date

&

& 3:4 8:23 235:25 237:4

0

0 134:16
0000148 136:7
0000223 137:2
0000364 140:1
0000580 126:1
0000716 137:22
0000733 138:13
0000738 139:15
0001325 61:7 225:21
0001326 225:16
0001340 227:9
00015 1:7 8:12
0028013 124:8
0028021 123:23
0028024 131:8
0028025 133:14
0028027 124:19 130:14
0028028 127:25
0193511 6:22
0193512 132:14
0193513 6:23
028010 6:15
028033 6:16
093 231:2

1

1 8:6 86:13 194:1 227:21 227:25 228:3
10 35:25 36:2 37:5 41:16 106:23 148:19 176:12 210:14 210:16 252:20
10,000 90:24
100 213:16,22
1067 68:18 184:24 186:24
109 6:7
10:18 64:22,23
10:25 64:23,25
10nnt 68:8 70:9
11 39:6,15 41:24 55:15 186:3 210:14 210:16,17 232:22
11/13/28 266:24
1100 267:1
112 6:10
11:34 114:9,10
12 42:8 92:25 106:22 141:20 141:23 142:8 186:3 191:11 226:21 229:23 230:2,7,8,15 232:22 240:15
12/5/2024 267:8 268:3 269:3
120 6:13
124 102:17
125 6:17
128 259:4
12:06 114:10 114:12
13 42:23 142:20 267:4
130 259:1
131 6:20 100:21
133 135:1
134 135:2
1344 231:5
136 135:19
137 135:19
14 38:5 43:14 157:21
140 7:1 52:3
145 98:9 100:24
146 135:19
15 51:22 116:16 150:15 157:21 176:12 252:20
150 3:5 48:10 49:11 50:6 62:24 63:2,15 64:9,11,14 192:22 244:15
151 20:17
159 28:25
16 36:20 51:22 99:25 145:13
160 4:5
17 83:24 161:20,21 162:3,4 163:20
170 178:11
17945 266:22
18 99:25 145:15 146:4
18,000 72:13
1820 267:2
185 186:25 187:4
19 29:12 30:9 30:11
195 7:7
1979 12:10 21:10
1980s 17:6,8
1986 64:7
1995 226:10
1998 11:24 12:16 15:20
1:12 160:4,6
1:23 160:6,8
1:50 182:10,11
1:56 182:11,13
1after 12:11

2

2 21:6,16 95:11 194:2,4 228:13
2,200 49:4
2,500 49:4
20 4:8 14:7 110:25,25 147:7 150:15 180:22 234:13 268:16 269:22 270:22
200 2:17 90:17 91:1 178:8 214:24
2000s 120:7
2003 47:1
2004 46:21
2005 61:21
2008 91:23 151:19 207:19 207:23
2009 91:23 96:20 97:17 207:25
2010 35:12 61:21 76:8 91:20 96:8,24 207:6,9,12
2011 29:10 32:23,25 35:25 36:2 37:11,13 39:13,16 113:8 226:21
2012 22:11 24:8,12 25:7 27:8,25 29:5 29:12 30:9,10 30:11 97:18 121:10 122:5 123:5,13,20 124:9,12 125:22 126:4 128:9 131:1 135:25 136:3 141:24 142:22 159:3 222:10 232:22
2013 29:17 30:1 64:5 66:1 66:4 67:25 70:11,13,15 76:9,18 77:8 77:15 82:6 92:2 96:9 97:19 98:7 105:20,24 107:21 108:21 108:23 109:22 110:1 112:7 113:5,14 114:4 114:19,22 118:12 121:14 124:5 148:3 149:14 194:6 195:4,5,11,20 204:15 253:11 253:18
2014 195:18
2014/0112093 21:22 227:14
2015 120:8 150:10
2018 150:13
2019 35:12
2023 148:17,18 233:4
2024 1:15 2:2 8:5 236:7 266:4,17 267:4
2067 42:3 99:5 99:16 123:7 137:7 139:20
2067s 68:17
216-523-1313 267:3
2200 3:6
225 204:20
227 7:8
23 148:16
24 45:21
246 4:4
25 14:7 107:16 230:16
250 77:12
259 132:20
26 110:7
260 4:5 133:1,8
27 45:21 147:24 229:5
28 4:12 32:22 32:25
29 37:11,12
2:35 208:10,12
2:45 208:12,15

3

3 7:7 21:18 22:7 46:21 196:1,4
3,000 17:21 184:2 212:25 213:20
3,750 184:15 185:2,15
30 39:15 76:13 100:4 107:16 116:16 136:21 153:7,9,17 189:10,12
300 116:20
3067s 68:13
31 4:16
32 113:18 116:20 155:8 155:10
33 4:19 7:9 61:1,4 225:10
330 214:21
333 213:21
35 100:4 116:19 180:24 187:21 189:9
36 5:1 230:17
37 5:5

375 186:22
38 230:19,20
385 204:20
39 5:9
3:22 1:7 8:12
3:43 245:12,13
3:51 245:13,15

4

4 7:8 22:10 29:4 46:21 47:1 178:7,9 206:23 227:2,4 231:2,17,21 257:19,23
4,500 90:24
40 12:20 188:8
400 240:11
4010 68:7 186:22
406 125:4 128:2
4069 69:11
407 125:1 128:2
408 124:23 128:2
409 124:23 128:3
43 206:25
44 93:4 207:2
44114 267:2
45 5:12 12:20 18:10 21:14 53:21 85:14 261:12 263:12
46 47:21 48:8 55:25 57:7,23 60:4
469-777-5423 2:19
47 47:22 54:20 229:11
48 98:3 105:18
48098 2:18
4:12 260:16,18
4:16 260:18,20
4:23 265:2
4:24 265:13
4x4x14 185:24

5

5 1:15 2:2 23:25 25:11,16 26:20 27:5,21 29:15 266:4
5,000 151:21
50 52:4 188:13
53 207:4
54 188:23 229:6,21
5445 2:16
55 4:8 20:6 188:14
55402 3:7
56 4:12 28:11 29:1 30:23 32:15,16 35:18 37:6 39:6 229:24
57 4:16 31:2,5
58 4:19 33:9
580 128:24
59 5:1 36:10,11

6

6 25:5 29:23
6.8 186:25
60 5:5 7:9 37:20,22 150:12 186:4
600 186:11 234:16
61 5:9 39:23 40:1
612-332-5300 3:8
62 5:12 45:24 54:16 63:20 261:4 263:12
62,000 114:25
63 5:16 65:8 76:13 182:22 183:4 186:18 193:22 253:6
64 5:18 75:11 86:12 161:9
65 5:16,21 52:5 91:8 180:14 206:20
650 133:10
66 6:1 21:1 94:11
6650 116:19
67 6:4 97:2 98:3
68 6:7 109:3,6
69 6:10 112:20 112:22
6nhtb 234:8
6nhtb17 70:8
6nhtb19 68:11 70:8 234:4

7

7 27:16 30:4,22 77:17,18,19 134:17
7,500 183:24 184:12
7.48 210:19
70 6:13 52:5 100:2 120:25 121:2 123:24 127:22 130:13 133:12 150:12 159:16 180:14
7025856 267:7 268:2 269:2 270:2
71 6:17 125:6,8 134:16 158:25 223:4 224:7
72 6:20 132:1,3

73 7:1 140:25 141:3 153:17
75 5:18 77:16 178:11 180:25 187:17
7500 68:9

8

8 32:15,18 40:21 78:14 210:13
8,000 120:3 203:6
80 77:16 100:2 139:13 159:16
8020 234:8,8,12
85 100:4 149:17

9

9 4:4 35:17,19 37:11 39:13,16 41:7 77:21 79:1 134:17 151:20 186:21 196:19
9,462,741 22:5
9,572,297 21:24
90 49:24,25 50:3,5 100:4 148:15 176:15 187:15
90s 15:18
91 5:21
94 6:1
946,274 21:23
95 148:1
97 6:4
99 171:23
99.5 26:20 27:4
99.99 26:18
9:00 1:16 2:3 8:4
9th 266:17

a

a.m. 1:16 2:3 8:4 64:22,23 64:23,25 114:9 114:10
ability 151:23 266:7
able 14:16 18:1 18:2 27:8 44:6 48:14 51:23 52:16 55:21 66:18 68:21 70:25 71:8,10 72:8 73:8,9 80:19 85:23 89:17 90:10 97:23 99:25 115:23 116:2 117:16,24 118:7 119:12 120:3 139:1 143:21 144:5 147:21 149:21 155:5 168:8,24 169:18,20 170:24 172:11 176:12 178:9 181:7 182:4 211:6 212:5,12 250:5 251:17 252:18 255:1 259:21 262:10
above 40:17 42:11 45:12 48:17 49:20 56:19 86:21 103:1,1,18 126:7 199:22 258:20 267:17
abrasion 73:17
abrasiveness 73:11,13
absolutely 24:24 34:8 52:11 60:17 62:24 69:9 90:5,5 108:20 111:3 121:15 251:3 255:21 259:10
abundantly 93:24
accelerate 100:7 102:2
accelerated 99:24
accepted 121:23
access 82:24 120:10 197:4
accommodati... 119:5
accomplish 46:10,14 49:5
accordance 268:5 269:5
accurate 11:4 22:8,16 28:1 30:17 33:3 36:6 37:16 39:19,21 40:2 40:19 41:5,14 41:22 42:5,21 43:12,23 65:18 72:21 76:2 105:19,23 125:21 136:23 159:3 244:24
accurately 30:6 32:20 35:22 37:8 39:10 46:13 62:10 67:18 76:16 94:8 95:25 98:6 109:24 113:12 132:9 222:7 253:16
acknowledge 268:11 269:16

acres 240:11
act 89:23 268:14 269:20
acted 142:13
action 134:3,5 252:12 266:14 266:15
activities 215:11
activity 66:25 122:19 170:5
actually 14:23 24:13,14 34:22 53:11,15 56:8 57:1 66:16,16 70:7 72:16 74:17 83:10 86:1 87:3 88:1 88:2 92:17 97:20 98:19,21 101:11 106:20 107:24 108:2 111:3 118:13 118:23 125:1 127:8 131:5,23 134:23 142:13 144:18 151:4 157:6 165:22 169:12 171:17 174:21 176:17 176:19 189:20 191:15 199:16 201:22 203:14 204:3 209:16 210:12 215:8 216:10 225:19 230:13 238:7 255:19 261:16 263:14
actuator 199:1
adapted 147:10 147:16
adapter 83:9
adaptor 50:1
add 83:17 119:18 219:15
added 106:18 221:6,7,9,18,22
adding 221:6 221:22 256:23
addition 64:3 253:14
additional 108:5 120:12 175:22
address 14:8 196:13 242:22 267:15
adjacent 126:19 138:9 249:6
advance 198:2
advantage 118:25 247:11 250:22
advantages 197:22 247:7 247:22 254:12
advertise 123:20
advertisement 133:17,20 134:1
advertisements 124:1
advertising 133:21
advise 144:20
affect 266:15
affectionately 97:21
affects 266:15
affixed 268:15 269:21
afford 172:11
afforded 203:13
afraid 157:24
agitate 71:8,10 86:8 97:24 103:14 155:18 155:22 156:1,4 156:13 168:12 205:13 206:10 214:8
agitated 264:18
agitating 46:9 110:17 156:20 189:18 205:18 205:23 209:7 210:24 214:6
agitation 4:18 4:21 5:3,7,11 5:17,20 11:12 29:9,11,24 30:7,10 32:20 32:24 34:6 35:23 36:1 37:9,12 39:11 39:14 40:13,15 41:1,13,21 42:3,12,24 43:15 44:20 56:14 62:7,10 65:14,25 66:24 67:3,4,18,24 68:15,16,18 69:24 70:6,19 75:19,20 76:16 76:21 82:4 94:9 102:4 104:22,24 109:15,17 113:10 114:21 116:25 118:12 123:12 130:18 130:19,22,25 131:10,13 134:19 136:12 137:8,10 138:18 142:2,4 149:21 150:1 151:10 155:17 156:11,12,19 161:11,15

163:6 166:17 168:3,9,21 170:13 178:2 183:13,20 185:16 187:6 188:24 189:7 192:6 193:7 196:17 197:3,7 198:20 200:3 200:21,23 201:7 202:22 209:13,18 212:3,16 214:2 215:17 217:12 217:23 219:3 221:19 230:25 239:1,6,9 241:13 242:12 245:23 251:1 253:2,17 256:10 258:4 259:9

agitator 104:3 213:1

agitators 213:2

ago 17:3 36:19 61:16,18 78:20 226:20 246:4

agree 142:7 143:6,9,24,25 144:2 146:3

agricultural 21:13 27:18,22

ahead 10:1,3,4 10:14 65:2 73:25 114:14 160:10 182:15 190:15 208:17 212:18 235:2 245:17 260:22

air 108:16

aisle 127:7

alertness 241:19

alfalfa 12:2 240:11

align 132:21

alleviate 13:14 15:9

alley 215:12

alligators 110:14

allow 14:23 15:4 85:2 86:4 249:4

allowed 43:20

allowing 229:12

allows 74:14

alongside 117:2

ambiguous 183:21

america 18:13 134:4

american 6:14 121:11 122:6 123:6,13,21 124:10,13 125:22 126:4 127:22 128:9 128:12 131:1 134:6,9 141:24 142:22 148:4

amicable 15:5

amount 14:16 15:8 44:9,11 73:10,15 74:5 116:3 148:25 152:12 156:5 156:14 170:22 185:12 188:4 188:20 191:1 212:4,14 214:7 219:23 254:23 257:12

amounts 183:9

amphibious 226:6 242:12 245:23

analogy 145:12

anchoring 90:6 263:21,22

angle 85:14 88:10,11,25 89:2 107:16 200:17 228:6 228:14

angled 107:2,5

angulation 108:15

animal 25:15 25:18,22 26:4 26:4 216:11,12 249:12

answer 10:4,14 26:9 47:16 50:9 58:17 63:23 186:16 188:1 222:8 235:2 244:6 246:12

answered 166:20 226:16

answering 10:23

answers 15:23 261:9

anybody 17:1 80:22 129:7 144:9 146:22 146:24 149:6 149:10,22 208:21

anymore 143:17

anyway 117:8

apologize 193:16 225:19 229:16

app 121:11,11

apparatus 118:16 169:15 177:4

apparatuses 117:7
appear 31:6 133:20 137:18 196:16 227:11 268:11 269:15
appearances 2:10,24
appeared 220:19 266:4
appearing 8:24
appears 135:13 138:19 227:15
appended 269:11,18
application 13:10 21:22 62:3 117:23 121:21 228:24 229:4 231:3 262:11
applicator 121:10
applicators 15:12 120:9 138:8
apply 15:6
applying 18:4
appropriate 223:20,21
approximately 2:3 42:13 45:12,21 46:21 55:9 64:21,25 114:8,12 133:7 160:4,8 182:9 182:13 208:15 245:11,15 260:16,20 265:1
area 12:3 14:1 14:3 17:12 86:2 97:24 98:18 117:15 120:9 152:12 159:17 168:24 170:15 171:16 174:15 203:4 203:11 229:19
areas 173:20
arial 6:21
arm 199:12,14
arms 50:11
arranged 42:12 42:25 58:6
arrangement 42:15 43:3
array 122:24
arrow 57:21
art 106:18,18 157:7 177:14 177:14 178:23 192:7 242:23 251:3
artificial 170:18
asae 72:13
aside 137:8 148:13 253:14
asked 15:25 166:19 188:12 222:12 226:15
asking 208:23 229:1 243:23 246:16 247:3 261:10
aspect 13:18
assembly 96:1
assets 146:20 151:22
assignment 268:2 269:2 270:2
assisted 254:19
associated 233:7
assume 10:5 125:14
assumes 217:14
atlanta 233:2
attached 7:12 62:20 69:23 79:16 199:16 269:7
attachments 6:3,6,19
attempt 9:24 229:13
attempted 47:18
attempting 143:2 144:10 144:21
attempts 46:8 152:4
attend 121:13 121:16,18 122:5
attended 122:18 125:23 141:24
attention 115:5 123:13 145:6
attorney 160:18 235:1 266:12,12
attorneys 8:20 236:1,4 237:4 266:14
attractors 150:3
attributes 218:16
audibly 10:11
audio 162:20
audubon 240:4
august 35:25 36:2 39:15
authorize 269:11
automobile 120:21
availability 51:5

available 25:6 27:7 30:9,16 32:22 33:2 35:24 36:4 37:10,15 39:13 39:18 58:25 61:13,21 67:25 70:10 197:25 218:7,9
ave 267:1
avoided 78:18
aware 19:16,19 19:24 25:20 26:2 78:7 93:24 135:24 136:2,5 203:25 238:22 241:16 241:23 242:2 247:7,23
awfully 125:14

b

b 32:19,21 33:1 33:4,8,14 34:10,19 35:15 40:22
baby 97:22 185:23
back 15:3 16:4 24:12 34:2,18 37:4 39:5 50:12 60:7 65:1,4 70:21 82:25 85:12,21 87:21 88:1,10 89:19 98:25 99:13,14 104:18,23 114:13,15,19 114:22 118:12 119:5 120:7,11 121:13 127:21 130:12 133:12 134:15 135:24 139:21 143:12 145:18 151:19 154:18,19,21 154:23 155:1,2 157:14 158:24 160:9 169:15 171:9,15,25 172:17 174:12 176:25 182:14 182:17 193:25 197:12,12,13 199:14,14 205:10 208:16 208:18 211:23 245:4,16,18 249:19,20 251:21 259:14 260:21 262:1 263:20,23 264:11 267:15
background 140:19 239:22
backward 85:13,15 89:18 102:5 103:11 103:13 146:18 230:10
bad 176:19 219:19
badger 122:10 122:11
balance 44:7
balanced 59:24
balancing 89:23
baling 12:1
ball 182:2
balzer 192:8,11 192:24 193:4
bank 80:19 81:17,20 85:21 104:23 117:3 138:9 145:25 146:14 155:2
banks 40:18
barge 190:22 193:4
base 71:5
based 41:2 148:9,11,23
basically 11:23 12:10,12 18:11 48:23 49:15 51:20 55:6 56:24 59:18 70:21 72:8 74:12 84:25 85:9 116:7,20 117:2,5 119:10 120:19 121:9 127:19 136:11 146:8,17 170:2 192:17 209:22 215:6
basics 205:11
basis 70:22
bates 93:4 100:21 206:23 223:8 231:5
bathroom 179:24
batteries 230:8
battery 229:23 230:2,7
baz15 6:15,16 6:22,23 61:6 123:23 124:8 124:19 127:25 130:13 131:7 132:14 133:13 225:16,20 227:9 231:5
bazooka 1:8 8:9,25 18:21 19:4,17 141:13 151:7 237:8,11 238:4 240:25 241:5,10 242:2 267:6 268:3 269:3
bazooka's 148:13,21

223:16,17
bazookas 152:2
bear 258:1
bearing 72:12 84:12 119:14 165:3,3,4,14 201:12
bearings 84:12 119:10 201:25 202:9
becoming 78:6 78:6
bed 210:15 215:6
bedding 175:4 216:4,7,11 217:4,18
beds 174:1
began 156:3
beginning 138:18 206:16
behalf 2:12 3:1 9:2 160:19
beings 249:1
believe 31:15 49:11 63:11 108:25 109:23 123:15 124:17 126:25 127:15 128:21 134:10 139:2,4,6 141:7 152:18 152:19 160:11 161:10,16 170:20 190:3 207:5 222:10 226:4,9 228:18 236:6 238:14 254:4,24 262:15 264:23
belly 194:14
belt 165:13
ben 5:8 8:7 9:16,19 11:3,7 11:9,13 13:8 18:21 20:3,7 20:25 25:20 26:2,9 27:13 27:17 28:3,12 29:15 31:3,13 32:14 33:10 35:20 37:4,12 37:21 38:9 39:8,24 40:10 41:20 43:25 45:25 47:11 50:9 54:12 58:10 61:2 65:4,10 75:9 75:13 77:22 80:8 81:24 91:9 93:13 94:13,20 95:13 97:3,10 98:10 100:22 102:11 102:16 105:19 110:6 111:20 112:16,21 114:16 121:4 124:9,20 125:7 125:18 129:1 130:17 131:11 132:2,25 133:4 133:9 134:18 135:20 139:17 140:1 141:1,22 142:20 145:15 158:2 159:9 223:20 235:2 245:9 247:1 253:6 257:2,18 258:3 266:4
beneficial 42:16 43:4,20
benefit 51:6
benefits 13:12 41:12
benny 1:13 2:2 4:2,9,13 9:8,15 267:8 268:4,9 269:4,13 270:20
berm 145:17
best 115:7,23 120:16 266:7
better 61:23 72:14 108:2 153:5 156:8,20 157:25 173:21 184:6 189:24 209:5 217:7,7 248:1,2 252:24
big 16:3 126:20 155:3 157:23 191:6
bigger 152:6 176:22 181:16
bit 11:7 15:11 17:4 50:4 51:15 68:5 77:25 85:6 92:18 106:8,16 108:1,14,15 118:24 157:23 169:18 191:9 206:16 233:8 248:1 254:18 256:5 262:8
bite 262:8
black 48:16 49:7,20 54:17 101:13 103:9 103:17 105:11 166:23 167:15 233:12
block 157:9
blockage 74:18 251:12
blue 56:19 126:14,25 163:1
boat 4:18,21 5:3,7,11 29:9 29:11 30:7,10 32:21,24 34:7 35:23 36:1

37:9,12 38:13
38:15 39:11,14
40:13 41:1,13
41:21 42:3,12
42:24 43:15
45:13 53:5
60:8 63:18
64:4 65:14
66:1 67:18,25
68:7,11,14
69:11 71:16,19
76:16,21 77:4
77:6 78:12
79:8,10,14,15
79:22 80:1,12
81:2,19,23
85:15 86:19
89:13 94:9
97:22,22 98:22
99:5,13,16
101:6 102:13
103:1,13
107:17,23
108:9 109:15
109:17 110:8
113:10 118:4
123:7,12,18
127:2,5,18
129:13,16,23
130:1,3,5,7,10
130:18,20,25
131:6,12,15
134:19,20
135:23,24
136:2,4 137:7
137:11,19,25
138:19 139:8
139:12,20
140:19 142:2,4
142:11,13,16
142:24 143:4
143:10 145:20
145:24 146:5,6
146:7,13,17
147:1,5 148:1
148:2,8,16,20
149:13,13
150:10 151:10
152:3 154:10
155:2 156:11
156:13,19
157:1,14 162:1
165:1,19 166:5
166:6,13 168:3
171:7,8,12,13
175:20 176:9
176:10 178:2
179:8,9 180:8
181:11 184:23
185:16 186:22
186:24 187:7
188:25 189:3,7
190:7 197:7
198:20 199:4
199:18,21,23
200:4,6,10,11
200:18,21,23
201:7 202:22
202:25 203:7
203:17,23
204:1 207:12
207:14 208:3
212:1 214:2,20
215:17 217:12
217:23 219:3
220:10 221:7
221:19,20,23
221:24 227:13
231:17,21
242:12 243:3
245:23 246:6,8
246:14 251:1
251:18 255:9
256:11,14,18
256:23 258:23
263:17 264:3
264:14,16
boat's 196:17
197:3
boats 5:17,20
19:20 46:10,13
68:20 69:12,17
70:6 71:12
75:19,20 82:4
83:21 91:20
94:23 97:13
123:2,3,9
130:22 134:23
148:25 149:4
150:1 161:11
161:15 163:6
166:17 168:21
170:9 171:7
178:20 179:6,7
183:13,20
185:19,23
187:14 192:6
194:11,12,13
204:3 230:13
230:25 238:8
239:1,6,9,12,13
257:12 261:12
263:11,19
body 49:8,20
55:18 153:25
bolt 83:10
bolted 163:20
204:18
book 174:7
boom 24:25
117:19
booster 13:23
122:24 151:15
178:12 262:12
booth 124:12
124:16,16,20
124:21,23
126:3,6,11,16
126:18,23
127:7,9 128:18
128:20 129:3,8
129:19 130:23
134:25
booths 128:2,5
128:14 129:5

bottom 40:15 45:13 48:17 49:18 52:17 57:25 63:5 71:1 79:3,25 84:19 112:11 133:18 186:23 190:12 191:15 205:20 227:8 256:7 258:15 258:18 259:13 259:17 261:18 262:1,24,24 263:4
bought 192:8
box 179:5
brand 96:12
break 64:18 98:14 112:19 159:24 179:21 179:24 180:4 182:7,17,18 191:8,21 208:7 208:21 245:7 245:20 252:23 260:11
breaks 160:23
brian 3:14 8:15
bridge 115:21 172:9
brief 44:9 236:22,22
bright 233:22
bring 13:14 17:14 40:15 63:8 71:1,10 98:25 103:25 122:2 167:3 190:25 264:11
bringing 151:1
brochure 76:12 127:23 193:10 224:18
brochures 67:8
broke 63:11 118:5 262:14
broken 86:4
brother 12:11
brought 104:14 131:1,5 134:20 134:23 150:18 153:1,2 157:2 168:25 179:11 218:12 259:13
brown 95:14 117:14
bucket 218:2
budget 250:5
build 14:20,21 14:22 15:25 115:21 120:3 151:3 172:8
building 15:16 17:13 52:3 96:14,17,19,21 151:15 152:20
buildings 17:17 17:20,21
built 12:22 29:9 68:7 71:24 96:22 150:22 189:4 197:7 207:8,12 207:14 245:22 246:3 256:10
bunch 222:9
burn 24:18 232:22
burned 214:7
burning 156:9 211:12 212:15
burnt 214:16 214:18
business 11:23 14:22,23 15:19 29:18 120:18 121:20 207:21
bust 191:6,13
butcher 240:16
butchered 240:18
buy 238:7
bypasses 13:24

c

c 2:9 8:1 35:21 35:23 36:3,6 36:16 41:9 99:5,16 237:14 237:25 238:12 238:16,25
ca 267:25
cab 69:9 113:23
cable 79:14,18 263:15,15 264:6
calculated 49:2
california 195:1,7
call 9:16 26:23 110:14 137:16 137:17 138:6 165:17 210:9 228:6 235:15 235:24 244:2 246:20
called 48:20 97:21 122:10 165:22,22 178:7 185:23 193:6 231:8 235:6 237:14 237:18
calls 10:16 234:25 235:15 235:19
camper 126:8 126:10
canada 239:12
cannon 39:15 42:4 69:25 82:23,25 85:23 86:7,15,18,21

87:4 88:17 89:21 92:8,10 92:15 98:11,13 99:12 100:22 100:23 101:4,8 109:16 110:9 110:19 111:1 112:6 139:21 139:23 198:17 200:3
cannons 83:1 90:19 92:15
cans 170:20 174:2 175:6 249:14,22
cap 171:20,20
capabilities 24:5
capability 209:15
capable 25:8,13 27:19 230:21
capacities 183:8
capacity 68:9 116:23 179:12 183:12,19,23 184:11 185:1 185:15
capitalized 233:5
caption 40:11 40:12,23 41:10 41:18 42:1
captioner 2:6
capture 108:16
captures 74:12
car 144:8
car's 145:8
care 116:8 179:8 241:19 250:19
carmel 24:19 232:23
carried 84:11
carry 203:5,8
cart 13:22 15:2
carts 122:24 151:16
case 8:11 72:12 236:18 237:8 237:16 242:4 267:6 268:3 269:3
cases 255:9
cash 115:18
cat 53:25 209:14,14,23 212:13
catch 251:24
cattle 240:13 240:14
cause 111:1 215:19 216:21 249:1
caused 43:4
causing 111:4 113:24
caveat 181:22
cavitates 252:4
cavity 58:24 191:12
cell 116:17
cells 116:16,19
center 42:17,19 43:8,9 44:1,13 44:14 57:10 74:8 83:12 90:3,11,12 91:2 118:1 122:13
centerline 42:13 90:13,15 90:16 91:3 105:7
central 8:4
centrifugal 24:3 48:15 104:15,16 230:20 251:10
ceo 13:9,17
certain 73:3 74:14 125:15 174:4 188:4
certainly 145:5 175:10 241:12
certificate 266:1 269:11
certification 268:1 269:1
certified 2:5,5 2:6
certify 266:3
chain 79:16 80:3,11 81:21 106:12 136:20
chains 79:9
challenge 116:21
challenged 151:7
challenges 14:8 17:23 256:22
challenging 242:2
chance 65:23 129:18
change 26:14 59:23 60:18 84:1 100:3 101:3 102:12 145:10 200:18 210:13 244:18 244:19 267:13 267:14 269:8 270:3
changed 14:6 194:13
changes 267:12 268:7 269:7,9
changing 59:21
channel 29:19 30:1 31:20,23 32:5,11 35:5,9 35:15 36:23 37:2 38:24

39:3 40:8
char 264:7
characteristics 92:5,11
charge 66:22
charged 266:9 266:10
chase 150:21
check 188:10
chew 191:16 192:17
china 18:13
chips 216:9,21
choices 71:8
choose 101:5 167:22 168:2
choosing 85:19
chop 250:16 251:18
chops 250:14
chose 215:20
chris 134:13,13
chrome 233:10 233:12,17,21
chunk 176:18
chunks 262:6 262:14,17
churning 153:23 154:6
ciccone 3:14 8:15
circle 173:5,5
circled 79:21
circulate 86:2
civil 268:5 269:5
claim 143:23 143:24
clarification 153:12 261:1,9
clarify 14:24 21:5 26:19 63:14 209:3 261:8,16
clarifying 232:12
classified 27:1
clay 81:17
clean 17:17 40:17 96:14 143:2 144:10 169:13 170:17 170:17,17,25 171:8 174:14 174:16,18
cleaned 174:14 179:11
cleaner 173:20
cleanout 197:4
clear 9:25 110:11 182:25 255:21
cleveland 267:2
client 235:1
clog 142:24 248:3 249:21
clogged 154:5
close 80:14,23 85:22 90:14 115:4 124:15 136:16,18,19 148:17 169:1 200:1 245:2
closed 163:7,8 163:11,24 164:8,15 168:11 177:24 178:1 215:21
closely 125:16
clr 1:24 266:23
clutch 54:1
coat 95:15
coefficient 243:14
college 16:5 239:23
color 23:9 73:5 233:16
column 183:23 184:11 185:1 186:19
combination 71:3 153:23 252:12
come 74:15 117:8 129:10 129:15 150:7 171:20 174:13 174:18 211:2 256:7,9
comes 57:10 92:22 263:16
comfortable 216:12
coming 17:25 74:10 78:8 79:18 81:15,20 166:24 174:17 202:10 211:23
commencing 2:3
commercial 15:12
commission 266:24 268:19 269:25 270:25
common 120:8 175:3,7
commonly 27:23,24 93:21
communicate 34:11 160:24
communication 194:18
communicati... 151:15 235:4 237:7,13
compacted 144:1,4
companies 122:15 134:8 141:13 150:20 152:23 153:5 237:22 238:18

company 12:21 13:9,18 63:11 66:21 71:24 116:1 237:14 237:18 238:4,6 246:17
comparable 51:19
compare 16:19
compared 164:22
compen 236:14
compensated 28:3,6 236:9 236:16,17,20
competitor 18:24,25 19:9 19:11
complain 80:22 80:22
complained 173:8
complaints 142:23 143:3
complete 59:4 96:22 131:5,23 168:8
completed 267:15
completely 52:12 55:8,10 104:1 176:7 254:15
complexity 221:10,23
complicate 119:21
component 99:3 167:4
components 43:4 44:19 48:7 55:23 73:4 82:11 83:13,17 87:23 88:5 152:15 200:22 215:24
compounding 145:21
comprising 154:2
compromise 119:9 255:17
compromised 255:6,17
con 119:2 131:24 220:9
concealed 249:8
concentrate 119:25
concentration 94:2
concerned 218:14
concluded 265:13
concrete 68:21 97:23 106:24 116:9,9 117:11 119:2 131:24 144:2 186:9
concreted 203:12
conducted 66:24 131:19 132:10
conduit 56:19 99:4,15,18
confidential 244:2 246:17 246:19
configuration 107:19
configurations 103:15
configured 54:3
confinements 17:13
confirm 159:2
confirmed 53:18
confused 223:14
conglomerati... 53:25
connect 50:16
connected 83:3 83:6 220:19 261:20
connection 28:7
conservative 148:23
consider 70:17 71:15,18 118:11 167:4 167:15 168:20 248:8 260:3 264:18
considerable 147:15
considerably 156:18
consideration 44:4 89:13,16 211:11
considerations 72:18
considered 25:22 26:5 70:20 202:9 224:19 257:3
considers 148:20 244:5
constantly 61:22
constitutes 148:15
constructed 50:6
construction 96:20

consult 24:21
consulted 18:11
consumed 156:8,17
consumers 242:24
consumption 209:11 214:11 214:23
contact 232:10
contacted 237:4
contain 159:9 159:17
container 210:23 213:15 220:15
content 25:10 25:13 27:21
contents 25:15 25:19 264:19
continue 55:21 98:20 99:1,11 103:14 104:21 104:24 150:21 151:3 157:18 192:18
continued 2:24 4:25 5:25 6:25 15:20,21 17:18 24:20
continuing 12:1 20:7 22:25 23:21 25:25 26:8 27:12 28:12 31:3 32:14 33:10 36:12 37:21 39:24 45:25 47:10,15 50:8 58:9 61:2 62:13 63:22 65:3,9 66:16 69:22 73:24 75:12 80:7,18 81:7 87:17 89:12 91:9 94:12 97:3 100:13 101:23 102:10 105:6 107:15 108:25 109:4 111:20 111:24 112:15 112:21 114:15 121:1 125:7,18 132:2,24 133:4 141:1 153:16 159:7 162:25 165:21 166:21 167:1,7,18 168:7 175:10 180:6 182:16 183:16 184:14 184:20 185:18 186:13 187:6 187:12,19,23 187:25 188:10 188:16 189:20 190:19 193:18 196:2 198:9,22 199:6,20,25 200:8,14,25 201:9,18 202:7 202:12,17,24 205:8,15,25 206:14 207:8 208:18 209:21 212:8 214:8,10 214:14 216:2 216:20,24 217:1,7,15 218:1,22 221:16 224:5 225:5 226:17 227:3 228:5 229:3 230:6 231:24 232:20 234:8 235:6 238:21 241:8 242:1,7,15 243:9,20 244:10 245:18 246:1,13 254:4 254:22 257:8 260:1,9
continuously 25:4
contract 266:14
control 4:22 13:24 32:24 41:2 69:7 76:25 87:19 88:14,15,16,17 88:18,19,19,21 88:23,25 89:1 93:2 131:12 146:19 147:14 147:22 228:2 228:22 230:11 264:13
controlled 153:22
controls 194:13
convention 155:25,25
conventional 256:19 260:7
conversation 135:9
conversations 236:22
converted 220:9
cookie 213:8,10 213:12
cookies 213:7,9 213:12
copies 7:13 266:10,10
copy 31:1,9 36:15 38:1 40:2 65:18 76:3

copycat 148:13 148:21
corn 167:10
cornell 44:22 68:8 71:22 74:20 83:15 84:2,16,23 87:6 98:1 166:18,21 167:11 218:18 218:23 230:20 234:18 247:4 248:6,11 253:15
corner 62:15 79:17,22 211:17,25 227:9
corners 106:10 106:13
corporate 2:16
corporation 12:17
correct 21:15 24:9 29:13,21 30:2,19 31:9 33:5 36:7,15 37:18 38:1 53:23 54:7 55:1 72:23 86:20 146:12 149:16 160:12 160:21 161:12 163:3,24 166:10,11 180:21 181:18 181:19 191:25 198:14,17 200:12,18,19 201:14,15,19 201:20 206:11 220:11,12,21 221:4 223:25 224:6,8 236:12 236:13 245:1
correction 243:9
corrections 267:12 269:17
correctly 191:19 219:25
corrosive 201:5
cost 51:5 62:2 115:8 119:18 120:1 221:7,19 222:6 266:9
costed 114:21
costly 221:12 222:4
costs 150:4
counsel 7:13 8:8 223:16,17 266:12,12
county 268:10 269:15
couple 81:22 110:13 111:17 112:9 114:18 135:18 137:1 195:23 235:10 261:1,9
coupled 74:22 74:23 162:3 229:23 230:17
coupler 44:23 84:11 111:9,24 112:1
course 14:5 16:3,6 83:25 117:22 118:13 120:1 154:22 179:1 209:18 212:15 221:8 241:4 256:12
court 1:1 8:10 8:18 9:7 10:10 10:20 87:14 111:14 162:16 162:20 184:4 234:6 265:4,8 265:10 268:7
courtroom 9:21
cover 82:15 83:8,9 163:12 163:13,17 164:5,6,7 165:3
cow 169:4 175:3
cows 210:15 215:11
crane 117:9 118:7
craned 117:11
crankshaft 51:20 84:10
crawl 171:12
crawler 147:9 148:3,7,14 149:14 151:5 152:3 153:21 154:3,7,8 155:16 156:2,3 156:7,9 241:17 241:24 242:4
crawler's 153:25
crawlers 148:18
crc 1:24 266:23
create 34:9,18 40:14 154:12 155:3 163:15 164:15,18 181:20,23,23 195:11 199:11
created 17:23 34:21,22 38:17 47:2 66:1 75:22 76:3,7 76:12 94:9 98:17 104:13 252:14 253:11
creating 66:10 108:5 154:1

creek 24:25 25:2
critical 146:20
croatia 18:14
crops 240:24
crowd 142:6,12
crr 1:24 266:23
crushed 154:2
crushing 154:1
crust 147:11,18 154:1,3,5,17,17 159:10,13,17 159:18
crusts 40:18
ct 1:16 2:3
cubic 210:19 254:23 255:2
currently 22:18
cursor 57:21 78:16 126:7 229:8
curve 184:20 184:21 185:10 244:23,24,25 247:19,20
curves 14:19
custom 11:19 11:21 12:9,19 13:3,4 15:19 19:22 21:8 34:1 65:16,17 130:15 239:8
customer 14:21 14:21 71:5 116:18 152:2 157:25 204:3 236:25 238:10 238:11 241:14 243:2 251:5 254:5
customers 14:15 34:12 116:15 120:5 144:20 151:20 176:23 179:13 219:7
cut 53:12 100:16 144:14 162:21 214:23 262:6
cutter 23:23 56:5 83:18 144:17 194:9 253:15
cutting 56:6 111:6 262:1
cv 1:7 8:12
cycle 17:16
cylinder 83:20 88:11 97:25 103:12,24 185:24 187:13 199:2,3,13,16 199:17
cylinders 88:8 88:9 106:14 222:3
cylindrical 57:3

d

d 1:13 2:2 4:1,2 4:9,13 8:1 9:8 37:7,9,14,17 38:2 41:17 267:8 268:4,9 269:4,13 270:20
dad 128:22
dairies 14:2 215:5
dairy 40:13 42:3 46:9 71:25 116:14 116:18 122:12 122:20,20,21 169:2,4 174:1
dakota 239:19
damage 203:17 205:4 252:9
dance 176:4
dangerous 78:12,18
dangers 78:19
date 1:15 109:21 193:23 194:5 195:11 207:15 237:5 267:8 268:3,9 268:19 269:3 269:13,25 270:20,25
dated 29:11
daughter 32:3 35:8 76:1 223:1 224:12
day 51:8 123:4 129:10 148:25 156:22 157:22 172:17 174:7 175:11 197:8,8 235:14 240:19 268:16 269:22 270:22
daylight 8:4
days 48:19 267:18
deal 157:23 171:5 174:21 206:17 218:16 250:23,24 251:2
dealer 238:17 239:1,6
dealers 239:9 239:11
dealing 250:17
dear 267:10
dec 20:4
december 1:15 2:2 8:5 32:22 32:25 148:16 148:17 266:4 266:17 267:4

decide 71:21 89:7
decided 12:13 59:8
decision 202:21 241:15
declaration 4:9 4:13 7:2 20:14 21:7 28:19 30:23 31:7 33:15 36:16 37:4 38:3 39:5 40:3,22 41:8 42:9 67:15 141:15 153:8 153:13
declarations 236:18
decreasing 197:8
deed 268:14 269:20
deem 250:20,20
deemed 267:19
deep 50:14 51:3 53:7 116:20 173:22 240:22
deeper 168:13 176:18 203:14 205:8
deere 44:22 185:24 186:20 186:25
defecate 26:25
defendant 1:9 3:1 8:8,24
defendant's 28:25 30:23 31:5 32:16 35:18 36:10 37:6 61:4 63:19 121:2 127:22 132:3 133:12 141:2 158:25 161:9 182:22 183:4 186:18 193:22 206:20 223:4 225:10 253:6 257:18 261:4
defendants 197:19
deficiencies 147:15
definitely 119:18 147:3 260:5
degree 49:24 49:25 50:3,5 85:14 107:16
delay 119:24
delicious 240:17
deliver 99:23 188:8,13
delivery 85:1 99:6,23 104:16 167:21
demonstrate 52:13 130:19 134:24 139:1,3
demonstrated 123:3
demonstration 123:8 131:6,16 131:19,20 132:9,10 136:12,14,17 139:7 142:1
demonstrations 16:18 131:10
department 267:22
depending 87:9 90:22 116:12 234:10
depends 199:20
depict 46:13 47:12,17 54:16 62:10 65:25 94:8 95:25 98:6 109:25 113:13 126:3 132:9
depicted 128:3 128:23
depiction 105:19 125:22 136:23
depictions 105:23 159:3
depicts 30:6 32:20 35:22 37:8 39:10
deposition 1:12 2:1 8:7,13 11:10,10 20:4 20:6 28:11 31:2 33:9 36:11 37:20 39:23 45:24 60:25 65:8 75:11 91:8 94:11 97:2 109:3 112:20 120:25 125:6 132:1 140:25 160:25 182:18 195:25 197:23 198:2 225:14 226:3 227:1 234:24 235:13 245:20 265:13 266:4,9 267:8 267:11 268:1,3 269:1,3
depth 53:7 55:6
describe 43:25 44:19 48:6,16 49:12,13 51:15 52:18,23 55:23 67:18 76:16 79:2,6 81:14 83:13 88:13 99:16 100:22

103:8 104:11 110:5 113:16 135:5 137:5,23 138:16,20 140:4 253:17

describes 30:6 32:20 35:22 37:8 39:10

design 14:24 29:7 47:7,8,13 47:17,24 62:3 145:19 164:13 197:3 200:20 220:1,17 248:9 257:4,10

designate 244:1 246:18

designed 12:12 15:1,3 29:9 116:7 199:22 199:25 200:1 217:3,11,16,22 218:16

designing 21:10 38:13 62:7 70:18

designs 203:21

desirable 44:1

desired 90:3 99:8,23

details 233:10 243:24 246:5

deutsche 135:7

development 22:12,13 29:6 29:7 94:23 158:19

device 11:12 48:10 49:1 60:10 80:13 87:19

devices 74:7,17 92:18 106:13 108:16 219:2 219:24

dew 170:21 175:6 248:14

diagonal 58:12

diameter 83:19 234:14

diesel 48:12 51:10 157:21 164:20,22 180:17,17,23 181:11,17 212:14 214:7 214:16,18,18 220:5

diet 170:21 248:14

difference 16:4 23:8,22 26:11 68:2

differences 23:17,22 68:6 68:22 69:2

different 23:5 48:2,6 67:21 68:6,23 69:2 70:7 92:21 94:17 100:23 102:6 122:25 149:20 157:4 163:21 179:16 183:7 190:6 198:16 201:5 222:13 226:5

differently 27:2 101:17,25

difficult 17:8 117:18 119:12 256:19

difficulties 195:24

difficulty 145:21

dilute 26:16 27:3,9

dip 111:2

direct 74:22 87:6

directing 70:3

direction 59:1 98:24 137:19

directly 44:22 53:16 56:14 60:8 69:23 74:1,22 80:20 82:19 103:17 105:2 126:7,19 127:6 136:21 137:7,8 140:21 165:5 252:21

dirtiness 170:2

dirty 95:14

disadvantages 197:23

discuss 182:17 235:3

discussed 20:21 92:12 101:18 253:10

discusses 40:25

discussing 108:18 252:12

discussion 144:23

disintegrate 202:1

dislodged 201:22

displace 49:2 59:22 98:24 192:13

displacement 24:4 108:12 153:24

display 29:8 246:8

displayed 123:18

dispute 180:20

disrupting 147:10,17

disrupts 153:25
distance 132:19 252:3
distribute 65:21 66:3
distributed 43:7 77:2,5,11 77:14
distribution 60:18
distributors 249:17
district 1:1,2 8:10,11
dived 147:5
division 1:3 232:16,18 233:4 234:1
dock 253:21 254:1,6,13 255:12,14,22 255:23 256:2,7
document 19:25 20:8,9 20:11,15,18,22 28:9,13,16,20 29:3,4 46:1 61:3,6,8,11 62:9,16 65:6 65:10,12 66:6 66:14 67:17,20 75:10,13,15,22 76:6,15,20,22 77:2,5,11,14,17 77:21 79:3 91:7,10,11,14 91:16 94:5,13 94:16,19 95:17 97:4,5,8 100:21 105:22 120:23 121:6,8 124:3,24 125:2 125:5,9,12 130:12 131:8 132:4,7,8,12,17 132:18 140:23 141:2,4,6,8,11 141:21 158:24 197:18,21 226:2,8 253:4 253:7,10,16 257:1,17,21,24
documentation 67:2,7
doda 48:10 49:11 50:5 53:1 54:1,21 54:23 55:4,24 56:3,7,22 58:19,21 59:9 62:25 63:2,9 63:12,15 64:8 64:9,11,14 170:14 189:4 189:17,21,24 190:22 191:4,9 191:23 192:2,9 192:20,21 193:8 220:17 220:23 250:2,7 251:6,8 252:13 252:18,25 261:11,14,22 263:9 264:12
doda's 261:17
dodas 53:14 191:8 262:2
doing 12:2 16:23 52:7 106:7 145:6 149:10 151:20 158:18 176:4 178:16 211:18 244:25 261:22 261:23
dollars 157:21
doubt 63:13
downstepped 54:1
downtime 73:15 115:16 115:20 197:8
downward 82:24 90:20
draft 108:5
drafting 108:3
drag 24:25 41:3 56:15 71:7,9,14 73:1 86:10,11 168:17 172:15 172:15 177:15 178:13 190:1 192:7 249:18 259:22
draped 79:10 79:20
drastically 83:25
draw 258:11 259:7,7
drawn 74:6
drink 170:21 249:2
drinking 248:14
dripping 171:15
drive 2:16 13:23 16:7 48:14 50:2,20 50:20 57:9,13 58:4 143:23 144:3,5 147:12 263:23
driven 51:19 57:9,12,13 203:3
driving 104:22
drop 52:15 249:3
dropped 150:14 246:19
drove 84:9 203:14

du 122:9 141:25
duane 9:15
dubuque 239:18
due 112:5 164:13 202:14
duly 9:9 266:5
dump 210:25
dx 4:8,12,16,19 5:1,5,9,12,16 5:18,21 6:1,4,7 6:10,13,17,20 7:1,7,8,9 223:4 224:7 263:12
dynamic 72:10 84:1 164:19,21

e

e 2:9,9,13 4:1 8:1,1 39:9,11 39:17,20 40:3 41:25 238:23
earlier 67:15 84:15 91:19 92:4 102:7 123:10 186:1 189:2 193:6,6 201:10,17 203:21 206:3 206:13 208:24 221:1 222:9 224:17,24 230:6 231:8 247:1 248:13 252:11,14 253:9,20 258:3 261:5,9
early 15:18 63:18 76:8 92:17 94:8 120:7 189:3 203:21 220:1 220:17 227:12
earned 243:13
easier 59:12 205:12
easily 157:16
eastern 1:3
easy 51:1,8,9 174:10 197:4 210:18
eclipsed 148:7
edge 117:20 193:1
edges 108:4
educated 233:20
educating 13:11
effect 9:21
effective 62:2
effectively 168:13
efficiencies 34:15
efficiency 23:4 70:23 152:18 152:19 164:11 164:12 181:5 182:3 189:12 189:15
efficient 43:20 152:15 164:9 180:11,15,25 181:1 189:10 211:16 213:17 213:22
efficiently 94:25
effort 177:3 214:17 262:4
efforts 29:8
eight 52:15 55:9 102:25 203:7 263:10
eighteen 17:8
either 48:11 59:3,5,18 61:23 71:2 85:2 86:7 123:18 176:18 181:7 203:4 237:21 244:8 250:14,21
elaborate 256:5
elbow 170:3
eldon 237:14 237:25 238:12 238:16,25
email 267:17
embodiment 230:19
embraced 121:24
emitted 78:23
employed 11:20 22:11 29:5
employee 266:11,12
employees 237:10
emptied 156:23
empty 143:11 156:23 157:3 213:12
en 50:17,17 85:24
enable 50:17 52:8 174:20 252:24 255:9
enabled 100:15
enclosed 267:11
encounter 170:8 175:12
encountered 170:10
encouraged 16:17 149:19 150:19
ended 101:3
ends 15:6,7

energy 180:15 180:18 181:1,5 181:6 189:13 245:3
engaging 153:24
engine 42:24 43:3,6 44:17 44:18,20,22,23 44:24 48:12 51:20,24 52:1 53:25 68:24 69:8,17,19 74:1,21,23 82:9,12,16 83:3,9,20 84:10,25 88:18 89:8 90:2 97:25 99:7,9 104:17 144:15 144:24 181:15 181:16 183:8 185:25 187:3 187:16,20 205:23 209:7 209:13 228:12
engines 51:10 83:21 151:24 187:13 209:15 209:23 212:13
enlarge 109:9
enormous 170:22
entail 14:10 79:7
entailed 14:11
enter 145:25 146:14 153:22
entered 269:9
enterprise 15:19
enterprises 11:20,22 12:9 12:19 13:3,4 19:22 21:9 30:10 32:23 34:2 35:25 37:11 39:14 65:16,17 130:15 239:8
enterprises's 142:1
entice 85:24
entire 110:22 212:6 268:5 269:5
entirely 110:21
entrained 210:24 212:9 262:3 263:20
environment 119:12 173:21 201:2,4 202:8 217:3 251:20 252:24
equation 188:22 243:5 243:16 244:11 244:15
equipment 15:25 21:11 41:4 62:4 66:24 93:17,22 115:1 120:12 126:21 127:11 138:20 139:2 140:14,17,21 149:20 150:20 172:15,16 204:17 233:1
equipped 69:12 69:14
ernie 134:13 135:23 136:4
ernie's 127:18
errata 267:13 267:18 269:7 269:10,18 270:1
error 142:12,18 142:19
escape 74:16
especially 17:24 25:9 27:20
esq 2:13 3:2
estimate 12:18 77:10,13 96:6 107:11 114:24 136:19 139:11 148:14,24 149:12 150:9
estimates 148:22
evenly 43:6
eventually 189:7
everybody 122:17 129:21 149:8 156:23 260:12
evidence 158:17 184:19 257:13
evident 197:2
evolution 218:11
ex 185:12
exactly 57:18 76:8 92:16 193:12 204:7 204:14 213:4 226:19 235:10 237:6
examination 4:4,5 9:11 160:15 246:24 260:24
examined 9:9
example 47:21 73:3,5 124:1 155:20 176:10 203:6 210:7 255:4

excellent 71:7
except 211:15
excuse 21:19 34:21 45:17 121:12 183:16 261:23
executed 269:10
execution 268:14 269:19
exhibit 4:8,12 4:16,18,19 5:1 5:5,9,12,16,18 5:21 6:1,4,7,10 6:13,17,20 7:1 7:7,8,9 20:6 28:11 29:1,12 30:5,7,15,18,23 31:2,5,7 32:8 32:11,15,16,19 32:21 33:1,4,8 33:9,14 34:9 34:19 35:15,18 35:21,23 36:3 36:6,10,11,16 37:6,7,9,14,17 37:20,22 38:2 39:6,9,11,17,20 39:23 40:1,3 40:12,22 41:9 41:17,25 45:22 45:24 54:16 60:25 61:4 63:20 65:8 75:11 76:13 86:12 91:8 94:11 97:2 98:3 109:3,6 112:20,22 120:25 121:2,4 123:5,24 125:6 125:8 127:22 130:13 131:25 132:1,3 133:12 134:16 140:25 141:3 153:17 158:25 161:9 182:22 183:4 185:25 186:18 186:18 193:14 193:22,24 195:10,11,25 196:4 206:20 223:4 225:9,10 225:13 226:25 227:1,4,20 229:12 253:6 257:19 261:4
exhibited 123:7
exhibits 4:7,25 5:25 6:25 7:6 7:12 189:3
exist 204:2 246:14
expand 58:16 77:25
expect 154:6 155:17
expected 155:15
expel 176:19
expelled 163:14
expensive 115:1 119:17
experience 155:20 175:7 177:7 258:13
experimental 48:25
experimenting 193:7
expiration 268:19 269:25 270:25
expires 266:24
explain 17:4 50:4 58:21 163:8 188:19 190:20 199:8 201:3 213:4 233:8 243:11 248:17,18,21 250:9 262:4
explained 53:20 78:20
explains 41:12
expo 6:14 121:11 122:6 123:6,14,21 124:10,13 125:22 126:4 127:23 128:10 128:13 131:2 134:4,6,9,21,24 141:25 142:23 148:4 159:4 222:10
extend 60:19
extensively 64:2
extent 19:21 74:14
external 185:12
extract 169:20 171:12,22
extrapolate 66:18 244:17 244:24
extremely 51:1 78:17

f

fabricate 51:9
fabricated 45:4 45:5
face 165:2
faced 164:4 175:15,19 247:13 250:2 262:7
facing 63:7
fact 142:5 145:21 173:11 248:25
factor 243:5,10 243:14

factory 239:15
fail 255:19
failing 89:15
failure 202:4 202:10
fair 11:4
fallen 81:9
falling 81:7
falls 239:19
familiar 18:6,8 18:9 24:2,6,11 51:4 64:9
far 53:7 57:6 57:22 81:7 86:18 95:15 137:15 139:11 144:18 178:12 218:13 234:11 238:4 251:10 263:8
farm 17:7,7,9 21:4 240:10
farmer 240:8
farmers 12:3 13:12 115:2,4 155:21 156:3 156:12 216:4
farming 12:14 240:2
farmstar 1:8 8:9,25 18:22 19:4,17 141:13 238:4 267:6 268:3 269:3
fashion 50:23
fashioned 250:25
fast 148:5 171:3
faster 14:12
fault 142:14
favorite 81:13
feature 253:15
featured 70:7 97:25 123:1
february 96:23
fed 25:2 84:15 104:16 261:14
feed 71:6 175:19 177:10 177:15 192:20 250:2 251:17
feeder 175:15 177:11,12
feeding 113:19 168:17 251:10 252:8
feet 52:15 55:9 55:15 100:4,5 116:19,20,20 132:20 133:1,8 133:10 136:21 139:14 168:18 250:6 255:2 263:10
fell 70:21 81:18
felt 120:15 152:17 168:5,7
fence 136:21 137:15
fibers 211:7
field 15:5,8,10 21:12 53:17 56:15 69:9 86:9 173:18 174:18 177:16 178:10 212:21 212:23,25 214:17,23 249:16,18 262:11
fifth 3:5
figure 103:3 173:3 227:21 227:25 228:3 228:13 231:2 231:17,21 257:23 258:25
figuring 172:10
file 1:7
filed 8:10
fill 58:24 236:24 255:23
filled 219:3,6,8 219:9 253:22 254:1,6,13 256:11 257:4,5 257:11,13
filling 59:5
filmed 34:24
filter 171:1
financially 266:13
find 15:17,24 74:7,16 110:11 118:25 119:4 119:16 121:19 128:16,16 168:11 175:1 229:2 236:23 249:13 267:11
finding 245:2
finds 215:14
fine 58:18 64:20 106:16 107:23 108:6,7 161:7 245:10 260:13
finger 144:15
finish 10:22,25 186:6
finished 96:23
fire 24:14,20 25:3,3 232:16 232:18,23 233:1,4,7,14,21 234:1
firecracker 180:21
firefighters 233:16
firefighting 21:12 22:14,19 23:14,18 24:8 24:12,17,23

25:8
firm 8:23 9:2
first 13:21,21 40:12 46:8 61:13 77:22 97:21 100:13 114:20 118:14 137:2 147:2 148:2 153:18 157:8 193:11 203:11 204:17 230:13 234:4,5 235:14,16 237:3 244:23 247:9 258:10 266:5
fish 152:6
fit 171:22
five 25:3,3 81:3 208:7 234:14 238:13 245:7 250:6 260:11
fixed 92:18 200:8
flat 108:3
flexibility 52:9 58:13
flexible 45:7 56:19 167:10
flier 65:13,19 65:22,25 66:3 66:19 121:10 194:20 195:10
fliers 124:7
flip 46:2 89:18 89:20
flipped 158:25
flipping 133:12 134:15
float 49:8 143:16 219:21 219:25 255:5,9
floatable 49:8 55:18 153:25
floating 11:11 42:20 43:11 44:2 45:10 49:1 59:15 60:10 86:23 100:18 112:10 139:21 154:13 157:1 166:7,14 193:7 199:4,18 199:23 200:23 231:18,22 256:2
floats 106:1 107:1,5,8,11,18 108:8,17 255:3 256:11 257:4,5
floor 152:14
flotation 48:10 74:7,17 90:8 92:18 106:13 108:16 219:2 219:24
flow 15:8 71:2 99:23 151:12 151:21 181:8 181:23 183:8 183:12,19,23 184:11 185:1 185:10,11,13 185:15 206:4,6 210:7 234:11 251:12
flowing 197:9
fluid 83:14 84:5,19,22 85:1,8 86:6 87:6 99:6,23 102:19,22,24 104:8,11,16 105:3 112:11 143:13 162:13 167:8,20 256:2 259:21
flush 215:14
flushed 169:5
foam 219:4,6,8 219:10,14,16 220:4,13 253:22 254:1,6 254:13,19 255:9 256:11 257:4,5,10,13
focusing 214:2
fold 92:25 94:24
folks 19:12
following 145:2 229:8
follows 9:9
foot 92:25 106:22,23 210:19 252:20 254:23
forage 122:12
forced 163:13
foregoing 268:13 269:18
form 22:24 23:20 25:24 26:7,16 27:3,9 27:11 32:13 47:9,14 50:7 58:8 62:12 63:21 66:15 69:21 73:23 80:6,17 81:6 87:16 89:11 100:12 101:22 102:9 105:5 107:14 108:24 111:23 112:14 132:23 133:3 159:6 165:20 166:25 167:6 167:17 168:6 183:15 185:17 186:12 187:5 187:11,18,24 188:4,9,15

189:19 190:18 198:21 199:5 199:19,24 200:7,13,24 201:8 202:5,11 202:16,23 205:6,14,24 206:13 207:7 209:20 212:7 214:12 216:1 216:19,25 217:5,13,24 218:20 221:14 224:23 228:4 230:5 231:23 232:19 238:19 241:7 242:13 243:7,18 245:24 254:3 254:21 257:7 259:25 260:8
formalized 11:24 12:16 15:19
formed 105:14
forth 120:11 199:14 262:1 263:20,23 264:11
forward 42:14 42:25 56:7 89:20 100:1 103:11,14 148:5 230:10 267:15
found 14:5 15:21 49:3 90:11 179:6,7 179:10,12 192:8 247:20
foundation 202:6 205:7 214:13 217:6 217:25 218:21 221:15 238:20 241:25 242:6 242:14 243:8 243:19 245:25
founder 21:8
four 13:23 17:16 83:20 87:3,12 88:2 97:25 156:1,4 156:6,9,13,21 157:22 185:24 187:10,12,12 203:7 208:4 250:14
fourth 210:5
fracking 151:13
frame 50:12 105:11 113:18
free 129:25 130:3,7,9 215:11 268:14 269:20
frequently 117:9
friction 14:19 72:25
front 5:11 9:21 39:15 42:4 43:1 44:6 49:17 60:9 69:24 79:8,10 79:21,23 82:23 82:24 85:3,16 85:18,23,25 86:7,15,21 88:12,16,16 89:3,18,20 90:19 92:8,10 92:14 98:10,13 99:9,9,10,12,15 99:17 100:17 100:22,23 101:8 109:16 110:8,19 111:1 112:6 131:2 136:21 139:20 139:23 146:18 155:3 169:19 197:12 198:13 198:15,16,23 199:1 200:3,17 263:16
fry 152:6
fuel 48:20,22 49:4 156:8,9 156:16 157:21 164:20,22,22 180:17,23 181:17 209:10 211:12 212:15 214:7,11,16,18 214:23 220:2,4 220:5,6,9
full 9:13 10:23 41:3 49:3 83:24
function 50:17 100:6 101:17 101:24 112:10
functional 51:17
funny 248:19
further 34:11 34:11 107:5,9 108:14 111:5 211:20 264:24
future 242:20

g

g 1:24 2:4 8:1 238:23 266:23
gallon 49:4 82:14 116:16 116:17,19 180:17,22 210:13,14,17 213:15
gallons 68:9 99:25 116:11 116:11 151:19

151:21 176:12 183:24 184:12 184:15 185:6 185:15 186:3 186:11 210:3 210:19 212:14 212:24,25 213:14,16,20 214:22
gap 60:9
garbage 170:19 177:20 179:10 249:4
gases 78:8,22 93:25 94:3 252:6
gate 82:22,23 82:25 85:16,18 87:9 88:22,24 101:3 172:21
gates 69:8,8 85:23 169:8 173:23 175:4 176:10,11,17 238:8 249:4 264:10
gea 238:22,23
gear 145:10
gearbox 49:25 50:3,5
general 122:22 247:23
generally 43:25 44:13 164:9 247:8 254:1
generate 29:19
gentleman 33:19,20 38:5
gentlemen 140:7
georgia 233:2
getting 81:4 118:1 152:2 164:13 181:6 208:24 211:13
gisch 1:24 2:4 8:18 266:23
give 11:4 56:13 162:21 169:22 193:16 195:22 195:24 200:14 209:24 222:7 229:4 246:5
given 197:20
gives 250:15,15
giving 14:15
glasses 173:9
glue 211:6
go 10:1,2,4,5,14 16:17 17:19 30:12 59:2 64:18 65:2 71:8,13 73:24 80:10 82:1 84:22 85:2,3 97:23 99:12 102:15 104:20 110:16 111:4 114:7,14 146:18 149:19 160:10 161:20 163:14 172:1 173:18 174:4,5 175:25 177:16 178:21 182:15 184:20 186:8 190:1,15 205:10 206:8 208:17 212:18 214:11 229:4 235:2,7 239:23 245:6,17 249:5 249:7 257:20 260:22 263:20
goal 116:1 205:19 206:9 206:14 242:9
goes 148:12 164:16 167:2 183:24 184:12 199:10 212:21 232:3
going 8:3 19:16 20:1 31:1 33:7 33:17 36:9 39:5 56:6 61:5 64:22 65:6 69:10 75:9 78:13 82:2,3 91:7,13 94:5 94:16 97:7 98:9 100:1,20 105:17 108:4 109:1,9 110:24 112:22 114:9 115:22 120:11 120:23 121:3 125:5,11,25 127:21 130:12 131:7 132:6 136:6 137:1,21 138:12 140:23 143:17 152:18 154:22 157:10 160:4 161:3 173:15,16 174:16 175:18 181:16,17 182:10,20 189:25 208:10 211:18 220:20 223:3 225:19 226:24 229:13 233:18 235:7 242:19 245:12 247:16 248:20 249:16,18,19 251:23,24 253:4 256:25 257:16 260:16 261:3 265:2
good 8:3 12:2 16:8 72:3,4 150:24 151:6 152:23 154:9 156:20 158:21

158:22 160:2 211:16 212:2,4 250:8 251:16 256:24 259:18 265:8
gould 3:4 8:23 235:25 237:4
gpm 185:2,5
grab 80:3
graduated 240:1
grains 240:12
graphic 79:19
gravities 244:20
gravity 26:14 42:18 43:8 44:1,13,14 90:4,11,12 91:3 210:4 211:21
gray 53:24 56:18 103:18 103:20 118:15 118:15 204:16 261:24 263:16
grease 197:6
great 16:8 18:3
greater 34:15 52:9
greatest 212:4
green 140:20
ground 55:16 153:24
group 194:11
groups 194:12
grow 13:25 15:21 16:9 17:18
growing 14:13
guess 12:25 46:25 54:17 60:13 85:7 95:20 129:11 139:13 144:6 173:7 179:22 232:12 233:18 233:19,20 247:2 254:14 257:2,8 258:12
gun 85:17 99:9 155:3 197:12 197:13 198:13 198:15,22 199:1,10,14 200:17
guns 85:12
guy 95:14 157:13
guys 162:17

h

half 18:12 63:5 159:25 172:16 181:2 192:16 210:13,17
hand 13:17 56:2 62:15 79:18 84:24 99:7 104:17 126:13 127:6 140:12 165:7 171:21 196:8 213:10,13 227:8 266:17
handful 240:14
handheld 87:20
handle 142:25 191:12,23 247:14,25 248:1
handles 251:6
handling 230:21
handrail 54:5 264:3
handrails 261:25
hands 213:8,12
hanging 60:1,2
happen 18:4 108:21 174:11 178:13 201:24 225:5
happened 81:14 171:4 177:25 179:14
happy 152:5 156:23 176:3,4
hard 72:3 157:9 204:11 215:22 243:13
harder 205:12 205:16 243:5
harmful 78:22
harness 2:15 9:2
harnessip.com 2:14
hat's 153:6
hate 248:17
hay 12:2
hazen 243:4,16 244:11,13
hca 1:7 8:12
head 17:20,21 17:21 23:2 70:23 72:10,10 84:1 155:4 158:18 164:19 164:21 168:8 168:10 178:5 178:10 179:14 180:12 190:1 234:10,15 236:5 240:15 251:17,22 252:2,9
header 131:10 131:12 133:24 135:8 137:8,10 140:7 158:12
heading 186:20 196:22
heads 10:13

heard 18:21 19:6 142:23 143:3 188:3 237:21,24,24
heavier 256:13
heavy 90:18 91:2 219:14
heel 53:13 191:4 261:19 262:19 263:1
held 8:13 122:8 146:21 150:10
help 14:21 24:16,17 154:7 174:18 236:24
helped 13:10 13:10 14:21 149:22
helping 16:25
hidden 127:19
hides 169:8
high 23:2,4 25:6,6 27:6,7 62:4 68:13,14 70:23,23 72:2 72:2 73:12 94:3 107:11 155:4 168:8,10 177:15,23 178:5,9,9 179:14 180:12 181:5,5 190:1 192:15 215:21 234:9,10,15 240:1 249:16 250:2 251:14 251:16,17,22
higher 25:13,18 52:15 73:16,16 152:8,10 182:3 189:14 211:21 252:9 259:12
highlight 229:13,14
highlighted 78:16
hire 173:5
hired 177:2
hit 70:25 180:12
hitch 49:16
hog 17:13 169:8
hogs 170:21
hold 211:8,8 247:16
holder 101:12
holding 150:11 238:4
holdings 237:19 239:3
holds 57:1 74:13
hole 85:25 191:9
home 11:16
homogeneous 206:15
homogenize 252:23
hook 79:8,11 79:13,13,15 80:11 101:1 168:19
hooked 117:22 118:16 135:7 230:11
hope 155:6
horizontal 49:17 53:3 75:1
horse 68:14
horsepower 14:20 52:2,4,6 68:14 175:23 178:8 180:22 181:12,13,17 183:8 186:22 186:25 187:4 187:15,17,21 188:14,21,22 188:24 206:7 234:17 250:5
hose 13:22 15:2 24:25 41:3 53:15 56:15 59:5 71:7,9,14 73:1 86:10 101:1 104:15 104:20 115:19 117:5,22 122:24 151:16 166:24 167:2 172:15,15 173:24 177:15 178:13 190:1 192:7 249:18 259:22 262:3
hoses 58:14 172:21,23 198:23 199:15 220:20
hostile 201:2,3 202:8
hot 202:1 215:22
houle 53:12,19 54:2 71:15 134:11 170:15 190:4,21,21,25 191:5,11,20 192:3,5,12,13 192:18 238:22 252:13,17 261:11,13,23 261:24 262:13 262:23 263:9 264:10
hour 159:25
hours 72:13 173:12 235:10
houses 71:9
housing 56:22 56:24,25 57:1 57:3,16,19 58:1,6 84:7

164:25 165:2 165:14,18 166:3 167:16
https 196:14
hub 202:2
hubs 119:10 201:12
huge 16:24,25 19:21 118:25
huh 206:5 213:19 217:20 220:18 222:11 256:4 262:20
human 248:25 249:1
humper 117:5
hundred 17:20 51:23 90:18 99:25 116:10 129:12 139:14 157:21 168:18 176:15 186:3 213:7
hurt 144:19
hydraulic 51:12 52:14 57:11 58:13,13 75:6 82:13,14 83:4,6,12 88:8 88:9,11 103:12 103:23 106:14 198:19,23,25 198:25 199:2,3 199:15,16,17 221:25 222:2 227:25 228:8 228:17,22 229:6,21 230:1 230:14,15 264:8
hydraulics 82:17,20,21 106:5
hydrogen 94:1 94:3
hydrostat 48:13 50:1,19 51:11,12,18,19 52:8

i

ian 3:13 7:2 9:4 135:8,11,14,16 137:15 138:9 140:9,21 141:15 149:3,7 149:16 244:2,9 244:9
ian's 128:22 144:7
ice 243:1
idea 61:18 146:8 158:9 175:18 254:11 256:24
ideas 61:22,25
identical 59:19 62:25
identify 8:20 161:25 228:21
image 29:11 47:21,21 53:21 60:14,24 224:22
images 46:2,4,5 47:6,8,12 48:2 54:15,18
immediately 58:25
impact 59:14
impacted 60:15
impaled 204:8 204:10
impartiality 266:15
impeller 45:1 48:14 50:2 51:21,22 56:7 57:14,14 59:1 72:3 73:8 74:25 83:19,22 83:25 84:3,9 84:13 163:7,9 163:12,14,24 164:4,8,9,17,23 165:12 166:2,9 166:12 169:12 169:13 171:13 175:16 231:14 231:20 232:4,7 232:10,10 234:13 247:5,8 247:13,17,23 248:6,10 262:7 263:6
impellered 164:15 168:11 175:19 177:24 178:1 215:21
impellers 163:22 164:2
implemented 172:11
important 10:11,19 75:5 175:13 212:22 218:11
improve 15:8
improved 15:2 42:19 43:10
inch 83:24 192:16 234:14
inches 45:12,21 102:25,25 159:19 191:10 191:11 234:13 250:13
include 45:2,6 56:22 67:7,10 67:13 69:15,17 69:24 70:2 78:5 84:2 86:5 86:25 92:8,11 98:10 101:6,8 155:11 201:7 202:21 255:13

included 30:16 33:3 36:5 37:16 39:19 40:24 42:12 43:16 49:10 77:19 83:15 91:14 92:6 267:13
includes 40:10 132:12 165:11
including 21:12 22:12 24:3 29:6 36:5 142:24
income 17:7,10
incorporated 21:9 36:1 39:14 269:12
increase 14:12 191:3 214:7 219:19,23 221:23
increased 219:16 221:19
increasing 209:17
incredible 74:5
indented 118:23
independent 261:17
indicated 94:2
indicates 124:25 132:17 132:18 147:25 148:6
indicating 267:13
indicator 130:16
individually 152:9
industries 1:5 8:9 9:3,5 19:6 19:14,18 21:12 21:13 125:3 141:13 150:25 151:16 160:19 166:22 267:6 268:3 269:3
industry 13:15 13:25 14:13 16:7,20,25 17:1,5,6,18 19:1,3,10,12 22:19,22 23:14 24:1,17,17 64:9,15 72:1 116:15 119:3 122:18 149:25 150:2 151:13 151:14,18 153:1,2 155:21 169:3 218:6,11 219:1 233:7,15 234:21 241:12 243:17 248:23
influence 202:20
information 66:13 149:7 235:1 246:17
injured 143:1 144:10
injury 144:12
inlet 43:16,19 56:4 57:18 63:6 84:5,20 102:19,22,24 105:3 154:18 162:5 167:8,19 178:6 191:9,10 191:11 250:12
inletting 44:10
innovate 13:13
innovation 218:12
input 50:18
inquiring 24:16 235:22,22
insemination 170:18
inside 17:14 57:15,16 165:12 166:2,9 170:1 231:14 263:6
inspect 130:3,7 144:14
installed 23:23
instructions 145:2 265:7
intake 43:16 45:2,6,9,18 84:15,19 112:12
integral 56:25 57:2 167:7
integrator 240:23
intend 246:16
intended 198:3 253:1
intending 120:19
intent 197:20
interact 252:21
interest 29:20 226:21 235:23 266:14
interested 129:13 136:11 138:3 266:13
interior 204:20
interject 223:12
internal 77:20 78:13,25 86:13
internet 41:2
interruption 184:7
intimately 66:17

introduced 20:6 28:11 31:2 33:9 36:11 37:20,22 39:23 45:24 61:1 65:8 75:11 91:8 94:11 97:2 109:3,5 112:20 112:22 120:25 125:6,8 132:1 132:3 140:25 141:2 148:3 182:21 194:9 196:1,3 198:5 206:19 225:9 227:2,4
introducing 131:25 226:24
inundated 151:11
invalidated 242:10
invent 38:15
invention 155:16
inventor 21:19 21:21 227:17
investigating 62:11
investment 62:5
invite 86:3
involved 19:23 22:12 24:14 29:6 34:6 72:1
involvement 38:12
involving 141:16
iowa 1:2 8:11 11:14,17 21:2 21:5 24:19 26:22 204:4 205:4 232:24 240:5,7
ip 2:15 9:2
ipr 141:16
irr 27:18
irrigation 27:18,22 180:8 260:7
ish 163:1 264:14
issue 119:15 124:7
issues 78:7 201:11,21 215:19
items 64:3 96:16 175:1

j

jar 213:8,10,12
jeremy 5:4 16:4 33:23 34:1 36:1,18,19 40:25 41:12 46:19,20 95:23 223:1 224:12 232:25 236:23 237:1 242:19
job 32:4 34:4 150:25 152:23 156:8,20 157:25 173:2,4 189:24 239:25 259:18
john 44:21,22 185:24 186:20 186:25
joke 248:13,19 248:21
jokes 248:18
joystick 194:14
judge 9:22
july 37:11,12 195:8
june 236:6
jury 9:22

k

kathy 12:7
keep 89:22 112:10 115:7 115:22 120:19 172:2,6,7 197:7 212:8 243:23 246:16 249:8 251:9
keeping 172:9 197:9
keeps 215:9
kicking 190:9
kid 157:9
kilowatts 188:5 188:8
kind 12:16,24 13:7,20 16:1 17:3 61:25 70:5 103:8 107:1 113:17 127:19 158:13 162:15 163:5 226:22 248:8 252:12
kinds 170:19
kiss 172:4
knew 66:17 177:5,6
knock 242:18
knockoffs 149:18
know 10:12,22 10:24 13:2 15:18,23 17:19 31:13 32:2 34:12 44:8 46:16 48:23,24 53:19 54:8 59:20 62:23 63:1 66:6 67:21 68:2 69:5 72:2

75:22 76:6
78:11 83:14
91:21 92:24
93:10 95:1,16
95:18,19 96:3
96:11,21 97:15
100:17 104:19
106:20,23
109:19 113:3
114:20 115:16
115:22,24
116:12,14
118:4,14 119:2
119:3 120:14
120:14 131:4
135:9 138:6
141:11 143:11
144:9 145:8
146:22,24
148:12 149:9
151:17 152:1
152:17 154:15
155:20 156:25
157:11,15,19
158:5,7,20,25
161:5 168:17
169:3,24
170:19 171:19
172:2,23 173:7
173:13 175:1,4
178:10 180:7
180:19 183:24
184:12 186:13
186:14 190:6
194:16,19,21
194:22 195:5
198:4 202:3
204:4,18
205:11 207:10
207:14,16
209:21 210:11
210:16,19,21
211:24 215:22
218:8,17,23,23
222:6,21
224:14,15
225:6 228:2
232:20 233:6
233:12,25,25
236:20 237:1
238:13,15,16
239:21 241:18
242:8,9,11,19
243:4,23 244:8
245:22 246:2
249:3,25 254:8
254:22,24
255:4,8,10
264:9
knowing 11:11
158:17 177:7
knowledge
11:11 51:10
237:2 239:14
243:13
known 27:14

l

label 223:8
labeled 61:6
67:21 100:21
102:16 105:18
109:5 206:23
258:25 259:3
labled 231:5
labor 16:3
lack 106:9
176:20 242:16
242:17
lagoon 4:21 5:3
18:16 32:23
40:13,16 41:20
41:21 42:4
45:11,16,20
46:9 52:17,23
53:8 55:20,22
70:3 71:1
78:17,23 80:4
80:15,19,24
81:2,5 86:22
104:3 110:10
111:2 113:11
113:19,21,22
113:25 114:3
118:22,24
119:13 123:1
127:20 131:10
131:19 132:9
132:16,19,22
133:1,7,10,22
133:24 134:11
135:8 136:14
136:17,24
138:1,10,22
139:12,22
143:4,10,11,13
145:17,22
146:1,11,15
147:9,12,13,19
147:22 148:3,6
148:14,18
149:14 150:3
152:20 153:21
153:23 154:7,7
155:15,16,18
155:22,24
156:1,2,3,4,7,9
156:13,20,22
157:1,1,3,4,22
159:12 163:6
166:13 168:13
169:6 171:11
177:13,14,18
177:20 178:19
178:21,22,23
179:4,5,11
181:10 190:12
191:15 192:6,9
192:24 193:2
201:11,23
203:15,16
204:10 205:3,4
205:13,21,23
209:8 211:25

212:1,6 213:1 214:3,5,19 215:15 220:24 240:20 241:17 241:24 242:3 249:6 258:4,15 259:3 261:19 262:24,25 263:13,24 264:19
lagoons 18:18 41:1 68:8 78:8 93:23 118:2 119:1 142:25 156:24 159:9 159:17,18 174:3 192:19 203:11 241:13 249:5 258:14
lakes 25:7
large 14:2 68:7 110:10 116:9 151:12 175:25 176:5 177:25 179:3,3 191:5 233:1 251:9,16 262:6
largely 121:21
larger 15:11 17:22 83:24 173:5 191:13 191:20 251:12 256:16,17 262:14
launch 71:13 145:19 146:7
launched 53:5 147:1 149:15 156:11
launching 204:5
law 8:23 9:2
lay 79:24 104:20,20 174:12
layer 258:18,18 258:20,21,21 259:1,4,7,8,23 260:4,6
laying 71:9 100:17,18,18
layout 128:9
lead 68:12 69:11 71:13
learn 16:19,22
learned 106:6,6
learning 176:22
lease 173:7
leave 211:17 244:9
left 57:20 60:1 60:13,19 84:22 85:17,19 91:4 99:8 126:19 127:6,14 165:7 196:8 230:10
legal 8:16,19 267:1 270:1
legally 26:22 26:22
length 43:7 89:16 99:8 101:4
letter 267:19
level 106:2 199:7,15
levers 264:5
liability 78:11
license 158:2,6 158:8,10
life 72:4 73:11 173:8 240:9
lifted 21:19
light 68:18,20 120:20 186:8
lights 88:19
lightspeed 34:13 69:6,6 209:16
liked 51:22 179:17
likely 145:1
likened 104:3 210:9
likewise 10:24
limestone 210:12
limit 74:18
limitation 168:24
limited 8:9 9:3 9:5 19:7,14,18 73:15
lindstrom 134:14
line 10:20 41:3 66:18 69:10 86:10 105:10 105:14 128:5 150:19 152:22 174:17 178:11 218:18,23,25 223:14 224:2 267:13 269:7 270:3
lines 198:19
lining 131:24
link 30:13,21 30:22 69:5 136:20 196:9
linked 34:14
liquid 11:25 12:1 13:11 15:10 17:15 18:6,9,15,18 22:15 23:3,4 24:7 25:12,14 25:23 26:6,16 26:23,25 27:1 27:4,9,23,25 41:4 43:21 44:10 45:11,16 45:20 55:22 56:8 58:6,24

59:2,7,22 60:6 63:25 64:15 73:8,10 78:23 80:4,15,21,24 81:2,5,8,10,18 85:2 86:1,9,22 89:14 93:22 98:18 99:13 100:8,15 102:1 102:2 104:17 107:8 110:11 115:19 116:4 142:12 146:2 146:10,16 147:5,11,18 151:12,13 159:9,12 162:1 162:9 163:1,14 163:22 164:16 166:6,13,16 167:3,20,23 168:4,21 173:17 175:2 188:24 189:18 191:1,21 192:13 199:4 199:18,22 200:22 201:13 202:15 205:11 205:15,17 206:10 208:24 209:7 210:7 211:6,7 214:3 214:6 215:4,25 216:13,17,22 217:3,11,19,22 220:24 230:18 230:21 231:16 231:18,20,22 231:25 232:3,7 232:8,9,11,15 232:15 240:24 243:6 252:3 258:10,13 259:12 260:4 263:13 264:12 264:19,19

liquids 25:9 27:19,20

list 174:17

listed 21:21 22:6 30:8 32:22 35:24 37:10 39:12 40:11 41:10 42:1 174:25 227:16 269:7 269:17

listing 269:7

lists 41:18 185:2 186:24

liter 186:21,25

literature 123:19

litigation 19:16 19:23 141:12 197:19

little 15:11 17:4 17:19 23:7 50:4 51:15 59:17,17 68:5 77:25 85:6 106:8,15 108:1 108:13,15 118:24 162:21 169:18 184:6 188:19 191:8 206:15 211:19 213:4 233:8 234:7 248:1 254:18 256:5,9 262:8

live 21:2

livenote 2:5

llc 1:8 8:10,25 18:22 19:4,17 267:6 268:3 269:3

load 59:5 71:6 73:1 79:19 86:8,8 113:19 113:20 116:25 168:19 172:16 205:22 209:6 209:12,17 212:12

loader 117:6

loading 73:1 79:4,6 168:17

locate 89:8

located 42:18 43:9 44:2,15 45:10 49:12 57:25 86:21 90:13 102:24 105:2,7 124:25 125:3 133:17

location 42:17 43:19 90:2

locations 239:15,17

lock 201:25

locked 106:7

locking 202:9

lodged 169:21 169:21

logical 60:11

long 12:8 61:16 81:1 90:9 99:4 106:22 116:19 132:20 133:1,6 133:8,10 171:14 173:12 191:2 226:20 235:8,18 240:8

longer 89:25 143:13 156:10 192:10 213:2 248:19

longest 132:18 132:25 133:6

longevity 72:19 72:22,24

longitudinal 90:16 91:3 105:7
look 24:20 89:13 125:16 128:13 129:15 135:16 158:11 171:13 174:13 210:2 211:11 229:5 233:11 233:11,11
looked 76:12 100:24 102:7 123:10 152:21 189:2 203:20 209:10 222:9
looking 17:7 24:13 40:21 41:8,16,24 47:20 61:13,25 62:1,1 63:19 86:12 95:11 99:15 123:25 124:19 129:22 130:5 131:9 137:18 140:7 152:14 155:9 183:22 184:10 184:23 234:11 251:4
looks 99:4 124:22 125:4 127:18 137:7 140:6 151:5,6 155:9 195:6 233:14 241:8 264:1
loose 53:13 262:1
lose 202:1 247:12
losses 14:19 72:25
lost 150:16
lot 14:7,18 17:23 70:20 78:9 115:25 119:18 120:9 129:9,15,22 136:11 138:7,7 138:7 149:18 149:18 151:22 151:23 154:22 156:23 157:16 158:17,18 170:8,10 176:8 210:20 213:11 215:5 226:20 242:21 243:12 250:21
lots 226:5
loud 21:7
lovingly 185:23
lower 25:21 26:2 53:6 79:16 108:9 181:20,23,23 264:9
lowered 50:15 55:5,8 86:2
lowest 183:12 183:14,19
lunch 118:5
lynn 264:7

m

machine 85:3,4 88:9 170:7 261:25
madam 267:10
made 49:25 51:16 52:11 59:12,13 60:10 66:6 71:7 90:23 100:14 100:14,15 119:5 133:23 142:7 143:6 146:3 148:17 166:16 167:11 172:22 193:11 204:3 205:8 215:21 248:13 256:18 262:9 265:5 268:7
magazine 34:23 222:25
main 86:10 192:14
maintain 115:12 197:6 221:3,13,17 222:5
maintenance 196:23 222:6
make 9:24 10:7 10:17 11:1 15:6 49:22 55:13 68:20 70:24,25 78:10 82:7 89:24 90:8,8 115:11 144:22 161:6,7 167:13 170:6 170:25 173:4 173:19 174:10 174:22 176:3 178:11,14 181:7 197:17 206:2,10 211:4 213:3 214:15 216:11 219:21 221:2 233:11 233:11 241:15 248:18 255:20 258:24 259:20
makes 16:3 51:17 92:19 155:6 174:23 178:3 181:3 212:25 213:1 213:24 214:17 218:7 234:18 248:19 254:20
making 14:11 52:3 85:25

148:24 186:7 198:6 242:11
man 33:22 38:8 54:8 93:7,10 113:23 153:22
managed 31:22 144:19
manager 34:5 34:23 222:25
managing 35:9 171:16
manifold 228:3 228:22
manipulate 176:21
manipulated 164:12
manner 152:16 157:7
manning 11:14 11:16,17 21:2 21:4 240:7
manual 5:19 75:19 76:3 145:9 161:11 161:14
manuals 67:10
manufacture 15:14 16:10
manufacturer 184:21
manufacturers 123:1
manufacturing 21:11 66:23
manure 6:14 11:25 12:1,14 13:11 16:18,18 17:15 18:1,6 18:10,15,18 22:15,22 23:17 24:7 25:14,23 26:4,6,17,23 27:1,4,9,24,25 34:22 41:1,4 43:21 45:11,16 45:20 58:6 64:1,15 66:23 67:3,4 70:3 73:8,10,13 78:23 80:4,15 80:21,24 81:2 81:5,8,10 82:4 83:15 86:22 93:23 107:8 116:4,25 120:9 121:11,21 122:6 123:6,14 123:21 124:10 124:13 125:22 126:4 127:22 128:9,12 131:1 134:4,6,9,21,24 136:24 141:24 142:2,3,6,13,22 142:25 143:4 147:11,11,13 147:18,18,22 148:2,4,15,19 149:13 150:10 151:13 153:22 155:16,18,22 159:4,9,12 162:1,9 163:1 163:6,22 166:6 166:13,16 167:24 168:4 168:21 175:2 180:14 188:24 189:18 191:21 199:4,18,23 200:22 201:13 202:15 205:11 205:16,17 206:1,10 208:24 209:7 211:6,8 214:3 214:6 215:4,25 216:14,17,22 217:3,11,19,22 218:15,19,24 219:1 220:24 222:10,25 230:18 231:17 231:18,21,22 231:25 232:3,7 232:8,9,11,15 232:15 234:21 240:20,24 243:5,6 248:23 256:10 258:3 258:10,14 260:4 263:13 263:13 264:19 264:20
map 17:22 127:24 128:3
march 96:24
marked 4:7 7:6 31:4 39:25 60:25 61:3 121:1 161:4 195:25 227:1
market 13:14 15:17 16:14 147:25 148:2,5 148:6,7,16,20 148:22 149:13 149:24 150:2 150:10,12,16 150:19,20,21 151:6 157:2 218:18,25
marketed 16:15 66:1
marketing 29:8 32:4,7 34:16 38:17,20 40:5 65:14 66:11,22 67:13,14 233:6 233:9,13
marketplace 61:14 226:11
markets 218:23

marshal 24:15 24:20 232:23
massive 191:1
material 112:11 230:22
materials 66:11 67:13 71:25 215:23 216:5,7 217:4,18
math 244:15 254:25
matter 8:8 248:25
mattresses 169:4,4
mean 12:6 47:20 52:20 172:14 196:12 207:15 233:13 248:3 262:21
meaning 185:11
means 163:11 243:11 250:10 262:22
measure 210:18
measured 72:8
measurement 132:14 180:18
measurements 132:13
media 8:6 123:13 159:25
meet 62:3 235:12
members 77:3
memories 61:12
men 140:12
mentioned 27:3 44:17 49:10 73:3 177:9 205:3 215:3 253:25 254:5 261:13
mentioning 72:19
merchant 3:4 8:23 235:25 237:4
merchantgou... 3:3
merit 2:4
mersed 195:1
mess 172:22
message 77:23 78:5
messy 169:18
met 135:14
metal 72:3
method 172:4
michigan 2:18
middle 44:15 91:4 103:3
midwest 120:10 122:19 267:17 270:1
mil 122:11
mild 56:6
mile 25:2 172:16
miles 11:17
milk 210:9
million 116:11 116:16,16,19 213:15 214:22
mind 9:13,16 22:2 92:23 159:23 179:20 208:6 223:11 245:6 246:11
mine 166:1
minimal 159:19 185:12 196:22
minimize 18:2 200:21
minneapolis 3:7
minnesota 3:7
minuses 244:18
minute 17:3 26:15 33:17 36:19 68:9 78:20 82:14 100:1 151:19 151:21 176:13 183:24 184:12 184:15 185:6 185:15 186:4 186:11 208:7 210:3 212:24 212:25 213:14 213:16,20 245:7 260:11
minutes 81:3 138:25 171:9 171:24 213:17 213:21 214:20 214:22
misread 22:1
mission 168:9
misspoke 153:15 230:6
misstates 184:19 201:16 206:12 224:24
misunderstood 220:7
mix 74:15 98:20 99:2 139:21 210:12 210:15
mixing 259:14 259:18
mixture 26:4
mixtures 25:14 25:17,21
mobile 151:15
mobilestar 4:22 32:24 34:13 69:4 194:17
mobilestar's 41:2

mobility 212:3
mobilize 118:18 119:13
mobilized 120:4
mobilizing 59:12 120:2
model 23:22 68:24,24 76:21 90:22 92:12,17 94:8 120:18
models 23:24 63:18 67:21,21 67:24 68:3,6 68:23 69:2 70:8,10 76:23 76:23,25 90:23
modification 50:25 51:16
modifications 49:22
moment 176:6 177:5 195:22 225:4
money 114:21 157:24
morning 8:3
motor 50:2,19 51:19 52:14 57:11 75:1 263:17 264:8
motorcycle 240:3
motors 48:13
mount 24:19,19 49:16 232:23
mountain 170:21 175:6 248:14
mounted 44:23 48:11 57:14 84:13 156:21 190:6
mouth 251:25
movable 87:11 87:18
move 20:2 23:3 23:3 85:4,11 87:21 98:16,19 98:22 103:13 108:12 117:9 117:20,24 120:13 151:10 182:2 191:1,5 200:6,11 212:1 212:1 214:20 232:7,15 252:3 263:12,18,19 263:22 264:5,5
moved 96:15 103:11,23 151:18 199:1
moves 199:13 200:10
moving 87:25 88:2,6 110:10 110:21,22 113:10 125:13 197:5,10 198:11 214:5
muck 105:10 105:14
muddy 145:22 146:12
multiple 155:19
munitions 122:11
murphy 117:14
mystery 158:13

n

n 2:9 4:1 8:1
name 8:15 9:14 11:9 32:1 160:18 174:2 225:6 267:6 268:3,4,15 269:3,4,21
nancy 1:24 2:4 8:18 32:1,1,10 35:8,14 36:25 39:1 40:7 66:9 66:10,13 75:25 75:25 76:3,11 223:1 224:12 266:23
narrow 92:18
nature 122:22 203:16 238:8 256:8
navigate 44:7 147:13,21 154:7
navigation 145:18
near 44:15 81:4 129:5 191:14 261:18 262:24
nearer 138:1
nearing 159:25
nearly 51:20
necessarily 23:10 80:20 152:9 201:9 205:25
necessary 71:25 257:14
necessity 257:15
need 17:12 58:22 73:9 173:3 188:10 210:21 247:10 247:18 250:23 251:21
needed 12:3,4 14:7 17:9,15 17:25 48:23 49:3 70:25 71:5 78:10 89:10,12,24 116:23 121:20 152:24 153:3 156:10 157:4

168:7
needs 14:4 19:13 26:5 120:17 125:15 144:24 149:21 170:6 173:18 236:24 241:12 251:25
negatively 60:15
net 72:9 252:2
never 90:9 147:1 152:19 152:21 173:8 178:24 204:22 219:9 246:11
new 13:13 14:8 17:24 22:12 29:6 95:5 96:12,15 138:1 150:2,6,8,18 151:2,16 157:7 178:21 209:14 212:13 239:20
newer 151:16
newest 40:25
nhtb 178:7,9
nice 74:19 150:25 234:16
nickel 72:2 73:5 215:22
nine 191:10 250:13
nodding 10:12
nonfilled 257:5
nope 208:8 245:8
normal 106:17
normally 17:15 58:14 240:10
north 6:14 18:13,20 121:11 122:6 123:6,13,21 124:10,13 125:22 126:4 127:22 128:9 128:12 131:1 134:4,6,9 141:24 142:22 148:4 234:16
northern 18:12 204:4 205:4
nos 124:23
nose 60:7 90:18 91:2 104:22 146:18 147:2,5
nosed 191:2
nosedive 146:1 146:15
notarized 267:14
notary 2:6 266:23 267:25 268:10,18 269:15,23 270:23
note 267:12
noted 228:23
notice 197:20
noticed 142:3 266:9
nozzle 40:16 43:2,4 56:17 59:3 87:22 88:12,16 89:3 89:18 99:10,10 99:19,20,21 100:6,10 101:4 101:6,9,11,18 102:7,14 131:2 138:24 191:2,2 191:22 261:13 263:8
nozzles 40:14 44:4,6,6,11 56:13 70:2 86:25 87:7,11 87:18,21,25 88:7,10,15,20 88:22,25 89:4 89:19 99:14 103:12 104:18 264:11
npsh 72:9 75:4 84:1 185:12 247:12,21 251:25
nuhn 1:5 3:13 7:2 8:8 9:3,4,5 19:6,14,17 71:18 73:20,22 125:3 127:7 128:20 129:5 133:24 135:8,8 135:11,14,16 137:8,10 138:10,22,22 139:12 140:7,9 140:21 141:13 141:15 148:2 149:3,7 150:25 151:5 152:3 158:3,6,9 160:19 241:16 241:24 246:19 267:6 268:3 269:3
nuhn's 124:15 126:16,18 127:9 141:16 143:19 148:6 148:14 242:3 242:10
number 22:2,4 93:4 124:20 155:11 162:3 163:20 174:25 185:7 200:21 231:5 254:24 267:7,13
numbering 77:20,21 78:14
numbers 228:21 269:7

numerous 29:25 222:13
nutrient 18:2
nutrients 15:7

o

o 8:1
oarable 263:17
oath 9:20 160:21
object 27:11 69:21 80:17 100:12 209:20 212:7 230:5
objection 22:24 23:20 25:24 26:7 32:13 47:9,14 50:7 58:8 62:12 63:21 66:15 73:23 80:6 81:6 87:16 89:11 101:22 102:9 105:5 107:14 108:24 111:23 112:14 132:23 133:3 159:6 165:20 166:19,25 167:6,17 168:6 175:9 183:15 185:17 186:12 187:5,11,18,22 188:9,15 189:19 190:14 190:18 197:18 198:7,21 199:5 199:19,24 200:7,13,24 201:8,16 202:5 202:11,16,23 205:6,7,14,24 206:12,13 207:7 214:9,12 214:13 216:1 216:19,23 217:5,6,13,14 217:24,25 218:20,21 221:14,15 224:23,24 226:15 228:4 231:23 232:19 234:25 238:19 238:20 241:7 241:25 242:6 242:13,14 243:7,8,18,19 245:24,25 246:15 254:3 254:21 257:7 259:25 260:8
obtained 223:17
obvious 247:9 256:22
obviously 16:6 108:12 110:13 123:16 124:22 157:8 242:5,7 252:5 254:10
occasionally 249:22
occupied 148:1 149:14
occupies 148:19
occurred 202:4 255:10
offered 72:5,5 72:7 76:17 242:23
offering 151:1 241:12
offers 41:3
offhand 114:23 124:22 225:7
office 141:18
official 268:15 269:21
offs 149:18
offset 59:18
oh 45:21 61:16 101:15 138:6 141:19 193:15 220:7,7 226:21 246:11
ohio 267:2
oil 210:8
okay 9:16 20:23 48:1 64:19 78:4 89:7 118:20 127:16 141:19 150:16 161:2,9 161:20 162:6 163:8,21 164:25 166:2 167:15 173:14 177:17 180:16 181:10 182:1,5 182:16 186:17 192:2 193:9 194:19 195:9 195:14,22 198:6,19 199:17 200:9 200:20 202:20 205:10 206:9 206:18 208:2,5 209:12 211:9 212:11 213:23 215:3 218:3 219:2,15,22 220:13,14,16 221:1 224:1,17 225:8 227:19 228:2,10 229:9 229:15 230:16 234:20 235:21 235:25 238:25 239:21 240:8 240:25 245:5,9 247:1 253:4 256:1,25 257:16 260:11

260:14,15 261:8 262:19 263:5,11 264:18
old 16:6 20:25 177:13,14 244:15
once 53:5 55:4 85:24 214:15 246:10
one's 59:19
ones 62:25 67:14 125:15 131:22 222:2 249:2,3,4
online 241:3
onlookers 138:2,4
open 51:25 69:8 82:22,23 82:25 83:11 85:16,17,23 87:9 101:3,17 101:24 164:4,9 164:22 175:15 175:19 176:16 220:15 247:13 250:2 262:7 264:9
opening 112:11 154:2
operate 24:5 89:14 107:7,23 154:4,13
operated 76:24 92:14 107:17 113:21 204:7 264:16
operating 48:13 106:16 106:17 107:13 112:6 139:24
operation 16:5 53:20 92:1 197:9
operational 150:4
operations 11:25 86:11
operator 142:11,18,19
operator's 75:19 161:11 161:14
operators 5:19
opinion 26:15 27:6 44:1 209:25 242:17
opportunities 167:25
opportunity 14:15 16:2 65:23 69:13 72:6,7,15 250:15
opposed 248:10
optimize 253:1
option 250:14
orange 103:2,7 104:14 127:11 140:20
order 26:5 83:18 151:23 252:17
ordered 266:10
orient 59:25
orientation 55:5 58:2,4
original 7:12 7:12 266:9
originally 50:6 50:10
outboard 49:16
outcome 72:17
outdoors 129:3
outlets 85:7 86:6,6
outlying 74:10
outside 17:14 117:20 163:15 192:19
overcome 182:4 218:17
overhead 171:13
overwhelming 257:14
own 91:25 115:15 121:20 158:18 240:20
owner 75:18
owner's 7:3 67:10 75:18 76:3 145:9

p

p 2:9,9 8:1
p.m. 114:10,12 160:4,6,6,8 182:10,11,11 182:13 208:10 208:12,12,15 245:12,13,13 245:15 260:16 260:18,18,20 265:2,13
pack 194:14
packages 151:24
pad 83:10
page 2:24 4:2 4:25 5:25 6:25 20:17 28:25 61:6 67:20 77:17,18,19,20 77:20,21,23 78:13,13,14 79:1,3 86:12 86:13 93:4 123:23,25 124:8,19 127:25 130:13 131:7 132:14 133:13,15,18

134:16 136:6 137:21 138:12 140:1 161:20 161:21,22 183:4 194:1,2 194:4 196:19 225:16,20 267:13,15 269:7 270:3
pages 132:6 134:18 135:1,3
pagination 78:25 86:13
paid 226:20
paint 23:13
pair 204:3,19 204:20
pan 264:1
panel 264:13
pans 122:1
paragraph 21:6,16,18 22:7,10 23:25 25:5 27:16 29:4,15,23 30:4,22 32:15 32:17,18 35:17 35:19 37:5 39:6,7 40:21 41:7,16,24 42:8,10,23 43:14 141:20 141:23 142:8 142:20 143:7 145:13,15 146:4 147:7,24 153:7,9,17,19 155:8,11,11,13 196:12,25 197:11 229:5 230:16
paragraphs 155:10
pardon 87:15 111:14,14 162:17 234:6
parked 81:20 127:8
part 11:10 49:17 51:8 52:25 56:2 60:21 79:25 120:10,18 122:17 140:12 144:22 154:15 154:16 162:8 165:11 167:5,7 167:16 168:13 171:20 175:13 176:22 207:21 243:24 244:12 263:1 269:9
partial 164:6
partially 108:19 143:8 176:6
participant 19:1
particular 76:21 100:1 123:4 145:6 147:10,17 251:1
particularly 250:8 251:7
particulate 175:24,25 176:2,5 177:19 177:22 189:21 189:25 250:3,9 250:16 251:19
particulates 251:6
parties 266:10 266:12,14
parts 51:9 81:23 88:21 143:9 161:23 197:5,10 198:11 238:7
party 223:18 266:9
pass 159:21 234:14 246:23 260:23 264:22
passing 192:16
passion 16:24 16:25
past 150:17 176:24 177:1 212:20 226:6
pat 176:25
patent 7:3 21:21,23,23 22:2,4 141:17 227:13,22 228:23 241:17 241:23
patents 5:17 141:17 242:3 242:10
patz 134:10
pause 125:15 226:1
paved 203:12
pay 115:4
paying 145:5
payloader 80:13 146:9
pc 3:4 8:23
pce 67:21 95:5 95:6
pdf 77:21 161:21
peller 248:10
pendant 93:25 230:8
pending 5:17
penetrated 118:23
people 15:22 17:13 116:2 129:10,13,15 129:22,25 130:3 136:11

136:16 137:13 142:15 149:19 151:1 157:10 172:12 173:5 174:17 226:12 232:25 233:13 242:16,17 248:17 251:2
percent 25:11 25:16 26:18,20 26:20 27:4,5 27:21 148:1,15 148:19 149:17 150:12,15 159:16 171:23 180:14,24,25 189:9,10,12 213:16,22 214:24
percentage 26:3
perfect 250:1
perfectly 106:1
perform 142:16 155:16 219:25
performance 23:11 52:24 102:13 197:2
performed 142:5
performing 142:4
perimeter 133:9 155:24 192:19
period 115:25
periods 35:7,11
peripheral 138:7
person 31:25 129:19 135:10 137:16 144:13 145:1 170:4 173:18 241:2
personal 93:16 93:21
personally 24:2 24:2,6 122:5 209:24 218:1 249:24 268:11 269:15
persons 266:14
ph 201:5
phone 235:15 235:19 267:3
photo 228:7
photograph 189:23 194:19 194:22
photographs 5:13,22 6:2,5 6:18 203:20,22 203:25 222:14 222:16,19,21 224:7,10,11,13 224:15 236:23
photos 6:21 53:11 222:9 223:2,7,15,22 223:24
physically 80:16 168:23
physics 245:1
pick 53:9 259:16 262:2 262:17
picked 50:13
pickup 120:5
picture 48:7,8 49:13 52:13,20 53:1 55:25 57:7 62:14,18 62:21 63:7 79:19 82:1 86:13,19 93:5 93:17 95:11,13 97:20 98:9 99:4 101:10,20 102:8,15,16,17 102:20 103:5 105:17 107:2 125:25 126:1,3 126:6,16,24 127:3,25 128:24 135:19 136:8,10,13 137:3,6,14,24 138:5,14,17,21 139:16,24 140:2,5,9,15 161:22 204:22 204:23 207:9 207:11 225:1
pictures 46:12 46:16,20 47:4 47:12 91:14,15 91:19,21 94:7 94:17,20,22 95:1,9,16,18,24 96:3,7,9,25 97:7,10,13,15 98:2,5 105:22 123:10 125:11 125:16,19,21 129:25 130:9 135:6,18,20,22 137:1 159:1,2 223:17
piece 101:13 115:1 126:20 127:11 139:1 140:20 166:23 169:21 204:17
pieces 126:20 138:20 139:3 140:14,17 204:18
pigs 17:14 248:13
pipe 15:3 43:16 45:3,6,9,19 56:10,12 84:15 84:19 112:12 162:5 167:10 167:16

pit 27:1 50:15 124:25 173:22 240:22
pits 51:3
pivotable 103:22
place 1:17 18:1 59:1,9 60:11 89:17 116:5,24 119:17 179:3
placed 50:1,14 50:19 52:22 60:22 73:22 74:2 89:19
plaintiff 1:6 2:12 9:3,5
plaintiff's 196:3 197:20 227:4 257:19
plan 14:22
plastic 250:19 250:19
plate 15:12 50:1
plated 73:5
platform 34:12 194:18
play 33:18 36:9 110:24 211:23
please 8:2,20 9:7,18 10:1,14 10:22 11:7 21:6,18 22:10 23:25 25:5 26:1,19 27:13 27:16 29:3,15 29:23 30:4 32:17 35:19 37:5 39:7 40:11,23 41:10 41:18 42:1,9 42:23 43:14 48:6 64:24 77:22 78:15 79:2 114:11 141:22 142:20 145:15 147:7 147:24 153:9 153:18 155:12 159:2 160:7 161:5 165:15 168:1 182:12 193:25 194:3 208:14 223:12 228:21 234:7,7 235:3 245:14 260:19 265:6 265:12 267:11 267:11
plentiful 117:14
plug 157:12,16 157:18 171:8 172:18 173:24 173:24,24 174:9 176:6 178:4 179:1
plugged 170:6 170:15 171:7 173:13 178:20 178:24 192:14
plugging 170:8 170:11 262:11
plugs 171:8 174:9 181:6
pluses 244:17
pocket 154:1 154:12 155:3
point 17:2 50:11 54:2 55:16 73:14 85:12 90:7,7 94:1 102:14 106:15 107:25 108:18 111:25 115:9 123:2 126:12 143:18 148:12 150:12 164:13 227:24 243:21 244:21 244:21,22 250:23 255:22 259:20 264:11
pointing 28:24
points 62:3 197:6
pond 26:25
poor 145:12
poorly 142:5
pop 174:2 249:2
popular 51:8
port 103:17
portable 230:15
portion 49:7 53:25 57:4,23 67:22 79:6 100:20 103:17 105:11 110:3,6 111:8,9,21,22 112:2 113:17 131:11 244:1 246:18 255:23 258:25 259:3
portions 88:13 105:15 154:2
position 44:17 52:9 55:17 59:9,14 88:6 116:2
positioned 42:16 43:5,17 45:7,19 49:20 52:24 54:24 55:4 56:18 58:1,5 60:2
positioning 43:19 60:8,12
positive 24:4 251:21
positively 252:8
possible 200:2 206:15

possibly 71:11 139:5 247:3 248:1
post 29:18
posted 29:25
potentially 195:19
pots 121:25
pound 120:3 203:6
pounds 90:17 90:18,21,24,24 91:2 100:2 176:15 178:11 186:4 210:13 210:14,17
power 50:23 69:19 82:12,13 188:4,8 230:17
powered 44:20 44:24 74:20 75:7 82:18 221:18,22 230:1,7,14,14
powerful 197:3
practice 24:18 29:18 67:4
prairie 122:9 141:25
predict 72:16
predictable 72:25
predicted 204:7
predominantly 183:3
preferably 69:11
preferred 68:12,15 230:19
preparation 235:13
prepare 234:23
prepared 195:18
preparing 67:2
present 3:12 217:4
pressure 25:6 27:7 70:24 71:3 72:9 73:12 100:2 104:13 163:15 164:16,19 168:8 176:3,15 177:15,23 178:10,11 180:12 181:7 186:4 192:15 206:2,4,6 249:16 250:2 251:21 252:2
pressures 23:2
pretty 12:21 115:4 174:19 175:3,6 233:12 233:20 245:2
previous 53:10
previously 7:6 15:9 60:25 161:4 182:21 195:25 206:19 224:19 225:9 226:14 227:1
price 115:5,8
primary 68:22 144:22
prime 75:1,2,3 154:21 230:20 247:18
primed 58:19 58:22 154:25 247:10
printout 196:7 196:16,20
prior 27:25 29:17 30:1 51:2 91:20 178:22 185:19 192:6 225:13 226:21 235:12 235:15,18
privileged 235:1
prob 195:17
probably 26:18 64:6 80:12 99:25 107:15 116:10 120:8 139:13 144:3 149:16,17 150:11,15 159:25 176:22 186:2 195:7,17 210:8 214:14 223:1 233:20 243:1
probe 244:4
problem 15:23 47:18 143:20 145:24 146:4 146:13 158:15 210:22 249:11 251:8
problems 13:15 15:23 17:24 118:1 149:23 157:17 249:1
procedure 268:5 269:5
proceed 9:10
proceeding 28:7
proceedings 141:16
process 79:7 104:22,24 175:17 176:22 190:20 191:17 253:2 259:15
produce 90:3 102:6 176:14 176:14 251:13
produced 17:15 97:14

100:9 106:19 197:19 198:2 249:12
product 16:19 22:12 29:6 61:24 66:17,18 67:2,7,8 71:24 115:15 123:5 143:19 150:18 151:2,3 158:21 158:22 178:7
production 29:7 92:12 267:15,17,22
productivity 14:12
products 13:13 13:20 14:10,25 15:15,17 16:11 16:14,16,21 19:2,12 29:19 29:20 41:1 61:22 67:3,5 67:11 76:17 115:11 122:2 122:22 152:8 152:22 221:2 238:17 242:24
professional 121:10
profit 152:8,10
profitable 151:14
progress 95:17
propel 85:8 98:14 143:12
propellant 85:4
propelled 245:23
properly 69:14 139:24
property 240:21
proprietary 122:25 243:12
propulsion 89:4 112:5
protect 74:9
protection 93:22
protective 93:16,22
prototype 63:18 64:4 148:3 187:14
prototypes 252:14
proud 12:21
proven 197:1,2
provide 19:2,12 35:1 69:13 82:12 102:4 158:16 251:5 251:18
provided 82:13 83:1 103:13 112:5 157:6 223:16
providing 110:19 152:23 188:3
proximity 179:4
psi 181:20,23 203:3 210:4
pto 50:11,16,16 50:18,23 51:18 54:1 170:16
pub 29:25
public 2:7 29:7 29:8,20 77:3 266:23 268:10 268:18 269:15 269:23 270:23
publication 21:22 124:7 227:14,22
publications 123:16
publicly 29:18 29:25 30:8,15 32:22 33:2 35:24 36:3 37:10,15 39:12 39:18 65:21 70:13 76:17 77:11,14 82:5 82:5 91:24 98:7 108:23 110:1 113:13 114:3 197:25 246:8,13
published 184:21
puck 1:13 2:2 4:2,9,13,18,21 5:3,4,7,8,11 8:7 9:8,13,15 11:9 11:19,21 12:8 12:9,19,25 13:3,4,4,8,20 14:9,24 15:14 15:19 16:10,14 19:22 20:17 21:8,9,9,10 22:11,18 23:13 28:25 29:5,8 29:11,24 30:6 30:9,10 31:17 31:22 32:20,23 32:23 33:23 34:1,6,9,18,22 35:2,4,9,13,22 35:25 36:1,1 36:18,19,22 37:8,11,12 38:9,18,21,23 39:10,13,14 40:5,13,25 41:3,12,20 42:11,24 43:15 44:20 45:5 47:2,21,22 48:8 49:22 53:21 54:12,20

55:25 57:7,23
60:4 62:7
65:16,17,21,25
66:3,9,10,11,25
67:24 70:5,18
71:16,19 73:21
74:21 75:20,25
76:3,4,11 77:6
81:2 82:5,9
83:16 84:23
86:5,14,25
90:21 93:4,13
94:9,9 95:7,11
95:25 98:3,6,9
100:21,24
102:17 105:18
105:20,23
109:17,25
113:13 114:2
114:19,21
115:7,11 116:5
116:24 117:9
118:11 119:8
119:16 121:13
121:16,18
122:2 123:12
123:20 124:9
124:12,21
129:7,13,15,19
129:22 130:1,3
130:15,17,19
130:22 131:1
131:15,19
132:10 134:19
137:11,19
139:8,11 142:1
142:2,24 143:3
144:11,20
145:19 146:13
147:16 148:1
148:18,22,24
149:6,8 150:10
150:16 151:9,9
152:3,7 154:10
156:11,12,19
158:5,8 160:17
162:1 163:2,5
165:1,18
166:13,17
167:13,22
168:2 181:11
181:21 182:17
183:13,20
185:16 188:1
189:7 196:5
198:10 200:3
200:20,20,23
201:7 202:18
202:21 203:21
203:23 204:1
206:23,25,25
207:2,4 208:19
209:6 214:2
215:17 217:12
217:22 220:1
220:17 221:2
221:19 223:13
223:22 224:3,6
227:6 230:24
230:25 232:16
233:3 234:24
236:20 238:11
239:1,6,8,25
242:11 243:4
243:24 244:4
245:19,22
246:2 247:4
248:11 252:14
253:17,22,25
255:12 257:6
258:11,23
259:6 261:6,12
263:12 266:4
267:8 268:4,9
269:4,13
270:20
puck's 24:22
29:17,19 30:1
31:19 32:5,11
35:15 37:1
39:3 40:7,25
41:13,20 42:3
67:3,18 76:16
76:21 92:13
98:10 120:18
124:1 129:3
142:3 145:24
146:5 148:8
149:13 153:12
154:12 161:11
161:15 166:5
170:9 180:8
196:7,17 197:1
197:2,24
198:20 219:3
221:7,18,23
234:1 244:12
puck.compro...
196:14
puck0000001
6:3
puck0000004
5:23
puck0000045
5:14
puck0000048
6:6
puck0000053
5:24
puck0000054
6:9
puck0000056
5:15
puck0000057
6:12
puck0000149
4:10
puck0000151
4:11
puck0000152
4:14
puck0000159
4:15
pull 28:10 31:1
33:7 45:23
52:16 55:14,14

60:6,7 65:6	49:23 50:6,13	113:19,21,22	177:10,11,12
79:12,24,25	50:20 51:5,8	113:25,25	177:13,14,15
80:11,12 85:15	51:16 52:9,21	114:3 127:20	177:18,23,24
118:21,22	52:23 53:1,6	133:22,24	178:1,5,13,23
119:13 125:5	53:10,12,19	134:3,5 135:8	179:15,15,17
140:23 143:5	54:2,21,23	137:9,10 138:1	180:7,8,25
144:8 169:15	55:4,24 56:3	138:10,22	181:1,5,10,21
169:18 170:16	56:20,22,22,24	139:12 140:8	182:3 184:21
170:22 171:15	56:25 57:1,3,6	142:24,25	184:22 185:10
173:23,23	57:10,16,18,23	143:2 144:10	185:14,24
174:1,2 176:17	58:1,5,6,19,21	144:14,16,17	186:5,7,10
212:5 256:23	59:4,9,14	151:24 154:4,4	188:7,13,24
256:25 257:16	60:12,22 62:20	154:13,16,18	189:11 190:1,4
257:16	62:23 63:6,13	155:4 158:12	190:21,25
pulled 36:9	63:15,17,25,25	158:14 162:1,9	191:5,11,20,23
53:15 117:2,4	64:2,6,9,12,14	162:15 163:1,1	192:2,3,9,9,11
117:6 203:15	64:15 68:12,23	163:5,13,19	192:20,21,24
204:11	69:7,11,19,23	164:15,18,23	193:4,8 197:4
pulling 33:11	70:5,23,23	164:25 165:1,2	201:23 205:12
102:16 203:17	71:13,15,18,22	165:18,18	205:16 211:16
204:11 205:9	71:24 72:9,10	166:3,16 167:3	211:17,23,24
257:18	72:11,15,20	167:5,16,20,22	211:25 212:1
pump 4:22	73:7,8,13,21,22	167:24 168:4	213:20 214:19
13:24 14:19	74:2,4,9,13,15	168:10,12,21	215:17,21
15:10 17:17	74:16,20 75:2	168:24 169:1,9	216:17,17
23:12 25:12,17	75:3,4,7 82:19	169:19 170:1,5	217:2,10,15,16
27:8,23,25	83:4,7,11,14,15	170:11,17	217:21 218:15
32:24 40:16	83:19 84:7,16	171:10,19,23	218:15,15
41:2 42:12,15	84:23 87:6	172:18,20	220:23,24
42:16,25 43:3	88:17 89:9	173:13,24	227:25 228:8
43:6,16,21	90:3 98:1	174:5,9,13,16	228:15,17,22
44:10,22,24	102:22 104:3	174:18 175:15	229:6,21 230:1
45:2 48:15	104:14,15,16	175:16,19,19	230:18,18,20
49:11,14,15,19	105:3 112:12	176:1,3,6,11,21	230:20 234:12

234:15,18,22
243:5 244:23
244:23,25
247:4,5,12,20
247:21 248:6
248:10,11
249:13 250:2,3
250:7,8,20,25
251:6,9,10,12
251:14,16,17
251:22 252:3,9
252:10,13,13
252:17,18,18
253:15 260:7
261:11,14,16
262:13,19,23
263:2,3,4,9
264:8,10
pump's 185:10
185:11 188:3
pumped 186:3
186:10 208:25
260:6
pumping 11:25
12:1,13 21:11
22:14 25:7,8
25:14 27:19
52:24 56:14
58:5 73:10
124:25 148:2,8
148:16,20
149:13 150:10
205:11 211:18
212:23,24
252:5 253:2
258:10
pumps 13:23
13:25 21:11,14
22:13,14,18,21
23:1,6,9,13,17
23:18,24 24:3
24:3,4,6,7,11
24:21,22 25:6
25:12,13,17
27:7,18,22,23
48:11 49:12
51:3 52:2
59:18 60:1
68:10 69:15
70:18 73:9,17
74:24 83:23,24
84:2 119:13
122:25,25
123:1 134:11
150:3 151:15
152:20 154:11
155:19,22
156:1,4,6,13,21
157:4,22
163:22 164:8
164:10 168:3
170:9,14
172:14 174:9
176:21 178:22
180:14 189:4,6
189:17,21
190:21,22
191:4,14 192:5
192:14,15,18
192:25 194:10
201:11 216:22
218:19,24,25
220:17,19
230:15 234:1,3
234:8,10 243:5
247:8,13,23
249:13,16,21
249:21 250:5
261:11,14,20
262:5,12 263:9
264:12
puncture
255:10,22
256:6
punctured
255:6
purchase 61:24
77:4 96:19
purchased
50:10
purchaser 77:6
purely 142:18
purpose 52:24
59:5 90:19
98:13 118:6
147:10,17
155:17
purposeful
120:15
purposes 22:21
65:14 123:8
push 56:9 86:1
146:9 154:20
154:22 215:5
256:23
pushed 117:3
146:17 215:10
215:12
pushing 56:11
211:19
put 11:23 44:5
46:10,13 48:21
53:4 60:11
65:13 66:13
68:21 69:4
72:25 94:24
96:17 116:2
118:7,13,18
119:8 151:24
152:15 169:11
171:25 181:15
185:19 202:7,8
203:2,7 210:23
215:8 233:2
245:3 255:1
262:2 263:21
putting 13:11
25:3 118:11
173:12

q

quad 158:11
qualified 145:5
quarter 120:5

quarters 51:24
question 10:2,6 10:14,16,23,25 26:1 111:16 165:15 168:1 180:1 183:17 183:21 184:8 200:15 216:3 217:17 235:3 244:4,7
questioning 223:14,20,21 224:2
questions 9:24 20:20 29:2 46:4 81:22 82:2,3 94:18 97:9 114:19 208:23 209:1,4 222:13 227:20 239:22 244:9 246:22 247:3 261:2,11 264:24
quick 64:18 94:6 109:1 112:19 125:14 153:11 159:24 182:7 223:3 253:5 260:11
quicker 14:11 14:14 15:6 108:1 152:11
quickly 80:10 110:23 146:1 146:15 171:2 176:16
quite 51:4 80:14 129:9,9 144:18 149:22 259:23

r

r 2:9 3:2 8:1
race 211:23
radiator 146:19
rails 45:13
raise 55:21 264:9
raised 52:21 55:10,17 107:8 107:12,18 108:8,17
ramp 119:1 144:1,2 203:13
ran 53:11 82:15 90:22 99:7 104:11 143:18 167:25 169:2 189:9 190:1 226:23 264:7
range 51:25 116:10
rare 131:22
rate 214:10 266:10
rated 72:12 187:14
rather 10:12 74:25 167:23 170:3 246:7 256:20
reach 80:19 117:19 170:1 265:7
reached 144:13 144:18
react 89:21
read 21:6,18 22:7,10 23:25 25:5 27:16 29:3,15,23 32:17 35:19 37:5 39:7 40:11,23 41:10 41:18 42:1,9 42:23 43:14 77:22 78:15 141:22 142:20 145:15 147:7 147:24 148:10 153:9,18 155:12 196:11 196:25 266:8 268:5,6,12 269:5,6,17
reading 22:2 267:19
ready 55:12
real 94:6 157:9 223:3
reality 153:21
really 80:25 89:24 108:6 117:25 150:14 150:24 152:17 164:6,12 173:2 211:14 236:25 259:17
realtime 2:5,6
rear 42:14 43:1 44:6 60:12 85:2 88:15 89:3 92:15 111:1,24 112:1 112:3,4 198:12 263:16
rearward 43:1 85:13,13
reason 11:3 59:8,25 60:21 151:8 157:1 174:6 175:14 179:23 219:11 219:13 267:14 269:8 270:3
reasonable 115:8
reasons 119:7 201:6
recall 61:17 124:3,15

128:17,20,23 129:3,7 130:5 131:18 134:5 149:3,5,6,10 204:13 208:25 220:2,16 224:20 226:7 235:8,18 236:3 237:3 239:11
receipt 267:18
receive 123:12 240:23
recently 11:19 232:25
recess 64:23 114:10 160:6 182:11 208:12 245:13 260:18
recirculating 147:11,18
reckoned 203:5
recognize 20:11 28:16 36:13 46:5 61:11 62:20 65:10 75:15 91:15 109:12 121:6 127:17 137:13 138:4
record 8:3,21 9:14 20:3 28:24 57:22 64:18,22 65:1 114:7,9,13 160:5,9 182:10 182:14 184:6 196:4 198:7 208:11,16 223:12 245:7 245:12,16 255:21 260:17 260:21 265:2,3 266:7 269:9
recorded 8:7 10:9
recreating 152:25
red 23:14 126:20 130:17 135:11 140:13 233:12,12,16 233:22
redhand 239:12
redi 230:20
reduce 254:14
refer 13:4 131:15 258:17 258:20,24
reference 92:12 228:21 258:25 267:7 268:2 269:2
referenced 7:6 31:7 33:15 36:16 38:2 67:14 268:11 269:15
references 229:21
referred 4:7 103:10 153:13
referring 13:2 48:8 56:17 65:15 77:19 78:19 82:4 86:15 90:16 98:2 103:16 193:13 223:8 228:16,19 256:1 262:23
refers 79:4 197:11
refinery 233:1
regain 198:9 205:20
regard 54:3 189:22 232:5 252:25
regarding 237:16
registered 2:4
registers 115:18
regular 17:24 67:3
regularly 66:24
regulatory 17:25
reinforced 73:4
reinstall 170:18
reiterate 156:25
relate 72:19
related 122:19 188:11
relating 146:4
relationships 14:20
relative 200:6 200:11 266:11 266:12
relatively 50:25 98:17 115:12 115:24 118:7
relays 230:12
releasing 44:11
relied 106:14
remained 30:15 33:2 36:3 37:15 39:18
remarkable 73:14
remember 46:23 78:17 84:17 106:11 109:21 114:20 122:8 124:20 128:8 132:21 132:25 133:6,9 134:8 193:10 195:3 235:10 237:5 247:2 248:15 252:15 253:23 258:5

reminder 162:16
remote 1:12 8:13 76:25 87:19 88:14,15 88:16,17,18,18 88:19,21,22,24 88:24 89:1 93:2 131:12 147:14,22 194:13 230:11
remotely 266:4
removal 55:22
remove 40:18 81:1 87:20
removed 49:24 50:18 100:25
rent 155:22 156:1
rental 144:8
renting 156:3 156:12
repeat 10:2 27:13 111:16 165:14 183:17 184:8 187:25 234:7
rephrase 10:2 26:1 47:11 88:4
replaced 50:3
replacing 247:3
reported 1:24 266:3
reporter 2:4,5 2:6 8:18 9:7 10:10,20 87:14 111:14 162:16 162:20 184:4 234:6 265:4,8 265:10 268:7
reporter's 266:1
represent 141:14 185:8
representative 161:17 230:24
representing 8:15,24 223:23
represents 185:9,9,11
request 23:15 269:9,11
require 23:2 169:14 222:2 247:14
required 71:6 145:19 178:9 219:24 221:25 252:17 267:25
requirement 25:20 26:3 52:6 206:7
requires 19:3 145:17 181:1 234:15 247:13
research 110:16 122:12 147:25 148:5 148:12,22,24 158:19
reserved 266:8
reservoirs 116:5
resistant 73:16 73:16
resize 262:17
resources 152:8
respect 164:14 200:18 251:3
respected 252:1
response 7:3
responsible 35:8 66:10 87:24 88:2,6
rest 16:20 74:23 84:16 89:15 239:13
restate 168:1 216:2 217:8,17
restriction 27:15
result 100:9 102:6 156:16 245:3
resume 116:23
retail 239:14
retired 11:19
retrieve 120:12
return 62:4,5
returned 267:18
review 20:4 264:24 267:12 268:1 269:1
rhyme 174:6
ride 77:24 78:12
right 12:20 21:3 22:4 30:24 48:17 50:21 53:2,13 53:22 54:6 56:2,18 57:6 57:22 58:17 60:3,19 62:15 65:3,16 79:18 84:24 85:19 86:18 89:5 91:4 92:8 93:14 94:4 95:7,15 96:25 98:3 99:7 101:13,13,14 101:15 104:17 107:3 110:15 113:17 114:6 125:17 126:13 127:9,9,12 137:10 139:9 140:12 159:21 160:14,23 161:2 162:8

165:8 172:5 174:4 175:21 178:25 182:6 182:20 183:2 192:1 193:18 194:1,4 195:12 196:2,25 198:8 199:6,15 200:16 206:18 208:6,9,13,23 211:2 213:18 214:25 217:17 225:8 227:3,8 227:21 229:9 229:20 230:10 236:13 245:22 251:15 253:12 255:25 261:1 266:7
rings 103:18,20
rippled 108:4
risk 93:20 254:14
rmr 1:24 266:23
road 55:14,15 59:13
robust 71:24 72:16 84:12 222:1
role 66:20
room 51:18
rotate 258:2
rotation 84:9
rough 46:25,25
roughly 106:22 133:8 180:19
row 184:23
rpm 51:23,25 69:8 88:18
rubber 84:11
rule 172:3
rules 268:5 269:5
run 51:22 52:2 58:14 104:8 169:3,7,8 178:9 214:21 238:6 248:23 249:10 250:5
running 51:24 54:1 111:7 115:18,18 138:23 144:16 157:22 171:9 192:10 214:19
runoff 18:3
russia 18:13
ruts 205:8

s

s 2:9 8:1 267:15 269:8,8 270:3
sac 122:9 141:25
sacrificing 108:15
safe 55:13 172:9
safer 55:14 59:13
safety 77:22 78:5,7 157:6
sale 76:18
sales 34:5 66:19,19 148:21 177:2,2 195:18
sam 72:1
sand 210:15,23 211:1 215:3,6 215:8,8,10,16 215:19,25 216:5
sat 49:15 98:17
satisfy 73:9 89:14
save 157:21
saw 118:21 142:1 201:11
saying 77:18 90:15 99:5 112:1 146:23 232:9 250:7 255:8,24
says 77:24 99:16 145:9 152:7 161:23 183:23 184:11 186:20 227:9 229:5 230:17
scale 14:6 210:20
school 24:19 240:1
scott 2:13 9:1 64:19 87:14 153:14 160:18 162:17 179:20 182:8 193:14 197:15,17 223:11 225:2 228:20 243:22 246:10,16 247:2 265:10
scraper 215:13
screen 20:1,8 31:4 37:23 39:25 45:23 46:1 53:21 65:7 91:10 94:14 97:4 102:17 109:7 112:23 121:3 125:8 147:8 161:3 178:17 182:21 193:16 193:19 206:19 206:21 223:3,5 225:9 227:5 231:3 261:3
screenshot 30:17 33:4 36:6 37:17 39:20 40:22

41:8,17,25
scroll 33:17 61:5 91:13 94:16 97:7 98:9 100:20 105:17 110:3 125:11,25 131:7 132:6 136:6 137:21 138:12 193:25 194:2 225:20
scrolled 196:19
scrolling 35:17 47:4 62:14 78:25 93:4 130:13 132:15 133:13 134:15 135:1 257:23
seal 266:17 268:15 269:21
sealed 256:8
seals 201:12
searchable 30:16 33:2 36:4 37:15 39:18
sec 179:21
second 13:22 22:2,4 100:4,5 100:14 155:10 155:12 176:7 183:3 193:17 195:24 229:4
seconds 33:18 36:20 38:6 110:7,25 113:18
secret 244:7,12 244:13
secrets 243:25 244:5
section 131:9 165:4 254:13 255:22,23 256:2
sections 253:21 254:1,6 255:12 255:14 256:8
secure 81:21
see 16:19 20:9 28:14 33:12,20 37:24 38:5 46:3 47:4 48:5 52:25 53:24 55:11 61:8 62:18 67:22 75:12 79:17 91:11,14 92:7 93:5,7 94:14 96:18 97:4 99:25 101:15 102:17,19 105:10 107:25 108:21 109:7 109:10 110:13 111:9,21 112:4 112:24 117:15 120:8 121:4,22 124:24 125:2,9 125:12 126:1,8 126:16,23 127:2,24 128:2 130:16 131:11 132:3,7,15 133:15,17,25 134:3 135:3,20 136:8 137:3,15 138:9,14 139:16 140:2,6 140:9,14,17,18 141:4 151:5 161:22 182:23 183:3,5,10 184:16,17 185:3 186:17 186:19 187:1 188:11 193:19 193:23 194:5 196:5,8,20,22 201:21 204:17 206:21,23 209:17 214:6 222:18 223:4 225:11,17,22 227:6,8 228:9 228:13,14 229:7,10,15,18 229:20 230:16 230:23 231:6 233:21 242:16 242:17 253:7 257:21 261:6 263:15
seeing 16:22 48:9 124:3 134:5 224:20
seek 19:13
seeking 15:22 61:22 158:10 226:10
seem 228:5
seemed 17:11
seeming 138:2
seems 226:4
seen 18:11,15 18:19 26:17 64:4 94:20 97:10 108:17 113:1 114:2 125:19 140:18 141:6,8 159:12 210:16,16 225:13,24 226:2,5,8,14 227:22 235:17 240:25 241:3
seeped 106:8
seeping 106:5 106:15
selected 90:3
self 11:20 245:23
sell 16:10,14 121:25 177:5 233:13 238:22

239:8
selling 66:23 67:4 242:12
sells 238:17
semi 131:23,23 256:20
semis 120:10
send 53:16 56:12 86:9 177:22 191:13 259:21 262:3,6 262:18
sense 10:7,17 11:1 82:7 92:19 152:24 155:6 174:22 174:23 178:3 178:14 181:3 211:4 213:3,24 218:7 258:24
sent 104:17 189:21
sentence 153:18
separate 12:13 47:5 233:4
separated 252:20
september 29:12 30:9,11 39:13,16 195:11,19
series 133:24 209:14
serious 144:12 144:12
seriously 143:1 144:1,9
served 49:7
service 115:12 144:21,23 239:15,17 240:3
serviceability 72:4 119:21
services 12:3,4
servicing 145:2
set 24:24 59:20 60:20 88:10,11 106:20,24 118:14
setting 59:11 148:13
settle 215:9 258:14
setup 128:23
seven 139:5
several 12:12 14:2 23:23 46:1 48:19 51:2 64:3 67:20 68:10 82:2 90:18 92:1 120:1 123:1,16 124:6 152:4 159:1 168:18 179:16 202:25 219:7 222:2,23 235:15 246:4
severe 154:5
severely 150:14
shaft 44:25 48:14 50:20,23 57:9,13 58:4 84:11 165:4 170:16
shafts 51:18
shaking 10:12
shape 107:2 131:18,21
shaped 60:10 103:9 107:18
share 20:1 28:9 45:22 94:5 112:19 121:3 148:6,7,23 150:17 151:6 161:3 182:20 223:3 229:12 261:3
shared 63:12 85:1 189:23
sharing 20:8 28:13 31:4 39:25 46:1 149:6 193:16 206:18
sheet 267:13 269:7,10,18 270:1
shell 63:8
shifted 152:7
shiny 233:21
shirt 135:11 140:13
shoot 85:22 191:3,21
shooting 98:25 104:23 261:19
shop 95:5,6,17 96:12 240:3,4 240:6
shore 53:16 71:11 87:20 89:25 104:1 113:21 143:22 179:11 189:22 189:25 220:25 262:3,18
shoreline 142:15
short 115:24 150:19 174:19 179:21 180:4,4 199:12,13 235:20
shorten 73:11
shorter 14:16 116:3 188:20
shortly 194:12 207:10 226:25
shot 98:23 259:13

shove 69:10
show 16:18 34:14 60:24 75:9 91:7 94:17,22 97:1 101:11 109:1 112:22 120:23 122:16,18,23 128:13 130:20 136:13 137:1 141:25 176:24 203:22,25 224:25 253:4
showed 224:17
showing 32:15 37:22 48:2 61:3 91:10 94:13 109:14 110:15 113:9 134:18 135:18 183:2 193:21 194:1 231:2 253:6
shown 29:12 30:22 36:20 38:5,13 42:11 47:5,8 48:7 53:20 55:24 57:23 60:3,14 61:8 62:15 79:2 86:19 93:7 94:17 95:9,13 97:8 98:2 99:3 100:23 102:19 103:2,8,18 105:10 107:2 110:5 111:8 113:17 122:23 125:12 127:24 135:5,11,22 136:10 137:5 137:23 138:14 138:16,21 139:8,16 140:4 140:9,15 147:8 185:25 225:8 228:3 231:17 231:21 261:4 261:12 263:11 267:16
shows 52:20 67:20 101:1 109:15 121:13 121:16,18 122:3 123:17
shut 44:5 69:8 82:22,24,25 144:15,25 158:17 172:21 173:25 176:9 176:10
sic 14:11 21:23 43:22 196:15
side 13:10 48:11 54:24 60:1 63:6 81:17 84:24 86:18 99:7 118:24 126:13 127:1,6 132:19 132:25 133:6 143:22,25 165:7 169:7 196:8 199:10 199:10 203:15 204:10 228:11 255:18
sides 48:2,12 49:16 203:10 203:19 251:24
sidewalls 203:16
sign 20:4,15 28:20 264:24 266:8
signature 20:17 28:22,25 266:22 267:14
signed 268:13 269:18
significant 23:17
significantly 152:7 155:18
signing 236:18 267:19
silage 249:5 250:18
silly 172:3
silver 49:19 52:25 264:1,14
similar 22:21 23:1 145:11 215:25
similarly 42:24
simple 10:15 50:25 115:12 171:5 172:6,7 197:3 221:2
simply 51:17 81:17 210:20 244:16
sincerely 267:21
single 129:19 156:3,12
sinking 89:15
sioux 239:19
sir 267:10
sit 108:9 211:17
site 71:13 116:13 117:15 118:19,19 119:24,24 122:11 172:18
sites 17:22
sitting 226:13
situation 19:20 58:15 145:11 174:20
six 17:16 33:18 45:12 82:14 102:25,25 139:2,4 140:7

203:7 250:14
size 116:12 132:22 177:19 177:22 189:21 250:3,16
sizes 175:23,24
sizing 189:24 250:9 262:5
skeptical 150:5
skid 203:4 205:9
skids 45:14 80:1 103:1 203:18
skimming 261:18
skip 30:13
skipped 30:21
slide 45:14 155:1 204:12
slides 118:15
slightly 107:18 248:3
slip 81:4
slipped 81:18
slope 191:2
slower 211:22 234:7
sludge 154:8 258:18 259:1 259:17
slurry 106:24 117:13,16,17 118:2,8 186:9 230:18,19
small 75:2 83:10,20,21 97:22,25 98:1 98:18 106:21 118:7 161:5 178:6 180:21 186:7,8 187:14 238:7 240:12 255:23 264:7
smaller 191:24 262:8
smooth 262:9
smr 1:7 8:12
snail 63:8 211:22
snap 54:1
soda 249:14
soil 13:11
sold 16:15 70:15 82:5 98:7 105:20,24 109:25 149:4 161:15 189:8 230:25 239:12 239:14 240:6 240:22 253:18
solely 106:13
solid 25:13,15 25:18 27:21 89:22 112:11 175:1 191:6,6 191:13 230:21 234:14
solids 25:9,10 26:3,20 27:5 27:20 40:15 52:16 53:9,13 56:6 71:1 74:10,12,15 81:16 85:24 86:3 98:14,16 100:16 110:12 111:6 113:10 116:8,22 117:17 139:22 154:22 178:18 179:2,2 190:10 191:20,24 192:16 205:20 206:16,17 211:20 212:6 247:14,25 248:2 258:14
solutions 8:16 8:19 267:1 270:1
solve 14:3 47:18 149:21 249:11
solved 147:14 157:16
solving 149:23
somebody 31:22 80:2 171:17 254:10
someplace 234:16
son 16:4 33:25 223:1 224:12
soon 176:24 177:1 212:10 249:24
sorry 12:25 16:13 35:13 38:20 47:11 64:11 69:16 77:19 81:8 88:4 94:6 101:8 111:12 111:18 112:3 129:1 133:4 134:17 145:12 145:14 148:10 149:2,9 164:1 166:21 186:5 190:17 193:15 195:10,23 197:15,16 212:10 220:7 225:25 226:1,1 231:11 236:14 236:15 247:2 248:16 257:19 257:19 258:1 261:15
sort 119:14 162:11 201:21 205:10 212:14 239:22 261:14
sorting 169:8 173:23 249:4

sought 158:2,5 158:8
sound 89:22 195:12
sounds 72:18 160:2 172:3 240:17 265:8
source 25:1,1 50:23 51:8 223:18,22,24 224:6 230:17
sourced 224:16
sources 152:21 222:23,24
south 3:5 11:16 21:4 195:1 239:19
southern 1:2 8:11 18:12 195:7
space 152:14 162:22 254:20
speak 10:11,21 68:5 85:6 129:18,20 149:8 184:5 208:21 224:14 236:15 245:19 254:18
speaking 10:25 33:19 84:17 92:4 253:9,21 258:5,7
specially 147:16
specific 26:14 76:20 81:23 87:23 210:4 211:21 244:19
specifically 57:13 78:22 79:14 87:24 88:21 89:2 110:7 147:9 226:7 233:7 247:21 258:7
specification 228:23
spectacularly 96:14
speculation 78:9
speed 51:20 210:7 212:21
spelled 244:15
spend 14:18
spent 28:7 118:4
spoke 36:18 84:14 212:10 235:8 258:3
sponsor 124:9
spot 98:23
sprayed 142:12 142:14
spraying 142:5
squarely 74:6
stability 42:20 43:10 59:15 60:15 90:1,10
staff 177:2,3
stage 191:17
stages 96:1
stainless 238:8
stall 215:11
stand 8:2 52:14 53:5 59:5 64:24 73:2 86:9 113:20 114:11 155:19 157:14 160:7 168:19 182:12 208:13 245:14 260:19
standalone 155:22
standard 29:17
standing 80:20 93:7 101:12,14 136:20 140:13 151:6 169:19
start 16:8 56:2 85:24 86:2 110:17 151:10 152:13 154:4 173:12 232:18 233:3 242:11 259:14
started 12:5,10 13:25 15:16 16:1 17:19 21:9 96:20 152:20 232:21 240:1
starting 110:25 243:20 244:21 244:21,22
starts 197:1
state 2:7 18:4 20:3 24:14,20 26:22 35:7 217:8 232:23 239:20 266:2 266:23 268:10 269:15
statement 22:16 24:9 28:1 29:13,21 30:2,19 33:5 40:19 41:5,14 41:22 42:5,21 43:12,23 78:11 232:13 268:13 268:14 269:19 269:19
statements 21:15 22:6 36:7 37:18 39:21 142:7 143:6 146:3
states 1:1 8:10 18:13 125:2 130:16,16 131:12 141:17

stating 9:13 99:5
stay 14:23 59:24 171:4 192:10
stead 215:9
steady 215:9
stealthfully 120:13
steel 118:16 215:22 220:8 238:8
steer 82:24 85:17,18 87:4 90:20
steering 87:22 88:12 89:3 92:15 99:10 198:15,22 199:10
stem 52:13
stemler 3:2 4:4 8:22,23 9:12 20:2,7 25:25 26:8 28:12 31:3 32:14 33:10 36:12 37:21 39:24 45:25 47:15 50:8 58:9 61:2 63:22 64:17 65:3,9 73:24 75:12 80:7 87:17 91:9 94:12 97:3 101:23 102:10 105:6 109:4 111:18,20 112:15,21 114:6,15 121:1 125:7,17,18 132:2 133:4 141:1 153:14 153:16 159:21 160:2,13 165:20 166:19 166:25 167:6 167:17 168:6 179:20,24 180:2,5 182:8 183:15 184:19 185:17 186:12 187:5,11,18,22 187:24 188:9 188:15 189:19 190:14,17 193:13 197:15 197:17 198:1,6 198:21 199:5 199:19,24 200:7,13,24 201:8,16 202:5 202:11,16,23 205:6,14,24 206:12 207:7 208:8 209:20 212:7 214:9,12 216:1,19,23 217:5,13,24 218:20 221:14 222:12 223:11 223:25 224:4 224:17,23 226:15 228:4 228:20 230:5 231:23 232:19 234:25 235:9 238:19 241:7 241:25 242:6 242:13 243:7 243:18,22 245:8,24 246:10,15,25 254:4 260:1,10 260:14,23 264:23 265:6,9 267:5
step 26:12,12 170:11
stinking 172:22
stop 117:23 171:14 173:19 244:8
stopped 193:16
storage 14:3 205:20
store 118:8 186:9
stores 106:24 117:13,16,17 118:2
stowed 55:11
straight 104:23
strategic 154:14
straw 216:9,21
straws 170:19
streams 18:3 25:8
street 3:5
strike 12:25 16:13 25:25 52:18 55:2 145:14 258:12 258:23
string 218:2
struck 229:16
structure 24:4 56:18 99:17 103:2,7,9 113:16
stuck 143:4,10 145:25 146:14 154:11 249:15 249:17
stuff 173:1 233:11
stupid 172:6
stutsman 237:14,18,25 238:12,16,25 238:25 239:3
style 63:13 164:18 189:6

subchambers 255:13
subject 29:25
submerged 58:20 104:2 105:1,15 108:19 111:10 111:13,22,25 112:5,9,10 166:6,12 169:14 201:13 202:14 231:16 231:20,25 232:8,11,15
submerging 254:15
submersible 167:23 168:4 168:20 247:5,8 247:22 248:10
submission 227:12
submitted 141:15
subscribed 268:10 269:14 270:21
subsequent 106:19 262:12
subsequently 35:4 144:14
subsidiary 63:10
subsidize 181:9 181:9
substance 235:4
substantial 266:15
subtracts 254:25
success 15:22 202:13
successful 17:1 52:7 176:23
suck 43:21 169:10 191:20
sucked 215:12 215:16 216:16
suction 60:5 72:10 74:5,6 154:16,18 162:5,7 163:12 163:13,16 164:5,6,7 167:1,1,19 171:19 252:2
suffer 115:20
suffering 73:18
sufficient 78:2
suite 2:17 3:6 267:2
sulfide 94:1,3
sundstrom 124:25 128:17 129:5 134:12 134:13 135:24 140:18
sundstrom's 126:23 127:2 130:5,7,10 135:23 136:2
sunshiny 195:6
super 48:10 49:11 50:6 53:12,12 54:2 62:24 63:2 64:11,14 192:22
superior 267:1
supernat 259:16
supernatant 258:21 259:4,7 259:8,23 260:3 260:6
supernate 43:21
supplies 22:22 23:14,18,19
supply 22:18 99:13
support 7:3 255:2
supposed 106:7 172:25
sure 47:19 62:24 63:15 73:19 81:25 90:25 95:19 119:20 129:20 129:20 153:4 153:20 155:14 194:21 195:3 210:1 217:9 227:23 233:5 238:15 254:17 255:7,11,20
sured 119:3
surface 40:17 45:19 86:22 100:19 167:2 199:6,15 200:2 203:4
surprised 241:20
survivable 14:22
survive 17:10
suspended 25:9 25:10 27:20 214:15
suspension 40:16
swear 9:7
swine 14:1,1 122:21 159:18 169:7
swing 15:3
swinger 13:23
swinging 261:25
swirl 63:8
switched 209:23

switches 230:8 230:9
sworn 9:9 266:5 268:10 268:13 269:14 269:18 270:21
syackey 2:14
system 24:25 56:16 71:7,10 71:14 73:1 82:14,15 83:12 85:1 99:6,24 104:16 167:8 167:21 168:17 177:15 190:2 192:7 215:14 215:14 222:1 230:14 249:19 259:22
systems 13:24 151:12

t

t 60:10
t'd 99:8
table 183:7,22 184:10 186:19 186:24 188:11
take 44:3 46:20 64:17 81:1 89:12 102:1 112:19 116:8 118:6 129:25 130:9 145:9 156:5 159:23 170:16 171:11 171:24 173:9 178:12 179:21 180:3 182:6 191:6 203:2,6 205:22 208:7 210:22 211:10 213:2,17,21 222:16 224:9 224:11,13 244:2 245:7 250:21 251:15 260:10 262:6,7 262:10
taken 2:2 8:7 34:2 91:22 95:2,16 96:4,7 96:9 97:16 109:20 113:3 151:22,22 194:20,23 207:9,11
taker 93:20
takes 171:14 175:22 213:11
talked 128:21 206:3 254:10
talking 26:13 53:18 54:5 90:23 95:6 112:2 135:10 137:16 140:13 162:17 177:7 220:2,8 225:1 225:1 251:24
talks 41:20
tall 55:15
tank 48:20,22 49:4,17,18 117:11 118:16 186:9 220:8,9
tanks 68:21 97:23 106:24 116:9,9 220:2 220:4,6
tapered 56:18 99:17
taylor 3:2 8:22 111:16 125:13 160:12 182:7 190:16 222:12 235:6,17 236:24 265:4
teal 163:1
team 232:25
technical 165:23 195:23 243:24
techniques 211:16
technologies 121:23
technology 158:9 172:10 209:22
tell 11:7 106:11 127:16 157:20 185:21 207:16 210:20 226:13 228:8 266:5
telling 149:3 157:13
ten 263:10
tend 104:4 115:4 258:11 258:14
tendency 266:15
tent 126:14,25
term 115:17
terms 248:9
terrain 145:22 146:11
testified 9:9 221:1
testimony 9:19 10:9 11:4 201:17 206:13 224:24 236:10 236:21 266:6,7 268:6,7 269:6 269:9,12
tethered 117:23
text 78:15 99:5 133:25
thank 9:6 11:6 21:25 30:14 31:12 42:7 58:18 65:5 114:17 155:7

158:23 159:8 159:20 160:17 161:8 162:23 174:24 208:20 265:9
thanks 153:14 182:8
theirs 238:10
thick 40:18 98:18,21 154:8
thicker 205:15 205:17 206:1 206:10 208:24 243:6 258:4
thin 243:1
thing 13:21,22 30:4 48:16 49:19 59:23 81:13 152:5 154:24 173:1 173:16 211:5 212:22 218:14 250:1
things 12:14 13:16 62:4 70:20 106:6,25 119:11 120:1,6 121:19 169:2,9 171:14,23 179:3 211:11 226:12 238:9 248:23 249:9 250:18
think 17:2 22:1 26:11 69:1 73:7 84:14 113:4,6,7 123:2 128:21 137:17 144:4,6 149:17,19 150:14,16,18 150:19 152:6 153:13 158:14 158:14,20 159:24 177:9 189:3 193:9 194:6,24,25 195:2 201:10 203:20 204:2 219:7 221:1 223:19,21 241:11 242:21 243:12 254:12 261:10
third 49:3 223:18
thirds 51:24
thirty 267:18
thought 72:14 118:3 150:22 175:17 198:10 261:12
thoughts 241:5 241:9,10
thousand 17:21 18:20 116:10 151:19 212:24 213:14,16,17 214:20
three 11:17 17:20 40:14 50:11 51:24 54:2 70:7 87:3 87:12,12 116:11 120:4 123:3 135:20 192:16 197:6 208:3 213:2,8 213:11,12 240:18 255:18
threshold 25:21
throw 157:10
thrust 44:4 83:2 87:5 100:11,13 102:3,5 103:13 110:20
thrusted 100:16
thrusting 85:13 87:21 88:1 92:15
tie 79:9 106:12
time 1:16 8:4 14:17,18 15:9 16:8 17:9,17 24:15,23 28:4 28:7 35:7,11 44:9,21 47:1 52:3 53:16 58:10 61:16 62:6 64:16,21 64:25 80:8 88:3,3 102:11 112:16 114:8 114:12 115:20 115:25 116:3 117:14 118:4 119:6,23,23 121:22,24 122:1 145:7 150:1,23 151:18 155:19 156:5,14 157:12 158:1 160:1,3,8 170:14,23 171:2,14,23 172:12 174:8 174:11 177:3 178:20 182:9 182:13 184:5 188:18,21 191:16 192:5 192:15 194:10 204:6 208:15 209:10 213:11 215:1,2 226:20 235:11,16 245:11,15 260:15,20 265:1
times 73:1 77:11,12,14,16

78:18 124:6 174:4 213:2
timing 82:15 83:8,9
tin 193:5 204:16
tire 145:10 201:22 202:2 202:10 203:3,4 203:9,14
tires 203:18
today 8:24 9:4 9:17,20,24 10:9,19 11:4,8 11:15 13:5 28:4 148:5,23 160:17,21,25 174:8 189:2 225:14 226:3,8 226:13 234:24 236:10 247:1 248:21 261:5 261:10
together 11:24 34:15 46:10,14 48:20 49:4 72:25 114:3 151:25 152:15 171:25 185:19 204:19 211:6,8
told 146:24 235:7 254:11
ton 120:5
took 15:9 46:16 89:16 95:18,20 95:23 99:22,22 206:15 232:25
tool 150:24
toolbox 150:24
tools 34:14
top 49:25 56:19 59:3 79:22 80:21 113:11 113:17 123:25 133:25 171:19 186:21 199:12 211:3 236:5
topics 20:21
tops 111:6
total 25:10,15 26:3,20 27:5 27:20 72:10 84:1 132:19 133:9 164:19 164:21 204:6,6
totally 52:12 102:12 148:7
touched 17:3
toward 42:18 74:10
towards 43:9 133:25 152:8
towing 55:12
track 209:6,12 209:16 212:12 212:14,19
tracked 212:20
tracking 203:19
tractor 15:4,5 16:7 50:16 69:9 80:12 113:23 117:4,5 117:6 135:7 146:9 155:23 156:21 259:21 262:11
tractors 156:9
trade 121:13,16 121:18 122:2 122:15,18,23 128:13 243:25 244:5,7,12,13 248:9 257:4
trademark 141:18
traditional 120:21
trailer 48:18 52:21 79:11,12 80:1 127:18 140:19 145:19 146:6
train 198:10
training 172:12
transcribed 266:6 268:7
transcript 7:13 20:5 244:1 246:18 264:25 265:5,11 267:11,12 268:5,12 269:5 269:11,17
transfer 59:6 151:12
transmission 51:12,13 52:8 75:7
transmissions 51:11
transport 21:13 94:25 155:23 256:19
transported 120:20
transporting 93:1
trapolino 32:1
treat 18:2
trials 150:6
triangular 103:9 131:21
tribulations 150:7
tricks 176:8
tried 13:13 14:3 68:19 120:13 128:15 146:22 172:7 202:25 221:2
trimmed 83:22
triple 158:12

tripping 111:5
troubles 248:24
troy 2:18
truck 24:25 117:19 215:13 249:20 259:22
trucking 238:6
trucks 25:3 51:2 233:21
true 21:15 22:7 22:7,16 24:9 28:1 29:13,21 30:2,17,19 31:9 33:3,5 36:5,7,15 37:16,18 38:1 39:19,21 40:2 40:19 41:5,14 41:22 42:5,21 43:12,23 65:18 76:2,2 105:19 105:22 125:21 136:23 159:3 266:7
truly 153:2
trust 147:17
truth 266:5
truthfully 30:5 32:19 35:21 37:7 39:9 46:12 62:9 67:17 76:15 94:8 95:24 98:5 109:24 113:12 132:8 152:6 241:19 253:16
try 68:20 115:7 115:11,22 116:21 117:20 118:18 120:11 121:19 157:9 173:19 209:3
trying 14:12,20 15:24 110:11 110:16 119:4 119:25 121:22 121:25 143:5 145:10 172:2,8 174:20 218:17 219:21 224:2 232:13 244:4 258:1
tstemler 3:3
tube 30:8 100:3
tumbleweeds 174:3 249:7
turn 15:5 19:25 42:8 48:14 85:20 127:21 130:12 144:20 152:11
turnaround 171:2 174:11
turned 17:20 34:13 44:25,25 69:6 154:25 199:11
turning 40:21 41:7,16,24 54:2,20 77:17 89:15 123:23 124:8 132:13 139:15 140:1 141:20 145:13 153:7,17 155:8 158:24
turnoff 150:6
turns 107:25 199:14 251:11
turtlebacks 110:15
twenty 120:7 128:8
twice 181:1
two 12:11 17:20 46:10,13 48:1,10,13 51:24 52:6 53:13 59:18 67:20 68:19 71:4,11 82:25 84:12,12 85:12 85:22 87:4,21 88:1,8,10 89:3 89:19 99:14 103:12,20 104:18 113:6 116:11,16,18 134:18,23 135:3 136:5 141:12 155:10 171:9,24 189:4 190:21,22 191:4,14,17 192:16 197:5 197:10 198:11 198:23 203:7 204:18,24 209:23 220:17 230:7 236:18 250:5 252:21 255:17 261:12 261:20 262:2,5 263:11 264:12
tying 106:10
type 62:23 63:17 72:3 73:12 116:25 152:4 173:1 217:15 234:10 247:15
types 12:14 13:16 51:3 61:20 70:18 73:3 106:25 116:4 119:11 120:6 122:15 122:25 146:20 149:20 151:23 163:21 164:2 169:9 177:4 216:4,7 226:5 238:9 249:9 250:18

typical 145:17 145:24 146:4 146:13 155:21
typically 23:9 23:13,16 116:5 116:24 118:21 138:25 164:5 169:17 249:13 258:17 259:7

u

u 135:1
u.s. 21:21,22,23
uh 206:5 213:19 217:20 220:18 222:11 256:4 262:20
ultimately 71:21
unattended 104:25
uncommon 117:15
uncoupled 172:22
under 9:20 83:1 104:2 111:25,25 131:11 138:24 146:1,15,18 147:5 160:20 185:1 197:1,5 197:10 198:12 198:20,23 199:3
underneath 43:22 73:12 81:19 98:22 108:4,16 118:14 154:16 171:12
underside 43:17
understand 9:19 10:1 13:3 45:17 160:20 169:24 191:19 226:11 238:5
understanding 14:19 176:20
understood 10:5 16:7 44:8 144:13 224:4
underwater 40:14
unfairly 197:22
unfortunately 118:17 169:22 250:4,17
unhook 172:20
unique 56:7 63:3 168:11
unit 8:6 50:11 57:11 100:1 117:1 159:25
united 1:1 8:10 141:17
units 41:3 52:6 146:20
unloading 79:4
unopened 106:23
unpleasant 81:12
unplug 171:10 173:19
unplugged 170:6
unpowered 205:1,2
uowm 126:1 134:16,17,17 135:1,2,19 136:7 137:2,22 138:12 139:15 140:1 223:8
uowm0000007 6:19
uowmn 128:24
upload 32:4 36:22 38:23 40:7
uploaded 30:7 31:13,19 32:10 32:21 35:4,14 35:23 37:1,9 39:2,2,12
upper 62:15 79:22
upright 101:12
upstairs 96:13
upward 104:14
urinate 26:25
urine 26:13
usable 52:12
usda 122:12
use 15:7 24:22 29:7 49:23 63:25 68:12 71:11,21 72:2 75:2 83:20,22 101:2 103:24 104:2 117:9 146:9 163:5 164:18 167:22 168:2 175:14 175:18 177:13 177:14,25 178:7 179:14 179:15 180:24 181:4,11,16,17 185:22 189:6 192:2,18 193:4 197:21 198:3 208:3 211:15 215:7,13,20 216:4,8 217:22 218:8 221:3 234:21 243:9 243:20 248:9 254:1 257:9 262:5
used 22:13,14 22:19 24:7,7

24:12 27:23,24 38:21 40:5,17 44:21,21 45:14 56:7 63:18 64:2,6,14 68:8 68:10,15,17 70:13 73:16,20 75:6 76:17,22 82:5 83:24 85:3 86:7,8,9 89:20 91:24,25 91:25 93:25,25 97:22 98:7 99:19 103:15 104:19 110:1,8 110:14 113:13 114:3 115:17 115:17 131:6 144:17 146:6,8 157:7,14 158:12 163:22 164:3,22 170:14 178:7 178:22 179:16 179:18 180:7 181:10,21 185:14,23 186:5,7,10,14 187:3,13,16,20 188:7,12,23 190:3 192:5,7 192:24 193:1,8 200:1 207:20 215:7 216:10 216:12 217:2 217:10,11,21 218:2,25 220:1 220:17,23 234:1,9 243:9 243:17 252:13 255:1,13,16 257:4,9 263:14

useful 170:7

useless 250:21

users 115:15

uses 168:16 218:6 243:4,24

using 16:20 24:25 42:4 51:2 62:25 69:10 70:17 71:15,18 102:13 108:14 139:20 144:7 155:4,19,23 156:5 157:3 168:20 172:15 178:21 189:17 189:20 192:3 192:10 198:5 199:21 256:11 256:19 258:11 258:23 259:6 260:7

usually 80:2 81:1 235:20 249:6,9

utel 152:13

utility 82:16,20 264:8

utilization 152:13

utilize 118:10 149:20

utilizing 152:14

uw 128:24

v

v 107:2,18 267:6 268:3 269:3

vac 215:13

vacuum 75:3 88:17 247:15

validity 242:3

valuable 214:16

value 149:25

values 72:8

valve 56:12

valves 87:9 88:22,24 172:21

variable 55:6

various 21:12 24:3 95:25 97:13

vast 122:24

vehicle 29:24 42:14,14,17,18 42:19,20,25 43:7,8,9,10,18 43:22 44:2,15 44:18,20 45:10 47:7,13,25 48:3,17,22 49:8,10,20,23 50:24 52:10,21 52:22 54:4,9 54:16,17,18,25 55:6,18 59:10 59:15 60:2,3 60:13,14,16 62:7,21 68:24 70:3,19 73:21 74:8,11,21 79:5 80:3 82:9 82:12 83:16 84:23,25 85:8 85:11,18,20 86:5,14,23,25 87:24 88:3,5 88:14 89:8,8,9 89:17,17,21,24 90:4,9,12,13,21 91:5,24 92:5,7 92:13,22 93:2 93:8 95:25 98:6,10,15,17 99:1 105:8,11 105:15,20,23 106:10,16,21 107:7,12 109:25 110:22 111:2,4,21

112:6 113:13 114:2,19,21 115:5,8 116:5 116:25 117:10 118:12 119:17 120:2,2,4,19,20 144:11,21,24 145:3 147:12 147:16 153:25 154:12,13 186:8 201:23 207:8 219:17 219:20 220:20 224:18 225:6 247:4 248:11 253:22,25 254:16 255:3 255:13 256:20 257:6 258:11 259:6 263:21

vehicles 47:2,5 61:21 62:11 106:19 119:8 226:6 253:17 263:22

vein 56:7 250:14

velocity 44:12 85:10 100:3,7 191:3 259:12

veritext 8:16,19 267:1,7 270:1

veritext.com. 267:17

version 92:22

versus 8:9 51:5 257:5

vertical 17:19 40:14 55:5 56:10,12 58:2 58:11 74:25 131:13 170:13 171:10

vertically 53:6 58:15 84:13

viable 150:23

vicinity 124:18

video 1:12 4:17 4:20 5:2,6,10 6:8,11 8:7 30:5 31:1,4,6,10,14 31:19 32:10,19 33:1,7,11,12,14 33:14,18,19 34:2,9,16,19,24 35:1,4,14,21 36:13,20,22 37:1,7,14,24 38:1,2,6,17,20 38:23 39:2,9 39:17,25 40:3 40:5,7,12 64:22 65:1 109:1,5,7,12,14 109:19,19,24 110:4,6,7,24 111:8,12,13,22 112:18,24 113:1,3,9,12,18 114:9,13 160:5 160:9 182:10 182:14 189:23 208:11,16 224:25 245:12 245:16 260:17 260:21 265:2

videoconfere... 1:17,25 2:1,10 266:4

videographer 3:14 8:2,17 9:6 9:10 64:21,24 114:8,11 160:3 160:7 182:9,12 208:10,13 245:11,14 260:15,19 265:1

videos 29:18 30:1 32:4,7 40:10 42:11 67:14

view 217:18

viewed 52:5 53:2

virtually 23:7

viscosities 244:19

viscosity 210:5 210:6,8,25 211:1

visited 129:19

visiting 128:17 128:20 129:7

voices 111:17

volt 229:23 230:2,7,8,15

volume 25:6 27:7 234:10 251:14,16

volunteer 174:17

volute 56:8,25 57:1,15 63:3,4 163:15 165:23 165:24 166:3,5 166:10 176:18 231:9,10,11,12 231:14,16 262:23 263:3

vs 1:7

w

wagon 56:15 71:6 113:20 168:18 249:19 259:22

wagons 86:8 117:7 172:16

wait 10:22,24

waiting 151:4

waived 267:19

walk 128:13 175:16 243:1

walls 96:16
want 44:14 74:6 78:10 119:9 178:17 184:8 194:2 205:10 210:9 219:15 223:13 227:19 242:16 242:18,19 243:2,23 244:18 251:2 254:8
wanted 70:22 70:22,24 146:7 170:24 174:10 178:18,18 179:15 189:14 254:9 257:9 261:8
warm 216:11
waste 15:6 25:15,18,22 26:5,23 204:6
watch 219:9
watching 136:12
water 25:1,1,7 25:14,18,21 26:4,20 27:4 27:23 40:17 52:16 53:4,7 53:15 55:9 59:11,22 63:7 68:12 74:11,14 83:1 85:5,11 86:2 90:1 98:20,24,25 99:11 104:2 108:9,13 110:11 111:25 138:24 143:18 167:3 168:25 169:16 180:7 197:5,11 198:12,20,24 210:12 211:2,2 211:18 218:14 231:24 247:17 247:17 252:4,5 252:7,20 254:15 255:2 256:9
waterbeds 215:7,8
waters 18:3
watery 259:23
way 18:20 50:22 57:11 61:5 71:6 74:16,19 76:24 92:16 99:11 119:4 120:14 120:16 133:5 143:12 146:25 157:4 170:12 182:2 183:25 184:13,14 186:23 200:1 204:11 205:5 209:5 211:14 211:15 212:9 215:14 233:14 233:23 236:10 236:21 250:25 262:10
ways 144:19 179:16,17 210:18 242:22
we've 51:1 151:20 152:21 158:25 171:11 172:14 204:22 226:10 235:4 235:15 248:23 252:6,6,6
wear 93:21 215:19 216:21
wearing 93:16 173:17
web 196:13
website 196:8 196:17 197:25
week 17:16
weight 43:5 44:10,11 49:2 59:19,21,23 60:18 108:13 203:2,8 219:14 219:16,20 254:23 255:2 256:24
welcome 65:4 114:15 208:18 245:18
welded 48:20 49:4,17
welding 240:4 240:6
went 50:11 66:17 67:15 122:15 175:11 179:6,7,10 189:13 194:13 235:11
wet 145:23 146:12 203:16
wheel 13:23 48:13 50:2,19 119:14 152:25
wheels 118:11 118:13,18,22 119:8,17 143:21 153:24 154:6 201:7,11 202:21,25 203:8,22 204:1 204:5,19,20,24 205:5 221:7,18 221:22 222:7 233:10,17,21 243:2
white 99:5 126:8 133:25
wide 92:25 106:23 116:20

widely 64:14
wider 57:3 89:25
wife 12:7
williams 243:4 243:16 244:11 244:13
winch 79:11,14 79:18
wind 56:8 263:18,18
windows 96:16
wings 94:24
wink 173:10
winter 123:17
wireless 147:14 147:22
wisconsin 2:7 122:10,20 141:25 266:2 266:23
wise 254:11
witness 4:2 9:7 125:15 159:22 197:16 229:1 245:10 246:23 260:23 264:22 266:5,7,17 267:8,11 268:1 268:4,11 269:1 269:4,15
witness' 267:14
wives 12:11
wolverine 148:21 241:1,6 241:10
wolverines 148:13
wondering 214:1
wood 216:9,21
word 164:11 165:23
words 144:7
work 11:18 12:24 13:7,20 14:11 15:12,20 19:4,10,11,14 34:1 115:25 116:3 151:18 154:11 157:12 157:24 164:13 170:4 171:17 173:21,21 181:2 188:18 188:20 215:1,2 252:25
worked 12:8,19 13:21,22 14:9 31:16 74:18 108:6,6,6 118:19,20 126:11 190:20 240:3,4,6
working 16:5 21:14 136:4 197:8 239:25
works 158:14 172:13 176:21 209:25
wrap 250:18,20
wrappers 249:5
write 174:7
written 141:23
wrong 139:3 178:23

x

x 4:1 148:25 254:22

y

yackey 2:13 4:5 9:1,1 22:24 23:20 25:24 26:7 27:11 32:13 47:9,14 50:7 58:8 62:12 63:21 64:20 66:15 69:21 73:23 80:6,17 81:6 87:16 89:11 100:12 101:22 102:9 105:5 107:14 108:24 111:23 112:14 125:13 132:23 133:3 153:11 159:6,23 160:11,14,16 160:18 162:19 162:24,25 175:9 179:22 179:25 180:3,6 182:6,16 184:14 187:6 187:25 190:15 190:19 193:15 193:18 196:2 197:24 198:4,8 198:9 201:18 202:17 208:6,9 208:18 214:10 216:2,20,25 218:22 223:23 224:1,5 225:3 225:5 226:17 227:3 228:25 229:3 232:20 244:3,10 245:6 245:18 246:21 247:2 252:11 253:9,20 254:3 254:21 257:7 258:8 259:25 260:8,13,25 264:22 265:12
yeah 18:7 56:23 73:6 78:2 81:9 111:18 126:9 153:10 160:2 165:10 174:23 175:5 177:11

180:2 181:14
183:18 189:12
190:5 213:25
225:3 229:10
233:24
year 136:5
149:1,4 174:4
194:11 195:2
195:18 207:17
207:18 240:2
244:15
years 12:12,19
14:7 18:11
21:14 24:1
61:18 92:1
150:17 208:4
209:23 238:13
246:4
yellow 54:5
261:25 264:1,3
yep 8:22 55:19
62:17 69:20
93:15 95:12
101:16 103:23
134:2 162:12
163:25 180:5
213:6 216:15
216:18,24
229:17 231:4
232:1 243:15
258:9
yesterday
141:9 235:6,12
235:14
yoke 103:10,16
103:22,24
104:8,9,12
105:2,6,12
108:18 111:21
112:2,3,4,10
154:19 197:13
198:12
york 239:20
young 119:3
youtube 29:19
30:1,8,11,16
31:19,23 32:5
32:11,21,25
33:3 35:5,9,15
35:24 36:2,4
36:22 37:1,10
37:12,16 38:24
39:3,12,15,19
40:8

z

zoom 1:12 2:2
8:14 229:14
235:14

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS

COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted

fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at www.veritext.com.

Docusign Envelope ID: 97C32ED1-94AE-4C1C-930E-51BB3B4FBB90

DEPOSITION REVIEW
CERTIFICATION OF WITNESS

ASSIGNMENT REFERENCE NO: 7025856
CASE NAME: Nuhn Industries LTD v. Bazooka Farmstar LLC
DATE OF DEPOSITION: December 5, 2024
WITNESS' NAME: Benny D. Puck

In accordance with the Rules of Civil Procedure, I have reviewed the transcript of my testimony. I have listed my changes on the attached Errata Sheet, listing page and line numbers as well as the reason(s) for the change(s). I request that these changes be entered as part of the record of my testimony.

I have executed the Errata Sheet, as well as this Certificate, and request and authorize that both be appended to the transcript of my testimony and be incorporated therein.

Date: 12/20/2024

Signature: DocuSigned by: Benny D. Puck 0A48AD032F024D7...
Benny D. Puck

Docusign Envelope ID: 97C32ED1-94AE-4C1C-930E-51BB3B4FBB90

ERRATA SHEET
VERITEXT LEGAL SOLUTIONS MIDWEST
ASSIGNMENT NO: 7025856

Page/Line(s)	Change	Reason
14:11	"We entailed [sic] making it" to "It entailed making them"	Misspoke
14:20-21	Remove "build a customer -- helped build –"	Misspoke
15:5	Remove "more – amicable"	Misspoke
16:8	"to us" to "us to"	Misspoke
23:10	Insert "That" before "Will"	Misspoke
26:21	"Yes" to "it is 99.99 percent water and .01 percent total solids"	Clarification of testimony
27:15	"had that -- that restriction" to "not been able to do that"	Clarification of testimony
43:21	"supernate" to "supernatant"	Misspoke
48:11	Insert "with one" after "pumps"	Misspoke
48:12-13	"They are - - they are" to "the engine is"	Misspoke
48:14-15	"impeller" to "impellers", "shaft" to "shafts" and "pump" to "pumps"	Misspoke
63:24	Remove "Absolutely not sure, but"	Clarification of testimony
68:12	"preferred to use" "been preferred to be used"	Misspoke
68:17	"in the -- in the" to "with the"	Misspoke
70:8	Insert "Cornell" after "the"	Clarification of testimony
71:23-25	"we had a -- we had" to "Cornell was a" and "necessary" to "useful"	Clarification of testimony
78:7	"aware" to "understood"	Clarification of testimony
86:3	"invite" to "recirculate" and insert "the lagoon" after "in"	Clarification of testimony
87:24	"gate valves," to "gate valves were"	Misspoke
91:25	Insert "publicly" before "used"	Clarification of testimony
108:10	"They" to "it"	Misspoke
115:6	"were" to "did"	Misspoke
123:3	"three" to "two"	Misspoke
136:21	"30" to "fifteen"	Misspoke
141:10	"No, I have not." to "Yes, I did."	Misspoke

Docusign Envelope ID: 97C32ED1-94AE-4C1C-930E-51BB3B4FBB90

141:12	Insert “document from a” before “litigation”	Clarification of testimony
142:11-13	“The -- the -- the boat was – operator error sprayed the -- the -- the crowd with liquid manure.” To “It was operator error that caused the crowd to be sprayed with liquid manure.”	Clarification of testimony
149:16	Remove “Ian was probably correct.”	Misread the exhibit
151:13	“the fracking industry. In the liquid-manure” to “the fracking industry instead of the liquid-manure”	Clarification of testimony
151:16	“those industries” to “the fracking industry”	Clarification of testimony
159:18	“And the crust” to “If any crust were present it”	Clarification of testimony
192:1	“That’s right” to “The Doda pump handled smaller solids than the Houle pump.”	Clarification of testimony
194:4	Insert “We used the Doda pump to pump liquid manure without using the Houle pump.” after “Yes.”	Clarification of testimony
194:7	“Yes, I do.” to “I think this was in or before 2013.”	Misspoke
205:19-21	“So we could get the -- the solids out of the bottom to regain storage of the lagoon.” To “The lagoon became thicker as we stirred up the solids that were settled on the bottom of the lagoon into suspension with the watery upper layer.”	Clarification of testimony
206:14	“it” to “the lagoon”	Clarification of testimony
201:25	“The -- the -- the bearings” to “these particular bearings were not made for marine environments and “	Clarification of testimony
230:6	Insert “when I said that the hydraulic pump was connected to the timing cover.” after “earlier,”	Clarification of testimony
248:7	Insert “It would clog less.” after “Yes.”	Clarification of testimony
250:3	“the size particulate” to “with the Doda pump seizing the particulate.”	Typographical error
251:3	“Art” to “choice”	Clarification of testimony
257:13-14	“the evidence is overwhelming, it’s,” to “it’s just”	Clarification of testimony

Docusign Envelope ID: 97C32ED1-94AE-4C1C-930E-51BB3B4FBB90

Date: 12/20/2024

Signature: DocuSigned by: Benny D. Puck 0A48AD032F024D7...

Benny D. Puck