IN THE MATTER OF AN ARBITRATION BEFORE A TRIBUNAL CONSTITUTED
IN ACCORDANCE WITH THE TREATY BETWEEN THE U.S.A. AND THE REPUBLIC OF ECUADOR CONCERNING THE ENCOURAGEMENT AND RECIPROCAL PROTECTION OF INVESTMENT, SIGNED AUGUST 27, 1993
(THE "TREATY")

and

THE UNCITRAL ARBITRATION RULES 1976

In the Matter of Arbitration Between:	
CHEVRON CORPORATION (U.S.A.), TEXACO PETROLEUM COMPANY (U.S.A.),	
Claimants,	PCA Case No. 2009-23
and	
THE REPUBLIC OF ECUADOR,	
Respondent.	

TRACK 2 HEARING LAGO AGRIO-02 SITE VISIT

Tuesday, June 9, 2015

Coca (Francisco de Orellana)
Republic of Ecuador

The Lago Agrio-02 Site Visit in the above-entitled matter convened at 9:11 a.m. before:

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DR. HORACIO GRIGERA NAÓN, Arbitrator

PROFESSOR VAUGHAN LOWE, Q.C., Arbitrator

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P R O C E E D I N G S

PRESIDENT VEEDER: Let's start.

Today is the 9th of June 2015. We're here at the Lago Agrio well site. In accordance with the agreed arrangement, we start with the Respondent's presentation.

OPENING STATEMENT BY COUNSEL FOR RESPONDENT

MR. EWING: Good morning, Members of the Tribunal. We are now at Lago Agrio-02; to give you our context, we started this morning at Coca, came up through Sacha, and instead of coming to Shushufindi, we came to Lago Agrio. We came around town. We didn't go through the center of town to avoid the congested area, so we're at the northern end of the Concession in one of the first oilfields that was developed in this area.

So, Lago Agrio-02, the two indicates that it's presumably the second well that was developed in the Lago Agrio oilfield.

So, we are here at this site for basically four reasons today. One, this is an easy site to connect the responsibility of TexPet. The pit that we will be looking at was drilled--was dug, filled by TexPet, so we know whose oil is there. So, we were able to assign or attribute responsibility.

This is a great site for us to see the threat to human health or the risk to human health. We have people

09:12 who live potentially on top of pits, and I'll explain that in a second. There are numerous animals running around here. We can hear them. There are lots of dogs. The risk to human health is easy to see.

This study is also easy for us to see the migration. We know one of the sources of contamination here is Pit 3. From all the flags over there, you can see a lot of samples have been taken, and then that contamination has spread into the sediment, and Dr. Garvey will explain that.

And, finally, this is a good site for us to discuss. We have talked about how Chevron has used the Pre-Inspections to influence their Judicial Inspections, and Dr. Garvey will explain in sort of overall in the statistical analysis that he did, but this is also a very good site to really understand how that played out, and this should give us a good example or illustration of that.

As you can probably guess, this site adds another layer of complexity, and that is that both TexPet and Petroecuador extracted oil from this site. So, up until now, the three sites we have seen have been TexPet-extraction only, and now we add the complexity of two Operators.

This is the last site because you've now seen what TexPet oil, what TexPet operations resulted in at

09:14 Shushufindi-34, Shushufindi-55, and Aguarico-06, and that any concurrent contamination at those sites is unrelated to Petroecuador activities, whereas here we have uncertainty, and we have to try and figure out how you divide out and attribute some of the responsibility.

Claimants have attempted to shift the blame for the contamination that's here--and I'm sure we'll hear about that--to recent Petroecuador activities, "recent" being 1992 and more recent. But, as you've seen at other sites, contamination from TexPet continues to exist in the environment, and it continues to exist here, and Dr. Garvey will explain why we know that this contamination is from TexPet.

This is also a site where it's important to note the delay that has been caused by the way this case has been litigated. Keep in mind that TexPet ended as Operator in 1990, and they left Ecuador in 1992. Within 11 months of TexPet leaving Ecuador, the Lago Agrio Plaintiffs filed their lawsuit in New York. So, in 1993, this lawsuit was filed.

We have seen contamination. You have seen oil on the ground. You have seen oil in the sediments. It has now been 22 years that that contamination has been out there and you can still see it. We'll help you to imagine maybe what it would have looked like 22 years ago when this

09:15 first case was originally filed and, in a sense, how much easier this would have been to resolve at that time as opposed to now, looking back 22 years later with the added complexity of a site like this where now Petroecuador has operated.

So, we see the benefit of the litigation style that Chevron chose in this case and Texaco chose in this case in New York.

So, I want to give you a little bit of history and a little explanation of where we are, just to give you a layout of the site. So, we have a map here. Here's, Nicole, if you could come here, one side of the other pole.

This is Lago Agrio-02. We drove in from the south and came up. We passed Pit 4. You probably didn't notice it. Maybe you did--I'll be particularly impressed if you did--but it's back in the woods just down the road here.

We came in. This is approximately where the gate is. All of our cars are now parked along this wall. The oil wellhead is here where it says, "wellhead," and then we have three definite pits that we know of.

Let me just set this down here.

We have Pit 1, which is here, which is in the--my right, to your right, right here labeled in blue.

We have Pit Number 2, which is just to the left of that pit. You can see the flags that Chevron has put out,

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the yellow flags to the trees.

And then we have Pit 3, which is all of the flags that Ecuador--that all of us have. We put them all in that pit just so you know exactly where that one is. But that's Pit 3 right there, which has received the most amount of sampling as a part of this arbitration.

There's also a fifth potential pit here that can be seen in--potentially seen in aerial images. The Parties--some of Chevron's internal documents mention that they believe this might be another pit. It's not definite. We don't know, but it would be right under this house. Some of the material that LBG tested as a part of this litigation--or this arbitration was from this area, and it was petroleum byproducts or hydrocarbons. Whether or not this is definitely a pit or maybe just a spill, we don't know, but there is some source of contamination there as well.

So, that's the overview of this site.

During the Lago Agrio Litigation, Chevron identified Pit 1, which is the pit in blue, and their map had none of the other pits, and they described none of the other pits to the Lago Agrio Court, despite the fact that in their Pre-Inspections and their Pre-Inspection documentation, they had clearly mapped these pits out. In fact, I think most of our outlines for these pits are from

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Chevron's Pre-Inspection documents, and they had even labeled them Pit 1, 2, and 3 in their internal documents--and 4. But, during the litigation, they did not bring up Pits 2 and 3 at all.

Chevron will say that they discussed those in their Rebuttal Report. So, during the Lago Agrio Litigation, the way Judicial Inspection would work is that the Parties would come. They would walk around the site. After the Judicial Inspection, they would take samples where the Parties or the Judge wanted, and then both sides would file a report, and that report would be typically--I think Mr. Bianchi filed the Report here for Chevron. I don't remember who for the Plaintiffs. You'd have an Expert Report, akin to what LBG has done or what GSI has done here, but focused on a specific site. And then there would be a Rebuttal Report.

And, in this case, the Rebuttal Report was filed by Mr. Callejas, who was Chevron's lawyer. There was never a report that was filed by Mr. Bianchi or any of the other Chevron's technical experts with this. There's some technical discussion in Mr. Callejas's report, but there is no sort of Expert Report rebuttal.

And, in that report, Chevron still does not mention these pits. You can look through the entire report. Unless I have somehow missed it in the 667 pages

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that it is, they don't discuss these as pits. In fact, you can see--this is Claimants' Tab 19--they talk about these areas. They say their pits are "other areas sampled," and they say Mr. Robelino, who is the Plaintiffs' Expert, the technical team drilled six holes outside of the remediated areas--and he's referring to six samples that the Plaintiffs took in this area--from which six samples were collected at depth.

Later on in the same document, it states that, as a part of the JI process, the Experts were tasked with answering specific questions placed to it by the Court. One of those questions was the number of pits that existed at this site.

So, Chevron never referred to these as "other pits." They referred to them as "other sampled areas" outside of the remediated areas. So, they did discuss the samples they were taking here, they never admitted that they were or report actual pits. We'll talk a little bit about these samples more because they do give us more indication about what the PIs and the JIs were used for.

So, I think that's as much as the overview as we want to get into. We are sitting here now. We're going to walk on top of Pit 3. We'll be briefly there while we--Dr. Garvey will discuss the PI and the JI sampling. We will walk down past the house, down to this area here where

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you'll see the siphon that sticks out of Pit 3, and this is the sediment and stream area that Chevron, the Lago Plaintiffs, and LBG have now sampled. And Dr. Garvey will explain some of the science and the toxicology there.

A couple of quick wrap-up points. We have promised to get you a reference on the filtering. You can find that in John Connor's 2014 Report. At Page 18 is one place to start. There is some discussion as well in the LBG Reports, but that is where Mr. Connor addresses that.

I would also like to clarify: We have repeatedly said and argued that the petroleum in the area from TexPet's operations is liquid, that it's mobile, and that it's not asphaltic.

The reason we have said that is because Mr. Connor had originally said that it was asphaltic materials. He said yesterday that wasn't the case and we have a misunderstanding, but I just wanted to read some quotes from Mr. Connor's report to explain why we are emphasizing this liquidity, the mobility, and the fact that it's not asphaltic.

So, starting with Mr. Connor's first JI Report at the Sacha 6 well--so this was filed in the Lago Agrio Litigation--he said: "These weathering processes reduced the concentration and mobility of the crude oil removing 30 to 90 percent of the hydrocarbon mass and over time

converting the crude oil into an asphaltic composition."

At the Sacha-21, he actually provides a definition of what asphaltic means. He says: "The asphaltic material is a solid mass that does not release dust particles, vapors or leachate and is essentially an inert mass that does not impact the environment and is not bioavailable to living organisms."

That continued into his Reports in this arbitration. He says that: "The residual oil in the soil would be immobile, pose no impact to surface water or groundwater, and present no significant risk to human health." And that's in his 2010 Report, Page 37.

Page 48: "Specifically, weathered crude oil tends to have lost some or all of the more volatile, water-soluble, biodegradable petroleum hydrocarbons, leaving only the heavier, more viscous, and insoluble portions of the crude oil, such as resin and asphaltic materials."

This is what we're responding to and why we're explaining to you what you're seeing at these sites is still liquid, yet it is still from TexPet's operations over 30 years ago. And, as they recognized at Shushufindi-55 and conceded, for instance, that swamp is still contaminated with mobile material. It's not inert asphaltic material.

So, with that, unless the Tribunal has any questions...

PRESIDENT VEEDER: We have no questions at this stage. Thank you.

MR. EWING: Then I would like to walk over to Pit 3 and continue there.

(Pause.)

MR. EWING: We are now standing on top of Pit 3 that all Parties now agree exists and we commonly call it Pit 3. This pit is or was clearly visible in aerial photography--or in aerial imagery. These are in Respondent's Tabs 1 and 2. You can see this pit very clearly.

It was covered sometime in the mid-1990s, early 1991. You'll probably hear Claimants say that it was covered by Petroecuador. Again, like the other pits, there is no documentation that that's the case. It may be true. We don't necessarily think that it is the most likely scenario.

With that, though, I would like to turn the floor to Dr. Garvey to explain some of the PI and JI sampling issues that are represented here.

DR. GARVEY: So, good morning. I'd like to talk--well, before I begin talking about the PI and JI samples that were collected here, I just want to review

briefly the different topics I'm going to cover in my talks this morning. I'm going to review results that we've seen in the previous two days of Site Investigations that we visited, talk about the PI JI samples, and the evidence that we have here regarding those, talk about the soil pit investigation that Louis Berger did in this area, and then talk a little bit about weathering of contamination, weathering of the oil. Finally we talk about stream impacts, the impacts of this pit area to the stream that's just down the hill here to my right. You can't see it yet, but we will go there in a few minutes. And then finally, I'll talk about the human risk implications of this contamination for the family that lives right here.

So, to begin, then, the PI and JI studies were--well, they were conducted by Chevron--yes, by Chevron in this area, and in particular the PI locations that were placed here are two squares, this one here and that one there, I believe the red squares.

MR. EWING: Red squares.

DR. GARVEY: Right, red squares there.

In each of those instances, Chevron took samples down through the pit here. But, before I talk in detail about those samples, let me just talk a bit more about the philosophy, what we understood happened.

Basically, Chevron visited many of the sites that

was likely candidates for the JI inspection and placed PI samples, if you will, preliminary inspection samples, around those areas. They put in several hundred samples in that regard.

With that knowledge, they then decided on a subset of those samples to reoccupy as part of the JI. What I mean by "reoccupy" is simply to come back to the same location and collect a sample that would appear in front of a court. The PI samples would not appear in front of a court; the JI samples would. By "reoccupy," they simply went to a location that they had visited before and took another sample.

If they had simply done a PI investigation and then used that information in some random fashion or some general fashion to say, okay, let's say the average of the PI samples was a thousand units; if they had come back and done a random subset of those or an evenly spaced subset of those, like taking every third sample, they might still get an average of a thousand. In fact, the average of the JI samples that they took was 40 times lower than the average of the PI samples that they collected. The median value of the JI samples that they collected was three times lower than the median of the original PI samples.

So, it's clear just from those statistics alone that they didn't just randomly reselect, reoccupy the PI

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locations. What they did was to identify locations that were low in contamination and only reoccupy those. I don't think there's but one sample, in fact, over a thousand parts million TPH by 8015 that they reoccupied. The vast majority of the reoccupied samples were low ones.

Now, they can argue that that was because they were trying to bound the problem; but, as I understood the JI investigation, it was not a bounding problem. It was a documentation of the nature and extent of contamination, not simply its perimeter.

So, clearly from the simple selection, the subsetting of the PI data, PI locations to select the JI locations, they selected the lower end values. But, in addition, they also had knowledge about where the high values were. And so, using that knowledge, they then placed other JI locations where they were fairly confident they could control what would happen and minimize the concentrations they would detect there as well, and this is a case of that.

These two red squares here represent PI samples. One of them--I can't remember which one it is now--is about 8100 parts per million. It represents this, these two samples here. It is this deep boring here. Basically the symbol here is just at the top of the segment. The segment goes from underneath this clean fill, clean cap, if you

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would, down to some depth here, and the average value there is about 8100. Here, the one right next to it, it would be these two pairs here. The other one value has a value of about 3800 parts per million.

So, again, they're integrating the material within the pit. They're not taking the cover material, but they knew by the basis of these two profiles how thick the cover was.

So, when they come back as part of the JI, that's given by the two orange flags there okay. The samples that they submit as part of the JI investigation are only the cap material, and they come back basically pretty clean. Okay. These cool colors here, this yellow and the blue as opposed to the purple, these are significantly lower in contamination. One is about 17 parts per million. The other one is less than 4. It's a non-detect. Okay.

And Chevron also collected these samples down here but did not submit these in these JI Reports. They submitted them later in the rebuttal reports and really didn't discuss them at any length. Okay. So, they're not in the original JI Report. The information that they had, that they gathered at the same time as this, was reserved and put into a later report and not brought front and center, so to speak.

Okay. So, we'll come back to this cross-section

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in a few minutes.

Now, Louis Berger sampled all around this area, and we show Respondent's Tab 33, Page 1. Sorry, and that one was Respondent's Tab 23, Page 2, the one we were just looking at.

That's a planned view of the site itself. Louis Berger basically threw a lot of darts in this pit area here to try to get a good feel for the nature and extent of contamination just around this pit. Obviously we didn't do the rest of the site. We have a very good understanding of what's in this pit. What you notice here by our color coding in these purples and reds is all highly contaminated samples and they're largely given by the red flags that you'll see behind you here. I'm not going to call out any particular ones. As you can see, there's lots of purples and reds here. Enough said.

So, we collected these soil borings here that gave us an estimate of the contamination and the depth of contamination here. Okay. We could observe petroleum product in these samples. We either had petroleum sheens or petroleum odor or in, some instances, free oil. We found them both within the pit itself as well as outside the pit. We found values that were high either at the pits' edge or actually outside of the pit. Again, in evidence of the fact that we have liquid oil in this pit in

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2013 when we did these borings, and this comes back to the reason that we brought you to the sites earlier is that we planned to--well, we could demonstrate that the liquid oil here cannot be exclusively attributed to Petroecuador because we know from the sites we visited that we can find liquid oil on sites that we have where TexPet was the only Operator. Okay.

So, I just want to review, then, quickly what we found overall, to summarize what we found to this point with regard to the other sites and how it applies here. We've tested basically five of the Claimants' assertions:

Essentially, Claimants' assertion that oil spilled or oil in pits in the Oriente rapidly becomes asphalt-like and is mobile is not true.

Claimants' assertion that liquid oil found in pits or in spills could not be due to TexPet activities is not true.

TexPet's assertion that pits were comprised of clay that prevented oil from migrating from the site is not true.

Claimants' assertion that TexPet oil was largely contained in the pits around the sites is not true.

And then, finally, TexPet oil that has significantly spread beyond pit parameters is solid and therefore inert is also not true. Okay.

So, with that, we'll head down to the sensitive area site.

(Pause.)

DR. GARVEY: Okay. So, let's review again the history of this pit. Okay.

It was here part of the TexPet operations that was constructed in the late 1960s when they did this. They drilled and began producing oil at this site. It was under TexPet's control up until 1990, an open pit during that entire time. In the one-year period after Petroecuador takes over the operations, the pit becomes covered.

So, in terms of contributions of oil to this, if you would, we have 25 years of operation by TexPet here. We have one year of operation by Petroecuador.

As Mr. Connor has said, the majority of waste that's produced in the exploration and development of a well is during the development period and not during the production period. So, we anticipate that the vast majority of the oil within this pit is the result of TexPet operations. That's not to say that there might not be some contribution by Petroecuador, but we don't expect it to be very much.

And, clearly, the fact that they operated here for only a year and the fact that we know that oil within this pit remains liquid and mobile would suggest that there's a

significant contribution by TexPet here.

So, in the years 1990 to 1991, this area is covered over with a layer of clean fill. It's not a remediation. It doesn't prevent groundwater from migrating through it. It also doesn't prevent anyone from disturbing it. It doesn't really contain the contamination.

So, if we can, that one, Greg.

And so we have the inventory of these bright red and purple points here that document the contamination here. This pit is, in fact, about 4 meters thick. Okay. The depth of deposit here but based on the cores that we placed in here, we find contamination down to as much as 4 meters.

So, these bands on these wells here on these borings represent the thickness of the impacted soils here. Okay. So, we have extensively contaminated soils through the length of the pit. Okay.

So, what happens over time? Well, in addition to constructing this pit, they also put a siphon in the side. Now, why would they put a siphon in the side? It's a means to control the oil that's in here. Essentially it rains a lot here, as you might well have noticed. Water gets into the pit. It displaces the oil because it's heavier than the oil. It sinks to the bottom. It pushes the oil over the top. You put a siphon in the side, like this one here,

the water can drain from underneath the oil, prevent the oil from overtopping the berms here. Okay. So, it makes a lot of sense in that regard. But this pit, the siphon is still in place here, and I'll let you inspect in a few minutes, but you can actually see oil staining coming out of the siphon to the present time. Okay. This soil here, some on my finger, it's stained with oil. Okay.

Now, this oil is not as fragrant as the oils we've had elsewhere. This is a more weathered oil. It's lost more of its volatile components. Perhaps because the cap isn't as protective, this oil is more degraded, but it's still liquid and mobile. Okay.

Now, in terms of the impact of this area to the stream here below me, we'll look at the cross-section again. We have the siphon here, a potential source of oil. We have migration of groundwater. If you notice at the top of the hill there, there were groundwater flags on the--there were white-red symbols, and I have the groundwater map right behind. Okay. This is a map--a plan view again--of groundwater contamination here, and I'll identify for you several symbols here in reds that show--this is not the one we were supposed to bring, it was the other one. Anyway, there are five groundwater wells here. Three of them are impacted to the point where they're above the Ecuadorian standard. One of them is over

1000 parts per billion of TPH in the groundwater, and that's by Method 8015, not by Method TEM. That's by the same method that Chevron uses for that.

These groundwater wells represent contaminated water within the pit and the immediate vicinity of the pit that's reaching the stream. How do we know that it's reaching the stream? If you notice over there, behind there is a red flag. That's a sediment sample that we collected there. That's highly in excess of Ecuadorian standards. Concentration in that stream sample is on Greg's map. I think it's in purple.

MR. EWING: It's here.

DR. GARVEY: Right. So, it's in excess of 5,000 parts per million by 8015.

I'd point out that we will present 8015 numbers here because of the maps we have prepared. If we had used TEM numbers, it would be three to seven times higher than these values, so we would be in tens of thousands of parts per million of TPH. Okay.

So, let's talk a little bit more about--so, we have a connection here between--sorry--we have a connection here from the pit to the stream. We have direct observations of contamination. We have oil still coming out of the siphon. We have oil in the groundwater below us that's moving to the stream. Groundwater is not static.

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09:48 It always flows because it's always got rainwater coming in, pushing it, displacing it, moving it toward the stream.
Shane, if you wouldn't mind taking a sample and see if we can get a hit on the PID from it.
MR. EWING: Would you like to walk down? You can walk down and see a little more closely.
DR. GARVEY: Sure.
MR. EWING: If you would like to come down here.
(Pause.)
DR. GARVEY: While Shane is working on the sample there to see what we can observe, we already have direct observations of contamination in the swamp based on the sample that was collected there as well as other samples collected downstream. And you'd note as well, just around the corner here, there are two green flags indicating that upstream of this point there isn't any contamination--any appreciable contamination in the stream. So, clearly, the contamination that's here has arisen as a result of the activities and then certainly as a result of this pit immediately to my left.
We should talk a little bit more about weathering and weathering contamination. We've noticed the presence of weathered, partially weathered oil--
MR. McDONALD: Just pointing out the oil.
DR. GARVEY: As we said, we discussed the presence

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09:51 of liquid oil in all of these deposits that we've examined that are 25, 30 years old yet still have liquid oil, and they represent a partially weathered but certainly not a fully weathered oil.
In fact, Dr. Short studied the level of weathering in these samples using various indices of weathering. It's different compounds in the oil that tell you how weathered it is. It's his area of expertise. He's done that extensively on the Exxon Valdez project. And so, he finds that the level of weathering typically for the oil around here is Number 5 on the Kaplan Galperin scale. I'm not going to go into it. It is a scale that's used to evaluate and to estimate the degree of weathering.
At that scale at about a value of five, the vast majority of the PAH compounds that are in the original crude oil are still there. And because you've lost other mass from the sample, the volatiles have largely left and the benzene-related components have largely left, the PAH concentrations are actually higher than they were in the original crude oil. As a result, toxicities due to PAHs have increased in these samples. And so the vast majority of a significant fraction, if not the vast majority of the samples of the oil samples that we've looked at have weathering scales about five as per Dr. Short, and we would anticipate that the PAH contamination in those samples, in

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09:52 those oils is actually higher than the original crude oil. Okay.
MR. EWING: Dr. Garvey, could you just explain why the PAH is relevant to--
DR. GARVEY: Oh, I'm sorry. Yes.
PAH, the toxicity, is one of the main drivers for crude oil toxicity. They are multiple ring compounds, they are typically persistent. They can bio accumulate, and they often pose cancer as well, so they're a significant component of the toxicity expression, if you would, that you get from a crude oil or from oil waste. Okay. All right.
Last area I want to cover, then, is the human health exposure here. Either one of the maps will do. I just need a map.
So, we're now standing here, Pit 3, we're right in this area here. There's a really high sediment sample is that guy right there. This is a residence, just through the trees here. Okay. So, we're not but 25-30 yards from a residence here. This is obviously somebody's active farm, and so these people are exposed to this material on a regular basis. Okay. These oils, these contaminated sediments, and these contaminated soils and the like are part of their daily life. Okay. And so, again, this was the reason to come to this site was to involve and bring in

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09:54 the human component of exposure to these sites. Okay.
So, just put these aside for a moment. Watch yourself.
Okay. So, what does this do with regard to human exposure? Well, human exposure here is primarily the result of TexPet operations. You either have historical releases from the pit, perhaps overtopping or coming through the siphon, or with the continued release from this pit as the groundwater migration or perhaps siphon migration or siphon transport as well.
Dr. Harlee investigated three different exposure pathways. Two of them showed non-cancer health risks sufficient to trigger a cleanup at this site. Past, current, and future use of site as a domestic water supply, the residents say they no longer use the stream because it's contaminated. The two streams locations evaluated, this one and the one over there, show risk from contamination based on all the methods available, including the one that Claimants acknowledge can be used, the VPH-EPH Method.
While residents can rely on rainwater, there is clear evidence that the stream is still being used by the residents at least on occasion. A tube of toothpaste was found. Toys were also found along the stream's edge. Chickens, ducks, and other animals that live in this

residence also drink from this stream.

Of course, if we abandon the site in terms that this area is no longer productive, no longer producing oil does not mean that the health risk is gone for regulatory purposes. Surface oil in front of the house we acknowledge does not pose a non-cancer risk. However, future use of groundwater outside of Pit 3 also exceeds the USEPA's Housing Index, based on all methods available, including the one that the Claimants acknowledge. Thus, the future use of groundwater poses a health risk if used as a domestic water supply.

One more point: Use of a stream at this site poses a significant cancer risk, one times ten to the minus three requiring cleanup.

Is that the location there? I'm not sure if we can see it or not. It's a little bit farther down.

MR. McDONALD: The stream?

DR. GARVEY: Yes.

MR. McDONALD: It's just right past--you see the grass there? It's crossing up that way.

DR. GARVEY: Okay. So, it's at the stream. Just beyond our view here is a location where we have a sample for surface water, and use of that surface water as a drinking water supply poses unacceptable cancer risks as well as a hazard risk.

Current observed use of the stream for bathing, swimming, and laundry just downstream from this location, indicate that the sediments in water require further investigation.

So, to conclude then, we've demonstrated the ongoing availability of TexPet-related contamination. Okay. All four of the sites we visited, now we can comfortably say, we can document and see for ourselves, the presence of TexPet-related contamination and its availability. Therefore, we can anticipate that the kind of TexPet impacts we have seen at these sites would apply to other sites where we've had two different users. Okay, that there is no--okay. Once Petroecuador picks up the staff and starts to--or baton and starts to run with it on the site, that we can say that the TexPet operations have no long-term impacts. In fact, we know that there's long-term impacts from the TexPet material that still remains.

That is, the contamination from TexPet has not solidified to a benign solid. Okay. It's still a liquid in many places. Obviously it hasn't solidified. There is, in fact, some solid asphalt-like material directly underneath the house that's just down the hill here. This is the area. We're not sure if it's a spill or a pit. That's actually the place we found asphalt-like material,

unlike the materials we see here.

Shane, can you just point out to me what you were going to say?

MR. McDONALD: This is oil coming out in places, just so you note that, and the other thing is that this is sand. It's got a little bit of silt in it, but it's almost all sand, so it's very porous.

DR. GARVEY: Thank you.

So, this again means that this material can migrate, that we have a conduit to deliver groundwater here, and that this is not a water pipe of oil pipe--a vessel, if you would--to contain this.

So, finally--

PRESIDENT VEEDER: Did you get a reading?

MR. McDONALD: It actually didn't go up. I can tell you that. It had like a small, like one or two, but it was not the hundreds that we've seen in other places, but you can smell it. It's very, very pungent, and I know you know what it smells like now. But, if you want, I'll bring you a piece.

DR. GARVEY: This is my last statement, then.

TexPet contamination that exists in the Oriente continues to impact the people of the Oriente with significant and ongoing risks.

And with that, I'm complete.

MR. EWING: I would invite you to come and look at this, if you would like to see this while we have it out here. You've come all this way. It might not be--

PRESIDENT VEEDER: I can see.

MR. McDONALD: And also come look at the hole. The oil has come to the surface. That's on the surface. That's the hole right there. Some of the sheen is bacteria, but what came out of the hole is not.

DR. GARVEY: There's one last point. The access point for the home here is not this area here. Their access point is just a little bit--just down the road from this trail to the stream, if you would, and that's where you'll find things like toothpaste tubes and children's toys. Just to be clear, this is not where the family accesses the stream. It's just down the road--down the stream.

Okay. That's it.

MR. EWING: Thank you, Dr. Garvey.

A couple of things. I want to close off our affirmative presentation here.

As you look around, this site has looked differently every time we come, depending on how the landowner is using it. There have been times when you'll see the pictures in LBG's 2013 SI report, where there's high, relatively tall trees, banana trees, whatever else

these other things are around here. Those tall trees were cut down, you will see in LBG's 2014 Report, and it was more cleared out. Since then, as we can see now, this has all grown back up.

The jungle grows quickly, especially in areas like this, but it's constantly changing and shifting how these areas are being used, and this is again another example of how that--it changes how people use the area, but it also affects how you're able to sample. So, when LBG came here in 2014, when this was more cleared, it was much easier to get out into the stream. Now, we would have to cut through the jungle to do it, even worse than 2013, harder to sample when it was much more covered with jungle.

As Dr. Garvey pointed out, we have here a known TexPet source of contamination in this pit, Pit 3, that was filled with oil in 1976 aerial images. And again, you can see that in the Respondent's Tabs 1 and 2.

We know, as you can see from the green flags above, that we have relatively clean soil above us. So, we know that starting around here, which happens to be in line with--or not happens to be--is in line with the pit, we start to have the petroleum contamination, and that petroleum contamination continues downstream. If I could just see this. We have taken samples at various locations, and while the results are lower downstream, we don't know

yet where it ends. So, we went down past where Pit 4 is, and there is definite evidence of contamination. So, we are currently standing up here, like Dr. Garvey said, across from the purple flag, which we have as a red one, and it does continue down. We don't know how far it goes.

This is consistent again with what Dr. Hinchee said at the Hearing, that when you have a spill or any kind of a release from a pit, it's often near a stream just like this; and, once it gets into a stream just like this, it does continue down.

As Dr. Garvey explained issues at Shushufindi-55, as the stream moves, it has the energy to pick up the sediments and to take them downstream, and then they're deposited at various locations where there is a bend or where there's a pond. We found this at other sites that we investigated. Guanta-06, for instance, shows us a large, long stream, and you can see sedimentary, depositional sediment in LBG's report where they found higher contaminations, and Chevron as well confirmed those in their results. Point being, we have the additional complexity that we had at Shushufindi-55 of the stream and the sediments and the transport that that makes for us. But we also now have people who live right on top of this, and we also have now added the legal complexity of how do you actually attribute or divide the liability here,

recognizing that Petroecuador has operated here, and we can talk about some of what they have done in a second.

Actually, Dr. Garvey, could you talk briefly about how a stream like this would affect delimiting a pit? He found the streams crossing.

DR. GARVEY: One of the exercises that we did based on Chevron's assertion that the areas of contamination were bounded by points, and they placed, you know, three or four points around a pit area or around a site and say, well, we got clean values at these distances, everything is fine. But the problem in several instances, in more than one instance, is that one of their bounding points was on the other side of the stream. Contamination that's going to come down from the stream here--down from the hillside here reaches the stream, doesn't travel back up the other side, so finding a clean value on the other side of the stream is really no evidence that you bounded the problem, that you know where the contamination stops. A stream like this one will carry its contamination that reaches it downstream, and that's clearly what we see here with these flag points is that we've seen contamination come off of here and travel downstream. If we were to take a sample perhaps on the other side of the stream, we might get a clean sample. That doesn't mean that the problem is bounded because the stream is now a conduit to wash the

material moving downstream. It's kind of like the police barricading a train station and watching to see if the crook got out of the train station and not tracking the trains as they leave. Okay. It's kind of the equivalent here. If you don't track the stream, okay, this robber is going to leave on the next train, and you're going to be standing around the outside of the platform saying, I don't see anybody.

So, that's the case here is that the stream does not provide a boundary. When a stream lies between contamination and the next cleanest point, the stream is really a conduit for that material to leave the site.

MR. EWING: Where are we on time?

MR. BLOOM: We have sixteen minutes.

MR. EWING: Well, I will not use all of our 16 more minutes, so we will be able to wrap this up relatively quickly. But I do want to conclude with what we have seen at these sites.

This site now, please do look at the aerial imagery. You can see this pit exists in 1976 and appears to be filled with oil. Claimants will discuss workovers that have occurred at this site, and let's just briefly talk about what workovers are.

Whenever you have a well that's operating, from time to time you need to do what is called a "workover,"

which is to help the production of the oil coming out of the well. As the oil is coming in, various chemical processes occur which slow down the oil coming out, and what you can do is then use acids, hydrochloric acid, et cetera, to push out or to dissolve those various chemical processes and increase the production rate of a well is one example of a workover.

So, what will happen is TexPet would come here or Petroecuador would come here, they will set up their workover rigs, which are the towers that you may have seen as we come here, the shorter looking oil rig derrick towers, and then they can use those to do what they need to do by extracting pipes or pumps or whatever needs to be done.

What is different about what Petroecuador has done versus what TexPet has done--and you can see this in Claimants' Tab--I don't have it in front of me--Claimants have provided to you a picture of a workover--and I don't have their tab number. I can give you the reference. It's in their main book--but they provided a picture of Petroecuador coming to do a workover at this location to prove that Petroecuador has done workovers. We don't dispute that Petroecuador has done workovers. We don't dispute that Petroecuador has operated this well for a period of time.

But what's different--I would encourage you to look at that picture--is that Petroecuador has brought tanks. And what Petroecuador does now is they don't use unlined earthen pits like this for their workovers as this picture shows, but instead they have large tanks. I don't think we've actually passed any on the road, but sometimes as you're driving, you see them with these large tanks that they bring in and use for their workovers and collect their fluids there.

So, when Petroecuador does a workover now, it's a very different process than when TexPet did it, when they would use these earthen pits.

So, I'm sure you will hear about the workovers, but keep the context in mind of what the differences are between then and now.

So, to wrap up this site from our affirmative presentation, we have obvious contamination. You can see it in the pipe behind Eric, the staining on the soil. We have obvious contamination in the sediments, and you can smell it here. As Dr. Garvey said, this is more weathered. It's not fresh oil. It's not going to have the pungent odor that Dr.--or Mr. Connor said yesterday. But as Dr. Short has told us, this will have higher concentrations of the carcinogenic parts of oil, the PAHs. Those don't go away as quickly as the more volatile aspects. So, this can

be, as these sampling results have shown, particularly problematic for the people who live here.

So, we have contamination. We know that from the aerial imagery that this was put here by TexPet, and we know that we have exposure to people, because we have seen--you can see the chickens, the ducks, the people use this. I don't know that they're home--but they use this area on a daily basis.

So, we have the factual underpinnings to the entire Lago Agrio Litigation laid out here in front of us, and we have seen each of those pieces at the various sites, but this one puts it all together.

So, with that, I would ask if there are any questions; otherwise, we will cede the floor to Claimants for their affirmative presentation.

MR. BLOOM: I would like to invite the Members of the Tribunal to take a look inside the siphon, because you can kind of see--

MR. EWING: Just for the record, David, so you can hear it, Eric was just suggesting that you should go up and look at the siphon. As you can see down into it, you can see the oil waste coming out of it, and we do have gloves for some like Dr. Grigera who wants to just touch it.

PRESIDENT VEEDER: No questions for the time being, but we will look at the pipe.

MR. EWING: Please. Thank you.

PRESIDENT VEEDER: That brings an end to your presentation?

MR. EWING: That's the end of our affirmative presentation. We just invite you to take a look--

MS. RENFROE: Mr. President, we intend to start right here.

PRESIDENT VEEDER: Okay.

MS. RENFROE: I ask if we could clear the area just a little bit so--but we're going to generally be here, but if the Tribunal wants to move around in response to Mr. Ewing's invitation, you may want to do that now and then we'll begin.

PRESIDENT VEEDER: You start your presentation here.

MS. RENFROE: Yes.

PRESIDENT VEEDER: But how long will you be here?

MS. RENFROE: Very briefly. Approximately ten minutes or less.

PRESIDENT VEEDER: After that, we will have a 15-minute break.

MS. RENFROE: Yes, sir.

PRESIDENT VEEDER: Okay.

MS. RENFROE: Thank you.

(Pause.)

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PRESIDENT VEEDER: We're ready. Let's go.

OPENING STATEMENT BY COUNSEL FOR CLAIMANTS

MS. RENFROE: Thank you very much, Mr. President, Members of the Tribunal.

(Rooster crows.)

MS. RENFROE: I will speak up. It's to add my voice to the cacophony that we are hearing now.

We are going to cover our points at Lago Agrio-02 but in a different order. But, at a high level, the points we intend to make are consistent with the points we have made at the other three sites and consistent with the position that we have expressed in all of our briefings, Expert Reports and at the Hearing. We're going to focus on the RAP. We're going to focus on the data. We're going to focus on the applicable criteria, remediation criteria under Ecuadorian standards. And then we'll focus as well on the role and responsibility of Petroecuador and then conclude with the Judgment. But this time we're going to go in a slightly different order simply to not have to bring the Tribunal back and forth to this location.

And so the point that I want to start with just very briefly while we are standing down here and while you're able to observe that siphon and this stream feature, the first point I want to start with is, what you are looking at and what you have heard presented to by

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Mr. Ewing and Dr. Garvey is completely attributable to Petroecuador, whose responsibility it was to remediate this Pit Number 3. Under the RAP, as I'm going to show you in a little while, TexPet was not assigned the responsibility to remediate Pit 3. I will speak to that in more detail shortly.

But now I want to turn to the issue about individual harm and health risk. I want to point out that the Judgment, as you well know, did not award any compensation for any individual harm or damage. None of the residents that you have seen this week at these four sites, including this resident up here up the hill, none of those residents are Plaintiffs in the Lago Agrio Litigation.

And, in fact, at the Shushufindi-34 site, the very first site we went to--you remember standing in that pit and then up the slightly uphill--outside the pit was a house. That house wasn't there during the Lago Agrio Litigation. It was only added in 2013. And this house wasn't here when the JI--Judicial Inspections were conducted here.

Not a dollar--not one dollar--of the Judgment was awarded to any individual, and it's important to keep that in mind as we have heard this week the numerous refrains of Mr. Ewing about threats to human health. And while threats

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to human health are certainly something to be considered and a very important feature that Chevron evaluated during the Judicial Inspection, I would now ask--well, in just a second I'm going to ask Dr. McHugh to explain why this data at this site also does not present a threat to human health.

But, before I turn it to him, I want to simply observe that, in the Lago Agrio Record and in the Lago Agrio Judgment, the recitations in the Lago Agrio Judgment, there was no evidence of a cancer claim or cancer impact to an individual or a non-cancer impact or non-cancer claim to an individual. There was no such thing in the Lago Agrio Record or in the Lago Agrio Judgment.

Now, with that, I would like to ask Dr. McHugh to speak to the issue of whether the conditions we see here--and while again we noted the responsibility of Petroecuador, but like I would like him to speak now to the question of whether they present a human health risk, whether it's a cancer or non-cancer health risk.

DR. McHUGH: Thank you very much.

I'm going to address again at this site the same two issues of safe water and risk. And why don't I start with the issue of safe water. I have been working on this project for 12 years, since 2003; and, continuously throughout that time, there has been this allegation that

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residents living in the Concession Area do not have access to water that's free of petroleum.

Chevron, during their inspection program, tested all of the drinking-water sources that were identified, and those samples were properly collected. They were not filtered when analyzed for petroleum--Mr. Connor will address that--but they were properly collected, they were properly analyzed, and they showed that the drinking water samples--the drinking-water sources were safe.

At this site, the residents around this area use a rainwater catchment system--you could see that on this house, the blue storage barrel--and as you walk by you can see the gutter system that collects the rain. These rainwater catchment systems, these are springs, they used hand-dug wells--when Chevron was here for the Judicial Inspection. They tested wells. They were clean. They meet drinking water standards. They do not have petroleum. At three sites we visited previously, the residents there had clean water.

At all of the sites that I reviewed as part of this Judicial Inspection process, the residents had access to clean water. The allegation that the residents--that any residents were forced to use a water resource that had petroleum is not supported. The Judgment finding that residents don't have access to clean water is not supported

by our observations here and by the facts in the record.

There's been a lot of discussion of surface water versus catchment systems. And I'd just like to say that surface water, a stream, is not a good source of drinking water. That's not a situation unique to the concessionaire. That's a situation worldwide. Whenever you have people and livestock, surface water is extremely susceptible to bacterial contamination from animal waste. When it rains, the water runoff carries bacteria from animal waste into the surface water--happens everywhere.

And visiting the Concession Area here and seeing the free livestock has really emphasized that even small streams are very subject to the bacterial contamination. And, in fact, during the Judicial Inspection process, the surface water bodies were tested for bacterial contamination. The majority of surface-water samples had coliform bacteria, an indicator of livestock waste contamination.

So, the catchment systems that you see are not used to avoid petroleum, and here I would commend the representatives of the Government of Ecuador for selecting Site Visit locations that are very far from our hotel. We've had an extensive tour of the area as we've traveled back and forth to the inspection sites. And, as you've traveled back and forth, you've seen these water storage

barrels on residences throughout the Concession Area. They're widely used. It's easier to avoid bacterial contamination in those systems and it's easier to manage bacterial contamination in those systems. That's why they're being used.

Okay. So, now turning to risk, I'd like to emphasize again that contamination does not equal risk. It's a fundamental tenet of toxicology that the dose makes the poison. In order to have a risk, you have to have sufficient toxicity and sufficient exposure. When you're doing a risk assessment for regulatory purposes, as I discussed in D.C., we intentionally overestimate the toxicity and we intentionally overestimate the exposure in order to ensure our evaluation is protected. But that overestimation is done in accordance with the defined process in order to ensure that the results are reasonable and informative. And discussing the reasonableness of Dr. Strauss's risk assessment, I'd like to provide to you the tables she provided--two pages each--the tables that she provided that summarized the results of her risk assessment. Okay.

Okay. So, the first page is the non-cancer-risk assessment that Dr. Strauss presented, and as I discussed previously, she used six different evaluation methods. And to illustrate the reasonableness of her evaluation, I'd

like to return briefly to Aguarico-06, the site we visited yesterday, and so I'm going to talk about the first two rows of her evaluation, the first two rows on the table.

And again, describing this table, the white cells indicate no risk, and the colored cells indicate a finding of risk concern based on the evaluation process.

So, if you remember Aguarico-06 from yesterday, as we were standing on the platform, in the background there was the stream that was at the treeline, and you guys stopped and looked at that stream as you were walking the site, and you saw a sample of sediment from the stream and saw that that sediment was free of petroleum. And, in the closing, Dr. Garvey told you that that stream was not contaminated. He told you that their test results did not show contamination in that stream.

But, in Dr. Strauss's evaluation, her evaluation Number 1, which I've always described as the evaluation process that's consistent with the regulatory framework, it shows no risk; but, when she deviates from that process, she finds risk values as high as 11, 11 times the decision criteria, and she testified that that stream required remediation in order to protect the local residents. She testified that a clean stream, a stream acknowledged, clean by Dr. Garvey, required remediation to protect the local residents. It demonstrates that her evaluation is not

reasonable.

So, turning back to this site, this site has one of the three locations where even using her Method Number 1, she identified a risk concern, and this now is the second colored box as you look down the first column, and so it's the pink box that has the Number 3 in it. This means that her risk value was slightly over the decision criteria of 1. That evaluation location is shown by these flags right there, and Mr. Garvey described that as a location where they assumed use of drinking water. But her calculations don't just include the use of drinking water from that location. Her evaluation includes the assumption that the residents will bathe at that location every day. And, as part of that bathing, they will get the contaminated sediments on their skin and they will be exposed to contaminants through skin. As part of the bathing they will have incidental ingestion of some of those sediments and they'll be exposed to contamination through that incidental ingestion of some of those sediments.

And, as you can see, that's a swampy location. The current use of that is not suitable for bathing. The future use of that is not suitable for bathing. And doing the risk calculation, assuming that that location will be used for bathing is not reasonable; and, as a result, her

risk evaluation is not reasonable.

Looking at the other two locations as you look down Column Number 1, the other two locations that show color, that indicate a risk, the top one that has the number of 18 and then the 22 in the brackets, that's the monitoring well at Aguarico-06 that was installed in that swampy area that we saw yesterday, and we discussed yesterday that swampy area is not a current use of drinking water and it's not a potential future use of drinking water. That swampy area is not suitable for installing a well.

The third location where she has a colored box is from Shushufindi 13, and that's a location that Dr. Short, the Government of Ecuador fingerprinting expert, testified was a recent Petroecuador spill, and that the risk value is 2. It's slightly above the decision criteria. And we have that value because that very recent spill has more of those volatile components that increase the toxicity of the petroleum. And we've seen, although there has been a lot of discussion of weathering, there has been agreement that those volatile constituents do dissipate very quickly. And so, although that was a risk at the time it was measured because it was a recent spill, that risk will not persist for a significant period of time as those volatiles, those most toxic constituents dissipate.

If you turn to the second page, you see Dr. Strauss's cancer-risk assessment. On that, she identifies two locations with a cancer risk that she says clearly merit remediation. The top location, again, it's the swampy area at Aguarico-06 that we discussed. The second location is this location here where the cancer risk is based on bathing at that location every day. And so, as you walk through Dr. Strauss's risk assessment, you see that she has not identified any actual risks associated with the conditions that we've seen during this inspection or at the other sites that they have investigated.

So, in talking about risk at this site, as Dr. Garvey mentioned, Dr. Strauss evaluated risk at two locations. The one we're seeing right there is this location of a--I'm sorry, it's this location up here, the purple triangle. So, it's right from the residence that you can see up there. The second location is down here where Pit 4 is on the road, and right across the road you see the second residence that also has a rainwater catchment system, and there is also a spring further behind the house. But she evaluated this location here. And, if you look at her risk table, you see the results of that evaluation location directly above the T-5 location, directly above the 3.

So, at this location, the water sample here is

another one of those samples that was evaluated for TPH using three different methods, two of them non-detect; the third, a low level detection. All of the results meet Ecuadorian surface water standards, USEPA drinking water standards, and World Health Organization drinking water standards. So, the surface water here is safe.

When Dr. Strauss evaluated this location, making all the same assumptions she made here, assuming that there would be bathing here in addition to using this as drinking water, the risk number she got when she evaluated it in accordance with the regulatory framework, the value she reports is zero, which is clearly below the decision criteria of 1. It indicates that this location is safe for all of those uses, and that demonstrates, even though there are petroleum impacts here, they are limited in extent along the stream.

I want to finish just briefly responding to the issues of PAHs in the sediments. It's certainly correct that PAHs are more persistent than the volatile constituents such as benzene that we have talked about, and they can be measured. When you use a laboratory analysis, they use a very strong solvent to pull them off of the sediments, but that does not reflect the risk associated with these PAHs.

As the PAHs sit in contact with the soil for a

long period of time, they become very tightly bound to the soil. And so, even if we're exposed to the soil, the PAHs remain bound to the soil as the soil passes through the body, and that's called availability. The bioavailability of the PAHs decreases as they sit in the environment. There's a lot of scientific literature on that, and the risk assessment framework says it's important to account for that process to get an accurate risk. I addressed that issue in my January 2015 Report, I discussed it in the text, and I'll provide the scientific literature that supports that.

That's my evaluation of risk. I'm happy to answer any questions that you guys have concerning risk.

PRESIDENT VEEDER: No questions now. Thank you.

DR. McHUGH: Thank you.

MS. RENFROE: Thank you, Dr. McHugh.

As we make our way uphill and we'll take the break, I just want to point out that there's been a lot of very loose allegations about exposure that we have heard from the Republic's team. The very area that we're standing in has been cleared for your visit here. It didn't look like this a couple of weeks ago. I just want to point that out. I think that's an important observation to make.

As then as we go up the hill, you'll remember at

the Hearing when Dr. Strauss testified, the very first thing she did was she withdrew her opinions about the wipe samples. The wipe samples that she took, she took from this house up here, and she later concluded and withdrew them as not being reliable and not being valid to make an exposure allegation so I just wanted to point that out as you make your way up. We can go up the platform and take our break, and then I'll direct you to our next location.

(Pause.)

MS. RENFROE: Members of the Tribunal, just to orient you on where we are now, we're just right up here. You see flags. The yellow flagging indicates non-RAP Pit Number 3, and I am now going to ask Mr. Connor to address the data at this site as well as to speak to the question or the issues about the Judicial Inspection and Pre-Inspection sampling.

After he talks about the data and the Judicial Inspection process, then I'll ask Ms. Carol Wood to speak to the role of Petroecuador and the impacts that its operations have had at this site.

MR. CONNOR: Okay. Thanks I'm going to follow the slightly different path here as well to make this even more interesting than it has been.

First I want to talk about big picture or future topics. I'll talk about the data and I'll talk about some

tech stuff.

So, the first big picture issue is remediation. Okay. At this site, we have two remediation problems. This pit right behind us, Pit 3 that you can see delineated with these yellow flags and the stream down there, they both contain oil that exceeds the allowable limits specified under Decree 1215. If you came today to deal with these problems, you would follow 1215, and both of these features require that action. But it's not a big project. You saw the stream down there. It's a very small drainage. You crossed a lot of big rivers getting here. You crossed some pretty big streams just down at the end of the road here. This is a pretty small issue. It's not an expensive project.

Petroecuador has done many projects like this. I worked on many projects like this. This is not an expensive project. This is not a multimillion dollar project. This may not be even a hundred thousand dollar project, certainly not more than $200,000.

So, doing these things, there's a lot of experience. Petroecuador has initiated a plan and a program that does these pits at costs that are far less than assumed in the Judgment, and Dr. Hinchee has talked to you about that.

Do they need to be remediated? Yes. Is it a big

project? No, it's not a big project.

Second big-picture item, the RAP. We talked about it a lot this week, and let's make this point about the RAP, is that part of the Judicial Inspection scope was for the JI experts to check to see if the RAP had been properly done, if it had been fully and properly implemented by TexPet, and we did that. We went to every one of the pits. We looked at the documentation, we looked at the data and the testing that had been done by TexPet at that time, and we tested those pits ourselves to verify. And every single time that there was a pit that was assigned to TexPet or any other feature assigned to TexPet, it had been remediated. We always found that.

There were other features that weren't assigned to TexPet, and sometimes we found that they hadn't been remediated; although sometimes they had been, and Petroecuador has initiated a very high quality and aggressive program to deal with these effects. We have driven by some of the big biotreatment facilities this week. I don't know if you noticed, but the bottom line with the RAP, the big picture is that when something was assigned, we found that it had always been faithfully done, and the features that we find are exclusively those features that were not assigned.

The other issue about the RAP to make sure it's

clear is that TexPet did do streams. They did cleanup streams when they were assigned to them. There was at least three locations--Sacha-05, Sacha-89, and Shushufindi-13--that I know of. And at those locations they're streams bigger than this that--where there was sediment contamination, and what was found during the course of the JI was incorporated. There were also 25 additional pits that were found at some of these sites. Sometimes it was hard find these pits. Well, they were found, they were added and that was by agreement, and the Parties affirmed that, and they signed off on that.

Big picture about site conditions now, third big picture--

MS. RENFROE: Excuse me, Mr. Connor. Do you want to talk about Pit 3 in the aerial photographs before you go to the site conditions?

MR. CONNOR: No, I'm doing big picture and then I'm going to Pit 3.

MS. RENFROE: Thank you.

MR. CONNOR: Big picture on site conditions is that we have been to four sites this week, and we've set up tents and we walked out to look at the contamination, and how far did we walk? Here we walked 20 meters; Aguarico-06 walked farther, maybe 50 meters, we walked--the distance out to the stream out there that was clean was 80 meters;

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10:55 Shushufindi-34, walked up the road 80 meters, 50 meters, I don't know; Shushufindi-55 yesterday, we went from the cars over the closed pit and down to the stream: 100 meters, 50. All the features are near the sites. They're all near the sites, and that's what we've said when we said those features are approximate to the facilities. That's what I mean. You can reach there very easily--a billion dollar remediation, you've got to get in your car to drive through it. I have never worked on a billion dollar remediation in my entire career. I worked on tens of millions or 50 million or 100 million--never have seen a billion dollar remediation. You drive through one of those.

So, at any rate, we walked to it. Did we see the full extent? No, we didn't. We didn't see the full extent, but you can see, physically we know they're close to the facilities. At this particular facility--Ernie, if you can show me your map--this is probably the facility that has the longest extent of the four we've looked at.

And, at this one, as Dr. McHugh pointed out, we're sitting right here, this is in your Site Packet, it's one of the box maps, we're sitting right in front of Pit 3 here, and there is--this water sample is right here, contains sediment and they're contaminated. But the water samples collected by the various Parties going down the stream, both the Ecuador Experts and Chevron and the

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10:57 Plaintiffs, all met Ecuador surface water quality criteria, USEPA drinking water quality criteria, and World Health Organization quality criteria.

So, the impacts to the surface water are limited. There are impacts to sediments that go farther, but we know that we have a limited problem. We know we have a limited problem. So, that's what I mean when we said we have limited impacts outside of pits. That's the big picture on that.

Next big area is--and now I'm going to focus in on Pits 2 and 3. They're right here; all right? These were two pits. I'm going to show you when they were closed. I think we're not in any disagreement about the closure date for these pits, but let's look at what the evidence is. I think we looked at this in the Hearing.

The first aerial photo we showed you is 1985. 1985, here is the platform. We're seated right about here. There's the black shape of the pit. It was an oil pit. It's right to the north of the platform.

The next pit we have is July 1990. The Parties are in agreement that block spot right there is a pit, and there's another shape right here that's Pit 2. I don't know if you can see that? Do you see that?

And then, in October '91, this whole area has been scarified; it's been scraped. All the vegetation is

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10:58 cleared off. There's fresh dirt put over that. That's why the Parties are in agreement that by that time these two pits have been covered with earth. And how do we know they were covered with earth and not remediated? Well, you can look at them. One of the things you do, when I inspect sites and look at closed pit, is you see if there is any ponded water on the pit. You can see ponded water over here. You can see how lumpy the surface is. When you push dirt over a pit without solidifying the material underneath it, it sinks and creates a lumpy surface. Later we'll be seeing a remediated pit. Remediated pits by TexPet, the remediated pits by Petroecuador are flat and firm, with a slight crown to shed water. When you step on them, you don't sink in. That's normally what you find in a well-closed pit.

So, you see that these two pits--there's Pit 2 over there in those trees and Pit 3 here--are very boggy. They haven't been remediated. We also know they haven't been remediated because, when you drill into them, there's a lot of loose gunk in there. Okay. So, those pits need to be remediated.

If we then go to the data on these sites--let me point out one other thing.

With regard to pits, there were many pits closed by Petroecuador after July 1990, and you will see in

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11:00 Exhibit C-13--it's the HBT-Agra inspection--on Page 6-16, they talk about I think it's 46 closed pits that they found. And they say in there: It's our understanding that most of these pits were closed by Petroecuador after June 1990.

So, the auditor that was doing the work at that time said that most of the pits were, to their understanding, had been closed by the current Operator. So that's why--that's been our opinion, and the documents support that.

If you look at the data, we still have the red flags and the green flags, and without belaboring it, you notice there is a lot of red flags inside the pit, and there's green flags outside the pit; right? And, if you go down to the stream, there is green flags upstream, there is some red flags tracing the sediments contamination downstream, and there's also green flags for the water, which cleans up before the sediment.

Okay. So, that's the basic results here. Again, contamination of the same pits. We don't get contamination leaving pits. There is one exception to that here. You see outside where the soldiers are standing over there? There's a red flag on the platform that's outside the pit. We don't know if that's from the pit or if it's from the platform operations. There used to be a flare located

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right there, and the flares sometimes drip oil.

There is also one well that's down the hill that--there's two wells that are about this far away from each other, they're within 2 meters. One of them was clean and one of them had a low level hit of TPH. So, this is one of those site where we do have an exception. We do find some things outside of pits. But we know that this pit is not actively recharging and causing continued contamination of that stream. And that's really the point of disagreement here. We don't really disagree on where stuff is. We disagree on where it's going.

And the concept that was presented by the Ecuador experts is that the materials in this pit are contained or moved down through the groundwater and out into the stream. We know that's not happening because outside that pit the soil borings are clean. If it was contaminated, they would be contaminated, too. Down on the hill we have other clean borings and we have other clean wells. If it was contaminated, those would be contaminated too.

There is one location that has a hit, and that could be affected by one of these other pits. All right. But the concentrations that are in there are way lower than what's in the stream, way lower by a factor of well over a thousand times.

So, that concentration cannot be causing this high

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concentration; right? You can't use dilute coffee to make strong coffee. A really dilute concentration can't cause this. This is evidently a spill of some sort. It could be the discharge from this pit when it was closed. That's plausible. It could come out that siphon pipe. When you see a remediated pit, over here, there is never a siphon pipe. There is only siphon pipes left on unremediated pits. When TexPet remediated pits, the siphon pipe and all the other appurtenances were removed. When Petroecuador remediates pits, the siphon pipe and all other appurtenances are removed. So, you only see that on a pit like this.

So, then we talked about a delineation of the pit, we've looked at the streams, the sediments, and we understand that these materials are not going from the pit to the stream. Why do we care about that? We care about it because it gives us our sense of urgency. If it was actually causing a problem and getting worse then you need to get it right away. Well, it should be gotten right away anyway. It needs to be cleaned up. But it's not getting worse over time. These sediments have been here for some time, they're highly weathered, we know they've been there a long time and--for some period of time and they're not moving, because they're still there.

We go downstream and there's a really important

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fact. Let's look at two things. Look at the solids. So, you'll notice that--as I said before, you see these red markers, the contaminated sediments stop here and then resume again right next to Pit 4; okay? So, we have red dots coming down, and when you get to location LE-2-PI-Z-23, there is no contamination, but then it starts again. There was a major spill event that Ms. Wood will talk to you about that happened in the last ten years where oil came down into Pit 4 and Pit 4 was cut to allow that oil to drain into that stream. So, that is a plausible explanation of why we get clean and then we get oily again. It's not very oily because the water at that location is clean. And that's important to us in terms of understanding--we have a water one? Okay, we got it.

Notice that the water is not carrying the sediments. I think that was a theory that was presented. I think we talked about it today: If you have sediment in motion, it will contaminate the water. We have multiple water samples taken down here by all the Parties and all the Parties who consistently find that water is not contaminated. So, the problem is limited to this area, and it's not expanding. If it was expanding, that water wouldn't be clean.

So, we have the data to show us that we've got a relatively small problem. It does need remediation. It's

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not a big project, and we do have a good understanding where it is.

Okay. All of that information you can find in--that analysis of the migration you can find in my Report of January 2015, Appendix B.

Okay. Now, I'm going to talk about tech stuff, technical stuff. You've heard a lot of talk about chemistry and sampling and gizmos, and I think we're confusing you. I mean, you know, it's my fault, too. Nerds get talking about this stuff and it takes a while before we realize nobody really cares sometimes. I don't know if you ever had that experience.

(Laughter.)

MR. CONNOR: But, at any rate, so we told you that this is really simple, that you can see oil and you can smell oil, and then we talked to you about geochemistry and PIDs and all this stuff. And what are we talking about? We're talking about--the reason we have all these conversations is that, if--you can see oil and you can smell oil, but you got to know what you're seeing and smelling, and there are a lot of mistakes that are made.

It's a very common problem where people think they see oil in the stream, and it's not, and I'm going to explain that to you; okay? And I'm going to talk about a number of technologies--or testing technologies that have

the problem of telling us there is oil there when there is not oil there or telling us that there is oilfield impact when there is not oilfield impact. That's why there is so much discussion of the nerdy stuff during the Hearing and by me this week.

So, let's start with one of the nerdy topics, and that's bacterial sheen.

There is bacterial sheen in that swamp down there. There is also oil in that swamp. At the other sites we went to, particularly Aguarico-06, as you're walking along the walkway, there were bacterial sheen on either side. There is always bacterial sheen in the wetlands here. There is always bacterial sheen in North America, in England, in any country where you have a warm, humid climate in a wetland. Bacterial sheen is bacteria that forms a milky film on the water surface. And when you look at it in the sun, it's iridescent. It looks like oil. It's a common mistake. It's a common mistake.

And there's all this documentation in this case that there was oil seeping out of banks. There's oil seeping out of the grass. That's bacterial sheen. There is oil in some of these locations, but the pervasive observation and impression of oil is very often related to that mistake. I haven't done a demonstration of that because I don't think you guys want to go back down there,

but I can, I can.

Okay. So, in our case--I don't mean to be at all disrespectful about that, but it is a common mistake, and I certainly didn't know it until I learned it many years ago, too. So, it's a field technique. It's something that's important to know.

And to validate our interpretation of that, we also ran laboratory analyses to confirm that our observations were right. During the JI, we collected film samples, sheen samples, sent them to the laboratory to confirm that they are bacterial or petroleum, and we found our observations were correct. So, the reason we believe our eyes and our experience are that because we tested it.

The next thing is the PID. The PID is the photoionization detector. We used those. The Ecuador experts have used those. They're a good and useful tool. But the thing about it is they are a screening tool. They can tell you that maybe there is something in that sample, but it's trumped by the lab data. So, PID measures anything volatile. Anything you can smell it will indicate it's there. If you take rosemary, right, if you use really fresh rosemary in cooking and you crumble that up, it will hammer that PID. It will scream; right? Because it's letting off natural organic volatiles, and the PID will pick those up.

And the PID will pick up a crushed flower. It will pick up a lot of things. And so knowing it does that means you have to consider that when you measure a PID in the field, it could be wrong. It could tell you you're seeing oil when you don't.

So, what do we do is we use the PID as a guide, just as Dr. Garvey described. But once you get the PID reading and you think you have a sample that might have oil in it, you send it to a lab to get it tested; and once you've tested it, you have a definitive measure of whether or not there is oil in it. The PID was only a guide. It was only a guide. It's like the witching stick for water. You can find it with a witching stick, but you've got to drill to hit the water; right? So, let's keep that in mind that it can be a useful tool, but it's limited.

The TEM test--I know you guys haven't heard enough about this. I'm only going to talk about it for like 15 minutes.

MS. RENFROE: You have about one minute left.

MR. CONNOR: So, I'll make it shorter.

(Laughter.)

MR. CONNOR: The problem with the TEM test is it calls non-petroleum things petroleum. That's the fundamental problem with it, and so it's not a reliable test. If you have a lot of organic in there, it will tell

you it's oily, and it's not.

Filtration. There is some talk about filtration. I need to clarify one thing first is that Dr. Garvey was right that the Protocols called for filtering to take out metals and sediments but not filter when you're testing for petroleum. We never filter it when we're testing for petroleum. We understand that. If you look at, it's Exhibit C-499 and C-500, which are the sampling analysis plans, if you look in the Sampling Plan Table 4, you will see the filtering is specified only for metals. Organic samples like petroleum were never sampled--never filtered.

So, why do you filter for metals? We filter for metals because we want to make sure that we're not calling something that's an oilfield impact when it's not. So, if we go to someone's water well and it has sediment in it, that sediment could be natural sediment. For me, to pollute the person's water well with metals, those metals have to dissolve in the groundwater and transport there. Solid particles can't work through an aquifer like that. It has to be dissolved. And so to tell if I have had an impact on that water well, I need to take a sample, get the dirt out of it and check the dissolved water. Did I contaminate that person's water? If I want to get the correct answer, I need to filter it, so I don't say I have a contamination when I don't. That's why we filter. Do

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11:12 all the people here filter their water? Some do, some don't. That's their prerogative. We filter it so we can get the right answer. That's why we filter.

The next issue is clarification on the weathering issue. You heard a lot about that this week, and I just want to clarify that my reports tell you that what's left is principally resins and asphaltenes, and I think even in the quotes that Mr. Ewing gave us, you'll see that it will progress towards a solid asphalt. It doesn't always get there. He quoted a statement from Sacha 21. That's one of the first JIs I did, and at that site there is this big asphaltic mass. It's big. It's like 10-meters across. It's hard, and it's not bioavailable, and when I said that, I was talking about that asphalt mass. That's not always like that. In this pit you still have some liquids, but they're all biodegraded, degraded weathered liquids; right? I think Mr. Ewing read the thing: They're not soluble--they're not soluble; they've lost their volatiles, they've lost their volatiles; they're not mobile, they're not mobile for all the reasons we've said this week. And we saw that on a macro basis because there is very rarely anything outside those pits, so that's weathering.

Now let's talk a little bit about this PI-JI issue. Right. And I'm just going to talk about it at this site. I think Ms. Wood will talk about it a little bit

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11:14 more. And I am going to show you this cross-section and just try to clarify something. It seems like there is a very--you might have to put it up here, Danny, so we can see it. It seems like there was a fundamental misunderstanding of what the Chevron JI teams were doing in the field. We talked about this a little bit in the Hearing. I've written about it in my Reports over and over, but there is a persistent misunderstanding on this.

We did not use the PI to avoid contamination. I've explained that to you. We found plenty of pits. We found plenty of stuff. There's stuff on a lot of these sites, and it's all recorded in those JI Reports.

On 15 of the 45 JIs that Chevron did, they had two different teams, with the Agreement of the Judge, and you can read the Transcript of the Hearing and it says yes, you can have these two teams. The JI team did all the things that were asked in the JI. The Rebuttal team took all the things, took share samples with the Plaintiffs.

So, at this particular site, Mr. Garvey was correct that the JI team, headed by Mr.--Dr. Bianchi, took the surface samples because the surface samples were required in the JI. You were to take surface samples from every pit to see if the contamination had reached the surface because if it was at the surface, someone could touch it. So, at every site, we'd take a surface sample

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11:15 from every pit.

And they also took a deep sample in the pit. You'll see every site, you go to these pits, there is a deep sample. On these 15 sites, these samples were taken by a different team--they were called the Rebuttal team--and two separate reports went to the Court: One was JI, one was rebuttal. If you put them together, you got the whole picture on this site. Rebuttal does have a map that shows where the pit locations are. It has all the data. Dr. Bianchi's JI Report talks about rebuttal sampling, it talks about the PI sampling. It mentions these locations. All right? So, you have to put those two together, and then you have the picture. They were both given to the Court. All the data was given to the Court. There is no mystery about where the pits were at any time during these JIs.

So, when I did my analysis, in the Reports I have given you, I've used all that data too, and all that data has been available to Ecuador experts, which is a good thing.

MS. RENFROE: Thank you, Mr. Connor.

MS. WOOD: Good morning.

Well, you will be pleased to hear that I'm going to be pretty short because Mr. Connor already covered a lot of what I was going to say. That shows you how well

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11:17 coordinated we are.

First, two points I wanted to address very quickly. One is the PI-JI issue, and you heard Mr. Ewing say before--

(Pause.)

MS. WOOD: So, one was the PI-JI comments that Mr. Ewing had made at the beginning--also Mr. Garvey. The second is Petroecuador's use of this property and continued operation of this property and this platform.

Mr. Ewing gave you the impression that the PI-JI process was in some way how nefarious. I think Mr. Connor explained it to you very well. I wanted to point out some documents in the record that underscores what we're saying and that the Lago Agrio Court was not at all misled by Chevron. The information about these pits and the samples that they took about these pits are all in the record.

Specifically, I would point you to Mr. Bianchi's Judicial Inspection Report, excerpts of that is at Tab 51, which talks specifically about the various pits and identifies the sampling that the JI Expert for the Plaintiffs had conducted and presented.

And this one I will actually show you. At Tab 53, you have the Judicial Inspection Acta, and we've talked a lot about Actas in the past, about Actas associated with the RAP. This was an Acta or Transcript of the Judicial

Inspection Hearing, when the Judge came out here and the Parties and the Judge directed the technical people to collect samples and respond to certain questions. At Tab 52 in our site Rebuttal Report, we have excerpts--excuse me, yes, Tab 52, we have excerpts from that Acta, and then actually highlighted every place where there is a discussion about Pit 3, about Pit 2, about the fact that there were more than one pit at this site. But don't forget the purpose of the JI was to go and look at the RAP sites, at the RAP pits, and that is what Mr. Bianchi was doing when he focused a lot of his discussion on that pit, which Ms. Renfroe is going to talk with you about.

Also, behind Tab 54 is the Rebuttal Report that Mr. Connor mentioned to you. Again, I will just show this to you. There is discussion here about the rebuttal sampling that was done, specifically back here at Pit 3. Again, Mr. Ewing implied that there was something again untoward because this was written and presented by the attorney for Chevron.

That is the way the Rebuttal Reports were done. Mr. Callejas, the attorney for Chevron, was the author of this, presented this Report, but there was definitely technical discussions in here prepared by technical people. So, any allegation that somehow Chevron gamed the system or

TexPet gamed the system by any type of nefarious use of the PI-JI is simply incorrect, and the documents show that.

The second point I wanted to make to you really quickly is the Petroecuador issue. You've heard a lot about it, as we've talked at the various sites. I hope you also see, as we have driven the many kilometers to get to the various places, the number of Petroecuador and Petroecuador contractor operations. We passed another Production Station on the way here. I think you probably saw the flares. Not as large as the ones we saw at the Aguarico Station but we also saw smaller flares.

So, just big picture real quick. Again, this is at Page 37 of your mini-packet. This is the 2 kilometer. The point we're making here is that this is a very, very active oilfield. There are over 15 oil wells here that Petroecuador either operated or drilled themselves.

Now, many of these are former Consortium locations, which is important for you to keep in mind when you're looking and talking about the Judgment.

You heard Mr. Ewing talk yesterday about, well, it really doesn't matter about the Ecuador Code of Regulations because what the Judgment said is to take it to background. That obviously makes no sense, and again it's another point as to why the Judgment makes no sense and is absurd based on the facts.

If you have an active oil-and-gas operation going on, an active platform, you have spills, you have releases from workovers, from other handling of the petroleum. That's going to cause more contamination. So, why would you have Chevron or TexPet come back to active operations and remediate to background when they're going to continue to have Petroecuador operations and spills coming right along behind that? So, it's just another point where the Judgment makes no sense. It's not based on reality.

Talk about workovers very quickly. Mr. Ewing said we'll hear about workovers. Well, you will hear about workovers. There are a number of workovers here. Petroecuador operated this facility for at least 24 years. To our knowledge, this well was producing up until 2011. It could have been longer. During that time period, they had over 24 workovers. And while currently, and that's very good that Petroecuador is currently taking any waste they pull out from the well and putting that in barrels, that wasn't the process they always used, and it certainly wasn't the process going back into the early years when they operated this facility.

There are flares that were used on this property, not as large as the flares we saw at Aguarico-06, but there were flares used on this property.

Spills. Just very briefly, there are at least

five spills to our knowledge at this site. Mr. Connor pointed one out to you, but this is actually a Petroecuador Petroproducción document that shows the spill, and this is--actually, you can hand it back to her--it shows the actual release from the platform, going all the way down this road. I don't know if any of you saw a flag, a little yellow flag as we came in where a pit is located, went all the way down the road, went into that pit, and Petroecuador cleaned some of it up, but it wasn't a complete remediation.

In addition to just impacts at this site, the other question it raises is if Petroecuador is out clearing up Pit 4, why didn't they come back and clean up the pits that they were responsible for? We, as in TexPet, only have responsibility for RAP Pit 1. Everything that was left was Petroecuador's. They should have come and addressed the other pits at the same time that they were addressing Pit 4.

And I would also refer to Tab 22 in our Site Packet, where it shows you pictures of the property, which is further down the road, where you truly can see liquid oil and what liquid oil looks like.

I will conclude and turn this back over to Ms. Renfroe. I would just simply say that, pursuant to the RAP, the Parties split responsibility for the environmental

liabilities out here, and it made sense because Petroecuador was going to continue to operate here. If Petroecuador had remediated the environmental liabilities from the Concession that were not assigned to TexPet in the RAP, we would not be here today.

With that, I will conclude.

Thank you.

MS. RENFROE: Members of the Tribunal, I'm going to ask you to move one more time.

PRESIDENT VEEDER: Okay.

MS. RENFROE: I'm going to take you now to the only RAP feature assigned to TexPet that you will see or have seen in these four sites.

(Pause.)

MS. RENFROE: Okay. I think we have everybody, so with your permission I will start.

PRESIDENT VEEDER: Sure.

MS. RENFROE: Thank you, Members of the Tribunal.

So, this is our last location and our last point, and our last site, and I want to end our presentation where we have begun at each site and where we began in the Hearing, and that is with the framework that I gave you to evaluate the environmental issues which, of course, is the Settlement Agreement and the Remedial Action Plan.

The blue pennant flagging that I'm standing behind

represents the only RAP feature assigned to TexPet at the four sites that you have visited. This is RAP Pit 1, and you can find that in Table 3.1 of the Remedial Action Plan, Lago-02 Pit 1, approximately 150 cubic meters was a water pit assigned to TexPet for closure. This is the only RAP feature assigned to Tex--or only RAP pit assigned to TexPet of the four sites we have been to, the only pit that was assigned to the company.

And so, that means that when you look at the yellow and blue map, you see the blue pit here, I'm standing in it, everything else at this location remained TexPet's responsibility under the Parties' agreement--Petroecuador's responsibility under the Parties' agreement. Thank you.

ARBITRATOR GRIGERA NAÓN: It's where you're standing right now?

MS. RENFROE: Right. Where I'm standing right now.

And this pit, Petroecuador has expanded the platform. Originally, this fence and the platform was not over Pit 1. But since Petroecuador took over operations, they've expanded the platform. They built the fence. And so TexPet remediated this pit in the spring of 1996 and then got approval through the Actas in the spring of 1996, and those Approval Actas are in your mini-packet at

Pages 29 through 33. The Ministry's inspectors came out here, they came out to this site, and they came out and inspected TexPet's remediation of this pit.

Now, much of the pit is behind me, and it's been overgrown because it's been revegetated as was required by the Remedial Action Plan. It's been overtaken by the forest, and that's exactly what is supposed to happen with remediated pits.

So, while I think there is no longer any dispute about the fact that Petroecuador closed Pits 2 and 3 over there, the yellow pennant flagged areas, between June of 1990 and October of 1991--I think that's no longer in dispute as I've heard this morning--they did not remediate the pit in any form or fashion as TexPet remediated this pit.

Now, and as I said, the Ministry approved the remediation of this pit. When the Ministry was here, there were observations made, photographs taken of oily asphaltic materials over in the vicinity of Pit 3, Pits 2 and 3. This is an image from C-2444, the geospatial mapping tool. And even though--

PRESIDENT VEEDER: Excuse me.

MS. RENFROE: --these materials were seen during the Remedial Investigation, Pits 2 and 3 were not assigned to TexPet. Only Pit 3.

So, that means that Pits 2 and 3 and Pit 4 were solely Petroecuador's responsibility. And, as I said down in the little swampy area, what you were looking at down there and the siphon and the fact that that pit has not been properly remediated or those two pits have not been properly remediated is solely, solely, the responsibility of Petroecuador.

As I said, TexPet, however, did close this pit pursuant to the RAP. It followed this eight-step process. This is an image from your large Site Packet. I just brought it in case you didn't bring your Site Packets. You remember John Connor explained this process to you at the Hearing. And that was the process followed with this Pit 1 that I'm standing in, and it led to the final approval and the Final Release by TexPet by the Republic of Ecuador and its Ministry of Energy and Mines and Petroecuador as well.

Now, let's look at the data map, the map, the solids. Do we have the large solids data map? If we can pull that up.

One thing that you will see here is that this is Pit 1 where I'm standing, and you will see that there was sampling done, but that sampling was done only during the Judicial Inspection. LBG did not take any samples of this RAP remediated pit--none whatsoever. They had no evidence, nor is there any evidence that this pit is leaking.

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11:35 There's no siphon in this remediated pit. There is no evidence whatsoever that this pit is threatening the environment or threatening any human health. And, in fact, Dr. Strauss did no health-risk calculation for any area relating to this Pit 1. There is no evidence whatsoever that this pit is causing any problem to the environment or to human health--no evidence in the Lago Record, and no evidence brought forward now by LBG or Dr. Strauss. They simply weren't concerned with this pit.

Now, think about this, how ironic it is, that they came out to a site where there is both a RAP remediated pit by TexPet and Petroecuador pits that were not--pits not remediated by Petroecuador. They didn't even bother to sample this pit.

So, this is an example of--this pit is typical, as John Connor said, typical of the other TexPet RAP-remediated pits that were inspected during the Judicial Inspections. They were approved by the Government of Ecuador, and then during the Judicial Inspections the data again proved that they met RAP standards.

A quick word about the suggestion yesterday by Mr. Ewing that we are trying to impose the Ecuadorian criteria retroactively. I frankly didn't follow his argument. I found it confusing. But it simply is not a correct statement of our position.

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11:36 Our position is very clearly that with respect to those RAP features, like Pit 1 where I'm standing, that were assigned to TexPet, the RAP criteria that the Parties agreed to in the RAP, those were the only criteria to govern how this pit was to be remediated and to what standards. At that time, there were no quantitative standards to decide that, so the Parties reached agreement on it.

With respect to those areas, those non-RAP features that Petroecuador has yet to remediate, to the extent that you evaluate their effects today, then we have suggested that Decree 1215, Ecuador's own remediation laws, should be applied, and that's how they should be evaluated.

So, I want to quickly move now from--I'm going to remain standing in the only RAP feature we've seen all week, the only RAP pit, and I am going to wrap up. I'm going to offer a few concluding remarks.

I have in front of me, as I do, the threefold maps of all four sites, and I'm sure you don't have all of them with you, but if you wish to look at them, I would offer them to you. One of the things that--for context, to sort of reset the context here.

In the Respondent's Supplemental Rejoinder, Paragraph 170, they say: "TexPet caused an environmental disaster. The equivalent of six Exxon Valdez spills or

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11:37 three-fourths of the BP oil spill." And what do they cite to? They cite to Dr. Garvey and LBG to support that very, very broad, unbelievable statement.

And, in fact, this week, Mr. Ewing has even invoked the Kuwaiti oil spill, pictures of which you saw during the Hearing. But they have shown you--while we've been at these four sites, they have shown you nothing--nothing--that would resemble an Exxon Valdez, a Kuwaiti oil spill, or even a BP oil spill. They have shown you nothing like that. Instead, what you've seen are pockets of contamination, all of which--all of which--are from non-RAP areas for which TexPet had no remediation responsibility.

So, what you've spent three days doing is looking at areas that, under the Agreement and under the Release signed by the Republic of Ecuador, TexPet had absolutely no responsibility for.

So, I question where is this disaster, where is this oil that they contend exists, citing to Dr. Garvey? Well, it wasn't in the Lago Record. There is no evidence of it in the Lago Record. You haven't seen it this week. It's not in these oilfields. It's not at this site, and it's not at any of the other three sites you've seen. While there have been impacts, as we've said repeatedly, those are the responsibility of Petroecuador and even

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11:39 those, though, are limited.

What we have heard, though, from Dr. Garvey and Mr. Ewing repeatedly every day, at every site is they don't know the extent of the contamination. They haven't been able to fully delineate it, and they don't understand fully what's happening at these sites, and I'm quoting. If I had the Transcript, I'd quote for you, but you've heard that yourself. They've said that at every site, every location, every day.

And if, indeed, that's true, if it's true that thousands of more samples would be needed to understand the extent of the Consortium impacts and if it would take many years of further Site Investigation to do that, if all of that is true, then what that tells us is there was absolutely no factual basis in the Lago Record for the $9.5 billion Judgment that was issued--no basis whatsoever.

Now, if on the other hand, as Mr. Ewing suggested in his rebuttal yesterday afternoon, the Lago Court had plenty--had much more data available to it than LBG has been able to develop in its three years of work in these fields, if that's true, if that is true, then what we are left with is again having to measure the Judgment against the data and the facts in the Lago Record, and that brings us right back to the analysis that I have been trying to present this week.

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11:41 When we evaluate the Lago Judgment, we evaluate it against the RAP, and we consider that you've only been shown one RAP location where there is absolutely no problem. You can analogize that to the way that the Judgment dealt with the RAP and failed to address the fact that Petroecuador had not remediated the areas assigned to it. That is areas not expressly assigned to TexPet.

Secondly, the applicable criteria. We know and we've said all week, the Judgment did not use Ecuador's own criteria and it didn't use the criteria in the RAP. It used a 100 part per million TPH standard--absolutely not supportable, not the Parties' agreement, not the law of Ecuador, and that is not what is done in practice by Ecuador's own oil Operators, Petroecuador.

And then when we go to the data and we apply those criteria to the data, the data that Mr. Ewing suggested the Lago Court did have, again I hand you an excerpt from the Site Packets that we provided. These are three slides that Mr. Connor provided in his presentation in the Hearing and which are also in the Site Packets, and these three slides summarize the data that was in the Lago Record, the Judicial Inspection data, and shows you the percentages of those data that met Ecuadorian criteria: Soil, drinking water, surface water. And you can see for yourself: The data in the Lago Record showed that the vast majority of

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11:42 the samples met Ecuadorian criteria and that where there were exceedances, those were at locations that Petroecuador had yet to remediate.

And then my next point has to do with remediation costs. One of the things we haven't heard anything about this week, there has been no attempt by the Ecuador team to try and justify the $9.5 billion Judgment with respect to the cost of pit remediation. You may remember--I know you keep this fact close in mind--that the Judgment assumes a pit size, an average pit size, of 8,400 cubic meters of soils that would have to be remediated on average. You've not been shown any pit this week that even got close to that.

Moreover, the pits that Petroecuador has remediated, though they didn't show you any of those this week, but the pits that they have remediated, they've done it at a cost of $85,000 per pit versus the $6.1 million that the Judgment awards--$85,000 that Petroecuador has spent on average per pit versus 6.1 million. If you think about that Judgment and apply it, the Judgment awarded $6.1 million to remediate this pit that TexPet had already remediated. It awarded $6.1 million to remediate Pits 2 and 3 that Petroecuador closed but did not remediate. And it would have awarded another $6.1 million to remediate Pit 4 down the road. None of that has any connection or

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11:44 any link to the facts.

And then finally, the last point is the Petroecuador role responsibility which the Judgment also completely ignored.

So, I'm going to close with this observation.

You heard yesterday and a couple of days now from Mr. Ewing the idea that since we have been out here, the Chevron team has somehow conceded the facts--conceded the facts. I respectfully suggest that that's a--well, the best way I can put it is just to say it's a misinterpretation, and that's being very charitable.

The facts are--the facts are--that the Consortium produced oil in this oilfield and at this platform. The Consortium experienced environmental impacts as part of its oil-production activities. And then the Consortium in 1995 reached an agreement to divide responsibility for remediating the Consortium impacts, and that document, as you know, is the Settlement Agreement and the Remedial Action Plan.

Fact Number 4: TexPet completed its share of the work as approved by the Republic of Ecuador and fully released it.

Fact Number 5: Petroecuador has not completed its work. Eventually it did some, but at this site is an example of where it hasn't completed its remediation work.

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11:45 Those, Members of the Tribunal, are the facts, and those are the facts that matter when it comes to evaluating whether what you've seen here can possibly support a $9.5 billion Judgment.

And so, with that, I appreciate very much your attention, your patience, and I'll conclude.

PRESIDENT VEEDER: Thank you very much. Thanks.

We'll take a 10-minute break before we hear the Respondent's responses.

(Pause.)

REBUTTAL ARGUMENT BY COUNSEL FOR RESPONDENT

MR. EWING: Members of the Tribunal, I will first turn the floor to Dr. Garvey for our rebuttal, then I have a short rebuttal, and then Mr. Bloom will be addressing us to close this out.

DR. GARVEY: Okay. First, some very, very brief points.

To begin with, this site is one out of 300-some-odd Concession Areas that have well oil platforms that require remediation. They are spread out over approximately 80 miles northwest--north to south, 40 to 50 miles east to west. It is a large area. I have worked on billion-dollar remedies. This would be, if it were to cost that much, it would be my fifth on this.

It could be very deceptive to just conclude from

your initial evaluation that, yeah, I could do this for this much money.

As a case in point, the project that I worked on was estimated at the beginning to be about $200 million for the remedy. This is running in excess of one and a half billion. So, you can't--you need to evaluate what's here before you can say yes, this is--I know this is enough effort or enough money to do the job.

So, you have always the dilemma of trying to figure out how much do I need to lay out, how much do I need to anticipate when I'm trying to estimate a cost. Okay.

So, any case, just to make that point, I want to make two points about Dr. Strauss's work that was criticized earlier. Where we stood yesterday at Aguarico-06 was not the location that was used by Dr. Strauss in her risk assessment. If you remember, we pointed out that this point furthest downstream was the only one we thought was actually downstream of Aguarico-06. That was basically a swale that drained to the south and there was a little ridge that prevented the swale area from reaching the stream further--points further upstream.

The point furthest downstream is the one that Dr. Strauss used in her risk assessment, and we would expect that area to be impacted. That sample was not

extraordinarily elevated, but it was only a single sample, and we talked about that as well. It's an error to use a single value as a basis to evaluate something and say I know it's clean or I know it's not. I can make some estimates of the level of contamination, but certainly it's not exhaustive.

And then one other point about the streams and the like here, there were two points made about surface water, the surface water values further down the stream that came out clean, and therefore there was no further transport. Surface water is very ephemeral. It rains today, you get a lot of water coming out, everything gets diluted. It doesn't rain tomorrow, things get concentrated. That's why we use sediments to tell us how far things are being transported because they integrate over time. They are much, much cheaper, if you would, to analyze because they might represent six months, a year's worth of deposition, six months or a year's worth of solids transport which is where most of the oil will be transported, either attached to the solids or affected by the solids.

So, having a clean water sample downstream doesn't get you everything, a free bill of health, points beyond that.

In the same light, we also talked about yesterday, at Aguarico-06, that we could show variation on short

distances, and so it's again, a mistake to just take a single point and say, all right, got a hot point here, it's hot; I go down a little bit further downstream and get a cold point, it's clean again; I go back on the other side and I get a hot point. Now, that could be explained by sources coming in at two different locations. It could also be very well explained by you went from a depositional area to an erosional area to a depositional area. So, you really--again, you haven't characterized this system to make that kind of conclusion that we don't have any further transport downstream.

I think that's all I'm going to comment on.

Thank you for your time.

PRESIDENT VEEDER: Thank you.

MR. EWING: Members of the Tribunal, I just want to briefly address what looks to be six points from what were raised this morning.

First, we stood down below and looked at the sediment locations, and Dr. McHugh criticized Dr. Strauss's risk assessment, saying: Look where this is. You'd never want to take a bath here.

And there are two sort of main fundamental problems with that.

One is that, as Dr. Strauss explains in her Report, that's not how that area looked when she was here

before, and that single sample and the samples taken on this stream are meant to characterize what you would expect to see in the rest of the stream--or in this area. So, that single sample is not meant to say that only the, you know, 1 foot square that was sampled is contaminated, but instead to characterize that area of contamination.

This is Dr. McHugh's first trip to this area, and this is what it looks like as you see today.

Dr. Strauss has been here at least seven times, has interviewed the owners of this house. This rainwater catchment system, for instance, is new. They've added that more recently. The people who live here used to live down the street. These families have lived here for two generations, so this is a long-term group of people who live here.

The fact that they now may have access to clean water through a rainwater catchment system or if they have to maybe buy water--and the same is true for all of these sites--that's not the issue here. The issue here is whether the people on their private land are able to use their own natural water sources. The fact that they've been forced to abandon the surface water, and we know from Dr. Strauss's interviews in her Reports that they have been forced to mostly abandon that surface water, that they were able to use it before and now they cannot.

The fact that they've abandoned it because it's contaminated doesn't mean it shouldn't have to be cleaned, and that they've attempted to try and find an alternative doesn't mean you shouldn't have to clean what's there.

Another point on the bacterial issues, and you will see this in LBG's Report, what residents have told us is they know that they can clean bacterial contamination by boiling. I think, at least as a former boy scout, you can boil water for 20 minutes and it kills your bacteria, and you can drink that water, typically speaking. LBG recounts in their SI Reports how residents would ask, you know, can I boil this water to remove the oil contamination? It's sort of a sad question, because according to LBG, you can't. So, the bacterial contamination, no one thinks i's a great thing, but it's easily remedied.

The fourth point, and I now want to sort of shift away from the health issues momentarily to talk about this pit. We've got Pit 2 and 3 here, and Claimants correctly point out that it's not a RAP pit. That's not surprising that it's not a RAP pit because it was never disclosed. It was undocumented. TexPet didn't say, oh, yes, we dug four pits here. We should include these on the list so that we can appropriately assign liability at all of these locations.

They did disclose one pit here, and they did clean

that up. But this was not a part of the RAP because it was never disclosed, and it was hidden. And there is a dispute about who closed this because we don't know. We don't know that Petroecuador did it, despite the fact that Chevron will write that without factual support.

The next quick point, we talked about how this is--actually, I think Dr. Garvey covered this. This is a large remediation. We are about to get back in our cars, and as Dr. Connor says--or Mr. Connor says, you have to drive through a billion-dollar remediation.

As we take two hours to drive through the various oilfields that we're about to drive through, consider that that is the size of what we're talking about.

We have now heard from Claimants that they admit that these sites contain pockets of contamination. Those are the ones that we in a sense forced them to admit to because of the sampling that LBG has done. That's not all the contamination at these sites most likely. We don't know what the extent of contamination is in Pit 2. The Lago Agrio Record has some indication of it, but we don't know the full extent of it from LBG's perspective.

And now imagine this 344 times because that is the number of well sites that were drilled by TexPet. So, this is not localized to one single platform. So, even as Mr. Connor says, if this goes 100 meters or 50 meters or if

you do that around all of these well sites, you've got an extensive area that may need and likely does need to be remediated.

The further point of that is, they say that we've not attempted to justify the soil damages at these locations, and respectfully we believe that that would be a question of Track 3, of how much it would actually cost to remediate this area and to understand what the true cost of this would be. We believe that the Lago Agrio Court was presented with voluminous data, hundreds of thousands of pages of record and evidence, came to--you guys have done four mini-Judicial Inspections. The Court did 45 plus 11 with their own court-appointed experts.

The Court saw a lot, and it had the Plaintiffs and Chevron arguing both sides of this, similarly probably to how this is, although I was never at a Judicial Inspection. But the Court was presented with voluminous evidence and was asked to make a determination about how to clean that up and how much it would cost, and it made its estimation, its best judicial decision about what that would cost.

And, finally, I want to talk briefly about the PIs and the JIs.

We have made and talked significantly about how the PIs and the JIs were used. You've heard today from Claimants again that the Court was well-aware of the PIs.

I haven't seen that evidence. We've gone through multiple rounds of briefing. You saw at the Hearing what happened at Sacha 6 when Chevron complained that the Lago Plaintiffs had come out and done some PI samples, that the Lago Plaintiffs had come out and put smaller versions, but flags as locations where they wanted to go and sample. Chevron complained about that, yet was doing much, much more at all of the sites, even beyond what was done by the Plaintiffs.

So, this idea that the Court was well-aware and supportive of it is just--we just don't have any evidence of that. And, as Dr. Garvey has explained, the statistics show that the orange flags that Chevron took during the JIs at the surface were clearly not intended to show the extent of the contamination in this pit, as they took down their PIs, the red square--or--yeah, their PIs in the red squares.

And maybe, sort of interestingly, if you actually look at the sample names for those orange flags, they're not labeled Pit 3. Chevron knew that this was Pit 3, and they called this Pit 3 in their internal documents, but when they submitted those samples to the Court, they're not Pit 3 samples.

So, with that, I would turn this over to Eric to wrap us up, unless you have any questions for me.

PRESIDENT VEEDER: No questions.

12:13 MR. EWING: Thank you.
MR. BLOOM: Well, I have the pleasure of wrapping up for the Republic. But first on behalf of the Attorney General and for the Republic of Ecuador, I want to thank the Tribunal, I want to thank Jess and David and Martin for making the journey.
As some of you may know or may not know, the Attorney General became a grandfather last night, so he is hopefully back in Quito by now with his granddaughter, this is his first grandchild, but he hopefully is back with his granddaughter and his daughter. So, on his behalf, I get the honor of thanking you very much.
As he said in the opening, this Site Visit was very critical for our case, and I will explain that in a little bit. But we also very appreciate the sensitivity to this issue, to the issue of the environment because, as I'm sure you have sensed over the last several years, it's a very important and sensitive issue to the Republic. And the issue means even more to the people around us, the people we passed coming here: The kids who were waiting at the school bus, or people, I don't know how long they walk, but they're walking very long ways, for the kids who play around here, for the people who wash their clothes here, for the livestock. So, we appreciate the sensitivity to the issue itself.

12:15 For some of us, this is an exotic adventure of sorts, but I try very hard not to forget the fact that we are around people where it's their very lives. It's not a one-week adventure.
Now, no one has made, in our view, probably a longer journey, figuratively speaking, than Chevron, which now admits, as it has, to the existence of contamination and the existence of contamination that is not confined to the pits. And you may remember at the very first site we kept hearing how it's all confined to the pit. It's not confined to the pit. The two starkest examples--although there was admission here, it was called I believe by Mr. Connor, an exception to the rule--but you'll remember at Shushufindi-55, the President asked the question and got the concession that there was contamination in the wetland stream. It's not in the pit--not in the pit.
I think the most dramatic example may have been Aguarico-06, where we walked down that huge hill, and it was all the way at the bottom, and then it made a left-hand turn that we discovered mainly because the farmers--or the farmer had cleared off some of the land. And ultimately, it was about 100 meters away, and that's as best as we know. We believe it's now downstream.
And they admit the existence of undocumented pits, which I'll talk about in a moment, and they admit that the

12:17 oil at several of these pits, at least three of these locations, were all TexPet's oil.
Claimants have journeyed a long way, but while Claimants have acknowledged what they have been forced to acknowledge, they seek to diminish time and again the scope of the problem. If my notes are correct, Mr. Connor said yesterday, you don't see swathes of petroleum. Well, there are swathes of petroleum, much of it is just beneath the surface.
We heard the reference today to Kuwait and the Exxon Valdez, say, this isn't that. Well, what's the difference? Those are very recent spills where the remediation began right away. Right now we're talking 30 years after the fact, in the middle of a rainforest. And what happens? The rainforest grows on top of it. There are swathes of petroleum, and we have to understand that every time we're seeing oil bubble up to the surface, is a reservoir most of those times underneath pushing it up. It's a volume of oil that's pushing it up.
And recall, we have not been able to delineate the scope of this, and I will address some of the stuff that Ms. Renfroe just said a few moments ago about why that is. But we have not delineated the scope horizontally nor horizontally (sic). You will recall Dr. Garvey saying in one instance we went 1.8 meters down, but that wasn't the

12:19 bottom of it.
And also recall that we could not even find the Aguarico-06 contamination until much of that rainforest was cleared out. Well, that's the problem all over this region. It's not just visual. Visual is where it begins. I would submit that there are reservoirs of oil dotted throughout this entire region; and, in this respect, let me just explain because this is one of those issues I did not fully comprehend until I came here for the first time, and it's one of the reasons why we thought it was so important for you to come and see for yourselves.
I had difficulty internalizing what it means to have pits all around, and for me, it was very extraordinary because they don't look like pits in some instances. You're around, you get to see it a little bit more. You see oftentimes it goes down a little bit. But you've got to visualize what they were before one of two things happened, before someone--we believe that it was TexPet, you heard them say that they think that it's Petroecuador--but when you push the soil on top of it, it doesn't mean the oil goes away. It means you still have a pit. It's still oil. Or, in those instances where the soil is not pushed on top, you have leaf litter, all these leaves, and they get piled one on top of another, on top of another, and in some months' time, much less years' time,

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it begins to grow, and we are back in a rainforest, sometimes very dense rainforest.

So, whether we can see them, they surely exist. So, we know there is contamination. We know it has migrated. We know that there are exposure pathways. I won't go to each and every one of these sites, but you surely see it here, and you certainly see it with respect to the livestock.

It was interesting at the first site, Mr. Connor referred to all of the oil being confined to the pit, limited to the pit. Today, he was saying something a little bit different, that it's proximate, that all the oil was proximate or close to the pit. The point is it's beyond the pit, it's migrating, and you get into the streams, and we don't know where it ends.

Talking about exposure pathways, for me maybe the most dramatic moment was when I was standing in those corn stalks that the visual site--so there I am, and I may be only five foot five generously speaking but those corn stalks were certainly above my head and perhaps over your heads as well. And that's what they're growing, that's what they're eating. Now, maybe they shouldn't be planting them there, and there may be other places where they're not planting, but they ought to be able to.

There are no barriers around any contamination.

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Keeping the livestock away or keeping the kids away, nor could there be because they don't know where all the contamination is. That's the reality.

So, what do we hear from the Claimants? We heard yesterday, and I presume this was a misspeak, that when TexPet came here, they came here as a minority owner, which is factually incorrect, and let me just remind you very quickly of the history. In 1964, the Government granted the Concession to two Parties: Gulf Oil and to TexPet. It was 50-50. They entered into a Joint Operating Agreement in 1965, pursuant to which TexPet became the Operator. There was no State-owned oil company with any interest in the Consortium in 1964 or '65 or in the 1960s or in the early 1970s. Petroecuador's predecessor, CEPE, C-E-P-E, exercised a 25 percent option in 1974. So, for the first nine years and all the pits that were created in those nine years, CEPE had zero to do with.

And, most critically, who was the Operator for almost the entire time? From 1965 until 1990, there was one Operator and that was TexPet. They left in 1992. This lawsuit, the Lago Agrio lawsuit, was brought the very next year. So, once you think about it, every time they say Petroecuador has been the Operator for the last 25 years, that's only because the underlying litigation has lasted going on now 23 years.

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So, we offer this environmental case for a couple of reasons, and I just wanted to address two of them, and we've addressed them in our submissions: One, we wanted to and needed to respond to Claimants' argument that the Judgment was factually absurd. And I would submit, Members of the Tribunal, not only that the Claimants' argument is contrary to what you're seeing before your eyes, but that this evidence proves that the Court actually based its decision on the facts before it. As Mr. Ewing just said, the Court went to 45 of these sites, heard from the Experts but, most importantly, saw and understood what was beneath these pits, and that they're dotted across the region. The Court appreciated that. The Court also heard, importantly, testimony from the residents, something you have not had the benefit of.

So, for the Lago Agrio Court to be persuaded by 45 of these and by the people most affected ought not be very surprising, and we submit it very much supports the reasonableness of the Lago Agrio Court Judgment.

And Number 2, and I would be remiss if I did not point this out, we have also offered the environmental case because it relates to the issue of remedy. It relates to the issue of remedy even assuming State responsibility. And why is that? That's because, under international law, the Claimant cannot be put in a better position than the

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Claimant would have been in absent the breach of international law. Simply, Claimants cannot be granted an absolution, not when there is contamination, contamination that is affecting those who brought the lawsuit against them.

Dr. Hinchee said--and we appreciate this--he says the more challenging task is not finding the contamination but finding where it stops. And that's the challenge.

Two final points, and then we will wrap up.

Please remember what Dr. Garvey said and Mr. Ewing said, that we picked sites to test certain hypotheses, for example, that the contamination is asphaltic, that it does not migrate and, therefore, is not only not posing danger now but never will pose any danger in the future.

Now, this was not Remedial Investigation. LBG did not conduct a Remedial Investigation. What would a Remedial Investigation constitute? What would it look like?

In a Remedial Investigation you are going to take some samples. You are going to throw some darts, as he said, and you try to find where the contamination is. But critically you don't necessarily find out then. It goes to the lab. Then they do all the confirmatory tests. It might be five or six months later before you get the confirmation as to which darts are hitting contamination.

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12:27 Once you find the contamination, the next thing you've got to do is throw some more darts to figure out how far it goes and how far it goes.

The RI is a difficult process. It's the reason why we have been doing this three years, and the point of our exercises was very specifically to test certain hypotheses because Claimants came in here making these bold statements that we suspected might not be true and we now have confirmed they are not true, but it's not a Remedial Investigation. Nor, by the way, did we look for sites that were quote-unquote the best sites for us. What we tried to do was pick sites that we thought would tell our story that would educate the Members of the Tribunal. We hope we did that. We wanted to educate the Tribunal, to enable the Members of the Tribunal to better understand the undocumented pits, to better understand the migration of the contamination, to better understand how contamination interacts with the people, with the livestock.

Mr. Connor said today, we don't disagree where the contamination is. We disagree with where it's going. Yes. We do. We have some educated guesses, but the point is, it's going somewhere. That we now know for certainty. In part we know that because you have persistent oil 30 years after the fact that has not gone away. If you remember in the very beginning of this case, they said: 30 years, it's

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12:29 not going to be here. It's all weathered.

That's not true. We tested that hypothesis.

Now, under joint and several liability principles, Plaintiffs referring to sue Chevron, subject to Chevron's right to seek contribution against Petroecuador. But if the Tribunal were for any reason to find that the Parties must apportion liability, as Mr. Ewing said, that's an issue for Track 3. At that point, we can determine the cost of an appropriate RI.

And then the last point, is the Claimants, at one point they referred to this yesterday as their factual defense, and that's the RAP defense. And, of course, we came here to address the facts rather than pursuing repetitive arguments as to the RAP, which we had briefed exhaustively in Track 1. And you heard Ms. Renfroe return to this issue at the end saying this is the framework. Well, let's address it.

Claimants assert that certain responsibilities were assigned to TexPet and others were assigned to Petroecuador. I want to be clear. Certain responsibilities indeed were assigned to TexPet, and you can look in the RAP. There is no assumption of liabilities or responsibilities by Ecuador, certainly not as to the third parties. This was an agreement between two Parties. And what TexPet did was get a release from the Republic for

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12:31 the Republic's claims against TexPet, and the Republic has not brought suit against TexPet. There is no mention there of the third parties' right to seek relief. And this Tribunal has already found that there was no indemnification provision, no hold harmless. If third parties are out here who are being harmed, they have the right to pick their tortfeasor and to bring a lawsuit. They were not parties to the RAP or the 1995 Settlement Agreement.

Now, what we all, all of us here--

(Rooster crows.)

MR. BLOOM: And him.

--we as party representatives, as honest experts, as roosters--one more time?--as judges of fact and judges of law, what we do matters. We know it matters to Claimants because they brought this arbitration. This matters a whole lot to the Republic. It matters, we believe, to much of this world, given the importance of this rainforest, and we know that it means the world to the people whose very lives depend on this rainforest.

And, with that, Members of the Tribunal, I just want to extend my thanks not only to you and to the secretaries and to David, but to our colleagues and friends from Chevron who have made the jaunt and who have coordinated with us, but I also want to have a very special

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12:33 thank you to the members of the Attorney General's team--over there--who have done a phenomenal job logistically, members of the military, the Security Teams, everything from the water to getting us back and forth.

We promised this Tribunal a safe and pain-free and--logistically pain-free trip, and I'm very proud of the team because I think the members of the team who were involved delivered.

With that, I thank you.

PRESIDENT VEEDER: Thank you very much.

CLOSING REMARKS BY THE TRIBUNAL

PRESIDENT VEEDER: I'm going to speak very fast. I'm sorry, David.

I'm going to add our thanks to what we've just heard from Mr. Bloom, but before I do that, I'm sure I speak for all of us that we wish the grandfather a very happy life with his new grandchild. So, please could those congratulations be communicated to the Attorney General.

MR. BLOOM: I sure will.

PRESIDENT VEEDER: To formal matters, this has been a very long time in arranging. It's been extremely problematic in producing the Tribunal's Order and the Protocol with the assistance of both Parties, of all Parties. We've gone, I think, through a successful active visit over the last two-and-a-half days. But if there is

any problem that we can put right now, we would like to hear it from one side or the other. So, formally, I want to call upon both Parties as to whether they have any grievance or complaint about the way the Tribunal has conducted this Site Visit.

We ask the Claimants first.

MS. RENFROE: Mr. President, we have no objections. The Claimants have no objections and appreciate the Tribunal's guidance.

MR. BLOOM: And for Respondent, we, too, have no objections. We thank you.

PRESIDENT VEEDER: Well, thank you very much. From the Tribunal's perspective--I think I speak for all three of us--it's been a very, very interesting two-and-a-half days. We know how much work has gone into it by the Parties and their counsel. We see only the tip of the iceberg, but thank you for all the incredible hard work that you have done, sometimes in very difficult conditions.

I think it's time to go, but before I do that, we would also like to show our thanks, not just to the Attorney General, to Dr. García, and as you said, also to his staff, to Daniela Palacios and Felipe Aguilar, who have been responsible from the beginning of the airport to the present day for looking after us, and we are very grateful

for the efficiency with which they've done that.

We also want to thank the Ecuadorian military and to Colonel Luis Mena, who has been so discreetly in charge of all of us--and we've never felt unsafe, even if you thought we might be, which we didn't; but also, all members of WSO who also have been active and everywhere for us, in particular Johnny Torres.

Now, our drivers, they've done a wonderful job, I think sometimes in extremely difficult conditions. I think in a left-handed country like mine you can drive on the left but I've never seen so many cars in a right-handed country drive on the wrong side of the road. So, thank you to all of them.

Thank you to Jon on the video. Thank you to Favio with the sound. Thank you for David--I've lost him--how could I lose David? And don't forget, when you patent your machine, we are entitled to a minor 2 percent license fee.

(Laughter.)

PRESIDENT VEEDER: And thank you for the ambulance team. Luckily, we don't know them at all.

(Laughter.)

PRESIDENT VEEDER: But we wish you a very safe return, all of you, to your home countries, including Ecuador. Thank you.

MR. BISHOP: Mr. President, since I wasn't--

PRESIDENT VEEDER: Oh, sorry, sorry.

MR. BISHOP: Kind of off the record, I just wanted to add our thanks on behalf of the Claimants to everyone as well. Thank you very much for the hospitality and security and certainly to the Tribunal and all the technical people. Thank you very much.

(Whereupon, at 12:38 p.m., the Lago Agrio-02 Site Visit was concluded.)

CERTIFICATE OF REPORTER

I, David A. Kasdan, RDR-CRR, Court Reporter, do hereby certify that the foregoing proceedings were stenographically recorded by me and thereafter reduced to typewritten form by computer-assisted transcription under my direction and supervision; and that the foregoing transcript is a true and accurate record of the proceedings.

I further certify that I am neither counsel for, related to, nor employed by any of the parties to this action in this proceeding, nor financially or otherwise interested in the outcome of this litigation.

DAVID A. KASDAN