

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANA

PATRICK JOSEPH
TURNER, ET AL

v.

Docket No. 05-CV-4206
New Orleans, Louisiana
Thursday, January 12, 2006

MURPHY OIL USA, INC.

TRANSCRIPT OF CLASS CERTIFICATION PROCEEDINGS
HEARD BEFORE THE HONORABLE ELDON E. FALLON
UNITED STATES DISTRICT JUDGE
VOLUME I

APPEARANCES:

FOR THE PLAINTIFF:

LAW OFFICES OF SIDNEY J. TORRES
BY: SIDNEY J. TORRES, ESQ.
1290 7TH Street
Slidell, LA 70458

LAMBERT & NELSON
BY: HUGH P. LAMBERT, ESQ.
701 Magazine Street
New Orleans, LA 70130

BRUNO & BRUNO
BY: JOSEPH M. BRUNO, ESQ.
855 Baronne Street
New Orleans, LA 70113

LAW OFFICES OF RONNIE G. PENTON
BY: RONNIE G. PENTON, ESQ.
209 Hoppen Place
Bogalusa, LA 70427

GAINSBURGH, BENJAMIN, DAVID,
MEUNIER & WARSHAUER
BY: GERALD E. MEUNIER, ESQ.
1100 Poydras Street, Suite 2800
New Orleans, LA 70163-2800

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

1
2 LAW OFFICES OF DANIEL E. BECNEL
3 BY: DANIEL E. BECNEL, ESQ.
4 425 W. Airline Highway, Suite B
5 LaPlace, LA 70068

6 FOR THE DEFENDANT:

7 FRILOT PARTRIDGE KOHNKE &
8 CLEMENTS
9 BY: KERRY J. MILLER, ESQ.
10 ALLEN J. KROUSE, ESQ.
11 GEORGE A. FRILOT, ESQ.
12 PATRICK J. McSHANE, ESQ.
13 3600 Energy Centre
14 1100 Poydras Street
15 New Orleans, LA 70163

16
17
18 Official Court Reporter:

19 Karen A. Ibos, CCR, RPR
20 500 Poydras Street, Room HB-406
21 New Orleans, Louisiana 70130
22 (504) 589-7776

23
24 Proceedings recorded by mechanical stenography, transcript
25 produced by computer.

I N D E XPAGE/LINE:WITNESSES FOR PLAINTIFFS:MARCO P. KALTOFEN

Traverse Examination by Mr. Miller	26/25
Direct Examination by Mr. Lambert	32/7
Cross-Examination by Mr. Miller	81/16
Redirect Examination by Mr. Lambert	127/25

WITNESSES FOR DEFENDANTS:CHAD A. MORRIS

Direct Examination by Mr. Krouse	138/2
Cross-Examination by Mr. Lambert	146/21

CARL J. ZORNES

Direct Examination by Mr. Krouse	155/1
Cross-Examination by Mr. Bruno	171/10

BENJAMIN W. BADON

Direct Examination by Mr. Krouse	193/1
Cross-Examination by Mr. Bruno	228/22
Redirect Examination by Mr. Krouse	249/15

1 of the legal system and they permit fair and efficient resolution of
2 legitimate claims of numerous parties in a single action against a
3 defendant who has caused harm. The issues before this court today
4 are the procedural questions: Should this case be certified and
5 tried as a class action and how should the class be defined.

6 The community of St. Bernard Parish impacted by the Murphy
7 Oil spill occupies a narrow strip of land situated between the
8 Mississippi River and the 40 Arpent Canal. It is a close-knit
9 community rich with heritage and tradition. Murphy Oil's refinery
10 is contiguous to this densely populated community. The affected
11 area is composed of a system of canals and ditches which ultimately
12 provide drainage towards the 40 Arpent Canal. The area impacted by
13 the Murphy's crude oil is extensive. The geography lends itself to
14 a clear delineation of class boundaries in this case.

15 Your Honor, in preparation for this hearing, the parties
16 have engaged in extensive discovery. Six proposed class
17 representatives, 26 named plaintiffs, four defense experts, six
18 plaintiffs' experts and four fact witnesses were deposed.

19 Additionally, as your Honor knows, there has been extensive motion
20 practice in this case. Today plaintiffs will be concise and to the
21 point in our presentation to the court. With the exception of one
22 expert witness, Marco Kaltofen, plaintiffs will offer the testimony
23 of our witnesses through affidavits and depositions.

24 As liaison counsel on behalf of the Executive Committee
25 and the Plaintiffs Steering Committee, I would like to introduce to

1 the court plaintiffs' proposed class representatives who are here
2 today.

3 Phyllis Michon. Your Honor, Ms. Michon and her family
4 lost their home and many of their possessions were covered with
5 crude oil.

6 Cherie Perez. Ms. Perez lost her very successful business
7 Gerald's Doughnuts.

8 Mr. Phillip Hebert. Mr. Hebert is a member of law
9 enforcement and a first responder who worked in the oil spill area
10 immediately following the release.

11 Mr. Fernand Marsolan, who will be here during the trial,
12 is a bank executive who lost two rental homes in this area.

13 Dr. James Shoemaker. Dr. Shoemaker not only lost his home
14 on Palmisano but also lost a successful chiropractic office in a
15 building housed on Judge Perez Drive. He also lost rental property
16 on Hamlet Drive.

17 And Ms. Robin Clark. Ms. Clark's family home on Despaux
18 Drive was also in the affected area.

19 I would like to thank them for being here today for this
20 very important hearing. Thank you.

21 At this time, your Honor, Mr. Bruno will briefly address
22 class certification issues, followed by Mr. Lambert who will briefly
23 address the basis for plaintiff's proposed class definition. Thank
24 you.

25 MR. BRUNO: Good morning, your Honor. I am very honored

1 to be very in this very important case. Thank you for the
2 opportunity.

3 Judge Fallon, the release of crude oil from the Murphy
4 refinery turned an otherwise flood damaged community into a
5 community contaminated by toxins. While Murphy may want to
6 determine damages on an individual by individual basis as one might
7 if the community were just flooded, the evidence will show that you
8 just can't do it that way.

9 Dr. John Kilpatrick, an expert in real estate finance,
10 will testify that as a result of this systemic neighborhood wide
11 event the property in the area has been devalued. He will testify
12 that it is clear and compelling that individual property remediation
13 will have very little impact on the improvement of individual
14 property values in the absence of a community wide remediation
15 effort.

16 Dr. Paul Templet will testify that environmental concerns
17 require that there be a comprehensive community wide clean up.

18 Dr. Vincent Wilson will testify that houses within the
19 contaminated area contain levels of toxicants that pose a
20 significant health threat to individuals and animals that live or
21 work near or on these properties.

22 Dr. Erno Sajo will testify that even in the remediation
23 effort, resuspension of these toxic particles is likely an important
24 mechanism of cross contamination and continued exposure.

25 Now, Judge, you know that Murphy itself has defined an

1 area of contamination and has admitted that there may be
2 contamination outside of that area. The EPA has defined an area of
3 contamination. So, Judge, the evidence will show that the dominant
4 common issue is the necessity of a community wide clean up, the
5 geography of that clean up, and the extent to which the properties
6 in that area have been devalued as a result of the contamination.

7 Now, in the meantime Murphy Oil, as tort-feasor, as Judge,
8 and as jury has induced community members who are acting under
9 extreme stress and financial hardship to accept Murphy's dictate of
10 an amount of property diminution on a class like basis. Murphy has
11 publicly admitted that it has contaminated the community, it has
12 defined an area, and has admitted that it has caused diminution in
13 property value. But more importantly the release that Murphy Oil is
14 requiring these affected residents to sign does not include a
15 cleanup standard.

16 Judge, Murphy's compensation plan itself is common and is
17 an admission of commonality. What is in dispute is value and
18 geography. What remains for the court to do at this point is to
19 define the class boundaries and to adequately define those class
20 boundaries.

21 Judge, Mr. Lambert will now explain the basis for our
22 proposed class definition.

23 MR. LAMBERT: Good morning, your Honor. What we've got
24 is, as Joe points out, a situation where Murphy Oil has admitted
25 that their crude has contaminated this community. The areas that

1 we're involved with, involved in, if I might, look like this. The
2 first one, your Honor, that's supposed to come up, and of course I
3 love electronics, is 01, it's the defendant's defined area, which is
4 the smallest.

5 Your Honor, while we're cueing --

6 THE COURT: All right. Let's use that.

7 MR. LAMBERT: The first area, your Honor, is this black
8 line which is west of the Murphy Oil site, which is here, and
9 includes, interestingly enough, a notched out area where the
10 Chalmette High School is and does not, as you'll notice, go to this
11 canal feature which is called the 40 Arpent Canal (INDICATING).
12 That'll become significant later on.

13 THE COURT: Whose is that?

14 MR. LAMBERT: That is Murphy's. It's the smallest, your
15 Honor.

16 The second area that's defined sort of globally is this
17 orange dotted line which is the EPA's designation, and it changes as
18 data comes out. Most of their recent data has come through Murphy's
19 studies through CTEH, which is an acronym for the company that
20 Murphy's hired to do its analysis.

21 This is the outline of the EPA, which is larger than
22 Murphy's but is in a different shape. And notably it includes the
23 high school. I mentioned that a few times, it'll become
24 significant, your Honor, later.

25 The last area, not surprisingly, your Honor, what we call

1 our blue lined area and it is larger than the other two. This is
2 the Murphy area which is behind it. The EPA's area will be in the
3 same zone but a different configuration as you saw with the orange
4 lines, and some day we will get it up here and you will be able to
5 see all three together. And the school is clearly here
6 (INDICATING).

7 And also you'll notice that the boundaries of the line
8 described by Marco Kaltofen, the only expert you'll hear from, and
9 also attested to by the hydrologist Dr. Bedient, and it shows the
10 flow of canals, and the defense experts confirm it, towards this
11 Arpent Canal from pumps that are located here and here and here and
12 here (INDICATING).

13 Actually there's two pumps, sorry, there's one here and
14 one here. There was a purposeful break at some point put in the
15 levee right here when the water level of the swamp or the wetlands
16 got below the level of the community (INDICATING).

17 So what we've done, your Honor, and we are going to
18 provide you with a book because one of our electronic glitches --
19 there we go, look at that. In reviewing, your Honor, this green
20 line is the defendant's admitted area, the orange is the area that
21 the EPA outlined at the point in time when this particular map was
22 drawn, and the blue is the plaintiff's proposed class based on the
23 evidence presented by Marco Kaltofen in his sampling. And this red
24 line includes two areas that are bounded by natural boundaries that
25 we're going to ask your Honor to consider, which are slightly larger

1 than the tested areas but we think may be appropriate for defining a
2 class based on the law that allows for an interpretation of the
3 class slightly larger than what would be supported by specific
4 evidence.

5 Now, with regard to the common issues to be decided, when
6 we get past this stage in the process we'll present evidence of how
7 much crude escaped from the refinery, when it escaped from the
8 refinery, and the like. We have these photographs, which are hardly
9 visible, but show the flood waters on the 30th, that's the day after
10 Katrina, overtopping the containment dykes which surround this
11 series of tanks which are called the 250 tanks because they're
12 250,000 barrels each, and the 450 tanks, which are here, which are
13 450,000 barrels each (INDICATING).

14 On the day that this aerial photograph was taken, your
15 Honor, the containment dykes around these tanks don't appear. And
16 the resolution is better and I have some higher resolution
17 photographs. May I approach?

18 THE COURT: Yes.

19 MR. LAMBERT: These were taken on the 30th, your Honor, to
20 demonstrate: (A) overtopping of the containment dykes; and
21 secondly, the presence of oil sheen at that point in time. It's
22 interesting to note that the evidence will show through defendant's
23 testimony, expert testimony, a petition right here, your Honor
24 (INDICATING). And I am trying to keep from shaking my hand. This
25 is right around what's called the 450-2 tank. Right there there was

1 a sample taken that confirmed the presence of crude oil from this
2 tank, and that we believe demonstrates that the crude oil came from
3 this tank over the top of these dykes and was deposited not only
4 here but throughout the neighborhood (INDICATING).

5 But the point is that it is inside of a containment dyke
6 which is the same height or higher than the one around the 250
7 tanks, and that'll become significant at some point in time, your
8 Honor, in terms of the movement of this contaminant.

9 THE COURT: What's your position, the one middle tank is
10 the one that --

11 MR. LAMBERT: Yes, your Honor, this is the one that
12 appears to have, these are floating roofs, the roof in this tank is
13 significantly lower than the others. That will come into play as a
14 causative factor because this tank was not loaded to its required
15 pre-storm levels before the storm occurred.

16 But my point to your Honor at this stage is that there is
17 a sample inside of a dyke system right here that equates to oil out
18 of here, which is the Murphy crude. And that shows movement of that
19 oil when these dykes were being overtopped.

20 Now, Dr. Bedient, who is a hydrologist from Rice
21 University has testified and will testify by affidavit that the
22 canal systems are waterways intended for drainage of the community
23 under normal circumstances. Here they are. The blue lines show
24 this intricate canal system which all ends up at this canal you'll
25 hear a lot about, the 40 Arpent Canal, runs right along the northern

1 border of the community. All of these interconnecting canals flow
2 towards it. The plant location is right here, your Honor. The 250
3 tank that leaked is right there (INDICATING).

4 The testimony will show that from a geographic standpoint,
5 in other words, water flows downhill. Topographically, the oil came
6 down all through Judge Perez Drive, all the way down, and then, of
7 course, this is the issue how far. But then once it's out in the
8 community it also, the aerial photographs show -- and that was a big
9 sludge towards the end of the day after the water levels dropped to
10 the point where the stuff is coming out big time. And then when
11 it's there it makes a flow pattern to the north and moves towards
12 the draining that's occurring, one is a pump here and the other, of
13 course, is way over here, which is the Industrial Canal which
14 breached and water flowed in at some point but water flowed out at
15 some point.

16 So you have an open tub with a drain -- in other words, we
17 call it like a tub drain -- drain here, all time this pump is
18 running, draining out through the Industrial Canal as soon as the
19 water levels got to that point, sucking everything this way
20 (INDICATING). Now, before that happened when things were sort of
21 stagnant as they were in those first photographs on the 30th, this
22 oil floated around and moved down here to the east as well. And you
23 will see that in our data (INDICATING).

24 Now, these canals are referred to as preferential
25 pathways, because obviously that's what they are, and they influence

1 the flow as do the pumps, and ultimately the Corps of Engineers
2 broke a hole in the levee system right here to aid the drainage, and
3 then at some point, and we have new data as of ten o'clock last
4 night apparently from the levee system, we are going to see where
5 this pumping station came on board here slightly east of the
6 ruptured tank (INDICATING).

7 Now, we have data from Marco Kaltofen, which includes 75
8 ASTM tier 2 analysis results. What we've done in one of the
9 exhibits, which this is a diagram of the, actually it's a map, which
10 has those sampling points on it. And referenced on that same map is
11 the EPA's outline. What we've done, your Honor, for exhibit, which
12 will come up in Mr. Kaltofen's testimony in just a minute, is pull
13 out 17 of these samples that show the periphery of the plaintiffs'
14 proposed class boundary.

15 And those little flags -- and you will get a kick out of
16 it, Judge -- they are numbers by hand and they are referenced in an
17 index in a binder because our system didn't quite work out the
18 pretty pop up that we wanted. We wanted to pop right there and show
19 you a graph and a photograph of that particular sampling point and
20 pop right there and do the same thing. But instead of that I am
21 going to provide your Honor with this book, and it's going to have
22 starting here No. 1, 2, 3, 4, and around the perimeter, and you will
23 be able to look, because I have a copy of that map right here, and
24 go to the tabs and you'll be able to see the fingerprint analysis,
25 the analytical data and in some instances, not all, but in some

1 instances a photograph of the particular location of that sampling
2 where the sample was taken.

3 We believe that these 75 analyses, 17 of which we're going
4 to present to your Honor as defining this periphery, are clearly
5 adequate in order to carry our burden of proof with regard to the
6 class certification boundaries. You'll note, your Honor, that the
7 analysis run by the defendants only include six full analysis,
8 though they have many, many sampling points, many of which are
9 clustered right here in the area where they've admitted
10 contaminated. We believe that these class boundaries define areas
11 where this crude oil moved, not only because we found actual
12 fingerprint samples of it in these locations, but also because the
13 geography as well as the hydraulics lend itself to moving this
14 material in the direction that it actually moved in with the
15 accolade that this 250 area here also contaminated property slightly
16 to the east (INDICATING).

17 THE COURT: Okay. Mr. Lambert, I understand your
18 position. Thank you very much. Let me hear from the defendants.

19 MR. LAMBERT: Thank you, your Honor.

20 MR. MILLER: Your Honor, Kerry Miller on behalf of Murphy
21 Oil USA. Good morning.

22 May it please the court, I am going to relate back to
23 something Mr. Bruno said during his portion of the opening. And I
24 think it's plainly obvious and that is the issue of class definition
25 is very important in this proceeding. And it's important not just

1 in this proceeding but in every proceeding. And the courts have
2 called the class definition aspect of the Rule 23 hearing something
3 that's extra Rule 23, it's not expressly contained in Rule 23 but it
4 is as important or even more important than the Rule 23
5 requirements.

6 And the reason why the courts are saying that is because
7 the class definition is what controls everything that happens
8 subsequent in the case after a class is certified. It's what binds
9 the people. All judgments, all verdicts and all settlements are
10 derivative of whatever class definition is entered in a case. And
11 when you have a system of representative litigation like we do here,
12 the class definition has got to be readily ascertainable and proven
13 by objective data is what the courts say. The Supreme Court says.

14 Now, in a securities case, your Honor, proving the
15 definition of a class by objective data I would submit to you is
16 easier than the job in this case because you would have a
17 shareholder list. Your Honor's familiar with prescription drug
18 cases, Vioxx and Propulsid and things of that nature. There you
19 might have user or a purchaser lists on which to define the class.

20 But when you're dealing with a pollution or contamination
21 case like we have now, the way that the class must be defined is
22 through science. That's what supplies the objective data. You
23 cannot get a list. No computer can spit out a list of properties
24 that were contaminated or not contaminated by crude oil, it's not
25 possible.

1 So what we're faced with here is job one is have the
2 plaintiffs met their burden of proof in showing that their class
3 definition is readily ascertainable and is proven by objective
4 scientific data. And I am going to relate back again to something
5 Mr. Bruno said. That is not your job, your Honor. It is not your
6 job to pilfer through the bench books and exhibits and draw a class
7 boundary. That is the plaintiffs' job. And if the boundary
8 submitted by the plaintiffs is not based upon objective data then
9 the class cannot be certified.

10 Just recently a federal court in Mobile dealt with a
11 similar issue, this time it was a mercury contamination case. And
12 what happened in that case was plaintiffs moved for class
13 certification and they did not have scientific or objective data to
14 define the geography of the class. And this is what the court
15 concluded, and I can't say is any better than the judge in Mobile so
16 I will quote what he said. The Court said: "The Court cannot
17 endorse this sort of presumptuous "shoot first, ask questions later"
18 approach to class certification. Plaintiffs are effectively asking
19 this court to accept on face what they will formulate a meaningful,
20 appropriate, reasonable definition of their surface water and ground
21 water subclasses during the merits phase.

22 Accordingly, the court cannot and will not certify
23 amorphous ill-defined subclass based upon mere speculation that
24 plaintiffs might some day formulate meaningful definitions for those
25 subclasses predicated on objective criteria that will not

1 necessitate extensive individualized fact-finding and minihearings
2 to determine each perspective class member's status vis-a-vis the
3 class."

4 And that's a situation that's before your Honor. The
5 evidence that the plaintiffs have to support the class definition
6 that they propose is testimony from experts that they don't have an
7 opinion on the class boundary -- that would be Dr. Bedient,
8 Dr. Templet and Dr. Wilson, and we briefed those issues on Daubert
9 hearings -- and they just don't know. They haven't done the science
10 yet. So the plaintiffs are left with Mr. Kaltofen. And that's who
11 Mr. Lambert referenced.

12 Connie, please put up Defendant's Exhibit 16. And this is
13 similar to the demonstrative that the plaintiff's put up. What this
14 depicts, your Honor, are the various class definitions that have
15 been proposed in this case. The red line, the interior red line is
16 the EPA zone. The next red line with the finger is the first class
17 definition proposed by -- I'm sorry. The plaintiffs initially
18 proposed the EPA zone as their affected area in open court in
19 connection to a supervisor of the Murphy settlement process. A
20 couple of weeks later we got a map showing this line, this red line
21 with the finger out toward the west, and that was a proposed
22 definition. Some weeks later at Mr. Kaltofen's deposition, the blue
23 line became the plaintiffs' proposed definition. And then finally
24 in the memo in support of class certification plaintiffs moved it
25 out to the green line.

1 Now, in the plaintiffs' brief they talk about an affected
2 area of 2,000 properties, and I don't know how they got there. The
3 census data will show you that their green line involves 14,000
4 homes and 35,000 people and covers an area of 6.66 square miles.
5 Mr. Lambert said it's based upon 17 sample locations. That's less
6 than .15 of 1% of the number of properties located within that area.

7 Courts have said when you extrapolate small samples into
8 large numbers, it is not reliable. We cited a case in our brief
9 that says if your sampling rate is 1.56%, it is not reliable on
10 anything.

11 Seventeen locations in a 6.66 square mile area don't tell
12 you anything, your Honor. And that's all the science they have of
13 their own to go by what's this class definition.

14 What the plaintiffs will also say, your Honor, is, well,
15 we looked at EPA data and EPA data also serves as a basis for our
16 class definition. The EPA data we looked at or EPA tests in or
17 around this area, which is outside of the EPA zone. Well, the
18 question I've been asking ever since that revelation was made is,
19 well, why doesn't the EPA think that that data supports an affected
20 area?

21 Because what the EPA has never done, your Honor, is expand
22 their boundary this way. There has been one expansion by the EPA
23 and it's been this little area right here. They have never gone
24 this way, and that's been the EPA boundary since October, now almost
25 three months. And so I can't conceive how the plaintiffs could

1 interpret, Mr. Kaltofen can interpret EPA data to support a class,
2 support an affected area that the EPA concludes is not supporting an
3 affected area (INDICATING).

4 Now, there are other issues in this class -- you can take
5 that down, Connie and go back to the power point.

6 Common issues don't predominant, which is another big
7 issue you have in a toxic tort or environmental class action. On
8 this issue, we will have evidence that will show this was a
9 waterborne oil spill event and the oil was driven by the water and
10 so the oil went where the water took it. And that's based on a
11 number of different factors. It's based on all of the buildings
12 that were there, it's based upon drainage, it's based upon pumping,
13 it's based upon water receding, it's based upon, in terms of getting
14 inside of houses, the destruction caused by Hurricane Katrina. And
15 that's all relative to property damage type issues.

16 Next we will talk about the personal injuries that are
17 alleged in the case where they simply don't predominate. On the
18 initial level EPA and ATSTR have said there are no long-term health
19 consequences. Many of the named plaintiffs who were deposed concede
20 they have no health claims in this case. Some do but the ones who
21 do claim a generic symptom such as rashes and fever and coughing.
22 There has not been a single medical diagnosis produced in this case
23 linking the rashes and the fever and the coughing exposed to oil,
24 much less Murphy Oil.

25 So that creates another whole host of individualized

1 issues. Next we could talk about mental distress, which is another
2 claim the plaintiffs have, and they all need to meet Rule 23 muster.
3 On the issue of mental distress, what these people all have said,
4 understandably so, is that they are stressed out. But they are
5 stressed out because of a number of factors: The fact that the
6 hurricane destroyed their entire community, the fact that insurance
7 adjusters have been difficult to deal with, the fact that FEMA has
8 been difficult to deal with.

9 And so what they all say is, maybe the oil played a part
10 and maybe it didn't, but I can't separate it out. I can't tell you
11 what percentage of stress is related to oil as opposed to all of
12 these other factors. So again, that presents a very individualized
13 inquiry.

14 And the last Rule 23 inquiry that plaintiffs must prove is
15 that handling this case as a class action is superior to other
16 resolution methods. We would submit to your Honor that it's simply
17 not superior, it's not superior to individualized litigation because
18 of all of the factors I just mentioned and it's not superior to the
19 Murphy settlement program that is underway. What Murphy has done is
20 truly dramatic in terms of its scope and its speed.

21 Thus far, your Honor, Murphy has made settlements with
22 more than 5,388 individuals, that involves 1,839 homes, more than 50
23 million has been paid directly to residents. More than \$13 million
24 has been spent on public property clean up, more than 4 million
25 private properties have been cleaned up, \$4 million worth of private

1 property clean up has occurred. That equates to more than 800 homes
2 cleaned. And there have only been 37 rejections to date.

3 And the proof is in the pudding. The statistics tell a
4 story. The Murphy settlement program is working, it's working well,
5 it's working fast, and so the effect of class certification, as your
6 Honor knows, could impair or impede this process. And that
7 shouldn't happen because it's continuing to work, it's continuing to
8 work now with businesses and with residents who are just streaming
9 back into the area.

10 And so given all of those factors, your Honor, we submit
11 to you that the class cannot be certified, cannot be certified
12 because the plaintiffs have not met their burden of producing
13 objective scientific data to support the class that they proposed.
14 And that has been one proposal, that is the largest green line, 6.66
15 square miles, 14,000 houses, 35,000 residents. Class certification
16 cannot be approved in this case because of the predominance of
17 individualized, not common issues, and it should not be certified
18 because the Murphy resolution program is a superior method to
19 resolve this issue. Thank you, your Honor.

20 THE COURT: All right. Thank you very much. All right.
21 Let me hear from the plaintiffs. Call your first witness or
22 introduce your documents.

23 MR. PENTON: May it please the court, your Honor, Ronnie
24 Penton on behalf of the plaintiffs.

25 Judge, at this time we would offer to file into evidence

1 in this case Plaintiff Exhibits 1, P1 through P106 upon agreement of
2 counsel, with the following exceptions, Judge: P10 we need to add
3 the additional identification of recap screening standards as
4 opposed to recap standards.

5 At this time, Judge, we would withdraw and not offer P12.
6 We would also withdraw P19.

7 There were three objections, Judge, to P40, P42 and P43.
8 We would withdraw those at this time, and I believe Mr. Meunier may
9 have something else to say about those three.

10 We would withdraw at this time P54 and P55, withdraw at
11 this time P59A and B, withdraw P71, withdraw P89 and P-90. And with
12 those exceptions, Judge, that is our tender.

13 THE COURT: The court will admit the documents with the
14 exception of 10, 12, 19, 40, 42, 43, 54, 55, 59A and B, 71, 89 and
15 90.

16 MR. MEUNIER: Your Honor, as to the exhibits objected to,
17 P40, 42 and 43, when would the court wish to hear our position on
18 that?

19 THE COURT: When you get ready to offer them. Do you have
20 a witness that you can do it with or is it a deposition?

21 MR. MEUNIER: They are self-authenticating, so we would
22 propose to offer them now, but I understand that there is an
23 objection.

24 THE COURT: What are they?

25 MR. MEUNIER: For the record, Judge, P40 is a CDC news

1 report posted on the web site of CDC News. On September the 24th,
2 '05; P42 is a Wall Street Journal article dated January 3, 2006; and
3 P43 is another CDC web site news posting. So they're all news
4 reports, your Honor, which are self-authenticating under Rule
5 902(6), and which are offered for the effect on the listener, not
6 for the truth of the matter asserted.

7 MR. MILLER: Your Honor, Murphy does object to exhibits of
8 plaintiffs 40, 42 and 43 on the hearsay ground. I think your Honor
9 has previously ruled in connection with some of the deposition
10 designation information that the court considers newspaper articles
11 are hearsay, and I think that they would be offered for the truth of
12 the matter asserted --

13 THE COURT: I understand the issue. I sustain the
14 objection. I think that they may have some value. If they have
15 some value, it may be in another phase of the case; but from the
16 standpoint of certification, I see no value of them. The 801(c)
17 hearsay rule, I'll exclude the documents, I'll sustain the
18 objection. Let's move on. Anything further?

19 MR. MILLER: I will do exhibits in our case, your Honor.
20 Thank you.

21 THE COURT: Okay. You will do it now or in your case?

22 MR. MILLER: In our case.

23 THE COURT: Okay. Let's call your witness, please, from
24 the plaintiffs' standpoint. Any witness live?

25 MR. LAMBERT: Yes. We call Marco Kaltofen.

1 THE COURT: Come forward, sir, please, and take the stand.

2 THE DEPUTY CLERK: Please step into the witness box.

3 Would you raise your right hand.

4 (WHEREUPON, MARCO KALTOFEN, WAS CALLED AS A WITNESS BY
5 PLAINTIFFS AND, HAVING BEEN DULY SWORN, TESTIFIED AS FOLLOWS.)

6 THE DEPUTY CLERK: Please be seated. And using the
7 microphone there, would you state your full name for the record.

8 THE WITNESS: Good morning, your Honor. My name is Marco
9 Paul Johan Kaltofen.

10 THE COURT: Would you spell the last name, please.

11 THE WITNESS: K-A-L-T-O-F-E-N.

12 THE DEPUTY CLERK: Thank you.

13 THE COURT: You may proceed, counsel.

14 MR. LAMBERT: Your Honor, at this time I would like to
15 introduce to the court some other experts that are present here in
16 the courtroom available for cross-examination.

17 THE COURT: Let's take him first.

18 MR. LAMBERT: All right. Judge, I've also been asked by
19 my cocounsel that the court sequester fact witnesses.

20 THE COURT: Any fact witnesses? You folks will know
21 better than I. If there are fact witnesses, please stand up. Any
22 fact witnesses? I ask that you stand outside, with the exception of
23 any representatives or experts. Any fact witnesses, either side has
24 a right to ask that they be sequestered.

25 MR. MILLER: Your Honor, we have three fact witnesses who

1 are planning to testify live in the audience and they will go out
2 and sit in the hall. We have another fact witness who has been
3 submitted by deposition and affidavit, can he remain in the
4 courtroom, your Honor?

5 THE COURT: Any objection to that?

6 MR. TORRES: No, your Honor.

7 THE COURT: Let that be done.

8 MR. MILLER: Also I understood from our previous meeting
9 at the pretrial that at the initial phase Mr. Kaltofen's CV would be
10 entered into evidence and I would get the opportunity to
11 cross-examine Mr. Kaltofen on his qualifications and methodology.

12 THE COURT: That's exactly right. Plaintiffs will offer,
13 introduce, and file into evidence the CV of this witness.

14 MR. TORRES: Yes, your Honor.

15 THE COURT: If he would be called, he would testify
16 substantially the same as the CV. I will accept him, I'll accept
17 the CV into evidence. Let's cross-examine, please.

18 THE DEPUTY CLERK: Do you want it marked?

19 THE COURT: Gentlemen, wait outside until we call you.
20 What's the mark of the CV?

21 MR. PENTON: The CV is P1.

22 THE COURT: I will receive it into evidence, and
23 cross-examine on qualifications.

24 TRVERSE EXAMINATION

25 BY MR. MILLER:

1 Q. Good morning, Mr. Kaltofen.

2 A. Good morning.

3 Q. Mr. Kaltofen, as I understand it, you're here to testify about
4 fingerprinting oil; is that correct?

5 A. That's one of the things I'll testify on, yes, sir.

6 Q. Now, fingerprinting oil, that's a type of chemical analysis, is
7 it not?

8 A. It's a review of chemical analysis.

9 Q. Mr. Kaltofen, you're not a degreed chemist, are you?

10 A. I have a degree in general engineering with a concentration in
11 chemistry.

12 Q. Do you have a Ph.D. in chemistry, Mr. Kaltofen?

13 A. No.

14 Q. Do you have a Ph.D. at all?

15 A. No.

16 Q. Do you have a masters degree, Mr. Kaltofen?

17 A. I do not.

18 Q. Mr. Kaltofen, have you written any peer reviewed articles on the
19 chemical analysis of an oil spill?

20 A. In my work as a licensed professional engineer, civil engineer
21 and chemist, I do not generally write peer reviewed articles.

22 Q. So the answer is no, Mr. Kaltofen?

23 A. That's correct, sir.

24 Q. Mr. Kaltofen, I did a Lexis-Nexis search of your name and you
25 have a rather unique name, Marco Kaltofen, so don't think I picked

1 up any other Marco Kaltofens out there. And what I picked up, Mr.
2 Kaltofen, was four times in which your name was referenced in cases
3 around the country. One case was a Lavar (PHONETIC) case that I
4 referenced in my opening statement. Is it true, Mr. Kaltofen, that
5 you testified either live or by affidavit in the Lavar case?

6 A. That is the case in Mobile that you mentioned?

7 Q. Correct.

8 A. Yes.

9 Q. And the issue in that case was mercury contamination, correct?

10 A. I don't think it was related to the Murphy case.

11 Q. It was mercury contamination?

12 A. Oh, mercury, I'm sorry, I didn't hear you. It was related to
13 mercury contamination, that's correct.

14 Q. And oil spills weren't an issue in the Lavar case, correct?

15 A. No, sir.

16 Q. Another case I picked up you testified in was called Acres v.
17 United States, the site was 2003 WL 23531398. And that case
18 involved Sarin and Mustard gas. Do you recall that, Mr. Kaltofen?

19 A. Yes, I do.

20 Q. That didn't involve crude oil, did it?

21 A. No. That case was related to method validation and the gas
22 chromatography depiction of chemical weapons at low levels.

23 Q. And in that case you were referred to as an expert in air
24 modeling; is that your recollection?

25 A. I don't believe, no, sir.

1 Q. What do you think you were referenced as an expert, what field?

2 A. Of course I can't say what others say, but I have not put myself
3 forward as a professional air monitor, excuse me, air modeler.

4 Q. Do you recall how you were admitted as an expert in that case?

5 A. Well, of course, I am not returning so I don't know all of the
6 details, but I was asked to testify on my knowledge of chemistry and
7 chemical detections, particularly in the environment; and also the
8 detection at low levels of certain chemical agents in air samples,
9 as well as general information about methods, including gas
10 chromatography, flame photometric detection and gas chromatography,
11 mass spectrometry.

12 Q. Another case I picked up, Mr. Kaltofen, in which you testified
13 was the in re: MTBE Products Liability Litigation, reported at 209
14 FRD 323. And I think that case by it's own title dealt with a
15 product MTBE; is that correct?

16 A. You know, I don't recall that case. Do you know the date?

17 Q. I don't, I don't have it offhand.

18 A. It may be that I produced some documentation that was used in
19 that case, but I don't recall particularly, specifically testifying
20 in person about MTBE -- the gasoline additive, correct?

21 Q. I think the case referenced test kits, you supplied an affidavit
22 concerning test kits?

23 A. I'm sorry, I don't recall the particulars. If you had that date
24 I could obviously look that up.

25 Q. The last case in which I found your name was Ruffin v. Shaw, 149

1 F.3d 294, and that case involved toxicity in carpet. Do you recall
2 your involvement in that case, Mr. Kaltofen?

3 A. Actually that may be what the case involved, I am not a
4 toxicologist. In that case I was asked to testify about gas
5 chromatography, mass spectrometry and the analysis of certain
6 chemicals that are used in synthetic textiles.

7 In this case by gas chromatography, mass spectrometry,
8 this is the same type of instrumentation that we're talking about in
9 this case.

10 Q. Mr. Kaltofen, much has been made in opening and in the briefings
11 before the court on the fact that you use the ASTM method in this
12 case to fingerprint oil. Is that correct, Mr. Kaltofen?

13 A. Whether or not it's been much, it is, in fact, one of the
14 references I used in determining the chemical instrumentation that
15 we would be using for this work, yes, sir.

16 Q. What ASTM method did you use?

17 A. The ASTM method is the gas chromatography, the mass spectrometry
18 method, and this is a method that is referenced by the U.S. Coast
19 Guard Marine Safety Laboratory, and actually it references a
20 relatively large number of ASTM methods.

21 Q. ASTM methods, they have method numbers attached to them.

22 A. Yes, sir.

23 Q. Do you know what method number is attached to this?

24 A. There was 3328 and I believe it was 5729, but I don't know the
25 exact number.

1 Q. Do you know the title of ASTM method 3328?

2 A. No, not as I sit here.

3 Q. Are you aware that title of ASTM method 3328 is Standard Test
4 Methods For Comparison of Waterborne Petroleum Oil By Gas
5 Chromatography?

6 A. Yes, that fits my recollection of the method, yes, sir.

7 Q. Mr. Kaltofen, I am surprised to hear that because I thought you
8 used a method that only dealt with or that pertained to terrestrial
9 oil spill events?

10 A. The methodology that I used was gas chromatography flame
11 ionization to develop a chromatogram which essentially gives you the
12 fingerprint of the petroleum product that you are trying to trap to
13 do the zone mapping, as well as GC and mass spec detection and that
14 gives you more of a detailed picture of the individual chemicals
15 that are present.

16 And this methodology is applicable to both the waterborne
17 and terrestrial components of an oil spill. There will be
18 differences in how sample handling is performed, and that's one of
19 the things that you will pick up from the multiple references that
20 we're talking about, but the instrumentation is the same.

21 Q. So as I understand your testimony, you're saying ASTM 3328 is
22 applicable to both waterborne and terrestrial oil spills, correct?

23 MR. LAMBERT: Excuse me, your Honor. I think that --

24 THE COURT: We may be going over from the standpoint of
25 qualifications. You can go into that when you have him on cross.

1 I've also worked with the detection of crude oils, as well
2 as drilling fluids, that were related to offshore oil investigations
3 at Georges Bank in New England for the research laboratory out of
4 Boston, Massachusetts, as well as petroleum production platforms in
5 offshore waters in the southeastern United States and others.

6 MR. LAMBERT: Your Honor, at this point we tender
7 Mr. Kaltofen as an expert in civil engineering with a specialty in
8 chemicals, particularly with regard to fingerprinting oil.

9 THE COURT: The court's required to make some analysis,
10 it's called a Daubert analysis or 702 analysis of the witness'
11 qualifications, as well as whether or not his testimony is based on
12 proper methodology, is relevant to the facts of this case. There is
13 some question as to the depth of the analysis that could or should
14 be made during a class certification hearing.

15 I made the analysis prior to this, I've had an opportunity
16 to review the documents, his opinion as well as his CV, as well as
17 listen to his qualifications as he explained them to the court. I
18 feel that he is qualified to testify and that he's used proper
19 methodology, and also that the issues with regard to the class
20 certification hearing he intends to testify are relative, therefore,
21 and will accept him as an expert under 702. You may proceed,
22 counsel.

23 MR. LAMBERT: Thank you, your Honor. Your Honor, I've got
24 up to the board here, or on the screen, hardly visible. Is your
25 Honor's

1 THE COURT: It's a little better.

2 MR. LAMBERT: -- monitor better?

3 THE COURT: Yes. Yours, too.

4 THE WITNESS: I can see mine, your Honor.

5 MR. LAMBERT: Let me do it this way, let me drop back into
6 some older technology.

7 THE COURT: He can draw on his monitor and you can print
8 it there if you need to.

9 MR. LAMBERT: Let's see if we can get this ELMO rolling
10 here, your Honor.

11 THE COURT: We are going to have to pull this down in
12 order to do that.

13 THE DEPUTY CLERK: I will have to take the computer off,
14 is that okay?

15 MR. LAMBERT: There we go.

16 MR. MILLER: Your Honor, we have an objection to the use
17 of this exhibit. I just realized it relies upon information in an
18 underlying exhibit that has not been admitted into the evidence.
19 That was Plaintiffs' Exhibit 12, which is one of the ones that
20 Mr. Penton said he withdrew.

21 In particular, your Honor, I think this exhibit contains
22 sample points, that I am assuming has test related data, that we
23 only saw last night. The sample material did not have any
24 relationship to an address, so it really was meaningless data to us
25 because it was not connected to an address. And that is the reason

1 why we objected to Exhibit 12 and it is not admitted into the
2 evidence, and this summary exhibit or map is based upon evidence
3 that's not being admitted so we object to that, too, your Honor.

4 MR. LAMBERT: Your Honor, the data that's contained at
5 each of these sample points has been part of production that was
6 made to the defendants a long time ago. Sample point 60 which I
7 guess is the one we're talking about, this one right here
8 (INDICATING).

9 MR. MILLER: I can tell you which ones we're talking
10 about. It's the addresses of the class representatives. Their
11 properties were tested December 13th and 14th, and we did not see
12 the test results until last night. And the test results, it looks
13 like it's about 23 samples, not 23 locations but 23 samples,
14 multiple samples per location, does not link the sample in the test
15 report to the address. So I have no idea what test results go with,
16 for example, the 4028 Hamlet address, the 721 West St. Bernard
17 Highway address, some these to the east, too, your Honor. I don't
18 know what data goes with that.

19 THE COURT: Let's use the other, the one that you had up
20 there.

21 MR. LAMBERT: Your Honor, it doesn't go out that far. And
22 I can -- I am not sure if I understand the objection though, your
23 Honor, because the lab results which were submitted, and I will put
24 them up on the ELMO, this is the sample data for point 60. If
25 you'll see right here, two second sample point, point 60, here is

1 the Alpha Lab data sheet, it shows that it was a soil sample and it
2 gives the particulars, and it was presented to the defendants some
3 time ago.

4 THE COURT: I thought you all had worked out these
5 problems?

6 MR. LAMBERT: I did, too.

7 MR. MILLER: I saw these demonstrative just a few minutes
8 ago, your Honor. And I'd assumed that we are not going to show a
9 demonstrative that had information based upon exhibits, evidence
10 that was not in evidence.

11 THE COURT: Let's figure out a different way of presenting
12 it.

13 MR. LAMBERT: All right. Excuse me, your Honor, I need to
14 take a second. Your Honor, I don't know of any other way to do this
15 except to identify the locations and the sample points.

16 THE COURT: I thought we introduced most of the exhibits.
17 There are no exhibits that you can use that have already been
18 introduced into evidence?

19 MR. MILLER: Mr. Lambert, I think it's on the map behind
20 you, the two maps behind you has the sample points on it, and I
21 think we have that scanned into the computer.

22 MR. LAMBERT: Well --

23 MR. MILLER: That's the one that has the sample points
24 that I know the addresses of. The one he just put up has additional
25 addresses.

1 THE WITNESS: Can I see that so that I can identify that
2 map?

3 MR. LAMBERT: Yes.

4 THE WITNESS: This is the same map that is linked by the
5 addresses, sample numbers, and GPS coordinates on my sampling field
6 notes that have been on that document web site for, oh, a couple of
7 weeks now. I believe we actually discussed this at my deposition.

8 MR. LAMBERT: We did.

9 THE COURT: Let's use that map.

10 MR. MILLER: We're fine with that, your Honor.

11 BY MR. LAMBERT:

12 Q. Okay. Now let's go back to the -- Mr. Kaltofen, let me ask you,
13 if you can, please --

14 MR. LAMBERT: And this is going to be awkward, your Honor,
15 because I am not -- let me ask.

16 BY MR. LAMBERT:

17 Q. Let me ask you, if you can, to identify the location that
18 represents sample No. 1, and let me just so you and I can
19 communicate, you can use this map. And I'll put the documents that
20 are related to it up on the ELMO.

21 A. That's fine. Starting with sample No. 1. --

22 THE COURT: Why don't you give me some background, who
23 made the samples, where were they made, how were they made, things
24 of that sort.

25 BY MR. LAMBERT:

1 Q. Beginning with 1I, which is if you'll point to it, and I will
2 give you a pointer.

3 A. Thank you. 1I is in this location. This is 2309 Benjamin
4 Street. We have a series of sediment surface soil and other samples
5 from this location. These were the set of samples that were
6 submitted for the, and pardon me if it's too many acronyms, from a
7 GC-FID, GC mass spec testing --

8 Q. Just so we go through those acronyms, GC is gas chromatograph,
9 GC-FID is?

10 A. Gas chromatography flame ionization detection. That tells you
11 what most people call the pattern, the fingerprint, the picture
12 that's essentially unique to the mixture of different chemicals that
13 you're seeing.

14 And the second one is GC mass spec, which stands for gas
15 chromatography mass spectrometry; and what GC mass spec does is it
16 goes beyond the first method GC-FID and it actually creates a
17 fragmentation pattern, an ion pattern that is essentially unique for
18 each different chemical. The first tells you relative amounts and
19 something about the chemical nature of a complex mixture. GC mass
20 spec goes a little further and gives you an identification for each
21 and every chemical that you might have in that mixture. So for
22 these samples we're doing both of these for each analysis.

23 THE COURT: Did you do the sampling yourself?

24 THE WITNESS: I did the sampling personally for I believe
25 just about every sample that we're going to discuss here. There is

1 a small number of locations that were sampled pretty much the same
2 time I was in Siberia on another job and unavailable.

3 So the first, I believe it's the first 11 samples or 11
4 sample locations were collected by someone else but analyzed by the
5 same laboratory that did all of the other work.

6 THE COURT: How did you target the areas?

7 THE WITNESS: When I was targeting the area the thing I
8 was looking for was is the sample going to answer the question how
9 far did Murphy crude oil go? So it was an attempt to try and
10 determine whether certain areas, certain general areas had, in fact,
11 been impacted by Murphy crude oil.

12 Since the crude oil analysis looks different by GC-FID and
13 GC mass spec I knew that I could use those two techniques to
14 distinguish between the different possible petroleum products that
15 might be in these locations.

16 BY MR. LAMBERT:

17 Q. Mr. Kaltofen, I think the court also wants to know how did you
18 pick it; in other words, did you use visual and then did you use
19 analytical methods after that?

20 A. I understand. In picking the locations, one, I wanted to get
21 the geographic dispersion so I would tell where the Murphy crude
22 impact essentially stopped predominating and where it still
23 predominated.

24 And also I wanted to collect a sample that was going to
25 actually retain the petroleum products, so I would tend to look at

1 things like sediments and soils and biological samples that even if
2 you don't see visible petroleum those are the kind of materials that
3 will actually retain it.

4 Also there are some surfaces that retain staining from the
5 petroleum. You can actually tell the difference from the feel for
6 the most part between petroleum stain and then just a watermark that
7 you see at a lot of different locations that isn't related to
8 petroleum. Visual you really can't tell the difference between the
9 different types of fuels and petroleum just on the stain, but I know
10 that I can collect that sample, take it to the lab and then tell the
11 difference. That's how I chose those surfaces.

12 **Q.** Mr. Kaltofen, explain to the court how you can tell the
13 difference between what's been referred to sometimes as a bathtub
14 ring that doesn't have petroleum in it and one that does?

15 **A.** That's part of the visual observation, it's not based on
16 chemical testing. The watermarks that you see usually leave behind
17 a lot of small biological materials, small pieces of grass, plants
18 and clays. Clays that are easily suspended in the top of the water
19 column. Those tend to be dry, powdery, dusty, they break apart,
20 they tend to be easy to remove from non-porous surfaces like poles,
21 wood, fences.

22 And then for the petroleum related stain it tends to be
23 more tenacious, it's harder to remove. Sometimes it's darker but
24 not always; sometimes it will have a drip pattern but only when it
25 was at a higher level. It also -- I was using laytex gloves and the

1 petroleum would tend to bind somewhat, adhere to the surface of the
2 laytex gloves. So as the watermark stain, you could put it on your
3 gloves and wipe it off easily; the petroleum stain would actually
4 tend to leave a dark brown smudge.

5 So those were some of the things I used to aid me in
6 making visual observations about where I was seeing fuel and
7 petroleum staining and where I was just seeing the watermarks.

8 BY MR. LAMBERT:

9 Q. Now, once you've determined that you have a petroleum product
10 then you have to go to the analysis or laboratory analysis to
11 separate some refined product, for example, from crude oil; is that
12 fair?

13 A. Well, the biggest thing that's happening is crude is different
14 in a very basic way from refined products. Crude oil is a very
15 complex mixture of lots of different hydrocarbons, chemical
16 compounds containing carbon and hydrogen. The refined oils by their
17 nature are a subset of the crude oils. The gas chromatography flame
18 ionization detection will actually divide your sets of compounds by
19 how many carbons they contain, things of that pretty quickly tend to
20 come up first, things that evaporate slowly come up last.

21 But when you look at crude oil with the GC-FID, you see a
22 wider spread of a larger set of different compounds, different
23 number of carbons and different weights of evaporation. Refined
24 products like lubricating oils, gasoline will have a different
25 carbon rate. Diesel fuel is just a subset of the crude oil, and you

1 will see that the ends of the chromatogram that are present for
2 crude are missing for diesel, lubricating oils.

3 In different weights you'll see the same thing, it's a
4 narrow range. Gasoline is much more volatile, gasoline is actually
5 a synthetic product where you change the crude oil. That would be
6 much more represented in the beginning of your chromatogram rather
7 than spread out like crudes.

8 So this is how I used GC-FID to distinguish between all of
9 the different types of petroleum. That's not a field test.

10 MR. LAMBERT: May I approach, your Honor?

11 THE COURT: Yes.

12 BY MR. LAMBERT:

13 Q. Mr. Kaltofen, I would like for you, if you would, please, to use
14 this easel and you can come on down here, and I would like for you
15 to draw a graph that shows the gas chromatograph and show the court,
16 if you would, please, a representation rough, of course, of a crude
17 scale. Or if you would prefer, here is your sample data --

18 THE WITNESS: It's just as easy to do it from memory.
19 This is relatively generic and I will keep it tuned to what we're
20 actually doing.

21 THE COURT: All right.

22 THE WITNESS: The way it's divided is it's done over time,
23 we call this retention time so we will start here. You inject your
24 sample, which is your petroleum dissolved in a solvent. It goes
25 into a column. Gas moves through, pushing it through the column and

1 the column holds on to the petroleum products but it lets go of the
2 more volatile ones first, they come out of the column first.

3 And as they come out we have a detector, a flame
4 ionization detector where you use a flame, mass spec detector, mass
5 spectral instrument. As they come out of the column and the
6 detector sees them, they start to make a series of peaks like in an
7 EKG. The higher the peak generally the more material you have
8 present.

9 So if I start to do, say I inject what's called MTBE, if I
10 injected pure MTBE it would look something like this. And I am
11 ignoring a few things just to make this easy. Pure MTBE you see one
12 peak (WITNESS DRAWS.).

13 If you had a mixture of MTBE and Decane, when you see a
14 chromatogram a second peak would appear. The mass spec will
15 actually hit these with an electrical potential essentially and
16 cause the chemicals to fragment and then we see the fragmentation
17 patterns so we know what it is. But for our work two chemicals
18 first and the second they come out.

19 When we do crude, because we have a very complex mixture,
20 something a little different starts to happen. A little simplified.
21 Wider pattern, a bunch of unresolved stuff that's underneath here
22 and peaks that correspond to another carbon, another carbon, C₄, C₅,
23 C₆, C₇ and so on. If we're looking at crude oil we get the spread.
24 If we're looking at diesel, you'll just see that range. If you're
25 looking at gasoline, most of it will come off here. So this is a

1 technique we use to separate them out. (WITNESS DRAWS.)

2 If you're looking at two different chromatograms, keeping
3 all of this in mind, and I'm sorry this is getting busy, if someone
4 collects an unknown sample, I have no idea where it came from, it's
5 a petroleum compound, we run it through the GC-FID analysis. If it
6 comes back and looks like this, we will start down here, what do you
7 think that is (WITNESS DRAWS)? Right in the gasoline range. Much
8 more likely than not that we're looking at gasoline and not crude.
9 And that's how we do it.

10 THE COURT: How do you know it was Murphy's crude?

11 THE WITNESS: When you look at the crude oil with a mass
12 spec we're getting a lot more data. Not just the pattern that you
13 can compare to other crudes but you get concentrations of individual
14 compounds, you start to see certain marker compounds appearing in
15 both your samples and in the crude samples. So that's how you would
16 distinguish crudes.

17 But we also have the benefit of being out in the field,
18 and there are normally far fewer sources of crude in a neighborhood
19 than all of the other different types of fuels. So when you see the
20 wider crude pattern, people don't keep crude oil in their cars, they
21 don't keep it in their homes, so the physical setting gives you a
22 lot of information about where it came from. And that's also where
23 you look at things like preferential pathways that material is going
24 to move, it's going to follow the water as the defendants said.
25 That wind, water, and so on, topography will start to move the crude

1 to certain areas, we're going to be able to see that.

2 There are a few other issues like weathering, certain
3 things will start to evaporate, those things happen. Together they
4 help you identify when and possibly where the material came from.

5 We have markers that are the chemical constituents,
6 location, physical alteration, preferential pathways, all of those
7 together give you the area where you find a specific crude source.

8 Are we done up here?

9 MR. LAMBERT: Just for the record I am going mark the
10 exhibit --

11 THE COURT: And if you could, just so we understand. The
12 horizontal scale going across the bottom where you've drawn these
13 peaks, that represents different temperatures at which these
14 components of crude oil burn?

15 THE WITNESS: Well, we use both time and temperature with
16 the gas chromatograph because there is a huge difference between how
17 fast some of these come out, they will not wait longer, but they
18 will keep raising the temperature so that it will drive off even the
19 less evaporating compounds. The heavier compounds will still come
20 off because the temperature keeps going up.

21 BY MR. LAMBER:

22 Q. Now, in the process of your investigation, Mr. Kaltofen, did you
23 find that the crude oil in tank 250-2 based on the information that
24 you reviewed contained more than one, let's say, type of crude,
25 Arabian medium, Nigerian light, some Russian component and so on?

1 A. There are a couple of different patterns that I see from GC-FID
2 from on-site samples that are directly adjacent to the tank. And
3 these two patterns come from different weathering, rainfall and
4 evaporation, and to a limited extent biodegradation will start to
5 change the pattern from the original crude.

6 So, yes, I see a couple of different patterns, and those
7 patterns reappear when looking at samples that are in the area that
8 I bounded on the map. In terms of determining the individual
9 sources of crude oils and what field they're from and what country
10 they're from, that's what you do with the GC-MS data, but my basis
11 for determining that there are different crudes present while it
12 could be done from the GC mass spec, I haven't done it that way. I
13 understand from other testimony that the crudes were a mixture, so
14 obviously the different marker compounds that are present are going
15 to be mixed in there as well.

16 MR. LAMBERT: And, your Honor, we will just ask that that
17 be marked as Kaltofen 107.

18 THE COURT: Anything with him, just put that as an A.

19 MR. LAMBERT: That would be good.

20 THE COURT: What is the number?

21 MR. LAMBERT: Kaltofen 107. 107, Judge.

22 THE COURT: Okay. Let it be admitted.

23 BY MR. LAMBERT:

24 Q. Do you have in your data an example of your source samples?

25 A. Yes, I do.

1 Q. Let me ask you --

2 A. They're designated 69 to 76.

3 Q. Just take one out.

4 A. I will pull one out. This is the first one 68(b) which is from
5 the tank farm.

6 Q. Now, Mr. Kaltofen, does this show a distribution consistent with
7 your explanation of a wide spectrum for crude oil?

8 A. Yes, it does.

9 THE COURT: What is the vertical axis on this graph?

10 THE WITNESS: The vertical axis is a response on the
11 detector. The flame ionization detector is actually creating an
12 electric current that is proportional to the number of petroleum
13 molecules that are crossing at that exact time. The bottom axis is
14 the time, the top axis is the number of units in the detector.

15 BY MR. LAMBERT:

16 Q. Is this what sometimes is referred to as a light end, the
17 gasoline range?

18 A. That area is the light ends, that's correct, that's where you
19 will find the more volatile elements, more volatile compounds like
20 gasoline.

21 Q. And that's in weathering, this is what you would expect to
22 change?

23 A. Those are some of the things you're going to lose first, that's
24 correct.

25 Q. And then over here are the heavier ends (INDICATING)?

1 A. That's correct. That's the stuff that evaporates the least.

2 Q. And what is this little hump right here (INDICATING)?

3 A. That little hump that you see in the middle is essentially an
4 unresolved complex mixture of hydrocarbons, meaning it's a group of
5 hydrocarbons that are coming off at such similar times that they are
6 not resolved, they are not divided into separate individual
7 compounds.

8 Q. Let me ask you to take a look at this sample, which is -- make
9 sure I got the right one.

10 A. That looks like 1I to me.

11 Q. Yeah, it is. It is, in fact, 1I and that's from 2309 Benjamin?

12 A. That's correct.

13 Q. And this is its analysis?

14 A. That's correct.

15 Q. And explain to the court, if you would, please, how this
16 analysis leads -- first of all, is it your opinion that this
17 represents an analysis of Murphy crude?

18 A. Yes, it is.

19 Q. And would you explain to the court how you reached that
20 conclusion?

21 A. We are essentially spanning the same range of carbon compounds
22 at this location. This location is also directly adjacent to the
23 canal, the main east-west canal that borders St. Bernard.

24 THE COURT: We're talking about the Industrial Canal at
25 that point, is that what he's talking about?

1 MR. LAMBERT: He's talking about the Arpent, your Honor,
2 the 40 Arpent.

3 BY MR. LAMBERT:

4 Q. And where is that location, the Benjamin location?

5 A. That location is right here (INDICATING).

6 MR. LAMBERT: This, your Honor, let me ask -- just one
7 second.

8 BY MR. LAMBERT:

9 Q. Mr. Kaltofen, can you identify the location of this particular
10 No. 2, 60S?

11 A. 60S is here (INDICATING).

12 Q. On that map, which we're going to mark --

13 MR. MILLER: I'm sorry, is there an exhibit number for the
14 house picture?

15 MR. LAMBERT: No, this one right here (INDICATING).

16 THE COURT: Do we have that map on CD or anything?

17 MR. LAMBERT: This particular map, yes, your Honor, it is
18 on a CD.

19 THE COURT: Would it be easier to just put it up and let
20 him mark the addresses on it?

21 MR. LAMBERT: I am afraid to try but I will try.

22 THE COURT: What's the number?

23 MR. LAMBERT: That wasn't my job, your Honor, I have to
24 get that.

25 THE COURT: We have to speed it up a little bit, folks.

1 MR. LAMBERT: Yes, your Honor.

2 THE WITNESS: Your Honor, am I allowed to be of
3 assistance?

4 THE COURT: Can we pull this up?

5 THE WITNESS: I originally entitled that electronic
6 version of this map as plot of sample locations, it's a PDF.

7 MR. LAMBERT: Your Honor, if I could suggest. This
8 particular book with the map that I tried to use in the first place
9 is nothing more than that map extremely simplified, and each tab has
10 the exact things that I am now doing on the ELMO in a paper form.

11 THE COURT: The issue really is I guess one of leading,
12 but we're taking too long to get to the same point. He is going to
13 draw the addresses on it, we can do it that way or we can do it the
14 easier way of moving them.

15 So I understand your objection of leading, it's the first
16 time you've seen it, but to me it seems to be the easiest way of
17 doing. We don't have a jury, I understand the situation, I will
18 overrule the objection.

19 MR. MILLER: I will point out though, your Honor, that
20 there are certain plots on that map that I have never seen test
21 results for as it relates to some addresses, so I ask the witness
22 not be allowed to testify to those particular points on the map.
23 I'll identify those as they come up for your Honor's assistance.

24 THE COURT: I'll consider that or let you cross-examine
25 him on that. Let's move, please.

1 MR. LAMBERT: Your Honor --

2 THE DEPUTY CLERK: Does it have a number, Judge?

3 MR. LAMBERT: We're going to make that Kaltofen 3.

4 THE COURT: Let's use it and I'll decide whether or not
5 everything comes in or whether we extract some of it.

6 MR. MILLER: Hold on, your Honor, we just electronically
7 got up that map so our problem may be solved. There it is.

8 BY MR. LAMBERT:

9 Q. Can you give me the address, please, of this location which is
10 No. 2 on the Kaltofen 3 simplified version map, and it's No. 3
11 tab -- I'm sorry, it's tab 2 in the book, which is 60.

12 THE COURT: He is talking about 1619 --

13 THE WITNESS: I understand. Do you want to go through
14 these one at a time? The judge has his copy, I have mine.

15 MR. LAMBERT: Yes. And if you would put the address first
16 and refer to it by the tab number.

17 THE WITNESS: Yes, I can do that. And do you want to go
18 through these fairly quickly one at a time?

19 THE COURT: Yes, I would like you to do that.

20 THE WITNESS: All right. So what we're going to do
21 generally is if you look at the map with the heavy blue line, we're
22 starting at 1I, which we have already located, and we are generally
23 going counterclockwise around that perimeter. We are looking at a
24 series of samples where we had petroleum hydrocarbon detections and
25 where we were also matching the GC-FID pattern to on-site materials

1 that we had at the Murphy Oil facility.

2 So I will go through the different items from the boundary
3 area first and compare them to some of the on-site Murphy samples.

4 So Tab 2 is 1619 Center Street. The first page in that
5 tab shows a series of analyses, the second page is the actual
6 chromatogram where you see the distribution of different petroleum
7 hydrocarbons that are present. Again, we are looking at a fairly
8 wide range, there is a lot of information here; but what we're also
9 looking for is the location of these unresolved complex mixtures,
10 these broader peaks, in addition to the large number of different
11 size and weight and evaporation hydrocarbons that are going to be
12 present.

13 BY MR. LAMBERT:

14 Q. Mr. Kaltofen, let me ask you to respond to a couple of questions
15 about number -- we're on No. 2?

16 A. Yes.

17 Q. And be brief. Does this represent a broad spectrum which would
18 equate to a crude oil?

19 A. This is what we would be expecting from a crude product, yes,
20 sir.

21 Q. And in the 45, 50 range, do you see a little hump?

22 A. Yes, I do.

23 Q. Is that similar to the hump that you observed in the samples of
24 crude right near the tank?

25 A. Again, that's a pattern that we see over and over again from our

1 samples that are within the boundary.

2 Q. And the address?

3 A. That address is 1619 Center Street.

4 Q. Let's go to No. 3.

5 A. If I look at No. 3 --

6 Q. The address please.

7 A. 721 West St. Bernard and Trio.

8 Q. And would you point to it, please, on the map behind you
9 Kaltofen No. 107.

10 A. 107, this screen isn't really big enough. It's right about in
11 this area here (INDICATING).

12 Q. And if you refer to the chromatograph in that section.

13 A. I am looking at chromatograph in that section. This area is one
14 of the samples I drew outside of the boundary. Again, because there
15 was an issue of whether or not this is the predominant source of
16 contamination and I didn't have the scientific data to put that area
17 within my boundary.

18 Q. But with regard to this particular chromatogram, does it
19 represent a crude oil?

20 A. It's similar in pattern but it was, for me this was an equivocal
21 location.

22 Q. Is that outside of the blue line that you've drawn?

23 A. I drew that outside of my blue line. In fact, that actually
24 visits the issue of relying on EPA data as well. EPA had a series
25 of samples that were very low in overall petroleum contamination in

1 areas near there.

2 Q. Let's go to tab 4.

3 A. Tab 4 is my sample No. 5, that's 221 West Judge Perez. That is
4 this area here (INDICATING).

5 Q. Would you point to it on 107 --

6 MR. MILLER: Your Honor, that's one of the scientific
7 results that I've never seen before until last night. You will note
8 that the printout at Tab 4 has a time on it of January 5th, 2006.
9 And while I was provided this particular sheet of paper last night,
10 I was never given the address that that sheet of paper goes to. And
11 therein lies my problem.

12 And I would also add that this document that's here at Tab
13 4 was contained within Plaintiffs' Exhibit 12, which has not been
14 admitted into evidence and was specifically withdrawn from being
15 admitted into evidence.

16 BY MR. LAMBERT:

17 Q. Did you keep field notes?

18 A. Yes, I did.

19 Q. And were those field notes presented to the defendants?

20 A. Yes, they were.

21 Q. And did those field notes have on them the sample numbers?

22 A. Sample numbers and addresses and GPS coordinates for where these
23 samples were collected.

24 Q. As well as the circumstances under which the samples were taken?

25 A. That's correct.

1 MR. LAMBERT: Your Honor --

2 THE COURT: I've overruled the objection, let's move on.

3 BY MR. LAMBERT:

4 Q. Go ahead. And if you would, please, refer to, let's just use
5 the graph, does the graph at that location -- and again, the
6 address?

7 A. The address at that location is 221 West Judge Perez. Once
8 again, we are looking at the wider pattern of a crude oil.

9 I am going to move on to No. 5. 5 is 2709 Dauterive
10 Drive, and that is --

11 MR. MILLER: Your Honor, again this is another one we have
12 never seen until last night, so I would like to make my objection on
13 the record.

14 THE COURT: All right. I will overrule the objection.

15 THE WITNESS: That's at this location --

16 MR. LAMBERT: Just so the record is clear, your Honor,
17 they've had these for a long time.

18 THE COURT: I understand you gave them the notes with the
19 addresses and that's in the record.

20 MR. LAMBERT: Yes.

21 MR. MILLER: I have never seen the printout, that's my
22 problem.

23 THE WITNESS: And just for speed, I'm going to say it's
24 the same discussion as with the previous samples.

25 BY MR. LAMBERT:

1 Q. If you take, No. 5 now, just look at gas chromatograph if you
2 would, please.

3 A. Yes.

4 Q. Does the hump appear?

5 A. We have the same hump, but here an interesting thing happened.
6 We had been using Alpha Laboratories for our work up until the point
7 we finished collecting samples from the Murphy Oil tank farm. We
8 were actually required by Alpha Laboratories --

9 Q. Let me ask you a series of questions on this, if you would,
10 please. This is pertinent, your Honor. Alpha Laboratories, that's
11 Alpha Woods Hole Laboratories?

12 A. Alpha Woods Hole or Alpha Laboratories, they're both the same
13 organization.

14 Q. And that was the laboratory that you initially used to analyze
15 the samples; is that correct?

16 A. That's correct.

17 Q. And would you tell the court, very briefly, what transpired with
18 regard to the Alpha Labs analysis of samples for the plaintiffs?

19 A. Alpha Laboratories informed me that at the request of one Scott
20 Stout that they would no longer accept my samples or perform the
21 analyses for this project and that I would have to find another
22 laboratory to do the work I wanted to do.

23 Q. What reason did they give you?

24 A. Apparently Scott Stout had informed them that --

25 Q. The court doesn't know who Scott Stout is at this point.

1 MR. MILLER: Your Honor, I am going to object, this is all
2 hearsay.

3 THE COURT: Sustained.

4 THE WITNESS: Let me say then that --

5 MR. LAMBERT: No, that's it.

6 THE WITNESS: Excuse me.

7 MR. LAMBERT: Your Honor, just so the record is clear, we
8 were using the same laboratory as the defendants --

9 MR. MILLER: Objection, your Honor, he is testifying.

10 THE COURT: Sustained. I understand the issues.

11 MR. LAMBERT: The reason I am pointing it out is because
12 the scales are different and the graphs are going to look a little
13 different, but it's the same basic stuff.

14 THE COURT: Just ask him the question.

15 BY MR. LAMBERT:

16 Q. Does the graph represent crude oil?

17 A. It does.

18 Q. And in your opinion does that crude oil fingerprint to Murphy
19 crude oil?

20 A. Yes, it does.

21 Q. And let's go onto the next tab, No. 6.

22 A. Next tab is No. 6.

23 Q. Address please.

24 A. 2804 Volpe Drive. And that location is right about here
25 (INDICATING). Again the same answer, we see the same pattern on the

1 GC-FID chromatogram, it's also accompanied by a photograph of the
2 location where the sample was collected.

3 Q. If you would, please, go on to No. 7.

4 A. Tab 7 is 2309 Ventura Drive.

5 Q. Does the --

6 A. That is here (INDICATING).

7 Q. Does that gas chromatograph equate in your opinion to Murphy
8 crude oil?

9 A. Once again we see the same pattern, yes, sir.

10 Q. And the next address, please, No. 8?

11 A. The next sample No. 8 is --

12 MR. MILLER: Same objection, your Honor, we only got that
13 last night with no address reference.

14 THE COURT: Overrule the objection.

15 THE WITNESS: 2101 East Judge Perez. And understanding
16 now we are using a different machine, again we have that pattern
17 match.

18 MR. LAMBERT: Your Honor, you recognize the different
19 scales?

20 THE COURT: I do.

21 BY MR. LAMBERT:

22 Q. No. 9, please, the address?

23 A. No. 9 is 2029 Judy Drive.

24 MR. MILLER: I renew my objection on that one, too, same
25 basis.

1 THE COURT: Same ruling.

2 THE WITNESS: This is the location, again we have the same
3 GC-FID. This is one of those samples, your Honor, that I mentioned
4 I didn't personally collect.

5 MR. LAMBERT: Your Honor, with regard to some of the
6 timing of receiving some of these materials, that's the reason why I
7 tried to put in the evidence with regard to why we switched
8 laboratories because that caused delays and we had no problem with
9 using the same lab, it's not our fault.

10 THE COURT: I don't have any problem with your asking him
11 whether or not the same laboratory was used and whether or not the
12 graphs are the same or whether or not the results are different or
13 change or affected in any way the time.

14 MR. LAMBERT: I understand. Let me do that. I
15 understand.

16 BY MR. LAMBERT:

17 Q. With regard to the laboratory Alpha Labs, did you have any
18 objection to that laboratory being used to do the analysis of
19 plaintiffs' samples knowing that they were used by the defendants?

20 A. No, sir.

21 Q. And did the switching of laboratories cause a delay in
22 connection with receipt of results?

23 A. Yes, it did.

24 Q. And did the switching of results result in a different
25 appearance of the graphing which we can see as we look through these

1 samples?

2 A. It did.

3 Q. But is it fair to say that both of those laboratories results
4 are equivalent except for the way they're presented?

5 A. They're comparable because we sent samples from the Murphy Oil
6 tank farm to be analyzed a second time with the different machine,
7 still a gas chromatograph - mass spec but simply not the same
8 instrument that had been physically in Massachusetts.

9 Q. Okay. But you're satisfied with the new laboratory's results as
10 being capable of providing you with the data necessary for you to
11 fingerprint this to Murphy?

12 A. They will do the same thing for me, that's correct.

13 Q. Now, where were we, I think we were on No. 9?

14 A. I believe we're at No. 10.

15 Q. That's correct. No. 10, address please.

16 A. Address No. 10 is 2700 Debouchel Boulevard.

17 Q. And on the map?

18 A. That is here in this area (INDICATING).

19 MR. LAMBERT: Your Honor, the map. Show him again,
20 please.

21 THE WITNESS: Yes (INDICATING). And again we have the
22 same GC-FID type of information and again we meet the same pattern
23 requirements. We also have a photograph.

24 BY MR. LAMBERT:

25 Q. No. 11, please.

1 A. Sample No. 11 is 3313 Ventura, that's here (INDICATING).

2 MR. MILLER: Same objection, your Honor.

3 THE COURT: Same ruling.

4 THE WITNESS: And again, same discussion about the
5 chromatogram that we have from previous samples.

6 BY MR. LAMBERT:

7 Q. In your opinion is the oil that you sampled at that location
8 Murphy crude oil?

9 A. Yes, it is.

10 Q. No. 12, what address, please?

11 A. No. 12 is and there is a page key that goes along with this, but
12 this is 3817 Despaux, Despaux Drive. And we have similar discussion
13 that we had with some of our other samples.

14 Q. Does the gas chromatograph represent crude oil?

15 A. Yes, it does.

16 Q. And does it also represent crude oil in your opinion from
17 Murphy?

18 A. It matches the same pattern to the known Murphy samples, yes,
19 sir.

20 Q. If this, for example, and let me just ask you this so we can get
21 it clear -- we can't do that. If this sample were a refined oil
22 like oil from a car.

23 A. Yes.

24 Q. What would it look like?

25 A. Well, I'll describe it. I can provide an example.

1 Q. Just this chart, what would the chart look like?

2 A. What this chart would look like is you would have a much more
3 narrowly restricted series of detections of peaks. And also the
4 broader unresolved peak that we've talked about would appear at a
5 different retention time. For lighter mixtures, it would be a lower
6 boiling more volatile mixture, it would appear sooner; for heavier
7 mixtures, it'll appear later, it boils at a higher temperature. And
8 it's relatively distinct, you can really see the difference fairly
9 easily.

10 MR. LAMBERT: Approach, your Honor?

11 THE COURT: Yes.

12 BY MR. LAMBERT:

13 Q. Take this page if you would, please, and just mark, well, the
14 marker is too broad, just a pen and draw for me what you would
15 expect to see if this were oil from the crank case of a car.

16 A. (WITNESS COMPLIES.)

17 THE COURT: I see it.

18 MR. LAMBERT: And I am going to mark this for
19 identification as Kaltofen 3, we have 1 -- or is it 2?

20 THE DEPUTY CLERK: We have plaintiff exhibits and 1 is his
21 CV, three is the book you haven't decided on yet.

22 MR. LAMBERT: I think we marked this scribble also as
23 Plaintiff 107 and this is four.

24 THE DEPUTY CLERK: Excuse me.

25 MR. LAMBERT: I think this is 3.

1 THE DEPUTY CLERK: No, you marked it as 107.

2 MR. LAMBERT: I think this is 107, this map (INDICATING).

3 THE COURT: That's 107.

4 MR. LAMBERT: And then this scribble thing, we can mark it
5 107(A) if you would like.

6 THE DEPUTY CLERK: How do you have it marked?

7 MR. LAMBERT: Three.

8 THE COURT: Let's just put 107(A).

9 MR. LAMBERT: Okay. Let's do that. And then your next
10 number would be two?

11 THE DEPUTY CLERK: Is it 107(B)?

12 MR. LAMBERT: I guess so, that would be an easier way to
13 do it, 107(B).

14 THE DEPUTY CLERK: Is that admitted?

15 THE COURT: Yes, let it be admitted.

16 BY MR. LAMBERT:

17 Q. Now, there is a photograph in connection with that particular
18 address on Despaux that shows a mark on the side of a structure. Do
19 you see that?

20 A. Yes, sir.

21 Q. And do you believe that mark to have been caused by crude?

22 A. That mark was readily determined to be petroleum and not a
23 watermark. And when we looked at our sample analysis it came back
24 as Murphy crude.

25 Q. No. 13. Does that pattern represent to you Murphy crude oil?

1 A. The pattern on 13, yes.

2 Q. And is it in your opinion representative of Murphy crude oil
3 being at that address? And I'm sorry, I forgot to ask you the
4 address.

5 A. The address was 3921 Despaux Drive. And once again --

6 Q. This is 13?

7 A. Yes, it does.

8 Q. And there is a photograph of a bathtub in that particular
9 address. What is that, if you recall?

10 A. That's an interior sample from that location.

11 Q. And was the sample taken from this location?

12 A. On 24 I believe is an interior sample.

13 Q. Let's go to Tab 14.

14 A. Fourteen is 3912 Ventura Drive. We're still in the north side
15 of our boundary area.

16 Q. Let me ask you to point that out on 107 if you would, please.

17 A. That is this location here (INDICATING).

18 Q. Does that gas chromatograph represent in your opinion Murphy
19 crude oil?

20 A. Yes, it does.

21 Q. Again, you have that hump in that 45, 50 area?

22 A. That's correct.

23 Q. Was there two samples taken at that location?

24 A. I repeated a sample that had been collected by another person at
25 that location, so I have the same location, two separate samples,

1 one I personally collected, one had been collected by another
2 investigator.

3 Q. And did that sample also turn out to be Murphy crude?

4 A. We had similar results, yes, sir.

5 Q. Now, there is a difference in the way these two look. Can you
6 describe for the court, looks like there's a scale difference on the
7 vertical scale; is that correct?

8 A. Yes, there is.

9 Q. And would you explain to the court those differences?

10 A. Well, the computer as it gets in the data will automatically
11 scale to the highest concentration, highest response factor
12 compounds. So we'll get a little change in that Y axis, that
13 left-hand scale for each sample. In general, obviously the peaks
14 will be lower, the scale numbers will be lower as concentrations go
15 down. What it allows to do by scaling is we can take very different
16 concentrations of the same material and they should look fairly
17 similar.

18 Q. Now, when you get a negative sample what happens? In other
19 words, and let's take two examples, let's say there's no oil at all.
20 Is that below detection limits?

21 A. We would say that was below the detection limits for the oil
22 product. You will see that initial solvent peak still, you will see
23 the scale numbers drop down and all that you're really seeing is
24 essentially a flat line. You will also look beyond the chromatogram
25 and look at the tabulated results from the detector, the actual

1 digital information that the computer gets, you will see those
2 numbers drop as well down below the detection limits.

3 Q. Now, Mr. Kaltofen, when you sample in a location, is it possible
4 to sample a contaminated site and not obtain a sample that has
5 contamination in it?

6 A. You could find a negative sample at most sites for this type of
7 analysis, yes, sir.

8 Q. So, in other words, if we went into a room that had
9 contamination on the floor or whatever, you could take a sample from
10 dust or whatever in the area that was unaffected and get a negative
11 result?

12 A. Yes, you could because you know something about the chemistry of
13 the material you're looking for. You know that it was waterborne,
14 you know how high essentially the water reached, so, yeah, you could
15 find a negative sample in a location that, in fact, was
16 contaminated.

17 Q. If you went into a house that was not contaminated with Murphy
18 crude, would it be possible for you to obtain a sample that would
19 equate to Murphy crude?

20 A. Well, that's a horse of a different color. You couldn't
21 manufacture the crude on the site. There isn't a household item
22 that normally contains crude oil.

23 Q. So in other words, if you got a positive sample it's there; but
24 if you get a negative sample, it doesn't necessarily mean it's not
25 there?

1 A. That's correct.

2 Q. Let's go to tab No. 15.

3 A. Tab No. 15 is 35 --

4 Q. Address.

5 A. -- 25 Palmisano Boulevard.

6 MR. MILLER: Objection, your Honor, that's one we just got
7 last night.

8 THE COURT: Same. And I base my ruling on 1006, these are
9 summaries. Counsel has had an opportunity to review the basic
10 material prior to this and had an opportunity to do so also.

11 Let's try to pick up the pace, please, because we have 44
12 of these, there's got to be an easier way of doing it than one at a
13 time.

14 MR. LAMBERT: Tell you what, your Honor, let me do it this
15 way then.

16 BY MR. LAMBERT:

17 Q. Is it fair to say, Mr. Kaltofen, that these various tabs
18 represent addresses which --

19 MR. LAMBERT: Your Honor, 107(c).

20 THE COURT: Let's just have him identify the addresses.

21 MR. LAMBERT: Yeah, let's do that.

22 BY MR. LAMBERT:

23 Q. Let's identify the address of these tabs.

24 A. The remaining tabs that are on the boundary are the 800 Laplace
25 Street address --

1 Q. Let's do the tab number.

2 A. Tab 16. Tab 17, 315 West Genie. And those are the tabs that
3 correspond to the boundary samples. After that there are two sets
4 of additional data, the first being the samples, other samples of
5 contamination that corresponds to Murphy crude. That runs up until,
6 through tab 35.

7 So after the first 17 tabs, go 18 through tab 35, these
8 are other positive Murphy crude samples that are taken throughout
9 this area.

10 Q. But not necessarily on the perimeter?

11 A. Not necessarily on the perimeter and a couple of them are
12 outside the boundary that I've drawn. But I don't have the data yet
13 to show or there might not be the data to show that these
14 predominate in those areas.

15 Q. Let's do it this way. Each one of those have a sample code?

16 A. Correct.

17 Q. And those sample codes relate to the flags on Exhibit 107?

18 A. They relate to the flags on Exhibit -- is that 107? Yes, they
19 do.

20 MR. LAMBERT: So, your Honor, these flags have a number
21 and they relate to the tabs in the book after No. 18; is that
22 correct?

23 MR. MILLER: Let me just make my objection to that
24 process, because what's in the book includes more data and more
25 graphs than is depicted on Exhibit 107. And the objection goes to

1 the data that's in the book that we just received last night.

2 As for the data we received back in November and December
3 that's on Exhibit 107, we have no objection.

4 MR. LAMBERT: I think that's incorrect, but, your Honor, I
5 believe they are on that map.

6 THE COURT: All right. I'll overrule the objection.

7 BY MR. LAMBERT:

8 Q. And with regard to No. 18 through the last number which is,
9 what --

10 A. The last number in the first of the two groups of data that
11 follow those boundary samples.

12 Q. The last one is 44?

13 A. Well, the Tabs 36 through 44 are samples that were collected and
14 analyzed on the Murphy property and also a small number of
15 additional samples from some of the class representatives.

16 Q. And so what relates to the flags on the map are from 18 through
17 36, 35?

18 A. That's correct --

19 Q. Wait, 35 or 36?

20 A. Through 35.

21 Q. Through 35. And 36?

22 A. Through 44 --

23 Q. Through 44, wait, one at a time. Are on Murphy's property,
24 correct?

25 A. Some of them are on Murphy's property. Once you're within those

1 tabs, the ones that are numbered -- actually, why don't I go through
2 these tab by tab because I can see that there's Murphy on-site and
3 off-site samples.

4 Q. All right, let's do that.

5 A. Tab 36 is a Murphy on-site sample, these samples are the basis
6 of our comparison to the other sites. Tab 37 is a Murphy on-site
7 sample. Tab 38 is an off-site sample. Tab 39 --

8 Q. Do you know where this off-site sample is located?

9 A. For tab 38? Tab 38 is sample No. 83S and it's marked on Exhibit
10 107.

11 Q. It's not on the perimeter, but it's in the --

12 A. It's another sample from off site.

13 THE COURT: What was the purpose of all of those? Why do
14 you take those samples if they're not in the perimeter?

15 THE WITNESS: Well, of course, when I began this work I
16 wouldn't know where the perimeter actually was, so that's one
17 reason. Another is some of these are class representatives for
18 which we collected data during the process of doing the discovery
19 where the perimeter was, and of course the Murphy on-site samples
20 form the basis of comparison for the off-site samples.

21 BY MR. LAMBERT:

22 Q. So the ones that are off or out of the blue area that you've
23 outlined were representative of Murphy crude but not predominant
24 Murphy crude?

25 A. When I drew the boundary the samples were showing Murphy crude

1 oil and also fuels and refined products that were not Murphy crude.
2 So when I drew these boundaries I was attempting to include only
3 areas where Murphy crude was the predominant petroleum contaminant.
4 So I excluded those areas even though I have some positive numbers
5 outside of my boundaries.

6 I've also seen -- well, we've looked at the photographs in
7 some detail widespread contamination outside of those boundaries,
8 but nevertheless I have not developed a sufficient number of
9 positive Murphy Oil hits to show me that it's contiguous. So we
10 just did tab 40.

11 Q. Yep.

12 A. Tab 41 is also an off-site sample. Tab 42 is an off --

13 Q. Is that, does that appear on Exhibit 107?

14 A. Yes, it does. Tab 42 is an off-site sample which appears on
15 Exhibit 107. Tab 43 is an on-site Murphy sample, which also appears
16 on Exhibit 107. As is the last one, Tab 44, it's an off-site
17 sample, but it appears on Exhibit 107.

18 Q. Did I hear you correctly 43 is on site?

19 A. Forty-three, Tab 43 is an on-site sample.

20 Q. On site, okay.

21 A. It's actually on the Murphy property at the tank farm, it's my
22 memory that this is directly adjacent to the tank which leaked.

23 Q. And then 44 is again an off-site sample?

24 A. This is an on-site Murphy Oil sample but it's not on the tank
25 farm, it's on Murphy property on Judge Perez Drive.

1 THE COURT: Anything further on direct?

2 MR. LAMBERT: Just a little bit.

3 BY MR. LAMBERT:

4 Q. Now, Mr. Kaltofen, based on your sampling, you have observed the
5 map which shows the blue periphery of the proposed area. Is it your
6 opinion that that area represents an area that's contaminated with
7 Murphy crude oil as the predominant contaminant?

8 A. Yes, it is.

9 MR. LAMBERT: I don't have any further questions, your
10 Honor.

11 THE COURT: We are going to have to take a break, I have
12 two other matters to deal with. We will be back at one o'clock.
13 The court will stand in recess.

14 THE DEPUTY CLERK: Everyone rise.

15 (WHEREUPON, A LUNCH RECESS WAS TAKEN.)

16

17 P R O C E E D I N G S

18 (AFTERNOON SESSION)

19

20 (BACK ON THE RECORD.)

21 THE COURT: You're still under oath, sir.
22 Cross-examination. Anything further?

23 MR. BECNEL: Judge, I have one of my class
24 representatives, he is a warden of our prison and he has to go back.

25 THE COURT: Sure, you can leave.

1 MR. LAMBERT: Your Honor, housekeeping. I'd like to
2 clarify that we are putting in, we're offering 107. I am not sure
3 if your Honor ruled on that yet.

4 THE COURT: I'll admit 107.

5 MR. LAMBERT: And the other thing, your Honor, is the book
6 which you have a copy of, we're going to mark that, make sure it's
7 clearly marked and referenced as 107(c).

8 THE COURT: What's your position on 107(c)?

9 MR. MILLER: Your Honor, to the extent that that book
10 contains material that was just released to us last night without
11 reference to an address, we object to that material in that book.

12 THE COURT: As I mentioned before, the reason I am
13 allowing it is not only to move the matter along, but more
14 importantly under a 1006 it's a summary of the material that has
15 been supplied and made available to opposing counsel sometime prior
16 to this incident. So I understand his objection and overrule the
17 objection and will be admitted.

18 MR. LAMBERT: Your Honor, one more matter. This morning
19 before we started our examination it was the admission of evidence,
20 one of the items which was withdrawn was Exhibit 12. 12 contains
21 materials which are included in the sampling which appears on 107.
22 The addresses which have been referenced appear also in the field
23 notes that -- in the field notes there's the sample number and the
24 address and the circumstances under which it was taken in time and
25 so on, and those are all part of the exhibits and part of the

1 records.

2 So what we do at this time is withdraw our previous --
3 let's see how we're going to do that. We want to offer 12, we want
4 to include 12. And we checked during lunch to make sure that each
5 and every sample was accompanied by an appropriate field note and
6 we've checked each one of them, and I have a copy of Exhibit 12 here
7 with handwritten references to each one of the addresses that came
8 directly from the field notes.

9 MR. MILLER: We object to that, your Honor, Exhibit 12
10 contains all new data. It's not summary data, it's brand new
11 chemical analyses and data. It has no references to addresses. We
12 do have field notes, your Honor, and we marked those as actual
13 exhibits in our set, but they're very hard to understand. It's
14 handwritten notes, bad reproduction and almost impossible to read,
15 your Honor.

16 THE COURT: That's the whole purpose for the 1006. It
17 says: "The contents of voluminous writings, recordings, or
18 photographs which cannot conveniently be examined in court may be
19 presented in the form of a chart, summary, or calculation. The
20 originals, or duplicates, shall be made available for examination or
21 copying, or both, by other parties at reasonable time and place.
22 The court may order that they be produced in court or be in court."

23 So that's why I allowed this in. It seems to me that
24 making sense out of field notes is just problematic for the court.
25 If it's problematic for you who is close to the case, it's got to be

1 more problematic for the court. So these are put in in the form of
2 a summary and that's my understanding of what has been going on
3 here. Am I wrong about that?

4 MR. MILLER: Your Honor, we respectfully disagree that the
5 information is styled summary type information. It is new data just
6 spit out of a computer, very specialized chemical data. These
7 chromatograms and PAH concentration data.

8 THE COURT: I will give you an opportunity to voir dire
9 him on that. First ask him a couple of questions about that.

10 MR. LAMBERT: I will.

11 BY MR. LAMBERT:

12 Q. Mr. Kaltofen, you provided the defendants with an access code to
13 your web site?

14 A. That's correct.

15 Q. And this data in the form of these gas chromatographs appear on
16 your web site?

17 A. As far as I know they do, yes, sir.

18 Q. And as you receive them from the laboratory, understanding the
19 delays that occurred because of the switch from Alpha Lab, did you
20 immediately post them? When I say immediately I don't mean two
21 seconds, I mean did you timely post them on your web site?

22 MR. MILLER: Objection, your Honor, he just said he didn't
23 know if they were on the web site or not.

24 MR. LAMBERT: Go ahead and answer.

25 THE WITNESS: They were actually forwarded electronically.

1 They were on the web site, I don't know -- I believe that was put on
2 after my deposition, so I don't know if they actually got the links
3 to it at that time.

4 BY MR. LAMBERT:

5 Q. Are they currently on your web site?

6 A. They're currently at the web site; and again, I am not sure that
7 the link is there.

8 Q. What link?

9 A. Actually click on something, the name of the file is there, I
10 don't know that it's actually hyperlinked you actually have to do
11 the work and put in the file name.

12 Q. You're talking about to link it up to the address?

13 A. You actually have to take the address --

14 Q. From the field notes?

15 A. No, from the web page.

16 Q. From the web page.

17 A. When you go to the web page the file name is there and you type
18 in the file name and it'll give you that data. I don't know that
19 I've had a chance to make an active link to it yet.

20 THE COURT: Do you want to take a moment?

21 MR. MILLER: Just on this topic, Mr. Kaltofen.

22 CROSS-EXAMINATION

23 BY MR. MILLER:

24 Q. Your deposition was taken on December 27th, correct?

25 A. Yes, sir.

1 Q. And that's, and you provided me your web site information at
2 that deposition, correct?

3 A. The log in and password, that's right.

4 Q. And I did check the web site on December 28th and this
5 information was not on it. Do you differ with that statement?

6 A. The last set of chromatograms I believe came after December
7 28th.

8 Q. The last set of chromatograms that appear in Exhibit 12 are
9 dated January 4th and 5th and 6th; is that a correct statement?

10 A. I think it is, I don't know for certain.

11 MR. LAMBERT: I can provide him with that, your Honor.

12 THE COURT: Wait. Let him ask questions, please.

13 BY MR. MILLER:

14 Q. Mr. Kaltofen, do you know if yourself or your counsel notified
15 me that there was additional information on your web site January
16 5th or 6th?

17 A. I don't know about January 5th or 6th, no, sir.

18 Q. Now in term was your field notes, Mr. Kaltofen, do your field
19 notes contain the results of these samples that you took?

20 A. No.

21 Q. Isn't it true that your field notes only contain the address or
22 the location at which you took a sample?

23 A. The field notes have the address, usually a sketch, there is a
24 GPS coordinate, there will be the ID number that crosslinks to the
25 address and that's the note about how the sample was collected.

1 Q. But your field notes don't tell me or you or any reader what
2 you're finding at that location?

3 A. The chromatograms are separate.

4 Q. And they're generated after the material goes to the lab,
5 correct?

6 A. Yeah, the lab produces them.

7 MR. MILLER: Thank you, your Honor.

8 THE COURT: Did he give any of that to you?

9 MR. MILLER: No. The problem is I got field notes that
10 just tell me, you know, I got in a truck and rode to this house and
11 took a sample and then I rode to this house and took a sample, so I
12 have that.

13 And then last night I get this reference material that's
14 in Exhibit 12 that's pretty complicated chemical data and there is
15 no address reference at the top of either page. So I got this stack
16 of information, and I looked at it last night with my expert and we
17 couldn't make heads or tails of it because we did not know what
18 chromatogram or other chemical information went with what address in
19 the field notes. And so that's why this morning is the first time I
20 see the connection between the two.

21 BY MR. LAMBERT:

22 Q. Mr. Kaltofen, the field notes contain an identifying sample
23 number, correct?

24 A. Yes, they do.

25 Q. And that sample number appears on the gas chromatographs?

1 A. Yes.

2 Q. And so the address is linked to the sample number by the field
3 notes?

4 A. Yes.

5 Q. And the gas chromatograph contains the number of the sample, and
6 sometimes, I am looking through them, sometimes the address also but
7 sometimes not?

8 A. Yes.

9 MR. LAMBERT: Your Honor, with that, we offer,
10 introduce -- we offer again Exhibit 12 which contains the gas
11 chromatographs, many of which are part of Exhibit 107(c) and a few
12 of which -- and I am looking at the dates. Let me ask the witness
13 to do this, please. Can I approach?

14 THE COURT: Yes.

15 BY MR. LAMBERT:

16 Q. Can you identify for me in Exhibit 12 which gas chromatographs
17 were provided to you recently that may be on your site but without,
18 that may have been unavailable to the defendants?

19 A. This is the set of chromatograms that are on my site and that
20 have been turned over for about a week. I can't speak to whether or
21 not the other side have them.

22 Q. What are those of, are those of the class reps?

23 A. These are the class reps, yeah.

24 Q. Do those class rep samplings, were those done -- okay. Did
25 those result, in your opinion, did those gas chromatographs

1 demonstrate the presence of Murphy crude oil in each of the class
2 reps properties?

3 A. Each of the class reps' property shows a Murphy positive, that's
4 correct.

5 THE COURT: There is an objection that we are getting
6 outside of the voir dire and I'll sustain that objection. I'll
7 admit it, subject to the objection. I understand the objection,
8 I'll overrule the objection and admit it under 611.

9 MR. TORRES: And 107(c), your Honor.

10 THE COURT: I've already done that. Are you finished with
11 direct?

12 MR. LAMBERT: Just one more question I forgot to cover.

13 BY MR. LAMBERT:

14 Q. Mr. Kaltofen, did you observe the collection of sampling by
15 defendants in terms of their I think they call it homogenized
16 sampling technique?

17 A. I did observe the samples that were collected of the class
18 representatives on the 13th and 14th of December.

19 Q. Could you describe to the court their method of combining the
20 samples?

21 A. The sampling technicians would pick up the samples and put them
22 in a plastic bag.

23 Q. Is that three locations?

24 A. At three locations. And shake them up inside the plastic bag.

25 Q. And does that technique concern you with regard to the sampling

1 technique?

2 A. I wouldn't use a plastic bag myself because like with a laytex
3 glove example, the petroleum and the plastic bag can react with each
4 other, you can find components of the plastic bag in the sample and
5 you might find that some of the petroleum adheres to the plastic
6 bag.

7 Q. Does the combining of three locations of soil, for example, does
8 that have a tendency to affect the concentration of materials in one
9 sample, for example, or one sampling location?

10 A. I think the biggest effect would be that by homogenizing that
11 way you would move the volatiles, the thing that evaporate rapidly.

12 MR. LAMBERT: Thank you, your Honor, that's all.

13 THE COURT: Cross-examination.

14 CROSS-EXAMINATION

15 BY MR. MILLER:

16 Q. Good afternoon, Mr. Kaltofen.

17 A. Good afternoon.

18 Q. Let's start at the back end. You just spoke about a sample
19 technique used by the Center For Toxicology and Environmental
20 Health, correct?

21 A. Yes.

22 Q. Do you know if the EPA approves of that technique that you just
23 described witnessing?

24 A. Generally I haven't used that technique because some EPA methods
25 do not approve of it. Others may allow it.

1 Q. My question is in this case you know the EPA is doing sampling
2 in this case, do you not?

3 A. Yes, I do.

4 Q. Do you know if the EPA approves of that sampling technique in
5 this case?

6 A. I don't know if they do or not.

7 Q. Okay. Thank you. Mr. Kaltofen, let's talk about your affected
8 area or the affected area that you delineated. Are you with me?

9 A. Yes, sir.

10 Q. And as I understood your direct testimony, I think I took from
11 that there were basically three key things that you used to
12 delineate the affected area: No. 1, the sampling and chemical
13 testing; is that correct?

14 A. Yes, sir.

15 Q. No. 2, visual observations that you made in the field; is that
16 correct?

17 A. Visual observations, yes, that was part of it.

18 Q. And No. 3, reliance on EPA test data; is that correct?

19 A. Those weren't the only three, we missed a couple of things. We
20 talked a little bit about --

21 Q. I'm sorry, you did rely on the EPA test data to create your
22 data?

23 A. I'm sorry, I may have misunderstood your question. Excuse me.
24 I relied only on those three things or three of the things --

25 Q. Let's back up. Did you rely on EPA test data on your creation

1 of the affected area?

2 A. Yes, I did.

3 Q. Did you rely upon anything else besides sampling and testing and
4 visual observations and EPA testing?

5 A. Yes.

6 Q. What were those things?

7 A. Some of the other things that were important were looking at how
8 petroleum would be likely to move in the area, looking for things
9 that were potentially preferential pathways where there would be
10 more likely to move oil over distance, and issues related to
11 topography, water movement, elevation.

12 Q. Would you say the first three things, the sampling and testing,
13 visual observations of the EPA data are the key things you relied
14 upon in creating your affected area?

15 A. They are very important.

16 Q. Are they the key things?

17 A. I think you can't do it in isolation. I think it's important to
18 consider the idea of pathways and chemical and weathering behavior,
19 transport behavior, they all come together.

20 Q. You gave a deposition in this case, didn't you, Mr. Kaltofen?

21 A. Yes, sir.

22 Q. And you were under oath in that deposition?

23 A. Yes, sir.

24 MR. MILLER: Can you pull up the Kaltofen deposition?

25 MR. LAMBERT: What page and line?

1 MR. MILLER: I'm getting it right now. Go to page 219 I
2 believe -- I'm sorry, that's not correct.

3 THE COURT: We are going to have to move on.

4 MR. MILLER: We'll move on.

5 BY MR. MILLER:

6 Q. In terms of your affected area, Mr. Kaltofen. Connie, let's
7 pull up Exhibit 100, Defendant's 100. Do you see that document,
8 Mr. Kaltofen?

9 A. Yes, I do.

10 Q. Can you read that on the monitor?

11 A. I can pretty much see it. I made this document so I am a little
12 comfortable with it.

13 Q. This is your document, correct?

14 A. Yes, it is.

15 Q. Can you identify for the court, there is a reference to a seven
16 right there. What does that reference, what is that in reference
17 to, Mr. Kaltofen?

18 A. We wrote that number down during my deposition, we were
19 numbering samples that met certain conditions.

20 Q. Mr. Kaltofen, did you take these samples that are listed in this
21 box, the top seven?

22 A. Those samples were collected by another investigator.

23 Q. And who is that investigator, Mr. Kaltofen?

24 A. You know, I am uncertain of the name. A.J. and I believe his
25 name is Valenti.

1 Q. Was that investigator employed by you, Mr. Kaltofen?

2 A. No, sir.

3 Q. Who was he employed by?

4 A. I don't know.

5 Q. Did you direct this investigator how to take these samples?

6 A. Only in the most general fashion.

7 Q. Is that right? In what fashion was that?

8 A. I sent him sample containers, a list of the addresses for the
9 laboratory that would receive this sample set.

10 Q. Did you tell him how to collect the samples, Mr. Kaltofen?

11 A. Not in detail, no, sir.

12 Q. Did you tell him at all how to collect the samples?

13 A. I told him I was looking for surface material, that's about it
14 really.

15 Q. Do you know what he used to put the sample material in?

16 A. I never saw them.

17 Q. Do you know if he used a shovel to gather the samples?

18 A. I don't know.

19 Q. Do you know if he used a shovel with crude oil to gather the
20 samples?

21 A. Same answer.

22 Q. Do you know what kind of bag he put the samples in?

23 A. I don't know if he used a bag or not.

24 Q. Now, this next area on Exhibit 100, what does that heading say?

25 A. You're looking at the second area?

1 Q. Yeah, locations were non-detect; is that correct?

2 A. Oh, okay, I'm sorry. I was looking at the yellow area up above.
3 Yes. What is your question about it?

4 Q. This area with non-location, none of those samples relate to
5 positive findings from Murphy Oil in your opinion, correct?

6 A. Well, four of them are actually laboratory blanks or samples
7 that deliberately had no material. So non-detect represents there
8 being blanks. We do that for analytical reasons.

9 Q. I am just making sure the court understands this document. None
10 of those represent positive findings of Murphy Oil, correct?

11 A. Correct.

12 Q. Let me back up. This document is a two page spreadsheet that
13 you created; is that right?

14 A. It's probably about two pages, yes.

15 Q. And this spreadsheet, Exhibit No. 100, it lists all of the
16 samples that you took as of the time you created your affected area,
17 correct?

18 A. I think that's about right. I think -- yeah, I can see all of
19 the off-site samples there as well.

20 Q. So you're dealing with about, I think if you look at the bottom,
21 look at the second page, please, focus in right toward the bottom of
22 the second page. I think there you can see the total number of
23 samples that you had taken; is that correct?

24 A. At the bottom?

25 Q. Yeah. Is that 82? And that equates to 82 total samples?

1 A. That sounds right, yes.

2 Q. So there are 82 total samples, some of which you took and some
3 of which were taken by an investigator, correct?

4 A. That's correct.

5 Q. Let's go back to the first page. We covered the first two basic
6 categories, let's go to this category right here, right in the
7 middle of the page. Here is the middle of the page up here,
8 locations with refined oil (INDICATING). Do you see that,
9 Mr. Kaltofen?

10 A. Yes.

11 Q. And next to that it says non-Murphy.

12 A. That's right.

13 Q. Mr. Kaltofen, are these the sample locations or samples that you
14 took where you found oil or product that was not belonging to Murphy
15 Oil?

16 A. Yes, those are those locations, yes, sir.

17 Q. Next category, Mr. Kaltofen. Read that for me.

18 A. These are the on-site and oil standard sample.

19 Q. Sand these would be the samples that you took on the Murphy
20 premise on November 8th and 9th, correct?

21 A. With the exception of that lab standard, that's right.

22 Q. And the lab standard, that's not a sample of a different
23 residential location, right?

24 A. That's just a commercial sample of oil with a known composition.

25 Q. It's just a lab reference, am I right?

1 A. You bet.

2 Q. Now we get down to this part and I want to focus on this
3 category. Says, "off-site Murphy related detects." Okay. Are you
4 with me?

5 A. Yes, I am.

6 Q. And under this category those would be the samples that you
7 yourself personally took in St. Bernard Parish, correct?

8 A. The first set 1I through 11 are the samples that were taken by
9 Mr. Valenti.

10 Q. So can we draw a line right here --

11 A. If you can.

12 Q. -- after 11. A box will work. So now we're on 14W. Is that
13 where it starts, your samples?

14 A. Yes, sir.

15 Q. Can you count for me within this category how many separate
16 samples you took in the area so we have a number?

17 A. If you can back that off a little bit, that's too much. This
18 set, these are the Murphy Oil detections that are off-site. We
19 have, there are 14 in that first section.

20 Q. Are there some on the next page?

21 A. Let's take a look. And you've cut off -- there you go.

22 Q. How many on that page?

23 A. We get to about 30 total.

24 Q. About 30 total?

25 A. Yes.

1 Q. Those aren't 30 separate sample locations, are they?

2 A. They are 30 separate samples. If they're similar locations
3 they're usually different media, meaning a white sample or sediment
4 sample.

5 Q. Those 30 samples, can you tell me how many separate locations
6 that represents?

7 A. You can look at the list, it's probably about 20, maybe a couple
8 less than that.

9 Q. Can you go ahead and count that for us?

10 A. Start with the second one.

11 Q. Go to the first page and let him do it from top to bottom.
12 Starting at 14W.

13 A. (WITNESS COMPLIES.) Go to the next page. It looks like 19.

14 Q. So there are 19 separate sample locations?

15 A. And I am speaking generally. Some of them are -- I am not
16 counting samples that are relatively close.

17 Q. Nineteen separate sample locations that you took, correct?

18 A. That's correct.

19 Q. And you took, you used those 19 separate sample locations to
20 create your affected area, correct?

21 A. Yes, sir.

22 MR. MILLER: Let me go ahead, your Honor, may I approach
23 the witness?

24 THE COURT: Yes.

25 MR. MILLER: What I'd like to do, Mr. Kaltofen, is connect

1 your spreadsheet to Exhibit 107, if that's possible, because I think
2 that's the best way to do it. You know what, Connie, just put
3 Exhibit 100 up and we can use this for the map and the spreadsheet
4 back on the board.

5 THE WITNESS: It would be faster maybe if I stood up and
6 counted them off with you. Do you want to do that?

7 BY MR. MILLER:

8 Q. Yes, absolutely. I want you to count off the 19 separate sample
9 locations.

10 A. These are just the locations where we actually have detections?

11 Q. Correct.

12 A. So we have 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15,
13 16, 17, 18, I am missing the 19 somewhere, but just about got it.

14 Q. And so what you can do, if you wanted to, is you can take your
15 spreadsheet and Exhibit 100 and then reference the, for example, go
16 right here, you can take a reference here, for example, look right
17 here, 23S, Despaux soil, and use that 23S number and correlate that
18 to a location on Exhibit 107, correct?

19 A. Yes, you can.

20 Q. And that's because the orange and yellow and green tags that are
21 on Exhibit 107 contain that number, right?

22 A. Yes.

23 Q. For example, we were just looking at, which one is that? 23S.
24 You can find 23S on this map, correct?

25 A. Yes, sir.

1 Q. If you would help me, point to that one. I think I found it.
2 Pointing a little north of the 40 Arpent Canal?

3 A. That's correct.

4 Q. That would be sample 23S, correct?

5 A. Yes.

6 Q. And 23S appears in the legend and also on the spreadsheet of
7 Exhibit 100, correct?

8 A. Yes, sir.

9 Q. Now, when you created your affected area, Mr. Kaltofen, did you
10 know how many houses or properties rather were in your affected
11 area?

12 A. No. Other than, of course, generally, but I did not know the
13 number.

14 Q. Did you know the size of the affected area when you created it?

15 A. I knew the approximate number of miles from east to west.

16 Q. Let's pull back up the Kaltofen deposition. Go to page 129.
17 Let's look at lines 11 through 14 on page 129. I asked you a
18 question: "Do you know, referring back to your affected area, it's
19 on the map behind you, how many square miles is in that area? And
20 you answered, "No, I do not." Do you see that?

21 A. I do.

22 Q. Do you have the same testimony today --

23 MR. LAMBERT: Excuse me, your Honor. I don't see anything
24 inconsistent, he said the linear --

25 THE COURT: That's argument, if you need to put anything

1 I'll give you an opportunity to do 106 now or redirect.

2 MR. LAMBERT: All right.

3 BY MR. MILLER:

4 Q. Mr. Kaltofen, is your testimony any different today than it was
5 at your deposition where you stated you didn't know the size of the
6 area within your affected area?

7 A. No. The last time you asked me what the number of square miles
8 was, this time you asked me about the size. I said I knew
9 approximately the east-west distance. They're different questions,
10 they're close, but they're different questions

11 Q. Do you see that, Mr. Kaltofen?

12 A. Yes, I do.

13 Q. We went through this exercise in your deposition. What I want
14 to know, Mr. Kaltofen, is if you break plaintiffs' affected area
15 into zones and if you compare those zones to the number of samples
16 you took in each zone, the sampling rate, are you with me?

17 A. I understand.

18 Q. We have an area right here and this is Paris Road. Are you
19 familiar with that North-South highway in St. Bernard Parish?

20 A. Yes.

21 Q. And this goes to the west towards Orleans, are you familiar with
22 that?

23 A. I am.

24 Q. And, Mr. Kaltofen, what I've done here is overlaid since this
25 data on Exhibit 107, do you see that's been done with this exhibit?

1 A. I understand.

2 Q. So how many sample locations, Mr. Kaltofen, did you have within
3 what I would call this red area, this western quadrant of your
4 affected area?

5 A. I am just going to assume that the bookkeeping is correct on
6 this exhibit and it says five samples. I wouldn't argue with that.

7 Q. And do you know what the sampling rate is?

8 A. I am going to assume the number is correct.

9 Q. And that sampling rate would be .09%, correct?

10 A. If you want to do it based on housing units.

11 Q. Let's move, let's look at this area in yellow. And,
12 Mr. Kaltofen, I want to focus you in on -- first, do you know what
13 the blue area represents on this map?

14 A. I believe that was one of the original outlined areas that was
15 produced by Murphy.

16 Q. And what about the red outline, do you know what that
17 represents?

18 A. That's the adapted EPA profile that was done on visual
19 observations only.

20 Q. Is that the EPA affected area in other words?

21 A. That's their visual inspection area if I'm looking at that
22 properly.

23 Q. Is that what EPA considers the affected area, do you know?

24 A. Well, actually I recall this particular outline from looking at
25 what the EPA had put out in particular on their web site, and they

1 had done a windshield survey, that's a colloquialism, a visual
2 observation of light, heavy and medium affected areas, and this is
3 the area that they had put in based on visual observation.

4 Q. We will get back to the EPA in a minute. But let me ask you
5 this, this area in yellow, that's an area that's within the
6 plaintiffs' affected area, correct?

7 A. I believe it is, yes, sir.

8 Q. And within this area as I overlaid it over Exhibit 107 which is
9 your map, I determined there to be five samples. Do you agree with
10 that assessment?

11 A. Five samples --

12 Q. Five sample locations.

13 A. Five sample locations? That doesn't seem right.

14 Q. Within the area in yellow.

15 A. That doesn't seem right.

16 Q. Can you tell me how many sample locations that you relied upon
17 in creating the affected area that are depicted in yellow?

18 A. Can we go back to 107?

19 Q. Absolutely?

20 A. I know we can't draw it or we can put that close enough to look
21 at that yellow area?

22 MR. MILLER: Yes.

23 THE COURT: You can draw on the screen if you want and
24 then print it out.

25 MR. MILLER: I have a hard copy if he prefers.

1 THE WITNESS: There you go. Starting here at Paris and 40
2 Arpent straight down --

3 MR. MILLER: Let's make sure the court understands. We
4 are going straight down to St. Bernard Highway.

5 THE WITNESS: Following St. Bernard Highway until we're at
6 a line that essentially is the boundary of the Murphy property.

7 BY MR. MILLER:

8 Q. Right.

9 A. And straight up back to the 40 Arpent Canal and then we connect
10 the dots. So we're looking at, looking at more than five samples.
11 Twice that many.

12 Q. I am not including what's in the EPA area, just including in the
13 yellow highlight so eliminating these (INDICATING).

14 A. Yes, it's a couple more, but I understand your question better.

15 Q. I am not asking you for non-detect, I am just asking you for
16 positive Murphy's. So does five samples seem to be reasonable
17 within the yellow area that's depicted on the map that was on the
18 screen a minute ago?

19 A. We have five samples that are positives outside of the visual
20 inspection area but inside that yellow area.

21 Q. Right. And you know what the sampling rate represents? I'll
22 bring you the map back. And let me see if you agree with my number.
23 I have it at .18%.

24 A. That's .18% of the houses.

25 Q. Of the households. Is that correct, Mr. Kaltofen?

1 A. I am going to have to take your word for the number of
2 households.

3 Q. And let's look now to the east, this is purple or fuchsia or
4 some color like that. Mr. Kaltofen, how many sample locations
5 showing positive results from Murphy Oil are within this purple area
6 depicted on the exhibit that's on the screen? I have six, correct
7 me if I'm wrong.

8 A. I am just going to go with it.

9 Q. It looks like six.

10 A. I am going to assume that you did the accounting right.

11 Q. Does that look right to you? You can look back at 107 if you
12 have any questions.

13 A. It looks fairly close.

14 Q. The sample rate in that quadrant would be .26%, correct?

15 A. .26% of the houses?

16 Q. Correct.

17 A. I understand.

18 Q. And you agree with that math?

19 A. I am just going to have to assume it's right because I didn't
20 count the houses.

21 Q. Mr. Kaltofen, are you familiar with the EPA and LDEQ approved
22 work plan with respect to the Murphy Oil incident?

23 A. I've only seen it, I am not completely familiar with it, no,
24 sir.

25 Q. Are you aware of any statements in that EPA and LDEQ approved

1 work plan of the appropriate sampling rate to delineate an affected
2 area?

3 A. I don't know what they've put in, no, sir.

4 Q. Another basis, Mr. Kaltofen, that allowed you to delineate the
5 affected area where you allowed visual observation; is that correct?

6 A. Yes, sir.

7 Q. And you mentioned some testimony in direct about wearing a
8 laytex glove and wiping a line to determine if it's oil or if
9 it's -- let me back up. To determine if it's a petroleum
10 hydrocarbon or if it's organic swamp material, correct?

11 A. That's essentially it, yes.

12 Q. Isn't it true, Mr. Kaltofen, that organic swamp material can
13 create what's been referred to as a bathtub ring on a house or a
14 structure?

15 A. First of all, by swamp material let's just agree on what we're
16 talking about. We're just talking about the stuff that's in the
17 water, that stuff that would be in the water without the oil.

18 Q. And that would be organic, you might call it peat or plant
19 material; is that correct?

20 A. There would be a lot of different things but they are not oil.

21 Q. Organic biological material?

22 A. That's fine.

23 Q. Okay. And organic biological material that was brought in with
24 the effects of Hurricane Katrina could leave a ring on a house,
25 correct?

1 A. We saw that there was a watermark, yes.

2 Q. But as I understood your testimony you can determine between an
3 organic material water ring and a ring left by a petroleum product;
4 is that correct?

5 A. When we did the testing we found that the watermarks and the
6 petroleum marks were relatively easy to distinguish. It didn't mean
7 we didn't want to do the testing, but we could distinguish them by
8 doing the kind of testing we talked about out in the field.

9 Q. That was the laytex glove test?

10 A. We would use that to help us find the petroleum samples,
11 correct.

12 Q. Now, on the occasions where you did that in the field, that
13 would be depicted in your field notes, correct?

14 A. For the most part they're in our field notes. I don't know if
15 every single time we did it is in the field note.

16 Q. But if the court were to be interested to see how many times you
17 used the laytex glove, the court could consult the field notes,
18 correct?

19 A. I think the field notes might have some part of it but certainly
20 not all of it.

21 Q. So you took some laytex gloves, wiped samples, for lack of a
22 better term, to ascertain whether a ring was organic material or
23 petroleum product but didn't put that in your field notes; is that
24 correct?

25 A. There were probably times we did it, yes, sir.

1 Q. Now, let's talk about being out in the field, Mr. Kaltofen. As
2 I appreciate your deposition testimony you were out in the field --
3 and the field I mean is the area depicted on Exhibit 107, the area
4 near the Murphy refinery in St. Bernard Parish -- for the first time
5 on November the 1st; is that correct?

6 A. Yes.

7 Q. And you spent the afternoon on November the 1st in the field,
8 correct?

9 A. Yes.

10 Q. And in the time that you spent in the area depicted in your
11 field notes, correct? That is you have a start time and end time in
12 your field notes?

13 A. That's right.

14 Q. So if someone wanted to figure out how many hours you spent in
15 the field they could consult with your field notes and arrive at
16 that determination, right?

17 A. Yes.

18 Q. The next day you were in the field was November the 2nd; is that
19 correct?

20 A. It was.

21 Q. And again, your field notes would identify the actual time you
22 spent in the field, correct?

23 A. Yes.

24 Q. And then you spent the morning of November the 3rd in the field,
25 correct?

1 A. Yes.

2 Q. And again, your field notes would identify the amount of time
3 you spent in the field, correct?

4 A. They do.

5 Q. And each time you were in the field, Mr. Kaltofen, you were
6 there only with one other individual who helped in the testing and
7 that was Brian Moore, correct?

8 A. There was only one other technical person, that's right.

9 Q. I understand there may have been lawyers and photographs
10 present, but it was only you and Mr. Moore who was present in the
11 field doing testing work or sampling work, correct?

12 A. Yes.

13 Q. And so you were there the 1st in the afternoon, the 2nd all day
14 and the 3rd in the morning. And then on the 3rd you returned back
15 to Boston I believe, according to your field notes?

16 A. Yes.

17 Q. And the next time you were in Louisiana was November 8th and 9th
18 for the Murphy inspection on-site at the refinery, correct?

19 A. Correct.

20 Q. Now, when you were here in Louisiana on November 8th and 9th,
21 you didn't do any field samples on that visit, correct, you just did
22 sampling at the refinery as I understand your field notes; is that
23 correct?

24 A. I think you're right, yes.

25 Q. And then the only other time you were in the field doing

1 sampling was December 13th and 14th, correct?

2 A. Yes.

3 Q. And again, you have field notes that would tell us how long you
4 spent in the field on December 13th and 14th, correct?

5 A. Yes.

6 Q. And the goal on December 13th and 14th was to sample properties
7 owned by the six class representatives, correct?

8 A. Yes.

9 Q. So by the time you came on December 13th and 14th to sample
10 property owned by the six class representatives, those six class
11 representatives had already been designated by counsel for the
12 class, correct?

13 A. I assume so, yes.

14 Q. Go back to Defendant's 100, Connie. This is your spreadsheet,
15 Mr. Kaltofen. What I want to ask you when it pops up is, are you
16 relying upon air data in the creation of your affected area? You
17 took some air samples, did you not?

18 A. I did.

19 Q. And let's go to, I think it's on the second page, it's a heading
20 I think maybe there it is, air data. Is that right, Mr. Kaltofen?

21 A. Yes. That's -- let me just double check. Yes, it is.

22 Q. And you took 11 separate air samples, correct?

23 A. That's right, 11 canister samples.

24 Q. And in these 11 air samples I think you had seven in which you
25 said you didn't find anything significant; is that correct?

1 A. I think that's right.

2 Q. So only four out of 11 did you find something in the air that
3 you would consider significant, correct?

4 A. Yes.

5 Q. And what's significant could come from any petroleum hydrocarbon
6 source, correct?

7 A. Essentially.

8 Q. The four positive air samples that you found, you're not trying
9 to link those to Murphy crude oil specifically, are you?

10 A. They're certainly consistent with Murphy crude oil, but
11 they're not the same as some of the other data that's more directly
12 related.

13 Q. I just want to make sure we're clear. You're not saying that
14 those four positive air samples that you took had to come from
15 Murphy crude, right?

16 A. They could have come from another source, it's possible.

17 Q. Let's go back to the first page of this exhibit. I am going to
18 switch gears a little bit, Mr. Kaltofen. Let's focus on this middle
19 portion, the non-Murphy testing area.

20 What I find here, there's one on West Genie. Can we focus
21 in a little tighter on this. Give me that sample number, you can
22 probably see it better than I can.

23 A. Which one are you thinking of? There are two from West Genie on
24 that site. Is it 53?

25 Q. Yes, let's highlight both of them from West Genie. Go ahead and

1 identify what's been highlighted, Mr. Kaltofen, for the record.

2 A. Well, the first one I believe is a wipe sample that was taken
3 from 315 West Genie, can't quite see it.

4 Q. I think that's right.

5 A. The second one is a sample that was taken from a spilled waste
6 oil container.

7 Q. And a spilled waste oil container, what do you mean by that?

8 A. It was a metal drum that appeared to have waste oil.

9 Q. And that was a metal drum at the 315 West Genie address?

10 A. Yes.

11 Q. And that metal drum did not contain Murphy crude oil, did it?

12 A. No. As a matter of fact, we were very pleased with that sample
13 because it gave us a spot where we had Murphy crude and another
14 petroleum source together and we were able to see that we could tell
15 them apart easily.

16 Q. I'm glad you mentioned that because at 315 West Genie you took
17 three or four different samples, did you not?

18 A. That's correct.

19 Q. And at least two of your samples were non-Murphy, correct?

20 A. They were related to that waste oil we just discussed.

21 Q. So they're non-Murphy, right?

22 A. Of course.

23 Q. And then one sample you took you connect to Murphy; is that
24 correct?

25 A. Right.

1 Q. Why don't you go ahead and identify where 315 West Genie is on
2 the map, if you could.

3 A. We had a laser pointer up here.

4 MR. LAMBERT: Here, I have one.

5 THE WITNESS: Thanks. 315 West Genie is this location
6 (INDICATING).

7 BY MR. MILLER:

8 Q. And at 315 West Genie looks like you took four different
9 samples; is that correct?

10 A. That sounds right.

11 Q. Two of them, identify them, the two waste oil samples, which two
12 detected presence of non-Murphy Oil?

13 A. 53 and 55.

14 Q. 53 and 55. And then 52 is an air sample, right?

15 A. Yes, it is.

16 Q. And you already told me you couldn't link any of your air
17 samples to Murphy Oil, correct?

18 A. No, the air samples were not directly related to Murphy Oil.
19 The word should be exclusively.

20 Q. So you have four samples taken from 315 West Genie, correct?

21 A. Yes.

22 Q. And three out of the four cannot be linked to Murphy Oil,
23 correct?

24 A. Well, one could be but not exclusively, the other two were
25 definitely not.

1 Q. Do you know if you had that situation in any other address, I
2 think that applied to the Prince Drive sampling point that you have?

3 A. I believe Prince Drive we had one sample that was and one sample
4 that was not related to Murphy Oil.

5 Q. Can you identify where the Prince Drive sample is on the map?
6 And you can refer back to Exhibit 100, if you need to.

7 A. Right there, can you see that (INDICATING)?

8 Q. Okay. Mr. Kaltofen, thank you. Let's switch gears a little
9 bit. Back to the EPA issue. You testified in the creation of your
10 affected area you relied upon EPA test data; is that correct?

11 A. That's correct.

12 Q. And you submitted some sample locations from the EPA in
13 connection with your affidavit; is that correct?

14 A. Yes.

15 Q. Connie, can you pull up Defendant's Exhibit 3. Mr. Kaltofen, do
16 you recognize what Defendant's Exhibit 3 here is on the screen?

17 A. I do.

18 Q. What is it, sir?

19 A. It's a black and white version of what was originally a color
20 graphic showing locations of some of EPA's sediment and water
21 samples.

22 Q. And this is the EPA sampling or testing information that you
23 relied upon in creating the affected area for the plaintiffs?

24 A. That's correct.

25 Q. And let's just get our bearings straight here because this map

1 looks a little bit different from the others. I think this is Paris
2 Road, is that correct, Mr. Kaltofen (INDICATING)?

3 A. Yes, it is.

4 Q. And this would be St. Bernard Highway; is that correct
5 (INDICATING)?

6 A. Yes, it is.

7 Q. And this would be Judge Perez Drive; is that correct
8 (INDICATING)?

9 A. Yes.

10 Q. And I think the refinery would be in this general vicinity; is
11 that correct (INDICATING)?

12 A. You've got it.

13 Q. And so the EPA affected area, I am going to try and trace this
14 with my laser pointer, would basically do something like this, come
15 here, come in here, come in here and then be east of Paris Road
16 (INDICATING); is that correct?

17 A. To my knowledge I don't know if that's the EPA affected area, I
18 believe that's the area that was mapped as a result of their visual
19 observation.

20 Q. Let's go ahead and look back at Exhibit 107 on the board because
21 I think what's been highlighted in orange is the map that was
22 created by the EPA, correct?

23 A. That line is, in fact, that original visual inspection area.
24 You called it the affected area, I don't know if it's the EPA's
25 affected area, I know that it's the area that they delineated by

1 visual inspection.

2 Q. This area that EPA has delineated as exhibited on 107, do you
3 know of any other area that the EPA has delineated other than the
4 one on Exhibit 107?

5 A. We discussed the area to the north that was added. That's the
6 only one that I'm familiar with that they added with this type of
7 boundary.

8 Q. You have EPA sample points here west of Paris Road. Are you
9 with me, Mr. Kaltofen?

10 A. Yes, I am.

11 Q. And I think generally the plaintiffs affected area runs down
12 St. Bernard Highway all the way up to here and then out here towards
13 the Orleans Parish line (INDICATING); is that correct?

14 A. I can only speak to what I drew, and I can't tell you whether or
15 not that's their delineated area or not.

16 Q. So you don't know what delineated area the plaintiffs have
17 proposed to the court for certification in this matter?

18 A. I proposed an area, I don't know about any others. I understand
19 that they exist but I couldn't testify about it. Testify to the
20 exact location.

21 Q. So you know you have an area and you can testify as to that,
22 correct?

23 A. That's correct.

24 Q. Are you saying you don't know if your area is the area that
25 plaintiffs have proffered for certification in this matter?

1 A. I understand that the area they proffered includes my area. I
2 understand that there are some additional areas where I certainly
3 found positives for Murphy, but based on my data I am uncertain if
4 it is or is not the predominant contaminant. And I don't think you
5 can have me tell you street by street exactly where that line is
6 because I didn't draw it.

7 Q. Let's look at sample locations that are in this area. I think
8 you have them listed as A, B, C, D, E and F. Do you see that, Mr.
9 Kaltofen?

10 A. I do.

11 Q. And all of those sample locations would be in the affected area
12 that you drew, correct?

13 A. Those are sediment samples that are within the affected area
14 that I drew.

15 Q. Now, the settlement samples that are within the affected area
16 that you drew, do you know if that's in any area delineated by the
17 EPA that relates to the Murphy Oil incident?

18 A. I only know of their visual inspection zone.

19 Q. Let's look at their visual inspection zone if that's what you
20 want to call it. Does the EPA's visual inspection zone include
21 sample points A, B, C, D, E and F that you used to draw your
22 affected area?

23 A. That's outside of their zone.

24 Q. Do you know why, Mr. Kaltofen, the EPA in considering its own
25 data did not consider sample locations A, B, C, D, E and F to test

1 positive for Murphy crude?

2 A. Actually, my understanding is that the original area that we had
3 defined that you saw here on our exhibit is based on EPA's visual
4 observations and not on test results. I do understand from having
5 reviewed the test results that the largest number of those outside
6 of the area that you see on this map are water samples, and I did
7 not consider water samples which were contemporaneous to the
8 flooding itself in delineating the area, of course the water was no
9 longer present, so this is based on sediment samples only.

10 Q. Are you done?

11 A. Yes.

12 Q. Let me see if I can ask it a different way because we had a
13 little disconnect there. Am I correct in saying that sample
14 locations depicted on Exhibit 3A, B, C, D, E and F you believe
15 indicate the presence of Murphy Oil?

16 A. I believe those samples are reinforcing the boundaries that I've
17 drawn for the affected area based on Murphy Oil.

18 Q. Let me ask the question again. Do you believe sample locations
19 A, B, C, D and F indicate the presence of Murphy Oil?

20 A. These tests are not the fingerprints that we were looking at
21 earlier this morning. These are tests for individual components of
22 petroleum hydrocarbon, so what they tell me is that these areas had
23 petroleum contaminant sediments but they're not Murphy specific. So
24 these samples help me define my area based on the fact of the area
25 of petroleum contamination, but they do not ID Murphy specifically.

1 Q. Let's make sure we're clear. Points A, B, C, D, E and F, they
2 don't fingerprint Murphy Oil, do they?

3 A. These are not fingerprints.

4 Q. Mr. Kaltofen, do you know how big the EPA, how large it is in
5 square miles, the EPA delineated area is?

6 A. I understand that that inspected area is about a square mile.

7 Q. EPA has said that several times, correct?

8 A. Give or take.

9 Q. Do you know how large the plaintiffs' proposed affected area is?

10 A. I believe it's about six square miles.

11 Q. How about 6.66, does that ring a bell to you?

12 A. I would believe that, yes, sir.

13 Q. Can you explain to me the difference of over six fold between
14 the EPA affected area and the plaintiffs' proposed affected area?

15 A. Absolutely. The difference between the two areas is in taking
16 the samples that we collected. We try to take samples that in
17 addition to being very close to the plant were also in those
18 directions where we would expect oil to travel, where we would go at
19 some distance from the facility and some distance from that visually
20 inspected area and use the benefit of the testing equipment, which
21 is obviously going to give us more than just visual inspection, and
22 see what directions Murphy crude fully went to. And we collected
23 samples and compared them to the analytical results of Murphy crude
24 to see how far that wave of crude oil had passed after that water
25 had started to transport off the site.

1 Q. Mr. Kaltofen, do you know what the EPA's activity has been in
2 the affected areas since Hurricane Katrina?

3 A. I can't speak for them.

4 Q. I think you testified you were there on the 1st, 2nd and 3rd of
5 November, and then the 13th and 14th of December in the community;
6 correct?

7 A. That's correct.

8 Q. So that would be all or parts of five days; is that right?

9 A. That's correct.

10 Q. And it was you and one other person, correct?

11 A. One other technical person, yes.

12 Q. Do you know how many technical people the EPA has had in the
13 field since Hurricane Katrina hit in the affected area?

14 A. No.

15 Q. Do you know what kind of scientists the EPA have employed in the
16 field in the affected area since Hurricane Katrina hit?

17 A. I don't know their number or job description, no, sir.

18 Q. Are you saying in this case, Mr. Kaltofen, that the EPA has not
19 done its job properly in investigating the Murphy Oil incident
20 following Hurricane Katrina given the fact that there is a six fold
21 difference between the EPA's affected area and that offered by the
22 plaintiffs in this case?

23 A. I am saying that I used accepted scientific methods to delineate
24 the areas where Murphy crude oil was the predominant contaminant
25 using the same analytical techniques that are generally accepted and

1 EPA has done something that's different. They're responding to
2 their regulatory demands and that's fine. I don't see them in
3 conflict. I see their work as having been of assistance in helping
4 me draw the boundary, even though they are not doing exactly the
5 same types of analyses that I am doing.

6 Q. Is it your testimony that the EPA has not used accepted
7 scientific methods in creating its affected area in this case?

8 A. EPA has drawn an affected area --

9 MR. LAMBERT: Excuse me, your Honor, can I interpose an
10 objection?

11 THE COURT: What's the objection?

12 MR. LAMBERT: He is asking this witness to comment on what
13 the EPA is doing, and he's done it for quite awhile and I have not
14 objected but I think it's time.

15 THE COURT: It goes to the credibility, I'll overrule.

16 MR. MILLER: And it's my last question on this point, I
17 really would like to move on to another topic.

18 THE WITNESS: Can you just read that back to me?

19 (WHEREUPON, THE LAST QUESTION WAS READ BACK BY THE COURT
20 REPORTER.)

21 THE WITNESS: I think the testing methods that EPA uses
22 are almost undoubtedly going to be scientifically accepted. I think
23 how they determine an area that meets their regulatory demands is
24 not going to be the same as determining whether or not Murphy Oil is
25 the predominant contaminant over an area.

1 BY MR. MILLER:

2 Q. One more question on that point. Which affected area do you
3 think is more specifically established, the one delineated by the
4 EPA or the one offered by the plaintiffs in this case?

5 A. I believe that my delineated area is scientifically valid. I
6 think EPA has done another test that I've done and I am not
7 uncomfortable with that.

8 Q. Can you tell me which one is more scientifically valid, yours or
9 the EPA's?

10 A. I don't think that's a reasonable question. I think you heard
11 me say that I accept that their science is valid and that type of
12 work that they're doing is generally correct because I am making the
13 assumption that they're following their professional standards. I
14 am saying that the goal of their delineation and the methodology of
15 their delineation is different from mine and --

16 THE COURT: Counsel, I take your point, let's move on.

17 BY MR. MILLER:

18 Q. Let's move on, Mr. Kaltofen. You're a civil engineer, correct?

19 A. I am.

20 Q. When you drew your affected area, did you know where the pumping
21 stations were in relation to the affected area?

22 A. At the time I drew the delineated area I only knew where the
23 canals were, not where the pumping stations were.

24 Q. When you drew your affected area did you know how the drainage
25 worked in the affected area?

1 A. In general, yes. But as I said, without the knowledge of
2 exactly where the pumping station was and its capacity.

3 Q. When you drew your area did you know how the water drained in
4 the affected area?

5 A. Well, actually that was a big part of how I drew it. The water
6 represented a significant boundary to where my delineation would end
7 up.

8 MR. MILLER: Connie, let's pull back up Mr. Kaltofen's
9 deposition. Page 199, please -- actually, page 200, Connie, I'm
10 sorry. At the very bottom of the page.

11 BY MR. MILLER:

12 Q. Sir, in your deposition I asked you the question: "Do you know
13 which way the water receded following Hurricane Katrina in the
14 affected area? And your answer was, "No, I couldn't figure
15 everything out for you, no, sir." Do you stand by that answer
16 today, Mr. Kaltofen?

17 A. Actually that's the answer I've given today is exactly the
18 answer I gave in that deposition. I note that the transportation of
19 water is being affected -- excuse me, the transportation of water is
20 going to affect the transportation of the waterborne oil, and I
21 admit that I don't have a specific understanding of each part of the
22 mechanical drainage system.

23 Q. Let's go up to page 199, Connie, line 17. And I asked you the
24 question, "Do you know how the drainage worked in the affected
25 area?" And you said you didn't know. Do you stand by that answer

1 today, Mr. Kaltofen?

2 A. You cut me off, we won't know what I was going to say.

3 Q. I think we were having colloquy there, and I think I get from it
4 that you said you didn't know.

5 A. I think we were having a disagreement that was very small
6 compared to the information we were trying to impart. I told you
7 that I was unfamiliar with the particulars of the pumping station
8 and part of the bilge draining system, but that the movement of
9 water in general and those fundamentals were an important part of
10 determining where the oil was transported. These answers are
11 consistent.

12 Q. Now, drainage systems and pumping systems, drainage systems and
13 pumping stations, those are matters of civil engineering, correct?

14 A. Those are both matters of civil engineering, yes.

15 Q. And you are a civil engineer, are you not, Mr. Kaltofen?

16 A. I am.

17 Q. Mr. Kaltofen, I want to go back to the issue of the ASTM
18 methods, we were doing that examination during your voir dire. Do
19 you recall that examination?

20 A. I do. You're going to help me out, the word voir dire, but I
21 understand our conversation.

22 Q. Did you use a specific ASTM method in this case to interpret the
23 findings of Murphy Oil from samples?

24 A. Actually what I did was I referenced specific ASTM methods,
25 which I was originally referred to through the Coast Guard's Marine

1 Safety Laboratory for determining the analytical techniques that
2 would be used for fingerprinting the Murphy Oil. The Coast Guard
3 Marine Safety Lab interpretation of some of those ASTM methods
4 played an important role in determining the flow chart for me on how
5 to proceed. So those were part of my reference methods.

6 Q. Did you use an ASTM method or did you reference an ASTM method
7 in your work in this case?

8 A. It was going to be both. I was using the same equipment, this
9 is in the ASTM and I referenced it for look at how to fingerprint
10 and do some qualitative analysis.

11 Q. Did you also use Coast Guard methods or information in your
12 interpretive work in this case?

13 A. Coast Guard information, they don't develop a separate
14 methodology.

15 Q. How about EPA information, did you use EPA information in your
16 fingerprinting in this case?

17 A. The EPA information is part of the analytical methodology.

18 Q. Did you use --

19 A. Yes.

20 Q. You did?

21 A. Yes.

22 Q. So you used or you referenced ASTM methods, information from the
23 Coast Guard, and information from the EPA in doing the scientific
24 work that you did in this case, correct?

25 A. That's correct. The laboratory is more in line with EPA

1 methodologies.

2 Q. And do you know what the ASTM method you referenced?

3 A. I would have to go look up the ASTM method numbers, but I
4 believe it was GC-MS No. 5937 or it might be 5339. I don't remember
5 the number as I sit here.

6 Q. 5739 ring a bell?

7 A. Yes, it sounds about right.

8 Q. Do you know what the relationship between 5739 ASTM and 3328
9 ASTM is?

10 A. They actually reference each other.

11 Q. Do you know if those are methods for waterborne spill
12 investigations?

13 A. They will be applicable to waterborne spills.

14 Q. Do you know specifically for waterborne spills?

15 A. I am fairly sure that they reference waterborne spills
16 specifically.

17 Q. Do you know the title of ASTM 3328, the method?

18 A. We talked about it this morning, it's something I would look up
19 to get the exact title.

20 Q. Would it surprise you that the title is Standard Test Methods
21 for the Comparison of waterborne Petroleum Oil By Gas
22 Chromatography?

23 A. No, I would not.

24 Q. Would it also surprise you that the first footnote in ASTM
25 method 5739 says it's a waterborne test method?

1 A. Wouldn't surprise me, no, sir.

2 Q. I want to pull out some of the chromatograms Mr. Lambert showed
3 you on direct. I am going to use them on the ELMO now I think. Can
4 you see that, Mr. Kaltofen?

5 A. I can.

6 Q. Is that a chromatogram?

7 A. Yes, it is.

8 Q. Is that one of the ones Mr. Lambert showed you this morning in
9 direct?

10 A. The way I have these they're attached to sample number.

11 Q. I am not trying to fool you, it's actually Tab 7 of the book
12 that Mr. Lambert produced this morning.

13 A. Maybe I should follow along with a book.

14 Q. Sure.

15 (WHEREUPON, A BOOK WAS PROVIDED TO THE WITNESS BY MR. LAMBERT.)

16 THE WITNESS: Yes, yes, sir, I have it.

17 BY MR. MILLER:

18 Q. I am going ask you, Mr. Kaltofen, what are these three peaks
19 represent? I put little asterisks next to them, what do they
20 represent?

21 A. Those are individual compounds.

22 Q. What do you mean by individual compounds?

23 A. Those peaks represent individual compounds which come out in the
24 analysis.

25 Q. So to you, Mr. Kaltofen, do those peaks indicate the presence of

1 Murphy Oil?

2 A. The peaks correspond to one of the compounds in the original
3 data table, so without looking at the data table and the Murphy Oil
4 samples, it's hard for me to say.

5 Q. Do you know if these peaks represent internal standards of the
6 machinery?

7 A. I have to go look at the retention times that are laid out in
8 the original data sheet.

9 Q. Do you know if each chromatogram that we showed you this morning
10 contained internal standard peaks on them?

11 A. Generally they do, yes.

12 Q. What is an internal standard peak?

13 A. An internal standard peak would be a compound that's added to
14 your sample and you just look for it to appear in your chromatogram
15 to make sure that everything is working properly.

16 Q. So if these three peaks that have asterisks are internal
17 standards, those three peaks would not represent anything that would
18 be in the sample that's being tested as a sample was procured,
19 correct?

20 A. We add the internal standard.

21 Q. And you just don't know if the ones with the asterisks represent
22 peaks for internal standards that are added in the lab?

23 A. You have to look them up on the data sheet.

24 Q. And I think you said this morning, Mr. Kaltofen, that this
25 particular chromatogram at Tab 7 to you at least indicates a

1 presence of Murphy Oil, correct?

2 A. Excuse me, 47 -- excuse me. 48 is a positive, yes.

3 Q. Let me show you another one, you can flip to Tab 10. Again, you
4 see three peaks, do you know what the three peaks indicate on Tab
5 10?

6 A. Given the appearance in a lower concentration sample, it's more
7 likely they aren't internal standards, but the same thing is true,
8 you look it up.

9 Q. So these three peaks you wouldn't think it was the presence of
10 anything that was procured in the sample, correct?

11 A. No. I actually have to go look them up and the retention time
12 and the data.

13 Q. This particular chromatogram, is it your opinion that it
14 indicates a presence of Murphy Oil?

15 A. I believe 42 was one of our positives, yes.

16 Q. Let me see if they have any markers here. Let's talk a little
17 bit about sampling and how sampling might help you indicate or
18 determine the perimeter of an affected area. Are you with me?

19 A. Go ahead.

20 Q. I think in your case I think we identified that you had 18
21 separate sample locations, samples that you took that you used to
22 create your affected area; is that right?

23 A. More or less, yes.

24 Q. Let's put 18 dots on a map. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11,
25 12, 13, 14, 15, 16, 17, 18. Are you with me so far?

1 A. I am.

2 Q. So let's assume that these 18 dots on the map are 18 samples
3 that I took. Hypothetically, okay. And these 18 samples indicate a
4 positive match for the source material that I am looking for. What
5 I am going to do is I am going to connect the dots. Would that be a
6 proper way to draw an affected area?

7 A. If you have 18 dots?

8 Q. You have 18 dots, that's all you have, 18 samples, they're all
9 positives, would that be an appropriate way to draw that affected
10 area?

11 A. You know what, you don't know anything else, you don't have
12 access to any other data, EPAs, you don't know what the source was,
13 you don't have a lot of information that's missing from the Murphy
14 Oil spill. So if you want to do that completely in isolation and
15 make that example, fine; but it's not relative to what we did at
16 Murphy Oil.

17 Q. And this wouldn't be the way that you did Murphy Oil, would it?

18 A. If you want to make up this case, you can. It would be very
19 difficult to do it like this in isolation, but it's not what
20 happened at Murphy Oil.

21 Q. Let me see if you agree with me. If your source is here where I
22 placed the X and I am trying to figure out where the source material
23 got to, where it was released to. It seems to me that the way I
24 would try and figure it out is I would try and sample here, assume
25 purple is positive, are you with me? I would want to do that, do

1 you agree, you want to take a nice sample in the vicinity of the
2 area to see if you're finding positives for the source of your
3 material?

4 A. More samples are always better.

5 Q. More samples are always better. I'm an LSU guy so I am going to
6 use yellow as a negative, we will put negatives. Let's do this.
7 What would that smattering of yellow and purples in this zone
8 indicate to you?

9 A. All right. So we are talking about impacted area?

10 Q. Yes.

11 A. I am just going to get up because the pointer doesn't go there.
12 If they're going to make an example, let's say here we have an X.
13 Some chemical contaminant that isn't present anywhere else, this is
14 the one source of it, say it is purple ball bearings, it almost
15 doesn't matter as long as it's unique, like Murphy crude oil is
16 unique. Where you have the positive samples then at a minimum this
17 is the area that was impacted by the dispersal of that contaminant.
18 So where you have a positive knowing it didn't come from another
19 source and you have in fact drawn the impacted area at a minimum.

20 Q. At a minimum. But isn't it true, Mr. Kaltofen, that unless you
21 test beyond the affected area right here, right here, right here,
22 right here and right here, right here and right here, you can't
23 figure out where the fence is, where the perimeter is, correct?

24 A. For this example, if you're getting more positives outside, then
25 your impact area is actually larger.

1 Q. Isn't it true that if you're going to try and establish a
2 boundary or a perimeter of an affected area you need to test on both
3 sides of your perimeter, you need to test in your inner area and
4 your outer area; is that correct?

5 A. Your perimeter is determined by the results of your sample.

6 Q. The perimeter should be where the positives turn to negatives on
7 a consistent basis, correct?

8 A. For our unique chemical, all of the things that are giving you
9 positives have been impacted.

10 Q. No, I am asking you about the perimeter.

11 A. Right.

12 Q. Shouldn't the perimeter be where the positives for this source
13 consistently turn into negatives?

14 THE COURT: Just a minute, an objection.

15 MR. LAMBERT: Excuse me, your Honor. I want to object
16 just to make sure that this line of questioning is confined to this
17 hypothetical example and that it's not dealing with the reality of
18 St. Bernard and other parameters.

19 MR. MILLER: It's hypothetical, your Honor.

20 THE COURT: It is and that's what the witness said. He is
21 objecting whether or not it's relevant. I know he's under
22 cross-examination, he is under cross, he is not going to be your
23 case, I wouldn't imagine.

24 MR. MILLER: Sure, sure.

25 BY MR. MILLER:

1 Q. Just in terms of trying to determine a perimeter, wouldn't you
2 want to look to a consistent set of positives and negatives and see
3 where they are?

4 A. Your impacted area is going to include the full set of positives
5 for this chemical in the hypothetical case, particularly because we
6 have a new chemical; but we were talking about Murphy, the issue is
7 predominant. And so I don't want the isolated sample outside to be
8 confused with predominance.

9 Q. But in my hypothetical where do you draw the line, at what point
10 do you establish a perimeter?

11 A. In your hypothetical if you want to include the entire area that
12 is impacted, we have the benefit of having this unique analysis that
13 by definition your impacted area is the set of positive samples.

14 Q. You keep sampling until you find all negatives, right?

15 A. All of the negatives are outside of your area by this
16 definition.

17 THE COURT: Anything further of this witness?

18 MR. MILLER: One more question, your Honor, one
19 more little set -- actually, let me confer with my cocounsel for a
20 second.

21 THE COURT: All right. Let's go, counsel.

22 MR. MILLER: Thank you, Judge.

23 BY MR. MILLER:

24 Q. Mr. Kaltofen, I want to go back to a point quickly that we made
25 right after lunch, and that dealt with the first sample, seven

1 sample locations that were listed on the Exhibit 100. Do you recall
2 those?

3 A. Yes, I do.

4 Q. And I think you said in response to some questions that an
5 investigator gave samples, do you recall that?

6 A. That's my understanding, yes, sir.

7 Q. Do you recall in your deposition, I think it was on December
8 27th, we talked about that earlier?

9 A. I do.

10 Q. I asked you who employed that investigator. Do you recall what
11 came out in that deposition?

12 A. Not really, no, sir.

13 Q. Do you recall Mr. Lambert saying that Mr. Lambert employed that
14 investigator?

15 A. If he said it, then I believe him. I am not sure if I know
16 exactly who employed him. I understand he was working at the
17 direction of Mr. Lambert or at least Mr. Lambert's firm or some of
18 these other plaintiff attorneys.

19 Q. Do you recall in the deposition Mr. Lambert also saying that
20 investigator had no expertise in collecting samples?

21 A. If you say he did, I believe you.

22 Q. I want to put up on the ELMO the testimony that I think you
23 provided the Judge about what information you gave the investigator
24 in connection with collecting samples, do you recall that?

25 A. That's right.

1 Q. And is that a fair representation, I think it's an actual quote,
2 that you said you provided Mr. Lambert's investigator general
3 instructions about how to collect the samples?

4 A. That's correct.

5 Q. Let's pull up page 56 to your deposition -- 54, I'm sorry. And
6 let's look at lines 4 through 16. Go ahead and read the deposition
7 transcript. I asked you, "Do you know how Mr. Valenti --
8 Mr. Valenti, that's Mr. Lambert's investigator, correct?"

9 A. Yes, I think that's right.

10 Q. "Do you know how Mr. Valenti took these samples?" And how did
11 you answer me in deposition when you were under oath?

12 A. When you're talking about --

13 Q. Just give me your answer if you don't mind.

14 A. Which, No. 11?

15 Q. Line 6.

16 A. Line 6, "I can't speak to what happened to those samples before
17 they got to the laboratory."

18 Q. And let's go to my next question. "Did you provide him,
19 Mr. Valenti, with any instructions on how to gather these samples?"

20 A. That's correct.

21 Q. Look at your answer, it says, "No. The sampling equipment was
22 sent down here. I don't know how he did it or how that transpired."
23 Do you see that testimony?

24 A. And I stand by that.

25 Q. You stand by it today. Let's look at the next question. "Do

1 you know anything about his sampling protocol for these seven
2 samples?"

3 MR. LAMBERT: Excuse me, your Honor, again repetitive. He
4 even asked him if he used a dirty shovel to pick it up and the
5 witness said, no, he didn't know.

6 MR. MILLER: One final question.

7 MR. LAMBERT: There is nothing inconsistent.

8 THE COURT: I will overrule the objection, it's
9 cross-examination.

10 BY MR. MILLER:

11 Q. In response to my question, "Do you know anything about the
12 sampling protocol for these seven samples?" How did you answer in
13 the deposition, Mr. Kaltofen?

14 A. That's no.

15 Q. And do you stand by that testimony today?

16 A. I do.

17 MR. MILLER: No further questions, your Honor.

18 THE COURT: Any brief redirect?

19 MR. LAMBERT: Brief, yes, your Honor.

20 REDIRECT EXAMINATION

21 BY MR. LAMBERT:

22 Q. Let's start over here. Instead of a circle --

23 MR. LAMBERT: And, your Honor, are we going to mark this
24 or maybe he doesn't want to?

25 THE COURT: Counsel hadn't.

1 BY MR. LAMBERT:

2 Q. Instead of a circle with a bunch of hypothetical what ifs, let
3 me ask you to take a look at this exhibit or it's a representation
4 of an exhibit which is in evidence. And this line represents what
5 (INDICATING)?

6 A. That line represents the boundary within which Murphy crude oil
7 is the predominant contaminant.

8 Q. Is it the 40 Arpent Canal?

9 A. Yes, it is.

10 Q. So if you were looking for a boundary and you know the water is
11 flowing towards a drainage canal, you don't have to sample out here
12 in the swamp to know that it's a boundary, do you?

13 A. Yes, that's correct.

14 Q. Likewise, in reality this end of this blue line represents an
15 area which at some point has high ground including railroad tracks?

16 MR. MILLER: Objection, leading question, your Honor.

17 THE COURT: Sustain your objection.

18 BY MR. LAMBERT:

19 Q. Are there -- let me make it simple. Aren't there natural
20 boundaries that exist in terms of topography, for example, railroad
21 tracks and canals that can form the basis of the end of a sampling
22 requirement?

23 A. Yes.

24 Q. And those exist in real life; is that correct?

25 A. Yes.

1 Q. And there are also other factors that have to do with where
2 things travel that you already testified with regard to water flow
3 and preferential pathways and the like?

4 A. Yes.

5 Q. All of the questions with regard to Mr. Valenti, didn't you
6 resample what Mr. Valenti sampled?

7 A. Yes.

8 Q. And did your resampling where you actually took the samples
9 yourself and they were done in connection with appropriate
10 procedures confirmed the results of the laboratories that had tested
11 the samples provided by Mr. Valenti?

12 A. Yes, they did. There were weather differences but they are all
13 readily explainable.

14 Q. Where were you when Mr. Valenti took these samples; in other
15 words, why weren't you able to come?

16 A. In October I was in Siberia.

17 Q. And you were working over there doing what?

18 A. I was doing sampling and testing at the Techa River System
19 outside of the Mayak Chemical Nuclear Works.

20 Q. And you were doing that on behalf of who?

21 A. I was doing that on behalf of the Siberian Scientists for
22 Nuclear Responsibility.

23 Q. Now, you were asked a bunch of questions about West Genie Street
24 in connection with some samples taken there. The presence of one of
25 the samples taken there was something that related to Murphy crude

1 oil from a gas chromatograph standpoint, correct?

2 A. Yes.

3 Q. And was it fairly clear to you that two of the samples that came
4 from an oil drum area were likely to be negatives anyway?

5 A. Yes, it was negative for Murphy Oil. There was a small drum of
6 oil that had overturned.

7 Q. And that was consistent with your observations when you took
8 those samples?

9 A. That's correct.

10 Q. Now, you've been questioned at length about the number of
11 samples that you have taken. Are you satisfied that the results of
12 the sampling that you've taken, along with your observations of the
13 locations of the sampling, and your review of the drainage systems
14 and the topography of this area have provided you with enough
15 information to form an opinion with regard to the presence of Murphy
16 crude oil as the predominant contaminant inside of that area?

17 MR. MILLER: I object. He said he didn't review the
18 drainage systems.

19 THE COURT: Did you have enough information to make an
20 opinion, sir?

21 THE WITNESS: Yes, I did, your Honor.

22 MR. LAMBERT: Just one more, your Honor.

23 BY MR. LAMBERT:

24 Q. You didn't review the drainage systems before you provided the
25 initial analysis of this area, correct?

1 A. I did not review the drainage works, that's correct, before.

2 Q. At a later point in time you reviewed information with regard to
3 drainage, including the reports of Dr. Bedient and so on?

4 MR. MILLER: Objection, your Honor, this is not redirect,
5 this is new examination.

6 THE COURT: Sustain the objection, also it's leading.

7 MR. LAMBERT: All right.

8 BY MR. LAMBERT:

9 Q. Are you satisfied that the number of samples that you've taken
10 are sufficient for you to, along with the other information that
11 you've obtained, accurately describe this area of contamination
12 predominantly with Murphy crude oil?

13 MR. MILLER: Objection, your Honor, it's not redirect.

14 THE COURT: It's asked and answer already. Anything
15 further?

16 MR. LAMBERT: That's it.

17 THE COURT: We will take a break. I understand you're
18 going to admit the other material, let's get it all ready.

19 THE DEPUTY CLERK: Everyone rise.

20 (WHEREUPON, A RECESS WAS TAKEN.)

21 (BACK ON THE RECORD.)

22 THE COURT: Be seated, please. Plaintiffs call your next
23 witness or witnesses.

24 MR. PENTON: May it please the court, your Honor. In
25 keeping with the numerous status conferences and the hearings in

1 court, Judge, at this time we would offer the deposition testimony
2 of the witnesses in this case for the record, sir. And that would
3 be Dr. Philip Bedient, Dr. Paul Templet, Dr. Vincent Wilson,
4 Dr. Erno Sajo, Dr. John Kilpatrick, and Keith Baugher.

5 THE COURT: I understand that's agreeable with the
6 defendants?

7 MR. PENTON: Yes, your Honor.

8 MR. MILLER: Keith Baugher is actually our expert, he is
9 here to testify live.

10 MR. PENTON: We have designations and we can hold those
11 until he testifies.

12 THE COURT: Let's hold that.

13 MR. PENTON: Okay.

14 MR. McSHANE: Also, your Honor, with respect to Dr. Sajo,
15 that would be qualified with your Honor rulings excluding his
16 testimony.

17 MR. PENTON: Absolutely.

18 MR. McSHANE: I don't know if you want us to line out some
19 of the testimony.

20 THE COURT: At least circle it and give it back to me and
21 I will rule on that.

22 MR. McSHANE: We will do that, Judge.

23 THE COURT: I will allow that to be introduced. With
24 regard to Dr. Sajo, I made some Daubert rulings with regard to his
25 testimony and his deposition may need to be trimmed down. I don't

1 know whether it would or not, in any event I will give counsel an
2 opportunity to circle information that you think it should be out
3 and I will ask the plaintiffs whether they agree with that. If they
4 disagree I will decide that.

5 MR. PENTON: Our class reps, Cherie Perez, Phyllis Michon,
6 Fernand Marsolan, Robin Clark, James Shoemaker, Phillip Hebert; the
7 named plaintiffs, Danny Gaspard, Joseph Giroux, Charles Imbornone,
8 and Tammie Oggs as well as Blaise Sauro, all by deposition.

9 THE COURT: I understand that's agreeable with the
10 defendants.

11 MR. MILLER: Yes, your Honor. We have our cross
12 designations for those named plaintiffs and class reps, too.

13 MR. PENTON: Your Honor, previously prior to the start and
14 prior to the opening statements the affidavits for these witness as
15 well as their exhibits attached to their deposition were given a
16 trial exhibit identification number, Judge.

17 THE COURT: Okay. What I generally do is introduce the
18 depositions as part of the record. I usually don't make them as
19 exhibits. Certainly I don't make them exhibits in a jury trial
20 because the jury has a right to see all of the exhibits, and I don't
21 want depositions in the jury room because I don't let any other
22 witnesses into the jury room. It's not as significant with a bench
23 trial, but for consistency purposes, if it's not a problem I would
24 like to have the depositions made a part of the record and introduce
25 the other material as exhibits.

1 MR. PENTON: Okay, Judge. Some housekeeping on the
2 original offer of plaintiff exhibits. Judge, Plaintiffs' Exhibit
3 88, upon agreement of counsel, we are going to substitute two of the
4 attorney numerosity affidavits of Mr. Joe Bruno and Anthony Irpino,
5 and that's agreeable I believe.

6 MR. MILLER: We have no objection to swapping out those
7 exhibits.

8 THE COURT: Let those be received.

9 MR. PENTON: I will put the original substituted
10 affidavits for P88. Judge, I left one, let's see -- I have two, I
11 have two additional depositions, one the Murphy 30(b)(6) deposition,
12 the designees were Mr. Carl Zornes and C.L. Russell as 30(b)(6)
13 deponents for Murphy.

14 We're offering that, as well as Mr. Louis Strate who
15 testified, the corporate manager of insurance for Murphy who
16 testified day before yesterday, we would likewise offer his
17 deposition.

18 MR. MILLER: The Louis Strate deposition exhibit is a
19 joint exhibit.

20 THE COURT: It's a joint motion.

21 MR. MILLER: With respect to the Murphy 30(b)(6)
22 deponents, there were two deponents, Mr. Carl Zornes who is going to
23 be our first witness live; the other deponent C.L. Russell is
24 someone who we are not calling at the trial.

25 THE COURT: The 30(b)(6) you're entitled to introduce a

1 deposition even if the party is live, it's the only type of
2 situation that is allowed under federal rules. Federal rules allow
3 it, I will permit the deposition. Anything else?

4 MR. PENTON: One other thing, Judge. We would like to
5 offer P108, and what that is is the hard exhibits of Mr. Strat's
6 deposition. As opposed to the transcript being a part of the
7 record, these are actual documents which consist of settlement
8 documents, the affidavit and the list of settlements that were
9 attached to his deposition.

10 MR. MILLER: We've actually put that in our exhibit books,
11 I don't know what exhibit reference that is. It would duplicate
12 what we've done.

13 THE COURT: It's a joint exhibit.

14 MR. MILLER: This would be a joint exhibit, he doesn't
15 need to introduce a new one.

16 MR. PENTON: You had all of those?

17 MR. MILLER: We have everything attached.

18 THE COURT: What is his exhibit number?

19 MR. MILLER: Defendant 71 is the Strate affidavit with
20 attachments.

21 THE COURT: So you also introduce Defendant 71, I will
22 admit it into evidence.

23 MR. PENTON: You would like me to withdraw the offer of
24 P108?

25 THE COURT: Yes.

1 MR. PENTON: Fine, it is withdrawn. And at this time I
2 turn it over to liaison counsel.

3 MR. TORRES: In connection with the depositions and
4 affidavits that have been submitted on behalf of the class
5 representatives, we would like to make note that we designate as the
6 personal claim subclass representatives Ms. Cherie Perez, Phyllis
7 Michon, Robin Clark and Phillip Hebert; and business claim subclass
8 representative Ms. Cherie Perez, Dr. Shoemaker and Fernand Marsolan.
9 And with that the plaintiffs rest.

10 MR. PENTON: Your Honor, the transcripts should be here in
11 about ten minutes, so we also have duplicates for the court.

12 THE COURT: Just make them available. In matters of this
13 sort, counsel can present their case by way of several methods. One
14 method is to call live testimony, the other is called connotation
15 and the other is to introduce it solely on the paper. It's not
16 unusual, but either you go, and it's really up to counsel, they have
17 to agree to with regard to some depositions because technically
18 speaking the deposition can be objected to, if the party is within
19 the scope and power of the court.

20 Counsel are very experienced, very talented in their
21 respective areas, and they have helped the court by seeking to agree
22 wherever they could agree without adversely affecting their
23 complaints, so I appreciate that.

24 The plaintiffs have rested. I will hear from the defense.

25 MR. McSHANE: Judge, just one other housekeeping. Yellow

1 highlights representing the portion that Murphy submits, the
2 plaintiff agrees they will take those back, they brought in page and
3 line references and they will use a different color and use a black
4 Shaprie to comply with the subject of evidentiary rulings and have a
5 final single deposition designation.

6 THE COURT: Fine. Good. Call your first witness.

7 MR. KROUSE: Yes, your Honor, we will call Chad Morris.

8 THE COURT: Are you going to introduce any evidence first
9 or not?

10 MR. MILLER: No, your Honor. We said that initially but
11 we also did what the plaintiffs did, we put deposition designations
12 in our exhibit books. What we will do is go home and separate that
13 out and do that in the morning.

14 THE COURT: That's fine. Come forward, please, sir.

15 THE DEPUTY CLERK: Please raise your right hand.

16 (WHEREUPON, CHAD A. MORRIS, WAS CALLED AS A WITNESS BY
17 DEFENDANTS AND, HAVING BEEN DULY SWORN, TESTIFIED AS FOLLOWS.)

18 THE DEPUTY CLERK: Please be seated. And using the
19 microphone, would you please state your name for the record.

20 THE WITNESS: Chad Aaron Morris.

21 THE DEPUTY CLERK: Please spell your last name.

22 THE WITNESS: M-O-R-R-I-S.

23 THE DEPUTY CLERK: Thank you.

24 DIRECT EXAMINATION

25 BY MR. KROUSE:

1 Q. Mr. Morris, where do you reside, sir?

2 A. In Baton Rouge, Louisiana.

3 Q. By whom are you currently employed?

4 A. Landsource, Inc.

5 Q. What do you do with Landsource, Inc.?

6 A. I am the vice-president, I am a professional surveyor.

7 Q. How would you describe your occupation?

8 A. Primarily industrial and commercial surveying.

9 Q. Do you hold any certificates or licenses?

10 A. I am licensed with the Registration Board for Surveyors in
11 Louisiana and Texas.

12 Q. And what is your educational background, sir?

13 A. I hold a bachelor of science degree from the University of
14 Florida in surveying and mapping.

15 Q. And do you belong or have you served as any type of officer with
16 any Louisiana societies on surveying?

17 THE COURT: Counsel.

18 MR. LAMBERT: Excuse me, your Honor, how is he being
19 offered?

20 MR. MILLER: Just a fact witness, a little background.

21 MR. LAMBERT: I was just saying if he is being offered in
22 any expert way we don't have a problem.

23 MR. KROUSE: Last question on that point.

24 THE WITNESS: I am past president of the state Society For
25 Surveying, the Louisiana Society of Professional Surveying.

1 BY MR. KROUSE:

2 Q. Mr. Morris, you were retained by my law firm Frilot, Partridge,
3 Kohnke and Clements to do what?

4 A. To perform surveying in the vicinity of the tanks that were
5 damaged and to perform surveying in the surrounding communities for
6 elevations and to obtain aerial photography of the area.

7 Q. Now, what survey tools did you use to perform this function or
8 task?

9 A. I guess three primary tools would be the total station, which is
10 an instrument that we use every day for measuring angles and
11 distances and for determining the horizontal and vertical positions
12 of features that we shoot or tie in. We also use an automatic
13 level, which is a very traditional tool but it allows us to perform
14 additional redundant observations, checks on the data; and for the
15 elevation work in the neighborhood we used RTK GPS, which is
16 basically state-of-the-art GPS equipment that allows you to perform
17 elevation work as well as tie in horizontal features.

18 Q. When did you start work at Murphy refinery, sir?

19 A. The first day I was on site was September 27th.

20 Q. And how many visits have you had to the Murphy refinery to
21 perform this function that we're here about?

22 A. I believe 25.

23 Q. Now, essentially could you describe for the court, you have a
24 laptop in front of you and you have what's known as a CAD. Can you
25 explain to the court exactly the mechanism by which the data that

1 you collected was transformed into this computer program?

2 A. Basically we tied our horizontal and vertical measurements that
3 we made with total stations and GPS into the Louisiana state
4 coordinated system and then we're able to superimpose aerial
5 photography that we obtained from photo metric firms, two in Baton
6 Rouge, one other, they geo reference the photography, so essentially
7 we just lay the survey data on top of the photographic image.

8 Q. How many data points do you estimate that you used or have you
9 utilized in terms of surveying the 250 series tank?

10 A. 3,300.

11 Q. And how many data points do you estimate that you've utilized to
12 survey the residential community surrounding the tank farm in St.
13 Bernard Parish?

14 A. Just over 10,000.

15 Q. Can we pull up onto the screen, sir, the survey data, and can
16 you explain to the court generally speaking what we're looking at?

17 A. This is a series of photographs. For way of perspective or
18 orientation I can draw on the screen, this series of lines along in
19 this area, that is Paris Road, this is the 40 Arpent Canal, this is
20 Judge Perez, this is St. Bernard Highway (INDICATING).

21 Q. Just in general geography, the Industrial Canal that's in New
22 Orleans, is that on this map at all?

23 A. No. It's several miles west, probably a block or farther to the
24 left is where it would fall.

25 Q. Why don't we take a look, first of all, at the north tank farm

1 at the Murphy refinery, and if we can zoom in on that area and what
2 you focused in on.

3 A. The large screen is hard to see. If people can see and look at
4 the wide screen TV screens it's much more clear on those screens.
5 Basically on September 27th we walked through the area, and I was
6 told to document the area, meaning survey essentially everything
7 that I can see that may be of some interest in the future. We
8 weren't trying to pick out any specific features that were smoking
9 guns or anything along that line, it was simply a documentation of
10 what was there.

11 And as I stated before, that was consisted of
12 approximately 3,000 data points. We surveyed everything from the
13 location of the tanks to the height of the dykes around the tanks to
14 the location of the pipes that are in the area, then also did some
15 detailed surveying around the dent in the tank.

16 Q. Let's take a look at the tank itself, the 250-2 tank, and you
17 can explain to the court the measurements that you took that showed
18 the movement of the tank following Hurricane Katrina.

19 A. Maybe a little difficult to see, but this blue or I'm sorry
20 yellow circle in this area, that is the foundation where the tank
21 was prior to the storm. And you can see the location of the tank on
22 the photograph and you can also see this green line, that's the
23 actual edge of the tank (INDICATING). Because of the height of the
24 tank and the angle of the photograph was taken it looks like there's
25 just a little overlap, that's not actually overlap, that's just part

1 of what we deal with in dealing with photographs.

2 Q. Mr. Morris, can you measure for the court and give your best
3 estimate in terms of number of feet that tank 250-2 moved from its
4 foundation?

5 A. Yes. I'll zoom in a little bit and measure distance. For what
6 it's worth, this program that I'm using is auto CAD, it's probably
7 the most widely used design and surveying program in the world.

8 MR. LAMBERT: Excuse me, your Honor. If I might, this is
9 interesting but relevance? Class certification.

10 THE COURT: Well, where are we going with this?

11 MR. KROUSE: Your Honor, what we're trying to do is just
12 give the court an idea, first of all, of the massive amount of
13 movement in and around the tank itself, also the elevations of the
14 dyke which comes into play to serve as a foundation for other expert
15 witnesses who will be testifying today and tomorrow.

16 THE COURT: I'll overrule the objection and allow it. But
17 let's recognize that we are not dealing with substance, we are
18 dealing with class certification. This may have some relevance on
19 explaining the numerosity or commonality but it's very tenuous.

20 MR. KROUSE: I understand, your Honor, we will move on.

21 BY MR. KROUSE:

22 Q. Mr. Morris, can you just give us an idea in terms of the
23 elevations around the tank dyke area and focus in on the breach at
24 the 250 series tank dyke containment area and let's focus in on
25 that.

1 A. The tank shifted roughly 35 feet to the east and the breach in
2 the levee, it's a little fuzzy here, but you can see water coming
3 all the way through the breach. The width of the breach and the
4 depth of the breach. By looking at these elevations, this elevation
5 shows this is a ground elevation between the pipe and the middle of
6 the breach elevation with respect to North American vertical data
7 item is two tenths of a foot.

8 And if we pan over we can look at an area on the top of
9 the dyke, top of the dyke elevation is roughly eight and a half
10 feet. So that breach was eight and a half feet deep. And that's
11 the type of usefulness of this data.

12 Q. And generally speaking, can you show the outline of the dyke
13 around the 250 series tanks?

14 A. We can see the outline going all the way around here
15 (INDICATING).

16 Q. And what was the elevation of that dyke, generally speaking,
17 towards the west?

18 A. The elevation prior to Katrina was roughly eight and a half feet
19 above sea level.

20 Q. Now, can you contrast that with the elevation at the 40 Arpent
21 Canal immediately to the north of that, did you take measurements of
22 the levee to the north of the 40 Arpent Canal?

23 A. Yes. It varies somewhat, but roughly six feet above sea level
24 on the 40 Arpent Canal.

25 Q. What about to the street, I believe it's Florida Avenue adjacent

1 to it, what is that?

2 A. This is actually the road that runs along the tow of the level
3 levee, roughly two and a half feet below sea level.

4 Q. Did you conclude whether the dyke around the Murphy series tanks
5 was higher or lower than the height of the 40 Arpent Canal levee?

6 A. Murphy, the dykes around the tank are roughly two feet higher,
7 slightly above two feet higher than the 40 Arpent Canal levee.

8 Q. Did you have an opportunity to take measurements within the
9 residential neighborhoods, starting with Judge Perez immediately
10 south?

11 A. Yes.

12 Q. What was the purpose of taking those measurements?

13 A. We were basically looking at the slope of the ground in a
14 general sense. We just looked at the elements of what we surveyed
15 and we saw it's roughly two and a half feet below sea level. If we
16 zoom in at Judge Perez we can see the ground elevations are in the
17 vicinity of two to three feet above sea level, it varies as you go
18 up and down Judge Perez.

19 And if we move out to St. Bernard Highway and zoom in we
20 can see that the ground elevations come up to eight, eight and a
21 half feet above sea level. So there is a pretty significant drop
22 from the river to the 40 Arpent Canal.

23 Q. What did you conclude generally from the slope from St. Bernard
24 Highway to the 40 Arpent Canal?

25 A. The ground slopes away from the river toward the 40 Arpent

1 Canal.

2 Q. Did you have an opportunity on this photo, aerial photo, which I
3 believe is September 3, 2005; is that correct?

4 A. That's correct.

5 Q. To take a look at any of the pumps that were located on the 40
6 Arpent Canal?

7 A. Yes.

8 Q. Can you show those to the court?

9 A. I want to zoom in on this area, I believe this is pump No. 7.
10 We can very plainly see that pump No. 7 is operating. This
11 photograph was taken 11:25 Saturday, September the 3rd. And we can
12 also see some erosions or breaches in the 40 Arpent Canal levee.

13 Q. What about with pump No. 6, can you point that out to the court?

14 A. Pump No. 6 I actually need to look at the photography for
15 September 2nd, I can show it. While we have this photography I can
16 look at the breach the Army Corps created near Paris Road.

17 Q. Okay. Let's see that.

18 A. Or orientation when we look at it on the other one, you can
19 count 1, 2, 3 power structures east of, this is Paris Road, and we
20 can see the breach that was dug and we can actually see the
21 equipment that's still sitting there. That's again on the 3rd.

22 Q. Let's go to the 2nd of September and show the location of the
23 pumps.

24 A. We will zoom in on that same area, first to look at that breach
25 area. Again we were 1, 2, 3 power structures, so this is the area

1 where the breach was dug. And it's obviously not there on September
2 the 2nd. This photograph was taken at roughly 10:15 A.M. We can
3 look at the pump No. 6, which is west of Paris Road, again this is
4 Friday, and we can plainly see that that pump is moving water.

5 And if we look at pump No. 7 again for orientation, the
6 tanks are in this area, pump No. 7 is little bit northeast in this
7 area. If we zoom in we can pretty plainly see that on September 2nd
8 there is no water moving.

9 MR. KROUSE: I think that's all the questions I have, your
10 Honor. Exhibit 10 is a CD with Mr. Morris' survey data from the
11 tank dyke, Exhibit 84 I believe is the survey data from the
12 neighborhood. We're prepared to assist the court if they want to
13 look at an auto CAD, we've also printed copies of the presentation
14 that we will mark and identify as exhibits after the
15 cross-examination.

16 THE COURT: Let's have cross-examination. Thank you.

17 MR. LAMBERT: Thank you, your Honor.

18 CROSS-EXAMINATION

19 BY MR. LAMBERT:

20 Q. Mr. Morris, how are you?

21 A. Just fine, sir.

22 Q. A couple of things I wanted to ask you about. Do you recall in
23 your -- let me just ask you this. When you surveyed the perimeter
24 of tank 250, and if you would, please, zoom in on this area, the 250
25 series tanks. Did you find two areas right over here that we all

1 discussed whether we wanted to call them breaches or whether we
2 wanted to call them erosion areas that were significantly below the
3 top level of the dykes (INDICATING)?

4 A. Yes.

5 Q. And how far below the top were these numbers?

6 A. We can see the top of the dyke elevation eight and top of the
7 erosion at five or five and a half. I am not sure if these are on
8 the very top.

9 Q. What do you have right here (INDICATING)?

10 A. This one is five.

11 Q. So three feet?

12 A. Yes, sir.

13 Q. And let's go on back, back it out, please. There was some areas
14 along the east side here, which were also, let's try this one right
15 in here (INDICATING).

16 A. We see roughly 5.1 again.

17 Q. So just to refresh, the top of the general elevation is eight
18 and a half?

19 A. Yes, sir. It varies as you go around the dyke, it's not
20 perfectly level but eight, eight and a half is fair.

21 Q. But these particulars I am asking you to opine about are
22 significantly below the top which are three and a half feet or so?

23 A. Roughly three to three and a half feet, yes.

24 Q. Now let's go on down, if you would, please, to the southeast
25 corner of this system. Right in this area, this area (INDICATING).

1 A. Six two here, five two here.

2 Q. All right.

3 A. So roughly the same.

4 Q. And then around the corner over in here (INDICATING).

5 A. Again, roughly the same.

6 MR. LAMBERT: Your Honor, we may struggle with this, but
7 it might be more easier if we go the old way. Do you mind if I
8 approach?

9 THE COURT: That's fine.

10 BY MR. LAMBERT:

11 Q. I am referencing P70 which is a series of aerial photographs
12 provided by the defendant, and I am looking at TU 102175, which is a
13 satellite photograph taken on August the 31st. Katrina was on the
14 29th, the 30th, then August the 31st. And what I want to ask you to
15 do is to look at, and then I want to show it to your Honor, the
16 areas that I've asked you to focus upon. The northeast -- I'm
17 sorry, the northwest corner and the southeast corner. Can you do
18 that, please. And you recall you did it in your deposition?

19 A. I believe I was in the room but it wasn't in my deposition.

20 Q. All right. Maybe so. But at any rate, is it fair to say that
21 in that aerial photograph or satellite view the water on the inside
22 of the 250 dyke series is communicating not only through the breach
23 that you pointed out around the pipes, but also through these areas
24 of the dyke that are three and a half feet or so below the eight and
25 a half foot levee that you talked about?

1 A. That appears to be the case to me.

2 MR. LAMBERT: Show the Judge, please.

3 THE COURT: I can see it on there. Proceed.

4 BY MR. LAMBERT:

5 Q. Now, if you could back out, please.

6 A. Which day's photography would you like to see in the background?

7 Q. It doesn't matter at this point. I want your surveys of the
8 neighborhood, the survey data of the neighborhood.

9 A. Okay.

10 Q. Now, when you took these readings --

11 MR. LAMBERT: And by the way, your Honor, so the record is
12 clear, P20, which you can refer to, this is the way we've got this
13 gentleman's presentation, absent any of the data with regard to the
14 neighborhood by the time we took his deposition. We had none of
15 this, we had this area of tank 250, we had it in the form of these
16 two pages which appear as P20 with yellow dots and I had no idea
17 that you could zoom in on them and get a footage mark until we took
18 the deposition. And we don't have the equipment capable of doing
19 that, it's a several thousand dollar auto CAD program. We were
20 griping about what each other knew.

21 THE COURT: All right. Let's move on.

22 MR. KROUSE: Just to respond, your Honor. We provided
23 Mr. Morris with this laptop --

24 MR. LAMBERT: I'm Lambert.

25 MR. KROUSE: At the deposition we provided you Mr. Morris

1 with his laptop and had full opportunity to review this and gave you
2 the auto CAD material so you had opportunity to review it.

3 THE COURT: Okay. I've heard enough. Let's continue.

4 BY MR. LAMBERT:

5 Q. The elevations that you took in the neighborhood were street
6 elevations, correct?

7 A. Yes, sir.

8 Q. You didn't take any elevations with regard to soil?

9 A. That's right.

10 Q. Now, as I understand your testimony, this neighborhood generally
11 topography wise goes to the north, towards the 40 Arpent; in other
12 words, high over here, lower over there, correct (INDICATING)?

13 A. I believe it would be more square with the road, but, yes, sir.

14 Q. This way (INDICATING)?

15 A. Yes, sir.

16 Q. Square with the roads because that's where you took the
17 elevations?

18 A. That's correct.

19 Q. This map is oriented so this is north, correct (INDICATING)?

20 A. That's correct.

21 Q. At any rate, the movement, whether it's at a 20 degree angle or
22 dead ahead, is generally towards the 40 Arpent Canal?

23 A. That's right. In general the ground anywhere along the
24 Mississippi River is going to flow or the ground is going to slope
25 away from the river and roughly perpendicular to the river.

1 Q. That's fine. Now, based on what you just showed the court with
2 regard to the function of these pumps, if you could back out a
3 little further, please.

4 A. (WITNESS COMPLIES.) That's it.

5 Q. That's as far as you go?

6 A. That's as far as the photography I have loaded, yes.

7 Q. I take it then the photography here loaded doesn't show pump
8 No. 7?

9 A. That's pump No. 6 in that point.

10 Q. It does, where, where is it?

11 A. It's all the way in the corner.

12 Q. Okay. And that one was functioning well before the one down
13 here, correct (INDICATING)?

14 A. That one was functioning on Friday and the one to the east was
15 not functioning on Friday.

16 Q. And the one down here was also functioning before the Corps of
17 Engineers broke the dyke somewhere in here (INDICATING), correct?

18 A. That's correct. On Friday the break in the dyke was not there.

19 Q. So if we use the analogy of a bathtub drain, the only one going
20 in the beginning was right down here (INDICATING)?

21 A. I am not an expert on bathtubs and I don't know if there were
22 any other drains, but I can tell you --

23 Q. Let me rephrase the question. The only drainage point that you
24 know of along the 40 Arpent Canal that was active at the time when
25 you flashed up those photos was this one down here, correct

1 (INDICATING)?

2 A. No. I know, we can zoom in on this other pump structure and we
3 can zoom in a little more and look just the pump structures in this
4 area, and just west of that we can see erosions in the levee and
5 this erosion is rather large and looks to me like it's still flowing
6 water on Friday.

7 Q. Did you measure it?

8 A. No. But we can give you a measurement from the photograph.

9 Q. Did you measure the elevation of this?

10 A. No.

11 Q. Back up and show me where that is.

12 A. It's just west of pump structure No. 7.

13 Q. Back up so we can see it relevant to the Murphy Oil site.

14 A. I'm sorry. Let me mark it on the screen.

15 Q. I see it, right here (INDICATING).

16 A. The break is in this area and you can't quite see the tank on
17 it, can you (INDICATING)?

18 Q. Down here (INDICATING)?

19 A. Let me pan over just a little bit. The tanks are, the screens
20 aren't quite lined up. The tank structure is here, and the pumps
21 are here and the erosion or breaks in the levee are in this area,
22 there are three of them (INDICATING).

23 Q. So for some period of time you would have a movement towards the
24 east from this tank area, correct?

25 A. For some period of time we would have some water flowing out, I

1 couldn't tell you --

2 Q. Water flow?

3 A. Yes.

4 Q. If there's oil on top of the water --

5 A. I don't know about direction, but I can tell you water is
6 flowing out of the breaks.

7 Q. I understand. And the whole time you have pump No. 6 running on
8 the far west end of your map?

9 A. From my data I can only tell you that it was running on Friday.

10 Q. Okay. That's fine. Now, you didn't go there until the 27th,
11 did you?

12 A. That's correct.

13 Q. So these observations that you're making with regard to when
14 these pumps ran has to do with your view of these aerial photographs
15 taken back of a historical?

16 A. That's correct.

17 MR. LAMBERT: That's all I have, your Honor. Thank you.

18 THE COURT: Any redirect?

19 MR. KROUSE: No, your Honor. In connection with this
20 testimony we would offer, file and introduce into evidence Exhibits
21 101 and 102 along with the previous admission.

22 THE COURT: The court will allow it.

23 THE DEPUTY CLERK: What previously marked exhibits?

24 MR. McSHANE: Judge, I believe we had taken up as a
25 pretrial matter, what we would like to do with Dr. Kuhlmeier, the

1 hydrologist and others, is to ask Chad to run the auto CAD, the
2 survey data in connection with testimony from the other defense
3 experts.

4 MR. KROUSE: And we are going to use him for the next
5 witness as well, Carl Zornes.

6 And the exhibits were 10 and 84, which is the survey data
7 disc.

8 THE DEPUTY CLERK: He is offering them now, he offered 101
9 and 102 be admitted.

10 MR. BRUNO: What is the exhibit number? 10 and 84 and the
11 two photographs.

12 THE COURT: Any objection to those from the plaintiffs?
13 Let it be received and marked.

14 MR. KROUSE: Carl Zornes, your Honor.

15 THE DEPUTY CLERK: Please step into the witness box.

16 (WHEREUPON, CARL J. ZORNES, WAS CALLED AS A WITNESS BY
17 DEFENDANTS AND, HAVING BEEN DULY SWORN, TESTIFIED AS FOLLOWS.)

18 THE DEPUTY CLERK: Please be seated. And if you would use
19 the microphone there, would you state your name for the record.

20 THE WITNESS: Carl Joseph Zornes.

21 THE DEPUTY CLERK: Spell the last name.

22 THE WITNESS: Z-O-R-N-E-S.

23 DIRECT EXAMINATION

24 BY MR. KROUSE:

25 Q. Mr. Zornes, by whom are you currently employed?

1 A. Murphy Oil USA.

2 Q. And what is your position with Murphy Oil?

3 A. I am manager of community and industrial relations at the Murphy
4 refinery.

5 Q. And provide the court with a brief description of your duties.

6 A. What's that?

7 Q. A brief description of your duties.

8 A. I am in charge of all of the community involvement. I also have
9 the industrial relations side, which is the union bargaining group.

10 Q. Did you have prior to Hurricane Katrina striking St. Bernard in
11 August of 2005, were you part of a hurricane evacuation group?

12 A. Yes, I was.

13 Q. Could you explain how many members were a part of that hurricane
14 evacuation crew?

15 A. We had approximately 11 people.

16 Q. And on what date did the refinery close as a result of Hurricane
17 Katrina?

18 A. That was a Sunday evening. The 27th?

19 Q. And where did you evacuate to?

20 A. We evacuated to Ponchatoula, Louisiana.

21 Q. And when did you have the first opportunity to return to the
22 refinery to inspect its condition following Hurricane Katrina?

23 A. Hurricane Katrina actually passed through on that Monday. It
24 was Wednesday when we returned by crew boat down the river.

25 Q. And where were you coming from?

1 A. I think that particular day we started out in Gramercy, it was
2 about a five and a half hour crew boat ride down the river.

3 Q. When you arrived at the Meraux refinery at Murphy, what was your
4 objective for you and your hurricane crew?

5 A. Well, the main thing was to get a good visual of the whole plant
6 and try to check the whole refinery, the basic operating units, make
7 sure if there were any leaks and secure any leaks if there was any.

8 Q. We have the same map that Chad used, I want to utilize that with
9 you as well to try to keep everybody on the same page.

10 MR. BRUNO: Does that have numbers or something? Can we
11 reference that in some fashion? We should.

12 THE COURT: What's the number?

13 MR. KROUSE: 101.

14 THE COURT: The map he is referring to is 101 and the
15 disc.

16 MR. KROUSE: And the disc is 10, he is running a disc.

17 BY MR. KROUSE:

18 Q. Where did you disembark and where did you go, generally
19 speaking, on that first day?

20 A. On that first day we disembarked at our docks, which is located
21 out on the river, and we actually made our way to the main office
22 building and then we secured the Gate 3, which is near the west side
23 of the plant on St. Bernard Highway because the gate was blown over.
24 And it was basically more or less that first day was trying to
25 secure what was along St. Bernard Highway.

1 Q. Can you describe for the court the general condition of the
2 Murphy refinery on August 31, that Wednesday when you arrived as a
3 result of the devastation from Hurricane Katrina?

4 A. It looked pretty much like the rest of the parish. I mean,
5 there was debris everywhere, there was still water in the plant. It
6 just looked like a hurricane had passed.

7 Q. And did you have an opportunity to walk and inspect the main
8 office on the admin building on St. Bernard?

9 A. Yes, we did. We had water damage in that office.

10 Q. You're focused on this 11 man crew at least on this first
11 Wednesday. Where did you go in the refinery and what did you
12 accomplish?

13 A. We pretty much couldn't get too far because water was still in
14 the plant, but we were able to get probably somewhat past the
15 maintenance building, which is about right there (INDICATING).

16 Q. All right. Thank you. And where else did you get to go?

17 A. Pretty much everywhere east of that.

18 Q. Did you see any evidence of oil, particularly crude oil, in the
19 Murphy refinery on that first day, the 31st of August?

20 A. No crude oil at all.

21 Q. Any evidence of leaks or problems within the refinery?

22 A. We had several air leaks and water leaks that we secured as we
23 were going through.

24 Q. Was there any water on St. Bernard Highway on the 31st of
25 August?

1 A. No, there wasn't. Not in front of the refinery where we came in
2 at.

3 Q. You returned the next day on Thursday, September 1st, is that
4 correct, with the same crew?

5 A. Yes.

6 Q. Where did you get to that day within the refinery?

7 A. On the 31st, let me get my bearings straight. You might have to
8 go a little bit more, pan a little bit more west if you could. We
9 probably got to the beginning of Area 4, which is our catalytic
10 cracking unit, which is about right there (INDICATING).

11 Q. And so you're making your way up the western boundary of the
12 refinery?

13 A. Yes.

14 Q. Are each of the crew members in this team reporting to you on
15 the condition of the units?

16 A. Yes, they are.

17 Q. Do you have any reports from any members of the crew of any type
18 of crude oil leaks on that date?

19 A. No, we haven't.

20 Q. Now, did you have an opportunity to return the next day, that
21 Friday?

22 A. Yes, we did.

23 Q. And I guess you're still conducting inspections of the entire
24 refinery and working your way northbound?

25 A. That's correct.

1 Q. On that date, Friday, September 2nd, were there any reports of
2 any type of crude oil leaks to you as this team commander?

3 A. No, there wasn't.

4 Q. Now, can you explain to the court and generally show where the
5 south tank farm area is on this map, Exhibit 101?

6 A. The south tank farm consists of pretty much from this point to
7 this point, everything back south and the south is back this way
8 (INDICATING).

9 Q. Now, let's turn quickly to Saturday, September 3, 2005. And
10 let's take a look at your location on Judge Perez on that date, and
11 tell the court what you discovered on that date.

12 A. Okay. I finally made my way down the west side road inside the
13 plant, which is right in this area right here (INDICATING). I got
14 to this corner of the plant and that's when I noticed the oil on
15 Judge Perez. Our fence was down, our perimeter fence that runs
16 along Judge Perez was down, it still had water, I was in water up to
17 about almost close to the top of my knee boots at that point. And I
18 could see oil pooling right where I was, just about close to where I
19 was standing looking at it across the fence.

20 Q. And how would you describe that oil for the court?

21 A. It was a dark, looked like crude oil to me.

22 Q. Now, did you know where the source of the oil was coming from on
23 September 3rd?

24 A. No, not at that time.

25 Q. Did you have an opportunity to send two of your team members to

1 inspect some of the tanks on that date?

2 A. Yes, we did. I sent them to the crude tanks on the south side
3 and I told them to check basically everything we could get to on the
4 south side of the plant

5 Q. And what two tanks were those?

6 A. Those were 200-4 and 200-5, those were the only two crude tanks
7 we had on that side of the street.

8 Q. What action did you take at this point to locate the source of
9 the oil?

10 A. Once we found out it was not coming from the south side of Judge
11 Perez, myself and my safety manager Bill Turnage went to the
12 sheriff's office to speak to Jack Stevens to see if he can get us an
13 air boat to come through the back of the plant to see if we can
14 check our other five tanks out.

15 Q. Why was it necessary on this date, September 3rd, to get an air
16 boat to get back to the tank farm?

17 A. Because the area was still flooded and we did not have a boat to
18 access it ourself.

19 Q. Where did you take the air boat from and where did you go?

20 A. Okay. Once we get the air boat, we went down, we got a ride
21 down St. Bernard, I mean Paris Road in a dump truck and he told us
22 to see some Wildlife and Fisheries agent and he said they will know
23 who you are. So we got to the point, they were staged on Paris Road
24 around the 40 Arpent Canal, and there were several air boats there
25 and several Wildlife and Fisheries agents. And they were expecting

1 us.

2 So once we got a hold of one of them and they said we'll
3 take you. So me and Bill got in the air boat and we got, we rode
4 right outside of the 40 Arpent Canal, he hopped the levee and we
5 kind of went the same route as the 40 Arpent Canal all the way to
6 the back of the -- it's a wooded area that's behind our tank farm on
7 the north side of the property, and we came in approximately right
8 there, we hopped over. Well, actually we hopped over around this
9 point and then we got in the 40 and drove it down to this point.
10 Then we came through this wooded area along here and weaved our way
11 through the wooded area and got right there on that corner
12 (INDICATING).

13 Q. And that's on the north edge of the 250 series tank?

14 A. That's correct. And I had the air boat driver drop us off
15 approximately right there at that point.

16 Q. And you're pointing to the northeast quadrant of the tank deck?

17 A. That's correct. And that's when we got out on foot to survey
18 the tanks.

19 Q. Now, you mentioned Bill, Bill is whom?

20 A. Bill Turnage is our safety manager at the plant. He is part of
21 our hurricane team also.

22 Q. Now, did Bill accompany you on your inspection of the perimeter
23 of the tank dyke area?

24 A. Up to a certain point because he has a bad knee and he couldn't
25 get down some -- well, the first crevasse that I came to, which was

1 right about that point right there, some of the tank dyke eroded
2 about two and a half, three feet down into the ground and that's
3 when Bill, I told him to stop because I knew he had bad knees and I
4 told him I will take a look the rest of the way.

5 Q. Let's focus on that soil erosion at the northwest quadrant of
6 the tank dyke. At that point in time did you see any type of oil
7 leaking from that area?

8 A. No. Actually there was only water in the tank dyke from right
9 there from what I could see and there was clean dry mud that I
10 jumped down on. There was no visual signs of any, not even oil
11 stain in that area.

12 Q. Did you continue to walk the perimeter southbound on the western
13 boundary of the 250 series?

14 A. Yes. I started walking down and when I first noticed oil was
15 about at this point right there. And I can see some oil pooling in
16 that area right around here, and you could see oil toward the south
17 going this direction here (INDICATING).

18 Q. Is that oil that you're speaking of located within the confines
19 of the perimeter of the tank dyke?

20 A. Yes, it was.

21 Q. Now, did you continue to walk southbound on the dyke?

22 A. Yes. I continued to walk, I said I got to about this point
23 right here, right there (INDICATING). Let me clear this. Right
24 about there I could see the tank bubbling about right there, the
25 base of the tank it looked like there was, that would be the leak

1 because it was kind of like bubbling up. You could see crude oil
2 was coming up out of the water.

3 Q. Incidentally, Mr. Zornes, was any of the tank dyke road that you
4 were walking on top of stained with any type of oil staining to your
5 knowledge?

6 A. No, there wasn't.

7 Q. Now, you continued to work your way southbound?

8 A. Yes, I continued working my way southbound. About right here I
9 had to kind of maneuver my way, there was a big empty like sand
10 hopper across the impacted area and I had to maneuver my way around
11 getting through it. And when I got to right at the break of the
12 tank dyke right there, that's when I noticed the oil coming out of
13 our tank dyke (INDICATING).

14 Q. Let me put this in perspective time wise. On September 3 when
15 you're back at Judge Perez, approximately what time was it that day
16 that you first noticed the oil on Judge Perez?

17 A. That was around noon.

18 Q. And about what time that day, September 3, did you first notice
19 this break in the tank dyke?

20 A. That was about maybe 1:30, somewhere around there.

21 Q. Describe the break for the Judge.

22 A. The break was about maybe where the oil was going through was
23 about six foot wide, it was right where the pipe, the suction pipe
24 for the tank was coming through the tank dyke. And I couldn't tell
25 how deep it was but I did take a stick and see how deep, I moved it

1 around and made sure it was solid oil or water, and it was an
2 oil-water mix that was going through but there was a good layer of
3 oil on the water.

4 Q. What would you estimate the thickness in terms of inches of oil
5 that was going through the tank dyke breach?

6 A. At that point it looked like it was about two to three inches.

7 Q. Now, did you have an opportunity to observe all of the tank dyke
8 perimeter on that date?

9 A. Well, at that point I wanted to stop that leak, and that's when
10 we, I went, I backed up, told Bill what we had, and we got in the
11 air boat and immediately went back to Jack Stevens to see if he can
12 help us out with some sandbags.

13 Q. How did you eventually stop the leak?

14 A. He got us a very large front-end loader and we loaded it up with
15 about 300 sandbags. I got my crew, 11 of us got on this piece of
16 machinery, we drove in on our north tank farm gate and drove up the
17 road going toward the plant.

18 I can show you. We went through the gate, which is right
19 here, drove along this area and stopped the vehicle right there at
20 that point (INDICATING). And we put the bucket of the front-end
21 loader right on the levee, and we made like a little chain gang and
22 started loading the sandbags in the broken dyke area. We had to cut
23 a few of the sandbags to get between the piping so we can get a base
24 down in the bottom of it, and then once we started getting a good
25 base down, then we started stacking the sandbags in to stop the

1 leak.

2 And it was about -- by the time we got the sandbags and
3 all back there it was about three o'clock and it probably took us a
4 good two hours. I mean, that's nonstop hustling getting those
5 sandbags down.

6 Q. What time do you estimate that task was completed on September
7 3rd?

8 A. It was around five, 5:30 because it was getting dark around that
9 time.

10 Q. How many sandbags did it take?

11 A. It was about 300.

12 Q. Could you explain to the court the direction of the flow of oil
13 as it reached the western side of the 250 series tank area?

14 A. The flow of oil that was coming out of the dyke area was
15 actually was just flowing in this direction toward Judge Perez
16 (INDICATING). And when we drove in there at Judge Perez you could
17 see the oil going, direction of the water which was west. That was
18 the direction the oil was going.

19 Q. Now, did you see any other breaches in the dyke on that date?

20 A. No, no, I did not.

21 Q. When did you first report this incident to the appropriate
22 authorities?

23 A. Well, we called immediately when I saw the oil at the fence line
24 before we even got the air boat, we called El Dorado and they did
25 the reporting from El Dorado. We had a satellite phone with us for

1 contact.

2 Q. Now, let me show you another exhibit, if we could, and that
3 would be Exhibit 55, Connie. This is a drawing that you drew at
4 your deposition that I believe Mr. Bruno took, and can you explain
5 to the court what this drawing is and what it depicts?

6 A. Okay. This is basically a drawing that was just showing you
7 where I saw the oil when I approached it on that particular day.
8 This is the point right there is where I told you we landed with the
9 air boat, and basically all of this area up in here, the red is what
10 I noticed was water. And when I noticed the oil, the oil was
11 starting about right here (INDICATING). And everything that I could
12 see southward was pretty much covered in oil inside the dyke.

13 Q. Was the breach that you found the only breach within the dyke
14 that day?

15 A. The only breach that something was coming out of.

16 Q. Something being what?

17 A. Yeah, oil that was coming out. Now the breach on this right
18 here at this point, it wasn't through the levee, it was kind of like
19 eroded where you could step down but you still had enough dyke there
20 to hold back any water.

21 Q. Now, since this time period, and Connie, can we pull up Exhibit
22 16, Defendant's Exhibit 16. You have remained on site in your job
23 responsibilities with Murphy; is that correct?

24 A. Yes.

25 Q. And you have had an opportunity to survey the area around the

1 refinery, particularly the neighborhoods, pretty much on a daily
2 basis; is that correct?

3 A. That's correct.

4 Q. And can you tell the court in terms of what your own personal
5 observations are in terms of where you observed oil in that end of
6 the oil line, and let's start with the western boundary based upon
7 your personal observations.

8 A. As far west as I've seen it, it was around Delambert Street, one
9 street over the last, I think it's De La Ronde Canal, it's one
10 street over, that's Delambert Street.

11 Q. I don't know whether you can do that on this map in terms of
12 Exhibit 16.

13 A. If I could find Delambert Street it would -- it's kind of small.

14 Q. And if you can't we'll move on. If it's too small we'll move
15 on.

16 MR. KROUSE: May I approach the witness, your Honor?

17 THE COURT: Yes.

18 THE WITNESS: Is that Delambert? I can't tell.

19 THE COURT: Mr. Bruno, do you want to see this?

20 MR. KROUSE: Mr. Bruno?

21 THE COURT: Do you want to see this?

22 THE WITNESS: This is Delambert right here (INDICATING).
23 That's pretty much it.

24 BY MR. KROUSE:

25 Q. Why don't you mark on this map.

1 A. It's about as far west as I seen it Delambert Street.

2 Q. Why don't we talk about the eastern boundary from the refinery.

3 A. From the refinery, and the refinery is right here, I mean, I did
4 not see anything past, Judge Perez is right here, it was where it
5 was pooling at, that was as far as it got. It did not get off our
6 property that way, except on Judge Perez.

7 MR. BRUNO: I'm sorry, I don't mean to interrupt. I am a
8 little confused. This is Exhibit 16?

9 MR. KROUSE: Yes, but we're using this map.

10 MR. BRUNO: Is this Exhibit 16?

11 MR. KROUSE: This is another map?

12 MR. BRUNO: Have we identified it for the Judge?

13 MR. MILLER: 16 she says.

14 MR. BRUNO: That's the point, it's not 16.

15 MR. KROUSE: We will remark this as exhibit, give it
16 another exhibit number, 102.

17 MR. BRUNO: Okay.

18 MR. KROUSE: This map is too small for him to use and he
19 asked to look at another map. I am going to need that one.

20 THE COURT: Let's make it 16(a).

21 MR. KROUSE: That's fine, your Honor, we designate that as
22 16(a).

23 BY MR. KROUSE:

24 Q. Let's talk about northern boundary. In fact, you own property
25 in St. Bernard Parish; is that correct?

1 A. Yes.

2 Q. What is the address of the property that you own in St. Bernard
3 Parish?

4 A. It's on 3817 Karen Drive.

5 Q. Can you locate for the court the approximate location of your
6 house on 16(a)?

7 A. Yes. Karen Drive is right here (INDICATING). And I am about
8 the fourth house from Magistrate.

9 Q. Did your house have any oil from the Murphy Oil refinery?

10 A. No, no, it did not.

11 Q. What were your observations in terms of the northern boundary of
12 the oil?

13 A. The northern boundary stopped pretty much around Josephine
14 Street.

15 Q. And can you draw that on the map, please.

16 A. That's pretty much about right here (INDICATING).

17 Q. And let's talk about the southern boundary.

18 A. Southern boundary, pretty much Judge Perez except for the Jacob
19 Drive, Despaux area was the boundary. And we did have some that got
20 down Jacob Drive. Let me find Jacob Drive over here, Jacob Drive
21 this way (INDICATING).

22 Q. Thank you, sir.

23 MR. BRUNO: Can you leave that there, do you mind?

24 MR. KROUSE: Absolutely.

25 BY MR. KROUSE:

1 Q. Mr. Zornes, other than the Murphy Oil spill, are you aware of
2 other oil spills in St. Bernard Parish during this same time period
3 after Hurricane Katrina that you have personal knowledge of?

4 A. Yes. Just east of the IGA store on Judge Perez there was a
5 pretty large tank that fell over, and it was on the property of the
6 gas company that has a gas plant right there. I don't know whether
7 it's just a transfer station or what.

8 Q. And what is that street location just in general terms of that
9 IGA store?

10 A. It's the street over from Delambert, it's probably LaPlace.

11 Q. And the other cross street?

12 A. Judge Perez.

13 Q. Were you aware of any other oil spills not related to Murphy?

14 A. Not related to Murphy. There were several just driving through,
15 there were several transformers off of telephone poles that were
16 down and open.

17 Q. And what kind of hydrocarbon or petroleum products would come
18 from there?

19 A. There is some type of oil that are in these transformers, I
20 don't know the name of the oil, but they pretty much hold probably a
21 half of drum of oil in each one of those transformers, if not more.

22 Q. Are you aware of any other oil spills on Jacob Drive that
23 happened other than the Murphy Oil spill?

24 A. After the storm they had a few people trying to get their dump
25 trucks I guess ready to go for some of this debris hauling, and they

1 had one gentlemen that just changed his oil in the middle of the
2 street. And he let out two dump truckloads, two trucks -- he let
3 his oil just go right in the street. Just stuff that I seen.

4 MR. KROUSE: That's all I have. Tender the witness, your
5 Honor.

6 THE COURT: Cross.

7 CROSS-EXAMINATION

8 BY MR. BRUNO:

9 Q. Carl, given the dignity of the circumstances I am going to
10 address you as Mr. Zornes, if that's okay with you.

11 MR. BRUNO: May we have, please, back 55. Maybe I have
12 the wrong one, sorry. Is it 101?

13 BY MR. BRUNO:

14 Q. Mr. Zornes, the first report of oil leaving the refinery was
15 made by you to your superiors in El Dorado on approximately, at
16 approximately 12 o'clock on Saturday, right?

17 A. That's correct.

18 Q. The reports that you filed with the various agencies indicate
19 that the first information that there was any oil leaking from the
20 facility came from an overflight by some other entity; isn't that
21 true?

22 A. That I am not sure of where that came from.

23 Q. Now, the fact is that you're not aware of any eye witness
24 testimony at all which would assist the court in determining when
25 the tank first began to leak; isn't that true?

1 A. No, I can't identify that.

2 Q. Right. You all had evacuated the plant on the Sunday before the
3 hurricane in the afternoon, right?

4 A. That's correct.

5 Q. And the folks in El Dorado had approved the closure of the
6 plant, right?

7 A. That's correct.

8 Q. And presumably the folks in El Dorado were satisfied that you
9 had taken all of the appropriate precautions for the coming
10 hurricane, right?

11 A. That's correct.

12 Q. So there were no Murphy employees on the site from the afternoon
13 of the 28th until the 3rd, Saturday, when you went back to the
14 northern tank farm, right?

15 A. That's correct.

16 Q. So any determination of when the tank began to leak comes from
17 evaluations by expert witnesses and the like, right?

18 A. That's correct.

19 Q. What is Murphy's position as to when the tank began to leak, do
20 you know?

21 MR. KROUSE: Objection, your Honor.

22 MR. BRUNO: Withdrawn.

23 THE WITNESS: Mr. Bruno, can I go back to the question?
24 You said the 3rd, we were there before the 3rd. So, no, I did not
25 see any oil leaking before the 3rd, but we were there before the

1 3rd.

2 BY MR. BRUNO:

3 Q. I know you were there before the 3rd, forgive me, I may be going
4 too fast. You didn't observe oil leaking from any part of the
5 refinery until the 3rd?

6 A. That's correct.

7 Q. So the first eye witness testimony with regard to oil coming out
8 of the refinery is the 3rd?

9 A. That's correct.

10 Q. And I am just trying to illustrate the point, there is no body
11 that you're aware of that can help the court determine when the oil
12 first left the tank, right?

13 A. Not to my knowledge.

14 Q. Can we go north a little bit. Now, if there is testimony that
15 there was oil on the north of the containment dyke of the 450 and
16 250 series tanks, if, would you agree with me based upon your
17 observations that if that oil came from Murphy it had to have gotten
18 there while the water was over the containment dykes in the days
19 before?

20 MR. KROUSE: Objection, your Honor, he is asking a
21 hypothetical question.

22 THE COURT: He's also speculating and it's argument, I
23 will sustain the objection.

24 MR. BRUNO: Thank you, Judge.

25 BY MR. BRUNO:

1 Q. Are you aware if any of the experts retained by Murphy Oil
2 identified oil in that area to the north of the containment dyke?

3 MR. KROUSE: Objection, your Honor, argumentative. Again,
4 he is asking him about what experts -- we are going to hear from all
5 of these experts.

6 THE COURT: I will allow that, overrule the objection.

7 MR. BRUNO: I guess what I'm --

8 THE COURT: I overruled it.

9 THE WITNESS: Could you say that again, I'm sorry?

10 MR. BRUNO: Let me just go back.

11 BY MR. BRUNO:

12 Q. You are here to tell the court what you observed as to where the
13 oil went, right?

14 A. That's correct.

15 Q. And presumably you have discussed this issue with other Murphy
16 Oil personnel?

17 A. Yes.

18 Q. And you have discussed this issue with others who have been
19 retained by Murphy in connection with this spill event?

20 A. Yes.

21 Q. Are you aware of whether or not any other Murphy personnel or
22 any folks employed by Murphy witnessed oil in the area immediately
23 to the north of that containment dyke?

24 A. No.

25 Q. Are you aware of any clean up operations that Murphy Oil

1 undertook to clean up oil in this area right above this pumping
2 station, were you aware of whether or not Murphy cleaned up any oil
3 right there?

4 MR. KROUSE: At what point in time, your Honor?

5 MR. BRUNO: At any point.

6 THE WITNESS: Yes, they did clean up some outside. That's
7 past the 40, right?

8 MR. BRUNO: Yes.

9 THE WITNESS: Yes, right where the discharge station is, I
10 believe they did clean up something there.

11 BY MR. BRUNO:

12 Q. And based upon what you observed, and by that I mean you
13 witnessed oil flowing south, would you agree with me that if that's
14 Murphy Oil it got there long before you arrived on the scene?

15 MR. KROUSE: Objection, your Honor, speculation.

16 THE COURT: He is under cross, I will allow it, overrule
17 the objection.

18 BY MR. BRUNO:

19 Q. If this oil here was Murphy Oil, it had to get there before you
20 got there because you witnessed the oil moving south?

21 A. If that oil would have got there before I got there, it would
22 have been in the 40 Arpent Canal the day I went to the plant and it
23 was not there in the 40 that day.

24 Q. Okay. Now, do you know a Brian Clark?

25 A. Yes.

1 Q. And who is Brian Clark?

2 A. He is a Wildlife and Fisheries agent in St. Bernard Parish.

3 Q. And did he accompany you at any time on the 2nd or 3rd?

4 A. On the 3rd he is one of the ones that helped us get an air boat.

5 Q. Did he have the opportunity to observe the environment as you
6 did?

7 A. He pretty much was running the station at Paris Road, so I don't
8 know where he went other than Paris road.

9 Q. I'm sorry, didn't he accompany you on the air boat?

10 A. No, he did not.

11 Q. I'm sorry, I got that wrong. Who was with you on the air boat?

12 A. Bill Turnage and the air boat driver.

13 Q. And that wasn't Mr. Clark?

14 A. No, it was not.

15 Q. Did Mr. Clark tell you that he had reported oil in the vicinity
16 on the day before the 3rd?

17 THE COURT: Sustain the objection, hearsay.

18 MR. KROUSE: Your Honor, objection on those grounds.

19 BY MR. BRUNO:

20 Q. Did you have any information that oil may have been leaking from
21 the refinery on the day before the 3rd?

22 A. No, I did not.

23 Q. Now, when you went to the site of the air boat, I wasn't quite
24 clear how you got to that site, was that by vehicle?

25 A. Yes.

1 Q. And I take it then that the roadways were free of water?

2 A. No, they wasn't. We took a dump truck from Judge Perez and
3 Paris Road, that's where we got on the dump truck, and the dump
4 truck got us all the way to a store by the name of Ponstein's which
5 is on the corner of Paris Road and Genie, and we got in a boat and
6 got to where the air boats were located, the land went up again and
7 that's where they loaded up on the air boat.

8 Q. So there was still water on the street?

9 A. Yes.

10 Q. Now, on the 3rd when you observed the oil on Judge Perez,
11 describe for the court what exactly you saw.

12 A. I saw crude oil pooling in the areas of the low spots.

13 Q. You gave your deposition last week, you were the 30(b)(6)
14 representative?

15 A. Yes, I was.

16 Q. And do you remember having described for me what it looked like
17 moving from the refinery down Judge Perez into the community?

18 A. Yes.

19 Q. Tell the judge what you told me then.

20 A. Sure. The oil was actually coming off of our, the north side of
21 our property and running on the east, the westbound lane of Judge
22 Perez and going west.

23 Q. Could you determine at that time whether or not oil was actually
24 entering into the residential community?

25 A. No, I could not.

1 Q. When is the first time that you learned that the oil actually
2 entered the residential community surrounding the refinery?

3 A. It was sometime after, probably the next day on the 4th, I guess
4 the 4th.

5 Q. Mr. Zornes, is there any dispute as to whether or not crude oil
6 from the Murphy refinery entered any part of the residential areas
7 in the immediate vicinity of the refinery?

8 MR. KROUSE: Object to the form of the question.

9 THE COURT: The form of the question I sustain. Does he
10 have any doubt or based on what he has seen.

11 MR. BRUNO: Fair enough.

12 BY MR. BRUNO:

13 Q. Do you, sir, based upon your own personal observations, have any
14 doubt as to whether or not oil from tank 250-2 entered into the
15 residential area in the immediate vicinity of the refinery?

16 A. No, I don't.

17 Q. Do you know whether or not Murphy admits liability in the legal
18 sense for the oil that's in that community?

19 MR. KROUSE: Object to the form of the question.

20 THE COURT: I sustain that objection.

21 BY MR. BRUNO:

22 Q. As the manager of community relations, your job is to talk to
23 the individuals in the community, right?

24 A. That's correct.

25 Q. You're there to give them information about the goings on in the

1 refinery, right?

2 A. That's correct.

3 Q. And certainly since the hurricane you've had many, many, many
4 conversations with the people in that community?

5 A. Yes, I have.

6 Q. And, in fact, many of the people in the community have come to
7 you to ask you questions about this oil spill in particular, haven't
8 they?

9 A. That's correct.

10 Q. And frankly, your job is to communicate to them what you know
11 about the oil spill, right?

12 A. That's correct.

13 Q. And many of those people have asked you where the oil went,
14 haven't they?

15 A. That's correct.

16 MR. KROUSE: Objection, your Honor, in terms of relevance,
17 I don't know where we're going here.

18 THE COURT: May have some relevance, I'll overrule the
19 objection.

20 BY MR. BRUNO:

21 Q. You also know, do you not, that the people in the community have
22 gone through some very difficult times?

23 A. Yes, I do.

24 Q. Under a great deal of stress?

25 A. Yes.

1 Q. And you also know that many people in the community don't really
2 trust Murphy with regard to what it says as to where the oil went,
3 don't you?

4 MR. KROUSE: I object --

5 THE COURT: I sustain the objection.

6 BY MR. BRUNO:

7 Q. Here is the bottom line question, Mr. Zornes. Do you believe as
8 the manager of community relations that the people of the community
9 of St. Bernard would benefit by an independent determination as to
10 where the oil went in their community?

11 MR. KROUSE: Objection.

12 THE COURT: Sustain the objection.

13 MR. BRUNO: Fine.

14 BY MR. BRUNO:

15 Q. You talked a bit about priorities. On that day your priority
16 was to stop the flow of oil into the community, right?

17 A. That's correct.

18 Q. And the priorities changed with time; isn't that true?

19 A. That's correct.

20 Q. Once the oil had been contained, the next priority was to remove
21 the oil that was found in the community, correct?

22 A. That's correct.

23 Q. And again, as time went on and you had satisfied yourself that
24 the large bulk of the oil had been removed from the community, then
25 the next task was to try and ascertain where the oil went within the

1 residential areas?

2 MR. KROUSE: Object to the form of the question, your
3 Honor.

4 THE COURT: Overrule the objection. You can answer.

5 MR. BRUNO: Isn't that true?

6 THE WITNESS: Would you repeat the last part?

7 BY MR. BRUNO:

8 Q. Once you had identified where the large pockets of oil were so
9 it could be removed, the next priority was to identify where in the
10 community the oil went, right?

11 A. That wasn't my job, but someone was doing that.

12 Q. Well, you had marked that map, and I think if I can approach,
13 Judge, you had indicated on the map your observations as to where
14 the oil went. And I noticed that counsel instead of using the
15 impact zone as defined by Murphy he chose to use the map that the
16 plaintiffs have provided.

17 If you would look at Exhibit 16. Do you, in fact, see the
18 Murphy Oil impact zone in blue in the lower right-hand corner -- I'm
19 sorry, lower left-hand corner?

20 A. This one here (INDICATING)?

21 Q. Yes.

22 A. Yes.

23 Q. Can we go through the exercise, but this time using -- withdraw.
24 Let me just set this up a little bit. In your responsibility of
25 director of the community relations you have described what has been

1 termed the Murphy impact zone, have you not?

2 A. Yes.

3 MR. FRILOT: That's the Murphy settlement zone, not the
4 impact zone.

5 MR. BRUNO: Okay, fine. I apologize.

6 THE COURT: Let's restate it.

7 BY MR. BRUNO:

8 Q. You are familiar with what has been described as the Murphy
9 settlement zone?

10 A. Yes.

11 Q. All right. Fine. And the purpose of that zone is what?

12 A. Is to outline pretty much who was affected by the oil.

13 Q. And the people in that, who live within that community have the
14 opportunity to settle claims with Murphy?

15 A. That's correct.

16 Q. And those people will be paid a sum of money expressed as a
17 percentage of the appraised value of their homes, correct?

18 A. That's correct.

19 Q. And that percentage is the same percentage for everybody in that
20 zone, isn't it?

21 MR. KROUSE: Objection as to relevance.

22 THE COURT: It's to commonality, so he is reaching,
23 overrule the objection.

24 THE WITNESS: I am not sure of the settlement payments.

25 BY MR. BRUNO:

1 Q. Now, if you would, you had described in your direct testimony
2 with opposing counsel that the eastern boundary was Delambert, and
3 in fact, Delambert --

4 MR. KROUSE: Western boundary.

5 BY MR. BRUNO:

6 Q. The western boundary is Delambert, and, in fact, the western
7 boundary of the settlement zone is Delambert, right?

8 A. That's correct.

9 Q. And you described the northern boundary of the, where you saw
10 the oil, and, in fact, coincidentally the northern boundary of where
11 you saw the oil is the northern boundary of the settlement zone,
12 right?

13 A. Some of it.

14 Q. What's the name of the street again?

15 A. Josephine. But there is some on Genie, that went as far back as
16 Genie, just from visual sighting.

17 Q. The point I'm making is that the settlement zone corresponds
18 with your observations of where you visibly observed oil.

19 A. Pretty much. It's very obvious if you were driving at that
20 point seeing it every day, you can pretty much tell where the oil
21 went.

22 Q. Right. But is it a fact that the settlement zone corresponds
23 with your, Mr. Zornes' observations of where you observed the oil?

24 A. That's correct.

25 Q. Now, in fact, the settlement program will pay to anyone who can

1 demonstrate that they have fingerprinted oil on their property, even
2 if they're outside the zone; isn't that true?

3 A. I am not sure.

4 MR. KROUSE: Objection, your Honor, in terms of his
5 knowledge of the settlement program.

6 THE COURT: He isn't sure, I will sustain the objection.

7 BY MR. BRUNO:

8 Q. You're not sure?

9 A. No, I am not sure of that.

10 Q. Now, when you made your visual observations, did you take notes?

11 A. No, I did not.

12 Q. So there is no writing that you prepared yourself that would
13 have indicated where you made these observations of oil?

14 A. No, just my recollection. I live in the parish, I been in the
15 parish my whole life, I am 51 years old.

16 Q. Did you assist in the establishment of the settlement zone?

17 A. Did I do what?

18 Q. Did you help out, did you participate?

19 A. No.

20 Q. Did you report to anyone your observations of the oil in the
21 community?

22 A. Just working on a day-to-day basis with the cleanup crew, which
23 O'Brien was in charge of that.

24 Q. Are you telling the court that the oil only was where you saw
25 it, is that what --

1 MR. KROUSE: Objection to the form of the question.

2 THE COURT: How else can he tell if he didn't test it?

3 MR. BRUNO: That's what I'm setting up a foundation for, I
4 have to ask the first one to get to the second one.

5 BY MR. BRUNO:

6 Q. Your testimony is based solely upon your visual observations?

7 A. Visual observations.

8 Q. You're not suggesting that there is oil, visible to the eye, on
9 every square inch of the settlement zone, are you?

10 A. No, there isn't. There are a lot of them that probably doesn't
11 have oil in them at all but they just happened to fall in that
12 group.

13 Q. And you are not suggesting through your testimony that where you
14 didn't see oil there is no oil, are you?

15 MR. KROUSE: Object to the form, your Honor.

16 THE COURT: I sustain the objection. Restate it with
17 regard to tests.

18 MR. BRUNO: All right. Well --

19 THE COURT: The witness bases his judgment solely on what
20 he saw. He didn't test it.

21 THE WITNESS: I didn't test it, no, sir.

22 BY MR. BRUNO:

23 Q. Is your judgment based upon your own belief that the oil will be
24 only where you see it?

25 MR. KROUSE: Objection, your Honor. Asked and answered

1 and to the form of the question.

2 THE COURT: It wasn't answered, I'll allow it, overrule
3 the objection.

4 MR. BRUNO: Do you want the question restated to you?

5 THE WITNESS: No, I am going to answer it. From my view
6 it's only where I've seen it and it's not anywhere else, and the
7 only way to detect it anywhere else would probably be fingerprinting
8 or testing.

9 BY MR. BRUNO:

10 Q. So you are aware of the fact that there is ongoing today
11 activities by a company retained by Murphy to test to determine
12 whether or not oil is in locations other than where it can be
13 visually observed, correct?

14 A. That's correct.

15 Q. And you know that Murphy is offering settlements to those people
16 whom that company will say have fingerprinted oil on their property;
17 isn't that true?

18 MR. KROUSE: Objection, asked and answered.

19 THE COURT: Asked and answered, but the relevancy there is
20 iffy, too. I don't find it relevant in 401; 403 it's confusing.
21 I'll sustain the objection.

22 BY MR. BRUNO:

23 Q. You took no photographs, did you?

24 A. No, I did not.

25 Q. And you're not aware of any other leaks of crude oil in the

1 vicinity of the refinery other than the release of crude from 250-2,
2 are you?

3 A. I am not aware of any.

4 Q. And I only ask you that because during your direct examination
5 you made reference to some other leaks?

6 A. More or less spills.

7 Q. Some spills. None of those were crude oil?

8 A. I don't know what type of oils that was but I'm almost positive
9 it wasn't crude oil.

10 Q. Do you know a Mr. Tafaro, Pete Tafaro?

11 A. Pete Tafaro, yes, I do.

12 Q. Who is he?

13 A. He works for the sheriff's office.

14 Q. Did you see any oil on Marietta Street?

15 A. No, I did not.

16 Q. Did you see any oil on Golden?

17 A. Don't recall.

18 Q. Did you see any oil on St. Avide? I hope I'm saying that
19 correctly.

20 A. No, I did not.

21 THE COURT: Did he look at those areas?

22 THE WITNESS: I drove through those streets, your Honor.

23 BY MR. BRUNO:

24 Q. You did drive through those streets?

25 A. Yes.

1 Q. Well, actually I should cover that. Did you drive -- your
2 testimony with regard to where you saw the oil, I don't know that it
3 was clear how far to the west or east you actually went in your
4 search for oil. Can you just share with the court how far in either
5 direction you went?

6 A. Yes. I pretty much went, early on I passed my mother's house
7 which lived on Delille and Urquhart, there was no visible oil in
8 that area from Paris Road that way. Pretty much I drove Buccaneer
9 Villa, Arabi. I mean, I pretty much covered every square inch of
10 the parish probably.

11 Q. It's important for us to know. Is it your testimony, we have a
12 diagram of the area in blue, forgive me for the record.

13 THE COURT: Is that 107?

14 BY MR. BRUNO:

15 Q. 107. Is it your testimony, just so that we can have it, that
16 you drove every single street within the blue zone or within the
17 blue area on 107?

18 A. Absolutely not. I didn't drive every street.

19 Q. When is the first time that you were able to drive through any
20 of these areas and make these observations that you shared with the
21 court?

22 A. Not until the streets were pretty much, removed the debris out
23 of the streets, and I couldn't give you an exact date or even a
24 close date of when that was. It was a few weeks after before you
25 can actually drive through.

1 Q. Fair enough. But a few weeks after what, the hurricane or the
2 3rd?

3 A. The hurricane.

4 Q. So roughly, and this is just rough, I am not holding you to it,
5 say between the 21st, thereabouts?

6 A. Yes. And not all of the streets were clean then, only a certain
7 amount of streets were passable. So each day was a little more.

8 Q. Did you observe the oil on the water and how it moved?

9 A. Yes.

10 Q. Tell me, does the oil follow the water?

11 A. The oil is going to go with the flow of the water, correct.

12 Q. Were you able to observe the draining of that community into the
13 40 Arpent that we heard a little bit about in previous testimony?

14 A. Pretty much. Everything seems to drain toward the 40 Arpent
15 Canal. It depends on elevations I guess. And if the pumps were on,
16 the pumps take suction, everything is going to go back toward the 40
17 through our canals.

18 Q. Sure. Is it true or not that most of this area, that is the
19 area on 107 that's defined by this blue line, will drain toward the
20 40 Arpent Canal?

21 A. I am not an engineer, but I know the water by my house drains to
22 the 40 Arpent Canal, drains to the side canals and then side canals
23 drain to the 40. And the side canals are the De La Ronde, the
24 Corinne Canal, different names.

25 Q. You talked about driving the streets. Did you go to these

1 canals to determine whether or not there was observable oil on them?

2 A. Not until I was able to get into that area. That's been, it's
3 been way into the system when streets were being cleaned and stuff.
4 Not during when the water was up, no, I did not go back there.

5 Q. Well, I guess in describing to the court what you observed
6 driving around, did you make the same observations with regard to
7 the waterways and the canals?

8 A. Yes.

9 Q. Did you see any oil in the 40 Arpent?

10 A. Yes. We had oil in the 40 Arpent when our crews were cleaning
11 up because I observed them cleaning up the oil.

12 Q. How far to the west?

13 A. To the west, west was around the canal, I think the De La Ronde
14 Canal where it runs into the 40.

15 Q. Is that this one here (INDICATING)?

16 A. It's by Delambert, right over here (INDICATING).

17 Q. And that's a canal nearest to Paris Road?

18 A. Yes. And they were cleaning up that canal, so I presume it was
19 back there, too.

20 THE COURT: How far is that from the Murphy refinery from
21 the tank?

22 THE WITNESS: From the tank, is that about right.

23 MR. BRUNO: I put my hand on this map, Judge, it says 2500
24 for purposes of the record. That's about where the tank is and my
25 finger is about there (INDICATING).

1 THE WITNESS: That's correct.

2 BY MR. BRUNO:

3 Q. And I understand they broke the at levee at some point to
4 relieve or to assist in draining?

5 A. Yes.

6 Q. Do you know where that was?

7 A. No, I'm not sure where that's at.

8 Q. All right. That's fine. How about to the east, do you know how
9 far the oil got on the 40 Arpent to the east?

10 A. I seen them cleaning up around Munster or Bartolo, that's
11 probably about right there in the 40 (INDICATING).

12 MR. BRUNO: And, well, Judge, the Bartolo is marked on the
13 map, we're still looking at Exhibit 107. And again, 2500 is
14 approximately where the tank is so the oil got that far to the east.
15 All right.

16 THE COURT: Anything further?

17 MR. BRUNO: I'm sorry, Judge, I am being summoned by
18 cocounsel.

19 No further questions, Judge. Thank you.

20 THE COURT: Any redirect?

21 MR. KROUSE: No redirect.

22 THE COURT: Okay. You're excused. We will take a ten
23 minute break at this time.

24 THE DEPUTY CLERK: Everyone rise.

25 (WHEREUPON, A RECESS WAS TAKEN.)

1 (BACK ON THE RECORD.)

2 THE COURT: Be seated, please. Call your next witness.

3 MR. KROUSE: Your Honor, in connection with the testimony
4 of Carl Zornes we will offer, file and introduce into evidence
5 Defendant's Exhibit 16(a).

6 MR. BRUNO: No objection.

7 THE COURT: Let it be admitted.

8 MR. BRUNO: 161 is not in?

9 MR. KROUSE: Yes, we will offer that as well. And 55.

10 THE COURT: Let it be received.

11 MR. BRUNO: And no objection.

12 MR. KROUSE: Your Honor, we will call Ben Badon to the
13 stand.

14 THE COURT: Come forward, please, sir.

15 THE DEPUTY CLERK: Please raise your right hand.

16 (WHEREUPON, BENJAMIN W. BADON, WAS CALLED AS A WITNESS BY
17 DEFENDANTS AND, HAVING BEEN DULY SWORN, TESTIFIED AS FOLLOWS.)

18 THE DEPUTY CLERK: Please be seated. And using the
19 microphone, would you state your name for the record.

20 THE WITNESS: Benjamin William Badon.

21 THE DEPUTY CLERK: Please spell the last name.

22 THE WITNESS: B-A-D-O-N.

23 DIRECT EXAMINATION

24 BY MR. KROUSE:

25 Q. Mr. Badon, good afternoon.

1 A. Good afternoon.

2 Q. By whom are you currently employed?

3 A. The O'Brien Group.

4 Q. And who is or what is the O'Brien Group?

5 A. It is an emergency response management organization. We manage
6 oil spills, hazardous material releases, major incidents of the oil
7 industry.

8 Q. And how long have you been with the O'Brien Group?

9 A. Five and a half years.

10 Q. And describe your position as it related to the O'Brien Group
11 with the Murphy Oil spill on or about September 2, 3, 2005.

12 A. With the Murphy Oil spill I was charged with the position of the
13 deputy incident commander and later the incident commander for the
14 oil clean up in the public areas.

15 Q. And why don't you explain to the court the chain of command, who
16 you would have reported to during that time period.

17 A. In my position as deputy incident commander I reported to the
18 incident commander on the scene, which that position was shared by
19 Murphy personnel either Jerome Donnelley or Doug Wittington. And
20 then they would report to El Dorado directly and I would also make
21 reports directly El Dorado. El Dorado being El Dorado, Arkansas,
22 where the command center was set up for Murphy Oil.

23 Q. Would you also explain the relationship, if any, between the
24 O'Brien Group and particularly you and the appropriate governmental
25 agencies, particularly the United States Coast Guard, the

1 Environmental Protective Agency and the LDEQ.

2 A. Even though we're hired by Murphy Oil to manage oil spill
3 responses, I work hand-in-hand both with the U.S. Coast Guard, the
4 Louisiana Department of Environmental Quality, and also the EPA to
5 effectively manage the oil spill and to take direction from them and
6 to work hand-in-hand with them to mitigate the oil spill and to
7 effectively manage the clean up response.

8 Q. And did you have a direct report in terms of the U.S. Coast
9 Guard -- let's start with the Coast Guard?

10 A. Yes. I reported and worked with them every day, in fact, shared
11 an office with them, as well as Louisiana DEQ and EPA.

12 Q. And can you explain -- first of all, when did you arrive on
13 scene at the Murphy refinery in your capacity with the O'Brien
14 Group?

15 A. I first arrived on scene on September 5th at 0930 in the
16 morning, conducted an overflight of the area and also conducted an
17 on-ground survey of the area and left there about 11:50 and then
18 arrived back on scene by vehicle on September 6th at 2230 hours.

19 Q. And can you explain to the court, there was a compound of
20 trailers on the St. Bernard Highway, how you were situated, the U.S.
21 Coast Guard, the EPA and the LDEQ and what interaction was?

22 A. I had a command center trailer, it was an office trailer, I
23 occupied one office at one end and at the other end U.S. Coast Guard
24 and EPA occupied an office there. In fact, at one point the U.S.
25 Coast Guard and EPA weren't going to set up offices there because

1 they didn't have the space, but I was able to provide a space for
2 them so they could be on site the whole time I was there as well
3 since I would be working with them so intensely.

4 Q. What was your daily reporting in terms of reporting to the Coast
5 Guard and the EPA on the clean up progress of the crude oil spill?

6 A. I'd report to them how many barrels of liquid we had retrieved
7 each day, as well as a count of how many personnel we had on scene,
8 as well as the equipment we had on scene and what equipment would be
9 ordered, if necessary, and in the end how much equipment and
10 personnel had been deconned, deconned in order to leave the site.

11 Q. Were you, in fact, directed by the U.S. Coast Guard early on on
12 where to clean within St. Bernard Parish?

13 A. That's correct. The entire time I was there we worked
14 hand-in-hand. They would tell me where to clean, where they had
15 seen oil, and so I didn't -- I took my marching orders from them,
16 DEQ and EPA.

17 Q. And what was your time period that you spent in this capacity at
18 the Murphy refinery as the deputy incident commander?

19 A. From let's see, I arrived on scene on the 6th, so 6th September
20 2005 till November 8th, 2005.

21 Q. Now, in connection with your duties, was it also your
22 responsibility to formulate an incident action plan, what they
23 called an IAP?

24 A. Correct.

25 Q. Can you explain to the court what the IAP was and how it was

1 drafted?

2 A. What it does, it's actually by law you have to formulate an IAP,
3 and what that does is give you a road map, not only to yourself but
4 also to the federal agencies so that they can kind of gauge your
5 progress, so that they know what areas you're working in, where you
6 have certain types of assets and so that they can make sure that
7 you're doing what you say you are. And so that you're pretty much
8 operating in the areas that they want you to.

9 MR. KROUSE: And we have provided to the court, and I
10 believe they are Exhibits 67, 68, 69 and 70, which are volumes of
11 the incident action plans that you provided to us that we marked and
12 identified and we will now introduce into evidence.

13 THE COURT: Any objection?

14 MR. BRUNO: No, Judge.

15 THE COURT: Let it be received and marked.

16 MR. KROUSE: Connie, can we pull up 003-521. While we're
17 waiting for that, I am going show him a hard copy to speed things
18 up. Mr. Badon --

19 Joe, have you seen this, I'm sorry?

20 MR. BRUNO: That's fine. I note you're leading and I'm
21 not objecting.

22 MR. KROUSE: Thank you.

23 BY MR. KROUSE:

24 Q. Mr. Badon, can you identify that document for the court?

25 A. Yes. This is an incident status summary, also known as an ICS

1 209 form, and it is from the November 1st to November 4th.

2 Q. Now, is this the last incident action plan formulated by your
3 company that basically summarizes the statistics with regard to the
4 oil recovered by your company?

5 A. That's correct.

6 Q. Can you briefly review that document for the court?

7 A. It shows that up to this point we have recovered 17,962 barrels
8 of oil. We had lost 7,031 barrels to evaporation, this is a 30%
9 evaporation rate set forth by the U.S. Coast Guard and EPA, and that
10 117 barrels were still onshore, that means either on the banks of
11 the canals or in other areas that couldn't be retrieved by my group.

12 Q. I am going to put this on the ELMO. Could you briefly describe
13 for the court the number of contractors and identify the contractors
14 who were working under your control and command during that time
15 period.

16 MR. LAMBERT: Your Honor, I forgot to do something after
17 the break. One of our class representatives has to pick up her
18 child, and I am going --

19 THE COURT: Sure, she is excused. You may leave, ma'am.

20 MR. BRUNO: I was going to object to relevance, Judge.

21 THE COURT: What is the question?

22 MR. BRUNO: About how many contractors are on site, the
23 document will tell us and I am happy that the document does.

24 MR. KROUSE: The document actually doesn't. I want the
25 witness to explain to the court the breadth of the clean up

1 operation following the spill.

2 THE COURT: Okay. I will overrule the objection.

3 THE WITNESS: At the most we had over 200 personnel
4 working at the scene, about 18 vacuum trucks, 21 skimmers, and over
5 6,200 feet of boom that were deployed in the canal.

6 BY MR. KROUSE:

7 Q. And what was the time period that that was actually utilized?

8 A. That's around October 4th, that's our peak of materials and
9 personnel on scene.

10 Q. Now, you mentioned earlier about a video that you had taken on
11 or about September 5, 2005; is that correct?

12 A. That's right. September 5th when I did my overflight and
13 on-ground survey of the area. I also took an accompanying video of
14 my trip there.

15 THE COURT: You are going to have to switch over.

16 BY MR. KROUSE:

17 Q. We are going to have two things on the screen. On your left can
18 you identify that for the court?

19 A. Yes. I am actually attempting to start the video there from the
20 helicopter, it's a little shaky at first. But you'll see the
21 beginning footages of when we're entering into over St. Bernard
22 Parish and I start taking footage there.

23 (WHEREUPON, THE VIDEOTAPE WAS PLAYED.)

24 BY MR. KROUSE:

25 Q. Could you briefly narrate this as we show the court.

1 A. Right now this is the Mobil Refinery. I was just trying to get
2 a sense of the destruction in the area, trying to get a good
3 document of where we were as well. I believe that street below us
4 coming up --

5 MR. LAMBERT: A.J. for the record, this is a week after
6 the hurricane, September 5.

7 MR. KROUSE: September 5th.

8 THE WITNESS: This is September 5th. See off in the
9 distance you see Judge Perez, you stop and rewind, back part was the
10 northern and southern tank farm of Murphy Oil refinery. Those are
11 the neighborhoods that run west of the refinery. To the left there
12 you'll see Paris Road, that's Judge Perez there (INDICATING).
13 That's the beginning again.

14 CONNIE: I am going to advance it. Do you want it past
15 that?

16 THE WITNESS: Yes, ma'am. That's a little too far, that's
17 actually when we're in the truck, that's the 250-2 tank -- and when
18 I say tack that's also terms for the dash -- 250-2 tank series and
19 also the 450 series tanks there as well, they are on the east side
20 of them. Going around you can see the damaged tank there and the
21 extensive flooding.

22 The first street you come to is Jacob. Look back on Jacob
23 and then Despaux. Right there in the middle there is Judge Perez
24 and your closeup shot of Judge Perez. You see the staining on the
25 medians there as well as the large number of vehicles in the

1 roadways. And then as the sun hits it you can start to see somewhat
2 of a sheen there on Judge Perez.

3 Looking back on the southern tank farm there, this I
4 believe is Despaux or Jacob, kind of zoom in pretty close there.

5 Going back towards St. Bernard Highway, which would be on
6 our right here. And then scanning again over the breadth of St.
7 Bernard Parish here, that's the marsh area between the levee and
8 St. Bernard Highway. And then we came to rest on the batch, that's
9 we landed in-between the Murphy Oil dock and the St. Bernard
10 Highway. This is where we got into the vehicle and then proceeded
11 west along St. Bernard Highway.

12 At this point my camera is looking north and looking for
13 any signs of visible oil staining or any oil on the road.

14 BY MR. KROUSE:

15 Q. Did you see any oil on St. Bernard Highway during this?

16 A. No, sir, I did not.

17 Q. So you're traveling westbound on St. Bernard?

18 A. Westbound. And right now my camera is looking northwest.
19 Again, looking for any oil or signs of oil or staining of oil.

20 Continuing west and panning around, see if I can find any
21 signs of oil anywhere.

22 That's another refinery, I don't know exactly the name of
23 it. That's not Murphy just so you know.

24 I believe we're coming up on Palmisano Boulevard pretty
25 soon here.

1 Q. In this area, Mr. Badon, are you noticing any oil?

2 A. No, sir.

3 THE COURT: Do you know where you are, sir?

4 THE WITNESS: I am sorry, say it again, sir?

5 THE COURT: Do you know where you are?

6 THE WITNESS: Yes, sir. We are heading westbound on
7 St. Bernard Highway, my camera is turning north, haven't reached
8 Paris Road yet.

9 MR. KROUSE: Connie, if you would, why don't you split the
10 screen and put up the other graphic for the judge. And, Mr. Badon,
11 if you can orient the court with the graphic.

12 THE WITNESS: Right now I am coming up to the corner of
13 St. Bernard Highway and Paris Road. At this point we head north on
14 Paris Road right here, we will be heading north on Paris Road right
15 there and we were heading north now on Paris Road itself. And
16 again, looking for signs of oil, looking for any staining oil on the
17 roadway or on the buildings. Also documenting all of the heavy
18 damage there as well.

19 BY MR. KROUSE:

20 Q. Damage from what?

21 A. Katrina, high winds, flooding.

22 Q. Can you stop the video when you reach the intersection of Paris
23 Road and West Judge Perez?

24 A. I can stop it from here? Keep going. Sorry about that. Again,
25 I am looking west here, looking west off of Paris Road here, looking

1 for any staining or signs of oil.

2 Q. And are you seeing any staining or signs of oil?

3 A. No, sir, not at this point.

4 Q. And again, your location at this point in time?

5 A. Now I am at the intersection of Paris Road and Judge Perez. As
6 I've marked on the map there.

7 Q. Why don't you go ahead and take that right-hand turn, and can
8 you --

9 A. Now, I am looking east again down Judge Perez panning across.

10 Q. And on this portion of Judge Perez do you see any staining or
11 oil signs?

12 A. No, sir. Again, heading east down Judge Perez looking for any
13 staining on the medians, looking for any staining on the roadways,
14 heading this way looking for any staining in the parking lots or on
15 the ground. Coming up towards Delambert Street here.

16 My camera is now looking south off of Paris, I'm sorry,
17 off of Judge Perez, and this is where we make our first stop here.
18 This is going to be the intersection of Delambert and Judge Perez.

19 Q. Why are you stopping here?

20 A. This is where we first noticed oil staining.

21 Q. Why don't you describe that for the court.

22 A. Okay. You'll see no oil staining here south of Judge Perez. I
23 am making sure I get a good view of the street sign here, then I
24 will be panning the camera north to the north side of Judge Perez on
25 Delambert.

1 Q. Where is the oil located that you're viewing?

2 A. There is no oil here yet, there is no sheen in the pooled water
3 here.

4 Q. And where is here?

5 A. Here is south on Judge Perez on Delambert. Now I've stopped the
6 camera and refocused back to north Judge Perez near Delambert. We
7 just panned across the De La Ronde Canal there. And again I am
8 looking at the sign to make sure we have a point of reference.

9 Heading back down, this is where we made our first, our
10 second stop, I'm sorry. Second stop was on Golden Street. We're
11 stopping here on Golden Street.

12 Q. And what do you observe here?

13 A. I observe, as you can see in the video, staining on the roadway
14 of oil as well as accumulations of pooled oil on the streets. Oil
15 sheens on the water, oil staining on the buildings as well.

16 Q. What time is this video taken by you on September 5?

17 A. I started filming I believe at 0935, this would probably be 0945
18 or 0950.

19 And again, this is pooled water with some oil sheen in it
20 as well as pockets of oil on the roadway. Again, staining as you
21 can see on the streets.

22 One thing you'll see almost like a stratification of oil.
23 Once the oil is in a big puddle you will see streams of oil like you
24 see here.

25 Q. And again here is where?

1 A. On the street on Judge Perez at the intersection of Judge Perez
2 and Golden Street. And you'll also see here a pretty like clean
3 asphalt here, clean roadways and then you will see staining on the
4 boat there.

5 Across the street I believe this is, if I can make out
6 that sign, Rosetta. I walked across there, I was making sure I got
7 a good shot of the median there. And you can see the staining on
8 the street there, the north side of Judge Perez.

9 Again, this is also the north side of Judge Perez on
10 Golden Street. This is where Golden Street bifurcates by the
11 Chinese restaurant there. And behind the Chinese restaurant, I
12 believe it's called Stixx, you'll see some pooled oil there. I
13 believe I pan down so you can see a nice sheen as well as staining
14 on the grass there of the oil. Some staining there.

15 And then in this shot you can definitely see the
16 difference between the water there and where the oil had pooled on
17 the water, as well as the staining on the dumpster and other
18 materials.

19 Now, I am heading from Rosetta, this is going east down
20 Judge Perez passing up the next street next to Rosetta, cross back
21 over to the north side. The next street from the Rosetta I don't
22 know that name right offhand.

23 Again, you'll see where we saw staining on the north part
24 of Judge Perez here, you'll see staining on the roadways, on the
25 parking areas, as well as pooled oil in the streets.

1 Again, my camera is looking north here, you can see the
2 staining on the roadways here, as well as the staining on that Conex
3 box, the staining there on the roadway.

4 And you can definitely see a difference between the
5 stained roadway and the roadway that hasn't been stained as well.

6 You see the fire plug there, it has some oil on it. And
7 then the natural low points, where the curves are the oil had
8 accumulated in some spots and next to the sidewalks in the parkways.

9 Q. Is the staining consistent throughout the, in terms of a
10 pattern on this road Judge Perez?

11 A. It starts at a certain point and you will see staining all the
12 way to the refinery. So as far as being consistent in that way,
13 yes, it is. But as far as being on the roadway itself, you will see
14 some areas that are stained and some areas that aren't.

15 Here is a good shot of the areas on the sidewalk that had
16 oil on them as well, and you will see the difference between the
17 regular mud and then the oil itself.

18 Again, staining of the medians there. I believe this is
19 the next street down from Rosetta. Again, just getting a good shot
20 of the extent of the damage from the flooding and also where the oil
21 had stained certain structures.

22 Again, I am looking south here, and you will see the
23 staining, the staining is on the north side but it never goes
24 completely over the median. So from this you can see that the water
25 never topped the medians.

1 Oil staining on the north side here, staining on the north
2 side of Judge Perez here on the roadway. Continuing down, walking
3 down and looking at some of the small rainbow sheens and also the
4 heavy accumulation of oil on the north side of Judge Perez in the
5 streets.

6 Q. How far are you approximately from the refinery at this point in
7 time?

8 A. I am still a good ways from the refinery. We haven't made it to
9 the high school yet. We're still maybe three streets down from
10 Rosetta maybe.

11 Q. When you speak of high school, that's Chalmette High School at
12 Palmisano?

13 A. That's correct. Lyndell, around Lyndell there.

14 All right. Back in the vehicle again heading east. And
15 at certain points here we had to go to from the north side to the
16 south side depending on obstructions in the roadway.

17 Again there is some oil staining there on Judge Perez.
18 This is a shot of Garner, this is oil spill response organization
19 that Murphy hired to effect the clean up. You see the large
20 trailers of boom that were in effect and had to be placed out on
21 September 5th in the canals to prevent the spread of oil, as well as
22 John boats to place that boom in the canals as well.

23 Q. Where were those booms, if you know, placed on that date by
24 Garner?

25 A. Beginning on that date they were placed on the east and west

1 side of the Twenty Arpent Canal north of the northern tank farm.

2 Q. Why was that the priority?

3 A. Because that's where the majority of the oil was found in the
4 canals.

5 If I can just digress a little bit. There are certain
6 priorities when dealing with an oil spill. First off, of course, is
7 safety, containment and control of the spilled material. And that
8 first boom was placed out there in order to contain and confine that
9 oil that had been released.

10 Q. So to your knowledge the first boom was placed on what date
11 around the 250-2 dyke?

12 A. September 5th. We're traveling east again, we're on the south
13 side of Judge Perez now. I'm panning across, you will see some oil
14 staining there on some siding that had been deposited there as well
15 as staining there of the grassy area.

16 We were coming up now on Chalmette High School. You'll
17 see staining on the parkway areas, that's the area between the
18 street and the sidewalk. You also see some staining on the medians
19 and in the streets as well. There is Lacoste Elementary, which was
20 located north of Chalmette High School.

21 Q. Did you see any oil during your tour on the parking lot or the
22 school grounds of Chalmette High School?

23 A. No. One thing you'll notice is that there is not a lot of oil
24 in that water as well, it's located in front of Chalmette High
25 School.

1 We see some staining here at the intersection of Palmisano
2 and Judge Perez. That's oil staining there that you see on the
3 ground and again staining of the siding there, some pooled oil
4 there.

5 Right there you will see some pooled oil. Pooled oil here
6 at the intersection of Palmisano and Judge Perez. As well as the
7 staining of the streets there and the median.

8 Q. You mentioned earlier on the medians, the neutral grounds, is
9 the oil consistently on the top of the neutral ground median or do
10 you see green space, grass?

11 A. You will see green space on the very top of the medians.

12 Q. And what is that indicative of?

13 MR. BRUNO: Objection, your Honor, calls for an opinion.

14 THE COURT: From his observations.

15 BY MR. KROUSE:

16 Q. Just based on your observations.

17 THE COURT: I'll allow it.

18 THE WITNESS: Just to my observation you will see the
19 grass, if the oil reached that part it would have stained it as
20 well.

21 You will again see oil on Judge Perez there. And you will
22 see the delineation on the median there where the oil had reached up
23 to.

24 BY MR. KROUSE:

25 Q. Again, Mr. Badon, on the driving map can you indicate to the

1 court your location?

2 A. Yes. Probably about right here now (INDICATING). Heading up
3 towards Despaux, I believe we just passed Riverlands or passing
4 Riverlands now or at the intersection I believe. You see the
5 staining on the medians here on either side of the median.

6 Looking here again for oil staining on the buildings
7 there. You will see the oil stainings on this side, on the northern
8 side as well as you'll see, you can definitely see the delineation
9 of the oil in the waters in those pools there.

10 Q. And again, your cross street here is Riverlands?

11 A. I believe, yes. I know Riverlands Apartments was across from
12 us. And we headed down a little bit farther. I believe this is the
13 next street over. Again, heading down and we will see the staining
14 on the streets of course.

15 I'm coming up, I believe, to the Corinne Canal or Chalona
16 Canal. Oil here as well in the canals and on the streets. Zoom a
17 little bit, there was some sheening there on the Corinne.

18 And then you'll see over here not so much staining on the
19 median there, it got right above the lip of the concrete, the
20 concrete lip there, got right above there.

21 And again, just panning down east towards the refinery
22 now. Now we're heading again east toward the refinery down Judge
23 Perez. The staining on the medians and one of the most photographed
24 boats in St. Bernard Parish standing on Judge Perez and then some
25 sheen as well in the water there.

1 You will see some rainbow sheen on this water here, you
2 can kind of see it right in front of us as well as some streams of
3 oil to our left. Staining on Judge Perez and on the medians. More
4 staining here. And you will see where the staining is now
5 concentrated pretty much to the north side right there on where it
6 meets there, you see some staining as well above the sidewalk.

7 BY MR. KROUSE:

8 Q. Again, what's your cross street for reference approximately?

9 A. I know we had just passed the Corinne Canal, we're heading east,
10 I don't know the exact street name.

11 THE COURT: Had you been to St. Bernard before September
12 the 5th?

13 THE WITNESS: A couple of times, yes, sir. Here is some
14 staining here on the northern side as well as in that parking area
15 of that area. Some stray dogs, some staining of the oil there, I'm
16 sorry, some staining of the roadway there by the oil.

17 Now, we are on the south side of Judge Perez, again
18 heading east.

19 BY MR. KROUSE:

20 Q. Ben, since the judge asked, where were you born and raised?

21 A. Slidell, Louisiana, fourth generation.

22 Q. Where did you go to high school?

23 A. Slidell High School. Again, some more stray animals there.
24 Staining on the roadways and on the medians. This is the southern
25 side of Judge Perez heading east, just passed up Lena Drive.

1 And what we did was we were on the southern side, just
2 passed up Lena, then we backtracked and went west and went behind
3 the Pizza Hut there to document some of the pooling of the oil
4 behind the Pizza Hut as well as the staining of those areas. And
5 you will see the heavy staining here on the north side.

6 Q. Again, can you orient the court to the driving map to the left,
7 where are we?

8 A. I'm in this area here now, I believe in this area here right
9 behind the Pizza Hut and in the parking lot (INDICATING).

10 Now I am looking at the streets that are behind the Pizza
11 Hut close to Lena Drive. You will see the staining there and the
12 medians and also on the light poles. Staining on the siding there,
13 staining on the fences, staining on the northern side of the parking
14 lot. You'll see the lines of staining on the buildings there north
15 of Judge Perez. Again, we're looking north here behind the Pizza
16 Hut parking lot.

17 I am panning again west -- I'm sorry, east. Then we're
18 going back to Judge Perez and we'll be heading east again when we
19 get to Judge Perez. You will see staining here in some of the
20 undeveloped areas on Judge Perez here. Some staining on the grassy
21 areas, as well as on the vehicles here, on the vehicle there and on
22 the street in front of it, as well as the median (INDICATING).

23 Now we are on the south side of Judge Perez heading east.
24 Panning north with the camera.

25 Q. Mr. Badon, let me ask you this. I am somebody observing this

1 video. Did you observe any residents of St. Bernard Parish during
2 the course of this video on September 5th other than first
3 responders and sheriff's office personnel?

4 A. Yes, I did. There were some citizens who had made it back to
5 their homes and were in their homes. I would say maybe less than a
6 handful but I did observe some people there.

7 Q. What was the official start date from the parish to your
8 knowledge when residents were supposed to return to their homes?

9 A. It was after Hurricane Rita on September 26th, and then to this
10 area east of Paris I believe it was one week after that, I am not
11 sure of the exact date.

12 Q. And that was the official start date for the return by the
13 parish authorities?

14 A. That's correct. Up until this point people who were in their
15 houses were there without, not at the approval of parish
16 authorities.

17 Q. They were there at their own risk?

18 A. That's correct.

19 Q. Could you explain to the court the destruction that you
20 witnessed of the properties from the storm surge from Hurricane
21 Katrina?

22 A. Very extensive. I have friends and family that live in this
23 area and they were hit very hard. Areas that had just unbelievable
24 damage. I had never seen anything like this, the people I was
25 traveling with had never seen anything of this damage to this extent

1 ever. An entire community leveled like this. So I had never seen
2 damage to this extent before.

3 Q. Where were we on the video here?

4 A. We are south of the northern tank farm on Judge Perez. I am
5 panning south here to the southern tank farm. We are crossing over
6 the median area through that little break, I am panning north again
7 and will be entering the northern tank farm. I am panning the
8 camera to the west now.

9 Now, in panning it to the east you'll see on the left
10 that's the fork in the tank to the left, that's the 250-1 tank.

11 Q. What was your purpose of going to the tank farm of the Murphy
12 refinery in this visual?

13 A. I wanted to get a good idea of what we were dealing with, to get
14 a good look at the areas, I could send this video back to El Dorado
15 to the command center there so they could have a hands-on first view
16 of the area as well as the tanks that had been affected.

17 Q. What was your observations that you had after viewing this area
18 on September 5th, specifically the north tank?

19 A. The north tank farm, the 250-2 had been moved to the east
20 approximately 30 feet and that oil had leaked from that area, from
21 that tank area into these, into the tank dock area and out into the
22 surrounding areas.

23 Q. Does your video show a breach from the tank dyke containment
24 area of the 250 series?

25 A. I don't believe so. Again, I didn't get out of the vehicle and

1 get on top of the berms themselves because I wasn't wearing any
2 rubber boots or proper attire to be in that area at the time. So
3 when I got out of the vehicle I made sure I wasn't standing in any
4 oil, that's why I didn't get up on the berms themself.

5 Q. Again, on the driving map to the left, can you show the court
6 exactly where you are?

7 A. We are here, right here at this corner here (INDICATING). This
8 is the southeastern part of the 250-1 tank. Panning east is what
9 they call the contractor parking lot, and the southern part of the
10 Murphy Canal you'll see the difference between the 250-1 and the
11 250-2 supposed to be in line, but this one was off by 30 feet. You
12 will see the tank dyke areas here, as well as staining on the grass
13 (INDICATING).

14 Panning across. Staining on the boat that was moored
15 there. That's Richard Nalam (PHONETIC) with Murphy, he is the one
16 that gave us the driving tour of the area. Look at some of the oil
17 stained areas there on the grassy area. An oil stained MRE box
18 there as well as some pockets of oil.

19 Q. And again, where was that located?

20 A. This is at the southeast part of the 250-1 tank, right where we
21 had parked.

22 Again I'm panning south now looking at Judge Perez there
23 looking at some of the staining on the roadway there and the grassy
24 areas. Now, I've walked outside of the fence area and I am standing
25 on Judge Perez panning south looking at the median, the staining on

1 the median as well. And then panning down east down Judge Perez,
2 and just documenting the destruction that was down there as well.

3 This is the southern tank farm. Staining on the median,
4 and again, I'm looking -- I'm looking south from this vantage point
5 here. Look north again, looking back inside of the refinery area --
6 I'm sorry, I was looking north there, that's the alleyway between
7 the 250 series and the 250 series tanks.

8 Back in the vehicle. I'm retracing our trip back this
9 way. We are still inside the northern tank farm here passing of the
10 450 series, some staining inside of the northern tank farm. Some
11 staining there on the grassy areas.

12 Now, we are heading out of the gate here, I believe we're
13 on Judge Perez again, panning south. Now, we're going to be going
14 to what they call Contractor Road, this is a road that runs north
15 and south, west of the southern tank farm. Right now we're heading
16 towards that area down Judge Perez, west on Judge Perez. Now we're
17 heading south on the Contractor Road which runs north and south.

18 The area that I am panning to on my left is the southern
19 tank farm. Panning across looking at the destruction there, as well
20 as the large accumulation of sediment from the flooding.

21 This is the back side of the houses on Jacob Drive and
22 there's the southern tank farm there. Where we're going to be
23 heading, we're going to go approximately halfway down this road and
24 then go into the southern tank farm and videotaping the southern
25 tank farm to look for any oil staining there in the southern tank

1 farm and for any other destruction in the southern tank farm.

2 Q. Did you see any oil stain in the southern tank farm?

3 A. No, I did not.

4 MR. KROUSE: Why don't we conclude the videotape at this
5 point, and we will mark and identify that I believe as Exhibit 87
6 and offer, file and introduce that into evidence.

7 THE COURT: Any objection? Let it be received into
8 evidence.

9 MR. KROUSE: And I believe the driving video path map is
10 Exhibit 18, and we will offer that into evidence as well.

11 THE COURT: Let it be received as well.

12 BY MR. KROUSE:

13 Q. Mr. Badon, part of your job responsibility was to organize and I
14 guess orchestrate the clean up of this oil spill; is that correct?

15 A. That's correct, manage the oil spill response organizations that
16 responded to this spill.

17 Q. Could you give to the court, describe to the court the
18 priorities of how this was accomplished, how was it done generally
19 speaking?

20 A. As I mentioned before, safety is the first priority when dealing
21 with any incident such as this. Next would be containment and
22 confinement of the material that was released and then secure the
23 source of the release and then to recover the materials, if
24 possible.

25 Q. And at some point in time were you requested by governmental

1 agencies to come up with a map of what you believed the affected
2 area of the oil spill was?

3 A. Yes, sir. From working in conjunction with the EPA and the
4 Coast Guard we were tasked with putting together zones, zones of
5 areas that were affected. Whenever you're dealing with an incident
6 such as a release you have to set up cordon zones. And for lack of
7 better terms in the incident command center it's designated hot,
8 warm and cold zones.

9 The hot zone would be any area that was affected, and I
10 was charged to map out areas that were affected in the public areas,
11 such as canals, streets, sidewalks and parkways or any other public
12 area.

13 And working in conjunction with not only my own surveys
14 and assessments, but also the assessments done by the U.S. Coast
15 Guard. One such assessment was conducted on September 16th, around
16 10 in the morning by the U.S. Coast Guard.

17 Q. You have a map in front of you on the screen, can you identify
18 that that as Murphy Exhibit 001-003?

19 A. That is correct. Based on visual observations by myself and the
20 U.S. Coast Guard, this map was developed to give a rough estimate on
21 where the affected areas were by the release of the oils in the
22 public areas.

23 Q. And when was this map drafted?

24 A. September 8th this map was developed and was sent, and on that
25 date it was given to director of the OEP for St. Bernard Parish and

1 Captain Plauche with the St. Bernard Parish Sheriff's Department so
2 they could set up cordon areas not to allow citizens into this area
3 so that we could effectively clean up and manage a spill response.

4 Q. And when specifically did you give it to representatives of the
5 St. Bernard Parish?

6 A. That would be September 8th.

7 Q. And what was their response to you when you gave them this map?

8 A. At the time that I gave them this map they said they did not
9 have the manpower to effectively cordon off these areas.

10 Q. Could you review for the court, generally speaking, the
11 boundaries that you have on here on the affected area?

12 A. That would be the western most boundary would be Delambert, the
13 eastern most would be just to the other side of the refinery,
14 southern would be about Ohio Street south to Judge Perez, and north
15 runs up above the Twenty Arpent Canal and it goes down to, I don't
16 know exactly the name of the street there, it's -- I can't read it
17 from here.

18 Q. That's fine.

19 A. But it pretty much follows along the No. 8 Canal as it goes east
20 and west.

21 Q. And can you identify this exhibit?

22 A. Right. That was an, that was a map put together by myself and
23 Isaac Will, who is one of my supervisors, to illustrate on the 40
24 Arpent Canal where we had placed boom. This map is generated on
25 September 11th because the boom had been placed on that date because

1 oil had been sighted on the 40 Arpent Canal on September 10th.

2 MR. LAMBERT: Excuse me, your Honor. Could I just for the
3 record interpose an objection because this has to do with clean up.
4 It doesn't have to do with defining class boundaries, it has to do
5 with emergency response and I think it's a completely different
6 purpose.

7 THE COURT: We are getting away from the class
8 certification now. What's the point of this?

9 MR. KROUSE: The point of this, your Honor, is that the
10 plaintiffs have made a point of saying the 40 Arpent Canal is a
11 preferred pathway, and with this witness we want to go in and
12 explore that contention or allegation.

13 MR. LAMBERT: Your Honor, we are dealing with two weeks
14 later at least, and with regard to this I guess we're going to have
15 to rebut this somehow. But the point is that this kind of emergency
16 response and cleanup effort has nothing to do with fingerprinting
17 Murphy Oil to the 250 series tanks.

18 THE COURT: I understand, but I overrule the objection.
19 Let's go forward.

20 BY MR. KROUSE:

21 Q. What was the purpose, generally speaking, of placing these booms
22 in the 40 Arpent Canal on September 11th?

23 A. That's right. Again, to contain, in that priority list we
24 contain the oil in certain areas before we retrieve it. This is the
25 containment area that we found on the 40 Arpent Canal. There was no

1 oil found past Jacob and Despaux Street on the 40 Arpent Canal, so
2 there is no oil found past the No. 7 pumping station to the east on
3 the 40 Arpent Canal.

4 THE COURT: Counsel has an objection.

5 MR. LAMBERT: Your Honor, object again because this is
6 September the 18th I guess is what he is talking about.

7 THE WITNESS: No, sir, this is September 11th.

8 MR. LAMBERT: The 11th. It's still almost two weeks
9 later, and now we're going to have to introduce evidence to rebut
10 this.

11 THE COURT: You have to do what you have to do.

12 MR. LAMBERT: Thank you, your Honor.

13 THE COURT: It may go to weight but it doesn't go to
14 relevance.

15 MR. KROUSE: We will try to quickly move through these.

16 BY MR. KROUSE:

17 Q. Can you identify this exhibit for the court?

18 A. Yes, sir. This is a map put together by Polaris. Polaris is a
19 company that does SCAT team surveys. SCAT is shoreline
20 contamination assessment team. They work in conjunction with me in
21 order to map out where oil is.

22 This is pretty much my road map to tell me where oil is
23 and where I have to conduct clean up. This map itself shows the
24 areas of the canal that were affected by the spill of oil. The
25 areas in red are the areas that have the heaviest oil. This area,

1 this is blue, is where there was no oil, areas in green where there
2 is moderate oil and areas in yellow where there is light oil
3 appearance.

4 Q. And specifically the red areas, could you review that for the
5 court?

6 A. The red areas are beginning from north to south on the 40 Arpent
7 Canal going from the western most boundary to Jacob Drive, the
8 eastern most to Bartolo Drive, going down the Meraux Canal, the
9 entire length of the Meraux Canal, east of the intersection of the
10 Meraux and the Twenty to Munster. On the Twenty going towards past
11 Campagna to I believe it's Corinne, and then running the heaviest
12 again on the Corinne Canal from the intersection where the Twenty
13 Arpent Canal and the Corinne intersect and south to where the
14 Corinne Canal turns into the No. 8 Canal and then a small area south
15 on the Corinne Canal as well.

16 And then the entire length of the Meraux and then a small
17 ditch that comes off of the Twenty, off of the Twenty here and runs
18 north and south, west of the northern tank farm.

19 Q. And the blue area generally, what does that mean?

20 A. No oil.

21 MR. KROUSE: We'd marked that as Defendant's Exhibit No.
22 105, your Honor.

23 THE COURT: I'll admit it.

24 MR. KROUSE: And the prior exhibit we marked as Exhibit
25 104 and move that for admission.

1 THE COURT: All right. Admit that.

2 BY MR. KROUSE:

3 Q. The next exhibit which we will mark and identify is Exhibit 106.
4 Can you identify this for me?

5 A. Again, this is another schematic by Polaris, a company that we
6 hired to give us the road map. That outlines the public areas on
7 the streets, the map before was the canals, this is of the streets.
8 The heaviest areas you see are Jacob north of Judge Perez, Despaux
9 Drive some areas both north and south, and then spattering areas
10 throughout that neighborhood west of the refinery.

11 Q. How did you rely upon those maps in terms of your assessment of
12 the oil spill in the affected area?

13 A. These maps were taken by myself, the EPA and the Coast Guard and
14 they were effectively used to develop the IAP, that incident action
15 plan of how we were, my objectives of where I would clean the oil
16 and how I would do that, depending on where the heaviest oil was all
17 the way to the lightest. Where the heaviest oil was, that's where
18 we would put the most resources, and then EPA and DEQ would take
19 that IAP, and also the Coast Guard, and make sure I was conducting
20 my operations as I said so in that plan.

21 Q. Can you identify this chart map for me?

22 A. Yes. Again, this is Polaris as well. They had done a map of
23 the canals that actually showed the street names and also put some
24 annotations on there as to the degree of the oil.

25 If you want I can point out on some of the annotations,

1 especially on the 40 Arpent Canal there that no oil was observed
2 from Jacob Street on the 40 Arpent Canal from Jacob to Paris.

3 Q. The other annotations, sir?

4 A. The other annotations, no oil observed on Virtue Street canal to
5 Paris Road, no oil observed from Virtue Street Canal to 40 Arpent on
6 the De La Ronde. And annotation oil in this canal may be due to
7 overturned vehicles and a sample was collected.

8 MR. BRUNO: Your Honor, I have been patient. This is not
9 based upon this witness's observations in any respect.

10 THE COURT: That's a valid objection. What's he doing
11 with this?

12 MR. KROUSE: Your Honor, first of all, let me ask the
13 question.

14 BY MR. KROUSE:

15 Q. These maps are created and given to you in your capacity as the
16 deputy incident commander; is that correct?

17 A. As the incident commander I direct personnel, I also direct
18 agencies and certain companies to find the oil where I should direct
19 my clean up operations. I am responsible for directing those people
20 to find the areas that were affected by the oil spill.

21 Q. Now, Mr. Badon, when you are not sitting in a trailer and not
22 observing or doing your job responsibilities, you're in the field
23 observing what your contractors are doing; is that correct?

24 THE COURT: One person at a time.

25 MR. BRUNO: It's still hearsay. He may be the man in

1 charge but he is not here as an expert. Nor is he here in any other
2 capacity. He is relying on the observations and testimony of others
3 and I suggest that it's objectionable.

4 BY MR. KROUSE:

5 Q. Did you personally observe the areas that are indicated on the
6 maps that we've reviewed?

7 A. Yes, sir, I did.

8 Q. Do you have personal knowledge of the areas that have been
9 indicated on these maps?

10 A. Yes, sir, I do. I spent two months down there.

11 Q. Did you live down there --

12 THE COURT: I'll overrule the objection and allow it. Are
13 the maps consistent with your observations?

14 BY MR. KROUSE:

15 Q. Are the maps consistent with your observations, sir?

16 A. Yes, sir, they are.

17 THE COURT: I hope you're about finished, counsel.

18 MR. KROUSE: Just a few more, your Honor.

19 BY MR. KROUSE:

20 Q. Can you identify this for me?

21 A. That's a hard boom and absorbent boom we had placed on the 40
22 Arpent Canal at the intersection of Jacob and Despaux and the 40
23 Arpent. This is the western most containment boom we had placed out
24 there in order to catch, containment of oil from the other booms
25 that had been set up.

1 This is only a preventive measure because there is no oil
2 found at this point past the other booms that we had set up and no
3 oil staining on the canal, on the sides of the canals on the 40
4 Arpent or in the canal itself.

5 Q. And did you personally observe this condition at the 40 Arpent
6 Canal?

7 A. Yes, sir, I did. And I am the one who took this picture.

8 Q. Sir, are you familiar with the intersection of Paris Road and
9 the 40 Arpent Canal?

10 A. Yes, sir, I am.

11 Q. Do you understand that there is a culvert located there?

12 A. Yes, sir.

13 Q. Could you describe the condition of that culvert when you first
14 observed it?

15 A. Blocked by heavy debris, tree limbs, oyster grass, car tires,
16 vehicle parts. Just completely blocked by at least 10 to 12 feet of
17 debris.

18 Q. When did you see that?

19 A. I first noticed that when we were able to make access to that
20 area, probably about September 15th. Between September 11th and
21 September 15th.

22 Q. Now, during this entire time period between September and
23 November 4 you're under the direction of the Coast Guard and the
24 EPA?

25 A. That's correct.

1 Q. Let me turn your attention to plaintiffs' map 107. Did the U.S.
2 Coast Guard or the EPA ever request or demand that you and your team
3 clean the area to the west of Paris Road?

4 A. No, sir, they didn't.

5 Q. Did they ever demand that you clean the area near Hannan High
6 School or east of the refinery?

7 A. No, sir, they did not.

8 Q. And if they had done so, what would you have done?

9 A. By law I would have had to have cleaned those areas.

10 Q. Now, sir, can you just briefly explain to the court, and I want
11 to show you this exhibit, some of the cars, boats that you observed
12 during the, personally observed during the course of your tour of
13 duty in St. Bernard. We will mark this exhibit as 109. Can you
14 identify it, sir?

15 A. Right. This is an Excel spreadsheet produced by Polaris under
16 my direction. I had asked them to map out and subsequently list all
17 of the obstructions, that includes vehicles, cars, debris, light
18 poles, anything in the public areas, anything in the canals that
19 would hinder or not allow us to effectively clean up those areas.

20 Q. And what was the total number of cars that you counted from this
21 spreadsheet?

22 A. Cars in the affected areas, in the public areas were 568, around
23 568.

24 Q. And at any time did you notice any type of petroleum hydrocarbon
25 products coming from boats, cars in that area?

1 A. Yes. There was some sheening coming from cars that were in the
2 canals, that had washed up into the canals.

3 Q. We will mark this exhibit as 110. Can you identify this for the
4 court?

5 A. Yes. This again, and in conjunction with the Excel spreadsheet
6 actual mapping. Each star represents either a cluster or single
7 piece of debris that was in those public areas, be it a house,
8 household debris, telephone pole, so on and so forth.

9 Q. Sir, did you have any symptoms or illnesses as a result of any
10 exposure to crude oil during your stay in St. Bernard Parish from
11 September to November 2005?

12 A. No, sir, I did not.

13 MR. KROUSE: Thank you, sir. I will tender the witness.

14 THE DEPUTY CLERK: Are you offering those?

15 MR. KROUSE: Yes, we will offer and file into evidence the
16 following exhibits: 001-003 --

17 THE COURT: What's the number, the defendant number?

18 MR. BRUNO: I rise, Judge, because I am advised by
19 cocounsel the highest number we've been furnished is 98, and I am
20 just inquiring before I object if these aren't part of some other
21 exhibit?

22 MR. KROUSE: This is off the master DVD. 009 is the
23 exhibit number. We can ask the witness about that, but that's
24 numerous file folders.

25 THE COURT: What's the exhibit number?

1 MR. KROUSE: 104, 105, 106, 107, 108, 109, 110.

2 MR. BRUNO: And that comes from the CD marked Defendant's
3 9. No objection.

4 THE COURT: I understand that your list stopped at 98, at
5 100. So where are we here?

6 MR. BRUNO: He just confirmed to me that they are part and
7 parcel of another exhibit marked --

8 MR. KROUSE: No. 9. I just tried to segregate those out
9 of that exhibit for the court's convenience.

10 THE COURT: We now have (a), (b), (c).

11 MR. MILLER: Nine is a large CD, many pages of a document.

12 THE COURT: Has that been admitted?

13 MR. MILLER: No, because we are going to do that tomorrow
14 after we take out the deposition designation so we can give you a
15 separate list.

16 MR. BRUNO: I'm sorry, Judge, are you ready?

17 THE COURT: Well, we're having a problem. Let's get with
18 my staff afterwards. Let's continue on with cross-examination. I
19 will admit these exhibits, but let's get the numbers right.

20 CROSS-EXAMINATION

21 BY MR. BRUNO:

22 Q. Did I understand your testimony to be that your maps describe
23 the area that's affected by the oil?

24 A. Yes, sir.

25 Q. Do you remember I took your deposition on Monday?

1 A. Yes, sir, yes, sir. The affected areas and the public areas.

2 Q. Well, let's see if -- I direct your attention to page 145, line
3 22. Do you recall the question: "So you were by no means trying to
4 define with your red line the entire geographic area that may have
5 been affected by the leak of crude oil?" And your answer at page
6 146, line one: "That's correct. It was public areas."

7 MR. KROUSE: Object to the form of the question.

8 THE COURT: I'll overrule the objection, he is under
9 cross.

10 THE WITNESS: What I was answering is that --

11 BY MR. BRUNO:

12 Q. Is that your answer?

13 A. Public areas, public areas.

14 Q. Slow down. The question on the table is, are you telling the
15 judge that your map describes the entire geographic area that may
16 have been affected by the leak of crude oil? Yes or no?

17 A. The public areas, yes.

18 THE COURT: Only the public areas?

19 THE WITNESS: That's correct, sir.

20 BY MR. BRUNO:

21 Q. Only the public areas. In fact, Mr. Badon, that's not what you
22 were charged to do; isn't that correct?

23 A. No, sir. I was charged to map out the public areas that were
24 affected by the oil.

25 Q. In fact, what you were asked to do because it was a high

1 priority so soon after the storm was to identify those areas where
2 there was recoverable amounts of crude oil, isn't that true, that
3 was the primary objective?

4 A. I was charged with finding the areas, the public areas that were
5 affected by the oil release.

6 Q. Would you please answer my question. Is it not a fact that your
7 primary directive was to identify those locations which contained
8 recoverable amounts of oil?

9 MR. KROUSE: Objection, asked and answered.

10 THE COURT: I will give him an opportunity to answer it
11 again. But let's slow down with the witness. I know it's late but
12 you have him under cross but let's not abuse him.

13 THE WITNESS: I was charged with mapping the areas, the
14 public areas that were affected by the oil.

15 BY MR. BRUNO:

16 Q. So the answer is no?

17 MR. KROUSE: Objection, your Honor.

18 THE COURT: It is what it is. I understand the issue. He
19 says that he is only charged with public areas.

20 THE WITNESS: Yes, sir, that's what I was charged with.

21 BY MR. BRUNO:

22 Q. And your testimony is it was not, in fact, a priority to
23 identify those areas which contained recoverable amounts of oil?

24 A. Recoverable amounts of oil were included in the public areas
25 that I had identified.

1 Q. And, in fact, the map that you prepared identifies those areas
2 with recoverable amounts of oil; isn't that correct?

3 A. Yes, they do.

4 Q. The map does not affect every -- I'm sorry. The map does not
5 describe every particular area that has visible signs of oil, does
6 it?

7 A. It includes the areas of public property that were affected by
8 oil.

9 Q. And, in fact, you did not make any observations of residential
10 properties while you were undertaking that task; isn't that true?

11 A. No, sir. I was just charged with the public areas to see where
12 the oil had affected the public areas so that I could manage my
13 clean up of the public areas.

14 Q. The point is that you are not here to testify as to what you
15 observed on residential properties during your drive through the
16 community; isn't that true?

17 MR. KROUSE: Objection, your Honor, asked and answered.
18 Every question is repetitive.

19 THE COURT: I understand. I'll overrule the objection.

20 BY MR. BRUNO:

21 Q. Now, on this map you identify things that are called hot zones.
22 Please tell the judge what a hot zone is. Forgive me, previously
23 marked as 001-003.

24 THE COURT: How did we deal with that, Gaylyn? Let's get
25 another number.

1 MR. BRUNO: For the record --

2 THE COURT: Wait just a minute. The problem is that we
3 don't have right numbers, there are some things that have been
4 marked the same number twice.

5 MR. BRUNO: Yes, Judge, I understand the problem.

6 THE COURT: I thought you all were supposed to get
7 together and work that out.

8 MR. KROUSE: I will take responsibility for that, your
9 Honor, and we will remark them.

10 MR. BRUNO: Well, but for the purposes of this record,
11 Judge --

12 THE COURT: We are going to have to mark them now. What's
13 the mark?

14 MR. PENTON: Does it have a CD number?

15 THE COURT: We just have to go from the last number.

16 MR. BRUNO: I agree, your Honor. What's your last number?

17 MR. KROUSE: 110. Let me just mark this.

18 THE DEPUTY CLERK: The last thing we admitted is 100, and
19 I don't have that on the list, I stop at a 100.

20 THE COURT: We have 100 exhibits marked and we don't have
21 anymore other than that, so I don't know where the 110 comes from.

22 MR. LAMBERT: They just did it.

23 MR. BRUNO: He didn't accept it.

24 BY MR. BRUNO:

25 Q. All right. In any case forget about the map. Did you, in fact,

1 identify hot zones?

2 A. Right. This entire area would be considered a hot zone --

3 Q. Just forgive me since we are not going to mark this map for the
4 purposes of your testimony, what I would like for you to do is
5 simply advise the court, first, what is a hot zone?

6 A. A hot zone is any, is that area where the release material is
7 located, that would be considered the hot zone. And then you have a
8 warm zone which is an area outside of that that is not in the
9 contaminated area, not affected by the contaminate; and then you
10 have an area outside of that called the cold zone where you would
11 set up a command center somewhere that's far from being as the, far
12 from having the potential of being affected by the contaminant.

13 THE COURT: But that has to do only with public areas,
14 right?

15 THE WITNESS: That's correct.

16 THE COURT: All of what we're hearing is public areas
17 designation?

18 THE WITNESS: That's correct.

19 BY MR. BRUNO:

20 Q. And on the maps that you've prepared and you've sent to others,
21 you indicate, you've called or divided the areas into Rec A, Rec B,
22 Rec C, what does that stand for?

23 A. Recovery A, Recovery Bravo, that's areas of designation so that
24 I can better divide up my personnel. I'll have recovery Alpha
25 supervisor, recovery Bravo supervisor, that way I know where certain

1 materials and personnel are at all times.

2 Q. And of course that is consistent with what you've told me in a
3 deposition, that these are areas where you were looking for
4 recoverable amounts of oil, correct?

5 A. Where we were recovering oil and also recovering oil off of
6 stained roadways by means of sand, stuff like that.

7 Q. Exactly. All right. Was not your intent to, "clean up" the
8 area that was defined by Rec A, Rec B, Rec C to any defined
9 governmental standard, was it?

10 A. Yes, it is. It's to clean up that area is a standard provided
11 by U.S. Coast Guard and also Louisiana DEQ and EPA, to clean it up
12 to a certain standard for those areas. As far as Louisiana DEQ is
13 concerned to recap standard; to U.S. Coast Guard is concerned to an
14 area where oil isn't able to, isn't tacky or able to be wiped off
15 readily. These standards are set forth by these different federal
16 agencies and I have to clean it up to their specifications.

17 Q. Is it your testimony that the area encompassed by Rec A has been
18 cleaned up to recap standards?

19 A. In the public areas?

20 Q. The whole area.

21 A. The whole area including private?

22 Q. Yes.

23 A. I am not involved with the clean up of the private areas, so I
24 can't comment on that.

25 Q. Is it your testimony that the public areas within Rec A have to

1 date been cleaned up to recap standards, yes or no?

2 A. If they have not already been restained by the efforts of the
3 house decon project, which is ongoing.

4 Q. They are or they're not?

5 A. Well, some areas were cleaned up to that point, but from the
6 house decon they may have been -- it's an ongoing process right now
7 that's meeting that standard for recap.

8 Q. So it's clear then that the clean up process in the area defined
9 by Rec A or Rec B or even Rec C is not complete as we sit here
10 today; isn't that true?

11 A. No, sir, that's not true.

12 Q. The whole area, not just the public ways, it's not finished?

13 A. Right, the house decon is still in effect, correct.

14 Q. And, in fact, the house decon, decontamination, may, in fact,
15 recontaminate the public ways; isn't that true?

16 A. That is true, yes.

17 Q. Now, on your drive, in fact -- perhaps as I recall that when the
18 map was up on the screen you were showing the little mark and you
19 indicated to the judge that you first observed oil at Delambert and
20 Judge Perez. Do you recall that?

21 A. Yes, sir.

22 Q. In fact, Delambert and Judge Perez is not within the EPA zone;
23 isn't that true?

24 A. That's unknown to me. I know that it was in my zone.

25 MR. BRUNO: May I approach, Judge? This is a document

1 prepared by defense counsel and --

2 MR. KROUSE: What's the number?

3 MR. BRUNO: You have to tell me. This is another one of
4 those things without a mark.

5 BY MR. BRUNO:

6 Q. Can you just look on this map for me and identify it?

7 A. It looks like Delambert is on the EPA.

8 Q. Where is Delambert and Judge Perez?

9 A. This is Judge Perez here (INDICATING).

10 Q. Yes, sir.

11 A. Yes, sir.

12 Q. It's not the EPA zone, is it?

13 A. According to the map it is not in the EPA zone, correct.

14 Q. Do you happen to know what the EPA utilized to establish its
15 zone, what factual data?

16 A. I know that they had done testing and visual observations. I
17 don't know what testing they did.

18 Q. Would you agree with me that at least as to the corner of
19 Delambert and Judge Perez there is a difference of view between the
20 EPA and you, would you agree?

21 A. Yes, sir.

22 Q. So there is obviously room for conflict over the visual
23 observations as to where the oil is in this community, you would
24 agree with me there, too?

25 MR. KROUSE: Objection, your Honor, argumentative.

1 THE COURT: He is under cross, I'll allow it, overrule the
2 objection. What's your answer?

3 THE WITNESS: Right. Obviously we don't agree on that
4 corner, so, yes, I would say that.

5 BY MR. BRUNO:

6 Q. Fine. And here we have Plaintiffs' Exhibit P53, which has been
7 admitted thankfully, Judge, this is the EPA map. Have you ever seen
8 this?

9 A. Yes, sir, but not in that color coding. I had seen an earlier
10 version while I was down in Chalmette of that map.

11 Q. And I just want to ask you. You had testified to the judge that
12 in driving past the high schools and the elementary school you made
13 no visual observation of oil, right?

14 A. In Judge Perez, yes, sir, I did, you can actually see it on the
15 tape --

16 Q. No, on the site, on the Chalmette High School site. Maybe I got
17 it wrong. Did you testify that you saw oil on the property of
18 Chalmette High School?

19 A. I believe the property line starts maybe like five feet from the
20 road, so if you look at that video there is some from Judge Perez on
21 that grassy area on the high school area.

22 Q. I am talking about the building itself, the high school site,
23 not just the five feet from the roadway to the parking lot.

24 A. Right. I know they had done some clean up I believe on the
25 building itself of the high school, yes, sir.

1 Q. Who is they?

2 A. The O'Brien Group. We had done some pressure washing of the
3 building, outside of the building.

4 Q. Okay. Then perhaps I got it wrong. So, in fact, there is
5 evidence of crude oil both at the high school and at the elementary
6 school on Judge Perez; is that correct?

7 MR. KROUSE: Objection to the form of the question.

8 THE COURT: I'll overrule the objection and allow it.

9 THE WITNESS: Visual observation, yes.

10 MR. BRUNO: Thank you.

11 BY MR. BRUNO:

12 Q. You had spoken a little bit about protective gear. And as the
13 person in charge it was your obligation to make certain that your
14 employees had the appropriate protective gear, right?

15 A. That's correct.

16 Q. Would you describe for the judge what is the required gear for
17 your employees who were to come in physical contact with objects
18 which had crude oil on them?

19 A. That would be safety glasses or goggles, Tyvek, disposable Tyvek
20 suits, rubber gloves and rubber boots.

21 Q. Now, you had made a comment about the fact that there were some
22 folks who remained in the area, "at their own risk." Do you
23 remember that testimony because I don't want to take it out of
24 context?

25 A. Yes, sir, yes, sir.

1 Q. I just didn't understand what was the risk the people were being
2 exposed by staying in the area?

3 A. In the contaminated area if they weren't in Tyvek or rubber
4 boots or rubber gloves, this oil can cause a small irritation when
5 exposed to the skin itself.

6 Q. I am just curious, but if I were a homeowner in that area and I
7 were to attempt to remove items from my home that were contaminated
8 with oil, would I be putting myself at risk if I moved those
9 personal items from my home without wearing the gloves and the suit
10 and the glasses, would I be putting myself at any risk?

11 MR. KROUSE: Objection, your Honor, we are into an expert
12 field.

13 MR. BRUNO: On the contrary.

14 THE COURT: I understand it, overruled.

15 THE WITNESS: Without the gloves, touching the oil itself
16 can cause a small skin irritation, yes.

17 BY MR. BRUNO:

18 Q. Now, again, you were asked some questions about symptoms and
19 such. Do you recall having smelled something that you would have
20 identified as crude oil when you were driving down Judge Perez?

21 A. Yes, sir, I did.

22 Q. Can you just briefly, when did you start smelling it as you were
23 moving toward the refinery?

24 A. Right around Delambert Street is where I first smelled the crude
25 oil and I continued to smell it throughout the entire time I was on

1 Judge Perez and then stopped smelling it after we had left that area
2 around the southern tank farm.

3 Q. Now, you had in response to questions by counsel indicated that
4 you had recovered some 17,000 barrels?

5 A. That's correct.

6 Q. Is that pure oil or oil and other liquids?

7 A. That's pure oil.

8 Q. How was -- when this material is picked up by your skimmers and
9 your vacuum trucks, how was the other liquid removed from the oil?

10 A. It was stored together in the 150-2 tank on the southern tank
11 farm. We would take measurements at the end of the day that would
12 delineate the thickness of the oil and the thickness of the water in
13 those tanks and from that I would call in that, those figures to El
14 Dorado, the command post, and they would from those numbers derive
15 how much we recovered for each day.

16 Q. So there is really no actual -- I'm sorry. No actual physical
17 measurement of oil, it's done by some kind of extrapolation or
18 mathematical process?

19 A. That's correct. Depending on how many inches of oil were in the
20 tank before and after, you can delineate how much had been recovered
21 for that day.

22 Q. Now, the oil follows the water, does it not?

23 A. Oil is affected by two main components, that would be current
24 and wind. If there is a strong wind it can necessarily override the
25 way the current is flowing; and vice versa if there is a very strong

1 current and a light wind, the current will prevail. So it won't
2 necessarily follow the water, but will be affected by the factors of
3 current and wind.

4 Q. So that if there is, first, oil in the water. Does oil
5 typically stay on the top, the bottom, the middle or what happens to
6 it?

7 A. Depending on the type of oil. This type of oil was staying on
8 top. Depending on weathering. The amount of time that the oil
9 stays out there it can stratify in the layers of the water.

10 Q. Will this oil ride on top of the water?

11 A. Yes.

12 Q. And so as the water drains and the depth of the water below
13 whatever's riding on top of it is reduced, there is a tendency for
14 the oil to get caught by this debris that you referred to?

15 A. Yes, oil can get caught by debris, yes.

16 Q. And it's not going to be a continuous thickness of oil over the
17 entire area that contained water, right?

18 A. Right. As you saw on the video you see areas of water that
19 weren't affected by the oil and areas that were.

20 Q. And obviously there will be different concentrations of the oil
21 as it moves out into the area, correct?

22 A. That's correct.

23 Q. And there will be different mixture or emulsions throughout the
24 area as well?

25 A. That's correct.

1 Q. And obviously, and forgive me, but the higher the concentration
2 the easier it is to see?

3 A. That's correct.

4 Q. Now, on your map -- can we, would it be possible to call up that
5 video at 3 minutes and 22 seconds. And while you're doing that let
6 me just ask a few questions.

7 I think in your deposition, and I don't want to since we
8 don't have a number, but that map that you utilized to indicate the
9 zone of the affected public property, you had indicated to me that
10 really you thought that you had, should have included one of those
11 canals and I believe that was the Meraux Canal. Do you remember
12 that?

13 A. Yes, the Meraux canal had oil on it, yes.

14 Q. And that was left off of your map, right?

15 A. It wasn't included in the red zone there?

16 Q. I'll just show it to you really quick. I hate to do this
17 without a reference but, your Honor, if you don't mind. If you
18 remember the Meraux canal is the one going right there (INDICATING).

19 MR. KROUSE: Here is reference right here (INDICATING).

20 THE WITNESS: The Meraux Canal is in that red area.

21 BY MR. BRUNO:

22 Q. I think in your deposition you agreed it should go to the 40
23 Arpent Canal?

24 A. Right.

25 Q. And it doesn't on your map?

1 A. Right. At the time being the Meraux Canal is very hard canal to
2 make access to, we couldn't actually drive to the other side of the
3 Meraux Canal because it was so heavily flooded and so much debris on
4 it. Later on we were able to clear out the area, and from the air
5 the Meraux Canal was very hard to see because the debris and trees
6 that line either side of the Meraux Canal.

7 Q. Now, again on that drive you drove on the southeast corner of
8 the containment dyke of the three 250 series tanks, right?

9 A. That's correct, the 250-1.

10 Q. And you did observe oil on the outside of the containment dyke,
11 did you not?

12 A. That's correct.

13 Q. On the east side?

14 A. That's correct.

15 Q. Did you opine as to how that oil got there?

16 A. No, sir, I did not opine.

17 Q. Did you observe any breaks in that dyke in the eastern northwest
18 dyke wall of the 250 series tanks?

19 A. The eastern northwest?

20 Q. Yes. In other words, the eastern side of the rectangle.

21 A. Okay.

22 Q. Did you observe any breaks in that dyke?

23 A. I saw that the tank dykes had been severely eroded and there
24 were some dips, in other words, a break in the even keel or the even
25 level of the top of the tank dyke area, so, yes, I did.

1 Q. So did you opine as to whether or not that oil got there by
2 overtopping the eroded parts of those dykes?

3 A. At the time we were just mainly doing an observation of where
4 the oil was. At that time I didn't really speculate on how it had
5 gotten there. Maybe -- I did notice though the erosion of the tank
6 dyke.

7 Q. But it's clear from your own visual observations that the crude
8 oil got to the west of the tank, of the north tank farm, I'm sorry,
9 to the east?

10 A. Yes. There was oil staining there, as you saw around the MRE
11 container and around the puddling right there around that area
12 (INDICATING).

13 Q. And I think you also testified in your deposition that you
14 observed or that there was clean up of oil to the north of the 250
15 tank dyke area?

16 A. That's right. In the Twenty Arpent Canal.

17 Q. And if I could just -- no, that's not going to show that. We're
18 talking about that are --

19 A. Yeah, right, you'll see the 450-1 tanks, this is the 450-2, that
20 is Jacob and Despaux Street.

21 MR. BRUNO: Can we back up a little bit. It doesn't show
22 up so much, let's just back it up a little bit. Now, can we roll it
23 now, please.

24 (WHEREUPON, THE VIDEOTAPE WAS PLAYED.)

25 BY MR. BRUNO:

1 Q. We're flying now to the north, are we not? We're coming up on
2 the east?

3 A. That's correct. We're flying to the north, you'll see the 250
4 series tanks there.

5 MR. BRUNO: Stop please.

6 (WHEREUPON, THE VIDEOTAPE WAS STOPPED.)

7 BY MR. BRUNO:

8 Q. To the right there, it's not very clear on the large screen, but
9 on the small screen do you see oil?

10 A. Right there (INDICATING).

11 Q. Well, not that sharp thing but, yeah, right there (INDICATING)?

12 A. Right here (INDICATING)?

13 Q. Yes.

14 A. Yes, I do. That's why I videotaped the area, that's where I
15 found that MRE box and the pools of oil there.

16 MR. BRUNO: Can we continue to the tape, please.

17 (WHEREUPON, THE VIDEOTAPE WAS RESUMED.)

18 BY MR. BRUNO:

19 Q. Of course that's the 250-2 tank, right.

20 A. That's correct.

21 Q. If we stop there, I am referring to the area to the right of the
22 screen, that would be to the north of the containment dyke?

23 A. Right here or right here (INDICATING)?

24 Q. That's it where you put your line.

25 A. That's the Twenty Arpent Canal there.

1 Q. And you all found oil there, too, did you not?

2 A. That's correct.

3 MR. BRUNO: Can we continue the tape, please.

4 (WHEREUPON, THE VIDEOTAPE WAS RESUMED.)

5 MR. BRUNO: All right. Stop.

6 (WHEREUPON, THE VIDEOTAPE WAS STOPPED.)

7 BY MR. BRUNO:

8 Q. Do you see any sheen in that picture there that would be 3
9 minutes, 10 seconds, am I seeing that or am I missing something?

10 A. Yes, sir, that's sheening there.

11 Q. I don't know how to do this, but could you show it to the judge
12 to make sure we're all looking at the same thing?

13 THE COURT: Just draw.

14 THE WITNESS: Sheening here (INDICATING).

15 THE COURT: And what is that, the Meraux Canal?

16 THE WITNESS: No, sir. The Meraux is on the other side.

17 No, sir, this is a small ditch that leads into the Twenty. I don't
18 think it really has a name, it was just a small contributing ditch
19 to the Twenty.

20 BY MR. BRUNO:

21 Q. Do you see any kind of an indication of a rivulet or movement, I
22 see something that looks like, for example, this right here, is that
23 indicating (INDICATING) --

24 A. That's just a rivulet, it kind of delineates between where the
25 oil is and where it is not.

1 Q. Right. So am I looking at it accurately, it looks almost like a
2 little river within the water?

3 A. Right. It's flowing, it's flowing in rivulets and in spaces.

4 Q. And it's flowing into the residential area, correct?

5 A. I believe so, yes, sir.

6 Q. Now, you also found oil north of the 40 Arpent Canal at or about
7 the pumping station No. I believe it's 7?

8 A. No. 7, correct.

9 Q. And that is, let's go to this map.

10 MR. BRUNO: Judge, I apologize for jumping from map to
11 map.

12 THE COURT: That's all right.

13 BY MR. BRUNO:

14 Q. But that's over here to the east, is it not?

15 A. I believe it's a little bit more to the west. Bartolo and it's
16 located to the east of Bartolo.

17 Q. There was oil there as well?

18 A. Right. Just north of the pumping station is where we had found
19 sheening of oil there. It was a very small amount. We were able to
20 pick it up with absorbent boom and pads. We didn't have to go very
21 far into the marsh to retrieve the oil.

22 Q. At the intersection of the 40 Arpent Canal and Paris you
23 observed a lot of, forgive me for saying it incorrectly, debris,
24 tires, all kind of stuff. Would that have indicated to you that the
25 movement of water in that area had been to the west and that's how

1 that debris kind of got piled up by that culvert?

2 A. I know there is a lot of debris, I really can't comment on how
3 or why it might have moved there.

4 Q. All right. But obviously we've talked about these pathways,
5 preferred pathways. You agree that all of these waterways are
6 preferred pathways for the oil?

7 MR. KROUSE: Object to the form of the question.

8 THE COURT: I'll overrule the objection.

9 THE WITNESS: Yes, sir.

10 BY MR. BRUNO:

11 Q. How often did you all pick up those booms? Weren't they picked
12 up on some regular basis because they become full of oil?

13 A. Now, that's absorbent boom. Absorbent is picked up on a regular
14 basis, but as soon as it's picked up a new set of absorbent boom is
15 laid out. Absorbent boom is almost like a large paper towel, you
16 lay it out in links and it absorbs the oil.

17 Now along with the absorbent boom we also layout what's
18 called a containment boom, it doesn't absorb oil it contains it in
19 one place. After a couple of weeks oil will accumulate on that and
20 we want to make sure we take it out and lay more boom as soon as we
21 take it out to clean it so all of the oil doesn't leak out and off
22 and cause more contamination.

23 Q. Just to wrap things up. In fact, you found oil in the Twenty
24 Arpent Canal?

25 A. That's correct.

1 Q. The Meraux Canal?

2 A. Yes, sir.

3 Q. And Canal No. 8?

4 A. Yes, sir.

5 Q. Corinne Canal?

6 A. Correct.

7 Q. And the 40 Arpent Canal?

8 A. That's correct.

9 THE COURT: Anything further?

10 MR. BRUNO: No, Judge. Thank you very much.

11 THE COURT: Any redirect?

12 MR. KROUSE: Yes, your Honor, real quick.

13 REDIRECT EXAMINATION

14 BY MR. KROUSE:

15 Q. The oil that you did find in the 40 Arpent Canal was limited to
16 the particular area. Can you describe that for the court?

17 A. Yes, sir. The western most boundary was Jacob and Despaux and
18 the eastern most boundary was Bartolo Street -- Bartolo and it had
19 gone all the way to the No. 7 Canal, No. 7 pumping station.

20 Q. And the debris that you saw at the 40 Arpent Canal and Paris
21 Road, was there any evidence of oil staining on that debris when you
22 observed it?

23 A. No, sir. There was no oil observed on that debris and there was
24 no oil observed on the sides of the canal between Paris Road and
25 Jacob Street.

1 MR. KROUSE: Thank you, sir.

2 THE COURT: All right. You're excused, sir. Let me see
3 counsel at the bench, please, on logistics.

4 (WHEREUPON, A BENCH CONFERENCE WAS HELD OFF THE RECORD.)

5 THE COURT: We are going to stop here and start at 8:30
6 tomorrow. I am not sure whether or not we are going to have to work
7 on Saturday, but we are arranging to work on Saturday. I understand
8 from the defendants that they have four more witnesses so we may
9 finish tomorrow. The court will stand in recess.

10 THE DEPUTY CLERK: Everyone rise.

11 (WHEREUPON, THE PROCEEDINGS WERE CONCLUDED.)

12

13

14

* * * * *

15

16

17

18

19

20

21

22

23

24

25

REPORTER'S CERTIFICATE

I, Karen A. Ibos, CCR, Official Court Reporter, United States District Court, Eastern District of Louisiana, do hereby certify that the foregoing is a true and correct transcript, to the best of my ability and understanding, from the record of the proceedings in the above-entitled and numbered matter.

Karen A. Ibos, CCR, RPR
Official Court Reporter