

COPY

SUPERIOR COURT OF NEW JERSEY  
LAW DIVISION - MORRIS COUNTY  
DOCKET NO. MRS-L-3575-08

THOMAS KLINE, AS ADMINISTRATOR  
AD PROSEQUENDUM OF THE HEIRS  
AT LAW OF SUSAN MORRIS KLINE,  
(DECEASED), AS ADMINISTRATOR  
OF THE ESTATE OF SUSAN MORRIS  
KLINE, AND THOMAS KLINE,  
INDIVIDUALLY,

Plaintiff(s),

v.

VICTORIA MORGAN-ALCALA, CARLOS  
ALCALA, NATALIE RAWLS, DAIMLER  
CHRYSLER CORPORATION, A/K/A  
CHRYSLER CORPORATION, LOMAN  
AUTO GROUP, BUTLER CHRYSLER,  
JEEP, INC., JOHN DOES A THROUGH Z,  
(names being fictitious), ABC  
CORPORATIONS 1 through 100,  
(names being fictitious),

Defendant(s).

-----X

DEPOSITION OF: ROBERT BANTA  
Volume II

DATE: September 7, 2012

TIME: 10:10 a.m.

BEFORE: SUSAN DE PALMA, a Notary Public  
and Certified Court Reporter  
of the State of New Jersey

LOCATION: CALLAHAN & FUSCO, LLC  
72 Eagle Rock Avenue  
East Hanover, New Jersey 07936

Page 2	Page 4																																																												
<p>APPEARANCES:</p> <p>GRIECO OATES &amp; DE FILIPPO, LLC 414 Eagle Rock Avenue West Orange, New Jersey 07052 BY: ANGEL M. DE FILIPPO, ESQ. and VANESSA FRIEDHOFF, ESQ. Attorneys for the Plaintiff</p> <p>LEARY, BRIDE, TINKER &amp; MORAN, PC 7 Ridgedale Avenue Cedar Knolls, New Jersey 07927 BY: JAMES T. GILL, ESQ. Attorney for the Defendants, Victoria Morgan-Alcala &amp; Carlos Alcala</p> <p>CALLAHAN &amp; FUSCO, LLC 72 Eagle Rock Avenue East Hanover, New Jersey 07936 BY: MARK BRADLEY, ESQ. and LUCINDA J. MC LAUGHLIN, ESQ. Attorneys for the Defendant, Loman Auto Group</p> <p>ALSO PRESENT: PAUL SHERIDAN</p> <p>NO COPY OF THIS TRANSCRIPT MAY BE CONSIDERED CERTIFIED UNLESS SIGNED IN INK BY THE REPORTER LICENSED BY THE STATE OF NEW JERSEY WHO RECORDED THIS MATTER. ANY FACSIMILE MAY HAVE BEEN ALTERED BY MEANS OF ELECTRONIC MEDIA.</p>	<p>EXHIBITS</p> <table border="1"> <thead> <tr> <th>EXHIBIT NO.</th> <th>DESCRIPTION</th> <th>IDENT.</th> </tr> </thead> <tbody> <tr><td>Banta-16</td><td>Technical Report</td><td>12</td></tr> <tr><td>Banta-17</td><td>Amended Technical Report</td><td>12</td></tr> <tr><td>Banta-18</td><td>Supplemental Technical Report</td><td>12</td></tr> <tr><td>Banta-19</td><td>Technical Report 3-24-11</td><td>19</td></tr> <tr><td>Banta-20</td><td>NHTSA EA</td><td>53</td></tr> <tr><td>Banta-21</td><td>NHTSA document dated 5-2-97</td><td>58</td></tr> <tr><td>Banta-22</td><td>Diagram</td><td>92</td></tr> <tr><td>Banta-23</td><td>Photo</td><td>93</td></tr> <tr><td>Banta-24</td><td>Photo</td><td>93</td></tr> <tr><td>Banta-25</td><td>Photo</td><td>115</td></tr> <tr><td>Banta-26</td><td>Photo</td><td>115</td></tr> <tr><td>Banta-27</td><td>Sheridan documents (11 pgs.)</td><td>120</td></tr> <tr><td>Banta-28-33</td><td>Six Photos</td><td>131</td></tr> <tr><td>Banta-34</td><td>Letter dated 10-15-10</td><td>153</td></tr> <tr><td>Banta-35</td><td>15 photos</td><td>180</td></tr> <tr><td>Banta-36</td><td>Vehicle Crash Test Letter</td><td>211</td></tr> <tr><td>Banta-37</td><td>Vehicle Crash Test Request</td><td>219</td></tr> <tr><td>Banta-38</td><td>Vehicle Crash Test Letter</td><td>260</td></tr> <tr><td>Banta-39</td><td>Vehicle Crash Test Letter</td><td>267</td></tr> </tbody> </table>	EXHIBIT NO.	DESCRIPTION	IDENT.	Banta-16	Technical Report	12	Banta-17	Amended Technical Report	12	Banta-18	Supplemental Technical Report	12	Banta-19	Technical Report 3-24-11	19	Banta-20	NHTSA EA	53	Banta-21	NHTSA document dated 5-2-97	58	Banta-22	Diagram	92	Banta-23	Photo	93	Banta-24	Photo	93	Banta-25	Photo	115	Banta-26	Photo	115	Banta-27	Sheridan documents (11 pgs.)	120	Banta-28-33	Six Photos	131	Banta-34	Letter dated 10-15-10	153	Banta-35	15 photos	180	Banta-36	Vehicle Crash Test Letter	211	Banta-37	Vehicle Crash Test Request	219	Banta-38	Vehicle Crash Test Letter	260	Banta-39	Vehicle Crash Test Letter	267
EXHIBIT NO.	DESCRIPTION	IDENT.																																																											
Banta-16	Technical Report	12																																																											
Banta-17	Amended Technical Report	12																																																											
Banta-18	Supplemental Technical Report	12																																																											
Banta-19	Technical Report 3-24-11	19																																																											
Banta-20	NHTSA EA	53																																																											
Banta-21	NHTSA document dated 5-2-97	58																																																											
Banta-22	Diagram	92																																																											
Banta-23	Photo	93																																																											
Banta-24	Photo	93																																																											
Banta-25	Photo	115																																																											
Banta-26	Photo	115																																																											
Banta-27	Sheridan documents (11 pgs.)	120																																																											
Banta-28-33	Six Photos	131																																																											
Banta-34	Letter dated 10-15-10	153																																																											
Banta-35	15 photos	180																																																											
Banta-36	Vehicle Crash Test Letter	211																																																											
Banta-37	Vehicle Crash Test Request	219																																																											
Banta-38	Vehicle Crash Test Letter	260																																																											
Banta-39	Vehicle Crash Test Letter	267																																																											
Page 3	Page 5																																																												
<p>INDEX</p> <p>WITNESS      DIRECT CROSS</p> <p>ROBERT BANTA By Ms. De Filippo 6</p>	<p>LITIGATION SUPPORT INDEX</p> <p>REQUEST FOR PRODUCTION OF DOCUMENTS:</p> <p>Page-Line 84, 25 102, 4-8 226, 9 244, 6</p> <p>EXHIBIT ANALYSIS: Exhibits retained by counsel.</p>																																																												

Page 6	Page 8
<p>1 ROBERT BANTA, 3196 Tullio Way, 2 Henderson, Nevada, having been first duly 3 sworn according to law, testifies as 4 follows: 5 6 DIRECT EXAMINATION 7 BY MS. DE FILIPPO: 8 9 Q. Mr. Banta, we are here for the 10 continuing deposition. Your original 11 deposition in this case was taken I 12 believe on June 28th of 2011. You recall 13 that in this case we started taking your 14 deposition at that time. Correct? 15 A. Yes. 16 Q. And I'm going to tell you that 17 all of the instructions that I gave you 18 then still apply. Do you want me to 19 repeat any of the general deposition 20 instructions? 21 A. No. 22 Q. You've given depositions numerous 23 occasions. Correct? 24 A. I have. 25 Q. So you know what the format is?</p>	<p>1 Q. And do you remember the law firm? 2 MR. BRADLEY: Plaintiff or 3 defendant? 4 THE WITNESS: The defense law 5 firm was Hanlon, Buglione, Hanlon in 6 Edison I believe. 7 Q. Was Chrysler also involved in 8 that lawsuit? 9 A. No. 10 Q. Did that involve a post collision 11 fuel-fed fire, that lawsuit? 12 A. No. It was a home structure 13 fire. A vehicle that was parked and the 14 plaintiff's allegation involved what they 15 believed was a malfunction of the 16 electrical system. 17 Q. Have you ever done in your 18 capacity as a fire expert or in any expert 19 capacity, have you ever given testimony or 20 rendered reports for a plaintiff? 21 A. Yes. 22 Q. And are we talking about an 23 injured plaintiff? 24 A. I'm sorry, let me back up a 25 little bit. I also did deposition</p>
Page 7	Page 9
<p>1 Just one thing, I might have asked you 2 this before but how many times have you 3 testified in either a deposition or at 4 trial for Chrysler, on behalf of Chrysler? 5 A. In deposition, maybe ... I'm 6 guessing, 50 to a hundred times. And at 7 trial, perhaps 20 times. 8 Q. Have you done any depositions or 9 trial testimony for other than Chrysler, 10 people other than Chrysler or entities 11 other than Chrysler? 12 MR. BRADLEY: In what capacity? 13 Q. In your capacity as an expert. 14 A. Yes. I've done a couple of 15 depositions on behalf of Mercedes Benz. 16 Q. When you say a couple -- I'm 17 sorry to interrupt you, because you made a 18 pause. I thought -- when you say a 19 couple, you mean two, two to three? 20 A. Two to three. 21 Q. Okay, go ahead. 22 A. And I believe one trial for 23 Mercedes Benz here in New Jersey. 24 Q. Do you remember what county? 25 A. Princeton.</p>	<p>1 testimony this year on behalf of a 2 plaintiff also in a vehicle fire case in a 3 garage. And that was a plaintiff's case. 4 I believe it was State Farm. 5 Q. State Farm was the plaintiff? 6 A. State Farm was the plaintiff. 7 Q. It wasn't an injured plaintiff, 8 it was a property damage claim? 9 A. Yes. The home had burned down. 10 Q. Now, you used the term "also." 11 So what were you thinking of when you 12 initially answered the question that you 13 gave testimony or rendered a report for a 14 plaintiff in a fire case? 15 A. Because I think one of your 16 earlier questions was had I given 17 testimony for someone other than Chrysler 18 and I told you about Mercedes Benz and I 19 did not tell you about the State Farm 20 case. 21 Q. And then my question was about 22 plaintiffs. And we know about the State 23 Farm case with the property damage. Is 24 there any other time when you rendered a 25 report or gave testimony for a plaintiff</p>

Page 10	Page 12
<p>1 as an expert?</p> <p>2 MR. BRADLEY: Besides the State</p> <p>3 Farm?</p> <p>4 MS. DE FILIPPO: Yes, besides</p> <p>5 State Farm.</p> <p>6 THE WITNESS: There was another</p> <p>7 case years ago where Chrysler was a</p> <p>8 plaintiff in a case. Chrysler had sued</p> <p>9 another entity in Mexico and I worked for</p> <p>10 Chrysler on that case.</p> <p>11 Q. So it's fair to say that it was</p> <p>12 not an injured plaintiff that you were</p> <p>13 rendering a report for?</p> <p>14 A. No.</p> <p>15 Q. It was Chrysler against another</p> <p>16 entity?</p> <p>17 A. Property loss, yes.</p> <p>18 MR. BRADLEY: You mean physical</p> <p>19 injury, when you said injured plaintiff?</p> <p>20 MS. DE FILIPPO: Yes, personal</p> <p>21 injury.</p> <p>22 MR. BRADLEY: As opposed to losing</p> <p>23 money could be an injury.</p> <p>24 MS. DE FILIPPO: Well, okay.</p> <p>25 Q. In this particular case, Mr.</p>	<p>1 MS. DE FILIPPO: Do you have them</p> <p>2 so he can look at them?</p> <p>3 MR. BRADLEY: Sure, I can print</p> <p>4 off a copy.</p> <p>5 MS. DE FILIPPO: I'm going to mark</p> <p>6 mine and then we'll continue. You can get</p> <p>7 him a copy.</p> <p>8 MR. BRADLEY: You want to just not</p> <p>9 use the marked copy?</p> <p>10 MS. DE FILIPPO: He needs to have</p> <p>11 a copy while I have a copy.</p> <p>12 MR. BRADLEY: I gotcha. Okay.</p> <p>13 MS. DE FILIPPO: Can you mark</p> <p>14 that?</p> <p>15</p> <p>16 (Technical Report dated March 14,</p> <p>17 2011 is received and marked Banta-16 for</p> <p>18 identification.</p> <p>19 Amended Technical Report dated</p> <p>20 4-4-11 is received and marked Banta-17 for</p> <p>21 identification.</p> <p>22 Supplemental Technical Report</p> <p>23 dated 9-12-11 is received and marked</p> <p>24 Banta-18 for identification.)</p> <p>25</p>
Page 11	Page 13
<p>1 Banta, how many reports did you author?</p> <p>2 A. Two.</p> <p>3 Q. And I know we didn't -- I'm not</p> <p>4 sure if we marked them in the last</p> <p>5 deposition. Let me just say this. I'm</p> <p>6 going to do my best. I think I read</p> <p>7 through your last deposition. I'm going</p> <p>8 to do my best not to repeat any of the</p> <p>9 questions because it wouldn't be in either</p> <p>10 of our benefits. But bear with me if I</p> <p>11 lay a foundation by going back to</p> <p>12 something that maybe we covered in some</p> <p>13 aspect. You can tell me if you think I'm</p> <p>14 wrong. You understand that. Right?</p> <p>15 A. I do.</p> <p>16 Q. In terms of the two reports that</p> <p>17 you authored in this case, can you tell me</p> <p>18 what the dates were of the two reports</p> <p>19 you're referring to?</p> <p>20 A. I don't have them with me.</p> <p>21 Q. Okay.</p> <p>22 A. March 2011 was one and I don't</p> <p>23 recall the second one.</p> <p>24 Q. When you say you don't have them</p> <p>25 with you --</p>	<p>1 Q. Mr. Banta, I know you said you</p> <p>2 did two reports but I have in my hands</p> <p>3 three reports. One is dated March 14th,</p> <p>4 one is dated -- and called a Technical</p> <p>5 Report. One is dated September 12, 2011.</p> <p>6 There's one March 14, 2011, September 12,</p> <p>7 2011, called a Supplemental Report and I</p> <p>8 also have one that is dated April 4th,</p> <p>9 2011 called Amended Technical Report.</p> <p>10 I'm going to give you my copies</p> <p>11 until you get your copy in this deposition</p> <p>12 and ask you to look at the Technical</p> <p>13 Report and the Amended Technical Report.</p> <p>14 And I just want you to indicate what the</p> <p>15 differences are between the two, if there</p> <p>16 are any.</p> <p>17 MR. GILL: For the record, Miss</p> <p>18 DeFilippo, the date that I have for the</p> <p>19 first report was March 24, 2011. I</p> <p>20 believe you said the 14th.</p> <p>21 MS. DE FILIPPO: It's the 14th on</p> <p>22 the document.</p> <p>23 MR. GILL: It says 14 on there?</p> <p>24 MS. DE FILIPPO: Yes.</p> <p>25 THE WITNESS: The original report</p>

Page 14	Page 16
<p>1 was March 14, 2011.</p> <p>2 MS. DE FILIPPO: Do you have a</p> <p>3 copy with you?</p> <p>4 MR. GILL: I do.</p> <p>5 Q. Mr. Banta, the electronic copy of</p> <p>6 Mr. Gill's report also says March 24,</p> <p>7 2011. I don't have a report with that</p> <p>8 date on it. So is there a way to verify</p> <p>9 what the dates of all your reports are</p> <p>10 since you didn't bring them with you?</p> <p>11 MR. GILL: It's probably not a big</p> <p>12 deal. I thought you misspoke on the date.</p> <p>13 MS. DE FILIPPO: No, we don't</p> <p>14 know.</p> <p>15 MR. GILL: I don't want to be</p> <p>16 introducing something to unnecessarily</p> <p>17 complicate this.</p> <p>18 MR. BRADLEY: The copy we have is</p> <p>19 March 24th as well. I don't know how you</p> <p>20 have a March 14th.</p> <p>21 MR. GILL: I can tell you -- this</p> <p>22 is off the record.</p> <p>23 (Whereupon, a discussion is held</p> <p>24 off the record.)</p> <p>25 THE WITNESS: I know what</p>	<p>1 Q. Well, Mr. Banta, do you recall in</p> <p>2 this case there was another attorney that</p> <p>3 was representing Loman Auto Group?</p> <p>4 A. Yes.</p> <p>5 Q. Are you saying you didn't sit</p> <p>6 with Mindy Jane to write this report or</p> <p>7 someone in her firm?</p> <p>8 A. I'm not sure when the counsels</p> <p>9 changed. I'm not sure. But I know that</p> <p>10 counsel and I went over this report that I</p> <p>11 have in my hand.</p> <p>12 MR. BRADLEY: I'm going to object</p> <p>13 to anything involving what you said with</p> <p>14 prior counsel. That's privileged.</p> <p>15 THE WITNESS: Let me figure this</p> <p>16 out. KAS, who is KAS? Was her name Misty?</p> <p>17 Q. Mindy Jane.</p> <p>18 A. Mindy Rodgers -- Mindy Jane had a</p> <p>19 supervisor I think who was KAS and I think</p> <p>20 KAS, it's coming back to me, KAS read my</p> <p>21 March 14th report. And as you can see, he</p> <p>22 did some editing of this report.</p> <p>23 Q. So the editing and the</p> <p>24 handwritten portions of the March 14th</p> <p>25 report is not your handwriting. Is that</p>
<p>Page 15</p> <p>1 happened here.</p> <p>2 Q. Wait. Let me state this</p> <p>3 statement for the record so it's clear.</p> <p>4 After all counsel conferred regarding the</p> <p>5 reports, it seems that there are reports</p> <p>6 floating around with the following dates:</p> <p>7 March 14th, 2011, March 24th, 2011,</p> <p>8 April 4th, 2011, and September 12th, 2011,</p> <p>9 and I believe my question to you is, can</p> <p>10 you tell us what each of those reports</p> <p>11 represents, in a general way first?</p> <p>12 A. Okay. I will start from the</p> <p>13 beginning, March 14th. The March 14th</p> <p>14 copy you see here, frankly, I don't know</p> <p>15 how you got it. I don't have this. This</p> <p>16 is a draft of a report that myself and</p> <p>17 counsel sat in this room and worked on</p> <p>18 sometime between March 14th and 24.</p> <p>19 Q. I don't want to interrupt you but</p> <p>20 I do want to make your testimony accurate,</p> <p>21 and there's no reason to be trying to</p> <p>22 trick you, but you didn't sit here in this</p> <p>23 office with this attorney, meaning</p> <p>24 Callahan and Fusco?</p> <p>25 A. Yes.</p>	<p>Page 17</p> <p>1 correct?</p> <p>2 A. That's right.</p> <p>3 Q. It's some attorney?</p> <p>4 MR. BRADLEY: Well, I'm going to</p> <p>5 object to this document because,</p> <p>6 obviously, there was notations from</p> <p>7 counsel and that's between our expert, is</p> <p>8 privileged communications.</p> <p>9 MS. DE FILIPPO: Why are you</p> <p>10 objecting to it? It was sent to me.</p> <p>11 MR. BRADLEY: By who?</p> <p>12 MS. DE FILIPPO: By counsel. I</p> <p>13 received it from counsel. So you can</p> <p>14 object all you want and we can go on. And</p> <p>15 we can deal with this later. I don't want</p> <p>16 to take a lot of time with it.</p> <p>17 Q. I just want to know, so that</p> <p>18 report, is it fair to say that the report</p> <p>19 of March 14, 2011 is the first report that</p> <p>20 you authored in this case?</p> <p>21 A. Yes, the draft.</p> <p>22 Q. Nothing came before it?</p> <p>23 A. No, that's correct.</p> <p>24 Q. And then that report was</p> <p>25 discussed between you and whatever</p>

Page 18	Page 20
<p>1 attorney you had at the time. Correct?</p> <p>2 A. Mindy Jane.</p> <p>3 Q. And some attorney, whether it be</p> <p>4 KAS or Mindy Jane or anybody in that firm</p> <p>5 made notations on your report. Correct?</p> <p>6 A. Yes.</p> <p>7 Q. And then did they send that back</p> <p>8 to you?</p> <p>9 A. Yes.</p> <p>10 Q. And then did you render a final</p> <p>11 or another second report?</p> <p>12 A. Well, I created the report which</p> <p>13 was dated March 24th.</p> <p>14 Q. Well, I never received a</p> <p>15 March 24th report is what I'm trying to</p> <p>16 say. Instead, I received a report that</p> <p>17 was dated April 4th and it was called</p> <p>18 Amended --</p> <p>19 A. Did you receive this?</p> <p>20 Q. I received that first.</p> <p>21 A. March 14th?</p> <p>22 Q. March 14th. Then I received the</p> <p>23 Amended Technical Report. And that's what</p> <p>24 I received next as your report. I didn't</p> <p>25 receive the March 24th.</p>	<p>1 was on page nine where the WK was changed</p> <p>2 to WJ. I made a typo on page nine.</p> <p>3 Q. So as you sit here today, the</p> <p>4 Amended Technical Report which I received</p> <p>5 is exactly the same as the Technical</p> <p>6 Report which I did not receive with the</p> <p>7 exception of page nine, the typo changing</p> <p>8 WK to WJ. Right?</p> <p>9 A. Yes, that's right.</p> <p>10 MS. DE FILIPPO: Jim, did you get</p> <p>11 an Amended Technical Report? April 4,</p> <p>12 2011.</p> <p>13 MR. GILL: I didn't see that.</p> <p>14 What she sent me here was the May 24, '11</p> <p>15 and September 12, '11, but let me look</p> <p>16 through it again. And if I have it here</p> <p>17 or not doesn't exclude the fact that it</p> <p>18 may have been sent to me.</p> <p>19 MS. DE FILIPPO: Okay.</p> <p>20 Q. So we should work then with the</p> <p>21 Amended Technical Report. Correct?</p> <p>22 A. Yes.</p> <p>23 Q. As your first report as far as</p> <p>24 you're concerned.</p> <p>25 A. Yes.</p>
<p style="text-align: right;">Page 19</p> <p>1 MS. DE FILIPPO: May we mark that</p> <p>2 report that your counsel has? Mark it</p> <p>3 whatever the next marking is.</p> <p>4</p> <p>5 (Technical Report dated March 24,</p> <p>6 2011 is received and marked Banta-19 for</p> <p>7 identification.)</p> <p>8</p> <p>9 Q. The Technical Report that I'm</p> <p>10 looking at marked Banta-19 dated March 24,</p> <p>11 2011 --</p> <p>12 A. Yes.</p> <p>13 Q. Can you tell me if there is a</p> <p>14 difference between that report and the</p> <p>15 Amended Technical Report which I received</p> <p>16 which is dated April 4th of 2011?</p> <p>17 A. The April 4, 2011 Amended Report</p> <p>18 corrected a typo where I used the two</p> <p>19 initials WK instead of WJ.</p> <p>20 Q. And you're talking about page</p> <p>21 nine of the Technical Report dated</p> <p>22 March 24th, 2011?</p> <p>23 A. Can I see the April 4, 2011?</p> <p>24 April 4th, that's the amended. Yeah. The</p> <p>25 only thing in the Amended Technical Report</p>	<p style="text-align: right;">Page 21</p> <p>1 Q. The next report that you authored</p> <p>2 after that was September 12, 2011.</p> <p>3 Correct?</p> <p>4 A. Right. That was the</p> <p>5 Supplemental.</p> <p>6 Q. And that's the Supplemental</p> <p>7 Technical Report. Correct?</p> <p>8 A. Right.</p> <p>9 Q. Okay. Mr. Banta, you're</p> <p>10 intending to give opinions in this</p> <p>11 particular case at trial. Correct?</p> <p>12 A. I think so. I have not been</p> <p>13 asked yet but I'm sure that's coming.</p> <p>14 Q. Well, your intention in</p> <p>15 participation in this case was to state</p> <p>16 opinions and opinion testimony in your</p> <p>17 reports which you would then indicate at</p> <p>18 the time of trial. Correct?</p> <p>19 A. Yes.</p> <p>20 Q. Can you tell me -- are you able</p> <p>21 to tell me what your opinions are that you</p> <p>22 intend to express at the time of trial in</p> <p>23 a general sense?</p> <p>24 A. Yes.</p> <p>25 Q. Okay.</p>

Page 22	Page 24
<p>1 A. In a general sense, the Grand 2 Cherokee vehicle at issue in this case is 3 not defectively designed, that the vehicle 4 met the customary requirements of an auto 5 manufacturer and met the requirements of 6 the federal government, that the accident 7 was so severe with multiplicity in events 8 that, although a rare event, a fire 9 following a crash is not unexpected, and 10 to the extent that there had been 11 allegations of defects made by other 12 parties in the case, most or all of those 13 allegations are baseless and are 14 incorrect.</p> <p>15 Q. I'm sorry, allegations about 16 other parties?</p> <p>17 A. No, allegations made by other 18 parties in this case on the plaintiff's 19 side, things about the vehicle being 20 defective and improperly designed and 21 inappropriate fuel tank location and the 22 behavior during the crash and those kind 23 of things are just untrue. They don't 24 relate to a crash of this type.</p> <p>25 Q. So have you given us the -- the</p>	<p>1 accident was so severe that a fire was not 2 unexpected. Correct?</p> <p>3 A. Yes.</p> <p>4 Q. Are you intending to give 5 opinions as an expert in the field of 6 reconstruction?</p> <p>7 A. No.</p> <p>8 Q. So any opinion you have about the 9 severity of the accident is not really 10 your opinion, it's based on somebody 11 else's opinion that you're taking and 12 extrapolating from. Is that fair to say?</p> <p>13 A. That's correct. The base data 14 comes from the reconstructionist.</p> <p>15 Q. So let's not deal with opinions 16 that are not your own. If you're not 17 going to talk reconstruction and you're 18 taking those opinions from someone else, I 19 want to talk about just what you're going 20 to focus on as an expert.</p> <p>21 A. My focus is the event of the 22 fire. The event of the fire is in large 23 part dependent upon information derived 24 from the reconstruction.</p> <p>25 Q. Well, okay. We'll get to that.</p>
Page 23	Page 25
<p>1 four general areas now that you stated, is 2 that your opinions in this case?</p> <p>3 A. I think so.</p> <p>4 Q. So I'm going to start with your 5 last one. The allegations made by other 6 parties are not true. You didn't really 7 mean to say other parties. You don't mean 8 party to the lawsuit. Right?</p> <p>9 A. I mean other individuals.</p> <p>10 Q. Individuals?</p> <p>11 A. Yes.</p> <p>12 Q. So what you're referring to there 13 is basically plaintiff's experts. 14 Correct?</p> <p>15 A. Yes.</p> <p>16 Q. So can we agree that that 17 category of what your opinions are is 18 subsumed on your number one, which says 19 the Grand Cherokee is not defectively 20 designed?</p> <p>21 A. Yes.</p> <p>22 Q. So in discussing your three 23 opinions that you intend to testify to, 24 let's talk about the third one from the 25 bottom, which is, you say, that the</p>	<p>1 However, the basis of the actual event of 2 the fire in terms of the happening of the 3 accident itself, that's all an opinion 4 coming from defense experts that you've 5 assumed to be true and taken from there 6 and their calculations and their opinions. 7 Correct?</p> <p>8 A. In part, yeah.</p> <p>9 Q. Well, did you do anything on your 10 own regarding the reconstruction where 11 you're going to be testifying about 12 opinions regarding your reconstruction and 13 things that you did to reconstruct the 14 accident or arrive at opinions regarding 15 the reconstruction?</p> <p>16 A. Yes. I made some observations of 17 the vehicle during my examination that 18 were not necessarily those of the 19 reconstruction. For example, I observed 20 the type of damage to the frame rail 21 structure and fuel tank straps and things 22 of that nature, the component parts.</p> <p>23 Q. But are you saying now that you 24 have an expertise in using your 25 observations of what you saw of the</p>

Page 26	Page 28
<p>1 vehicle to extrapolate from that in a 2 scientific way to determine how this 3 accident happened as a reconstructionist 4 would?</p> <p>5 A. Yes and no. The observations 6 help me understand the extent of the 7 damage in this vehicle as a result of the 8 collision. There are certain things I saw 9 when I examined the vehicle that told me 10 how the vehicle performed in the crash. 11 You know, which way the frame rail is bent 12 and what happened to the supporting 13 structure and the behavior of the fuel 14 tank straps. So there's certain 15 conclusions I can draw that had only an 16 indirect relationship to the thing the 17 reconstructionist would do. You know, they 18 do PDOF and speeds and things of that 19 nature.</p> <p>20 Q. But I'm indicating, Mr. Banta -- 21 what I'm trying to separate out is I 22 understand that you could observe things 23 and you could in your mind have thoughts. 24 But are you going to be testifying that 25 your observations led you to formulate</p>	<p>1 Q. If you're not --</p> <p>2 A. That's not what I'll be 3 testifying about. I'll be testifying 4 about the physical resultant damage to the 5 vehicle following the accident.</p> <p>6 Q. That's fine.</p> <p>7 A. In other words, the 8 reconstructionist will define the accident 9 and then I will supplement that with, in 10 addition, when I evaluated the fuel tank 11 mounting surfaces I noticed the following 12 things, which have nothing to do with the 13 crash reconstruction but they do help us 14 understand the behavior of the fuel system 15 during the crash, which is not something 16 that a reconstructionist would focus on.</p> <p>17 Let me give you a simple example. 18 Left fuel tank strap bracket was torn 19 loose, for example. That's not something 20 a reconstructionist would use to determine 21 PDOF or Delta Vs or impact speeds, but 22 it's something that someone who is 23 concerned about the fire would want to 24 know to help them understand the nature of 25 the fire and fuel leak event.</p>
Page 27	Page 29
<p>1 opinions based on either your knowledge or 2 your training as a reconstruction expert 3 about how the accident happened as opposed 4 to the extent of the damage?</p> <p>5 A. Could you read that back? 6 (Whereupon the previous question 7 is read back.)</p> <p>8 MR. BRADLEY: He's already 9 testified that he's not a reconstruction 10 expert. I'm going to object.</p> <p>11 MS. DE FILIPPO: I understand that 12 and with that I would move on but for the 13 fact that he's also indicating that he's 14 formulated opinions. And I want to know 15 what the basis of those opinions are from 16 a reconstruction standpoint as opposed to 17 those in origin as fire.</p> <p>18 Q. Let me rephrase this. If you're 19 going to talk about how the accident 20 happened based on either scientific 21 measurements or dimensions and you're 22 going to then focus and offer testimony 23 about how this accident happened, then I 24 need to know that and what you base it on.</p> <p>25 A. No.</p>	<p>1 Q. And you're saying that your 2 observations that the strap -- that a 3 strap might be loose led you to believe 4 that happened in the accident?</p> <p>5 A. As a result of the collision.</p> <p>6 Q. As a result of the collision?</p> <p>7 A. Yes.</p> <p>8 Q. And you base that on what?</p> <p>9 A. On my observation of the 10 attachment bracket behavior post crash.</p> <p>11 Q. But do you have any facts that 12 indicate to you that that did not happen 13 subsequent to the accident, in either 14 transport or at some other time?</p> <p>15 A. Yeah, that's correct.</p> <p>16 Q. You have facts?</p> <p>17 A. I have knowledge that it didn't. 18 I don't want to mislead you about a fuel 19 tank strap. They actually performed all 20 right. What I'm really focusing on is the 21 behavior of the left frame rail and 22 particularly the pass-through area of the 23 frame rail.</p> <p>24 Q. Well, are you going to be 25 indicating that you either took</p>



Page 30	Page 32
<p>1 measurements of the frame rail or tested 2 the frame rail or have some type of 3 expertise regarding the metal in the frame 4 rail that's going to allow you 5 scientifically to discuss the performance 6 of the frame rail in this case? 7 A. Yes. 8 Q. And what scientific basis do you 9 have to discuss the performance of the 10 frame rail? 11 A. I observed the nature of crush of 12 the frame rail on the left side. 13 Q. What scientific information is 14 going to allow you to go, to make the 15 transition from what you saw with your 16 eyes to an opinion about what it means? 17 What are you basing your opinion on? 18 A. Oh, I see. My empirical 19 knowledge of looking at many resultant 20 crashes both in testing and in the real 21 world and the physical properties of the 22 frame rail after the collision. 23 Q. Well, what do you mean by 24 empirical knowledge? What exactly are we 25 talking about?</p>	<p>1 protective envelope around the tank. 2 Q. And your basis for evaluating the 3 performance of the frame rail is -- is 4 there a scientific measurement you take, 5 is there a scientific test you do on the 6 metal? Is there something scientific that 7 you can tell me about that allows you to 8 look at a frame rail and go and make the 9 leap to an opinion about how it performed 10 in an accident? 11 MR. BRADLEY: I'm going to object 12 to the term scientific. I understand you 13 might mean a measurement or something like 14 that but he's already testified how he 15 comes to that conclusion. 16 MS. DE FILIPPO: You can object. 17 But you can answer. 18 THE WITNESS: The answer is that 19 I have an ability to study the envelope 20 around that tank in that vehicle based on 21 crash testing and other real-world 22 accidents and draw some fundamental 23 conclusions about how the envelope around 24 the tank behaved during the collision, 25 which I view as tank protective envelope</p>
Page 31	Page 33
<p>1 A. I have looked at lots and lots of 2 rear end crashes both in testing and 3 real-world and I know what to expect at 4 various speeds and latitudes and I can 5 evaluate the frame rail section both 6 before and after the tank and left and 7 right of the tank and draw some 8 fundamental conclusions about what 9 happened during the crash. 10 Q. That's exactly where I want to 11 head. So you're going to be testifying 12 about what happened during the crash. 13 That's reconstructing this accident; is it 14 not? 15 A. Well, if it's a reconstruction of 16 the frame rail area physically, but it's 17 not crash reconstruction in the 18 traditional sense. 19 Q. Well, you said a minute ago, and 20 correct me if I'm wrong, that you're going 21 to be reconstructing what happened in this 22 accident based on your observations of, 23 for instance, the frame rail? 24 A. No. I'm not reconstructing it. 25 I'm evaluating the performance of the</p>	<p>1 reconstruction, not crash reconstruction. 2 Although, they are probably related. 3 Q. Did you do any testing of this 4 particular vehicle? 5 A. No. 6 MR. BRADLEY: When? 7 MS. DE FILIPPO: Any, in any 8 sense. 9 THE WITNESS: No. 10 Q. Did you in other crash tests that 11 you looked at do any testing of those 12 vehicles? 13 MR. BRADLEY: Which vehicles? 14 THE WITNESS: No. 15 MS. DE FILIPPO: Any of the other 16 crash tests he looked at. 17 MR. BRADLEY: For Jeep Grand 18 Cherokees? 19 MS. DE FILIPPO: Any means any. 20 And he said no. 21 MR. BRADLEY: Just note my 22 objection. 23 MS. DE FILIPPO: I don't have to 24 limit it if the broader question says 25 none. Do you understand? I'm starting</p>

Page 34

1 with the broad.  
 2 MR. BRADLEY: I understand. But  
 3 I'm just objecting for clarification  
 4 purposes and I note my objection.  
 5 MS. DE FILIPPO: I understand that  
 6 and I really don't want to belabor that  
 7 and I appreciate you have every right to  
 8 object. But if he understands the  
 9 question, he can answer it.  
 10 MR. BRADLEY: I also have the  
 11 right to object to the question.  
 12 MS. DE FILIPPO: You can and you  
 13 did.  
 14 MR. BRADLEY: Okay.  
 15 MS. DE FILIPPO: Okay. But you  
 16 don't have the right to talk about it.  
 17 That's all I'm saying.  
 18 MR. BRADLEY: Let's not --  
 19 MS. DE FILIPPO: All right, let's  
 20 go forward.  
 21 Q. So you didn't do any testing on  
 22 the Susan Kline vehicle and you didn't do  
 23 any testing on any of the other vehicles  
 24 that you talked about making observations  
 25 on prior to the Kline vehicle. That's

Page 35

1 correct. Right?  
 2 A. Yes. If by testing you mean  
 3 metallurgical samples or bending or going  
 4 to the lab with something, no.  
 5 Q. Anything other than viewing?  
 6 A. No. What I did was comparative  
 7 evaluations of resultant damage.  
 8 Q. I understand those terms. But  
 9 I'm talking about more specific terms.  
 10 When you say comparative evaluations,  
 11 you're talking about I saw other ones and  
 12 I compared it to this one. Correct?  
 13 A. That's correct, yes.  
 14 Q. Now, you also indicated that one  
 15 of the opinions you're going to give is  
 16 that the ZJ met the requirements of auto  
 17 manufacturers and the federal government.  
 18 Correct?  
 19 A. Auto manufacturers in general.  
 20 Q. Right.  
 21 A. And those requirements of fuel  
 22 system integrity by the federal  
 23 government.  
 24 Q. What are the requirements of fuel  
 25 system integrity of the federal government

Page 36

1 relative to this accident involving Susan  
 2 Kline?  
 3 A. Well, as you know, MVSS 301  
 4 specifies performance in crash testing.  
 5 But they specify leak rate and  
 6 particularly in this, as we focus on this  
 7 case, in a rear impact direction and this  
 8 vehicle met and complied with that MVSS  
 9 301 standard.  
 10 Q. Anything other than 301 that  
 11 we're talking about here with respect to  
 12 government standards?  
 13 MR. BRADLEY: For fuel systems?  
 14 Q. For this case.  
 15 A. No.  
 16 Q. When you talked about that the ZJ  
 17 met the requirements of the federal  
 18 government.  
 19 A. Yeah.  
 20 Q. So 301?  
 21 A. Yes.  
 22 Q. For a rear end impact. Correct?  
 23 A. Yeah. 301 rear portion.  
 24 Q. Right. And you said in the  
 25 requirements of auto manufacturers in

Page 37

1 general. Is there something apart from  
 2 301 that you were referring to or are we  
 3 still talking about 301?  
 4 A. We're still talking about 301.  
 5 Auto manufacturers in general use some  
 6 feature of redundancy so that they can  
 7 meet the standard consistently test after  
 8 test to allow for test error,  
 9 repeatability error, that kind of stuff.  
 10 Q. But Mr. Banta, my question is  
 11 really, I just want to know if there's a  
 12 standard I'm not aware of that the auto  
 13 manufacturers have.  
 14 A. No.  
 15 Q. We're still talking 301 as the  
 16 standards?  
 17 A. Yes.  
 18 Q. And what you said in your second  
 19 opinion that you're going to be giving is  
 20 the the ZJ of Susan Kline met the  
 21 requirements of 301. Correct?  
 22 A. Yes. But what I'm trying to  
 23 convey to you is that while 301 is the  
 24 standard as a practical matter, the auto  
 25 manufacturers have a slightly more

Page 38

1 stringent way of designing and testing so  
 2 that they will cover those issues with  
 3 repeatability error and test variation.  
 4 So they design their vehicles to more than  
 5 comply with 301.  
 6 Q. But that's not the question at  
 7 this point. So let me just again make the  
 8 record clear.  
 9 A. I think that was my answer to  
 10 you.  
 11 Q. No, but that wasn't my question.  
 12 I think you really didn't answer my  
 13 question. You did and then you went off  
 14 on a tangent. All I want to know right  
 15 now is, you're going to give opinions that  
 16 the ZJ met the requirements of FMVSS 301.  
 17 And we're not talking about any other  
 18 extraneous standard that you're going to  
 19 elucidate at a later time. Right?  
 20 A. That's correct.  
 21 Q. And then your other thing or your  
 22 first one was that the Jeep Grand Cherokee  
 23 was not defectively designed. That's your  
 24 overall category. Correct?  
 25 A. Yes.

Page 39

1 Q. But you are not going to be  
 2 presenting any testimony about your  
 3 opinions which involve the design of the  
 4 vehicle. Correct? Because you're not a  
 5 design engineer.  
 6 A. No.  
 7 Q. I think we covered that last  
 8 time.  
 9 A. Well, I certainly will be  
 10 expressing opinions about the design. I  
 11 know a lot about the design of this  
 12 vehicle.  
 13 Q. But you're not going to be  
 14 expressing opinions about actually  
 15 designing the car and the reasons for  
 16 something being designed a certain way or  
 17 the nature of that information. Correct?  
 18 A. That's awfully vague.  
 19 Q. Let me ask you this then. What  
 20 do you base your opinion on that this Jeep  
 21 Grand Cherokee was not defectively  
 22 designed? I'm just confining it to design  
 23 now.  
 24 A. I base my opinion that the  
 25 vehicle was not defectively designed on a

Page 40

1 variety of things including my knowledge  
 2 of the testing of the vehicle, empirical  
 3 knowledge of its field performance, my  
 4 evaluation of this vehicle in my field  
 5 inspection of it, and my study of the  
 6 reconstruction done by others. I guess  
 7 collectively all this stuff allows me to  
 8 make some fundamental judgments about what  
 9 happened in this crash to the vehicle and  
 10 why the fire occurred.  
 11 Q. Mr. Banta, if I tell you that  
 12 there's a difference between the facts  
 13 that you observe, for instance, and being  
 14 able as an expert in court to give  
 15 opinion-based testimony because you have a  
 16 particular expertise, so I'm just trying  
 17 to cull out the areas in which you have an  
 18 expert basis to give an expert opinion.  
 19 And with that being said, can you  
 20 tell me the basis for your opinions that  
 21 you're going to give that the design  
 22 itself, how this vehicle was designed is  
 23 not defective?  
 24 A. The basis is my working knowledge  
 25 of this vehicle, both in design,

Page 41

1 manufacturing and assembly and its field  
 2 performance. I can't separate those out.  
 3 You know, I was there, I did this work.  
 4 Q. So let's talk about the work you  
 5 did. You didn't design this car.  
 6 Correct?  
 7 A. I did not.  
 8 Q. You didn't work with the  
 9 designers of this car in terms of  
 10 designing the car?  
 11 A. Oh, I sure did.  
 12 Q. You did?  
 13 A. Oh, yes.  
 14 Q. So you had input and you actually  
 15 had discussions with the people who  
 16 designed the ZJ?  
 17 A. I had -- let's see. ZJ was '93.  
 18 Yes, I did.  
 19 Q. Who were they?  
 20 A. Donna Hale, Chuck Cosmos, Michael  
 21 Teets, Ed Zylik. That was around '88 or  
 22 '89. Those are some that I remember.  
 23 Q. So when you say that you had  
 24 input with these people about the design  
 25 of the vehicle, are you saying that you

Page 42	Page 44
<p>1 told, for instance, Ed Teets your opinions 2 about how this design was coming along and 3 things were changed based on your opinion? 4 A. What we did was -- the answer to 5 that is yes and no. We sat down in the 6 Field System Tech Club with all the field 7 system people, not only Jeep, the Dodge 8 truck and the other groups when we form 9 tech clubs. And we talked about the 10 envelope, where the tank would sit, what 11 it would be made of, things like that. 12 And that was a consensus kind of 13 operation. It wasn't one person sitting 14 down and putting lines on a piece of 15 paper. The group says we want an 16 18-gallon tank, we want it to be HDPE, we 17 want it to pass through the frame rail. 18 Those kind of fundamental decisions were 19 made by the consensus of the group. I was 20 a part of that group. 21 Q. Okay, that's good. But I want to 22 know exactly what you did. What did you 23 do? You could be part of the group sitting 24 there and you could agree with everyone 25 sitting there. That's what someone could</p>	<p>1 THE WITNESS: No. We functioned 2 in oversight watching over engineering 3 activities. 4 Q. And when you were watching over 5 them, do you recall any occasion when you 6 stopped them or corrected any engineer's 7 work involving the ZJ? 8 A. I'm sure there was some. I'm 9 confident there were. 10 Q. Well, what were they? 11 A. I don't remember. 12 Q. Well, I'm only talking you. I'm 13 not really talking about the people in 14 Product Analysis. 15 A. We crash test a preproduction 16 vehicle. We bring it back into the 17 viewing room, put it up on a hoist and six 18 or eight of us gather around it, Ed Zyluk, 19 the fuel system design guy, the structures 20 guy, myself, maybe a manufacturing person. 21 The manufacturing guy says, I can't put 22 that screw there, I've got to move it, put 23 it in a different location. And I say, I 24 don't like that screw there because it's 25 dangerously close to some other surface</p>
<p>Page 43</p> <p>1 do. I want to know what you did. What 2 did you do? Did you do anything with your 3 hands? Did you do a mockup? Did you do any 4 scientific calculations? Did you do any 5 testing? I just want to know what you did 6 within the group. 7 A. My role was advisory and 8 oversight. I worked in a group called 9 Product Analysis. We watched over the 10 engineering design and testing and we 11 participated in it but we didn't actually 12 draw the lines and make the parts. Other 13 people did that. 14 MS. DE FILIPPO: Could you read 15 that answer back, please? 16 (Whereupon the previous answer is 17 read back.) 18 Q. Well, in your capacity which was 19 advisory and oversight, was it talking 20 that you did? Did you do any engineering 21 work, let's say, with respect to the 22 design? 23 MR. BRADLEY: I'm going to object 24 to the term engineering work, but you can 25 answer.</p>	<p>Page 45</p> <p>1 that may hit the tank. Let's move the 2 screw. Or, let's change this flange and 3 turn it the opposite direction because it 4 might hit the tank in a different PDOL. 5 Those were the kind of things we did 6 routinely, particularly in the first field 7 prototype test. The earlier prototype 8 tests revealed areas of concern that you 9 then go to work on and there are dozens of 10 those. 11 Q. I have a couple of questions 12 regarding your answer. 13 You said that a vehicle is 14 tested, it's crashed and we bring it back 15 and a bunch of us go look at it. And then 16 you said the fuel systems guy is there, 17 the structures guy is there and I'm there. 18 What are you? 19 A. I'm the oversight group in 20 Product Analysis. 21 Q. So you're not a technical person. 22 That's fair to say. Correct? 23 MR. BRADLEY: Just note my 24 objection. 25 THE WITNESS: I would not call</p>

Page 46	Page 48
<p>1 that non technical.</p> <p>2 Q. You're not a field systems guy.</p> <p>3 Right?</p> <p>4 A. That's right.</p> <p>5 Q. You're not a structure guy?</p> <p>6 A. That's right.</p> <p>7 Q. You're not a design guy?</p> <p>8 A. I'm a fire guy.</p> <p>9 Q. So that's what you would call</p> <p>10 you, the fire guy?</p> <p>11 A. Yeah.</p> <p>12 Q. So your concern when you're doing</p> <p>13 this oversight is whether or not you see</p> <p>14 anything obvious that to you, in looking</p> <p>15 at it, because you're not taking it apart</p> <p>16 and testing it yourself. Correct?</p> <p>17 A. Right.</p> <p>18 Q. So you're really looking at</p> <p>19 whatever it is that's obvious. Correct?</p> <p>20 A. I'm looking for fuel leakage</p> <p>21 potentials.</p> <p>22 Q. Obvious fuel leakage potentials.</p> <p>23 You're not doing anything to see if</p> <p>24 there's fuel leakage within that you</p> <p>25 couldn't see, or if there was a problem</p>	<p>1 the 301 test but in the -- out in the</p> <p>2 world where impacts vary.</p> <p>3 Q. Maybe it's more basic than that.</p> <p>4 When we talk about the word obvious,</p> <p>5 you're saying what's not so obvious before</p> <p>6 you actually test the car and look at it.</p> <p>7 Correct?</p> <p>8 A. Right.</p> <p>9 Q. And I'm saying obvious in terms</p> <p>10 of when you're actually there looking at</p> <p>11 the car, you're looking for what appears</p> <p>12 to you to be a problem?</p> <p>13 A. Yes, that have potential to cause</p> <p>14 fuel leakage.</p> <p>15 Q. And it's what you're seeing with</p> <p>16 your eyes. Correct?</p> <p>17 A. Well, I'm struggling with the</p> <p>18 word obvious. We've had heated arguments</p> <p>19 under this vehicle where someone will say</p> <p>20 no, that won't cause a leak and I say I</p> <p>21 think it will. Whether it's obvious to</p> <p>22 them or me, there might be a disagreement</p> <p>23 about it.</p> <p>24 Q. But it's what you're looking at,</p> <p>25 that you're pointing to, that you're</p>
Page 47	Page 49
<p>1 going on that can't be viewed. That's</p> <p>2 fair to say. Correct?</p> <p>3 A. I don't understand that. A</p> <p>4 problem that can't be viewed?</p> <p>5 Q. Yes. You're not doing anything</p> <p>6 to the vehicle yourself to get into it, to</p> <p>7 take it apart. You're not physically</p> <p>8 doing anything that you can't look at and</p> <p>9 say I think this is wrong, I think that's</p> <p>10 wrong.</p> <p>11 A. We have technicians that do that.</p> <p>12 Take that down, we want to look at it.</p> <p>13 Q. I understand. But I'm talking</p> <p>14 about you, what you do as the fire guy</p> <p>15 when you look at these cars as you're</p> <p>16 looking to see what's obvious and would be</p> <p>17 a problem relative to a fire.</p> <p>18 MR. BRADLEY: Just note my</p> <p>19 objection as to obvious.</p> <p>20 THE WITNESS: Actually, what I'm</p> <p>21 looking for is the not so obvious, the</p> <p>22 things that may cause fuel leakage. My</p> <p>23 goal in evaluating crash test results are</p> <p>24 to look for those things that may</p> <p>25 potentially cause fuel leakage not only in</p>	<p>1 saying would cause a leak.</p> <p>2 A. Oh, yeah. That's a physical</p> <p>3 thing.</p> <p>4 Q. It's a physical thing you can</p> <p>5 see. Correct?</p> <p>6 A. Right.</p> <p>7 Q. And do you go to the test site</p> <p>8 when the vehicles crashed?</p> <p>9 A. On occasion, not often. It's a</p> <p>10 very benign event actually.</p> <p>11 (Whereupon a short recess is</p> <p>12 taken.)</p> <p>13 Q. Mr. Banta, did you do anything in</p> <p>14 your capacity as an employee of Chrysler</p> <p>15 regarding interfacing with NHTSA at any</p> <p>16 time in your career?</p> <p>17 A. Yes.</p> <p>18 Q. And you are familiar then with</p> <p>19 certain procedures that auto manufacturers</p> <p>20 follow with regard to NHTSA. Correct?</p> <p>21 A. Yes.</p> <p>22 Q. And you know that from time to</p> <p>23 time there are things filed with NHTSA</p> <p>24 called defect petitions. Correct?</p> <p>25 A. Defect information reports, yes.</p>

Page 50

1 Q. But even defect petitions like  
 2 the one in this particular situation where  
 3 the Center For Auto Safety filed a defect  
 4 petition, you're aware of that in this  
 5 case?  
 6 A. Yeah.  
 7 Q. And can you tell me what your  
 8 understanding of what NHTSA's procedure is  
 9 after a defect petition is filed?  
 10 A. Typically they evaluate the  
 11 allegation or the claims. They sometimes  
 12 talk to the auto manufacturer initially  
 13 verbally. Then they -- if they believe  
 14 there's merit to the claim, they will open  
 15 up what is called a PE, preliminary  
 16 evaluation. And the preliminary  
 17 evaluation sets into play many things that  
 18 NHTSA does. Sometimes they do testing of  
 19 their own. They frequently contract out  
 20 testing. They conduct surveys, they do  
 21 field investigations and, of course, they  
 22 send information requests to auto  
 23 manufacturers, how many of these have you  
 24 seen, how many of those have you had, what  
 25 is your evaluation, things of that nature.

Page 51

1 And then there's an intermediate step  
 2 where they may determine that they need  
 3 further study and raise the level of the  
 4 PE to an engineering analysis where they  
 5 do a much more in-depth study and then  
 6 eventually they make a determination.  
 7 Q. When they -- you said at certain  
 8 stages they decide that they're going to  
 9 ask the manufacturer involved, and other  
 10 manufacturers too, questions. Correct?  
 11 Sometimes verbally, sometimes written.  
 12 A. Yes, mostly written.  
 13 Q. In this case are you aware of  
 14 written questions and answers that NHTSA  
 15 sent to Chrysler regarding the defect  
 16 petition of the Center For Auto Safety?  
 17 A. Yes.  
 18 Q. And do you have them with you  
 19 today?  
 20 A. I do not, no.  
 21 Q. Basically there are written  
 22 questions and answers that happened in  
 23 this particular case and Chrysler  
 24 basically sent information to NHTSA in  
 25 response to things that concerned NHTSA.

Page 52

1 Correct?  
 2 A. Yeah, in response to the  
 3 questions that NHTSA asked.  
 4 Q. And when I find them at the next  
 5 break, we'll get back to it and make an  
 6 exhibit. But in the meantime, then you  
 7 said that as a result of the defect  
 8 petition, NHTSA opens a preliminary  
 9 evaluation.  
 10 Do you know or did you ever know  
 11 what the criteria was for NHTSA to  
 12 determine that they would take that defect  
 13 petition and open the preliminary  
 14 evaluation?  
 15 A. You mean what --  
 16 Q. What prompted NHTSA --  
 17 A. What prompted NHTSA to do that?  
 18 Q. To go further on a petition.  
 19 A. I don't know.  
 20 Q. Do you know in this case what  
 21 prompted NHTSA to go further with the  
 22 petition and open up a preliminary  
 23 evaluation?  
 24 A. No, I don't. I don't know  
 25 internally what went on at NHTSA to, in

Page 53

1 their judgment, create a PE. And I  
 2 understand now it's been elevated to an EA  
 3 or will be elevated to an EA. And  
 4 similarly, I don't know the answer to that  
 5 either.  
 6 MS. DE FILIPPO: Let's mark this  
 7 document the next document.  
 8  
 9 (NHTSA EA is received and marked  
 10 Banta-20 for identification.)  
 11  
 12 Q. I'm going to show you a document,  
 13 Mr. Banta, that's been marked Banta-20.  
 14 Have you ever seen this document  
 15 before?  
 16 MR. BRADLEY: I'm just going to  
 17 note my objection because I believe this  
 18 is all printed off the Internet. When you  
 19 say this document, you mean the actual --  
 20 MS. DE FILIPPO: The statement  
 21 contained within the document, in whatever  
 22 format it's in.  
 23 THE WITNESS: I have seen this,  
 24 yes.  
 25 Q. I'm sorry?

Page 54

1 A. I have seen this, yes.

2 Q. And so that is a document, a

3 statement issued by NHTSA regarding moving

4 the preliminary evaluation to an

5 engineering analysis. Correct?

6 A. Upgrading it from a PE to an EA.

7 Q. Do you know what allowed or what

8 criteria was used to allow NHTSA to

9 upgrade from a PE to an engineering

10 analysis involving the Jeep Grand

11 Cherokee?

12 A. You mean why NHTSA did this?

13 Q. Well, no, the criteria that they

14 used to determine how they would go from a

15 preliminary evaluation to an engineering

16 analysis.

17 A. I don't know in this specific

18 case what the elements were. But

19 typically NHTSA determines that, as a

20 result of their PE analysis, they believe

21 more study is required. And that's

22 apparently what happened here.

23 Q. And if you look at this document,

24 it specifically indicates that NHTSA made

25 this decision after Chrysler submitted

Page 55

1 their answers to the questions to NHTSA.

2 Correct?

3 A. Chrysler and others.

4 Q. Chrysler and others?

5 A. Yeah. I think what it says is

6 that they looked at other manufacturers as

7 peer vehicles, they looked at Chrysler and

8 then they examined their own data as well.

9 Q. And NHTSA says that the

10 information that they reviewed both from

11 Chrysler and elsewhere led them to believe

12 that rear impact related tank failures and

13 vehicle fires are more prevalent in a Jeep

14 Grand Cherokee than in non Jeep peer

15 vehicles. Did I read that correctly?

16 MR. BRADLEY: Is that in Banta-20?

17 MS. DE FILIPPO: Yes. I'm reading

18 from it.

19 THE WITNESS: Except they say the

20 rear impact related tank failures and

21 vehicle fires are more prevalent.

22 Q. Let me read the sentence.

23 "NHTSA assessment of the data

24 collected during the preliminary

25 evaluation 10-031 indicates that rear

Page 56

1 impact related tank failures and vehicle

2 fires are more prevalent in the Jeep Grand

3 Cherokee than in the non Jeep peer

4 vehicles."

5 Did I read that correctly?

6 A. Yes, that's correct.

7 Q. And then the Agency went on to

8 say that, "In addition, the Agency's

9 analysis of its FARS data for the peer

10 vehicles in three Jeep models shows a

11 higher incidence of rear impact fatal fire

12 crashes for the Jeep products."

13 Isn't that what it says?

14 A. Yes.

15 Q. And then, "As a result of their

16 analysis and findings, the Office of

17 Defect Investigation upgraded its

18 investigation to an engineering analysis

19 and they want to determine whether the

20 subject vehicles contained a defect that

21 presents an unreasonable risk to safety."

22 Correct?

23 A. Right.

24 Q. One of those vehicles is in fact

25 the Susan Kline vehicle that they're

Page 57

1 investigating. Correct?

2 A. Yes.

3 Q. Have you been following the NHTSA

4 action with respect to the Jeep Grand

5 Cherokee during the pendency of the Kline

6 litigation that you've been involved in?

7 A. Yes.

8 Q. So it's fair to say that you, if

9 you needed to know anything, and even when

10 you wrote your reports I think you made

11 reference to the NHTSA information, you

12 could go on the NHTSA website and get

13 whatever information you needed?

14 A. Yes.

15 Q. At the time. Correct?

16 A. Yes.

17 Q. Now, would you agree with me that

18 the NHTSA -- NHTSA requires -- the federal

19 government requires that auto makers in

20 exercising prudent engineering judgment

21 select the worst case configurations for

22 testing?

23 A. Yes, that's right. You do not

24 have to test every configuration but NHTSA

25 expects the auto manufacturers to test

Page 58	Page 60
<p>1 worst case configurations.  2 MS. DE FILIPPO: I want to mark  3 this document.  4  5 (NHTSA document dated May 1997 is  6 received and marked Banta-21 for  7 identification.)  8  9 Q. Mr. Banta, just look at what's  10 been marked Banta-21 and verify, if you  11 would, that there's a statement from NHTSA  12 in that NHTSA document involving what we  13 just talked about, that NHTSA will require  14 with prudent engineering a manufacturer to  15 test the worst case.  16 MR. BRADLEY: I'm going to object  17 because I don't think you've asked if he's  18 ever seen the document.  19 MS. DE FILIPPO: He's looking at  20 it now. I asked him to look at it now and  21 verify in fact it represents what we just  22 talked about, the statements that we just  23 talked about.  24 MR. BRADLEY: When you said the  25 statements that we just talked about, you</p>	<p>1 of March -- again, I'm using mine, which  2 is the 14th, but I know that yours is the  3 24th.  4 MR. BRADLEY: I have an extra copy  5 of the 24th.  6 Q. If you look at page two of your  7 report, Mr. Banta --  8 MR. BRADLEY: I'm just going to  9 object because you have the March 14th  10 report and he has the March 24th report.  11 Since that was a change by prior counsel I  12 don't know if there are any changes. So  13 page two in your report might not be page  14 two. So that's why I think we should go  15 off of the 24th.  16 MS. DE FILIPPO: I think we  17 already said there's no difference but the  18 change on the WJ and WK.  19 MR. BRADLEY: I believe that's  20 between the March 24th and the April  21 report.  22 THE WITNESS: Right.  23 MS. DE FILIPPO: Well, then, let's  24 look at the April and I'll refer to my  25 notes as we go along.</p>
Page 59	Page 61
<p>1 mean specifically about worst case  2 configurations?  3 MS. DE FILIPPO: That's correct.  4 Q. I just want you to verify that in  5 fact that document expresses NHTSA'S  6 position with respect to testing worst  7 case scenarios.  8 A. Yes.  9 MR. BRADLEY: I also want the  10 record to reflect that this is about Dodge  11 Rams according to the title of Banta-21.  12 MS. DE FILIPPO: And the record  13 should reflect that the Dodge Ram is not  14 -- it's not confined to the Dodge Ram with  15 respect to its statement about the worst  16 case. But let me ask the witness.  17 Q. That NHTSA policy and requirement  18 about testing the worst case is not  19 confined to one vehicle. It's every  20 vehicle?  21 A. Oh, yeah.  22 Q. Every manufacturer. Correct?  23 A. That's right. That's a common  24 well understood rule.  25 Q. Now getting back to your report</p>	<p>1 Q. If you look at page two of your  2 April report --  3 A. I don't have that. The amended  4 report? The difference between the 24th --  5 the March and April reports is just one  6 letter and we can use them  7 interchangeably.  8 Q. We're looking at, for the record,  9 Banta-17. If you look at page two --  10 A. Page two.  11 Q. You indicate in paragraph number  12 three and I'll read it, "The author was  13 requested to study, analyze and determine  14 the cause and origin of the vehicle fire."  15 A. Yes.  16 Q. Did you determine the cause and  17 origin of the vehicle fire?  18 A. Yes.  19 Q. What was the cause and origin of  20 the vehicle fire?  21 A. The cause of the fire was  22 excessive fuel leakage from the fuel tank  23 area and the origin was the rear of the  24 vehicle.  25 Q. Also on page two you indicate you</p>



1 were also evaluating technical issues  
 2 raised by other involved parties.  
 3 What parties are we talking  
 4 about?  
 5 A. Generally that's directed at  
 6 allegations made by plaintiff's experts.  
 7 Q. Well, in this case, not  
 8 generally. I want to be specific to this  
 9 case. So what other involved parties are  
 10 we referring to in that sentence?  
 11 A. The technical experts of the  
 12 plaintiff.  
 13 Q. Just the plaintiff?  
 14 A. Yeah.  
 15 Q. Okay. So now having said that  
 16 we're talking about the technical experts  
 17 of the plaintiff as the other involved  
 18 parties, can you tell me what the  
 19 technical issues that you evaluated were?  
 20 A. Where are you reading?  
 21 Q. That same sentence.  
 22 A. Oh, I'm sorry. To the extent  
 23 that plaintiff's experts made allegations  
 24 about the location of the fuel tank, or  
 25 the performance of the fuel tank, or the

1 nature of the fire, or the cause and  
 2 origin of the fire.  
 3 Q. Is that all?  
 4 A. I think so.  
 5 Q. So it would be location of the  
 6 fuel tank, cause and origin of the fire?  
 7 A. And behavior of the fuel system.  
 8 Q. And behavior. Okay. Let's talk  
 9 about the cause and origin of the fire.  
 10 You read Mr. Bush's report.  
 11 Correct?  
 12 A. I did.  
 13 Q. And you agreed? Both of you agree  
 14 about the cause and origin of the fire.  
 15 Right?  
 16 A. Generally, yes.  
 17 Q. So you evaluated the issue about  
 18 cause and origin of the fire and basically  
 19 evaluated it the way that Mr. Bush did,  
 20 plaintiff's expert?  
 21 A. Well, I don't want to adopt Mr.  
 22 Bush's report in its entirety, but to the  
 23 extent that Mr. Bush led a fuel system  
 24 leakage caused the fire, I agree.  
 25 Q. Is there anything about his

1 report that you don't agree with?  
 2 A. I'd have to read the report.  
 3 Q. Do you have it with you?  
 4 A. No.  
 5 Q. I'm going to ask you to read it  
 6 at some point in time and advise me what  
 7 you don't agree with.  
 8 A. Okay.  
 9 Q. And let me ask you this. Have  
 10 you placed a statement anywhere in either  
 11 of your reports indicating any part of  
 12 Bush's report that you don't agree with  
 13 with respect to cause and origin of the  
 14 fire?  
 15 MR. BRADLEY: I'm just going to  
 16 note my objection about the rereading of  
 17 Bush's report and evaluation. We'll take  
 18 it under advisement.  
 19 MS. DE FILIPPO: Fine. You know  
 20 what, let me go back to my question.  
 21 Q. Can you indicate where in any of  
 22 your reports that we've marked here today  
 23 you make any statements where you indicate  
 24 that you take issue with anything  
 25 expressed by Mr. Bush?

1 MR. BRADLEY: With regard to the  
 2 cause and origin?  
 3 MS. DE FILIPPO: At any time. I'm  
 4 starting with the general.  
 5 THE WITNESS: I didn't --  
 6 MR. BRADLEY: Why don't you look  
 7 at them.  
 8 THE WITNESS: I didn't spend a  
 9 lot of time on Bush's report because I,  
 10 frankly, view him as a lightweight and  
 11 he's not well schooled in motor vehicles  
 12 and I tend to read his report and say, oh,  
 13 yeah, another Bush report.  
 14 Q. Okay, but now we're here and I  
 15 know you're going to come to court and I  
 16 just want to be prepared as I should be as  
 17 to whether or not you're going -- you have  
 18 expressed any --  
 19 A. If you give me a copy of the Bush  
 20 report, I'd be glad to critique it.  
 21 Q. I'm not asking you that. I'm  
 22 asking you to look at your reports and  
 23 indicate to me, is there any portion of  
 24 any part of any of your reports where you  
 25 have taken issue with anything said by Mr.

Page 66	Page 68
<p>1 Bush and you've indicated so in your 2 reports. 3 A. No, I did not say in either of my 4 reports that Mr. Bush said this, my 5 reaction is that. But conceptually Mr. 6 Bush may have echoed the same thing that 7 other experts said. Rather than focusing 8 on the person, I focus on the issues. 9 Q. Well, I think you did make 10 reference to people in your reports and 11 things that they have said in their 12 reports. And I think you'll agree with 13 me, because if you look at your September 14 report you certainly make issue of Mr. 15 Sheridan and Mr. Hannemann. 16 A. Yes. 17 Q. I'm asking you, did you take 18 issue with anything that Mr. Bush said? 19 A. I would need to look at his 20 report and answer that. I just don't know 21 the answer to that. I didn't write a 22 report specifically addressing the things 23 that Mr. Bush said. 24 Q. Well, with respect to cause and 25 origin of the fire, did you feel the need</p>	<p>1 plaintiff at all and the plaintiff. 2 A. In my report there are -- both 3 reports, there are responses to claims 4 made by various plaintiff experts. 5 Q. About cause and origin of the 6 fire? 7 A. Well, I don't know how to answer 8 that. There's a crash and there's a fire. 9 And I talk about both. 10 Q. Let's go back. You said that the 11 cause of the fire was excessive fuel 12 leakage from the fuel tank and the origin 13 of the fire was the rear of the vehicle. 14 Is there anything expressed in any of your 15 reports in which you indicate that you 16 take issue with the plaintiff's expression 17 of the cause and origin of the fire by 18 anyone? 19 A. I would have to go back and 20 reread their reports. I don't remember. 21 I can tell you this, that the cause and 22 origin of the fire is fuel leakage from 23 the fuel tank and I don't think that 24 anybody on the plaintiff's side had any 25 other theory or expressed any other</p>
Page 67	Page 69
<p>1 in any of your reports to indicate that 2 your opinion was different than Mr. Bush's 3 or deviated from what Mr. Bush said about 4 cause and origin of the fire? 5 A. I need to read Mr. Bush's report 6 again. My memory isn't that good. 7 Q. Well, did you indicate anywhere 8 in your reports about anything that the 9 plaintiff said at any time about cause and 10 origin of the fire that you took issue 11 with? 12 A. I don't know the answer to that. 13 Some of the things I said in my report may 14 have related to Bush without saying Bush 15 said this. 16 Q. No, I'm not talking about Bush 17 now. The next question was not about 18 Bush. 19 MS. DE FILIPPO: Can you read back 20 my last question? 21 (Whereupon the previous question 22 is read back.) 23 THE WITNESS: Well, who is 24 plaintiff? You mean plaintiff's experts? 25 Q. Anyone associated with the</p>	<p>1 conclusion. I think we're generally in 2 agreement on that. There's no question 3 that there was a substantial fuel leakage 4 from that fuel system. I don't know if 5 that's where you're going, but I think we 6 all agree on that. 7 Q. If you look at page two again, 8 paragraph number three, your last sentence 9 says, "The purpose of the investigation 10 and analysis is to determine the origin 11 and causation factors of the fire and 12 describe certain vehicle design and 13 testing considerations relative to this 14 incident." 15 Did you describe certain vehicle 16 design and testing considerations relative 17 to this incident? 18 A. Yes. 19 Q. Can you show me where you 20 described vehicle design and testing 21 considerations relative to this incident? 22 A. Page five under "Summary," 23 paragraphs two and three. 24 In paragraph two we talk about 25 the impact velocities. They're far beyond</p>

Page 70	Page 72
<p>1 any known rear impact design constant or                  2 objective.                  3 Paragraph three, there's no known                  4 test -- there are no known test                  5 requirements that describes fuel system                  6 integrity at speeds in this range.                  7 Q. Okay. Let's go back -- I'm                  8 sorry, are you finished?                  9 A. I'm still reading.                  10 Q. Go ahead.                  11 A. My memory is not that good, I                  12 have to read.                  13 The bottom of page five, "There                  14 has been no definitive study or research                  15 that has ever identified a skid plate or                  16 trailer hitch as a fuel leakage mitigation                  17 device."                  18 Q. Page five?                  19 A. Page five, yes, at the bottom.                  20 The very last sentence.                  21 Q. I don't have a sentence on the                  22 bottom of page five.                  23 MR. BRADLEY: Which report are you                  24 -- he has the April 4, 2011. That's what                  25 he's referring to.</p>	<p>1 your answer are what you believe to be the                  2 vehicle design and testing considerations                  3 relative to the Kline accident?                  4 A. Yes.                  5 Q. Now, did you ever indicate in                  6 your report of March 14th of 2011 -- I'm                  7 sorry, for you it's March 24th or                  8 April 4th of 2011. Did you ever indicate                  9 that the Jeep, Susan Kline Jeep, stayed                  10 attached to the Toyota?                  11 MR. BRADLEY: Just note my                  12 objection. What do you mean, stayed                  13 attached?                  14 MS. DE FILIPPO: After impact.                  15 THE WITNESS: Stayed engaged? The                  16 two vehicles stayed engaged?                  17 Q. They never separated.                  18 A. I don't believe I did. I don't                  19 have memory of that.                  20 Q. Are you going to be indicating at                  21 trial any opinions regarding whether or                  22 not the Jeep and the Toyota separated upon                  23 impact or stayed attached prior to the                  24 second impact with the Legacy?                  25 A. I view that as a reconstruction</p>
Page 71	Page 73
<p>1 Q. Are you done?                  2 A. No.                  3 Q. Go ahead.                  4 A. Under "Vehicle Structure,"                  5 paragraph two, "The design objective for                  6 management of the post collision fire                  7 event is to control gasoline leakage and                  8 therefore reduce the risk of a fire                  9 starting."                  10 Under "Impact Severity," the                  11 Hannemann claim about fire magnitudes is                  12 explained in the second paragraph.                  13 Under "Alternative Design" for                  14 Hannemann where he talks about the                  15 Explorer being a better alternative design                  16 for tank location, that's explained in                  17 paragraph three.                  18 Item six under "Sheridan" talks                  19 about no other competitive sport utility                  20 vehicle with a fuel tank after the rear                  21 axle, and of course that's not true. The                  22 Blazer and Mercedes Benz and Hummer and a                  23 number of other vehicles had it. I think                  24 that's generally it.                  25 Q. So what you just indicated now in</p>	<p>1 issue and I think that's appropriately in                  2 the reconstructor's hands.                  3 Q. So the answer is no, you're not                  4 going to offer testimony about your                  5 opinions with respect to that. Correct?                  6 A. My opinion would only be based                  7 upon their conclusions.                  8 Q. Now, if you look at page two                  9 again --                  10 A. Of?                  11 Q. Of the report we've been staying                  12 on.                  13 You indicate on page two under                  14 "Background" in paragraph number three,                  15 "The driver of the second vehicle, the                  16 Grand Cherokee, reacted by nearly                  17 stopping."                  18 And I think we discussed that                  19 your definition of "nearly stopping" was                  20 five miles an hour or less. Is that                  21 what--                  22 MR. BRADLEY: Discussed today?                  23 MS. DE FILIPPO: In his prior                  24 deposition.                  25 THE WITNESS: I believe that's</p>

1 correct, yeah. An extremely low speed or  
 2 stopped.  
 3 Q. Is it your testimony or are you  
 4 going to be testifying that it is your  
 5 opinion that the driver of the Grand  
 6 Cherokee was going under five miles an  
 7 hour when it was struck by the Toyota?  
 8 A. No. That's derived from the  
 9 reconstruction.  
 10 Q. And then you go on to say, "The  
 11 driver of the third vehicle, a Sienna,  
 12 then struck the rear of the Grand Cherokee  
 13 at a very high speed."  
 14 What's your definition of "very  
 15 high speed" as it pertains to this  
 16 accident and as you have written it in  
 17 your report on page two?  
 18 A. I would consider impact at the  
 19 rear at 45 miles an hour or so to be very  
 20 high speed. Forty-five miles an hour  
 21 seems in my experience to be a place where  
 22 extreme high amounts of energy are  
 23 released and it's a challenge to the  
 24 vehicle at 45.  
 25 Q. Are you talking about 45 miles an

1 high speed or that there even was high  
 2 speed other than assuming that the  
 3 reconstructionists are correct?  
 4 A. Yeah. Well, my definition of  
 5 high speed is based on the reconstruction  
 6 in this case. So I have to use their  
 7 numbers. And all I can say about it, it's  
 8 a very high speed impact.  
 9 Q. Now, on page three you indicate  
 10 again, under "Vehicle Examination," you  
 11 indicate "severe high speed rear impact."  
 12 Again, are we talking about the  
 13 45 miles an hour in that?  
 14 A. Or greater, yes.  
 15 Q. Well, what do you mean, or  
 16 greater?  
 17 A. Something above 45 miles an hour  
 18 is a severe high speed rear impact.  
 19 Q. And if you look at page four --  
 20 A. Five?  
 21 Q. Yes, under number five where you  
 22 talk about extremely severe impact forces.  
 23 Again, your statement is based on what the  
 24 reconstructionists have provided you with.  
 25 Correct?

1 hour speed at the moment of impact?  
 2 A. Yes.  
 3 Q. And in all cases are you saying  
 4 that in your opinion, 45 miles an hour is  
 5 a very high speed?  
 6 A. Oh, it's a high speed, yeah.  
 7 That's -- the current standard is 50.  
 8 That's the challenge to comply with.  
 9 MR. BRADLEY: For rear impact?  
 10 THE WITNESS: Yeah. Fifty is --  
 11 45 is a challenge.  
 12 MR. BRADLEY: Because I believe  
 13 Miss DeFilippo said for all.  
 14 THE WITNESS: Oh. Well, in  
 15 general. I think her question was, what  
 16 is the very high speed.  
 17 Q. We're only talking about rear  
 18 impacts. Let's understand each other.  
 19 A. Forty-five and higher produces in  
 20 my experience severe damage. It's not a  
 21 straight line function. It's not that at  
 22 30 you get twice as much energy as 60.  
 23 It's an exponential function.  
 24 Q. But you're not going to be  
 25 testifying about what you consider to be

1 A. That's right.  
 2 Q. What are facebar supports?  
 3 A. Where do you see that?  
 4 Q. That's also on page four.  
 5 A. On page four?  
 6 Q. Yes.  
 7 Q. It's in the second paragraph, the  
 8 first full paragraph.  
 9 "The rear facebar supports were  
 10 driven forward more than 36 inches."  
 11 What does that refer to?  
 12 A. Well, the facebar is what we used  
 13 to call the bumper, but because we have a  
 14 soft fascia, the bumper beam is actually  
 15 inside the bumper cover or fascia. And  
 16 the supports are that area of the frame  
 17 rails where the facebar attaches to. In  
 18 other words, the facebar transfers it's  
 19 load of the frame rail through the  
 20 supports.  
 21 Q. Is the facebar the rear  
 22 crossmember?  
 23 A. Yes.  
 24 Q. On page four it says, "The Grand  
 25 Cherokee's wheelbase has been

Page 78	Page 80
<p>1 significantly reduced as a result of the 2 crash." 3 Now, where did you get that 4 information? 5 A. During my inspection I measured 6 the wheelbase. 7 Q. Why did you do that? 8 A. So that I could determine how 9 much reduction of wheelbase there was as a 10 result of this impact. 11 Q. Why did you want to know that? 12 A. The wheelbase helps you -- the 13 resultant wheelbase helps you define the 14 magnitude of the rear crush. As you hit 15 the rear of the vehicle you begin to crush 16 it like an accordion. And the way you can 17 measure the accordion effect or crush 18 effect is in part by measuring the 19 wheelbase. Front wheels in this case, the 20 wheels were not impacted, they didn't 21 change. But the rear wheels did. 22 Q. So what was the measurement? How 23 much was the reduction of the wheelbase 24 that was significantly reduced? 25 A. I would have to look at my field</p>	<p>1 A. I measured 7 feet 11 on the left 2 and 8 feet 5 on the right. So if the 3 wheelbase is 109 inches or 108 -- I'm not 4 sure what it is. 5 MR. BRADLEY: Well, don't guess. 6 THE WITNESS: But that's a 7 significant reduction. 8 Q. How much of a reduction is it? 9 A. I'm not sure if it's 108 or 109. 10 I think it's in that neighborhood, but I'm 11 not certain of that. 12 Q. So it would be approximately how 13 many inches? 14 A. Pardon me? 15 Q. How many inch reduction did you 16 calculate? 17 A. Perhaps 12 inches. But again, 18 I'd have to look up the as-built 19 wheelbase. 20 Q. Well, 8-foot-5 would be 101. 21 That would be eight inches. 8-foot-5, my 22 calculations, 96 plus five. Right? 23 A. Yeah, 101 on the right side. 24 Q. Okay. 25 A. So it's apparent that we've got a</p>
<p>Page 79</p> <p>1 notes. I don't have those numbers with 2 me. 3 Q. Okay. 4 A. It was significant. 5 Q. I have your field notes which 6 were marked Banta-8 in the prior 7 deposition. Take a look at them. 8 A. Yeah, at the bottom of page two. 9 Q. Yeah? 10 A. You see that? 11 Q. No, because you have my copy. 12 A. I'm sorry. The bottom of page 13 two, the wheelbase measurements are 7 feet 14 11 inches on the left side and 8 feet 15 5 inches on the right side. 16 Q. How much of the reduction is what 17 I'm asking you. What was the original 18 measurement of the wheelbase? 19 A. I'd have to calculate. I don't 20 remember the production wheelbase, 21 109 inches I think. I think. I'm not 22 sure. I'd have to look that up. 23 Q. One hundred nine inches and 24 you're saying you measured it to be how 25 many inches?</p>	<p>Page 81</p> <p>1 left bias here or a left rotation. 2 Q. On the left it was how much? 3 A. 7-foot-11. I believe that's 95. 4 Q. Right. So you're saying that -- 5 are you saying that eight inches is 6 significant, as a significant reduction? 7 A. No. I think the wheelbase is 8 probably 108. 9 Q. Are you saying seven inches is a 10 significant reduction? 11 A. I'm sorry? 12 Q. Is seven inches in your opinion a 13 significant reduction in the wheelbase? 14 A. That's a big hit, yes. Most rear 15 accidents have no change in the wheelbase 16 at all, none. 17 Q. So if the one side has a 18 7-foot-11 wheelbase measurement and the 19 other side is 8-foot-5 inch measurement as 20 the wheelbase, would you say there was an 21 offset impact in this case? 22 A. Either a slight offset or a 23 rotation. 24 Q. But you can't say, you weren't 25 there, and you're not a reconstructionist.</p>

Page 82	Page 84
<p>1 It could be one or the other in your mind?  2 A. Yeah.  3 Q. Does it matter in your mind in  4 formulating your opinions as to whether it  5 was a rotation or an offset impact so long  6 as you know that there was a difference in  7 the wheelbase from one side to the other?  8 A. It doesn't matter. The resultant  9 damage is what it is.  10 Q. Did the lower control arm  11 bushings burn out in this case?  12 A. Probably. Everything burned in  13 the rear.  14 Q. Did you make a note of that in  15 your field notes?  16 A. I don't see a notation of that.  17 Q. How much of the wheelbase is made  18 up in bushings?  19 A. Not much. Half inch maybe.  20 Q. That would be on each side?  21 A. Pardon me?  22 Q. On each side?  23 A. I'm sorry?  24 Q. On both sides?  25 A. Maybe a quarter on both sides.</p>	<p>1 when you viewed this. Correct?  2 A. At the inspection site.  3 Q. Correct. Yes, you did? Yes, you  4 took pictures?  5 A. Yes.  6 Q. Now, your attorney handed me an  7 envelope before we started this deposition  8 and I haven't opened it yet so I'm opening  9 it now. In the envelope is a --  10 MR. BRADLEY: Flash drive.  11 THE WITNESS: Thumb drive.  12 Q. Thank you. Is this -- does this  13 contain your photographs?  14 A. Yes.  15 Q. Okay. You have a copy of this,  16 of all your photographs somewhere.  17 Correct?  18 A. Yes.  19 Q. Do you have your photographs  20 printed out?  21 A. No.  22 Q. We just have them on this stick  23 or in your computer. Correct?  24 A. On my server, my backup server.  25 Q. I'm going to request of you</p>
Page 83	Page 85
<p>1 Q. A quarter on both sides?  2 A. Perhaps, yeah.  3 Q. Did the lower control arms  4 deform?  5 A. I don't remember. I'd have to  6 look at the photographs. I know the  7 trailing arms on the lateral struts both  8 bent so I would -- well, I don't know.  9 Left frame rail bent up at the trailing  10 arm. I don't know, I'd have to look at  11 the photographs. The right frame rail  12 also bent up at the trailing arm. I don't  13 know.  14 Q. Okay.  15 A. I do know that the trailing arms  16 bent but I don't know about the control  17 arm.  18 Q. Well, getting back to number two  19 on page four, "The Grand Cherokee's  20 wheelbase has been significantly reduced  21 as a result of the crash."  22 Do you have pictures depicting  23 that?  24 A. Oh, yeah.  25 Q. You took pictures at the scene</p>	<p>1 through your attorney that you provide  2 your attorney with the copies of the  3 pictures that you -- from this that you  4 believe depict the significant reduction  5 in the wheelbase that you've indicated in  6 paragraph number two.  7 MR. BRADLEY: We'll take it under  8 advisement.  9 MS. DE FILIPPO: Well, if you're  10 not going to do that at a later time -- we  11 could do it now but I'm trying to save  12 time.  13 MR. BRADLEY: I understand.  14 MS. DE FILIPPO: It would be much  15 easier for him to say here are my photos  16 that I think support number two.  17 THE WITNESS: So you want the  18 photographs that show the reduction in the  19 wheelbase?  20 Q. Of the wheelbase. Do they exist  21 in this stick?  22 A. Yes.  23 Q. How many are there that show  24 reduction in the wheelbase? How many would  25 you say are on here?</p>

Page 86	Page 88
<p>1 A. I don't know.</p> <p>2 Q. I'm not holding you to it.</p> <p>3 A. Four or five maybe.</p> <p>4 Q. So it's not an inordinate amount</p> <p>5 of photos that show reduction in the</p> <p>6 wheelbase?</p> <p>7 A. All the ones that show it or the</p> <p>8 typical ones?</p> <p>9 Q. I want the ones that you point</p> <p>10 to.</p> <p>11 A. Okay.</p> <p>12 Q. You said also on page four that,</p> <p>13 the first full paragraph, the last</p> <p>14 sentence, "A fuel tank tearing puncture is</p> <p>15 the possible result."</p> <p>16 Do you see that sentence?</p> <p>17 A. Page four?</p> <p>18 Q. First full paragraph, last</p> <p>19 sentence.</p> <p>20 A. Oh, okay.</p> <p>21 Q. "A fuel tank tearing puncture is</p> <p>22 the possible result."</p> <p>23 Did I read that correctly?</p> <p>24 A. Yes.</p> <p>25 Q. Okay. Do you mean to say</p>	<p>1 I see below the vehicle. In other words,</p> <p>2 with this much crushing I would expect a</p> <p>3 tearing, but I didn't actually find</p> <p>4 evidence because all the evidence burned</p> <p>5 up.</p> <p>6 Q. Are you saying that the rear</p> <p>7 crossmember was pushed forward 36 inches?</p> <p>8 A. The facebar supports were driven</p> <p>9 forward. This thing was bent up. It was</p> <p>10 mangled.</p> <p>11 Q. I'm talking about the rear</p> <p>12 crossmember now.</p> <p>13 A. I don't know about the rear</p> <p>14 crossmember. The supports are a hard</p> <p>15 point.</p> <p>16 Q. Where was the crossmember?</p> <p>17 A. The facebar, which is the rear</p> <p>18 crossmember, is at the very rear of the</p> <p>19 frame rails.</p> <p>20 Q. Where was it when you saw it?</p> <p>21 A. It's bent up.</p> <p>22 Q. So but where was it when you saw</p> <p>23 it? Was it there?</p> <p>24 A. They were driven forward</p> <p>25 36 inches at the supports.</p>
Page 87	Page 89
<p>1 probable?</p> <p>2 A. No, possible. I have no evidence</p> <p>3 that it was probable but I think it's</p> <p>4 possible.</p> <p>5 Q. Well, we talk in terms of</p> <p>6 probabilities when we're talking about</p> <p>7 expert testimony. So if you're going to</p> <p>8 say it's possible, it's not a proper</p> <p>9 opinion. If you believe it's probable --</p> <p>10 I'm just saying, do you understand the</p> <p>11 difference in terms of your testimony?</p> <p>12 MR. BRADLEY: Just note my</p> <p>13 objection.</p> <p>14 THE WITNESS: Let me give you</p> <p>15 some dialogue. The rear facebar supports</p> <p>16 were driven forward 36 inches and the fuel</p> <p>17 tank was likely similarly driven forward</p> <p>18 and compressed from the rear while it was</p> <p>19 being driven forward. Therefore, a</p> <p>20 tearing puncture in my experience is a</p> <p>21 possible result. But because we have no</p> <p>22 tank remains to evaluate, I can't say that</p> <p>23 it's probable because I just have no</p> <p>24 physical evidence to support that beyond</p> <p>25 the nature of the damage and invasion that</p>	<p>1 Q. That's not what I'm asking you.</p> <p>2 A. Well, think of this. Here's a</p> <p>3 facebar at the end of two rails. If I</p> <p>4 bend this forward, it has more rail</p> <p>5 consequence. But if I bend this support</p> <p>6 where it attaches to the rail, the rail</p> <p>7 then moves with it and now I can have a</p> <p>8 hard point reference. So if I have a</p> <p>9 U-shape in here, the facebar could move in</p> <p>10 but the supports didn't move the rail. So</p> <p>11 I tend to look at the facebar supports as</p> <p>12 a hard point.</p> <p>13 Q. That's fair enough as to what you</p> <p>14 looked at. I want to know where the rear</p> <p>15 crossmember was when you looked at this</p> <p>16 vehicle.</p> <p>17 A. I'd have to look at the</p> <p>18 photographs. I don't know.</p> <p>19 Q. Did you make a notation in your</p> <p>20 field notes where it was?</p> <p>21 A. I'll look. My notations say that</p> <p>22 the facebar was rotated 90 degrees</p> <p>23 downward.</p> <p>24 Q. So it normally would be parallel</p> <p>25 to the ground. Correct? In a vehicle</p>

1 that's not impacted, the facebar, the  
 2 crossmember -- can we refer to it as  
 3 crossmember from now on so we at least  
 4 have one term?  
 5 A. Sure.  
 6 Q. The rear crossmember was  
 7 90 degrees down toward the ground so now  
 8 it went from parallel to the ground where  
 9 it sits to completely perpendicular?  
 10 A. Yeah.  
 11 Q. Well, was it twisted?  
 12 A. I don't remember. My notes do  
 13 not reflect that. I'd have to look at the  
 14 photos.  
 15 Q. What is the length of the rear  
 16 crossmember in the Jeep Grand Cherokee ZJ?  
 17 A. I don't know.  
 18 Q. Can you estimate?  
 19 A. Pardon me?  
 20 Q. Can you estimate?  
 21 A. No.  
 22 Q. Would you agree with me that the  
 23 rear crossmember, though, would be too  
 24 long to be standing completely  
 25 perpendicular to the ground if it was off

1 A. Yes.  
 2 Q. Can you draw that for me?  
 3 A. Sure.  
 4 Q. Get a clean piece of paper  
 5 because we're going to mark it.  
 6 A. So there's the facebar.  
 7 Q. That's the back of the car?  
 8 A. Yeah. That's the side view, left  
 9 side view. There's the facebar, there's  
 10 the ground. The facebar is perpendicular  
 11 to the ground like this. And after the  
 12 crash, the facebar was parallel to the  
 13 ground rather than perpendicular. It was  
 14 rotated 90 degrees down.  
 15 Q. Okay.  
 16 MR. BRADLEY: You said you wanted  
 17 to mark that?  
 18 MS. DE FILIPPO: Yes. Why don't  
 19 we mark it.  
 20  
 21 (Diagram drawn by the witness is  
 22 received and marked Banta-22 for  
 23 identification.)  
 24  
 25 Q. Mr. Banta, for clarity purposes

1 where its normal mounting was?  
 2 A. Can you read that back?  
 3 Q. Let me ask it a different way.  
 4 If the rear crossmember is unseated from  
 5 its parallel position to the ground and is  
 6 90 degrees now perpendicular to the  
 7 ground, do you think it's longer and would  
 8 hit the ground and not be exactly  
 9 90 degrees?  
 10 A. There's something wrong with  
 11 that. The facebar is perpendicular to the  
 12 ground initially before impact. And what  
 13 I'm telling you is that it was rotated  
 14 90 degrees down, so it would now be  
 15 parallel to the ground.  
 16 Q. The rear crossmember that we're  
 17 talking about is perpendicular to the  
 18 ground?  
 19 A. The facebar is.  
 20 Q. What's the difference? You said  
 21 it was the same thing.  
 22 A. It's the same thing.  
 23 Q. So are you saying that the  
 24 crossmember is perpendicular when the car  
 25 hasn't been struck to the ground?

1 I'm going to show you a photograph, which  
 2 we should mark Banta-23, and another one  
 3 Banta-24.  
 4  
 5 (Two photographs are received and  
 6 marked Banta-23 and Banta-24 for  
 7 identification.)  
 8  
 9 Q. Mr. Banta, this is just for  
 10 clarity for me actually because I don't  
 11 know if I understand your diagram of  
 12 Banta-22 as well as I should.  
 13 I'm going to show you what's been  
 14 marked Banta-23, the back of a Jeep.  
 15 Correct? The photograph is of the back of  
 16 the Jeep. Right?  
 17 A. Yes.  
 18 Q. Is the rear crossmember indicated  
 19 in that picture?  
 20 A. No. The facebar is not.  
 21 Somebody used the term bumper. We don't  
 22 use bumper anymore. But the facebar is  
 23 not on this view.  
 24 Q. Okay. I'm going to show you  
 25 another photograph marked Banta-24. Can



Page 94	Page 96
1 you tell me where the facebar would be 2 relative to that bumper?	1 Q. Is parallel to the ground.
3 A. Yes. It's -- well, they're the 4 same thing. Facebar and bumper are the 5 same thing.	2 A. No. It's perpendicular to the 3 ground.
6 Q. So do you see the --	4 MR. GILL: Paul doesn't agree with 5 you.
7 A. You see where it points to what 8 is called a bumper? That's the facebar.	6 MS. DE FILIPPO: Can we go off the 7 record a minute?
9 Q. That's the facebar?	8 (Whereupon, a discussion is held 9 off the record.)
10 A. Yes.	10 MR. BRADLEY: We had a discussion 11 off the record to help --
11 Q. So that's the rear crossmember?	12 MS. DE FILIPPO: Let me. There 13 was a discussion off the record for 14 orientation purposes.
12 A. Yes. It's the rearmost member of 13 the frame structure.	15 Q. There are things in the vehicle 16 called side rails. Correct?
14 Q. Which is what the arrow in the 15 middle of the page is pointing to?	17 A. Side rails? Frame rails.
16 A. Yes.	18 Q. Frame rails on the side?
17 Q. So when that is on the car, it's 18 parallel to the ground. Correct? It's not 19 perpendicular?	19 A. Yes, yes.
20 A. No, it's perpendicular. It's 21 facing up and the ground is here. That's 22 perpendicular.	20 Q. And they run front to back of the 21 vehicle?
23 Q. What do you mean, facing up?	22 A. Yes, like a ladder. Think of a 23 ladder.
24 Isn't the facebar, the crossmember, this 25 right here?	24 Q. And across the vehicle almost 25 connecting the side rails is a
Page 95	Page 97
1 A. Yes.	1 crossmember. Correct?
2 Q. So when this sits on the car, 3 it's as if I put it on like that.	2 A. Yes.
4 Correct?	3 Q. It makes a box almost?
5 A. Yes.	4 A. It does.
6 Q. Well, then, that is parallel to 7 the ground.	5 Q. So the side rails running forward 6 and back, if you take the whole side rail 7 and look from the side, that's also 8 parallel to the ground, the whole side 9 rail. I'm not talking about a piece of it 10 or flipping it or its dimensions. If you 11 take the whole rail in your hand and put 12 it up to where it's going to be on the 13 car, it is parallel to the ground when 14 it's affixed. Correct?
8 A. No, it's perpendicular. What is 9 this?	15 A. The bottom surface of the frame 16 rail is parallel to the ground.
10 Q. That is perpendicular, but that's 11 not what this is. This is sitting -- it's 12 on the car like this. Correct?	17 Q. And that's true for the 18 crossmember also. If you take the whole 19 crossmember rear in your hand and hold it 20 up to where it should be in the car, it's 21 going to be parallel to the ground?
13 A. Yes.	22 A. The bottom surface of the 23 crossmember will be parallel to the 24 ground.
14 Q. And this is perpendicular. It's 15 not going up and down, it's going across 16 the car. Correct?	25 Q. Right. What part of the
17 A. Right.	
18 Q. So it's parallel to the ground.	
19 A. No, it's perpendicular.	
20 MR. GILL: The bottom edge is 21 parallel to the ground but the faceplate 22 is --	
23 MS. DE FILIPPO: I'm only talking 24 about the bar itself as it goes across.	
25 THE WITNESS: Right.	

Page 98	Page 100
<p>1 crossmember won't be parallel to the 2 ground if the bottom surface is? 3 A. The vertical wall. 4 Q. And that would be at either end. 5 Correct? 6 A. Of the crossmember? 7 Q. Yes. 8 A. Yes. 9 Q. Okay. 10 A. And the same is true with the 11 facebar. 12 Q. Right. You indicate in your 13 report also that the -- on page four you 14 indicate that "The impact forces of this 15 accident were extremely severe. This 16 crash destruction eliminated the space 17 occupied by the fuel tank in spite of its 18 designed protection system." 19 Do you see that? Number five. 20 A. Number seven? 21 Q. Five. 22 A. The impact forces of this 23 accident were extremely severe, yes. 24 Q. How much space is occupied by the 25 fuel tank prior to the collision?</p>	<p>1 the crossmembers on the front and back? 2 A. That's a guess. 3 MR. BRADLEY: Well, don't guess. 4 THE WITNESS: I don't know. I 5 would estimate four to six. 6 Q. Now, you indicate in number six 7 that "The area forward of the rear axle 8 was also compromised." 9 Can you tell me specifically what 10 was compromised in the crash? 11 A. Yes. The body structure forward 12 of the rear axle was deformed? 13 Q. What body structure? 14 A. Generally the floorpan. 15 Q. So the floorpan ahead of the rear 16 axle was deformed? 17 A. Yes. 18 Q. In what way? 19 A. My note number ten says the 20 floorpan rear of the rear axle invaded the 21 space forward of the rear axle. So that 22 portion of the floorpan that was behind 23 the rear axle went forward ahead of the 24 rear axle. 25 Q. What is the floorpan? Is that</p>
Page 99	Page 101
<p>1 A. I don't know. I haven't measured 2 it. 3 Q. Can you estimate? 4 A. I'm reluctant to do that. 5 Q. What is the designed protection 6 system that you're referring to in number 7 five? 8 A. Generally the four elements of 9 the frame rail, fore and aft, and lateral, 10 ahead of and behind the tank. You 11 essentially put the tank inside a box. 12 Q. The box is composed of the two 13 side rails, a rear crossmember and a 14 crossmember just ahead of the tank? 15 A. Yes. 16 Q. There are other crossmembers in 17 the car. Correct? 18 A. Oh, yes. 19 Q. How much space is there from the 20 tank to each of the elements of that box? 21 A. I don't know. 22 Q. Do you have an estimate? 23 A. Four to six inches perhaps. 24 Q. And that's four to six inches to 25 the side rails and four to six inches to</p>	<p>1 sheet metal? 2 A. Yes. 3 Q. And you found sheet metal on this 4 vehicle when you examined it in front of 5 the axle, the rear axle? 6 A. Yeah. 7 Q. Was it affixed to anything at the 8 time that you examined it? 9 A. Affixed? In other words, attached 10 to the frame rails. 11 Q. It was still attached to the 12 frame rails? 13 A. Yes. 14 Q. Did the frame rails move ahead of 15 the rear axle? 16 A. I believe they did. I'd have to 17 look at my photographs, but I think they 18 did. I think the frame rail took a Z kind 19 of shape and moved forward ahead of the 20 rear axle. 21 Q. Ahead of rear axle? 22 A. Yes. 23 Q. And you have that in photographs? 24 A. Yes. 25 Q. Could you also show me that?</p>

Page 102	Page 104
<p>1 A. Yes.</p> <p>2 MR. BRADLEY: We'll take it under</p> <p>3 advisement.</p> <p>4 THE WITNESS: You want</p> <p>5 photographs showing where the structure</p> <p>6 moved forward of rear axle? Right?</p> <p>7 MS. DE FILIPPO: And also the</p> <p>8 photographs about the wheelbase.</p> <p>9 MR. BRADLEY: Yes.</p> <p>10 Q. Now, you call this four elements,</p> <p>11 frame rail, side rail times two, your</p> <p>12 designed protection system. Correct?</p> <p>13 A. Yes.</p> <p>14 Q. Where did you get that</p> <p>15 information, that that was a designed</p> <p>16 protection system in the Jeep?</p> <p>17 A. That's the universal in the auto</p> <p>18 industry. You wrap the fuel tank around a</p> <p>19 structure and ideally you want the</p> <p>20 structure and the fuel tank to move</p> <p>21 together as a unit.</p> <p>22 Q. Can you tell me with respect to</p> <p>23 Susan Kline's vehicle how the fuel tank</p> <p>24 was protected or by what means? I know</p> <p>25 you've already said by the four rails. Is</p>	<p>1 floorpan and the bumper and the fascia,</p> <p>2 when all that stuff gets bent up it's</p> <p>3 using the energy from the impacting</p> <p>4 vehicle to do that.</p> <p>5 Q. And I want to make sure I have</p> <p>6 them all, though. You said the side</p> <p>7 rails, the crossmember, the floorpan, the</p> <p>8 quarter panel. Anything else?</p> <p>9 A. No, that's generally it. That's</p> <p>10 generally the body structure.</p> <p>11 Q. Well, I want to make sure I know</p> <p>12 what the body structure is. So you told</p> <p>13 me everything in the back?</p> <p>14 A. I think so, yeah.</p> <p>15 Q. Now, you say in number seven, you</p> <p>16 say, "This vehicle was designed,</p> <p>17 manufactured, tested and certified to</p> <p>18 comply with the fuel system integrity</p> <p>19 requirements of FMVSS 301."</p> <p>20 Correct?</p> <p>21 A. Yes.</p> <p>22 Q. Then you go on to say, "The test</p> <p>23 results demonstrate that this vehicle has</p> <p>24 an" -- and I'm underlining the word</p> <p>25 "this," "has an effective and capable fuel</p>
Page 103	Page 105
<p>1 there anything else?</p> <p>2 A. The rigidity provided by the</p> <p>3 floorpan above those four items. The</p> <p>4 floorpan is welded to the two frame rails</p> <p>5 and the laterals around the tank. And</p> <p>6 then additionally, the entire rear</p> <p>7 structure is an energy absorbing system</p> <p>8 that uses up the impact forces that come</p> <p>9 in and converts it to bending energies.</p> <p>10 Q. What do you mean by "entire rear</p> <p>11 structure"?</p> <p>12 A. Well, when you hit one vehicle</p> <p>13 with another you start bending and</p> <p>14 deforming metal and it takes energy to do</p> <p>15 that. So you design the car so it will --</p> <p>16 say the rear in this case, so that it will</p> <p>17 deform and just look awful after a crash</p> <p>18 but it's effectively used up much of the</p> <p>19 energy of the collision.</p> <p>20 Q. So what structures are we talking</p> <p>21 about that absorbs the energy in the ZJ,</p> <p>22 in the Susan ZJ?</p> <p>23 A. Generally the whole rear body</p> <p>24 structure. As you bend the sheet metal,</p> <p>25 say the rear quarter panels and the</p>	<p>1 system integrity crash performance."</p> <p>2 Are you saying that you're</p> <p>3 specifically referring to the Susan Kline</p> <p>4 vehicle?</p> <p>5 A. No.</p> <p>6 Q. You're not?</p> <p>7 A. No.</p> <p>8 Q. Okay. So are you able to make</p> <p>9 that statement in any way, shape or form</p> <p>10 with respect to the Susan Kline vehicle?</p> <p>11 A. That's a good question. To the</p> <p>12 extent -- I've never been asked that</p> <p>13 question before, I want to tell you that.</p> <p>14 And it is a good question.</p> <p>15 To the extent that I was able to</p> <p>16 make a determination in my inspection of</p> <p>17 the vehicle, I could not find anything in</p> <p>18 the vehicle that would have made the Susan</p> <p>19 Kline vehicle different than the family</p> <p>20 that was tested. In other words, there</p> <p>21 wasn't some addition to the vehicle, there</p> <p>22 wasn't something taken away. There was no</p> <p>23 post manufacturing compromise to the</p> <p>24 vehicle that would have affected the</p> <p>25 impact performance. I think that's what</p>

Page 106	Page 108
<p>1 you asked. Is it?</p> <p>2 Q. And I'm also asking, besides the</p> <p>3 thought that there might have been</p> <p>4 something done to the vehicle by anyone</p> <p>5 with respect to this vehicle when it left</p> <p>6 the hands of the manufacturer, are you</p> <p>7 able to state that this particular Susan</p> <p>8 Kline vehicle at the time that it left</p> <p>9 Chrysler's hands was the vehicle that you</p> <p>10 could say was designed, manufactured,</p> <p>11 tested, certified to comply with fuel</p> <p>12 system integrity and that the test results</p> <p>13 demonstrate that this particular vehicle</p> <p>14 had an effective and capable fuel system</p> <p>15 integrity crash performance?</p> <p>16 A. Yes.</p> <p>17 Q. So you can refer to this vehicle</p> <p>18 in particular at the time it left the</p> <p>19 hands of the manufacturer with whatever it</p> <p>20 had on it, that this vehicle was tested</p> <p>21 and complied?</p> <p>22 MR. BRADLEY: Just note my</p> <p>23 objection.</p> <p>24 THE WITNESS: No.</p> <p>25 MR. BRADLEY: You said, "this</p>	<p>1 answer.</p> <p>2 A. Yes.</p> <p>3 Q. What's the difference?</p> <p>4 A. The difference is we would do a</p> <p>5 rear impact crash test but it may not</p> <p>6 necessarily be one that is used to</p> <p>7 demonstrate compliance with 301. It may</p> <p>8 be a development test or some other type</p> <p>9 of test. It takes the 301 test</p> <p>10 disciplines but it's not labeled a 301</p> <p>11 test until such time as the development</p> <p>12 engineer determines that that will be the</p> <p>13 basis for compliance.</p> <p>14 Q. So you're not recognizing a</p> <p>15 difference in a test between a test that's</p> <p>16 development, compliance, validation, et</p> <p>17 cetera. You're changing it to it's not</p> <p>18 301 now, it's either 301 only if it's</p> <p>19 compliance?</p> <p>20 A. If it's used to certify</p> <p>21 compliance to 301.</p> <p>22 Q. But, however, in discovery you</p> <p>23 know in this case there were 29 tests</p> <p>24 supplied to us represented by Chrysler to</p> <p>25 be the tests that the ZJ was involved with</p>
Page 107	Page 109
<p>1 vehicle was tested." You mean Susan</p> <p>2 Kline?</p> <p>3 MS. DE FILIPPO: Yes, the Susan</p> <p>4 Kline vehicle.</p> <p>5 THE WITNESS: I don't mean this</p> <p>6 exact vehicle.</p> <p>7 Q. I do, though.</p> <p>8 A. No, I cannot say that.</p> <p>9 Q. Now, you know that Chrysler</p> <p>10 supplied us with 29 tests including</p> <p>11 certification tests that Chrysler did</p> <p>12 regarding the ZJ pursuant to what Chrysler</p> <p>13 believed was the testing at the time of</p> <p>14 the federal government, FMVSS 301.</p> <p>15 Correct?</p> <p>16 A. No.</p> <p>17 Q. Did you review the tests --</p> <p>18 A. I said no, not 29 301 tests. You</p> <p>19 got 29 crash tests in total but not all</p> <p>20 were 301 tests.</p> <p>21 Q. What were they?</p> <p>22 A. They were just rear impacts.</p> <p>23 Q. You made a difference between</p> <p>24 rear impact and 301 tests. You said--</p> <p>25 there's a difference you implied with your</p>	<p>1 prior to certification or after</p> <p>2 certification.</p> <p>3 A. Yes. You were provided 29 what</p> <p>4 are called VCs.</p> <p>5 Q. What does VC mean?</p> <p>6 A. Vehicle crash. There's IS and</p> <p>7 VC, impact simulator or vehicle crash.</p> <p>8 Q. I don't have any IS tests.</p> <p>9 Correct?</p> <p>10 A. You do not. There are no</p> <p>11 crashings in an IS.</p> <p>12 Q. So we're only talking about</p> <p>13 vehicle crash tests. Right?</p> <p>14 A. Yes.</p> <p>15 Q. And the vehicles were crashed in</p> <p>16 accordance with the parameters set by 301,</p> <p>17 however, in all of the tests?</p> <p>18 A. That's correct, yes.</p> <p>19 Q. And all of the tests, we're</p> <p>20 talking about a nondeformable barrier that</p> <p>21 strikes the rear of the Jeep?</p> <p>22 A. Yes.</p> <p>23 Q. At 30 miles an hour or</p> <p>24 approximately?</p> <p>25 A. Moving barrier test.</p>

Page 110	Page 112
1 Q. Moving barrier, nondeformable at 2 30 miles or so an hour?	1 no best or worst case. The configurations 2 are not -- there are only two
3 A. Right.	3 configurations, you know, with or without
4 Q. Now, can you tell me what the 5 Kline vehicle configuration was when it 6 left the hands of the manufacturer?	4 skid plate. So I can't define those in 5 best or worst. I think we tested them 6 both.
7 A. I'm not sure what you mean.	7 Q. Well, then, are you able to say 8 that both were worst case tests?
8 Q. Can you tell me what the 9 configuration was, what did it have, what 10 didn't it have? And I'm talking relative 11 to rear end crash testing.	9 A. Well, they were just the case, 10 you know. Worst case applies to something 11 else, not these sport utilities. That 12 applies generally to trucks.
12 A. It was a typical base production 13 vehicle.	13 Q. Are you saying it doesn't apply?
14 Q. And when you say typical base 15 production, would you call Kline the worst 16 case scenario to test for 301, if it had 17 been tested? If this particular vehicle 18 had been tested for 301, FMVSS 301, would 19 you call it the worst case scenario test?	14 A. No, I don't think there's any 15 worst case consideration to the design in 16 a Grand Cherokee.
20 MR. BRADLEY: Just note my 21 objection. You can answer.	17 Q. At any time?
22 THE WITNESS: Well, in the case 23 of the Grand Cherokee in that model year 24 there were only two, the Limited and the 25 Laredo and there was only one wheelbase.	18 A. No. No, I don't think so.
	19 Q. Why don't you think so?
	20 A. Pardon me?
	21 Q. Why?
	22 A. Well, if you compare it to other 23 type vehicles, particularly trucks, trucks 24 have a multitude of build configurations 25 and a multitude of wheelbases and gross
Page 111	Page 113
1 So there were not DBW configuration 2 changes like there were on that pickup 3 truck. So the configurations to be tested 4 would be either the Limited or the Laredo 5 and the choices would be with or without 6 skid plate.	1 vehicle weights and bumper types. Grand 2 Cherokee doesn't have that. There's only 3 two models in a Grand Cherokee, Laredo and 4 Limited. And in the rear structure 5 they're identical. So if I were the 6 engineer trying to figure out which was 7 worst case, my answer would be with skid 8 plate and without skid plate and that's 9 it. Which of those are worse? I don't 10 know. Test them both.
7 Q. Did the Kline vehicle have a skid 8 plate?	11 Q. I think we agreed, though, that 12 NHTSA requires every model be tested as 13 worst case. So I'm not really talking 14 about the designer sitting down and trying 15 to make the decision if in fact he can't. 16 I'm just saying that if you're going to 17 comply with what NHTSA says about testing 18 worst case, is it fair to say that you've 19 tested the worst case if you've tested a 20 base vehicle like Kline with or without a 21 skid plate?
9 A. No.	22 A. Yes.
10 Q. I'm just asking again, would you 11 term the Kline vehicle the typical base 12 production vehicle that you describe, the 13 Kline vehicle?	23 Q. Okay. Now, do you know a guy 24 named Dillon, David Dillon?
14 A. Yeah.	25 A. I know of him. David Dillon?
15 Q. If it had been tested to be the 16 worst case?	
17 A. The Kline vehicle represented the 18 vast majority of the Cherokee. The Kline 19 configuration was the vast majority of the 20 vehicle built that year.	
21 Q. And would it be the worst case?	
22 MR. BRADLEY: Just note my 23 objection. You can answer.	
24 THE WITNESS: Well, I think in 25 this case, in this Grand Cherokee there is	

Page 114

1 Q. Yes. Did you ever meet him?  
 2 A. I did.  
 3 Q. Did you ever work with him?  
 4 A. No.  
 5 Q. How do you know him?  
 6 A. I know that he is a successor  
 7 manager of the Vehicle Safety Office.  
 8 Q. Successor to who?  
 9 A. After I retired he took over.  
 10 Successor to Matt Reynolds I believe.  
 11 Q. Who was your successor?  
 12 A. Pardon me?  
 13 Q. After you retired, then Matt  
 14 Reynolds took over and then David Dillon?  
 15 A. I think Matt Reynolds may have  
 16 been there when I was. I'm pretty sure.  
 17 I retired in '06. My guess is that Dillon  
 18 probably came in in '09 or '10 maybe.  
 19 Q. Did you know he had his  
 20 deposition taken in this case?  
 21 A. Yes.  
 22 Q. Did you read his deposition  
 23 testimony?  
 24 A. No.  
 25 Q. Did you discuss his deposition

Page 115

1 testimony with him or anyone? Don't tell  
 2 me what you discussed but just tell me if  
 3 you did.  
 4 A. No, I did not.  
 5 Q. How is it that you learned he was  
 6 deposed in this case?  
 7 A. I think I have a copy of his  
 8 deposition that was e-mailed to me.  
 9 Q. But you didn't read it?  
 10 A. I did not read it.  
 11 MS. DE FILIPPO: This is a good  
 12 time to take a break if you want.  
 13  
 14 (Whereupon a luncheon recess is  
 15 taken.)  
 16 MS. DE FILIPPO: Mark these two.  
 17  
 18 (Two photographs are received and  
 19 marked Banta-25 and Banta-26 for  
 20 identification.)  
 21  
 22 Q. Mr. Banta, we're back on the  
 23 record. I just want to clarify a couple  
 24 of things that we were talking about  
 25 before we took a lunch break. And that

Page 116

1 is, I'm going to show you 25 and 26 and  
 2 they're photographs, Banta-25 and 26. Can  
 3 you identify them?  
 4 MR. BRADLEY: Have you ever seen  
 5 these before?  
 6 THE WITNESS: I don't know. I  
 7 don't know what they are. They are  
 8 apparently the rear end of a vehicle but I  
 9 don't know what vehicle.  
 10 Q. If I represent to you that they  
 11 were part of Mr. Sheridan's report of  
 12 photographs taken at the time that he  
 13 viewed the vehicle before it was lifted,  
 14 before you actually came and lifted it as  
 15 it was in the lot.  
 16 A. At Cagliano's (phonetic)?  
 17 Q. At Carigliano's (phonetic), yes.  
 18 The reason why I'm showing you these  
 19 photos at this point in time is because we  
 20 had a discussion about how the rear  
 21 crossmember or facebar, as you said, was  
 22 impacted and which way it moved and you  
 23 said you would have to look at your  
 24 photographs. And over the break it was my  
 25 understanding that it would take quite

Page 117

1 sometime. So I'm going to renew my  
 2 request for your photographs. But looking  
 3 at the photographs which are marked 25 and  
 4 26, Banta, is the facebar or the  
 5 crossmember indicated in those  
 6 photographs?  
 7 A. Yes.  
 8 Q. And now, having looked at those  
 9 photographs, based on my representation to  
 10 you that it is the Kline vehicle, are you  
 11 able to indicate the way the facebar was  
 12 bent?  
 13 A. Yes. The facebar is bent -- this  
 14 is the facebar. It is bent downward and  
 15 rotating toward the ground.  
 16 Q. So rotating top toward the  
 17 ground, top of it toward the ground.  
 18 Correct?  
 19 A. Right.  
 20 Q. And I just want to clarify  
 21 because I know we talked about it at  
 22 length. That's actually opposite what you  
 23 thought earlier. Correct?  
 24 MR. BRADLEY: Just note my  
 25 objection.

Page 118

1 THE WITNESS: No.

2 Q. Did you say -- correct me if I'm

3 wrong. I might have been wrong. I

4 thought you said it rotated the opposite

5 way, up.

6 A. No, downward.

7 Q. So it rotated the top of it going

8 down and bottom of it pushing back?

9 A. Yes.

10 Q. Okay.

11 MR. BRADLEY: Banta-25 he's

12 referring to --

13 Q. Well, you're referring to 25.

14 And when you look at Banta-26, is it the

15 same area?

16 A. Yeah, that's a different shot

17 from the same general area.

18 MR. BRADLEY: You were answering

19 originally from Banta-25. Correct? Just

20 to make the record clear.

21 THE WITNESS: Yes.

22 Q. Now, would you agree with me that

23 when a Jeep is braking, the active braking

24 would cause the back of the Jeep to go up?

25 A. Yes. Nose down, rear up.

Page 119

1 Q. And when you look at page five of

2 your report -- back to your report again

3 which is the report that we've been

4 working from of April 4, 2011. When you

5 look at page five -- I suppose it should

6 be page four, number seven, paragraph

7 number seven where you indicate about the

8 vehicle was designed, manufactured, tested

9 and certified to comply with FMVSS 301,

10 that section. You see that, Mr. Banta?

11 A. I do.

12 Q. Does FMVSS and did it require a

13 test for under-ride?

14 A. No.

15 MR. BRADLEY: At what time?

16 MS. DE FILIPPO: At any time.

17 MR. BRADLEY: Prior to the

18 manufacture of the subject vehicle?

19 MS. DE FILIPPO: At any time.

20 THE WITNESS: No.

21 Q. So this vehicle, the Kline

22 vehicle, was never tested for under-ride.

23 Correct?

24 A. That's correct.

25 Q. And back when the vehicle left

Page 120

1 the manufacturer's hands and when it was

2 being conceived and designed, under-ride

3 was known in the real world. Correct?

4 MR. BRADLEY: Note my objection.

5 THE WITNESS: Under-ride is

6 known, yes.

7 Q. The concept of under-ride. Now,

8 there is a portion of the tank in the

9 Susan Kline vehicle which hangs below the

10 bumper. Correct?

11 A. Some of the tank does, that's

12 correct.

13 Q. I'm going to show you a document.

14 -- I'm just going to show you the entire

15 document. We're going to mark this

16 another -- the next number.

17 MR. BRADLEY: This is exchanged in

18 Mr. Sheridan's report?

19 MS. DE FILIPPO: It's 11 pages of

20 a packet from Mr. Sheridan exchanged

21 during his deposition and dated July 27,

22 2012, with a cover letter with that date

23 on it.

24

25 (Eleven pages from Mr. Sheridan's

Page 121

1 report is received and marked Banta 27 for

2 identification.)

3

4 Q. Mr. Banta, I'd like you to look

5 at the first photograph. Can you identify

6 what the first photograph is in that

7 packet?

8 MR. BRADLEY: Just note my

9 objection. I don't think this involves

10 the Kline vehicle at all. So I'm going to

11 object to this. It's beyond the scope of

12 his report. I don't think it's in there

13 at all.

14 MS. DE FILIPPO: Okay.

15 Q. You can answer.

16 A. Well, the caption says it's ZJ

17 Grand Cherokee taken of the left rear

18 corner.

19 Q. Well, when you look at that

20 vehicle in the photograph, can you

21 identify it as a ZJ by looking at it?

22 A. Yes.

23 Q. And the next photograph, would

24 you look at the next photograph? Is that

25 also a ZJ?

Page 122	Page 124
<p>1 MR. BRADLEY: Just note my 2 continuing objection. 3 THE WITNESS: Yes. 4 Q. And when you look at this 5 photograph, does it appear to you to be -- 6 well, let me ask you this. 7 Did you have an opportunity 8 during the pendency of this case, and I 9 think you've indicated such in your 10 reports, to look at the CARCO testing that 11 was done to Jeep Grand Cherokee? 12 A. Yes, I looked at that. 13 Q. And when you look at the second 14 photograph that is in this packet, does it 15 look to be the vehicle from the CARCO 16 45-mile an hour test? 17 MR. BRADLEY: If you know. 18 Q. If you can recall. 19 A. Yes. 20 Q. If you look at that photograph 21 and you look at the car itself, can you 22 identify the tank in that car? 23 MR. BRADLEY: As depicted in the 24 photograph? 25 MS. DE FILIPPO: Yes.</p>	<p>1 A. I think -- 2 MR. BRADLEY: It's not very clear. 3 THE WITNESS: I think it's more. 4 Q. You think it's more than 5 17 inches from the ground? 6 A. Yeah. Maybe close to 20. 7 MR. BRADLEY: Just note my 8 objection. 9 THE WITNESS: The bottom surface 10 of the floor tank? 11 Q. The bottom surface, yes. 12 MR. BRADLEY: Just note my 13 objection. I don't see how this has 14 anything to do with his expert report and 15 it's beyond the scope of his expert -- 16 MS. DE FILIPPO: Fine. 17 MR. BRADLEY: You can answer. 18 Q. You can answer. 19 A. Yeah, I think that's about right, 20 17 or 18. 21 Q. So now the -- can you tell by 22 looking at the photograph whether this 23 Jeep Grand Cherokee is in the same 24 configuration as the Kline vehicle? 25 MR. BRADLEY: Just note my</p>
Page 123	Page 125
<p>1 THE WITNESS: Identify the what? 2 Q. The gas tank. 3 A. Yes. It's painted yellow. 4 Q. So the item on the car underneath 5 the bumper which is painted yellow and has 6 two straps on either side of it, that's 7 the gas tank. Correct? 8 A. Yes. 9 Q. In the third photograph are you 10 able to identify that vehicle as a Jeep 11 Grand Cherokee? 12 A. Yes. 13 Q. Is it a ZJ? 14 A. Yeah. 15 Q. And when you look at that 16 photograph you see that there's a 17 yardstick in that photograph but behind 18 that yardstick is the gas tank depicted? 19 A. Yes. 20 Q. And is the gas tank, although 21 it's not painted yellow, the structure 22 which is approximately 17 inches from the 23 ground as per that yardstick? 24 MR. BRADLEY: If you can tell. 25 Q. A little less than 17.</p>	<p>1 continuing objection. 2 THE WITNESS: Well, it's the same 3 type of vehicle. 4 Q. And is there anything which 5 encompasses the tank as you look at the 6 photograph which we have previously marked 7 as Banta-23 that you are looking at right 8 now, the same one you're looking at? 9 MR. BRADLEY: Can you repeat that 10 question? I don't understand it. 11 Q. Is there any part of the vehicle 12 which is covering, shielding the tank as 13 you look at it depicted in Banta-23? 14 MR. BRADLEY: Just note my 15 objection. This is called an exemplar 16 vehicle. 17 THE WITNESS: No, nothing covers 18 the tank. You mean the bottom and rear 19 surfaces? 20 Q. Right. 21 A. Other than the vehicle structure? 22 Q. Right. Go to the next photograph 23 which is the side view of the Jeep Grand 24 Cherokee. Correct? 25 A. Yes. Of this Grand Cherokee,</p>



Page 126

1 yes.  
 2 Q. And can you see the tank in that  
 3 photograph?  
 4 A. Yes.  
 5 Q. And about how much of that tank  
 6 hangs below the vehicle structure?  
 7 MR. BRADLEY: Just note my  
 8 objection.  
 9 Q. Based on what you can see in that  
 10 photograph.  
 11 A. Oh, maybe about seven inches in  
 12 this photograph.  
 13 Q. And is there anything -- when you  
 14 look at that tank depicted in this  
 15 photograph, can you tell what material  
 16 that tank is made of?  
 17 MR. BRADLEY: If you know.  
 18 THE WITNESS: Yes.  
 19 Q. What is it?  
 20 A. It's high density polyethylene.  
 21 Q. And is that the same substance  
 22 that the Susan Kline tank was made of?  
 23 A. Let me go back and re-answer.  
 24 The typical material is high density  
 25 polyethylene, at least that's what Susan

Page 127

1 Kline had.  
 2 Q. Okay.  
 3 A. This vehicle appears to have a  
 4 production fuel tank and if it's a  
 5 production tank, it was also high density  
 6 polyethylene.  
 7 Q. So it looks like what would have  
 8 been the tank in the Susan Kline vehicle?  
 9 A. Yes.  
 10 Q. If you look at the next  
 11 photograph, is that the side frame rail?  
 12 A. The left side rail, yes.  
 13 Q. It's the left side rail?  
 14 A. This vehicle had either a trailer  
 15 tow or skid plate on it at one time.  
 16 Q. Okay. But when you look at the  
 17 side rail -- is the side rail depicted?  
 18 Is that the piece of metal that has an  
 19 oval hole through it?  
 20 A. Yeah, the pass-through?  
 21 Q. Yes.  
 22 A. Yes.  
 23 Q. When you look at this photograph,  
 24 the oval hole is kind of rusty. Right?  
 25 MR. BRADLEY: Just note my

Page 128

1 objection.  
 2 Q. In the photograph.  
 3 A. Yes.  
 4 Q. I'm just trying to identify what  
 5 we're looking at. Is that the hole that  
 6 the filler hose passes through to get from  
 7 the place where you put the gas into the  
 8 car to the tank?  
 9 A. Yes.  
 10 Q. And if you look at the next  
 11 photograph, you've already seen this  
 12 photograph, Banta-24. That would be the  
 13 bumper that we talked about earlier.  
 14 Correct?  
 15 A. Yes.  
 16 Q. And that's a similar bumper to  
 17 what the Susan Kline vehicle would have?  
 18 MR. BRADLEY: Just note my  
 19 objection.  
 20 THE WITNESS: Yes.  
 21 Q. And then finally, the last  
 22 photograph in this is a photograph of --  
 23 well, you tell me if you can indicate  
 24 what's depicted on the last photograph.  
 25 MR. BRADLEY: Just note my

Page 129

1 objection. I don't know what it depicts  
 2 and I don't see how it's relevant and it's  
 3 beyond the scope of his expert report.  
 4 MS. DE FILIPPO: Fine.  
 5 MR. BRADLEY: You can answer if  
 6 you know what's depicted.  
 7 THE WITNESS: This is a post  
 8 crash photograph done by CARCO after this  
 9 vehicle was hit in the rear by a bullet  
 10 vehicle at 40 miles an hour.  
 11 Q. You've seen this before.  
 12 Correct?  
 13 A. I think I have, yeah.  
 14 Q. Okay. And --  
 15 A. I think I saw this in black and  
 16 white. I've not seen a nice one like this  
 17 before.  
 18 Q. I'm sorry, I represented that was  
 19 the last photo. There's one more.  
 20 The next photograph is -- can you  
 21 tell me what that is?  
 22 A. That's the same vehicle with a  
 23 different view and it appears that in this  
 24 test this fuel tank was leaking not  
 25 gasoline but some solvent.

Page 130

1 Q. Is that stoddard?  
 2 MR. BRADLEY: If you know.  
 3 THE WITNESS: Probably.  
 4 Q. Mr. Banta, if you would look at  
 5 the photographs, whichever you prefer,  
 6 either photograph number 2, 3 or 4 in this  
 7 packet, or any that you need to look at,  
 8 and would you indicate to me or show me on  
 9 any of the photographs what protected the  
 10 portion of the tank that's hanging below  
 11 the bumper?  
 12 A. The tank --  
 13 MR. BRADLEY: Just note my  
 14 continuing objection as this is not  
 15 necessarily depictive of the Susan Kline  
 16 subject vehicle. Are you asking what  
 17 protected it in this vehicle as depicted,  
 18 in the Susan Kline vehicle, any vehicle?  
 19 MS. DE FILIPPO: I note your  
 20 objection. But he didn't ask me that  
 21 question. So he can answer if he  
 22 understands my question.  
 23 MR. BRADLEY: If you understand  
 24 the question, you can answer.  
 25 THE WITNESS: If we look at this

Page 131

1 photograph --  
 2 MS. DE FILIPPO: Why don't we mark  
 3 -- I'm thinking we ought to mark all the  
 4 photographs so we know what we're looking  
 5 at. So let's mark from the beginning to  
 6 end with the exception of the ones  
 7 previously marked.  
 8  
 9 (Six photographs are received and  
 10 marked Banta-28 through Banta-33 for  
 11 identification.)  
 12  
 13 Q. Let's just start with photograph  
 14 which I have marked Banta-29. Would you  
 15 look at that photograph, Mr. Banta, this  
 16 one?  
 17 A. Okay.  
 18 Q. You've already testified that  
 19 that depicts the back of the CARCO Jeep  
 20 Grand Cherokee prior to being stuck.  
 21 Correct?  
 22 A. Yes.  
 23 Q. And you've already indicated that  
 24 what's yellow in the bottom of the bumper  
 25 is the gas tank. Correct?

Page 132

1 A. Yes.  
 2 Q. Now, in looking at that photo,  
 3 can you tell me what part of the vehicle  
 4 protects the part of the tank that we're  
 5 looking at in that photograph?  
 6 A. No. It's covered by fascia  
 7 material.  
 8 Q. So if a vehicle were to strike  
 9 just that yellow piece of the car, whether  
 10 it be because it's lower or some kind of  
 11 vehicle that's not even a car, let's say  
 12 it was a recreational vehicle of some  
 13 sort, what would protect that portion of  
 14 the tank that we see here in yellow?  
 15 MR. BRADLEY: Just note my  
 16 objection.  
 17 THE WITNESS: Just the tank  
 18 surface itself.  
 19 Q. So in other words, whatever the  
 20 material of the tank is at the time?  
 21 A. The tanks on its own.  
 22 Q. Now if you look at the next  
 23 photograph, which we marked Banta-23,  
 24 where the bumper has been removed, is the  
 25 crossmember depicted in that photograph,

Page 133

1 Banta-23?  
 2 A. Yes.  
 3 Q. It is?  
 4 A. Yes, the rear crossmember.  
 5 Q. So the rear crossmember, that is  
 6 the piece of equipment that you indicated  
 7 previously protects the tank. Correct?  
 8 A. No. The rear crossmember and the  
 9 bumper both. They're both back there and  
 10 they're tied together.  
 11 Q. So with the bumper off are you  
 12 saying that the rear crossmember doesn't  
 13 protect the tank?  
 14 MR. BRADLEY: Just note my  
 15 objection. I believe he testified before  
 16 there was a box that protected the tank.  
 17 THE WITNESS: They're in  
 18 combination.  
 19 Q. I'm saying with the bumper off as  
 20 you see it here in Banta-23, are you  
 21 indicating there's no protection for any  
 22 part of that tank?  
 23 A. Well, I guess --  
 24 MR. BRADLEY: From what?  
 25 THE WITNESS: There is protection

Page 134

1 from the rear crossmember if you throw the  
 2 bumper away. But, obviously, some of the  
 3 structure is missing.  
 4 Q. And the box that we talked about  
 5 encompasses what's depicted on Banta-31?  
 6 A. Yeah. That's two corners of the  
 7 box. That's two corners of the box.  
 8 Q. So the box is -- one length of  
 9 the box, in other words, one side, for  
 10 lack of a very basic term or for use of a  
 11 very basic term, one side of the box is  
 12 what is depicted here, the longitudinal  
 13 side frame rail with the hole in it?  
 14 A. Yes.  
 15 Q. And that's one side of the box  
 16 that was designed to protect the tank.  
 17 Correct?  
 18 A. Yes.  
 19 Q. With respect to 301, Federal  
 20 Motor Vehicle Safety Standard 301, you  
 21 would agree those are minimum standards.  
 22 Correct?  
 23 A. They are standards.  
 24 Q. Would you agree they're minimum  
 25 standards?

Page 135

1 MR. BRADLEY: Just note my  
 2 objection.  
 3 THE WITNESS: Well, yes, that's  
 4 right. They are a standard. They say you  
 5 must achieve this goal. And I guess by  
 6 minimum, achieving them doesn't limit one  
 7 from doing something different, which in  
 8 fact Chrysler did.  
 9 Q. I'm talking about the fact that  
 10 when we call something minimum standards,  
 11 it's the minimum standard which must be  
 12 met. You can always do something better  
 13 but this is the minimum that the  
 14 government requires you to meet as an  
 15 automobile manufacturer. Correct?  
 16 MR. BRADLEY: Just note my  
 17 objection. You can answer.  
 18 THE WITNESS: Right. You must  
 19 meet that speed and you must meet the leak  
 20 rate requirements following that speed.  
 21 Q. At the very minimum.  
 22 MR. BRADLEY: Just note my  
 23 objection.  
 24 THE WITNESS: You have the  
 25 barrier conditions, the speed of the

Page 136

1 barrier, and then the leak rate following  
 2 the impact. Those are the minimum  
 3 requirements.  
 4 Q. And would you agree that those  
 5 are also threshold requirements for  
 6 safety, the threshold requirements?  
 7 MR. BRADLEY: Just note my  
 8 objection.  
 9 THE WITNESS: Yes.  
 10 Q. Now, on page five, paragraph that  
 11 is numbered nine of your report of --  
 12 MR. BRADLEY: April 4th I believe.  
 13 MS. DE FILIPPO: Yes, April 4th.  
 14 Q. You indicate that "The first fuel  
 15 ignited in this fire event was likely  
 16 gasoline from the tank system. The likely  
 17 ignition method was identified as  
 18 frictional sparking of the vehicle's metal  
 19 surfaces or the vehicle's fracturing lamp  
 20 filaments or both."  
 21 Is that your opinion?  
 22 A. Yes.  
 23 Q. You also indicate in the Summary  
 24 the velocities. You say something about  
 25 "These velocities are far beyond any known

Page 137

1 impact design constant or objective."  
 2 Correct?  
 3 MR. BRADLEY: Just note my  
 4 objection. Where are you?  
 5 MS. DE FILIPPO: Under "Summary."  
 6 THE WITNESS: Which paragraph.  
 7 MS. DE FILIPPO: Second paragraph,  
 8 last sentence.  
 9 A. Okay.  
 10 Q. Did I read that correctly?  
 11 A. The PDOF --  
 12 Q. "These velocities."  
 13 A. The last sentence?  
 14 Q. Right. "These velocities are far  
 15 beyond any known rear impact design  
 16 constant or objective."  
 17 A. Right.  
 18 Q. Now, are you basing that  
 19 statement on what you were told by the  
 20 reconstruction person in this case?  
 21 MR. BRADLEY: Just my objection.  
 22 THE WITNESS: The 68 to 77 is  
 23 information that I derived from the  
 24 reconstructionist. The statement about  
 25 rear impact design constant and objective

1 is solely mine.  
 2 Q. But the velocity that you're  
 3 referring to is not yours, it's his?  
 4 A. No. That's right.  
 5 Q. So if he told you a velocity, a  
 6 different number, then you would have to  
 7 determine if you believe that velocity was  
 8 beyond any known rear impact design  
 9 constant or objective. Correct?  
 10 MR. BRADLEY: Just note my  
 11 objection.  
 12 Q. The velocity that he's talking  
 13 about, I don't see that listed in that  
 14 paragraph. What is that velocity?  
 15 A. Sixty-eight to 77.  
 16 Q. I thought that was the speed.  
 17 A. Same thing.  
 18 Q. So speed and velocity you're  
 19 equating for purposes of your discussion?  
 20 A. Yes. You could take the word  
 21 velocity out and put speed in.  
 22 Q. Was there a change in velocity at  
 23 the time of impact?  
 24 A. Oh, yes.  
 25 MR. BRADLEY: Just note my

1 manufacturer doesn't consider highway  
 2 speeds when they're designing the rear end  
 3 fuel system integrity of a vehicle?  
 4 MR. BRADLEY: Note my objection.  
 5 I don't think he said that at all.  
 6 THE WITNESS: Highway speed is  
 7 different than impact speed. Usually you  
 8 scrub off some speed prior to impact. If  
 9 you're driving down the highway at  
 10 70 miles an hour you usually don't have  
 11 impact at 70. You apply the brakes, you  
 12 slide sideways, you hit a guardrail, and  
 13 you scrub off some speed, thankfully,  
 14 prior to impact. So typically impact  
 15 speeds are much lower than highway speed.  
 16 Q. But my question is different. My  
 17 question is, are you saying that auto  
 18 manufacturers, when they're designing the  
 19 fuel system integrity vis-à-vis rear end  
 20 hits, don't take into account highway  
 21 speed limits?  
 22 MR. BRADLEY: Just note my  
 23 objection. This is beyond the scope of  
 24 his report.  
 25 Q. And you would agree with me when

1 objection.  
 2 Q. So what was the velocity at the  
 3 time of impact? Because it wasn't 68 or  
 4 77 miles per hour. Correct?  
 5 MR. BRADLEY: Note my objection.  
 6 If you know.  
 7 THE WITNESS: I believe the speed  
 8 at impact was 68 to 77.  
 9 Q. But I'm asking you about the  
 10 velocity. Was there a change in the  
 11 velocity --  
 12 A. You mean the Delta V?  
 13 Q. Yes.  
 14 A. I don't know what that is. I  
 15 could look that up. I'm sure it's in a  
 16 reconstructionist's report.  
 17 Q. Did that matter to you when  
 18 you're determining whether or not this was  
 19 a defective design?  
 20 A. Well, when you get into this  
 21 range, no. If we're down in the  
 22 thirty-fives or forties, but remember I  
 23 told you around 45 is a pretty severe  
 24 crash.  
 25 Q. So are you saying that a

1 you travel, for instance, 95 down to  
 2 Florida, there are speeds of 70 miles an  
 3 hour and minimum speeds of 50. Correct?  
 4 A. Yeah.  
 5 Q. Now, did you know the speed of  
 6 the Alcalá vehicle at any time?  
 7 MR. BRADLEY: Note my objection.  
 8 THE WITNESS: I depended on the  
 9 reconstructionists for the speed data that  
 10 I got.  
 11 Q. Were you at all concerned about  
 12 what the Alcalá driver said about her  
 13 speed prior to impact?  
 14 A. I read her deposition.  
 15 Q. What did she say?  
 16 A. I don't remember.  
 17 Q. Did she say 68 to 77?  
 18 MR. BRADLEY: Just note my  
 19 objection.  
 20 THE WITNESS: I don't remember.  
 21 Q. If you recall.  
 22 A. I don't remember.  
 23 Q. Do you remember if she said -- if  
 24 she agreed with your reconstructionist or  
 25 not with respect to speed?

Page 142

1 MR. BRADLEY: Just note my  
 2 objection. He just said he doesn't know.  
 3 THE WITNESS: You know, I read  
 4 her deposition but the physical evidence  
 5 speaks volumes compared to her opinion. I  
 6 can understand why she and many other  
 7 people like her aren't real sure and we're  
 8 talking about impact speed not highway  
 9 speeds. So I didn't put a lot of  
 10 credibility into her statement.  
 11 Q. Did you formulate an opinion at  
 12 any time that you think she sped up from  
 13 her highway speed?  
 14 A. No.  
 15 MR. BRADLEY: Just note my  
 16 objection.  
 17 THE WITNESS: I don't know. I  
 18 base my speed data solely on the  
 19 reconstruction of the physical evidence.  
 20 Q. Now, on page six of your report  
 21 you indicate that "The presence of a fuel  
 22 tank skid plate or trailer hitch would  
 23 likely have made no difference in the  
 24 outcome in this case."  
 25 Correct?

Page 143

1 A. Where are you?  
 2 Q. First full paragraph.  
 3 A. Third paragraph?  
 4 Q. Yeah.  
 5 A. "In this case the presence of"?  
 6 Q. "The presence of a fuel tank skid  
 7 plate or trailer hitch would likely have  
 8 made no difference in the outcome."  
 9 A. Yes, I read that.  
 10 Q. That's your opinion. Correct?  
 11 A. Yes.  
 12 Q. What is that based on?  
 13 A. The severity of this accident and  
 14 my knowledge that this vehicle has the  
 15 same 301 results with or without a skid  
 16 plate or trailer hitch.  
 17 Q. Do you believe that a skid plate  
 18 is a way to protect the tank?  
 19 MR. BRADLEY: Just note my  
 20 objection.  
 21 THE WITNESS: I'm sorry?  
 22 Q. Do you believe that a skid plate  
 23 is a way to protect the fuel tank?  
 24 A. Oh, I think it can offer a  
 25 measure of additional protection to a fuel

Page 144

1 tank.  
 2 Q. Do you believe that it can also  
 3 act as an impact deflection device?  
 4 MR. BRADLEY: Note my objection.  
 5 THE WITNESS: Not in a crash, no.  
 6 Q. And you're basing those opinions  
 7 on crashes you've looked at after the  
 8 fact?  
 9 A. Yes.  
 10 Q. And --  
 11 A. And crash testing.  
 12 Q. But crash testing that you looked  
 13 at the vehicle after the test?  
 14 A. Yes.  
 15 Q. For all intents and purposes,  
 16 what you're looking at is a done deal  
 17 either way. Correct?  
 18 A. Yes.  
 19 Q. On page seven at the very top you  
 20 say that "Numerous vehicles produced by  
 21 Ford, General Motors, Mercedes Benz and  
 22 many others had tanks located rearward of  
 23 the rear axle?"  
 24 Correct?  
 25 A. Um-hum.

Page 145

1 Q. Can you tell me what vehicles  
 2 we're talking about?  
 3 A. Sure. The General Motors Blazer,  
 4 the Mercedes Benz G55, the Hummer, Jeep  
 5 Cherokee and Grand Cherokee, and I think  
 6 some of the Japanese as well.  
 7 Q. And can you tell me what the  
 8 Mercedes G55 had as a protection for the  
 9 tank?  
 10 MR. BRADLEY: Just note my  
 11 objection.  
 12 Q. If anything.  
 13 MR. BRADLEY: I don't think he  
 14 testified there was one.  
 15 THE WITNESS: My memory is that  
 16 the G55 had a polypropylene stone shield,  
 17 not a skid plate but a stone shield on the  
 18 bottom and then essentially the same body  
 19 structure that the Grand Cherokee has.  
 20 Q. And the GM Blazer, do you know  
 21 what protected, if anything, the tank in  
 22 the GM Blazer?  
 23 MR. BRADLEY: Just note my  
 24 objection.  
 25 THE WITNESS: No, I did not study

1 the GM version or scheme for protection.  
 2 I only looked at the tank location.  
 3 Q. Would you agree with the  
 4 proposition that the tank can be anywhere  
 5 as long as it's protected?  
 6 MR. BRADLEY: Just note my  
 7 objection.  
 8 THE WITNESS: Well, I guess to  
 9 some extent, yeah, that's true. You have  
 10 to design it for impact no matter where  
 11 you put it.  
 12 Q. So from a design point of view,  
 13 regardless of where you put it, the key to  
 14 safety regarding fuel system integrity is  
 15 how you protect that tank. Correct?  
 16 MR. BRADLEY: Just note my  
 17 objection.  
 18 THE WITNESS: That's one of the  
 19 key components, yes. It's not just  
 20 location. It's location, execution,  
 21 testing.  
 22 Q. Protection?  
 23 A. Results.  
 24 Q. But isn't the key the protection?  
 25 What did you do to design and protect the

1 MR. BRADLEY: Just note my  
 2 objection.  
 3 Q. Wouldn't you agree?  
 4 A. Yes, but the focus is not on the  
 5 word protection, the focus is on the word  
 6 energy management. If you manage all the  
 7 energy you don't need any protection at  
 8 all. That's a good goal. But as a  
 9 practical matter, it's hard to get to.  
 10 Q. If you manage all the energy, you  
 11 have protected the tank, wouldn't you  
 12 agree?  
 13 A. Yes, I guess. It's a semantics  
 14 thing.  
 15 MR. BRADLEY: Just note my  
 16 objection.  
 17 Q. With respect to the Mercedes, is  
 18 the Mercedes G55 a light duty vehicle?  
 19 MR. BRADLEY: If you know.  
 20 THE WITNESS: It's a sport  
 21 utility.  
 22 Q. Would you consider that light  
 23 duty, medium duty?  
 24 A. It doesn't have a duty cycle.  
 25 Q. It doesn't? You don't have --

1 tank for safety vis-à-vis your passengers?  
 2 MR. BRADLEY: Just note my  
 3 objection. I think he already answered.  
 4 THE WITNESS: It's really energy  
 5 management. It's how you manage that  
 6 energy so that it's not directed directly  
 7 at the tank and so that it is absorbed and  
 8 used up -- I put protection maybe second  
 9 or third below energy management.  
 10 Q. Well, when you're managing  
 11 energy, in effect you're protecting the  
 12 tank itself from rupture?  
 13 A. It contributes to the protection  
 14 of the tank. That's the ultimate goal, is  
 15 to stop the tank from being damaged.  
 16 Q. Right. So it's protecting from  
 17 damage?  
 18 MR. BRADLEY: Just note my  
 19 objection.  
 20 THE WITNESS: But the way to do  
 21 that is through energy management.  
 22 Q. However you have to do it, it's a  
 23 design to protect the tank from rupturing  
 24 and causing leakage which could cause  
 25 fire?

1 A. It's a sport utility.  
 2 Multipurpose vehicles do not have duty  
 3 cycles.  
 4 Q. Are all sport utility vehicles  
 5 classified as either light, medium or  
 6 heavy duty?  
 7 A. No.  
 8 Q. They're classified all the same?  
 9 A. Yes.  
 10 Q. So what do you call them?  
 11 A. The federal classification for  
 12 sport utility is an MPV.  
 13 Q. Multipurpose vehicle?  
 14 A. Yes.  
 15 MR. BRADLEY: Note my objection.  
 16 I don't see how this is relevant and  
 17 beyond his expert report.  
 18 THE WITNESS: Trucks and buses  
 19 have duty cycles. Passenger cars and MPVs  
 20 do not. But I would characterize the  
 21 Grand Cherokee and the G55 as a light duty  
 22 vehicle.  
 23 Q. Okay. With respect to page eight  
 24 of your report --  
 25 A. Page eight? Okay.

1 Q. Before you get there, would you  
2 go back to page seven for a minute? I note  
3 that you say on page seven and I'm going  
4 to read, "A Mercedes Benz medium duty  
5 sport utility is produced with a rear of  
6 rear axle fuel tank and has been available  
7 all over the world since the seventies."  
8 Wasn't that your use of the term  
9 medium duty with a sport utility?  
10 A. Yeah. Mercedes has yet another  
11 sport utility.  
12 Q. But I'm just trying to clarify  
13 because you said you don't classify sport  
14 utility as medium or light. But your  
15 sentence says, "Mercedes Benz medium duty  
16 sport utility."  
17 Is that a mistake, a typo?  
18 MR. BRADLEY: Just note my  
19 objection.  
20 THE WITNESS: No. There is yet  
21 another sport utility made by Mercedes  
22 Benz that is not the G55 but another one  
23 that also has rear of the rear axle fuel  
24 tank and I believe it's not sold in the  
25 U.S.

1 Q. What is that Mercedes, can you  
2 tell me?  
3 A. I don't remember. I have to look  
4 that up.  
5 Q. So you're saying it's a different  
6 one than the G55?  
7 A. Yes.  
8 Q. Now, in your report you make  
9 reference to the skid plate, on page  
10 eight, and you're indicating that the skid  
11 plate was never a safety device, in the  
12 second paragraph. Correct?  
13 MR. BRADLEY: Just note my  
14 objection.  
15 THE WITNESS: Are you on the  
16 first paragraph?  
17 Q. The first three paragraphs. The  
18 first three paragraphs.  
19 A. Mopar and Chrysler never  
20 characterized the optional skid plate as a  
21 safety device or safety retrofit and the  
22 skid plate does not function in that role.  
23 Yeah, that's correct.  
24 Q. You said they never did.  
25 A. Yes.

1 Q. Never?  
2 A. Yes.  
3 Q. Are you still saying that today?  
4 A. Yes.  
5 Q. Have you looked at the A-10  
6 documents which have been produced in this  
7 case for quite sometime now?  
8 A. Yes.  
9 MR. BRADLEY: Just note my  
10 objection. I believe the judge already  
11 ruled on the A-10.  
12 MS. DE FILIPPO: No, he hasn't.  
13 MR. BRADLEY: I believe he already  
14 has.  
15 MS. DE FILIPPO: You don't know  
16 and you can object and we can move on.  
17 Q. I'd like to show you the  
18 documents submitted by Chrysler, David  
19 Dillon, to NHTSA which references the skid  
20 plate and I'm going to mark this document  
21 whatever the next number is.  
22 MR. BRADLEY: I'm just going to  
23 have a continuing objection to this as  
24 beyond the scope of his expert report.  
25 MS. DE FILIPPO: It's right in his

1 report. I'm reading from his report.  
2 MR. BRADLEY: No, the document  
3 that you're marking.  
4 MS. DE FILIPPO: That's not beyond  
5 the scope of his report. He makes  
6 reference to it.  
7 MR. BRADLEY: I'm allowed to state  
8 my objection.  
9 MS. DE FILIPPO: But you can just  
10 object and you can stop telling him what  
11 your objection is because --  
12 MR. BRADLEY: I'm allowed to put  
13 my objection on the record, which I just  
14 did.  
15 MS. DE FILIPPO: No. You're  
16 allowed to say I object. You're objecting  
17 to form only. You're not objecting to  
18 anything but form.  
19 MR. BRADLEY: Okay, let's just  
20 continue.  
21  
22 (Letter dated October 15, 2010 is  
23 received and marked Banta-34 for  
24 identification.)  
25

1 Q. Mr. Banta, you remember earlier  
2 we talked about when there's a preliminary  
3 evaluation and it goes from the defect  
4 petition and then the government decides  
5 they're going to make it a preliminary  
6 evaluation and they send out questions and  
7 the manufacturers answer questions.

8 Correct?

9 A. Yes.

10 Q. And that happened in this case  
11 involving the Grand Cherokee. It's  
12 ongoing. Correct?

13 A. Yes.

14 MR. BRADLEY: Note my objection.

15 Q. I'm going to read the question  
16 which the government indicated that they  
17 would like Chrysler to answer.

18 MR. BRADLEY: Just note my  
19 objection. Can you also show it to him?

20 Q. Number nine. "Provide  
21 information on each unique version of skid  
22 guard, brush guard or other protective  
23 guard manufactured, marketed or sold by  
24 Chrysler intended for use with the subject  
25 vehicle fuel tank and installed either as

1 original equipment or available as  
2 optional equipment. For each unique  
3 version of the guard, provide the  
4 following information: G, whether the  
5 guard was withdrawn from production and/or  
6 sale and if so, when. Also provide the  
7 above information for any new or modified  
8 version of the guard that Chrysler is  
9 aware of which may be offered for sale  
10 within the next 120 days."

11 And the answer was, "G, The 1999  
12 to 2004 Jeep Grand Cherokee WJ standard  
13 brush guard was withdrawn from production  
14 between December 14th and September 4th,  
15 2002. During this time period a skid  
16 plate was standard equipment. During Jeep  
17 Grand Cherokee WJ 2003 model year  
18 developmental rear crash tests conducted  
19 in the 2001 calendar year a fuel tank leak  
20 was discovered from the onboard refueling  
21 vapor recovery system control valve in  
22 excess of FMVSS 301 requirements. Recall  
23 A-10 was conducted to repair all affected  
24 2002 model year Jeep Grand Cherokee  
25 vehicles using the bracket to protect the

1 onboard refueling vapor recovery control  
2 valve. During investigation of the  
3 control valve leak, it was determined that  
4 2002 Jeep Grand Cherokee vehicles with a  
5 skid plate did not experience the leak."

6 This sentence I'm quoting. I  
7 quoted the whole thing. The next sentence  
8 is, "Although the primary purpose of a  
9 skid plate is not to protect the fuel tank  
10 in rear end collisions, as an interim  
11 measure, the skid plate was made standard  
12 for production vehicles during the time  
13 period December 14th, 2001 to September 4,  
14 2002 when a reinforced ORVR control valve  
15 was being developed.

16 Once the reinforced ORVR control  
17 valve and reinforced brush guard began to  
18 be used on production of Jeep Grand  
19 Cherokees after September 4, 2002, the  
20 skid plate returned to optional."

21 So now your statement is that it  
22 was never used as, and never characterized  
23 as a safety device or safety retrofit.  
24 But isn't it true that in fact it was used  
25 and characterized when there was a problem

1 as a safety device?

2 MR. BRADLEY: Just note my  
3 objection.

4 Q. Pursuant to this TSB A-10?

5 MR. BRADLEY: He's not looking at  
6 a document you just read.

7 MS. DE FILIPPO: No. I'm asking  
8 him a question.

9 MR. BRADLEY: Yeah, but you just  
10 read it from --

11 MS. DE FILIPPO: If you're going  
12 to say I didn't read it right, we'll argue  
13 about that.

14 MR. BRADLEY: Well, I don't know.

15 MS. DE FILIPPO: Well, I'm telling  
16 you I did.

17 MR. BRADLEY: You're reading from  
18 a document that you're not giving the  
19 witness the opportunity to look at.

20 MS. DE FILIPPO: Counsel, he  
21 doesn't have to look at it if I read it  
22 verbatim.

23 MR. BRADLEY: If you're not going  
24 to let him look at the document, then I'm  
25 going to direct him not to answer the



1 question.  
 2 MS. DE FILIPPO: If you direct him  
 3 not to answer the question, he's going to  
 4 be back here on your dime because I just  
 5 read it. He didn't have a problem with  
 6 it. He didn't say, let me see it, you're  
 7 saying it. He didn't have the problem.  
 8 You can't interrupt like that. He's a big  
 9 boy. He's got brains, he knows what he's  
 10 doing. He has done 50 -- I want to say he  
 11 has done hundreds of depositions, hundreds  
 12 on this issue that we're here about.  
 13 MR. BRADLEY: And I'm sure --  
 14 MS. DE FILIPPO: So don't even  
 15 think you need to interrupt for this man.  
 16 MR. BRADLEY: I didn't interrupt  
 17 him.  
 18 MS. DE FILIPPO: Yes, you did.  
 19 You didn't let him answer. You said he  
 20 can't answer and he didn't say he can't  
 21 answer.  
 22 MR. BRADLEY: Angel, I'm saying he  
 23 can't answer if he can't look at the  
 24 document that you're referencing.  
 25 MS. DE FILIPPO: But he didn't say

1 MR. BRADLEY: You haven't given  
 2 him the opportunity.  
 3 MS. DE FILIPPO: Counsel, fine,  
 4 direct him not to answer.  
 5 MR. BRADLEY: I direct you not to  
 6 answer.  
 7 MS. DE FILIPPO: Fine. It's on  
 8 the record.  
 9 Q. Mr. Banta, do you need to look at  
 10 the document to review what I just read to  
 11 you?  
 12 MR. BRADLEY: Don't answer.  
 13 MS. DE FILIPPO: He can answer  
 14 that. Have you lost your mind? Get the  
 15 Judge on the phone. If I need to ask him  
 16 that question, he can certainly ask -- you  
 17 tell me what grounds he can't answer a  
 18 plain straight out question.  
 19 MR. BRADLEY: You're not giving  
 20 him the document.  
 21 MS. DE FILIPPO: I didn't ask him  
 22 about the document. I asked him if he  
 23 needs it.  
 24 MR. BRADLEY: Angel, prior to your  
 25 questioning you had read extensively from

1 that.  
 2 MR. BRADLEY: I'm saying that.  
 3 MS. DE FILIPPO: But he didn't.  
 4 MR. BRADLEY: I'm directing him  
 5 not to answer a question about a  
 6 document --  
 7 MS. DE FILIPPO: You cannot direct  
 8 him not to answer when I read it in its  
 9 entirety and he did not say he had a  
 10 problem.  
 11 MR. BRADLEY: I'm directing him  
 12 not to answer --  
 13 MS. DE FILIPPO: You cannot do  
 14 that.  
 15 MR. BRADLEY: I have not  
 16 interrupted you when you've spoken. I'm  
 17 directing him not to answer a question  
 18 about a document that although you marked  
 19 as an exhibit you will not let him look at  
 20 when you just read extensively from it.  
 21 MS. DE FILIPPO: Because?  
 22 MR. BRADLEY: Because he hasn't  
 23 looked at it.  
 24 MS. DE FILIPPO: Did he say he  
 25 needed it? He did not.

1 the document.  
 2 MS. DE FILIPPO: That's why I read  
 3 it extensively, so that we could move on.  
 4 MR. BRADLEY: But you're not  
 5 allowing him to review the document.  
 6 MS. DE FILIPPO: If he needs to,  
 7 he'll tell me don't you think?  
 8 MR. BRADLEY: I'm here as one of  
 9 the attorneys representing --  
 10 MS. DE FILIPPO: And what is your  
 11 -- and you're not--  
 12 MR. BRADLEY: -- Loman Auto Group.  
 13 MS. DE FILIPPO: And you think  
 14 that your role is to tell him not to  
 15 answer when he can?  
 16 MR. BRADLEY: No.  
 17 MS. DE FILIPPO: If he says he  
 18 can, you can't tell him not to. So I can  
 19 ask him if he can.  
 20 MR. BRADLEY: I am telling him not  
 21 to answer any -- I am instructing him not  
 22 to answer any question about the document  
 23 when you wouldn't let him look at it.  
 24 MS. DE FILIPPO: I didn't say I  
 25 wouldn't let him look at it. He did not

1 say he wanted it.  
 2 THE WITNESS: Angel, offer me the  
 3 document.  
 4 Q. Do you need the document?  
 5 A. No.  
 6 Q. Thank you.  
 7 A. Thank you.  
 8 Q. Now can you answer the question?  
 9 A. Sure.  
 10 MR. BRADLEY: No. Don't answer  
 11 any questions about the document that she  
 12 won't let you look at.  
 13 Q. Have you ever seen this document  
 14 before?  
 15 MR. BRADLEY: How does he know?  
 16 You won't even give it to him.  
 17 MS. DE FILIPPO: Because I read it  
 18 to him, so he knows.  
 19 MR. BRADLEY: How can you say he's  
 20 seen the document when you just read it to  
 21 him?  
 22 Q. You know what, Mr. Banta, you  
 23 know that there were questions and  
 24 answers. We talked about that. Correct?  
 25 A. Yes.

1 Q. And you know that this is an  
 2 ongoing -- now it's an engineering  
 3 analysis. You've been keeping up with  
 4 this. This is exactly what you do, fires.  
 5 This is about fires. Correct?  
 6 A. Yes.  
 7 Q. You've seen these questions and  
 8 answers?  
 9 A. It's about fuel leakage.  
 10 Q. You've seen these questions and  
 11 answers?  
 12 A. I know what the answer is.  
 13 Q. Do you think I did anything in  
 14 not reading the correct answer?  
 15 MR. BRADLEY: Note my objection.  
 16 A. I think you read it.  
 17 Q. You know what, I'm going to give  
 18 it to you because I'm going to give it to  
 19 you and you may look at it. Here you go.  
 20 A. I don't need it.  
 21 MR. BRADLEY: Please look at it,  
 22 Bob.  
 23 Q. All I'm asking you is, as an  
 24 interim measure was a skid plate used in  
 25 order to protect the tank for whatever

1 reason?  
 2 MR. BRADLEY: Just note my  
 3 objection.  
 4 Q. Pursuant to A-10.  
 5 A. Well, you read the answer.  
 6 Q. Yes.  
 7 A. Although the primary purpose of  
 8 the skid plate is not to protect the fuel  
 9 tank in rear end collision, as an interim  
 10 measure the skid plate was made standard  
 11 during this short production period when a  
 12 reinforced ORVR valve was being developed.  
 13 So the skid plate did serve a role  
 14 correcting the forces that would go into  
 15 the ORVR valve.  
 16 Q. And as an interim measure, and I  
 17 understand we're talking about interim  
 18 measure, it was used in order to keep the  
 19 tank safe until the problem could be  
 20 resolved?  
 21 A. It was an unintended result of  
 22 the skid plate being added.  
 23 MR. BRADLEY: I'd like to note my  
 24 continuing objection as to the A-10  
 25 recall.

1 Q. Was it a Mopar skid plate?  
 2 A. No.  
 3 Q. What kind of skid plate?  
 4 A. It was a production skid plate.  
 5 They're the same plate.  
 6 Q. I'm going to show you what's been  
 7 marked as an exhibit in a prior deposition  
 8 in July 2011. And it is the A-10 safety  
 9 recall that we're talking about.  
 10 Would you take a look at it?  
 11 MR. BRADLEY: Just for the record,  
 12 from July 20, 2011?  
 13 MS. DE FILIPPO: I just read that.  
 14 MR. BRADLEY: You said July. I'm  
 15 just clarifying. Exhibit P-21. Off the  
 16 record.  
 17 (Whereupon, a discussion is held  
 18 off the record.)  
 19 MR. BRADLEY: I just want to note  
 20 my continuing objection to questioning  
 21 about A-10 recall.  
 22 Q. So the A-10 that we were talking  
 23 about when we were talking about the  
 24 submissions to the government was that  
 25 document I just gave you. Correct?

Page 166

1 A. Yeah. You gave me the recall.  
 2 Q. TSB.  
 3 A. It's the recall instruction to  
 4 the DR mechanic. There are two  
 5 publications -- actually three. There's  
 6 the notification to the feds, there's a  
 7 customer letter and then the DR letter.  
 8 This is the DR letter that tells the  
 9 mechanic what to do.  
 10 Q. And you looked at it. Right?  
 11 A. Yes.  
 12 Q. And I just want to note that in  
 13 this document it says that, "Note: This  
 14 recall applies only to the above vehicles  
 15 that are equipped with a fuel tank brush  
 16 guard without sales code XEE."  
 17 Do you know what sales code XEE  
 18 is?  
 19 A. I'm pretty confident that's the  
 20 skid plate. In other words, if it has a  
 21 skid plate you don't need to fix it.  
 22 Q. Because it already has been --  
 23 the skid plate is the repair. Correct?  
 24 A. It improves the condition so it  
 25 won't fail.

Page 167

1 Q. Well, it says up here, "Those  
 2 vehicles that have already been repaired  
 3 by having a skid plate installed do not  
 4 require any additional service."  
 5 So the skid plate is the repair?  
 6 MR. BRADLEY: Note my objection.  
 7 THE WITNESS: That's right.  
 8 Q. So --  
 9 A. Skid plate is an effective  
 10 correction for that problem.  
 11 Q. So tell me again now, the Mopar  
 12 skid plate is different than this XEE skid  
 13 plate? Is that what you're saying?  
 14 MR. BRADLEY: Note my objection.  
 15 THE WITNESS: I believe there's  
 16 only one skid plate.  
 17 Q. Is that the Mopar skid plate?  
 18 A. Yes.  
 19 Q. Let me just show you something  
 20 that I previously marked in another  
 21 deposition, Robertson, on June 15th of  
 22 2011. This is a -- well, you tell me what  
 23 it is.  
 24 MR. BRADLEY: Exhibit 6.  
 25 THE WITNESS: This is a Mopar

Page 168

1 accessory sales catalogue. It has all the  
 2 stuff you can buy from Mopar after you buy  
 3 your vehicle.  
 4 Q. And that's something that the  
 5 dealer has. Correct?  
 6 A. Yes.  
 7 MR. BRADLEY: Note my objection.  
 8 Q. There's a place -- let me just  
 9 direct you so that we save a little time.  
 10 There's a place in it that says here,  
 11 "Other Mopar accessories not shown here  
 12 include consoles, engine block heaters,  
 13 skid plates, storage, guards, et cetera."  
 14 So the Mopar accessories that the  
 15 dealer was aware of was the skid plates.  
 16 Correct?  
 17 A. Yes.  
 18 MR. BRADLEY: Note my objection.  
 19 Q. This brochure actually goes to  
 20 all the dealers to be given to their  
 21 customers. Correct?  
 22 A. Yes.  
 23 Q. And it also says here, "Since the  
 24 time of printing some of the information  
 25 you'll find in this catalogue may have

Page 169

1 been updated. See your dealer for the  
 2 latest Mopar product information."  
 3 So basically it's advising both  
 4 the dealer and the customer that the  
 5 dealer has the information regarding these  
 6 products, including the skid plate.  
 7 Correct?  
 8 MR. BRADLEY: Just note my  
 9 objection.  
 10 THE WITNESS: Including all the  
 11 accessories listed.  
 12 Q. Everything listed here and maybe  
 13 more as the indication is here. If you  
 14 call Chrysler there might be more?  
 15 A. There might be.  
 16 Q. Now, you indicated that on page  
 17 eight, that three-fourths of SUVs had fuel  
 18 tanks behind the axle. Three quarters of  
 19 all SUVs. I just want to know where you  
 20 got that information.  
 21 MR. BRADLEY: Where are you?  
 22 THE WITNESS: Page eight.  
 23 MR. BRADLEY: I meant on page  
 24 eight.  
 25 Q. O&C-1, Sheridan. "About

Page 170

1 three-fourths of all sport utilities  
 2 offered for sale had fuel tanks located  
 3 behind the rear axle."  
 4 A. I don't recall. I don't remember  
 5 where I got that.  
 6 Q. Is there a place where I can go  
 7 and find that out?  
 8 A. I don't know.  
 9 Q. If you want to verify that  
 10 statement in your report, where would you  
 11 go?  
 12 A. I would have to go back and look  
 13 at the data.  
 14 Q. But where?  
 15 A. I keep some literature written by  
 16 other people and perhaps I found it there.  
 17 I'm not sure. But I will attempt to find  
 18 out where the source of that number is.  
 19 Q. That would be great. So O&C-2.  
 20 A. Pardon me?  
 21 Q. O&C-2 on page eight, you're  
 22 taking issue with something I think that  
 23 Paul Sheridan said and I just want to make  
 24 sure we're talking about the right  
 25 departments here.

Page 171

1 You were present in the Vehicle  
 2 Safety Office and the Product Analysis  
 3 Department and Mr. Sheridan was commenting  
 4 about something that I believe happened in  
 5 Jeep Truck and Engineering, the  
 6 Engineering Program Management Department.  
 7 A. I'm sorry, where are you?  
 8 Q. O&C-2 on page eight. Do you  
 9 recall what you were referring to there  
 10 about Mr. Sheridan's report?  
 11 MR. BRADLEY: Just note my  
 12 objection.  
 13 THE WITNESS: I don't remember.  
 14 Q. I'm going to get to it. Just  
 15 give me a minute.  
 16 I'm going to read O&C-2 and you  
 17 can read along with me but it's electronic  
 18 and I hope your counsel doesn't think I  
 19 would ever misread anything. I'm pretty  
 20 old and I do know how to read.  
 21 A. Do you know last night I had  
 22 dinner, this waitress --  
 23 MR. BRADLEY: There's no question  
 24 pending.  
 25 THE WITNESS: I gotta tell you

Page 172

1 this.  
 2 MR. BRADLEY: We can go off the  
 3 record.  
 4 (Whereupon, a discussion is held  
 5 off the record.)  
 6 Q. It says in O&C-2, it says that  
 7 "JTE staff discussions offered the skid  
 8 plate as standard equipment was rejected  
 9 by JTE Engineering Programs Management,"  
 10 and it goes through the following bases  
 11 for that.  
 12 And you say, "The entire section  
 13 is untrue. There was no evidence offered  
 14 that substantiates the allegations made in  
 15 this section. I was present in both the  
 16 Vehicle Safety Office and Product  
 17 Analysis."  
 18 But he's referring to Jeep Truck  
 19 Engineering. Is that a different office?  
 20 MR. BRADLEY: Just note my  
 21 objection.  
 22 Q. I'm sorry, the Product Analysis  
 23 or Engineering Program.  
 24 MR. BRADLEY: Just note my  
 25 objection. Do you need to look at his

Page 173

1 O&C-2?  
 2 THE WITNESS: I need to see  
 3 O&C-2. I think there must be more to it  
 4 than that.  
 5 MR. BRADLEY: Just for the record,  
 6 this is from Mr. Sheridan's report.  
 7 Q. Mr. Banta, my question to you is  
 8 merely, are we talking about two different  
 9 offices?  
 10 A. Yes.  
 11 Q. Okay. Can you tell me what -- if  
 12 you understand the term "recall yield"?  
 13 A. What?  
 14 Q. Recall yield.  
 15 A. Well, I translate that to mean  
 16 completion rate, how many of them were  
 17 actually done. Yield is a term the auto  
 18 industry doesn't use, but they use a  
 19 completion rate. For example, when I  
 20 estimate the cost of a recall, I would  
 21 estimate it at, say, a 75 percent  
 22 completion, 80, 85, 90, and 95.  
 23 Q. And I'm more focusing on what  
 24 customers generally heed in terms of the  
 25 recalls. In other words, there's a

Page 174

1 percentage of all recalls that people just  
 2 don't bother doing. Correct?  
 3 A. That's right, depending on the  
 4 nature of it.  
 5 Q. Wouldn't you agree with me that a  
 6 person who thinks there might be a fire  
 7 would be more likely to pay attention to  
 8 the recall as opposed to like if your  
 9 radio doesn't work right?  
 10 MR. BRADLEY: Note my objection.  
 11 THE WITNESS: Very high  
 12 completion.  
 13 Q. Very high?  
 14 A. For a fire. Almost a hundred  
 15 percent.  
 16 MR. BRADLEY: You answered the  
 17 question.  
 18 Q. Now, on page eight -- I'm sorry,  
 19 on page nine you say, "Methodology:"  
 20 Wait. Before we get to that, on  
 21 the top you list studies, "Analysis of  
 22 Fatal Crashes Accompanied By Fire" and I  
 23 think on the page before you list some  
 24 other "Analysis of the Real-World Crash  
 25 Performance."

Page 175

1 Did you use any of the  
 2 information in either of these studies to  
 3 base any of your opinions in this case?  
 4 A. No. It's difficult to take a  
 5 study and apply it to one.  
 6 Q. When you get to the methodology  
 7 section of your report on page nine where  
 8 you say, "In addition, it was performed  
 9 using generally accepted scientific  
 10 research and principles."  
 11 Can you just tell me what they  
 12 were, those scientific research and  
 13 principles?  
 14 A. Yes, to the extent that I did a  
 15 technical analysis, I did it using the  
 16 methods and principles that I've learned  
 17 over the years both inside and outside the  
 18 company and classes I've taken and people  
 19 I've worked with.  
 20 Q. Are we talking about technical  
 21 analysis of the fire, cause and origin?  
 22 A. Yes.  
 23 Q. Okay. Anything else?  
 24 A. No.  
 25 Q. Okay. And now you also said that

Page 176

1 you expressed your opinion to a reasonable  
 2 degree of automotive engineering  
 3 certainty.  
 4 Is that your statement today  
 5 also?  
 6 A. Yes.  
 7 Q. So my understanding is you're  
 8 leaving at five?  
 9 MR. BRADLEY: Yes, the deposition  
 10 is going to end at five.  
 11 THE WITNESS: I guess I am.  
 12 Q. So then we're going to do this as  
 13 fast as we possibly can.  
 14 So you know that you testified in  
 15 your first deposition about where you  
 16 worked went up through a Mr. Bolts  
 17 (phonetic). Correct?  
 18 A. Yes.  
 19 Q. And in that office -- what was  
 20 that office's name again with Mr. Bolts?  
 21 A. Vehicle Safety Quality and  
 22 Reliability I believe.  
 23 Q. There was also a man there in the  
 24 nineties named Dawkins. Correct?  
 25 A. Dale Dawkins.

Page 177

1 Q. What was he, safety director?  
 2 A. Director of product analysis.  
 3 Prior to that he was a vice-president of  
 4 product planning I believe.  
 5 MR. BRADLEY: Just note my  
 6 objection.  
 7 Q. Now, I just want you to look at a  
 8 document that was already premarked in the  
 9 Castaing deposition of 6-14-11. Have you  
 10 ever seen this document before?  
 11 MR. BRADLEY: Specifically  
 12 Exhibit 6?  
 13 THE WITNESS: Oh, I know about  
 14 this.  
 15 Q. Well, my question to you is this.  
 16 If you look at the document along with me,  
 17 and it says, "The law says" -- it says in  
 18 the middle of the page, "The law says all  
 19 you have to do is pass, Chrysler Safety  
 20 Director Dale Dawkins said in an interview  
 21 before he retired in December. You build  
 22 a margin in single vehicle tests to  
 23 accommodate variations in testing. We do  
 24 it so we pass, not because of some desire  
 25 to exceed the standards."

Page 178

1 Do you recall him making those  
 2 statements?  
 3 MR. BRADLEY: Just note my  
 4 objection.  
 5 THE WITNESS: Honestly, I don't.  
 6 Q. If I tell you that in the case of  
 7 Jimenez versus Chrysler in 1998 he was  
 8 questioned about these very statements on  
 9 the stand and admitted to them?  
 10 MR. BRADLEY: Just note my  
 11 objection.  
 12 THE WITNESS: I don't know.  
 13 Q. Do you have any reason to doubt  
 14 that he made those statements?  
 15 A. I just don't know one way or the  
 16 other.  
 17 Q. You do know about what was going  
 18 on at the time?  
 19 MR. BRADLEY: Just note my  
 20 objection.  
 21 Q. Tell me what was going on.  
 22 A. Cirrus and Stratus were midsize  
 23 cars that among other things had seat  
 24 belts in them and the government tested  
 25 the seat belts in a manner that Chrysler

Page 179

1 believed was improper. And they failed a  
 2 bolt, the head of a bolt, on a seat belt  
 3 anchorage and then wanted Chrysler to  
 4 recall them. Chrysler pointed out it was  
 5 tested wrong. And then Chrysler did a  
 6 stunt of putting a crane through the  
 7 windshield of a car and lifting the entire  
 8 car with the bolt to demonstrate how  
 9 strong it was. And NHTSA stood their  
 10 ground and ordered a recall and Chrysler  
 11 stood their ground and said we're not  
 12 doing it. And frankly, I don't know what  
 13 happened beyond that.  
 14 Q. Was it ever Chrysler's position  
 15 that the law says all you have to do is  
 16 pass?  
 17 MR. BRADLEY: Please note my  
 18 continuing objection to this questioning.  
 19 Q. As far as you know.  
 20 A. No. You have to pass but you  
 21 have to do that with some level of  
 22 redundancy.  
 23 MS. DE FILIPPO: Can you mark this  
 24 document, please?  
 25

Page 180

1 (Copy of photograph is received  
 2 and marked Banta-35 for identification.)  
 3  
 4 Q. In your prior deposition in this  
 5 case you were shown a photograph which was  
 6 from the Highway Institute and it was  
 7 fuzzy and I think you made a comment about  
 8 it. So I went back and looked for another  
 9 photograph and I'm showing you what's been  
 10 marked -- what is that?  
 11 MR. BRADLEY: 35.  
 12 MS. DE FILIPPO: I'm sorry?  
 13 MR. BRADLEY: 35.  
 14 Q. Would you agree with me that that  
 15 photograph accurately depicts the concept  
 16 of under-ride?  
 17 MR. BRADLEY: Just note my  
 18 objection.  
 19 THE WITNESS: Well, it depicts  
 20 under-ride. I don't know how accurate  
 21 these two vehicles are.  
 22 Q. Well, is there any indication  
 23 from looking at the photograph that the  
 24 Institute For Highway Safety changed in  
 25 any way the dimensions of the vehicles in

Page 181

1 that photograph?  
 2 MR. BRADLEY: Just note my  
 3 objection.  
 4 THE WITNESS: I'd have to know  
 5 the background of the vehicles. The Grand  
 6 Cherokee appears to have a body that's  
 7 high in here.  
 8 Q. I'm sorry, I didn't hear you.  
 9 A. The Grand Cherokee appears to  
 10 have a body that's high and the bullet  
 11 vehicle appears to have a body that's low  
 12 and I don't know why that is.  
 13 Q. So you think that --  
 14 A. But I understand the concept.  
 15 This appears to be under-ride.  
 16 Q. Do you think it's -- you think  
 17 that photograph is not accurately  
 18 depicting real life, the real life Jeep  
 19 and the real life -- that's another  
 20 Chrysler vehicle in that photograph, isn't  
 21 it?  
 22 A. I don't know. I don't know what  
 23 it is.  
 24 Q. You don't know this vehicle in  
 25 this photograph?

Page 182	Page 184
<p>1 A. It looks like a Cloud vehicle but 2 I'm not sure. I don't see a name plate on 3 it. 4 Q. Is it a Stratus maybe? 5 MR. BRADLEY: Just note my 6 objection. 7 Q. Are you saying that the 8 photograph in some way doesn't accurately 9 depict the Jeep and the Stratus? 10 A. No. What I'm saying is that I 11 can't tell you that this Jeep and this 12 bullet car are production type vehicles 13 because one appears to be high, one 14 appears to be low. 15 Q. When you say that are you talking 16 about higher than they appear in real 17 life? 18 A. Yes. 19 Q. And lower than it appears in real 20 life? 21 A. Look at the spacing between the 22 wheel and the body here. 23 Q. But Mr. Banta, this is already 24 under-riding. In other words, they're not 25 nose to butt. The Stratus, if you will,</p>	<p>1 objection. I'm not sure if they're from 2 the same -- 3 MS. DE FILIPPO: Would you stop 4 telling him why you're objecting? You're 5 objecting to form, or not. 6 MR. BRADLEY: Just note my 7 objection. 8 MS. DE FILIPPO: All your 9 objections are preserved. 10 THE WITNESS: Yeah, this appears 11 -- the color one is deeper engagement than 12 the black and white. 13 Q. So what does that mean to you 14 looking at it? 15 A. It went further in. 16 Q. So you can tell there's more of 17 an under-ride in the color one. However, 18 this one is in the process of under-riasion 19 (sic), so to speak? 20 A. It may under-ride, yeah. It's 21 starting to. 22 Q. We talked about in your last 23 deposition a woman named Ginny Fischbach. 24 Do you remember that? 25 A. I do.</p>
Page 183	Page 185
<p>1 the vehicle on the left is already 2 under-riding. Correct? 3 A. That's quite under. 4 Q. So when a vehicle goes under 5 another vehicle, wouldn't you expect that 6 the target vehicle would look a little 7 higher? 8 MR. BRADLEY: Note my objection. 9 THE WITNESS: The question was, 10 is that classic under-ride. I don't know. 11 It's only into the fascia. I don't know 12 what would happen if it kept on going. I 13 just don't know. Do you have more? Do you 14 have -- 15 Q. I think the Insurance Institute 16 For Highway Safety does. I mean that's 17 where it came from. I just researched it 18 because in Banta -- on 6-28-12 we marked 19 Banta-4 and it was a little fuzzy and you 20 said something about that so I thought, 21 well, this is much clearer. 22 MR. BRADLEY: Just note my 23 objection. 24 Q. For the concept of under-ride. 25 MR. BRADLEY: Just note my</p>	<p>1 Q. At the time we did not have her 2 -- you said she gave a power point 3 presentation at some point in time. You 4 knew her and she talked about testing for 5 fuel system integrity in that power point 6 presentation. Correct? 7 A. Yes. 8 MR. BRADLEY: Note my objection. 9 MS. DE FILIPPO: I just want to 10 mark that document and make sure that 11 we're talking about the same thing. 12 Q. I'm going to show you a document 13 which was marked at the Castaing dep on 14 June 14th as Exhibit 9. It's in a bound 15 book. I can take it out if you need to, 16 otherwise you can just look through it. 17 MR. BRADLEY: Exhibit 9 in the 18 Castaing dep? 19 MS. DE FILIPPO: Yes. 20 Q. Is that what we were talking 21 about in terms of your bullet point 22 presentation? 23 A. Yes. 24 Q. You were aware of that. Correct? 25 A. My notes reflected I was looking</p>

Page 186	Page 188
1 for it. I couldn't find it. You have it.	1 objection.
2 Q. I noticed that we had produced it 3 in a different deposition.	2 THE WITNESS: It was a real 3 concern. Yes. It was a genuine concern.
4 A. Yeah, this is the one. She 5 actually taught a class on this.	4 Q. And there's also another section 5 there that says, "No design change is 6 negligible."
6 Q. So you were aware of that when, 7 what year?	6 7 Can you tell me what you think 8 she meant by that?
8 A. Early nineties maybe.	8 A. Yeah.
9 Q. Or early nineties because if you 10 look at that page, the rules were going to 11 come.	9 10 MR. BRADLEY: Just note my 11 objection.
12 A. '97, yeah.	12 THE WITNESS: If you make a 13 design change, you have to do it 14 thoroughly, completely and properly. You 15 can't treat a design change as a casual 16 thing.
13 Q. So it's probably in the early 14 nineties?	17 Q. What does that mean to you, that 18 if you make a design change, you need to 19 test for that?
15 MR. BRADLEY: Just note my 16 objection.	20 MR. BRADLEY: Just note my 21 objection.
17 THE WITNESS: I think, yes.	22 THE WITNESS: Not necessarily. 23 Depends on the nature of it. That's a 24 judgement of the test engineer.
18 Q. Now, in that document there is a 19 notation that says, "Be careful not to 20 discount as anomaly."	24 Q. If the test engineer believes a
21 MR. BRADLEY: Do you know what 22 page?	25
23 THE WITNESS: Test issues and 24 post test inspection?	
25 Q. "Be careful not to discount as	
Page 187	Page 189
1 anomaly." What does that mean?	1 design change is significant and says 2 that, these are significant design 3 changes, then would you agree that the 4 vehicle should be tested with those 5 changes?
2 A. When you evaluate the post test 3 vehicle and you look at something and say, 4 I'm not happy with that, it doesn't look 5 good, maybe your partner might say or the 6 guy next to you, that's an anomaly, it 7 doesn't happen all the time.	6 MR. BRADLEY: Just note my 7 objection to form.
8 Q. It's okay to dismiss it?	8 THE WITNESS: If the design 9 change is believed to have an effect on 10 compliance then it must be retested.
9 A. It's a non repeatable test and 10 she's pointing out the ills of doing that.	11 Q. In your report, in any of your 12 reports did you ever indicate anywhere 13 that the Jeep was hit twice in the rear by 14 the Sienna?
11 Q. Don't do that?	15 A. I don't know. We went through 16 this once before.
12 A. That's right.	17 Q. No, I don't think we did the two 18 time hit. I'm trying to figure out if you 19 said in your report if the Jeep was hit 20 twice.
13 Q. So the standard is you don't do 14 that?	21 MR. BRADLEY: But you said 22 specifically in the rear.
15 A. That's right.	23 MS. DE FILIPPO: Yes, in the rear.
16 MR. BRADLEY: Just note my 17 objection.	24 MR. BRADLEY: Hit twice in the 25 rear?
18 Q. Does that mean to you that if you 19 find a problem like you described when you 20 look at the test or the test results and 21 you see something that is a problem or 22 potential problem, you don't say, oh, 23 well, I only saw this once, let's not 24 address it. You have to address it?	
25 MR. BRADLEY: Just note my	



Page 190

1 MS. DE FILIPPO: Hit twice in the  
 2 rear.  
 3 THE WITNESS: I don't remember.  
 4 Q. Okay.  
 5 A. I think I did in the second  
 6 supplemental.  
 7 Q. You think you said it was hit  
 8 twice?  
 9 MR. BRADLEY: In the rear?  
 10 THE WITNESS: Yeah.  
 11 Q. Does it matter to you?  
 12 A. No, I'm sorry. There was a  
 13 second collision. There was a rear and  
 14 then a front rear.  
 15 Q. But not two rear?  
 16 A. No.  
 17 Q. Now, in the rear end collision --  
 18 A. Are we done with this?  
 19 Q. Yes. You've indicated this is in  
 20 fact the document that you read and that  
 21 was a viable document that Chrysler tested  
 22 to or at least was taught to test?  
 23 A. Yes.  
 24 MR. BRADLEY: Objection.  
 25 THE WITNESS: And I had that in my

Page 191

1 notes and I looked for it and I could not  
 2 find it.  
 3 MS. DE FILIPPO: But I will give  
 4 you a copy.  
 5 THE WITNESS: I would love to have  
 6 it. If you have it electronically I  
 7 prefer it that way, but I'll take paper.  
 8 MS. DE FILIPPO: Okay. I'll look  
 9 for the electronic.  
 10 THE WITNESS: Is that dated? Is  
 11 there a date on it.  
 12 MS. DE FILIPPO: I don't know.  
 13 Are you allowed to ask me any questions?  
 14 THE WITNESS: Am I.  
 15 MS. DE FILIPPO: How about if we  
 16 look at it later. Is that okay?  
 17 THE WITNESS: That's fine.  
 18 MS. DE FILIPPO: Because your  
 19 counsel wants you out of here by five.  
 20 THE WITNESS: Okay.  
 21 Q. Mr. Banta, I want to show you  
 22 some photographs which I'm going to  
 23 represent to you I have taken from the  
 24 video of the CARCO test as still  
 25 photographs.

Page 192

1 A. Yes. That's the same vehicle we  
 2 were talking about earlier.  
 3 Q. That's exactly right.  
 4 A. Yes.  
 5 Q. I want you to look at these  
 6 photographs. I think I only have one of  
 7 each. Maybe I have two.  
 8 MR. BRADLEY: Can we just mark  
 9 these?  
 10 MS. DE FILIPPO: Yeah. Why don't  
 11 we mark them. Why don't we mark the  
 12 packet. Let's just do that. Let's mark  
 13 the packet of these because it will be  
 14 obvious what it is. You can tell what it  
 15 is.  
 16  
 17 (Packet of photos is received and  
 18 marked Banta-35 for identification.)  
 19  
 20 MS. DE FILIPPO: Camera stills  
 21 taken from the CARCO test at 40 miles an  
 22 hour.  
 23 Q. I want you to look at camera view  
 24 one. One is minus 50. These are  
 25 milliseconds. Right? These are

Page 193

1 milliseconds?  
 2 A. Probably.  
 3 Q. That's how they do it. Right?  
 4 A. I didn't take this but I would  
 5 expect it to be.  
 6 Q. So if you look at -- what I want  
 7 you to look at, if you look at where the  
 8 car is, the Jeep, this is a Grand Cherokee  
 9 '96. Correct?  
 10 A. I don't know.  
 11 Q. I'm going to represent to you  
 12 it's a '96.  
 13 A. Okay.  
 14 Q. ZJ. And I want you to look at  
 15 the photograph, first of all, to see a  
 16 vantage point. The vantage point I want  
 17 you to look at is the crane in the middle  
 18 because I'm going to ask you questions  
 19 about it.  
 20 So if you look at this crane and  
 21 you see where the car is in relation to  
 22 the crane --  
 23 A. Right.  
 24 Q. So at minus .05 milliseconds  
 25 before any crash occurs, that Jeep is in

1 the position where it's in vis-à-vis the  
2 crane. Correct?  
3 A. Yes.  
4 MR. BRADLEY: Objection.  
5 Q. In camera view two you see the  
6 exact same position because it's the exact  
7 same time.  
8 MR. BRADLEY: Objection.  
9 Q. And no damage has occurred and  
10 nothing has happened at that point.  
11 Correct?  
12 A. Yes.  
13 Q. What you know is going to happen,  
14 because you've already seen this, is that  
15 the bullet vehicle is going to strike the  
16 Jeep at 40 miles an hour.  
17 MR. BRADLEY: Just note my  
18 objection.  
19 Q. Correct? That's what you know  
20 from the film?  
21 A. I know the hit's coming.  
22 Q. So now if you look at 000, which  
23 is the next set of camera views, I see, at  
24 least what I see in that photograph is the  
25 Jeep and the Taurus like just about

1 kissing. Correct?  
2 A. Yes, they're touching.  
3 Q. They're touching. If you look at  
4 the vantage point, nobody has moved in  
5 terms of the Jeep. The Jeep has not  
6 moved?  
7 MR. BRADLEY: Just note my  
8 objection.  
9 Q. Right?  
10 A. Yes.  
11 Q. Now, the Jeep has dummies in it.  
12 You see them. Right?  
13 A. Anthropomorphic models.  
14 Q. And they're there?  
15 A. They appear to be.  
16 Q. You see their silhouettes.  
17 Correct?  
18 A. Yes.  
19 Q. And when you look at the next  
20 camera view two, it shows you that they're  
21 just about touching. Right?  
22 A. I think they are touching.  
23 Q. Maybe they are touching. Maybe  
24 there's already the beginnings of what  
25 might be under-ride. Right?

1 A. They're touching.  
2 Q. And but we know from that same  
3 time frame, camera view one, that the Jeep  
4 hasn't moved. Correct?  
5 A. Yes.  
6 MR. BRADLEY: Just note my  
7 objection.  
8 Q. And when you look at .052, the  
9 next one --  
10 A. Plus 052?  
11 Q. Correct.  
12 A. They're colliding now.  
13 Q. Are you calling that under-ride?  
14 MR. BRADLEY: Just note my  
15 objection.  
16 THE WITNESS: There is a slight  
17 under-ride component. This is not classic  
18 under-ride but there is a slight  
19 under-ride component. Could I see 00  
20 again?  
21 MR. BRADLEY: No. She's just  
22 asking from this photograph.  
23 Q. I just want you to look at this  
24 photograph.  
25 So you're saying there's a slight

1 under-ride component to 052 on camera view  
2 one. Correct?  
3 A. But this is not classic  
4 under-ride.  
5 Q. Okay. Why?  
6 A. Because classic under-ride lifts  
7 the target up in the air. You literally  
8 go under it and lift it up in the air.  
9 Q. I want you to look at this  
10 collision at 40 miles an hour. And look  
11 at the Jeep.  
12 Now, if you look at the Jeep you  
13 see there's deflation of the Jeep.  
14 There's a lot of crush. Correct?  
15 MR. BRADLEY: Note my objection.  
16 Q. There's crush in that area where  
17 the tank is. Correct?  
18 A. Yes.  
19 Q. It looks to me, I mean you can  
20 correct me if I'm wrong, that this bullet  
21 vehicle probably hit the tank?  
22 MR. BRADLEY: Just note my  
23 objection.  
24 Q. At this point.  
25 A. I don't know.

Page 198

1 Q. Well, the tank would be right  
 2 there where the nose of the vehicle is.  
 3 Correct?  
 4 MR. BRADLEY: Just note my  
 5 objection.  
 6 THE WITNESS: Yeah, but it's into  
 7 the soft part of the front end of the  
 8 bullet. What we need is, you know, a  
 9 later -- we need an ending of that.  
 10 Q. Give me a minute. The camera  
 11 view -- I want you to look at the vantage  
 12 point, though. This Jeep has not really  
 13 moved?  
 14 A. That's right.  
 15 Q. And it got hit?  
 16 MR. BRADLEY: Just note my  
 17 objection.  
 18 Q. With this kind of course that you  
 19 see here. It hasn't moved the Jeep at  
 20 all. Correct?  
 21 A. Correct.  
 22 MR. BRADLEY: Just note my  
 23 objection.  
 24 THE WITNESS: It's going to,  
 25 though.

Page 199

1 Q. But it didn't at this point.  
 2 With this hit with this crush there's no  
 3 movement. Correct?  
 4 A. That's correct.  
 5 Q. Now you see camera view two. The  
 6 same amount of the bullet vehicle, you can  
 7 see how much of it is underneath the Jeep?  
 8 MR. BRADLEY: Just note my  
 9 objection.  
 10 Q. Right?  
 11 A. Yes.  
 12 Q. Now, 052, camera view three, same  
 13 amount of time, you can see more of and a  
 14 closer up and you see that the bullet  
 15 vehicle, the fascia, if you will, of the  
 16 bullet vehicle is actually touching the  
 17 tire of the Jeep. Correct?  
 18 MR. BRADLEY: Just note my  
 19 objection.  
 20 THE WITNESS: I think that's  
 21 correct.  
 22 Q. So the tank would be behind that  
 23 tire. Correct?  
 24 MR. BRADLEY: Just note my  
 25 objection.

Page 200

1 THE WITNESS: Yes.  
 2 Q. So chances are --  
 3 A. Before impact, the tank would be  
 4 behind.  
 5 Q. Before impact. But now it looks  
 6 like there must have been some engagement  
 7 with the tank.  
 8 MR. BRADLEY: Just note my  
 9 objection.  
 10 THE WITNESS: Something moved.  
 11 Q. But the Jeep itself didn't move.  
 12 The car itself didn't move?  
 13 A. That's right.  
 14 MR. BRADLEY: Just note my  
 15 objection.  
 16 Q. Now when you look at .119 and you  
 17 see the vantage point of the Jeep --  
 18 MR. BRADLEY: I don't think we  
 19 have that.  
 20 Q. At 119 milliseconds -- I'm going  
 21 to give you mine. 119?  
 22 A. Yeah, the Jeep has been moved.  
 23 We still have more excursion of the  
 24 bullet. It looks like the Jeep might be  
 25 going up in the air. I'm not sure but I

Page 201

1 think it probably is.  
 2 Q. So that's full, in your opinion,  
 3 if it's up in the air like that, that's  
 4 full under-ride at that point. Correct?  
 5 MR. BRADLEY: Just note my  
 6 objection.  
 7 THE WITNESS: I think it is. No,  
 8 I'm sorry. That's not full under-ride but  
 9 that's probably full engagement. I don't  
 10 think it's going any deeper.  
 11 Q. You don't think it's going any  
 12 deeper at 40 miles an hour?  
 13 A. No.  
 14 Q. But we're already into the tire.  
 15 Correct?  
 16 A. Um-hum.  
 17 Q. We're already past the back area?  
 18 A. We're loading the rear axle.  
 19 Q. And relative to where the vantage  
 20 point was, movement is not that great?  
 21 MR. BRADLEY: Note my objection.  
 22 THE WITNESS: That's right.  
 23 That's the "typical" compress the golf  
 24 ball before it takes off.  
 25 Q. And so that's at 119

Page 202	Page 204
1 milliseconds. And then the next one, 2 camera view two, is the same amount of 3 time. It's just another view of what you 4 see?	1 Q. So in this scenario, the tank is 2 hit and hit in the fashion that we've 3 depicted here where most of the rear is 4 gone and we're already up to the axle, the 5 tires. Then it's safe to say that the 6 tank is going to rupture. That's when 7 it's going to rupture. Correct?
5 A. Yeah.	6 MR. BRADLEY: Just note my 7 objection.
6 MR. BRADLEY: Just note my 7 objection.	8 MR. BRADLEY: Just note my 9 objection.
8 Q. And here's camera view three.	10 THE WITNESS: Probably. Again, 11 in this crash.
9 A. Oh, yeah. That's in the air.	12 Q. In this 40-mile an hour crash, 13 yes.
10 MR. BRADLEY: Note my objection.	14 A. Yes.
11 Q. So at 119, under-ride, haven't 12 moved very much?	15 Q. Now, I want to talk about the 16 testing because you said that you went to 17 the test. You were called by Zylik, I 18 think you said, and Teets and whoever was 19 doing the testing and you were the fire 20 guy that would look at the test results. 21 Correct?
13 A. There's an under-ride component. 14 It's not pure under-ride but there is an 15 under-ride component.	22 A. Yeah.
16 Q. And we've hit the tank?	23 Q. And the vehicle?
17 MR. BRADLEY: Note my objection.	24 MR. BRADLEY: The CARCO test?
18 THE WITNESS: Yes.	25 MS. DE FILIPPO: No.
19 Q. Camera view two at 245, do you 20 have that? Still the vehicles are 21 together. Correct?	
22 A. Yes.	
23 Q. And then at 845, I think you have 24 that. You see the vehicles are separated?	
25 A. Yeah.	
Page 203	Page 205
1 Q. They separate. Correct?	1 THE WITNESS: Typical crash test.
2 A. Yeah.	2 Q. Yes. Would you agree with me 3 that the -- that there is a portion of the 4 Jeep which is called the crush zone? Crush 5 zone.
3 Q. They remained separated. They 4 never once came together again. Correct?	6 MR. BRADLEY: Note my objection.
5 MR. BRADLEY: Note my objection.	7 Q. Crush zone in a rear end hit.
6 Q. They remained separated. And 7 when they come to rest, they come to rest 8 in separate areas?	8 A. Before impact, no. After impact, 9 yes.
9 MR. BRADLEY: Note my objection.	10 Q. Well, in a rear end hit where is 11 the crush zone?
10 Q. At 1598. Correct? Here's 1598.	12 MR. BRADLEY: Just note my 13 objection.
11 A. Yes.	14 Q. After impact.
12 Q. And so you would agree with me 13 then with very minimal movement of the 14 vehicle itself, the Ford actually shoots 15 out the initial impact to the Jeep in the 16 40-mile an hour crash, engages the tank 17 before the vehicle actually starts moving 18 toward the Ford?	15 A. Whatever is deformed.
19 MR. BRADLEY: Just note my 20 objection.	16 Q. But do the designers such as 17 Zylik or Teets or the testers refer to an 18 area of the car that is the crush zone in 19 general?
21 Q. Before the separation and before 22 it's actually even going forward. 23 Correct?	20 MR. BRADLEY: Just note my 21 objection.
24 A. Yes. That's the golf ball 25 compression kinematic energy theory.	22 THE WITNESS: Yes.
	23 Q. And if I tell you that Mr. Zylik 24 said that the crush zone was from the rear 25 of the vehicle to the sill of the rear

1 wheel opening, would you agree with that,  
2 that that's the crush zone?  
3 MR. BRADLEY: Just note my  
4 objection.  
5 THE WITNESS: From the rear of  
6 the vehicle to --  
7 Q. Forward to the sill of the rear  
8 wheel opening.  
9 A. No.  
10 Q. So you don't agree with him?  
11 A. No.  
12 Q. Did you read his deposition?  
13 A. Mr. Zyluk has had a lot of  
14 depositions. In this case?  
15 Q. In this case.  
16 A. I think I did, yes.  
17 Q. And did you recall -- do you  
18 recall that he defined crush zone?  
19 A. No, I don't remember that.  
20 MR. BRADLEY: Just note my  
21 objection.  
22 THE WITNESS: Crush zone defined  
23 is many things to many people. If you  
24 read Mr. Teets' deposition, for example,  
25 he would say that if you ask ten people

1 where the crush zone is you might get ten  
2 different answers. Generally --  
3 Q. Did he say that in this case?  
4 A. Yeah, I believe Teets said that  
5 in his deposition.  
6 Q. What does Zyluk do again?  
7 A. Pardon me?  
8 Q. What does he do?  
9 A. He's a test engineer.  
10 Q. So if he's looking at a vehicle  
11 crush zone and defines it a certain way,  
12 you wouldn't defer to him as the test  
13 engineer?  
14 A. No.  
15 MR. BRADLEY: Just note my  
16 objection.  
17 Q. You wouldn't?  
18 A. No. The known crush zone is  
19 outside the box formed by the frame and  
20 the longitudinals.  
21 Q. Let me read for you what he says  
22 on page 52 of his deposition. He says --  
23 "QUESTION: And in the Jeep ZJ,  
24 when you measured from the rear of the  
25 vehicle to the sill of the rear wheel

1 opening, where would you -- where was the  
2 crush zone?  
3 ANSWER: This is the crush zone,  
4 along with a zone that may have crushed  
5 forward of that area."  
6 MR. BRADLEY: Just note my  
7 objection.  
8 THE WITNESS: Is he speaking  
9 about the result of a test or a crash?  
10 Q. No.  
11 A. What's he talking about?  
12 Q. The question started with,  
13 "QUESTION: Is there a point on  
14 the vehicle where crush does not occur as  
15 a result of the 301 barrier testing in the  
16 ZJ?  
17 ANSWER: Well, crush, we measure  
18 the overall crush of the vehicle between  
19 two given points. And within those points  
20 some areas crush, some areas don't crush.  
21 QUESTION: So what are the points  
22 you measure?  
23 ANSWER: We measure from the rear  
24 of the vehicle. It's usually at the sill  
25 forward of the rear wheel opening.

1 QUESTION: And in the Jeep ZJ when  
2 you measure from the rear of the vehicle  
3 to the sill of the rear wheel opening,  
4 where was the crush zone?  
5 ANSWER: This is the crush zone,  
6 along with the zone that may have crushed  
7 forward."  
8 MR. BRADLEY: Just note my  
9 objection for the record.  
10 THE WITNESS: He's talking about  
11 the resultant of a crash being the crush  
12 zone, which is different than a defined  
13 area prior to a crash.  
14 Q. Well, if you were a test engineer  
15 and you're measuring the crush in a rear  
16 end hit when you're doing the 301 testing  
17 and he's saying he's always measuring from  
18 the back of the car to the sill behind the  
19 rear wheel well, he's defining that as the  
20 crush zone, wouldn't you agree?  
21 A. No. That's the area he measures  
22 to identify the crush zone.  
23 MR. BRADLEY: Just note my  
24 objection.  
25 THE WITNESS: As a result of a

1 test.  
 2 Q. And the tank is right in that  
 3 area?  
 4 MR. BRADLEY: Just note my  
 5 objection.  
 6 THE WITNESS: Yeah, could be.  
 7 Q. Well, in the ZJ it is.  
 8 A. Yeah. But my point is when you  
 9 start with an uncrushed vehicle, an  
 10 unwrecked vehicle there is no crush zone  
 11 except to the extent that the areas  
 12 outside the frame rails and the  
 13 longitudinals have no protection. So  
 14 they're vulnerable by their nature. And  
 15 then after the crush you measure -- after  
 16 the crash you measure the area that's  
 17 deformed and that is the crush zone. But  
 18 it's not real estate prior to a crash.  
 19 Q. Don't you, at any time as a  
 20 design engineer -- or do you know if the  
 21 design engineers considered areas where in  
 22 a collision, whether it be a rear end hit  
 23 or even a front, where the vehicle could  
 24 absorb the crush and therefore protect the  
 25 passenger?

1 identification.)  
 2  
 3 Q. Mr. Banta, in test 5208 it says,  
 4 primary MVSS 301 validation. Correct?  
 5 A. Yeah, 1995 301 validation.  
 6 Q. And so what does that mean, a  
 7 validation test? What does that mean?  
 8 A. It's a test that is run after you  
 9 have certified the vehicle for compliance.  
 10 From time to time you run another test  
 11 just to make sure nothing has changed.  
 12 You gather additional test data.  
 13 Sometimes these vehicles actually have had  
 14 a frontal impact and then they'll come  
 15 right back and hit the rear as a  
 16 validation because the vehicle is there  
 17 and it's been prepared.  
 18 Q. Well, so are you saying that this  
 19 particular test you're looking at, 5208 --  
 20 what's the date that it was run?  
 21 A. July 26, 1994.  
 22 Q. So it was run in '94 and it's  
 23 labeled a '95 validation. What happens to  
 24 the results of a validation test?  
 25 MR. BRADLEY: Just note my

1 MR. BRADLEY: Just note my  
 2 objection.  
 3 THE WITNESS: Yes. But even that  
 4 area deforms.  
 5 Q. I understand. And you want it to  
 6 because you don't want the energy to get  
 7 pushed in to where the passengers are.  
 8 Correct?  
 9 MR. BRADLEY: Objection.  
 10 Q. That's the whole point of a crush  
 11 zone?  
 12 A. That's right.  
 13 Q. Thank you. Now, I want to go to  
 14 a test -- so did you look at the tests  
 15 that were provided, those 29 tests that we  
 16 talked about that Chrysler provided? Did  
 17 you have an opportunity?  
 18 A. I have looked at those from time  
 19 to time.  
 20 Q. I want to look at test 5208.  
 21 MS. DE FILIPPO: Let's mark it the  
 22 next number.  
 23  
 24 (Safety Test Vehicle Crash Test  
 25 letter is received and marked Banta-36 for

1 objection.  
 2 THE WITNESS: The information and  
 3 the vehicle are made available to  
 4 concerned people. It's brought back to  
 5 the viewing room and the videos are made  
 6 available for analyzing and the test  
 7 reports are made available.  
 8 Q. DO the test reports and the  
 9 validation test go to NHTSA?  
 10 A. No.  
 11 Q. Do the test reports and the  
 12 validation test go anywhere other than  
 13 within the corporation?  
 14 A. No.  
 15 MR. BRADLEY: Just note my  
 16 continuing objection.  
 17 Q. When you do a validation test and  
 18 it fails, the car fails, who should be  
 19 apprised of that failure?  
 20 MR. BRADLEY: Just note my  
 21 objection.  
 22 THE WITNESS: Depends on the  
 23 cause of the failure.  
 24 Q. Well, if there's fuel leakage.  
 25 A. Depends on the cause.

Page 214	Page 216
<p>1 Q. So in this particular test why 2 did the test fail? 3 MR. BRADLEY: Just note my 4 objection. 5 THE WITNESS: I don't know. I 6 haven't got to a failure yet. If you give 7 me a minute I'll read it. There was no 8 fuel leakage during impact nor during the 9 subsequent 30 minutes. There was fuel 10 leakage during the static role in excess 11 of the federal standard. So it appears 12 that something opened up in a vent 13 surface. 14 Let's see. This is a C1 Pilot 15 production, four liter, manual. Is there 16 a question? 17 Q. Why did it fail? 18 A. I don't know. 19 Q. Okay. 20 A. It does not tell us why. 21 Q. Am I missing documents? 22 A. There should be -- 23 MR. BRADLEY: Note my objection. 24 THE WITNESS: There should be 25 some additional file information to</p>	<p>1 has to be made. 2 Q. Let's assume that when Chrysler 3 provided this information, that's all they 4 provided with respect to this test. What 5 would you do to find out -- what should a 6 person do to find out why the test failed 7 and what was done, if anything? 8 MR. BRADLEY: Just note my 9 continuing objection to this line of 10 questioning. 11 THE WITNESS: I can give you the 12 short answer of that, that vehicle crash 13 tests are typically kept for some document 14 retention schedule and the schedules 15 reactivate every time a new case uses it. 16 So these VCs tend to stay around forever. 17 The file jacket this thing is part of is 18 not on the same retention schedule and it 19 was probably discarded five years ago. In 20 fact, this was done in '94. This was a 21 long time ago. I suspect that jacket is 22 gone. And it could be something as simple 23 as a note from a test technician saying 24 this was a development fuel tank that had 25 an ORVR from some other guy and the ORVR</p>
Page 215	Page 217
<p>1 explain why it failed and what the cause 2 was, what action was taken. 3 Q. That's what I wanted to ask you. 4 What was the cause and what action was 5 taken? 6 A. I don't know. 7 Q. Is it fair to say, though, that 8 whatever the cause was, some action should 9 have been taken? 10 A. Oh, yeah. 11 MR. BRADLEY: Just note my 12 objection. 13 THE WITNESS: Every test failure 14 has an explanation. 15 Q. Has to have an action? 16 A. Explanation. 17 Q. And an action to it? 18 A. If necessary. 19 MR. BRADLEY: Just note my 20 objection. 21 Q. Well, where would I go to find 22 this? 23 A. I don't know. But I can assure 24 you that for every test failure some 25 investigation is done, some explanation</p>	<p>1 failed. I don't know. 2 Q. But we don't have that listed 3 here. We have it as a primary or 4 validation test for fuel system integrity 5 in a primary 1995 301 validation. 6 A. Right. 7 MR. BRADLEY: Just note my 8 objection. 9 THE WITNESS: And a production 10 built vehicle. 11 Q. Right. 12 A. We don't know what happened or 13 why this happened. 14 Q. Without speculating, can you tell 15 me what most probably happened? 16 MR. BRADLEY: Just note my 17 objection. If you can. 18 Q. You know, without a guess but 19 with an educated knowledge of what went 20 on. 21 MR. BRADLEY: Just note my 22 objection. 23 THE WITNESS: I have seen a 24 number of these failures on rollover, like 25 this one was. This vehicle tested under</p>

Page 218	Page 220
<p>1 pressure. Okay? So I would expect that 2 something in the fuel system wasn't 3 properly assembled, like a clamp on a fuel 4 hose or the cap wasn't secured. That's my 5 guess. 6 Q. So you're guessing a 7 manufacturing type issue, not a design 8 issue? 9 A. Assembly issue. 10 MR. BRADLEY: Note my objection. 11 THE WITNESS: Probably related to 12 the chest, like when fuel was drained out 13 and stoddard solvent was put in. They 14 took the hose off the bottom of the tank 15 to drain, put stoddard solvent in. Maybe 16 the hose didn't get put on properly or the 17 cap put on properly and it leaked on 18 rollover. 19 Q. But we need to know for sure 20 because we can't just consider that as an 21 anomaly or something that happened. 22 A. I understand. 23 Q. With 5380, I want to show you 24 test 5380. We'll mark that. That was 25 previously marked in the Castaing dep on</p>	<p>1 like and act like a '96 ZJ, domestic ZJ. 2 Correct? 3 A. Yes. 4 MR. BRADLEY: Just note my 5 continuing objection. 6 Q. Now, that test failed. And what 7 I read there is that it failed because it 8 had excessive fuel leakage during impact 9 and the subsequent 30 minutes, where the 10 partial separation of the vent line 11 fitting from the tank. 12 A. Well, let's see here. Yes, that's 13 right. 14 Q. So what was done? 15 A. I know about this test. 16 MR. BRADLEY: Just note my 17 continuing objection. 18 THE WITNESS: This vehicle had a 19 prototype. This is a prototype build 20 configuration where they took a '93 and 21 turned it into a '96. 22 Q. Right. 23 A. And they had a vent line 24 attachment that was welded on, 25 ultrasonically welded to the tank and it</p>
Page 219	Page 221
<p>1 June 14, '11, but we're going to mark it 2 today. 3 MS. DE FILIPPO: Let's mark it. 4 5 (Chrysler Motors Safety Test 6 Vehicle Crash Test Request is received and 7 marked Banta-37 for identification.) 8 9 Q. Mr. Banta, please look at what's 10 been marked Banta-37. It's a 1995 11 testing, February 15th, '95. Correct? 12 A. February? 13 Q. February 15th testing, 5380. Is 14 that what you have? 15 A. Do you read that as February? 16 Q. Do you have 5380? 17 A. Yes. 18 Q. And when you look at that test, 19 that is a primary 1996 USA 301 validation. 20 Again, a validation test. Correct? 21 A. Right. 22 Q. It is a car that was retrofitted 23 to be a '96 ZJ for rear impact. Correct? 24 A. Yeah. It was a '93 vehicle. 25 Q. But it was retrofitted to look</p>	<p>1 was a prototype part that was inadequately 2 welded by the supplier of the prototype 3 parts. 4 Q. Where does it say that? 5 A. It doesn't, but I know about this 6 test. 7 Q. Wait a minute. So correct me if 8 I'm wrong. We're involved in litigation 9 with Chrysler and we want to know what's 10 going on with the testing and they provide 11 us with this document and there's nothing 12 indicated about what you're saying. Don't 13 you think that information should be with 14 this file? 15 MR. BRADLEY: Just note my 16 objection. This is beyond the scope of 17 his expert report. But you can answer. 18 THE WITNESS: No. The 19 investigation of the cause and the failure 20 is separate from this testing. This is 21 stored in a computer somewhere as 22 scanned-in documents. The investigation 23 is done by somebody with a file folder on 24 their desk. 25 Q. I understand that. But what I'm</p>



1 saying is in this litigation you know what  
 2 happened here.  
 3 A. I do. I know this test.  
 4 Q. And you're recalling something  
 5 that happened in 1995 with no  
 6 documentation whatsoever. What is it that  
 7 makes you remember in the year 2012 a  
 8 specific test that was done in 1995?  
 9 MR. BRADLEY: Just note my  
 10 objection.  
 11 THE WITNESS: Once in awhile I  
 12 remember these things. I remember this  
 13 one.  
 14 Q. Well, okay, I'm going to take  
 15 your word that you remember. But if I  
 16 want to verify --  
 17 A. Thank you.  
 18 Q. -- what you're saying and  
 19 understand more what really happened here,  
 20 I have nowhere to go to do that. Is that  
 21 correct?  
 22 MR. BRADLEY: Objection.  
 23 Q. You don't have any notes from  
 24 '95?  
 25 A. No, I don't.

1 They're gone. We still have these  
 2 documents. What we don't have are the  
 3 follow-up files about these tests. For  
 4 example, every vehicle I went to look at  
 5 on the rack at Impact Analysis I wrote  
 6 notes about, but I threw those away a long  
 7 time ago.  
 8 Q. If we're going to confine your  
 9 deposition today, I'm going to tell you  
 10 now there's 29 tests. What other of those  
 11 other 29 tests do you have an independent  
 12 recollection of apart from the record  
 13 itself?  
 14 MR. BRADLEY: Just note my  
 15 objection.  
 16 THE WITNESS: Some I remember and  
 17 some I don't. That last one I didn't  
 18 remember.  
 19 Q. I understand that.  
 20 A. This one I do.  
 21 Q. But you've looked at all these  
 22 tests, all these 29 tests?  
 23 A. For years.  
 24 Q. I know that. And what I'm trying  
 25 to find out is if I ask you to go through

1 Q. So I have nowhere to go to verify  
 2 what you say. Correct?  
 3 A. I don't know where you can go.  
 4 MR. BRADLEY: Just note my  
 5 objection.  
 6 THE WITNESS: I can just tell you  
 7 I remember this. I know it was a weld  
 8 failure on a prototype part.  
 9 Q. Why wouldn't the weld failure be  
 10 noted in the area where it says what went  
 11 on here? There's a specific area --  
 12 A. All these papers are done by the  
 13 testers.  
 14 Q. I understand.  
 15 A. All this follow-up stuff is done  
 16 by the responsible engineers.  
 17 Q. But the testers do say, you know,  
 18 resulting from partial separation of the  
 19 vent line fitting from the tank. Why  
 20 don't they say anything about bad weld or  
 21 problem with welding?  
 22 MR. BRADLEY: Note my objection.  
 23 THE WITNESS: They send the  
 24 vehicle and the test jacket -- they send  
 25 this and the vehicle back to Engineering.

1 these tests and report back what  
 2 information you have apart from what's in  
 3 the documents, could you do that?  
 4 MR. BRADLEY: Just note my  
 5 objection.  
 6 THE WITNESS: Only what I have in  
 7 my mind.  
 8 Q. That's what I'm saying. If I  
 9 say -- because your counsel is pressing us  
 10 for time right now, he's saying that he's  
 11 not going to let me go through these  
 12 tests, I want to know what information you  
 13 have apart from what I have.  
 14 MR. BRADLEY: Note my objection.  
 15 You can ask him questions about the tests.  
 16 THE WITNESS: Just what I have in  
 17 my head. I remember this one. And  
 18 probably one or two more maybe that I also  
 19 remember.  
 20 Q. Can you identify any --  
 21 A. But this was so odd I remember  
 22 this weld failure quite well.  
 23 Q. Can you identify any of the tests  
 24 as you sit here today by either number or  
 25 something about the test that makes you

Page 226	Page 228
<p>1 know you remember something happened?  2 A. No.  3 MR. BRADLEY: Just note my  4 objection.  5 THE WITNESS: But when I saw this  6 '93 production built Canadian ZJ, I  7 remembered this one. That triggered my  8 active memory.  9 Q. I'm going to make a request so I  10 can move forward that you advise me at  11 some later time which of these 29 tests  12 you have independent information about  13 apart from what's in the record.  14 A. I can do that. It will take  15 awhile but --  16 MR. BRADLEY: We'll take it under  17 advisement.  18 THE WITNESS: Let me write that  19 down.  20 Q. Thank you.  21 A. Which 29? Could you give me a  22 list?  23 Q. Yes, I can give you a list.  24 Mr. Banta, can you tell me what a  25 development -- when a test is marked</p>	<p>1 Correct?  2 MR. BRADLEY: Note my continuing  3 objection.  4 Q. Has to be acted on if there's a  5 problem?  6 A. Yes, has to be explained.  7 Q. Do you know if there was any test  8 that Chrysler had involving the Jeep ZJ  9 that was a passing test which had no tow  10 package, no bracket, no skid plate and a  11 compact spare?  12 MR. BRADLEY: Just note my  13 continuing objection.  14 THE WITNESS: No, I don't know.  15 Q. You don't?  16 A. No.  17 Q. So if I tell you as you sit here  18 today that there was no test that passed  19 of a Jeep without a tow package, without a  20 bracket of any kind, without a skid plate  21 and with a compact spare --  22 A. With a compact?  23 Q. With it. In other words, without  24 a full size spare, I'm telling you that  25 there's no test in those 29 tests that I</p>
Page 227	Page 229
<p>1 development test, what that means as  2 opposed to validation?  3 MR. BRADLEY: Just note my  4 continuing objection.  5 THE WITNESS: Development  6 typically means the tests that lead up to  7 full compliance. Validation is typically  8 after compliance.  9 Q. Is there any other designation  10 for tests?  11 A. I'll tell you the whole story.  12 There are development tests that lead to  13 compliance. So one may say development  14 and it will later be --  15 Q. Compliance?  16 A. Used as the basis for compliance.  17 And then validations are typically after  18 compliance. But I caution you that not  19 all validations are good vehicles. Some  20 are previously tested vehicles.  21 Q. So for purposes of, though,  22 acting on a problem that's found, no  23 matter what the test is, whether it's  24 development, validation or compliance,  25 whatever it is has to be acted on.</p>	<p>1 looked at that passed with those -- with  2 that configuration.  3 MR. BRADLEY: Just note my  4 objection.  5 Q. Are you indicating that you can  6 dispute that or that you can take issue  7 with my statement?  8 MR. BRADLEY: Just note my  9 objection.  10 THE WITNESS: I don't know.  11 Q. So you don't know if you can  12 agree with me. Correct?  13 A. I don't know one way or the  14 other. I have not looked at them in that  15 sense.  16 Q. Okay.  17 A. I've not gone into that kind of  18 parameter search.  19 Q. If I'm correct and there was no  20 test of a ZJ without a tow package,  21 without a bracket of any kind, without a  22 skid plate and without a full size spare  23 that passed in the 29 tests we were  24 provided, would you say that that vehicle  25 then in that condition is the worst case</p>

Page 230	Page 232
<p>1 that wasn't tested and passed?  2 MR. BRADLEY: Just note my  3 objection. This is beyond the scope.  4 THE WITNESS: I don't expect that  5 any of those conditions would qualify as a  6 worst case. We don't need trailer tow, a  7 bracket or a skid plate or a spare tire to  8 make the vehicle pass. There is no -- in  9 the Jeep there is no good case or bad  10 case.  11 Q. Well, I'm stripping that vehicle  12 down from having any structural  13 reenforcement when I eliminate the tow  14 package because wouldn't you agree the  15 bracket that we're talking about that  16 reinforced this Jeep was actually one half  17 of the tow package?  18 MR. BRADLEY: Note my objection to  19 structural reenforcement.  20 THE WITNESS: It was a left side  21 of the trailer tow hitch.  22 Q. And that gave more --  23 A. That was in '97 but not in this  24 vehicle.  25 Q. I understand that. But I'm</p>	<p>1 Q. Every car failed so long as they  2 were in that configuration.  3 MR. BRADLEY: Just note my  4 objection. He hasn't seen all the tests.  5 MS. DE FILIPPO: Yes, he has.  6 THE WITNESS: If that's the case,  7 it's mere happenstance. It's not because  8 of anything that the trailer tow, the  9 bracket, skid plate or the spare  10 contributed to.  11 Q. Contributed to --  12 A. There's not a cause and effect  13 relationship there.  14 Q. Well, if a car in the condition  15 that I've just told you, such as the Susan  16 Kline vehicle, did not pass and did fail  17 then wouldn't you say that the Susan Kline  18 vehicle did not pass 301?  19 MR. BRADLEY: Just note my  20 objection.  21 THE WITNESS: No. What I would  22 say is that we have to understand why  23 those failures occurred and determine  24 whether or not the reason for the failure  25 was the absence of a trailer tow or the</p>
Page 231	Page 233
<p>1 saying that gave more structural rigidity  2 to that vehicle. Correct?  3 MR. BRADLEY: Objection.  4 THE WITNESS: To the '97, yes.  5 Q. So I'm taking away the bracket of  6 any kind on my vehicle, no tow package  7 giving any extra structural rigidity with  8 the tow, both sides of the tow bar.  9 A. I understand what you're saying.  10 Q. No skid plate and no full size  11 spare standing up on its side in the back  12 of the car. And I am saying that there  13 was never a passing test when a vehicle  14 was not equipped with some of these  15 things.  16 MR. BRADLEY: Object.  17 THE WITNESS: I don't know.  18 Q. I'm telling you to assume that.  19 A. Well, were there failing tests?  20 Q. Yes.  21 A. There were?  22 Q. Oh, sure.  23 A. How many?  24 Q. Probably all of them.  25 MR. BRADLEY: Objection.</p>	<p>1 absence of a skid plate or some other  2 tire. And I don't think we've ever made  3 that determination.  4 Q. Well --  5 A. In fact, I know we haven't.  6 Q. You're asking to make a  7 determination about absence of things when  8 I'm saying to you that so long as all of  9 those things were missing, the car didn't  10 pass.  11 A. Well, that may be true but it's  12 not necessarily because of that. You  13 know, it's like the sunshine on the  14 sidewalks in New York causing heart  15 attacks. I don't mean sunshine causes  16 heart attack. The same thing here. It  17 doesn't mean these things caused those  18 vehicles to fail.  19 Q. No, to pass.  20 A. Well, the absence of these things  21 didn't cause those failures that you're  22 talking about.  23 Q. Are we ever going to know the  24 cause of the failures then if we can't get  25 to those documents?</p>

Page 234	Page 236
<p>1 MR. BRADLEY: Just note my 2 objection. 3 THE WITNESS: I don't think the 4 documents exist anymore. 5 Q. So can you point to me where a 6 Susan Kline vehicle passed is what my 7 question is. 8 MR. BRADLEY: Just note my 9 objection. 10 THE WITNESS: I have not 11 undertaken that kind of study. 12 Q. And my question to you is, and 13 you can advise me at any time you want, 14 whether or not a Susan Kline vehicle ever 15 passed. 16 MR. BRADLEY: Just note my 17 objection as to Susan Kline vehicle. 18 THE WITNESS: Well, of course it 19 did. We have the compliance reports. 20 Q. But your compliance reports that 21 you're basing compliance on prior to the 22 Susan Kline vehicle leaving the 23 manufacturer is based on two tests, 4561 24 and 4472. Correct? 25 MR. BRADLEY: Just note my</p>	<p>1 MS. DE FILIPPO: Yes, it is. 2 "QUESTION: Without specific 3 reference to 1995 in general in 4 engineering from an engineering 5 standpoint, is there a difference in 6 reaction of a vehicle to the 301 testing 7 whether or not it has a compact or a full 8 size spare? 9 ANSWER: There would be a 10 difference in that the vehicle weight 11 would be different and we balance the 12 vehicle to represent the production 13 weight. Whether it becomes part of the 14 test and influencing the test, if you were 15 to ask me that today the only thing I can 16 tell you is it would be something we would 17 look at." 18 MR. BRADLEY: Just note my 19 objection. 20 THE WITNESS: He didn't say that 21 the spare tire has any impact feature. He 22 said it had to do with weight. Maybe one 23 weighs 30 pounds, one weighs 20 pounds. 24 Q. Isn't weight important in terms 25 of impact?</p>
Page 235	Page 237
<p>1 objection. 2 THE WITNESS: I don't know. 3 Q. Well, I'm going to tell you it 4 was. 5 A. Okay. 6 Q. And 4561 has in it a full size 7 spare and non production rear prop shaft 8 that's one inch short. 9 A. That makes no difference. 10 Neither one of those makes no difference. 11 Q. You say it makes no difference 12 and that's your opinion as a fire guy. 13 But if I tell you that engineering 14 experts, design experts and testing 15 experts believe that there is a difference 16 in how the tests react with a compact or 17 full size spare and that -- would you 18 disagree with them? 19 A. Yes. 20 MR. BRADLEY: Note my objection. 21 Q. So I'm going to read to you Mr. 22 Zyluk's deposition, on page 166 where he 23 says -- 24 MR. BRADLEY: Is this from this 25 case?</p>	<p>1 A. Not at those differences. 2 Q. Okay. That's your opinion. 3 Correct? 4 A. Well -- 5 Q. But this is the design or testing 6 engineer. 7 A. But he didn't say that a full 8 size spare mitigates or changes the VC 9 test result. 10 Q. That wasn't the question. The 11 question was whether or not there's a 12 difference in the testing when you have a 13 full size or a compact spare. 14 MR. BRADLEY: Just note my 15 continuing objection. 16 THE WITNESS: But the difference 17 didn't rise to the level of causing tests 18 to pass or fail. 19 Q. Well, we don't know that, do we? 20 He didn't say. He didn't say it didn't. 21 He said he looked at it. He said we look 22 at it and we pay attention to it. So it 23 must be significant, otherwise wouldn't he 24 have said what you said, it doesn't make 25 any difference?</p>

1 MR. BRADLEY: Just note my  
2 objection because you're referring to a  
3 deposition that we haven't established Mr.  
4 Banta has even read.

5 MS. DE FILIPPO: It doesn't  
6 matter.

7 THE WITNESS: He was not asked  
8 the question if the spare tire contributes  
9 to a pass or failure.

10 Q. Did Chrysler make any design  
11 considerations in the ZJ to lessen the  
12 potential for under-ride?

13 MR. BRADLEY: Just note my  
14 objection. It's beyond the scope of his  
15 expert report. You can answer.

16 THE WITNESS: I'm sorry, I didn't  
17 hear the question.

18 Q. Did Chrysler make any design  
19 considerations in the ZJ to lessen the  
20 potential for under-ride?

21 A. Chrysler designed the vehicle to  
22 have the box structure envelope around the  
23 fuel tank for load transfer and made  
24 energy absorbing body structures to work  
25 in the test requirements for 301 and in

1 component for under-ride management.

2 Q. And if a fuel tank hangs below a  
3 rigid structure does it become more of a  
4 target for an under-riding vehicle?

5 MR. BRADLEY: Just note my  
6 objection to form.

7 THE WITNESS: It can, yes.

8 Q. When was the first time you ever  
9 saw the Baker memo?

10 MR. BRADLEY: Just note my  
11 objection.

12 THE WITNESS: Oh, goodness. 1984  
13 or 5 maybe.

14 Q. And you already testified I  
15 believe that a sport utility is a  
16 multipurpose vehicle. Correct?

17 A. Yes.

18 Q. And you never spoke to any of the  
19 people listed on that Baker memo including  
20 Sinclair or Baker regarding the memo.  
21 Correct?

22 MR. BRADLEY: Just note my  
23 objection.

24 THE WITNESS: I didn't know about  
25 the memo until years after it was

1 the real world. But there is not a  
2 specific device or component added just to  
3 mitigate under-ride.

4 Q. Just so that we're clear on that,  
5 Mr. Banta, you had your video taped  
6 deposition taken July 31st, 2007 in the  
7 case of Jarmon versus Davidson and Daimler  
8 Chrysler. Right?

9 A. Probably, yeah.

10 Q. And I'm reading from your  
11 deposition.

12 "QUESTION: Were there any design  
13 considerations for structures or other  
14 components for the ZJ to lessen the  
15 potential for under-ride?"

16 And your answer was: "No, we  
17 depend on managing the energy at the  
18 impact."

19 MR. BRADLEY: Just note my  
20 objection.

21 THE WITNESS: That's essentially  
22 what I just said.

23 Q. So you agree with your prior  
24 answer then?

25 A. Yeah. There's no specific

1 published. Wasn't it published in the  
2 late seventies? Seventy-nine maybe?

3 Q. You were there in the seventies,  
4 weren't you?

5 A. Oh, yeah, I was there. In fact,  
6 at the time I learned of the memo Baker  
7 was working for me.

8 Q. You would agree that rear end  
9 hits are foreseeable events in the real  
10 world?

11 A. Oh, yes.

12 Q. Would you also agree that on  
13 highway driving so is a chain collision a  
14 foreseeable event in the real world?

15 MR. BRADLEY: Note my objection.

16 THE WITNESS: Yes.

17 Q. Do you agree that a motor vehicle  
18 should protect passengers from enhanced  
19 injuries after a collision?

20 A. Yes.

21 Q. Do you agree with the General  
22 Motors stipulation in open court about the  
23 protection of passengers? And I'll read it  
24 to you.

25 MR. BRADLEY: Just note my

Page 242	Page 244
<p>1 objection to this line of questioning.  2 THE WITNESS: You mean the IV  3 thing? You're talking about the Mosley  4 stipulation?  5 Q. Yeah. I'll read to you what the  6 stipulation was. This was in court in the  7 Southern District of Mississippi in the  8 year 2000. And it says, "General Motors  9 agrees that it was a written goal of  10 General Motors that the recommended level  11 for fuel system performance is given for  12 front, side and rear impacts and rollover  13 premised on the concept that occupants  14 involved in collisions which produced  15 occupant impact forces below the threshold  16 level of fatality should be free of the  17 hazard of post collision fuel-fed fires."  18 Do you agree with that?  19 A. No.  20 MR. BRADLEY: Just note my  21 objection.  22 Q. You don't?  23 A. No.  24 Q. So do you believe that Chrysler  25 also disagrees with GM's stipulation as</p>	<p>1 said that the litigation costs this much  2 and we can spend this much and here's our  3 threshold, the threshold you just  4 described. And I think that was the Frye  5 presentation.  6 Q. Okay. Do you have a copy of  7 that?  8 A. I think I have it somewhere.  9 Q. Can you give that to me also?  10 I'll exchange my Fischbach for your Frye.  11 A. I think you have it.  12 Q. You think I have it?  13 A. I do.  14 Q. I don't have it.  15 A. You don't have it?  16 Q. No.  17 A. I'll look for it. If I have it,  18 I'll give it to you.  19 Q. You can send it to me  20 electronically?  21 MR. BRADLEY: We'll take it under  22 advisement.  23 Q. Were you involved in the case of  24 Smith versus Chrysler in Florida?  25 A. Smith?</p>
Page 243	Page 245
<p>1 voiced in open court?  2 A. Yes.  3 MR. BRADLEY: Just note my  4 objection.  5 Q. Were you aware of it, though?  6 A. Yes.  7 Q. You're aware of this stipulation.  8 Right?  9 A. Yes.  10 Q. How long have you been aware of  11 the GM position?  12 A. I don't remember. A long time.  13 Q. At least since 2000, and probably  14 before. Right?  15 A. A long time.  16 Q. Do you know where the stipulation  17 came from, engineering-wise?  18 MR. BRADLEY: Just note my  19 objection.  20 THE WITNESS: I think it was as a  21 result of a presentation that was made by  22 an employee of the General Motors Tech  23 Center where he essentially made that  24 statement in the letter along with some  25 supporting financial costs data where he</p>	<p>1 Q. Smith.  2 A. Do you have a first name?  3 Q. Well, it was a Florida case. Do  4 you recall that?  5 A. Plaintiff attorney? Do you  6 remember him?  7 Q. No, I don't have that offhand.  8 It's back in my office. So off the top of  9 your head --  10 A. Was it Sandra Smith?  11 Q. I don't know.  12 A. Ted Leopold?  13 Q. Yes.  14 A. It's coming back.  15 Q. Were you involved in that?  16 A. I think so.  17 Q. Is that a low speed collision?  18 A. That was a freak collision.  19 Q. Why do you say freak?  20 MR. BRADLEY: Note my objection.  21 THE WITNESS: I don't remember  22 the exact details.  23 Q. Was it a stop light and a rear  24 end hit, a very low speed?  25 A. I think so.</p>

1 Q. Very minor impact?  
 2 A. Well --  
 3 Q. Why do you say it's freak?  
 4 A. It was very unusual.  
 5 Q. Why?  
 6 A. It just didn't fit the pattern of  
 7 most. It seemed to me that when I  
 8 examined the Smith vehicle I was surprised  
 9 that there was a lesser proportion of  
 10 damage than I would have expected.  
 11 Q. Right. The crush was negligible,  
 12 wouldn't you say?  
 13 A. There was not as much crush as I  
 14 would have expected from a vehicle caught  
 15 on fire.  
 16 MR. BRADLEY: Objection.  
 17 Q. Did you ever come to a conclusion  
 18 as to what caused the fire in that case?  
 19 MR. BRADLEY: Just note my  
 20 objection.  
 21 THE WITNESS: Obviously, the  
 22 crash caused the fire. The impact caused  
 23 the fire.  
 24 Q. Did the tank rupture or did the  
 25 fuel filler hoses pull out of the tank?

1 A. I did not. That's correct.  
 2 Q. Did you see a picture of the  
 3 vehicle in that case?  
 4 A. I may have. I don't have a  
 5 mental image of it but I may have.  
 6 Something tells me the Austin case may  
 7 have been more than just a vehicle impact.  
 8 Maybe it hit a utility pole or something  
 9 also. There was some marking and sparking  
 10 from the electrical wires for a  
 11 streetlight.  
 12 Q. Mr. Banta, did you review the two  
 13 tests that the federal government did with  
 14 the Taurus impacting the Ford Explorer at  
 15 70 and 75 miles an hour?  
 16 MR. BRADLEY: Note my objection.  
 17 THE WITNESS: Yes.  
 18 Q. Did you note there was no fuel  
 19 spill or breach of the tank in those two  
 20 tests?  
 21 MR. BRADLEY: Just note my  
 22 objection.  
 23 Q. I know those two tests were not  
 24 initially to -- the first one was not  
 25 initially to inspect fuel spill. Did you

1 MR. BRADLEY: Just note my  
 2 objection. It's beyond his expert report.  
 3 THE WITNESS: I don't remember.  
 4 I don't remember that kind of detail.  
 5 Q. Okay. You issued a report in  
 6 that case, though?  
 7 A. I don't remember that either.  
 8 Q. You know you saw the vehicle,  
 9 though?  
 10 A. I have a pretty high confidence  
 11 level that I saw the vehicle.  
 12 Q. How about the Austin Sierra case,  
 13 were you in that?  
 14 A. Yes.  
 15 Q. And you issued a report in that?  
 16 A. No, wait a minute. I was in the  
 17 Austin Sierra case, I did not see the  
 18 vehicle. That was in New York?  
 19 Q. Yes.  
 20 A. No, I did not see the vehicle.  
 21 Q. You didn't see the vehicle in  
 22 that case?  
 23 A. I'm sorry?  
 24 Q. You never saw the vehicle in that  
 25 case?

1 know that there was no fuel spill in those  
 2 tests?  
 3 A. I don't remember anything  
 4 significant about them, but I think you're  
 5 right.  
 6 Q. And as a fire person and as a  
 7 person who just is involved in this  
 8 particular case, did you do any further  
 9 investigation into those tests to  
 10 determine anything about fuel system  
 11 integrity?  
 12 A. No.  
 13 Q. In the 50-mile per hour CARCO  
 14 test, you looked at that test. Right?  
 15 A. Yes.  
 16 Q. That test there was a skid plate.  
 17 Correct?  
 18 A. I don't remember.  
 19 Q. Do you remember if the tank  
 20 breached like the 40-mile an hour one or  
 21 if it was a problem with the fuel filler  
 22 hose pulling from the tank because of the  
 23 relative movement?  
 24 MR. BRADLEY: Just note my  
 25 objection.

1 Q. You you did look at the films?  
 2 A. Oh, yeah.  
 3 Q. And if you re-looked at the films  
 4 you could then again indicate what  
 5 happened in those cases. Correct?  
 6 A. I'll try.  
 7 Q. Well, you'll give your opinion as  
 8 to what you think happened with respect to  
 9 that? Why was a bracket added to the '97  
 10 car as far as you're concerned?  
 11 MR. BRADLEY: Just note my  
 12 objection.  
 13 THE WITNESS: The 97 ZJ had a new  
 14 fuel tank. It was a co-extruded multi  
 15 level tank, multilayer tank that was also  
 16 reshaped and some believed that it would  
 17 require a new certification test. So it  
 18 was tested again and again and it would  
 19 not pass. So impact performance people  
 20 determined that it needed a reinforcement  
 21 on that left rail and when they put the  
 22 reinforcement on, it passed easily.  
 23 Q. Let me stop you right there. So  
 24 what was the -- tell me the mechanism that  
 25 allowed a reinforcing bracket to make it

1 Q. Behavior of the movement of the  
 2 rail vis-à-vis the tank. Correct?  
 3 A. Yes.  
 4 Q. That's really the rigidity we're  
 5 talking about.  
 6 MR. BRADLEY: Note my objection.  
 7 THE WITNESS: Yes.  
 8 Q. As you said before, it's for  
 9 those things to move together in a crash.  
 10 A. I think what it does, when you  
 11 put that bracket on it makes this beam,  
 12 the distance of the bracket, stronger and  
 13 it changes the bend points, you know,  
 14 where it deforms.  
 15 Q. Right.  
 16 A. It moves the deformation away  
 17 from wherever it was before.  
 18 Q. And you're hitting again with a  
 19 flat plywood board coming at you,  
 20 nondeformable flat moving barrier. So  
 21 you're not hitting sideways or under-ride.  
 22 It's just a flat out hit in the back so  
 23 that that bracket then strengthened that  
 24 rail from that flat hit?  
 25 MR. BRADLEY: Just note my

1 so that the tank didn't fail.  
 2 MR. BRADLEY: Note my objection.  
 3 THE WITNESS: There was a new  
 4 tank. The tank was reshaped.  
 5 Q. I understand.  
 6 A. So the old compliance test wasn't  
 7 valid for the new tank.  
 8 Q. But what about the bracket  
 9 protected the tank?  
 10 MR. BRADLEY: Just note my  
 11 objection.  
 12 THE WITNESS: The thought is that  
 13 the bracket gave additional strength to  
 14 the left frame rail resulting in a change  
 15 in the way the left frame rail distorted  
 16 in the impact. Therefore, passing the 301  
 17 test.  
 18 Q. So it gave it more structural  
 19 rigidity in the back?  
 20 A. That's the belief.  
 21 Q. And the 301 test, you're hitting  
 22 with a barrier that's flat. Right?  
 23 A. Not necessarily structural  
 24 rigidity but it changed the behavior of  
 25 the rail during the crush.

1 objection.  
 2 THE WITNESS: The bracket  
 3 obviously strengthened the rail but I  
 4 think the design intent there was to move  
 5 the bend points.  
 6 Q. You agree with the fact that  
 7 Chrysler never did any vehicle-to-vehicle  
 8 testing?  
 9 A. That's right.  
 10 MR. BRADLEY: Just note my  
 11 objection.  
 12 Q. Do you agree that in some areas  
 13 the government does not have the resources  
 14 to cover everything that-- every possible  
 15 safety issue that should be covered?  
 16 MR. BRADLEY: Just note my  
 17 objection.  
 18 THE WITNESS: Yeah. They hit the  
 19 obvious ones.  
 20 Q. And there are some areas --  
 21 A. Some limitations the  
 22 manufacturers have.  
 23 Q. Well, the government resources  
 24 are a little different since they're tax  
 25 based, wouldn't you say?



Page 254	Page 256
1 A. Yes.	1 objection.
2 Q. And they can't pass on the costs 3 by selling a vehicle.	2 THE WITNESS: I think between the 3 Blazer and Explorer they were both strong 4 competitors. Both sold more than the 5 Grand Cherokee.
4 A. And they depend on the auto 5 manufacturers to do the testing.	6 Q. With the exception of the ZJ and 7 the XJ or the old Ford Pinto, can you give 8 me an example of a very minor rear end hit 9 in a vehicle which resulted in a fuel tank 10 fire?
6 Q. That's right. And in fact, they 7 don't even have or did not have an FMVSS 8 for something like steering. Correct?	11 MR. BRADLEY: Just note my 12 objection as to minor and comparing to 13 other vehicles.
9 MR. BRADLEY: Note my objection.	14 THE WITNESS: Can you read that 15 back?
10 Q. No FMVSS that covered issues 11 regarding steering?	16 (Whereupon the previous question 17 is read back.)
12 MR. BRADLEY: Note my objection.	18 THE WITNESS: Not limited to the 19 rear end.
13 THE WITNESS: No FMVSS for fire.	20 Q. Would you also agree that the 21 tank in the ZJ could have been located 22 mid-ship?
14 Q. Right, per se. Per se.	23 MR. BRADLEY: Note my objection.
15 A. Yeah. There's the end direct 16 301, 302, 303, 304.	24 A. It could with a significant 25 degree of tear-off. It could not in the
17 Q. But in steering safety or 18 steering column safety there's no FMVSS at 19 all?	
20 MR. BRADLEY: Just note my 21 objection.	
22 THE WITNESS: I think there is 23 for columns.	
24 Q. But not for the actual steering 25 mechanism?	
Page 255	Page 257
1 A. I think you're correct.	1 ZJ or WJ be located mid-ship but for a 2 pretty significant tear-up. Frame rails 3 would have to move, the body would have to 4 change. It could be done but it would not 5 be the ZJ anymore. That's essentially what 6 we did on the WK, we extended the wheel 7 base and moved the frame rails, made room 8 for it.
2 Q. Would you agree that NHTSA does 3 not allow compliance based on the test of 4 a vehicle if the parts are different than 5 what will be the production vehicle?	9 Q. Why did you do that?
6 A. That's right.	10 MR. BRADLEY: Note my objection.
7 MR. BRADLEY: Just note my 8 objection.	11 THE WITNESS: Why did we move it?
9 Q. Do you agree that Chrysler was 10 not aware of any problem locating the tank 11 in the rear and, therefore, no problems of 12 location were ever taken into 13 consideration?	12 Q. Yes.
14 MR. BRADLEY: Just note my 15 objection.	14 A. We wanted a more contemporary 15 location and we needed more real estate 16 underneath the vehicle for a spare tire.
16 THE WITNESS: Yes.	16 Q. But what's more contemporary? 17 What does that mean?
17 Q. Do you agree that the number one 18 competitor of the ZJ back in the nineties 19 was the Ford Explorer?	18 A. Oh, the general trend in the auto 19 industry is to try to make things uniform 20 in their production facilities. With the 21 exception of the Jeep line everything else 22 had moved up to middle or saddle tanks. 23 That seemed to be the contemporary way to 24 build vehicles.
20 MR. BRADLEY: Note my objection.	25 Q. Do you know if anyone, Chrysler
21 THE WITNESS: One of the 22 competitors.	
23 Q. Do you agree with the number one 24 competitor?	
25 MR. BRADLEY: Note my continuing	

Page 258	Page 260
<p>1 or anyone, did any kind of high speed 2 vehicle-to-vehicle crash testing to 3 determine the effectiveness of the skid 4 plate or lack of effectiveness in the ZJ? 5 A. No. 6 MR. BRADLEY: Note my objection. 7 Q. Does FMVSS 301 require the 8 manufacturer to do side impact testing? 9 A. Yes. 10 Q. 301 does? 11 A. Yes. 12 Q. So I want to talk to you about 13 the Dodge Durango. That had a mid ship 14 tank. Correct? 15 A. It did, yes. 16 Q. And it did not hang below the 17 frame rails, however. It was tucked up 18 into, as high as the frame rails. Is that 19 accurate? 20 MR. BRADLEY: Just note my 21 objection to this line of questioning. 22 THE WITNESS: I'm not sure of 23 that. 24 Q. You're not sure if it did or not? 25 A. I'm not sure, no.</p>	<p>1 Q. What was it in the year 1990? 2 MR. BRADLEY: Just note my 3 objection. 4 THE WITNESS: Twenty. 5 Q. Twenty into the side with a 6 nondeformable flat barrier? 7 A. Yes. Essentially it's the same 8 kind of barrier to hit with the rear, just 9 different weight. 10 Q. I want to go back to the tests. 11 We talked about 5208 and 5380. Correct? 12 Do you remember? Well, the record will 13 bear me out. 14 The next test I want you to look 15 at is 5441. 16 MR. BRADLEY: Are you going to 17 mark this? Do you want the cover page? 18 MS. DE FILIPPO: Yes. Just mark 19 it. 20 21 (Safety Test Vehicle Crash Test 22 Letter is received and marked Banta-38 for 23 identification.) 24 25 Q. By the way, do you disagree --</p>
Page 259	Page 261
<p>1 Q. I just want to go back -- 2 A. We have 15 minutes and I need a 3 cup of coffee. 4 Q. When you said 301 required side 5 impact testing, what were you referring 6 to? What has to be tested regarding side 7 impact? 8 A. The side -- 301 requires frontal, 9 side and rear, all three, and followed by 10 rollover in each case. 11 Q. What's the side impact testing? 12 A. The side impact testing at that 13 time was a moving barrier, moving rigid 14 barrier similar to the rear. 15 Q. Was that to test fuel system 16 integrity? 17 A. Yes. Front, side and rear are 18 the three elements of 301. In the case of 19 front, the vehicle goes into a fixed 20 barrier. In the case of the side and the 21 rear, it's a moving rigid barrier end of 22 the vehicle. 23 Q. What's the speed on the side 24 impact? 25 A. The old speed was 20.</p>	<p>1 have you read the Teets deposition in this 2 case? 3 A. Yes. 4 Q. Do you disagree with Mr. Teets 5 when he indicates that he met you in the 6 nineties when he was at Jeep and Truck 7 Engineering and that you didn't work in 8 design of the fuel tanks on the Jeep or on 9 the testing? 10 MR. BRADLEY: Just note my 11 objection. 12 THE WITNESS: No, that's correct. 13 Q. You agree with him? 14 A. Um-hum. 15 Q. And he said -- 16 A. Wait a minute. I met him before 17 the nineties. 18 Q. He said he met you in the mid 19 nineties. 20 A. No. I met him in the eighties 21 when he first started at Chrysler. He 22 just doesn't remember. 23 Q. So you disagree with him on that? 24 A. Yes. 25 Q. He said Bob was in the safety</p>

Page 262	Page 264
<p>1 office and we gave information to him. If 2 something came from the government that 3 you needed information for, they, meaning 4 Teets and his office, gave information to 5 you. Is that accurate? 6 A. Yeah, that's true. 7 MR. BRADLEY: Just note my 8 objection. 9 THE WITNESS: If we were doing an 10 investigation on, say, one of these EAs or 11 PEs, I would go to Mike Teets or his 12 contemporaries and say I need the answer 13 to this issue or what do you know about 14 this. 15 Q. So he's accurate in that? 16 A. Yeah. 17 Q. Do you agree with Mr. Castaing 18 that it's feasible to test for under-ride 19 and it was back in the nineties and late 20 eighties, early nineties? 21 MR. BRADLEY: Just note my 22 objection. 23 THE WITNESS: I think it's 24 feasible but I think it would be extremely 25 difficult. Under-ride doesn't have a</p>	<p>1 MR. BRADLEY: Just note my 2 objection. 3 THE WITNESS: Read that again. 4 I'm sorry. 5 Q. Stabilizing the architecture -- 6 A. Do that again. 7 Q. The major function of the rear 8 crossmember is to stabilize the 9 architecture of the crash and a little bit 10 of energy absorption? 11 A. Yes, not a lot of energy 12 absorption. Generally what the goal is is 13 to get that box structure around the tank 14 to move as a unit so you don't want to 15 deform it too much. 16 Q. When you look at 5441, it's a 17 validation test. 18 A. Yes. 19 Q. Done on 4-12-95. It is a 20 production, 1994 production build, Grand 21 Cherokee. 22 A. Yes, to represent '96 production. 23 Q. Okay. It's a failed test? 24 A. So it had a '96 fuel tank. It 25 had '96 steel fuel rails.</p>
Page 263	Page 265
<p>1 classic definition. 2 Q. But he said it was feasible to 3 test for under-ride. Do you agree with 4 that? 5 MR. BRADLEY: Just note my 6 objection. 7 THE WITNESS: I think it would be 8 difficult. 9 Q. I understand. But we're talking 10 feasible. 11 A. No. I think it's difficult. 12 Q. So you disagree with Mr. 13 Castaing? 14 A. Yes. 15 MR. BRADLEY: Note my objection. 16 THE WITNESS: My characterization 17 would be it would be very difficult. 18 Q. But it could be done? 19 A. I'm sure given enough resources 20 it could be done. 21 Q. Do you agree with Mr. Zylik that 22 the major function of the rear crossmember 23 was in stabilizing the architecture in 24 crash and a little bit of energy 25 absorption?</p>	<p>1 Q. Right. 2 A. And a '96 rear lift gate and a 3 '96 reinforced bumper bar, fascia and 4 brackets. And it leaked. 5 Q. It's a failed test. Right? 6 A. It failed in the rollover. 7 Q. Do you know why it failed? 8 MR. BRADLEY: Just note my 9 objection. 10 THE WITNESS: No. 11 Q. You don't know why? 12 A. I do not. 13 Q. Do you know what was done as a 14 result? 15 A. I do not. 16 MR. BRADLEY: Note my objection. 17 Q. So -- 18 A. I assume this file doesn't tell 19 us why it failed. 20 Q. And you don't -- nothing about it 21 jars your memory? 22 A. I don't remember this. 23 Q. As to what was done? 24 A. No. 25 Q. Okay. 5681. And while she's</p>

Page 266	Page 268
<p>1 looking for that I want to show you what's 2 been marked at the Ditlow deposition. 3 It's a September first letter of Mr. 4 Ditlow to Chrysler and it is Exhibit 7. 5 And you see I was looking for the pictures 6 and it happens to be here. So I'm showing 7 you a picture of the Sierra. 8 MR. BRADLEY: Just note my 9 objection. 10 Q. That's the Sierra. 11 A. I've never seen that before. 12 Q. Did you ever see that picture 13 before? 14 A. No. 15 Q. But you were involved in that 16 case? 17 A. I did the discovery in that case 18 and I was the 30 V6 PMK witness. 19 Q. What does that mean? 20 A. Person most knowledgeable for 21 discovery purposes. 22 Q. For Chrysler? 23 A. Yeah. 24 Q. But you were not the fire cause 25 and origin guy?</p>	<p>1 2 Q. Look at 5681. That's a 3 development test, '97? 4 A. Yes, a '97 development. 5 Q. Okay. That was also a failed 6 test? 7 MR. BRADLEY: Just note my 8 objection. 9 THE WITNESS: '96 production ZJ 10 modified to represent '97. 11 MR. BRADLEY: She asked if it was 12 a failed test. 13 THE WITNESS: I'm trying to get 14 there. Fuel leak at ... 15 MR. BRADLEY: You can't look at 16 me. 17 THE WITNESS: There's a notation 18 here. Do you see this page? It says "fuel 19 leak at." It's written probably in pencil 20 and I cannot read beyond that. So I don't 21 know what happened there. 22 Q. That's all we have. That's 5681. 23 Correct? 24 A. Yes. 25 Q. No, I don't even have that</p>
Page 267	Page 269
<p>1 A. I don't think we got that far. 2 Q. The case was settled as far as 3 you know? 4 MR. BRADLEY: Just note my 5 objection. 6 THE WITNESS: I don't think it 7 was settled. 8 Q. Is it still pending? 9 A. I think it was dismissed in the 10 bankruptcy action. I think. I'm not sure 11 of that but I think that's the case. 12 Q. All right. That's the same 13 Jarmon vehicle? That's the vehicle you 14 saw? 15 MR. BRADLEY: Just let the record 16 reflect page four of the Ditlow exhibit. 17 Just note my objection. 18 Q. You saw that vehicle in Jarmon. 19 Correct? 20 A. I did, yes. 21 Q. Okay. 22 23 (Safety Test Vehicle Crash Test 24 Letter is received and marked Banta-39 for 25 identification.)</p>	<p>1 portion of it. Between 1993 -- well, 2 actually from 1992 until 1994, let's just 3 say between May of 1992 until July of 1994 4 every test on the list was a failure. 5 MR. BRADLEY: Just note my 6 objection. 7 THE WITNESS: 5/92 till -- 8 Q. 5/92 till July of '94. 9 A. How many? 10 Q. Six tests. And then the 11 following test on July 31st was 5210, it 12 was a validation test, 1995. It was a 13 pass and the vehicle had a skid plate on 14 it and full size spare. 15 A. I'm sorry? 16 Q. A skid plate and a full size 17 spare and it passed. Let me ask you one 18 other question, Mr. Banta. I have looked 19 through these tests at length and I know 20 I've asked you to do that for me also and 21 I will list the tests for you. Actually, 22 I'll give you the numbers before we leave 23 today. But when testing vehicles like 24 this and there is no -- not every test 25 tells you what is on the vehicle, for</p>

Page 270

1 instance, I'm just going to give you an  
 2 example, I might know that a skid plate is  
 3 on a vehicle or I might know it's not  
 4 because it's either listed no or yes and  
 5 sometimes it's silent. What am I supposed  
 6 to take from that, if you know?  
 7 MR. BRADLEY: Just note my  
 8 objection.  
 9 THE WITNESS: If you want to know  
 10 that kind of detail and it's not on the  
 11 test report then you would have to look at  
 12 the photos or the video.  
 13 Q. And if it's not indicated in the  
 14 photos or video, I can't tell from the  
 15 photo or video --  
 16 A. Oh, you can.  
 17 Q. What if I can't?  
 18 MR. BRADLEY: Just note my  
 19 objection.  
 20 THE WITNESS: A skid plate? Sure  
 21 you can.  
 22 Q. Probably a skid plate I could.  
 23 But, for instance, on the full size spare  
 24 or -- I don't know if on every test I  
 25 could see a bracket. You think I can on

Page 271

1 every test see a bracket?  
 2 A. Yes.  
 3 MR. BRADLEY: Just note my  
 4 objection.  
 5 Q. And I can see a trailer hitch?  
 6 A. Yes.  
 7 MR. BRADLEY: Just note my  
 8 objection.  
 9 THE WITNESS: You can see the  
 10 spare, the trailer hitch, the bracket, the  
 11 skid plate.  
 12 Q. What about the tests that have no  
 13 videos and no photos? There are tests with  
 14 no photos. Then what do I do?  
 15 MR. BRADLEY: Just note my  
 16 objection.  
 17 THE WITNESS: If there are no  
 18 photos you have to look at the video.  
 19 Q. If there's no photos and no  
 20 videos?  
 21 MR. BRADLEY: Objection.  
 22 THE WITNESS: I don't know what  
 23 to do.  
 24 Q. Is there another place is what  
 25 I'm asking you.

Page 272

1 A. No.  
 2 Q. Nothing?  
 3 A. No. The photos -- this test  
 4 jacket, photos and the video.  
 5 MR. BRADLEY: It's 5 o'clock.  
 6 Q. There were six rear impact tests  
 7 that all resulted in test failure and no  
 8 passing tests over a two-year period. Is  
 9 that significant in your mind?  
 10 MR. BRADLEY: Just note my  
 11 objection.  
 12 THE WITNESS: It's of interest.  
 13 It's worth looking into.  
 14 MR. BRADLEY: It's 5 o'clock.  
 15 THE WITNESS: I can't draw a  
 16 conclusion based on that but it's worth  
 17 studying further.  
 18 MS. DE FILIPPO: Well, I do have  
 19 more questions and, for the record, I'm  
 20 just going to indicate that, you know, we  
 21 can deal with this later and you might be  
 22 back.  
 23 \* \* \*  
 24  
 25 (Deposition concluded. Time

Page 273

1 noted 5:05 p.m.)  
 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 CERTIFICATE

2 I, SUSAN DE PALMA, a Notary  
3 Public and Certified Court Reporter of the  
4 State of New Jersey, certify that prior to  
5 the commencement of the Examination,  
6 ROBERT BANTA was duly sworn by me to  
7 testify the truth, the whole truth and  
8 nothing but the truth.

9 I DO FURTHER CERTIFY that the  
10 foregoing is a true and accurate  
11 transcript of the testimony as taken  
12 stenographically by and before me at the  
13 time, place and on the date hereinbefore  
14 set forth, to the best of my ability.

15 I DO FURTHER CERTIFY that I am  
16 neither a relative nor employee nor  
17 attorney nor counsel of any of the parties  
18 to this action, and that I am neither a  
19 relative nor employee of such attorney or  
20 counsel, and that I am not financially  
21 interested in the action.



22  
23  
24 *Susan DePalma*

25 Notary Public of the State of New Jersey  
Certificate No. XI01024.

## A

<b>ABC</b> 1:12	267:10 274:18,21	242:18 253:6,12	<b>and/or</b> 155:5	127:3 129:23
<b>ability</b> 32:19	<b>active</b> 118:23	255:2,9,17,23	<b>Angel</b> 2:5 158:22	181:6,9,11,15
274:14	226:8	256:20 261:13	160:24 162:2	182:13,14,19
<b>able</b> 21:20 40:14	<b>activities</b> 44:3	262:17 263:3,21	<b>anomaly</b> 186:20	184:10 214:11
105:8,15 106:7	<b>actual</b> 25:1 53:19	<b>agreed</b> 63:13	187:1,6 218:21	<b>applies</b> 112:10,12
112:7 117:11	254:24	113:11 141:24	<b>answer</b> 32:17,18	166:14
123:10	<b>AD</b> 1:3	<b>agreement</b> 69:2	34:9 38:9,12 42:4	<b>apply</b> 6:18 112:13
<b>absence</b> 232:25	<b>added</b> 164:22	<b>agrees</b> 242:9	43:15,16,25	140:11 175:5
233:1,7,20	239:2 250:9	<b>ahead</b> 7:21 70:10	45:12 53:4 66:20	<b>appreciate</b> 34:7
<b>absorb</b> 210:24	<b>addition</b> 28:10	71:3 99:10,14	66:21 67:12 68:7	<b>apprised</b> 213:19
<b>absorbed</b> 147:7	56:8 105:21	100:15,23 101:14	72:1 73:3 108:1	<b>appropriately</b> 73:1
<b>absorbing</b> 103:7	175:8	101:19,21	110:21 111:23	<b>approximately</b>
238:24	<b>additional</b> 143:25	<b>air</b> 197:7,8 200:25	113:7 121:15	80:12 109:24
<b>absorbs</b> 103:21	167:4 212:12	201:3 202:9	124:17,18 129:5	123:22
<b>absorption</b> 263:25	214:25 251:13	<b>Alcala</b> 1:9 2:12	130:21,24 135:17	<b>April</b> 13:8 15:8
264:10,12	<b>additionally</b> 103:6	141:6,12	154:7,17 155:11	18:17 19:16,17
<b>accepted</b> 175:9	<b>address</b> 187:24,24	<b>allegation</b> 8:14	157:25 158:3,19	19:23,24 20:11
<b>accessories</b> 168:11	<b>addressing</b> 66:22	50:11	158:20,21,23	60:20,24 61:2,5
168:14 169:11	<b>ADMINISTRA...</b>	<b>allegations</b> 22:11	159:5,8,12,17	70:24 72:8 119:4
<b>accessory</b> 168:1	1:3,4	22:13,15,17 23:5	160:4,6,12,13,17	136:12,13
<b>accident</b> 22:6 24:1	<b>admitted</b> 178:9	62:6,23 172:14	161:15,21,22	<b>architecture</b>
24:9 25:3,14 26:3	<b>adopt</b> 63:21	<b>allow</b> 30:4,14 37:8	162:8,10 163:12	263:23 264:5,9
27:3,19,23 28:5,8	<b>advise</b> 64:6 226:10	54:8 255:3	163:14 164:5	<b>area</b> 29:22 31:16
29:4,13 31:13,22	234:13	<b>allowed</b> 54:7 153:7	208:3,17,23	61:23 77:16
32:10 36:1 72:3	<b>advisement</b> 64:18	153:12,16 191:13	209:5 216:12	100:7 118:15,17
74:16 98:15,23	85:8 102:3	250:25	221:17 236:9	197:16 201:17
143:13	226:17 244:22	<b>allowing</b> 161:5	238:15 239:16,24	205:18 208:5
<b>accidents</b> 32:22	<b>advising</b> 169:3	<b>allows</b> 32:7 40:7	262:12	209:13,21 210:3
81:15	<b>advisory</b> 43:7,19	<b>ALTERED</b> 2:24	<b>answered</b> 9:12	210:16 211:4
<b>accommodate</b>	<b>affixed</b> 97:14	<b>alternative</b> 71:13	147:3 174:16	223:10,11
177:23	101:7,9	71:15	<b>answering</b> 118:18	<b>areas</b> 23:1 40:17
<b>Accompanied</b>	<b>aft</b> 99:9	<b>amended</b> 4:7 12:19	<b>answers</b> 51:14,22	45:8 203:8
174:22	<b>Agency</b> 56:7	13:9,13 18:18,23	55:1 162:24	208:20,20 210:11
<b>accordion</b> 78:16	<b>Agency's</b> 56:8	19:15,17,24,25	163:8,11 207:2	210:21 253:12,20
78:17	<b>ago</b> 10:7 31:19	20:4,11,21 61:3	<b>Anthropomorphic</b>	<b>argue</b> 157:12
<b>account</b> 140:20	216:19,21 224:7	<b>amount</b> 86:4 199:6	195:13	<b>arguments</b> 48:18
<b>accurate</b> 15:20	<b>agree</b> 23:16 42:24	199:13 202:2	<b>anybody</b> 18:4	<b>arm</b> 82:10 83:10
180:20 258:19	57:17 63:13,24	<b>amounts</b> 74:22	68:24	83:12,17
262:5,15 274:10	64:1,7,12 66:12	<b>analysis</b> 5:12 43:9	<b>anymore</b> 93:22	<b>arms</b> 83:3,7,15
<b>accurately</b> 180:15	69:6 90:22 96:4	44:14 45:20 51:4	234:4 257:5	<b>arrive</b> 25:14
181:17 182:8	118:22 134:21,24	54:5,10,16,20	<b>apart</b> 37:1 46:15	<b>arrow</b> 94:14
<b>achieve</b> 135:5	136:4 140:25	56:9,16,18 69:10	47:7 224:12	<b>asked</b> 7:1 21:13
<b>achieving</b> 135:6	146:3 148:3,12	163:3 171:2	225:2,13 226:13	52:3 58:17,20
<b>act</b> 144:3 220:1	174:5 180:14	172:17,22 174:21	<b>apparent</b> 80:25	105:12 106:1
<b>acted</b> 227:25 228:4	189:3 203:12	174:24 175:15,21	<b>apparently</b> 54:22	160:22 238:7
<b>acting</b> 227:22	205:2 206:1,10	177:2 224:5	116:8	268:11 269:20
<b>action</b> 57:4 215:2,4	209:20 229:12	<b>analyze</b> 61:13	<b>appear</b> 122:5	<b>asking</b> 65:21,22
215:8,15,17	230:14 239:23	<b>analyzing</b> 213:6	182:16 195:15	66:17 79:17 89:1
	241:8,12,17,21	<b>anchorage</b> 179:3	<b>appears</b> 48:11	106:2 111:10

- 130:16 139:9  
157:7 163:23  
196:22 233:6  
271:25  
**aspect** 11:13  
**assembled** 218:3  
**assembly** 41:1  
218:9  
**assessment** 55:23  
**associated** 67:25  
**assume** 216:2  
231:18 265:18  
**assumed** 25:5  
**assuming** 76:2  
**assure** 215:23  
**as-built** 80:18  
**attached** 72:10,13  
72:23 101:9,11  
**attaches** 77:17  
89:6  
**attachment** 29:10  
220:24  
**attack** 233:16  
**attacks** 233:15  
**attempt** 170:17  
**attention** 174:7  
237:22  
**attorney** 2:11  
15:23 16:2 17:3  
18:1,3 84:6 85:1  
85:2 245:5  
274:17,19  
**attorneys** 2:6,17  
161:9  
**Austin** 247:12,17  
248:6  
**author** 11:1 61:12  
**authored** 11:17  
17:20 21:1  
**auto** 1:11 2:17  
16:3 22:4 35:16  
35:19 36:25 37:5  
37:12,24 49:19  
50:3,12,22 51:16  
57:19,25 102:17  
140:17 161:12  
173:17 254:4  
257:18  
**automobile** 135:15
- automotive** 176:2  
**available** 150:6  
155:1 213:3,6,7  
**Avenue** 1:23 2:4,9  
2:14  
**aware** 37:12 50:4  
51:13 155:9  
168:15 185:24  
186:6 243:5,7,10  
255:10  
**awful** 103:17  
**awfully** 39:18  
**awhile** 222:11  
226:15  
**axle** 71:21 100:7  
100:12,16,20,21  
100:23,24 101:5  
101:5,15,20,21  
102:6 144:23  
150:6,23 169:18  
170:3 201:18  
204:4  
**A-10** 152:5,11  
155:23 157:4  
164:4,24 165:8  
165:21,22  
**a.m** 1:19  
**A/K/A** 1:10
- 
- B**
- 
- B** 4:1 6:1,1  
**back** 8:24 11:11  
16:20 18:7 27:5,7  
43:15,17 44:16  
45:14 52:5 59:25  
64:20 67:19,22  
68:10,19 70:7  
83:18 91:2 92:7  
93:14,15 96:20  
97:6 100:1  
104:13 115:22  
118:8,24 119:2  
119:25 126:23  
131:19 133:9  
150:2 158:4  
170:12 180:8  
201:17 209:18  
212:15 213:4  
223:25 225:1
- 231:11 245:8,14  
251:19 252:22  
255:18 256:15,17  
259:1 260:10  
262:19 272:22  
**background** 73:14  
181:5  
**backup** 84:24  
**bad** 223:20 230:9  
**Baker** 240:9,19,20  
241:6  
**balance** 236:11  
**ball** 201:24 203:24  
**bankruptcy**  
267:10  
**Banta** 1:16 3:5 6:9  
11:1 13:1 14:5  
16:1 21:9 26:20  
37:10 40:11  
49:13 53:13 58:9  
60:7 92:25 93:9  
115:22 117:4  
119:10 121:1,4  
130:4 131:15  
154:1 160:9  
162:22 173:7  
182:23 183:18  
191:21 212:3  
219:9 226:24  
238:4 239:5  
248:12 269:18  
274:6  
**Banta-16** 4:6 12:17  
**Banta-17** 4:7 12:20  
61:9  
**Banta-18** 4:8 12:24  
**Banta-19** 4:9 19:6  
19:10  
**Banta-20** 4:10  
53:10,13 55:16  
**Banta-21** 4:11 58:6  
58:10 59:11  
**Banta-22** 4:12  
92:22 93:12  
**Banta-23** 4:13 93:2  
93:6,14 125:7,13  
132:23 133:1,20  
**Banta-24** 4:14 93:3  
93:6,25 128:12
- Banta-25** 4:15  
115:19 116:2  
118:11,19  
**Banta-26** 4:16  
115:19 118:14  
**Banta-27** 4:17  
**Banta-28** 131:10  
**Banta-28-33** 4:18  
**Banta-29** 131:14  
**Banta-31** 134:5  
**Banta-33** 131:10  
**Banta-34** 4:19  
153:23  
**Banta-35** 4:20  
180:2 192:18  
**Banta-36** 4:21  
211:25  
**Banta-37** 4:22  
219:7,10  
**Banta-38** 4:23  
260:22  
**Banta-39** 4:24  
267:24  
**Banta-4** 183:19  
**Banta-8** 79:6  
**bar** 95:24 231:8  
265:3  
**barrier** 109:20,25  
110:1 135:25  
136:1 208:15  
251:22 252:20  
259:13,14,20,21  
260:6,8  
**base** 24:13 27:24  
29:8 39:20,24  
110:12,14 111:11  
113:20 142:18  
175:3 257:7  
**based** 24:10 27:1  
27:20 31:22  
32:20 42:3 73:6  
76:5,23 117:9  
126:9 143:12  
234:23 253:25  
255:3 272:16  
**baseless** 22:13  
**bases** 172:10  
**basic** 48:3 134:10  
134:11
- basically** 23:13  
51:21,24 63:18  
169:3  
**basing** 30:17  
137:18 144:6  
234:21  
**basis** 25:1 27:15  
30:8 32:2 40:18  
40:20,24 108:13  
227:16  
**beam** 77:14 252:11  
**bear** 11:10 260:13  
**began** 156:17  
**beginning** 15:13  
131:5  
**beginnings** 195:24  
**behalf** 7:4,15 9:1  
**behaved** 32:24  
**behavior** 22:22  
26:13 28:14  
29:10,21 63:7,8  
251:24 252:1  
**belabor** 34:6  
**belief** 251:20  
**believe** 6:12 7:22  
8:6 9:4 13:20  
15:9 29:3 50:13  
53:17 54:20  
55:11 60:19 72:1  
72:18 73:25  
75:12 81:3 85:4  
87:9 101:16  
114:10 133:15  
136:12 138:7  
139:7 143:17,22  
144:2 150:24  
152:10,13 167:15  
171:4 176:22  
177:4 207:4  
235:15 240:15  
242:24  
**believed** 8:15  
107:13 179:1  
189:9 250:16  
**believes** 188:25  
**belt** 179:2  
**belts** 178:24,25  
**bend** 89:4,5 103:24  
252:13 253:5



<b>bending</b> 35:3 103:9,13	79:12 95:20 97:15,22 98:2	128:18,25 129:5 130:2,13,23	203:19 204:8,24 205:6,12,20	115:25 116:24 <b>BRIDE</b> 2:9
<b>benefits</b> 11:10	118:8 124:9,11 125:18 131:24	132:15 133:14,24 135:1,16,22	206:3,20 207:15 208:6 209:8,23	<b>bring</b> 14:10 44:16 45:14
<b>benign</b> 49:10	145:18 218:14	136:7,12 137:3 137:21 138:10,25	210:4 211:1,9 212:25 213:15,20	<b>broad</b> 34:1
<b>bent</b> 26:11 83:8,9 83:12,16 88:9,21	<b>bound</b> 185:14	139:5 140:4,22 141:7,18 142:1	214:3,23 215:11 215:19 216:8	<b>broader</b> 33:24
104:2 117:12,13 117:14	<b>box</b> 97:3 99:11,12 99:20 133:16	142:15 143:19 144:4 145:10,13	217:7,16,21 218:10 220:4,16	<b>brochure</b> 168:19
<b>Benz</b> 7:15,23 9:18 71:22 144:21	134:4,7,7,8,9,11 134:15 207:19	145:23 146:6,16 147:2,18 148:1	221:15 222:9,22 223:4,22 224:14	<b>brought</b> 213:4
145:4 150:4,15 150:22	238:22 264:13	148:15,19 149:15 150:18 151:13	225:4,14 226:3 226:16 227:3	<b>brush</b> 154:22 155:13 156:17
<b>best</b> 11:6,8 112:1,5 274:14	<b>boy</b> 158:9	152:9,13,22 153:2,7,12,19	228:2,12 229:3,8 230:2,18 231:3	166:15
<b>better</b> 71:15 135:12	<b>bracket</b> 28:18 29:10 155:25	154:14,18 157:2 157:5,9,14,17,23	231:16,25 232:3 232:19 234:1,8	<b>Buglione</b> 8:5
<b>beyond</b> 69:25 87:24 121:11	228:10,20 229:21 230:7,15 231:5	158:13,16,22 159:2,4,11,15,22	234:16,25 235:20 235:24 236:18	<b>build</b> 112:24 177:21 220:19
124:15 129:3 136:25 137:15	232:9 250:9,25 251:8,13 252:11	160:1,5,12,19,24 161:4,8,12,16,20	237:14 238:1,13 239:19 240:5,10	257:24 264:20
138:8 140:23 149:17 152:24	252:12,23 253:2 270:25 271:1,10	162:10,15,19 163:15,21 164:2	240:22 241:15,25 242:20 243:3,18	<b>built</b> 111:20 217:10 226:6
153:4 179:13 221:16 230:3	<b>brackets</b> 265:4	164:23 165:11,14 165:19 167:6,14	244:21 245:20 246:16,19 247:1	<b>bullet</b> 129:9 181:10 182:12
221:16 230:3 238:14 247:2	<b>BRADLEY</b> 2:15 7:12 8:2 10:2,18	167:24 168:7,18 169:8,21,23	248:16,21 249:24 250:11 251:2,10	185:21 194:15 197:20 198:8
268:20	10:22 12:3,8,12 14:18 16:12 17:4	171:11,23 172:2 172:20,24 173:5	252:6,25 253:10 253:16 254:9,12	199:6,14,16 200:24
<b>bias</b> 81:1	17:11 27:8 32:11 33:6,13,17,21	174:10,16 176:9 177:5,11 178:3	254:20 255:7,14 255:20,25 256:11	200:24
<b>big</b> 14:11 81:14 158:8	34:2,10,14,18 36:13 43:23	178:10,19 179:17 180:11,13,17	256:23 257:10 258:6,20 260:2	<b>bumper</b> 77:13,14 77:15 93:21,22
<b>bit</b> 8:25 263:24 264:9	45:23 47:18 53:16 55:16	181:2 182:5 183:8,22,25	260:16 261:10 262:7,21 263:5	94:2,4,8 104:1 113:1 120:10
<b>black</b> 129:15 184:12	58:16,24 59:9 60:4,8,19 64:15	184:6 185:8,17 186:15,21 187:16	263:15 264:1 265:8,16 266:8	123:5 128:13,16 130:11 131:24
<b>Blazer</b> 71:22 145:3 145:20,22 256:3	65:1,6 70:23 72:11 73:22 75:9	187:25 188:10,20 189:6,21,24	266:8 267:4,15 268:7	132:24 133:9,11 133:19 134:2
<b>block</b> 168:12	75:12 80:5 84:10 85:7,13 87:12	190:9,24 192:8 194:4,8,17 195:7	268:11,15 269:5 270:7,18 271:3,7	265:3
<b>board</b> 252:19	92:16 96:10 100:3 102:2,9	196:6,14,21 197:15,22 198:4	271:15,21 272:5 272:10,14	<b>bunch</b> 45:15
<b>Bob</b> 163:22 261:25	106:22,25 110:20 111:22 116:4	198:16,22 199:8 199:18,24 200:8	272:10,14	<b>burn</b> 82:11
<b>body</b> 100:11,13 103:23 104:10,12	117:24 118:11,18 119:15,17 120:4	200:14,18 201:5 201:21 202:6,10	272:10,14	<b>burned</b> 9:9 82:12 88:4
145:18 181:6,10 181:11 182:22	120:17 121:8 122:1,17,23	202:17 203:5,9	262:7,21 263:5 263:15 264:1	<b>buses</b> 149:18
238:24 257:3	123:24 124:2,7 124:12,17,25		265:8,16 266:8 267:4,15 268:7	<b>Bush</b> 63:19,23 64:25 65:13,19
<b>bolt</b> 179:2,2,8	125:9,14 126:7 126:17 127:25		268:11,15 269:5 270:7,18 271:3,7	66:1,4,6,18,23 67:3,14,14,16,18
<b>Bolts</b> 176:16,20			271:15,21 272:5 272:10,14	<b>bushings</b> 82:11,18
<b>book</b> 185:15			<b>brains</b> 158:9	<b>Bush's</b> 63:10,22 64:12,17 65:9
<b>bother</b> 174:2			<b>brakes</b> 140:11	67:2,5
<b>bottom</b> 23:25 70:13,19,22 79:8			<b>braking</b> 118:23,23	<b>BUTLER</b> 1:11
			<b>breach</b> 248:19	<b>butt</b> 182:25
			<b>breached</b> 249:20	<b>buy</b> 168:2,2
			<b>break</b> 52:5 115:12	

<b>C</b>	191:24 192:21 204:24 249:13	<b>category</b> 23:17 38:24	<b>change</b> 45:2 60:11 60:18 78:21 81:15 138:22 139:10 188:5,13 188:15,18 189:1 189:9 251:14 257:4	107:9,11,12 108:24 135:8 151:19 152:18 154:17,24 155:8 169:14 177:19 178:7,25 179:3,4 179:5,10 181:20 190:21 211:16 216:2 219:5 221:9 228:8 238:10,18,21 239:8 242:24 244:24 253:7 255:9 257:25 261:21 266:4,22
<b>C</b> 2:1 274:1,1	<b>career</b> 49:16	<b>caught</b> 246:14	<b>changed</b> 16:9 20:1 42:3 180:24 212:11 251:24	<b>Chrysler's</b> 106:9 179:14
<b>Cagliano's</b> 116:16	<b>careful</b> 186:19,25	<b>causation</b> 69:11	<b>changes</b> 60:12 111:2 189:3,5 237:8 252:13	<b>Chuck</b> 41:20
<b>calculate</b> 79:19 80:16	<b>Carigliano's</b> 116:17	<b>cause</b> 47:22,25 48:13,20 49:1 61:14,16,19,21 63:1,6,9,14,18 64:13 65:2 66:24 67:4,9 68:5,11,17 68:21 118:24 147:24 175:21 213:23,25 215:1 215:4,8 221:19 232:12 233:21,24 266:24	<b>changing</b> 20:7 108:17	<b>Cirrus</b> 178:22
<b>calculations</b> 25:6 43:4 80:22	<b>Carlos</b> 1:9 2:12	<b>caused</b> 63:24 233:17 246:18,22 246:22	<b>characterization</b> 263:16	<b>claim</b> 9:8 50:14 71:11
<b>calendar</b> 155:19	<b>cars</b> 47:15 149:19 178:23	<b>causes</b> 233:15	<b>characterize</b> 149:20	<b>claims</b> 50:11 68:3
<b>call</b> 45:25 46:9 77:13 102:10 110:15,19 135:10 149:10 169:14	<b>case</b> 6:11,13 9:2,3 9:14,20,23 10:7,8 10:10,25 11:17 16:2 17:20 21:11 21:15 22:2,12,18 23:2 30:6 36:7,14 50:5 51:13,23 52:20 54:18 57:21 58:1,15 59:1,7,16,18 62:7 62:9 76:6 78:19 81:21 82:11 103:16 108:23 110:16,19,22 111:16,21,25 112:1,8,9,10,15 113:7,13,18,19 114:20 115:6 122:8 137:20 142:24 143:5 152:7 154:10 175:3 178:6 180:5 206:14,15 207:3 216:15 229:25 230:6,9 230:10 232:6 235:25 239:7 244:23 245:3 246:18 247:6,12 247:17,22,25 248:3,6 249:8 259:10,18,20 261:2 266:16,17 267:2,11	<b>causing</b> 147:24 233:14 237:17	<b>characterized</b> 151:20 156:22,25	<b>clamp</b> 218:3
<b>Callahan</b> 1:23 2:14 15:24	<b>Castaing</b> 177:9 185:13,18 218:25 262:17 263:13	<b>caution</b> 227:18	<b>Cherokee</b> 22:2 23:19 38:22 39:21 54:11 55:14 56:3 57:5 73:16 74:6,12 90:16 110:23 111:18,25 112:16 113:2,3 121:17 122:11 123:11 124:23 125:24,25 131:20 145:5,5 145:19 149:21 154:11 155:12,17 155:24 156:4 181:6,9 193:8 256:5 264:21	<b>clarification</b> 34:3
<b>called</b> 13:4,7,9 18:17 43:8 49:24 50:15 94:8 96:16 109:4 125:15 204:17 205:4	<b>cases</b> 75:3 250:5	<b>Cedar</b> 2:10	<b>Cherokees</b> 33:18 156:19	<b>clarify</b> 115:23 117:20 150:12
<b>calling</b> 196:13	<b>casual</b> 188:15	<b>Center</b> 50:3 51:16 243:23	<b>Cherokee's</b> 77:25 83:19	<b>clarifying</b> 165:15
<b>camera</b> 192:20,23 194:5,23 195:20 196:3 197:1 198:10 199:5,12 202:2,8,19	<b>catalogue</b> 168:1,25	<b>Center</b> 50:3 51:16 243:23	<b>chest</b> 218:12	<b>clarity</b> 92:25 93:10
<b>Canadian</b> 226:6		<b>certain</b> 26:8,14 39:16 49:19 51:7 69:12,15 80:11 207:11	<b>choices</b> 111:5	<b>class</b> 186:5
<b>cap</b> 218:4,17		<b>certainty</b> 39:9 66:14 160:16	<b>Chrysler</b> 1:10,10 1:11 7:4,4,9,10 7:11 8:7 9:17 10:7,8,10,15 49:14 51:15,23 54:25 55:3,4,7,11	<b>classes</b> 175:18
<b>capable</b> 104:25 106:14		<b>Certificate</b> 274:25	<b>classified</b> 149:5,8	<b>classic</b> 183:10 196:17 197:3,6 263:1
<b>capacity</b> 7:12,13 8:18,19 43:18 49:14		<b>certification</b> 107:11 109:1,2 250:17	<b>classification</b> 149:11	<b>classifying</b> 165:15
<b>caption</b> 121:16		<b>certified</b> 1:21 2:22 104:17 106:11 119:9 212:9 274:3	<b>Cherokee's</b> 77:25 83:19	<b>clarity</b> 92:25 93:10
<b>car</b> 39:15 41:5,9,10 48:6,11 91:24 92:7 94:17 95:2 95:12,16 97:13 97:20 99:17 103:15 122:21,22 123:4 128:8 132:9,11 179:7,8 182:12 193:8,21 200:12 205:18 209:18 213:18 219:22 231:12 232:1,14 233:9 250:10		<b>certify</b> 108:20 274:4,9,15	<b>clean</b> 92:4	<b>class</b> 186:5
<b>CARCO</b> 122:10,15 129:8 131:19		<b>cetera</b> 108:17 168:13	<b>clear</b> 15:3 38:8 118:20 124:2 239:4	<b>classes</b> 175:18

<b>collected</b> 55:24	<b>completion</b> 173:16	<b>condition</b> 166:24	153:20	84:1,3,17,23
<b>collectively</b> 40:7	173:19,22 174:12	229:25 232:14	<b>continuing</b> 6:10	89:25 93:15
<b>colliding</b> 196:12	<b>compliance</b> 108:7	<b>conditions</b> 135:25	122:2 125:1	94:18 95:4,12,16
<b>collision</b> 8:10 26:8	108:13,16,19,21	230:5	130:14 152:23	96:16 97:1,14
29:5,6 30:22	189:10 212:9	<b>conduct</b> 50:20	164:24 165:20	98:5 99:17
32:24 71:6 98:25	227:7,8,13,15,16	<b>conducted</b> 155:18	179:18 213:16	102:12 104:20
103:19 164:9	227:18,24 234:19	155:23	216:9 220:5,17	107:15 109:9,18
190:13,17 197:10	234:20,21 251:6	<b>conferred</b> 15:4	227:4 228:2,13	117:18,23 118:2
210:22 241:13,19	255:3	<b>confidence</b> 247:10	237:15 255:25	118:19 119:23,24
242:17 245:17,18	<b>complicate</b> 14:17	<b>confident</b> 44:9	<b>contract</b> 50:19	120:3,10,12
<b>collisions</b> 156:10	<b>complied</b> 36:8	166:19	<b>contributed</b>	123:7 125:24
242:14	106:21	<b>configuration</b>	232:10,11	128:14 129:12
<b>color</b> 184:11,17	<b>comply</b> 38:5 75:8	57:24 110:5,9	<b>contributes</b> 147:13	131:21,25 133:7
<b>column</b> 254:18	104:18 106:11	111:1,19 124:24	238:8	134:17,22 135:15
<b>columns</b> 254:23	113:17 119:9	220:20 229:2	<b>control</b> 71:7 82:10	137:2 138:9
<b>combination</b>	<b>component</b> 25:22	232:2	83:3,16 155:21	139:4 141:3
133:18	196:17,19 197:1	<b>configurations</b>	156:1,3,14,16	142:25 143:10
<b>come</b> 65:15 103:8	202:13,15 239:2	57:21 58:1 59:2	<b>converts</b> 103:9	144:17,24 146:15
186:11 203:7,7	240:1	111:3 112:1,3,24	<b>convey</b> 37:23	151:12,23 154:8
212:14 246:17	<b>components</b>	<b>confine</b> 224:8	<b>copies</b> 13:10 85:2	154:12 162:24
<b>comes</b> 24:14 32:15	146:19 239:14	<b>confined</b> 59:14,19	<b>copy</b> 2:22 12:4,7,9	163:5,14 165:25
<b>coming</b> 16:20	<b>composed</b> 99:12	<b>confining</b> 39:22	12:11,11 13:11	166:23 168:5,16
21:13 25:4 42:2	<b>compress</b> 201:23	<b>connecting</b> 96:25	14:3,5,18 15:14	168:21 169:7
194:21 245:14	<b>compressed</b> 87:18	<b>consensus</b> 42:12	60:4 65:19 79:11	174:2 176:17,24
252:19	<b>compression</b>	42:19	84:15 115:7	183:2 185:6,24
<b>commencement</b>	203:25	<b>consequence</b> 89:5	180:1 191:4	193:9 194:2,11
274:5	<b>compromise</b>	<b>consider</b> 74:18	244:6	194:19 195:1,17
<b>comment</b> 180:7	105:23	75:25 140:1	<b>corner</b> 121:18	196:4,11 197:2
<b>commenting</b> 171:3	<b>compromised</b>	148:22 218:20	<b>corners</b> 134:6,7	197:14,17,20
<b>common</b> 59:23	100:8,10	<b>consideration</b>	<b>corporation</b> 1:10	198:3,20,21
<b>communications</b>	<b>computer</b> 84:23	112:15 255:13	1:10 213:13	199:3,4,17,21,23
17:8	221:21	<b>considerations</b>	<b>CORPORATIO...</b>	201:4,15 202:21
<b>compact</b> 228:11,21	<b>conceived</b> 120:2	69:13,16,21 72:2	1:12	203:1,4,10,23
228:22 235:16	<b>concept</b> 120:7	238:11,19 239:13	<b>correct</b> 6:14,23	204:7,21 211:8
236:7 237:13	180:15 181:14	<b>considered</b> 2:22	17:1,23 18:1,5	212:4 219:11,20
<b>company</b> 175:18	183:24 242:13	210:21	20:21 21:3,7,11	219:23 220:2
<b>comparative</b> 35:6	<b>conceptually</b> 66:5	<b>consistently</b> 37:7	21:18 23:14 24:2	221:7 222:21
35:10	<b>concern</b> 45:8 46:12	<b>consoles</b> 168:12	24:13 25:7 29:15	223:2 228:1
<b>compare</b> 112:22	188:3,3	<b>constant</b> 70:1	31:20 35:1,12,13	229:12,19 231:2
<b>compared</b> 35:12	<b>concerned</b> 20:24	137:1,16,25	35:18 36:22	234:24 237:3
142:5	28:23 51:25	138:9	37:21 38:20,24	240:16,21 248:1
<b>comparing</b> 256:12	141:11 213:4	<b>contain</b> 84:13	39:4,17 41:6	249:17 250:5
<b>competitive</b> 71:19	250:10	<b>contained</b> 53:21	45:22 46:16,19	252:2 254:8
<b>competitor</b> 255:18	<b>concluded</b> 272:25	56:20	47:2 48:7,16 49:5	255:1 258:14
255:24	<b>conclusion</b> 32:15	<b>contemporaries</b>	49:20,24 51:10	260:11 261:12
<b>competitors</b>	69:1 246:17	262:12	52:1 54:5 55:2	267:19 268:23
255:22 256:4	272:16	<b>contemporary</b>	56:6,22 57:1,15	<b>corrected</b> 19:18
<b>completely</b> 90:9,24	<b>conclusions</b> 26:15	257:13,16,23	59:3,22 63:11	44:6
188:14	31:8 32:23 73:7	<b>continue</b> 12:6	73:5 74:1 76:3,25	<b>correcting</b> 164:14

- correction** 167:10  
**correctly** 55:15  
 56:5 86:23  
 137:10  
**Cosmos** 41:20  
**cost** 173:20  
**costs** 243:25 244:1  
 254:2  
**counsel** 5:13 15:4  
 15:17 16:10,14  
 17:7,12,13 19:2  
 60:11 157:20  
 160:3 171:18  
 191:19 225:9  
 274:17,20  
**counsels** 16:8  
**county** 1:1 7:24  
**couple** 7:14,16,19  
 45:11 115:23  
**course** 50:21 71:21  
 198:18 234:18  
**court** 1:1,21 40:14  
 65:15 241:22  
 242:6 243:1  
 274:3  
**cover** 38:2 77:15  
 120:22 253:14  
 260:17  
**covered** 11:12 39:7  
 132:6 253:15  
 254:10  
**covering** 125:12  
**covers** 125:17  
**co-extruded**  
 250:14  
**crane** 179:6 193:17  
 193:20,22 194:2  
**crash** 4:21,22,23  
 4:24 22:9,22,24  
 26:10 28:13,15  
 29:10 31:9,12,17  
 32:21 33:1,10,16  
 36:4 40:9 44:15  
 47:23 68:8 78:2  
 83:21 92:12  
 98:16 100:10  
 103:17 105:1  
 106:15 107:19  
 108:5 109:6,7,13
- 110:11 129:8  
 139:24 144:5,11  
 144:12 155:18  
 174:24 193:25  
 203:16 204:11,12  
 205:1 208:9  
 209:11,13 210:16  
 210:18 211:24  
 216:12 219:6  
 246:22 252:9  
 258:2 260:21  
 263:24 264:9  
 267:23  
**crashed** 45:14 49:8  
 109:15  
**crashes** 30:20 31:2  
 56:12 144:7  
 174:22  
**crashings** 109:11  
**create** 53:1  
**created** 18:12  
**credibility** 142:10  
**criteria** 52:11 54:8  
 54:13  
**critique** 65:20  
**CROSS** 3:3  
**crossmember**  
 77:22 88:7,12,14  
 88:16,18 89:15  
 90:2,3,6,16,23  
 91:4,16,24 93:18  
 94:11,24 97:1,18  
 97:19,23 98:1,6  
 99:13,14 104:7  
 116:21 117:5  
 132:25 133:4,5,8  
 133:12 134:1  
 263:22 264:8  
**crossmembers**  
 99:16 100:1  
**crush** 30:11 78:14  
 78:15,17 197:14  
 197:16 199:2  
 205:4,4,7,11,18  
 205:24 206:2,18  
 206:22 207:1,11  
 207:18 208:2,3  
 208:14,17,18,20  
 208:20 209:4,5
- 209:11,15,20,22  
 210:10,15,17,24  
 211:10 246:11,13  
 251:25  
**crushed** 208:4  
 209:6  
**crushing** 88:2  
**cull** 40:17  
**cup** 259:3  
**current** 75:7  
**customary** 22:4  
**customer** 166:7  
 169:4  
**customers** 168:21  
 173:24  
**cycle** 148:24  
**cycles** 149:3,19  
**C1** 214:14
- 
- D**
- D** 3:1  
**Daimler** 1:9 239:7  
**Dale** 176:25  
 177:20  
**damage** 9:8,23  
 25:20 26:7 27:4  
 28:4 35:7 75:20  
 82:9 87:25  
 147:17 194:9  
 246:10  
**damaged** 147:15  
**dangerously** 44:25  
**data** 24:13 55:8,23  
 56:9 141:9  
 142:18 170:13  
 212:12 243:25  
**date** 1:17 13:18  
 14:8,12 120:22  
 191:11 212:20  
 274:13  
**dated** 4:11,19  
 12:16,19,23 13:3  
 13:4,5,8 18:13,17  
 19:5,10,16,21  
 58:5 120:21  
 153:22 191:10  
**dates** 11:18 14:9  
 15:6  
**David** 113:24,25
- 114:14 152:18  
**Davidson** 239:7  
**Dawkins** 176:24  
 176:25 177:20  
**days** 155:10  
**DBW** 111:1  
**De** 1:20 2:3,5 3:6  
 6:7 10:4,20,24  
 12:1,5,10,13  
 13:21,24 14:2,13  
 17:9,12 19:1  
 20:10,19 27:11  
 32:16 33:7,15,19  
 33:23 34:5,12,15  
 34:19 43:14 53:6  
 53:20 55:17 58:2  
 58:19 59:3,12  
 60:16,23 64:19  
 65:3 67:19 72:14  
 73:23 85:9,14  
 92:18 95:23 96:6  
 96:12 102:7  
 107:3 115:11,16  
 119:16,19 120:19  
 121:14 122:25  
 124:16 129:4  
 130:19 131:2  
 136:13 137:5,7  
 152:12,15,25  
 153:4,9,15 157:7  
 157:11,15,20  
 158:2,14,18,25  
 159:3,7,13,21,24  
 160:3,7,13,21  
 161:2,6,10,13,17  
 161:24 162:17  
 165:13 179:23  
 180:12 184:3,8  
 185:9,19 189:23  
 190:1 191:3,8,12  
 191:15,18 192:10  
 192:20 204:25  
 211:21 219:3  
 232:5 236:1  
 238:5 260:18  
 272:18 274:2  
**deal** 14:12 17:15  
 24:15 144:16  
 272:21
- dealer** 168:5,15  
 169:1,4,5  
**dealers** 168:20  
**DECEASED** 1:4  
**December** 155:14  
 156:13 177:21  
**decide** 51:8  
**decides** 154:4  
**decision** 54:25  
 113:15  
**decisions** 42:18  
**deeper** 184:11  
 201:10,12  
**defamation** 197:13  
**defect** 49:24,25  
 50:1,3,9 51:15  
 52:7,12 56:17,20  
 154:3  
**defective** 22:20  
 40:23 139:19  
**defectively** 22:3  
 23:19 38:23  
 39:21,25  
**defects** 22:11  
**defendant** 2:17 8:3  
**Defendants** 2:11  
**Defendant(s)** 1:14  
**defense** 8:4 25:4  
**defer** 207:12  
**DeFilippo** 13:18  
 75:13  
**define** 28:8 78:13  
 112:4  
**defined** 206:18,22  
 209:12  
**defines** 207:11  
**defining** 209:19  
**definition** 73:19  
 74:14 76:4 263:1  
**definitive** 70:14  
**deflection** 144:3  
**deform** 83:4  
 103:17 264:15  
**deformation**  
 252:16  
**deformed** 100:12  
 100:16 205:15  
 210:17  
**deforming** 103:14

<b>deforms</b> 211:4 252:14	206:12,24 207:5 207:22 224:9	39:15 41:10 140:2,18	237:1	<b>discussing</b> 23:22
<b>degree</b> 176:2 256:25	235:22 238:3 239:6,11 261:1	<b>desire</b> 177:24	<b>different</b> 44:23 45:4 67:2 91:3	<b>discussion</b> 14:23 96:8,10,13
<b>degrees</b> 89:22 90:7 91:6,9,14 92:14	266:2 272:25	<b>desk</b> 221:24	105:19 118:16	116:20 138:19
<b>Delta</b> 28:21 139:12	<b>depositions</b> 6:22 7:8,15 158:11	<b>destruction</b> 98:16	129:23 135:7	165:17 172:4
<b>demonstrate</b> 104:23 106:13	206:14	<b>detail</b> 247:4 270:10	138:6 140:7,16	<b>discussions</b> 41:15 172:7
108:7 179:8	<b>derived</b> 24:23 74:8 137:23	<b>details</b> 245:22	151:5 167:12	<b>dismiss</b> 187:8
<b>density</b> 126:20,24 127:5	<b>describe</b> 69:12,15 111:12	<b>determination</b> 51:6 105:16	172:19 173:8	<b>dismissed</b> 267:9
<b>dep</b> 185:13,18 218:25	<b>described</b> 69:20 187:19 244:4	233:3,7	186:3 207:2	<b>dispute</b> 229:6
<b>Department</b> 171:3 171:6	<b>describes</b> 70:5	<b>determine</b> 26:2 28:20 51:2 52:12	209:12 236:11	<b>distance</b> 252:12
<b>departments</b> 170:25	<b>DESCRIPTION</b> 4:4	54:14 56:19	253:24 255:4	<b>distorted</b> 251:15
<b>depend</b> 239:17 254:4	<b>design</b> 38:4 39:3,5 39:10,11,22	61:13,16 69:10	260:9	<b>District</b> 242:7
<b>depended</b> 141:8	40:21,25 41:5,24	78:8 138:7	<b>difficult</b> 175:4 262:25 263:8,11	<b>Ditlow</b> 266:2,4 267:16
<b>dependent</b> 24:23	42:2 43:10,22	232:23 249:10	263:17	<b>DIVISION</b> 1:1
<b>depending</b> 174:3	44:19 46:7 69:12	258:3	<b>Dillon</b> 113:24,24 113:25 114:14,17	<b>DOCKET</b> 1:2
<b>Depends</b> 188:23 213:22,25	69:16,20 70:1	<b>determined</b> 156:3 250:20	152:19	<b>document</b> 4:11 13:22 17:5 53:7,7
<b>depict</b> 85:4 182:9	71:5,13,15 72:2	<b>determines</b> 54:19 108:12	<b>dime</b> 158:4	53:12,14,19,21
<b>depicted</b> 122:23 123:18 125:13	103:15 112:15	<b>determining</b> 139:18	<b>dimensions</b> 27:21 97:10 180:25	54:2,23 58:3,5,12
126:14 127:17	137:1,15,25	<b>developed</b> 156:15 164:12	<b>dinner</b> 171:22	58:18 59:5
128:24 129:6	138:8 139:19	<b>development</b> 108:8 108:11,16 216:24	<b>direct</b> 3:3 6:6 157:25 158:2	120:13,15 152:20
130:17 132:25	146:10,12,25	226:25 227:1,5	159:7 160:4,5	153:2 157:18,24
134:5,12 204:3	147:23 188:5,13	227:12,13,24	168:9 254:15	158:24 159:6,18
<b>depicting</b> 83:22 181:18	188:15,18 189:1	268:3,4	160:9 254:15	160:10,20,22
<b>depictive</b> 130:15	189:2,8 210:20	<b>developmental</b> 155:18	<b>directed</b> 62:5 147:6	161:1,5,22 162:3
<b>depicts</b> 129:1 131:19 180:15,19	210:21 218:7	<b>deviated</b> 67:3	<b>directing</b> 159:4,11 159:17	162:4,11,13,20
<b>deposed</b> 115:6	235:14 237:5	<b>device</b> 70:17 144:3 151:11,21 156:23	<b>direction</b> 36:7 45:3	165:25 166:13
<b>deposition</b> 1:16 6:10,11,14,19 7:3	238:10,18 239:12	157:1 239:2	<b>directly</b> 147:6	177:8,10,16
7:5 8:25 11:5,7	253:4 261:8	<b>diagram</b> 4:12 92:21 93:11	<b>director</b> 177:1,2,20	179:24 185:10,12
13:11 73:24 79:7	<b>designation</b> 227:9	<b>dialogue</b> 87:15	<b>disagree</b> 235:18 260:25 261:4,23	186:18 190:20,21
84:7 114:20,22	<b>designed</b> 22:3,20 23:20 38:23	<b>difference</b> 19:14 40:12 60:17 61:4	263:12	216:13 221:11
114:25 115:8	39:16,22,25	82:6 87:11 91:20	<b>disagreement</b> 48:22	<b>documentation</b> 222:6
120:21 141:14	40:22 41:16	107:23,25 108:3	<b>disagrees</b> 242:25	<b>documents</b> 4:17 5:5 152:6,18
142:4 165:7	98:18 99:5	108:4,15 142:23	<b>discarded</b> 216:19	214:21 221:22
167:21 176:9,15	102:12,15 104:16	143:8 235:9,10	<b>disciplines</b> 108:10	224:2 225:3
177:9 180:4	106:10 119:8	235:11,15 236:5	<b>discount</b> 186:20,25	233:25 234:4
184:23 186:3	120:2 134:16	236:10 237:12,16	<b>discovered</b> 155:20	<b>Dodge</b> 42:7 59:10 59:13,14 258:13
	238:21	237:25	<b>discovery</b> 108:22 266:17,21	<b>doing</b> 46:12,23 47:5,8 135:7
	<b>designer</b> 113:14	<b>differences</b> 13:15	<b>discuss</b> 30:5,9 114:25	158:10 174:2
	<b>designers</b> 41:9 205:16		<b>discussed</b> 17:25 73:18,22 115:2	179:12 187:10
	<b>designing</b> 38:1			204:19 209:16
				262:9
				<b>domestic</b> 220:1

**Donna** 41:20  
**doubt** 178:13  
**document** 157:6  
**downward** 89:23  
 117:14 118:6  
**dozens** 45:9  
**DR** 166:4,7,8  
**draft** 15:16 17:21  
**drain** 218:15  
**drained** 218:12  
**draw** 26:15 31:7  
 32:22 43:12 92:2  
 272:15  
**drawn** 92:21  
**drive** 84:10,11  
**driven** 77:10 87:16  
 87:17,19 88:8,24  
**driver** 73:15 74:5  
 74:11 141:12  
**driving** 140:9  
 241:13  
**duly** 6:2 274:6  
**dummies** 195:11  
**Durango** 258:13  
**duty** 148:18,23,23  
 148:24 149:2,6  
 149:19,21 150:4  
 150:9,15

## E

**E** 2:1,1,19,19 3:1  
 4:1 6:1 274:1,1  
**EA** 4:10 53:2,3,9  
 54:6  
**Eagle** 1:23 2:4,14  
**earlier** 9:16 45:7  
 117:23 128:13  
 154:1 192:2  
**early** 186:8,9,13  
 262:20  
**EAs** 262:10  
**easier** 85:15  
**easily** 250:22  
**East** 1:24 2:15  
**echoed** 66:6  
**Ed** 41:21 42:1  
 44:18  
**edge** 95:20  
**Edison** 8:6

**editing** 16:22,23  
**educated** 217:19  
**effect** 78:17,18  
 147:11 189:9  
 232:12  
**effective** 104:25  
 106:14 167:9  
**effectively** 103:18  
**effectiveness** 258:3  
 258:4  
**eight** 44:18 80:21  
 81:5 149:23,25  
 151:10 169:17,22  
 169:24 170:21  
 171:8 174:18  
**eighties** 261:20  
 262:20  
**either** 7:3 11:9  
 27:1,20 29:13,25  
 53:5 64:10 66:3  
 81:22 98:4  
 108:18 111:4  
 123:6 127:14  
 130:6 144:17  
 149:5 154:25  
 175:2 225:24  
 247:7 270:4  
**electrical** 8:16  
 248:10  
**electronic** 2:24  
 14:5 171:17  
 191:9  
**electronically**  
 191:6 244:20  
**elements** 54:18  
 99:8,20 102:10  
 259:18  
**elevated** 53:2,3  
**Eleven** 120:25  
**eliminate** 230:13  
**eliminated** 98:16  
**else's** 24:11  
**elucidate** 38:19  
**empirical** 30:18,24  
 40:2  
**employee** 49:14  
 243:22 274:16,19  
**encompasses** 125:5  
 134:5

**energies** 103:9  
**energy** 74:22 75:22  
 103:7,14,19,21  
 104:3 147:4,6,9  
 147:11,21 148:6  
 148:7,10 203:25  
 211:6 238:24  
 239:17 263:24  
 264:10,11  
**engaged** 72:15,16  
**engagement**  
 184:11 200:6  
 201:9  
**engages** 203:16  
**engine** 168:12  
**engineer** 39:5  
 108:12 113:6  
 188:24,25 207:9  
 207:13 209:14  
 210:20 237:6  
**engineering** 43:10  
 43:20,24 44:2  
 51:4 54:5,9,15  
 56:18 57:20  
 58:14 163:2  
 171:5,6 172:9,19  
 172:23 176:2  
 223:25 235:13  
 236:4,4 261:7  
**engineering-wise**  
 243:17  
**engineers** 210:21  
 223:16  
**engineer's** 44:6  
**enhanced** 241:18  
**entire** 103:6,10  
 120:14 172:12  
 179:7  
**entirety** 63:22  
 159:9  
**entities** 7:10  
**entity** 10:9,16  
**envelope** 32:1,19  
 32:23,25 42:10  
 84:7,9 238:22  
**equating** 138:19  
**equipment** 133:6  
 155:1,2,16 172:8  
**equipped** 166:15

231:14  
**error** 37:8,9 38:3  
**ESQ** 2:5,6,10,15  
 2:16  
**essentially** 99:11  
 145:18 239:21  
 243:23 257:5  
 260:7  
**established** 238:3  
**estate** 1:5 210:18  
 257:14  
**estimate** 90:18,20  
 99:3,22 100:5  
 173:20,21  
**et** 108:16 168:13  
**evaluate** 31:5  
 50:10 87:22  
 187:2  
**evaluated** 28:10  
 62:19 63:17,19  
**evaluating** 31:25  
 32:2 47:23 62:1  
**evaluation** 40:4  
 50:16,17,25 52:9  
 52:14,23 54:4,15  
 55:25 64:17  
 154:3,6  
**evaluations** 35:7  
 35:10  
**event** 22:8 24:21  
 24:22 25:1 28:25  
 49:10 71:7  
 136:15 241:14  
**events** 22:7 241:9  
**eventually** 51:6  
**evidence** 87:2,24  
 88:4,4 142:4,19  
 172:13  
**exact** 107:6 194:6  
 194:6 245:22  
**exactly** 20:5 30:24  
 31:10 42:22 91:8  
 163:4 192:3  
**examination** 6:6  
 25:17 76:10  
 274:5  
**examined** 26:9  
 55:8 101:4,8  
 246:8

**example** 25:19  
 28:17,19 173:19  
 206:24 224:4  
 256:8 270:2  
**exceed** 177:25  
**exception** 20:7  
 131:6 256:6  
 257:21  
**excess** 155:22  
 214:10  
**excessive** 61:22  
 68:11 220:8  
**exchange** 244:10  
**exchanged** 120:17  
 120:20  
**exclude** 20:17  
**excursion** 200:23  
**execution** 146:20  
**exemplar** 125:15  
**exercising** 57:20  
**exhibit** 4:4 5:12  
 52:6 159:19  
 165:7,15 167:24  
 177:12 185:14,17  
 266:4 267:16  
**Exhibits** 5:13  
**exist** 85:20 234:4  
**expect** 31:3 88:2  
 183:5 193:5  
 218:1 230:4  
**expected** 246:10  
 246:14  
**expects** 57:25  
**experience** 74:21  
 75:20 87:20  
 156:5  
**expert** 7:13 8:18  
 8:18 10:1 17:7  
 24:5,20 27:2,10  
 40:14,18,18  
 63:20 87:7  
 124:14,15 129:3  
 149:17 152:24  
 221:17 238:15  
 247:2  
**expertise** 25:24  
 30:3 40:16  
**experts** 23:13 25:4  
 62:6,11,16,23

66:7 67:24 68:4  
235:14,14,15  
**explain** 215:1  
**explained** 71:12,16  
228:6  
**explanation**  
215:14,16,25  
**Explorer** 71:15  
248:14 255:19  
256:3  
**exponential** 75:23  
**express** 21:22  
**expressed** 64:25  
65:18 68:14,25  
176:1  
**expresses** 59:5  
**expressing** 39:10  
39:14  
**expression** 68:16  
**extended** 257:6  
**extensively** 159:20  
160:25 161:3  
**extent** 22:10 26:6  
27:4 62:22 63:23  
105:12,15 146:9  
175:14 210:11  
**extra** 60:4 231:7  
**extraneous** 38:18  
**extrapolate** 26:1  
**extrapolating**  
24:12  
**extreme** 74:22  
**extremely** 74:1  
76:22 98:15,23  
262:24  
**eyes** 30:16 48:16  
**e-mailed** 115:8

---

**F**

---

**F** 274:1  
**facebar** 77:2,9,12  
77:17,18,21  
87:15 88:8,17  
89:3,9,11,22 90:1  
91:11,19 92:6,9  
92:10,12 93:20  
93:22 94:1,4,8,9  
94:24 98:11  
116:21 117:4,11

117:13,14  
**faceplate** 95:21  
**facilities** 257:20  
**facing** 94:21,23  
**FACSIMILE** 2:24  
**fact** 20:17 27:13  
56:24 58:21 59:5  
113:15 135:8,9  
144:8 156:24  
190:20 216:20  
233:5 241:5  
253:6 254:6  
**factors** 69:11  
**facts** 29:11,16  
40:12  
**fail** 166:25 214:2  
214:17 232:16  
233:18 237:18  
251:1  
**failed** 179:1 215:1  
216:6 217:1  
220:6,7 232:1  
264:23 265:5,6,7  
265:19 268:5,12  
**failing** 231:19  
**fails** 213:18,18  
**failure** 213:19,23  
214:6 215:13,24  
221:19 223:8,9  
225:22 232:24  
238:9 269:4  
272:7  
**failures** 55:12,20  
56:1 217:24  
232:23 233:21,24  
**fair** 10:11 17:18  
24:12 45:22 47:2  
57:8 89:13  
113:18 215:7  
**familiar** 49:18  
**family** 105:19  
**far** 20:23 69:25  
136:25 137:14  
179:19 250:10  
267:1,2  
**Farm** 9:4,5,6,19,23  
10:3,5  
**FARS** 56:9  
**fascia** 77:14,15

104:1 132:6  
183:11 199:15  
265:3  
**fashion** 204:2  
**fast** 176:13  
**fatal** 56:11 174:22  
**fatality** 242:16  
**feasible** 262:18,24  
263:2,10  
**feature** 37:6  
236:21  
**February** 219:11  
219:12,13,15  
**federal** 22:6 35:17  
35:22,25 36:17  
57:18 107:14  
134:19 149:11  
214:11 248:13  
**feds** 166:6  
**feel** 66:25  
**feet** 79:13,14 80:1  
80:2  
**fictitious** 1:12,13  
**field** 24:5 40:3,4  
41:1 42:6,6 45:6  
46:2 50:21 78:25  
79:5 82:15 89:20  
**Fifty** 75:10  
**figure** 16:15 113:6  
189:18  
**filaments** 136:20  
**file** 214:25 216:17  
221:14,23 265:18  
**filed** 49:23 50:3,9  
**files** 224:3  
**Filippo** 2:3,5 3:6  
6:7 10:4,20,24  
12:1,5,10,13  
13:21,24 14:2,13  
17:9,12 19:1  
20:10,19 27:11  
32:16 33:7,15,19  
33:23 34:5,12,15  
34:19 43:14 53:6  
53:20 55:17 58:2  
58:19 59:3,12  
60:16,23 64:19  
65:3 67:19 72:14  
73:23 85:9,14

92:18 95:23 96:6  
96:12 102:7  
107:3 115:11,16  
119:16,19 120:19  
121:14 122:25  
124:16 129:4  
130:19 131:2  
136:13 137:5,7  
152:12,15,25  
153:4,9,15 157:7  
157:11,15,20  
158:2,14,18,25  
159:3,7,13,21,24  
160:3,7,13,21  
161:2,6,10,13,17  
161:24 162:17  
165:13 179:23  
180:12 184:3,8  
185:9,19 189:23  
190:1 191:3,8,12  
191:15,18 192:10  
192:20 204:25  
211:21 219:3  
232:5 236:1  
238:5 260:18  
272:18  
**filler** 128:6 246:25  
249:21  
**film** 194:20  
**films** 250:1,3  
**final** 18:10  
**finally** 128:21  
**financial** 243:25  
**financially** 274:20  
**find** 52:4 88:3  
105:17 168:25  
170:7,17 186:1  
187:19 191:2  
215:21 216:5,6  
224:25  
**findings** 56:16  
**fine** 28:6 64:19  
124:16 129:4  
160:3,7 191:17  
**finished** 70:8  
**fire** 8:11,13,18 9:2  
9:14 22:8 24:1,22  
24:22 25:2 27:17  
28:23,25 40:10

46:8,10 47:14,17  
56:11 61:14,17  
61:20,21 63:1,2,6  
63:9,14,18,24  
64:14 66:25 67:4  
67:10 68:6,8,11  
68:13,17,22  
69:11 71:6,8,11  
136:15 147:25  
174:6,14,22  
175:21 204:19  
235:12 246:15,18  
246:22,23 249:6  
254:13 256:10  
266:24  
**fires** 55:13,21 56:2  
163:4,5 242:17  
**firm** 8:1,5 16:7  
18:4  
**first** 6:2 13:19  
15:11 17:19  
18:20 20:23  
38:22 45:6 77:8  
86:13,18 121:5,6  
136:14 143:2  
151:16,17,18  
176:15 193:15  
240:8 245:2  
248:24 261:21  
266:3  
**Fischbach** 184:23  
244:10  
**fit** 246:6  
**fitting** 220:11  
223:19  
**five** 69:22 70:13,18  
70:19,22 73:20  
74:6 76:20,21  
80:22 86:3 98:19  
98:21 99:7 119:1  
119:5 136:10  
176:8,10 191:19  
216:19  
**fix** 166:21  
**fixed** 259:19  
**flange** 45:2  
**Flash** 84:10  
**flat** 251:22 252:19  
252:20,22,24

260:6  
**flipping** 97:10  
**floating** 15:6  
**floor** 124:10  
**floorpan** 100:14,15  
 100:20,22,25  
 103:3,4 104:1,7  
**Florida** 141:2  
 244:24 245:3  
**FMVSS** 38:16  
 104:19 107:14  
 110:18 119:9,12  
 155:22 254:7,10  
 254:13,18 258:7  
**focus** 24:20,21  
 27:22 28:16 36:6  
 66:8 148:4,5  
**focusing** 29:20  
 66:7 173:23  
**folder** 221:23  
**follow** 49:20  
**followed** 259:9  
**following** 15:6  
 22:9 28:5,11 57:3  
 135:20 136:1  
 155:4 172:10  
 269:11  
**follows** 6:4  
**follow-up** 223:15  
 224:3  
**forces** 76:22 98:14  
 98:22 103:8  
 164:14 242:15  
**Ford** 144:21  
 203:14,18 248:14  
 255:19 256:7  
**fore** 99:9  
**foregoing** 274:10  
**foreseeable** 241:9  
 241:14  
**forever** 216:16  
**form** 42:8 105:9  
 153:17,18 184:5  
 189:7 240:6  
**format** 6:25 53:22  
**formed** 207:19  
**formulate** 26:25  
 142:11  
**formulated** 27:14

**formulating** 82:4  
**forth** 274:14  
**forties** 139:22  
**Forty-five** 74:20  
 75:19  
**forward** 34:20  
 77:10 87:16,17  
 87:19 88:7,9,24  
 89:4 97:5 100:7  
 100:11,21,23  
 101:19 102:6  
 203:22 206:7  
 208:5,25 209:7  
 226:10  
**found** 101:3  
 170:16 227:22  
**foundation** 11:11  
**four** 23:1 76:19  
 77:4,5,24 83:19  
 86:3,12,17 98:13  
 99:8,23,24,25  
 100:5 102:10,25  
 103:3 119:6  
 214:15 267:16  
**fracturing** 136:19  
**frame** 25:20 26:11  
 29:21,23 30:1,2,3  
 30:6,10,12,22  
 31:5,16,23 32:3,8  
 42:17 77:16,19  
 83:9,11 88:19  
 94:13 96:17,18  
 97:15 99:9  
 101:10,12,14,18  
 102:11 103:4  
 127:11 134:13  
 196:3 207:19  
 210:12 251:14,15  
 257:2,7 258:17  
 258:18  
**frankly** 15:14  
 65:10 179:12  
**freak** 245:18,19  
 246:3  
**free** 242:16  
**frequently** 50:19  
**frictional** 136:18  
**FRIEDHOFF** 2:6  
**front** 78:19 96:20

100:1 101:4  
 190:14 198:7  
 210:23 242:12  
 259:17,19  
**frontal** 212:14  
 259:8  
**Frye** 244:4,10  
**fuel** 22:21 25:21  
 26:13 28:10,14  
 28:18,25 29:18  
 35:21,24 36:13  
 44:19 45:16  
 46:20,22,24  
 47:22,25 48:14  
 61:22,22 62:24  
 62:25 63:6,7,23  
 68:11,12,22,23  
 69:3,4 70:5,16  
 71:20 86:14,21  
 87:16 98:17,25  
 102:18,20,23  
 104:18,25 106:11  
 106:14 127:4  
 129:24 136:14  
 140:3,19 142:21  
 143:6,23,25  
 146:14 150:6,23  
 154:25 155:19  
 156:9 163:9  
 164:8 166:15  
 169:17 170:2  
 185:5 213:24  
 214:8,9 216:24  
 217:4 218:2,3,12  
 220:8 238:23  
 240:2 242:11  
 246:25 248:18,25  
 249:1,10,21  
 250:14 256:9  
 259:15 261:8  
 264:24,25 268:14  
 268:18  
**fuel-fed** 8:11  
 242:17  
**full** 77:8 86:13,18  
 143:2 201:2,4,8,9  
 227:7 228:24  
 229:22 231:10  
 235:6,17 236:7

237:7,13 269:14  
 269:16 270:23  
**function** 75:21,23  
 151:22 263:22  
 264:7  
**functioned** 44:1  
**fundamental** 31:8  
 32:22 40:8 42:18  
**further** 51:3 52:18  
 52:21 184:15  
 249:8 272:17  
 274:9,15  
**Fusco** 1:23 2:14  
 15:24  
**fuzzy** 180:7 183:19

---

**G**


---

**G** 155:4,11  
**garage** 9:3  
**gas** 123:2,7,18,20  
 128:7 131:25  
**gasoline** 71:7  
 129:25 136:16  
**gate** 265:2  
**gather** 44:18  
 212:12  
**general** 6:19 15:11  
 21:23 22:1 23:1  
 35:19 37:1,5 65:4  
 75:15 118:17  
 144:21 145:3  
 205:19 236:3  
 241:21 242:8,10  
 243:22 257:18  
**generally** 62:5,8  
 63:16 69:1 71:24  
 99:8 100:14  
 103:23 104:9,10  
 112:12 173:24  
 175:9 207:2  
 264:12  
**genuine** 188:3  
**getting** 59:25  
 83:18  
**GILL** 2:10 13:17  
 13:23 14:4,11,15  
 14:21 20:13  
 95:20 96:4  
**Gill's** 14:6  
**Ginny** 184:23  
**give** 13:10 21:10  
 24:4 28:17 35:15  
 38:15 40:14,18  
 40:21 65:19  
 87:14 162:16  
 163:17,18 171:15  
 191:3 198:10  
 200:21 214:6  
 216:11 226:21,23  
 244:9,18 250:7  
 256:7 269:22  
 270:1  
**given** 6:22 8:19  
 9:16 22:25 160:1  
 168:20 208:19  
 242:11 263:19  
**giving** 37:19  
 157:18 160:19  
 231:7  
**glad** 65:20  
**GM** 145:20,22  
 146:1 243:11  
**GM's** 242:25  
**go** 7:21 17:14  
 30:14 32:8 34:20  
 45:9,15 49:7  
 52:18,21 54:14  
 57:12 60:14,25  
 64:20 68:10,19  
 70:7,10 71:3  
 74:10 96:6  
 104:22 118:24  
 125:22 126:23  
 150:2 163:19  
 164:14 170:6,11  
 170:12 172:2  
 197:8 211:13  
 213:9,12 215:21  
 222:20 223:1,3  
 224:25 225:11  
 259:1 260:10  
 262:11  
**goal** 47:23 135:5  
 147:14 148:8  
 242:9 264:12  
**goes** 95:24 154:3  
 168:19 172:10  
 183:4 259:19



**going** 6:16 11:6,7  
 11:11 12:5 13:10  
 16:12 17:4 23:4  
 24:17,19 25:11  
 26:24 27:10,19  
 27:22 29:24 30:4  
 30:14 31:11,20  
 32:11 35:3,15  
 37:19 38:15,18  
 39:1,13 40:21  
 43:23 47:1 51:8  
 53:12,16 58:16  
 60:8 64:5,15  
 65:15,17 69:5  
 72:20 73:4 74:4,6  
 75:24 84:25  
 85:10 87:7 92:5  
 93:1,13,24 95:15  
 95:15 97:12,21  
 113:16 116:1  
 117:1 118:7  
 120:13,14,15  
 121:10 150:3  
 152:20,22 154:5  
 154:15 157:11,23  
 157:25 158:3  
 163:17,18 165:6  
 171:14,16 176:10  
 176:12 178:17,21  
 183:12 185:12  
 186:10 191:22  
 193:11,18 194:13  
 194:15 198:24  
 200:20,25 201:10  
 201:11 203:22  
 204:6,7 219:1  
 221:10 222:14  
 224:8,9 225:11  
 226:9 233:23  
 235:3,21 260:16  
 270:1 272:20  
**golf** 201:23 203:24  
**good** 42:21 67:6  
 70:11 105:11,14  
 115:11 148:8  
 187:5 227:19  
 230:9  
**goodness** 240:12  
**gotcha** 12:12

**gotta** 171:25  
**government** 22:6  
 35:17,23,25  
 36:12,18 57:19  
 107:14 135:14  
 154:4,16 165:24  
 178:24 248:13  
 253:13,23 262:2  
**Grand** 22:1 23:19  
 33:17 38:22  
 39:21 54:10  
 55:14 56:2 57:4  
 73:16 74:5,12  
 77:24 83:19  
 90:16 110:23  
 111:25 112:16  
 113:1,3 121:17  
 122:11 123:11  
 124:23 125:23,25  
 131:20 145:5,19  
 149:21 154:11  
 155:12,17,24  
 156:4,18 181:5,9  
 193:8 256:5  
 264:20  
**great** 170:19  
 201:20  
**greater** 76:14,16  
**GRIECO** 2:3  
**gross** 112:25  
**ground** 89:25 90:7  
 90:8,25 91:5,7,8  
 91:12,15,18,25  
 92:10,11,13  
 94:18,21 95:7,18  
 95:21 96:1,3 97:8  
 97:13,16,21,24  
 98:2 117:15,17  
 117:17 123:23  
 124:5 179:10,11  
**grounds** 160:17  
**group** 1:11 2:17  
 16:3 42:15,19,20  
 42:23 43:6,8  
 45:19 161:12  
**groups** 42:8  
**guard** 154:22,22  
 154:23 155:3,5,8  
 155:13 156:17

166:16  
**guardrail** 140:12  
**guards** 168:13  
**guess** 40:6 80:5  
 100:2,3 114:17  
 133:23 135:5  
 146:8 148:13  
 176:11 217:18  
 218:5  
**guessing** 7:6 218:6  
**guy** 44:19,20,21  
 45:16,17 46:2,5,7  
 46:8,10 47:14  
 113:23 187:6  
 204:20 216:25  
 235:12 266:25  
**G55** 145:4,8,16  
 148:18 149:21  
 150:22 151:6

---

**H**


---

**H** 4:1  
**Hale** 41:20  
**half** 82:19 230:16  
**hand** 16:11 97:11  
 97:19  
**handed** 84:6  
**hands** 13:2 43:3  
 73:2 106:6,9,19  
 110:6 120:1  
**handwriting** 16:25  
**handwritten** 16:24  
**hang** 258:16  
**hanging** 130:10  
**hangs** 120:9 126:6  
 240:2  
**Hanlon** 8:5,5  
**Hannemann** 66:15  
 71:11,14  
**Hanover** 2:15  
**Hanover,New** 1:24  
**happen** 29:12  
 183:12 187:7  
 194:13  
**happened** 15:1  
 26:3,12 27:3,20  
 27:23 29:4 31:9  
 31:12,21 40:9  
 51:22 54:22  
 154:10 171:4  
 179:13 194:10  
 217:12,13,15  
 218:21 222:2,5  
 222:19 226:1  
 250:5,8 268:21  
**happening** 25:2  
**happens** 212:23  
 266:6  
**happenstance**  
 232:7  
**happy** 187:4  
**hard** 88:14 89:8,12  
 148:9  
**hazard** 242:17  
**HDPE** 42:16  
**head** 31:11 179:2  
 225:17 245:9  
**hear** 181:8 238:17  
**heart** 233:14,16  
**heated** 48:18  
**heaters** 168:12  
**heavy** 149:6  
**heed** 173:24  
**HEIRS** 1:3  
**held** 14:23 96:8  
 165:17 172:4  
**help** 26:6 28:13,24  
 96:11  
**helps** 78:12,13  
**Henderson** 6:2  
**hereinbefore**  
 274:13  
**he'll** 161:7  
**high** 74:13,15,20  
 74:22 75:5,6,16  
 76:1,1,5,8,11,18  
 126:20,24 127:5  
 174:11,13 181:7  
 181:10 182:13  
 247:10 258:1,18  
**higher** 56:11 75:19  
 182:16 183:7  
**highway** 140:1,6,9  
 140:15,20 142:8  
 142:13 180:6,24  
 183:16 241:13  
**hit** 45:1,4 78:14  
 81:14 91:8

103:12 129:9  
 140:12 189:13,18  
 189:19,24 190:1  
 190:7 197:21  
 198:15 199:2  
 202:16 204:2,2  
 205:7,10 209:16  
 210:22 212:15  
 245:24 248:8  
 252:22,24 253:18  
 256:8 260:8  
**hitch** 70:16 142:22  
 143:7,16 230:21  
 271:5,10  
**hits** 140:20 241:9  
**hitting** 251:21  
 252:18,21  
**hit's** 194:21  
**hoist** 44:17  
**hold** 97:19  
**holding** 86:2  
**hole** 127:19,24  
 128:5 134:13  
**home** 8:12 9:9  
**Honestly** 178:5  
**hope** 171:18  
**hose** 128:6 218:4  
 218:14,16 249:22  
**hoses** 246:25  
**hour** 73:20 74:7,19  
 74:20 75:1,4  
 76:13,17 109:23  
 110:2 122:16  
 129:10 139:4  
 140:10 141:3  
 192:22 194:16  
 197:10 201:12  
 203:16 204:12  
 248:15 249:13,20  
**Hummer** 71:22  
 145:4  
**hundred** 7:6 79:23  
 174:14  
**hundreds** 158:11  
 158:11

---

**I**


---

**ideally** 102:19  
**IDENT** 4:4

- identical** 113:5  
**identification**  
 12:18,21,24 19:7  
 53:10 58:7 92:23  
 93:7 115:20  
 121:2 131:11  
 153:24 180:2  
 192:18 212:1  
 219:7 260:23  
 267:25  
**identified** 70:15  
 136:17  
**identify** 116:3  
 121:5,21 122:22  
 123:1,10 128:4  
 209:22 225:20,23  
**ignited** 136:15  
**ignition** 136:17  
**II** 1:16  
**ills** 187:10  
**image** 248:5  
**impact** 28:21 36:7  
 36:22 55:12,20  
 56:1,11 69:25  
 70:1 71:10 72:14  
 72:23,24 74:18  
 75:1,9 76:8,11,18  
 76:22 78:10  
 81:21 82:5 91:12  
 98:14,22 103:8  
 105:25 107:24  
 108:5 109:7  
 136:2 137:1,15  
 137:25 138:8,23  
 139:3,8 140:7,8  
 140:11,14,14  
 141:13 142:8  
 144:3 146:10  
 200:3,5 203:15  
 205:8,8,14  
 212:14 214:8  
 219:23 220:8  
 224:5 236:21,25  
 239:18 242:15  
 246:1,22 248:7  
 250:19 251:16  
 258:8 259:5,7,11  
 259:12,24 272:6  
**impacted** 78:20  
 90:1 116:22  
**impacting** 104:3  
 248:14  
**impacts** 48:2 75:18  
 107:22 242:12  
**implied** 107:25  
**important** 236:24  
**improper** 179:1  
**improperly** 22:20  
**improves** 166:24  
**inadequately**  
 221:1  
**inappropriate**  
 22:21  
**inch** 80:15 81:19  
 82:19 235:8  
**inches** 77:10 79:14  
 79:15,21,23,25  
 80:3,13,17,21  
 81:5,9,12 87:16  
 88:7,25 99:23,24  
 99:25 123:22  
 124:5 126:11  
**incidence** 56:11  
**incident** 69:14,17  
 69:21  
**include** 168:12  
**including** 40:1  
 107:10 169:6,10  
 240:19  
**incorrect** 22:14  
**independent**  
 224:11 226:12  
**INDEX** 5:1  
**indicate** 13:14  
 21:17 29:12  
 61:11,25 64:21  
 64:23 65:23 67:1  
 67:7 68:15 72:5,8  
 73:13 76:9,11  
 98:12,14 100:6  
 117:11 119:7  
 128:23 130:8  
 136:14,23 142:21  
 189:12 250:4  
 272:20  
**indicated** 35:14  
 66:1 71:25 85:5  
 93:18 117:5  
 122:9 131:23  
 133:6 154:16  
 169:16 190:19  
 221:12 270:13  
**indicates** 54:24  
 55:25 261:5  
**indicating** 26:20  
 27:13 29:25  
 64:11 72:20  
 133:21 151:10  
 229:5  
**indication** 169:13  
 180:22  
**indirect** 26:16  
**INDIVIDUALLY**  
 1:6  
**individuals** 23:9  
 23:10  
**industry** 102:18  
 173:18 257:19  
**influencing** 236:14  
**information** 24:23  
 30:13 39:17  
 49:25 50:22  
 51:24 55:10  
 57:11,13 78:4  
 102:15 137:23  
 154:21 155:4,7  
 168:24 169:2,5  
 169:20 175:2  
 213:2 214:25  
 216:3 221:13  
 225:2,12 226:12  
 262:1,3,4  
**initial** 203:15  
**initially** 9:12 50:12  
 91:12 248:24,25  
**initials** 19:19  
**injured** 8:23 9:7  
 10:12,19  
**injuries** 241:19  
**injury** 10:19,21,23  
**INK** 2:22  
**inordinate** 86:4  
**input** 41:14,24  
**inside** 77:15 99:11  
 175:17  
**inspect** 248:25  
**inspection** 40:5  
 78:5 84:2 105:16  
 186:24  
**installed** 154:25  
 167:3  
**instance** 31:23  
 40:13 42:1 141:1  
 270:1,23  
**Institute** 180:6,24  
 183:15  
**instructing** 161:21  
**instruction** 166:3  
**instructions** 6:17  
 6:20  
**Insurance** 183:15  
**integrity** 35:22,25  
 70:6 104:18  
 105:1 106:12,15  
 140:3,19 146:14  
 185:5 217:4  
 249:11 259:16  
**intend** 21:22 23:23  
**intended** 154:24  
**intending** 21:10  
 24:4  
**intent** 253:4  
**intention** 21:14  
**intents** 144:15  
**interchangeably**  
 61:7  
**interest** 272:12  
**interested** 274:21  
**interfacing** 49:15  
**interim** 156:10  
 163:24 164:9,16  
 164:17  
**intermediate** 51:1  
**internally** 52:25  
**Internet** 53:18  
**interrupt** 7:17  
 15:19 158:8,15  
 158:16  
**interrupted** 159:16  
**interview** 177:20  
**introducing** 14:16  
**invaded** 100:20  
**invasion** 87:25  
**investigating** 57:1  
**investigation**  
 56:17,18 69:9  
 156:2 215:25  
 221:19,22 249:9  
 262:10  
**investigations**  
 50:21  
**involve** 8:10 39:3  
**involved** 8:7,14  
 51:9 57:6 62:2,9  
 62:17 108:25  
 221:8 242:14  
 244:23 245:15  
 249:7 266:15  
**involves** 121:9  
**involving** 16:13  
 36:1 44:7 54:10  
 58:12 154:11  
 228:8  
**in-depth** 51:5  
**issue** 22:2 63:17  
 64:24 65:25  
 66:14,18 67:10  
 68:16 73:1  
 158:12 170:22  
 218:7,8,9 229:6  
 253:15 262:13  
**issued** 54:3 247:5  
 247:15  
**issues** 38:2 62:1,19  
 66:8 186:23  
 254:10  
**item** 71:18 123:4  
**items** 103:3  
**IV** 242:2
- 
- J**
- J** 2:16  
**jacket** 216:17,21  
 223:24 272:4  
**JAMES** 2:10  
**Jane** 16:6,17,18  
 18:2,4  
**Japanese** 145:6  
**Jarmon** 239:7  
 267:13,18  
**jars** 265:21  
**Jeep** 1:11 33:17  
 38:22 39:20 42:7  
 54:10 55:13,14  
 56:2,3,10,12 57:4

72:9,9,22 90:16  
 93:14,16 102:16  
 109:21 118:23,24  
 122:11 123:10  
 124:23 125:23  
 131:19 145:4  
 155:12,16,24  
 156:4,18 171:5  
 172:18 181:18  
 182:9,11 189:13  
 189:19 193:8,25  
 194:16,25 195:5  
 195:5,11 196:3  
 197:11,12,13  
 198:12,19 199:7  
 199:17 200:11,17  
 200:22,24 203:15  
 205:4 207:23  
 209:1 228:8,19  
 230:9,16 257:21  
 261:6,8  
**Jersey** 1:1,21,24  
 2:4,10,15,23 7:23  
 274:4,24  
**Jim** 20:10  
**Jimenez** 178:7  
**JOHN** 1:11  
**JTE** 172:7,9  
**judge** 152:10  
 160:15  
**judgement** 188:24  
**judgment** 53:1  
 57:20  
**judgments** 40:8  
**July** 120:21 165:8  
 165:12,14 212:21  
 239:6 269:3,8,11  
**June** 6:12 167:21  
 185:14 219:1

---

**K**


---

**KAS** 16:16,16,19  
 16:20,20 18:4  
**keep** 164:18  
 170:15  
**keeping** 163:3  
**kept** 183:12 216:13  
**key** 146:13,19,24  
**kind** 22:22 37:9

42:12,18 45:5  
 101:18 127:24  
 132:10 165:3  
 198:18 228:20  
 229:17,21 231:6  
 234:11 247:4  
 258:1 260:8  
 270:10  
**kinematic** 203:25  
**kissing** 195:1  
**Kline** 1:3,4,5,5  
 34:22,25 36:2  
 37:20 56:25 57:5  
 72:3,9 105:3,10  
 105:19 106:8  
 107:2,4 110:5,15  
 111:7,11,13,17  
 111:18 113:20  
 117:10 119:21  
 120:9 121:10  
 124:24 126:22  
 127:1,8 128:17  
 130:15,18 232:16  
 232:17 234:6,14  
 234:17,22  
**Kline's** 102:23  
**knew** 185:4  
**Knolls** 2:10  
**know** 6:25 9:22  
 11:3 13:1 14:14  
 14:19,25 15:14  
 16:9 17:17 26:11  
 26:17 27:14,24  
 28:24 31:3 36:3  
 37:11 38:14  
 39:11 41:3 42:22  
 43:1,5 49:22  
 52:10,10,19,20  
 52:24 53:4 54:7  
 54:17 57:9 60:2  
 60:12 64:19  
 65:15 66:20  
 67:12 68:7 69:4  
 78:11 82:6 83:6,8  
 83:10,13,15,16  
 86:1 88:13 89:14  
 89:18 90:17  
 93:11 99:1,21  
 100:4 102:24

104:11 107:9  
 108:23 112:3,10  
 113:10,23,25  
 114:5,6,19 116:6  
 116:7,9 117:21  
 122:17 126:17  
 129:1,6 130:2  
 131:4 139:6,14  
 141:5 142:2,3,17  
 145:20 148:19  
 152:15 157:14  
 162:15,22,23  
 163:1,12,17  
 166:17 169:19  
 170:8 171:20,21  
 176:14 177:13  
 178:12,15,17  
 179:12,19 180:20  
 181:4,12,22,22  
 181:24 183:10,11  
 183:13 186:21  
 189:15 191:12  
 193:10 194:13,19  
 194:21 196:2  
 197:25 198:8  
 210:20 214:5,18  
 215:6,23 217:1  
 217:12,18 218:19  
 220:15 221:5,9  
 222:1,3 223:3,7  
 223:17 224:24  
 225:12 226:1  
 228:7,14 229:10  
 229:11,13 231:17  
 233:5,13,23  
 235:2 237:19  
 240:24 243:16  
 245:11 247:8  
 248:23 249:1  
 252:13 257:25  
 262:13 265:7,11  
 265:13 267:3  
 268:21 269:19  
 270:2,3,6,9,24  
 271:22 272:20  
**knowledge** 27:1  
 29:17 30:19,24  
 40:1,3,24 143:14  
 217:19

**knowledgeable**  
 266:20  
**known** 70:1,3,4  
 120:3,6 136:25  
 137:15 138:8  
 207:18  
**knows** 158:9  
 162:18

---

**L**


---

**L** 2:19  
**lab** 35:4  
**labeled** 108:10  
 212:23  
**lack** 134:10 258:4  
**ladder** 96:22,23  
**lamp** 136:19  
**Laredo** 110:25  
 111:4 113:3  
**large** 24:22  
**late** 241:2 262:19  
**lateral** 83:7 99:9  
**laterals** 103:5  
**latest** 169:2  
**latitudes** 31:4  
**LAUGHLIN** 2:16  
**law** 1:1,4 6:3 8:1,4  
 177:17,18 179:15  
**lawsuit** 8:8,11 23:8  
**lay** 11:11  
**lead** 227:6,12  
**leak** 28:25 36:5  
 48:20 49:1  
 135:19 136:1  
 155:19 156:3,5  
 268:14,19  
**leakage** 46:20,22  
 46:24 47:22,25  
 48:14 61:22  
 63:24 68:12,22  
 69:3 70:16 71:7  
 147:24 163:9  
 213:24 214:8,10  
 220:8  
**leaked** 218:17  
 265:4  
**leaking** 129:24  
**leap** 32:9  
**learned** 115:5  
 175:16 241:6  
**LEARY** 2:9  
**leave** 269:22  
**leaving** 176:8  
 234:22  
**led** 26:25 29:3  
 55:11 63:23  
**left** 28:18 29:21  
 30:12 31:6 79:14  
 80:1 81:1,1,2  
 83:9 92:8 106:5,8  
 106:18 110:6  
 119:25 121:17  
 127:12,13 183:1  
 230:20 250:21  
 251:14,15  
**Legacy** 72:24  
**length** 90:15  
 117:22 134:8  
 269:19  
**Leopold** 245:12  
**lessen** 238:11,19  
 239:14  
**lesser** 246:9  
**letter** 4:19,21,23  
 4:24 61:6 120:22  
 153:22 166:7,7,8  
 211:25 243:24  
 260:22 266:3  
 267:24  
**let's** 23:24 24:15  
 34:18,19 41:4,17  
 43:21 45:1,2 53:6  
 60:23 63:8 68:10  
 70:7 75:18 131:5  
 131:13 132:11  
 153:19 187:23  
 192:12,12 211:21  
 214:14 216:2  
 219:3 220:12  
 269:2  
**level** 51:3 179:21  
 237:17 242:10,16  
 247:11 250:15  
**LICENSED** 2:23  
**life** 181:18,18,19  
 182:17,20  
**lift** 197:8 265:2  
**lifted** 116:13,14

- lifting** 179:7  
**lifts** 197:6  
**light** 148:18,22  
149:5,21 150:14  
245:23  
**lightweight** 65:10  
**limit** 33:24 135:6  
**limitations** 253:21  
**limited** 110:24  
111:4 113:4  
256:18  
**limits** 140:21  
**line** 75:21 216:9  
220:10,23 223:19  
242:1 257:21  
258:21  
**lines** 42:14 43:12  
**list** 174:21,23  
226:22,23 269:4  
269:21  
**listed** 138:13  
169:11,12 217:2  
240:19 270:4  
**liter** 214:15  
**literally** 197:7  
**literature** 170:15  
**litigation** 5:1 57:6  
221:8 222:1  
244:1  
**little** 8:25 123:25  
168:9 183:6,19  
253:24 263:24  
264:9  
**LLC** 1:23 2:3,14  
**load** 77:19 238:23  
**loading** 201:18  
**located** 144:22  
170:2 256:21  
257:1  
**locating** 255:10  
**location** 1:23 22:21  
44:23 62:24 63:5  
71:16 146:2,20  
146:20 255:12  
257:14  
**Loman** 1:10 2:17  
16:3 161:12  
**long** 82:5 90:24  
146:5 216:21  
224:6 232:1  
233:8 243:10,12  
243:15  
**longer** 91:7  
**longitudinal**  
134:12  
**longitudinals**  
207:20 210:13  
**look** 12:2 13:12  
20:15 32:8 45:15  
47:8,12,15,24  
48:6 54:23 58:9  
58:20 60:6,24  
61:1,9 65:6,22  
66:13,19 69:7  
73:8 76:19 78:25  
79:7,22 80:18  
83:6,10 89:11,17  
89:21 90:13 97:7  
101:17 103:17  
116:23 118:14  
119:1,5 121:4,19  
121:24 122:4,10  
122:13,15,20,21  
123:15 125:5,13  
126:14 127:10,16  
127:23 128:10  
130:4,7,25  
131:15 132:22  
139:15 151:3  
157:19,21,24  
158:23 159:19  
160:9 161:23,25  
162:12 163:19,21  
165:10 170:12  
172:25 177:7,16  
182:21 183:6  
185:16 186:10  
187:3,4,20 191:8  
191:16 192:5,23  
193:6,7,7,14,17  
193:20 194:22  
195:3,19 196:8  
196:23 197:9,10  
197:12 198:11  
200:16 204:20  
211:14,20 219:9  
219:18,25 224:4  
236:17 237:21  
244:17 250:1  
260:14 264:16  
268:2,15 270:11  
271:18  
**looked** 31:1 33:11  
33:16 55:6,7  
89:14,15 117:8  
122:12 144:7,12  
146:2 152:5  
159:23 166:10  
180:8 191:1  
211:18 224:21  
229:1,14 237:21  
249:14 269:18  
**looking** 19:10  
30:19 46:14,18  
46:20 47:16,21  
48:10,11,24  
58:19 61:8 117:2  
121:21 124:22  
125:7,8 128:5  
131:4 132:2,5  
144:16 157:5  
180:23 184:14  
185:25 207:10  
212:19 266:1,5  
272:13  
**looks** 127:7 182:1  
197:19 200:5,24  
**loose** 28:19 29:3  
**losing** 10:22  
**loss** 10:17  
**lost** 160:14  
**lot** 17:16 39:11  
65:9 116:15  
142:9 197:14  
206:13 264:11  
**lots** 31:1,1  
**love** 191:5  
**low** 74:1 181:11  
182:14 245:17,24  
**lower** 82:10 83:3  
132:10 140:15  
182:19  
**LUCINDA** 2:16  
**lunch** 115:25  
**luncheon** 115:14  


---

**M**
- M** 2:5  
**magnitude** 78:14  
**magnitudes** 71:11  
**major** 263:22  
264:7  
**majority** 111:18  
111:19  
**makers** 57:19  
**making** 34:24  
178:1  
**malfunction** 8:15  
**man** 158:15 176:23  
**manage** 147:5  
148:6,10  
**management** 71:6  
147:5,9,21 148:6  
171:6 172:9  
240:1  
**manager** 114:7  
**managing** 147:10  
239:17  
**mangled** 88:10  
**manner** 178:25  
**manual** 214:15  
**manufacture**  
119:18  
**manufactured**  
104:17 106:10  
119:8 154:23  
**manufacturer** 22:5  
50:12 51:9 58:14  
59:22 106:6,19  
110:6 135:15  
140:1 234:23  
258:8  
**manufacturers**  
35:17,19 36:25  
37:5,13,25 49:19  
50:23 51:10 55:6  
57:25 140:18  
154:7 253:22  
254:5  
**manufacturer's**  
120:1  
**manufacturing**  
41:1 44:20,21  
105:23 218:7  
**March** 11:22 12:16  
13:3,6,19 14:1,6  
14:19,20 15:7,7  
15:13,13,18  
16:21,24 17:19  
18:13,15,21,22  
18:25 19:5,10,22  
60:1,9,10,20 61:5  
72:6,7  
**margin** 177:22  
**mark** 2:15 12:5,13  
19:1,2 53:6 58:2  
92:5,17,19 93:2  
115:16 120:15  
131:2,3,5 152:20  
179:23 185:10  
192:8,11,11,12  
211:21 218:24  
219:1,3 260:17  
260:18  
**marked** 11:4 12:9  
12:17,20,23 19:6  
19:10 53:9,13  
58:6,10 64:22  
79:6 92:22 93:6  
93:14,25 115:19  
117:3 121:1  
125:6 131:7,10  
131:14 132:23  
153:23 159:18  
165:7 167:20  
180:2,10 183:18  
185:13 192:18  
211:25 218:25  
219:7,10 226:25  
260:22 266:2  
267:24  
**marketed** 154:23  
**marking** 19:3  
153:3 248:9  
**material** 126:15,24  
132:7,20  
**Matt** 114:10,13,15  
**matter** 2:23 37:24  
82:3,8 139:17  
146:10 148:9  
190:11 227:23  
238:6  
**MC** 2:16  
**mean** 7:19 10:18  
23:7,7,9 30:23

- 32:13 35:2 52:15  
53:19 54:12 59:1  
67:24 72:12  
76:15 86:25  
94:23 103:10  
107:1,5 109:5  
110:7 125:18  
139:12 173:15  
183:16 184:13  
187:1,18 188:17  
197:19 212:6,7  
233:15,17 242:2  
257:17 266:19  
**meaning** 15:23  
262:3  
**means** 2:24 30:16  
33:19 102:24  
227:1,6  
**meant** 169:23  
188:8  
**measure** 78:17  
143:25 156:11  
163:24 164:10,16  
164:18 208:17,22  
208:23 209:2  
210:15,16  
**measured** 78:5  
79:24 80:1 99:1  
207:24  
**measurement** 32:4  
32:13 78:22  
79:18 81:18,19  
**measurements**  
27:21 30:1 79:13  
**measures** 209:21  
**measuring** 78:18  
209:15,17  
**mechanic** 166:4,9  
**mechanism** 250:24  
254:25  
**MEDIA** 2:24  
**medium** 148:23  
149:5 150:4,9,14  
150:15  
**meet** 37:7 114:1  
135:14,19,19  
**member** 94:12  
**memo** 240:9,19,20  
240:25 241:6
- memory** 67:6  
70:11 72:19  
145:15 226:8  
265:21  
**mental** 248:5  
**Mercedes** 7:15,23  
9:18 71:22  
144:21 145:4,8  
148:17,18 150:4  
150:10,15,21  
151:1  
**mere** 232:7  
**merely** 173:8  
**merit** 50:14  
**met** 22:4,5 35:16  
36:8,17 37:20  
38:16 135:12  
261:5,16,18,20  
**metal** 30:3 32:6  
101:1,3 103:14  
103:24 127:18  
136:18  
**metallurgical** 35:3  
**method** 136:17  
**methodology**  
174:19 175:6  
**methods** 175:16  
**Mexico** 10:9  
**Michael** 41:20  
**mid** 258:13 261:18  
**middle** 94:15  
177:18 193:17  
257:22  
**midsize** 178:22  
**mid-ship** 256:22  
257:1  
**Mike** 262:11  
**miles** 73:20 74:6  
74:19,20,25 75:4  
76:13,17 109:23  
110:2 129:10  
139:4 140:10  
141:2 192:21  
194:16 197:10  
201:12 248:15  
**milliseconds**  
192:25 193:1,24  
200:20 202:1  
**mind** 26:23 82:1,3
- 160:14 225:7  
272:9  
**Mindy** 16:6,17,18  
16:18 18:2,4  
**mine** 12:6 60:1  
138:1 200:21  
**minimal** 203:13  
**minimum** 134:21  
134:24 135:6,10  
135:11,13,21  
136:2 141:3  
**minor** 246:1 256:8  
256:12  
**minus** 192:24  
193:24  
**minute** 31:19 96:7  
150:2 171:15  
198:10 214:7  
221:7 247:16  
261:16  
**minutes** 214:9  
220:9 259:2  
**mislead** 29:18  
**misread** 171:19  
**missing** 134:3  
214:21 233:9  
**Mississippi** 242:7  
**misspoke** 14:12  
**mistake** 150:17  
**Misty** 16:16  
**mitigate** 239:3  
**mitigates** 237:8  
**mitigation** 70:16  
**mockup** 43:3  
**model** 110:23  
113:12 155:17,24  
**models** 56:10  
113:3 195:13  
**modified** 155:7  
268:10  
**moment** 75:1  
**money** 10:23  
**Mopar** 151:19  
165:1 167:11,17  
167:25 168:2,11  
168:14 169:2  
**MORAN** 2:9  
**Morgan-Alcala**  
1:9 2:11
- MORRIS** 1:1,4,5  
**Mosley** 242:3  
**motor** 65:11  
134:20 241:17  
**Motors** 144:21  
145:3 219:5  
241:22 242:8,10  
243:22  
**mounting** 28:11  
91:1  
**move** 27:12 44:22  
45:1 89:9,10  
101:14 102:20  
152:16 161:3  
200:11,12 226:10  
252:9 253:4  
257:3,11 264:14  
**moved** 101:19  
102:6 116:22  
195:4,6 196:4  
198:13,19 200:10  
200:22 202:12  
257:7,22  
**movement** 199:3  
201:20 203:13  
249:23 252:1  
**moves** 89:7 252:16  
**moving** 54:3  
109:25 110:1  
203:17 252:20  
259:13,13,21  
**MPV** 149:12  
**MPVs** 149:19  
**MRS-L-3575-08**  
1:2  
**multi** 250:14  
**multilayer** 250:15  
**multiplicity** 22:7  
**multipurpose**  
149:2,13 240:16  
**multitude** 112:24  
112:25  
**MVSS** 36:3,8  
212:4
- N**
- N** 2:1,19 3:1 6:1  
**name** 16:16 176:20  
182:2 245:2
- named** 113:24  
176:24 184:23  
**names** 1:12,13  
**NATALIE** 1:9  
**nature** 25:22 26:19  
28:24 30:11  
39:17 50:25 63:1  
87:25 174:4  
188:23 210:14  
**nearly** 73:16,19  
**necessarily** 25:18  
108:6 130:15  
188:22 233:12  
251:23  
**necessary** 215:18  
**need** 27:24 51:2  
66:19,25 67:5  
130:7 148:7  
158:15 160:9,15  
162:4 163:20  
166:21 172:25  
173:2 185:15  
188:18 198:8,9  
218:19 230:6  
259:2 262:12  
**needed** 57:9,13  
159:25 250:20  
257:14 262:3  
**needs** 12:10 160:23  
161:6  
**negligible** 188:6  
246:11  
**neighborhood**  
80:10  
**neither** 235:10  
274:16,18  
**Nevada** 6:2  
**never** 18:14 72:17  
105:12 119:22  
151:11,19,24  
152:1 156:22,22  
203:4 231:13  
240:18 247:24  
253:7 266:11  
**new** 1:1,21 2:4,10  
2:15,23 7:23  
155:7 216:15  
233:14 247:18  
250:13,17 251:3

251:7 274:4,24  
**NHTSA** 4:10,11  
 49:15,20,23  
 50:18 51:14,24  
 51:25 52:3,8,11  
 52:16,17,21,25  
 53:9 54:3,8,12,19  
 54:24 55:1,9,23  
 57:3,11,12,18,18  
 57:24 58:5,11,12  
 58:13 59:17  
 113:12,17 152:19  
 179:9 213:9  
 255:2  
**NHTSA's** 50:8  
 59:5  
**nice** 129:16  
**night** 171:21  
**nine** 19:21 20:1,2,7  
 79:23 136:11  
 154:20 174:19  
 175:7  
**nineties** 176:24  
 186:8,9,14  
 255:18 261:6,17  
 261:19 262:19,20  
**non** 46:1 55:14  
 56:3 187:9 235:7  
**nondeformable**  
 109:20 110:1  
 252:20 260:6  
**normal** 91:1  
**normally** 89:24  
**nose** 118:25 182:25  
 198:2  
**Notary** 1:20 274:2  
 274:24  
**notation** 82:16  
 89:19 186:19  
 268:17  
**notations** 17:6  
 18:5 89:21  
**note** 33:21 34:4  
 45:23 47:18  
 53:17 64:16  
 72:11 82:14  
 87:12 100:19  
 106:22 110:20  
 111:22 117:24

120:4 121:8  
 122:1 124:7,12  
 124:25 125:14  
 126:7 127:25  
 128:18,25 130:13  
 130:19 132:15  
 133:14 135:1,16  
 135:22 136:7  
 137:3 138:10,25  
 139:5 140:4,22  
 141:7,18 142:1  
 142:15 143:19  
 144:4 145:10,23  
 146:6,16 147:2  
 147:18 148:1,15  
 149:15 150:2,18  
 151:13 152:9  
 154:14,18 157:2  
 163:15 164:2,23  
 165:19 166:12,13  
 167:6,14 168:7  
 168:18 169:8  
 171:11 172:20,24  
 174:10 177:5  
 178:3,10,19  
 179:17 180:17  
 181:2 182:5  
 183:8,22,25  
 184:6 185:8  
 186:15 187:16,25  
 188:10,20 189:6  
 194:17 195:7  
 196:6,14 197:15  
 197:22 198:4,16  
 198:22 199:8,18  
 199:24 200:8,14  
 201:5,21 202:6  
 202:10,17 203:5  
 203:9,19 204:8  
 205:6,12,20  
 206:3,20 207:15  
 208:6 209:8,23  
 210:4 211:1  
 212:25 213:15,20  
 214:3,23 215:11  
 215:19 216:8,23  
 217:7,16,21  
 218:10 220:4,16  
 221:15 222:9

223:4,22 224:14  
 225:4,14 226:3  
 227:3 228:2,12  
 229:3,8 230:2,18  
 232:3,19 234:1,8  
 234:16,25 235:20  
 236:18 237:14  
 238:1,13 239:19  
 240:5,10,22  
 241:15,25 242:20  
 243:3,18 245:20  
 246:19 247:1  
 248:16,18,21  
 249:24 250:11  
 251:2,10 252:6  
 252:25 253:10,16  
 254:9,12,20  
 255:7,14,20,25  
 256:11,23 257:10  
 258:6,20 260:2  
 261:10 262:7,21  
 263:5,15 264:1  
 265:8,16 266:8  
 267:4,17 268:7  
 269:5 270:7,18  
 271:3,7,15  
 272:10  
**noted** 223:10 273:1  
**notes** 60:25 79:1,5  
 82:15 89:20  
 90:12 185:25  
 191:1 222:23  
 224:6  
**noticed** 28:11  
 186:2  
**notification** 166:6  
**number** 23:18  
 61:11 69:8 71:23  
 73:14 76:21  
 83:18 85:6,16  
 98:19,20 99:6  
 100:6,19 104:15  
 119:6,7 120:16  
 130:6 138:6  
 152:21 154:20  
 170:18 211:22  
 217:24 225:24  
 255:17,23  
**numbered** 136:11

**numbers** 76:7 79:1  
 269:22  
**numerous** 6:22  
 144:20

---

**O**

---

**O** 2:19 6:1  
**OATES** 2:3  
**object** 16:12 17:5  
 17:14 27:10  
 32:11,16 34:8,11  
 43:23 58:16 60:9  
 121:11 152:16  
 153:10,16 231:16  
**objecting** 17:10  
 34:3 153:16,17  
 184:4,5  
**objection** 33:22  
 34:4 45:24 47:19  
 53:17 64:16  
 72:12 87:13  
 106:23 110:21  
 111:23 117:25  
 120:4 121:9  
 122:2 124:8,13  
 125:1,15 126:8  
 128:1,19 129:1  
 130:14,20 132:16  
 133:15 135:2,17  
 135:23 136:8  
 137:4,21 138:11  
 139:1,5 140:4,23  
 141:7,19 142:2  
 142:16 143:20  
 144:4 145:11,24  
 146:7,17 147:3  
 147:19 148:2,16  
 149:15 150:19  
 151:14 152:10,23  
 153:8,11,13  
 154:14,19 157:3  
 163:15 164:3,24  
 165:20 167:6,14  
 168:7,18 169:9  
 171:12 172:21,25  
 174:10 177:6  
 178:4,11,20  
 179:18 180:18  
 181:3 182:6

183:8,23 184:1,7  
 185:8 186:16  
 187:17 188:1,11  
 188:21 189:7  
 190:24 194:4,8  
 194:18 195:8  
 196:7,15 197:15  
 197:23 198:5,17  
 198:23 199:9,19  
 199:25 200:9,15  
 201:6,21 202:7  
 202:10,17 203:5  
 203:9,20 204:9  
 205:6,13,21  
 206:4,21 207:16  
 208:7 209:9,24  
 210:5 211:2,9  
 213:1,16,21  
 214:4,23 215:12  
 215:20 216:9  
 217:8,17,22  
 218:10 220:5,17  
 221:16 222:10,22  
 223:5,22 224:15  
 225:5,14 226:4  
 227:4 228:3,13  
 229:4,9 230:3,18  
 231:3,25 232:4  
 232:20 234:2,9  
 234:17 235:1,20  
 236:19 237:15  
 238:2,14 239:20  
 240:6,11,23  
 241:15 242:1,21  
 243:4,19 245:20  
 246:16,20 247:2  
 248:16,22 249:25  
 250:12 251:2,11  
 252:6 253:1,11  
 253:17 254:9,12  
 254:21 255:8,15  
 255:20 256:1,12  
 256:23 257:10  
 258:6,21 260:3  
 261:11 262:8,22  
 263:6,15 264:2  
 265:9,16 266:9  
 267:5,17 268:8  
 269:6 270:8,19

271:4,8,16,21 272:11 <b>objections</b> 184:9 <b>objective</b> 70:2 71:5 137:1,16,25 138:9 <b>observation</b> 29:9 <b>observations</b> 25:16 25:25 26:5,25 29:2 31:22 34:24 <b>observe</b> 26:22 40:13 <b>observed</b> 25:19 30:11 <b>obvious</b> 46:14,19 46:22 47:16,19 47:21 48:4,5,9,18 48:21 192:14 253:19 <b>obviously</b> 17:6 134:2 246:21 253:3 <b>occasion</b> 44:5 49:9 <b>occasions</b> 6:23 <b>occupant</b> 242:15 <b>occupants</b> 242:13 <b>occupied</b> 98:17,24 <b>occur</b> 208:14 <b>occurred</b> 40:10 194:9 232:23 <b>occurs</b> 193:25 <b>October</b> 153:22 <b>odd</b> 225:21 <b>offer</b> 27:22 73:4 143:24 162:2 <b>offered</b> 155:9 170:2 172:7,13 <b>offhand</b> 245:7 <b>office</b> 15:23 56:16 114:7 171:2 172:16,19 176:19 245:8 262:1,4 <b>offices</b> 173:9 <b>office's</b> 176:20 <b>offset</b> 81:21,22 82:5 <b>oh</b> 30:18 41:11,13 49:2 59:21 62:22 65:12 75:6,14	83:24 86:20 99:18 126:11 138:24 143:24 177:13 187:22 202:9 215:10 231:22 240:12 241:5,11 250:2 257:18 270:16 <b>okay</b> 7:21 10:24 11:21 12:12 15:12 20:19 21:9 21:25 24:25 34:14,15 42:21 62:15 63:8 64:8 65:14 70:7 79:3 80:24 83:14 84:15 86:11,20 86:25 92:15 93:24 98:9 105:8 113:23 118:10 121:14 127:2,16 129:14 131:17 137:9 149:23,25 153:19 173:11 175:23,25 187:8 190:4 191:8,16 191:20 193:13 197:5 214:19 218:1 222:14 229:16 235:5 237:2 244:6 247:5 264:23 265:25 267:21 268:5 <b>old</b> 171:20 251:6 256:7 259:25 <b>onboard</b> 155:20 156:1 <b>once</b> 156:16 187:23 189:16 203:4 222:11 <b>ones</b> 35:11 86:7,8,9 131:6 253:19 <b>ongoing</b> 154:12 163:2 <b>open</b> 50:14 52:13 52:22 241:22 243:1 <b>opened</b> 84:8	214:12 <b>opening</b> 84:8 206:1 206:8 208:1,25 209:3 <b>opens</b> 52:8 <b>operation</b> 42:13 <b>opinion</b> 21:16 24:8 24:10,11 25:3 30:16,17 32:9 37:19 39:20,24 40:18 42:3 67:2 73:6 74:5 75:4 81:12 87:9 136:21 142:5,11 143:10 176:1 201:2 235:12 237:2 250:7 <b>opinions</b> 21:10,16 21:21 23:2,17,23 24:5,15,18 25:6 25:12,14 27:1,14 27:15 35:15 38:15 39:3,10,14 40:20 42:1 72:21 73:5 82:4 144:6 175:3 <b>opinion-based</b> 40:15 <b>opportunity</b> 122:7 157:19 160:2 211:17 <b>opposed</b> 10:22 27:3,16 174:8 227:2 <b>opposite</b> 45:3 117:22 118:4 <b>optional</b> 151:20 155:2 156:20 <b>Orange</b> 2:4 <b>order</b> 163:25 164:18 <b>ordered</b> 179:10 <b>orientation</b> 96:14 <b>origin</b> 27:17 61:14 61:17,19,23 63:2 63:6,9,14,18 64:13 65:2 66:25 67:4,10 68:5,12 68:17,22 69:10	175:21 266:25 <b>original</b> 6:10 13:25 79:17 155:1 <b>originally</b> 118:19 <b>ORVR</b> 156:14,16 164:12,15 216:25 216:25 <b>ought</b> 131:3 <b>outcome</b> 142:24 143:8 <b>outside</b> 175:17 207:19 210:12 <b>oval</b> 127:19,24 <b>overall</b> 38:24 208:18 <b>oversight</b> 43:8,19 44:2 45:19 46:13 <b>O&amp;C-1</b> 169:25 <b>O&amp;C-2</b> 170:19,21 171:8,16 172:6 173:1,3 <b>o'clock</b> 272:5,14	186:10,22 207:22 235:22 260:17 267:16 268:18 <b>pages</b> 120:19,25 <b>Page-Line</b> 5:6 <b>painted</b> 123:3,5,21 <b>PALMA</b> 1:20 274:2 <b>panel</b> 104:8 <b>panels</b> 103:25 <b>paper</b> 42:15 92:4 191:7 <b>papers</b> 223:12 <b>paragraph</b> 61:11 69:8,24 70:3 71:5 71:12,17 73:14 77:7,8 85:6 86:13 86:18 119:6 136:10 137:6,7 138:14 143:2,3 151:12,16 <b>paragraphs</b> 69:23 151:17,18 <b>parallel</b> 89:24 90:8 91:5,15 92:12 94:18 95:6,18,21 96:1 97:8,13,16 97:21,23 98:1 <b>parameter</b> 229:18 <b>parameters</b> 109:16 <b>Pardon</b> 80:14 82:21 90:19 112:20 114:12 170:20 207:7 <b>parked</b> 8:13 <b>part</b> 24:23 25:8 42:20,23 64:11 65:24 78:18 97:25 116:11 125:11 132:3,4 133:22 198:7 216:17 221:1 223:8 236:13 <b>partial</b> 220:10 223:18 <b>participated</b> 43:11 <b>participation</b> 21:15 <b>particular</b> 10:25
--	---	---	---	---

---

**P**


---

**P** 2:1,1,19  
**package** 228:10,19  
229:20 230:14,17  
231:6  
**packet** 120:20  
121:7 122:14  
130:7 192:12,13  
192:17  
**page** 19:20 20:1,2  
20:7 60:6,13,13  
61:1,9,10,25 69:7  
69:22 70:13,18  
70:19,22 73:8,13  
74:17 76:9,19  
77:4,5,24 79:8,12  
83:19 86:12,17  
94:15 98:13  
119:1,5,6 136:10  
142:20 144:19  
149:23,25 150:2  
150:3 151:9  
169:16,22,23  
170:21 171:8  
174:18,19,23  
175:7 177:18

- 21:11 33:4 40:16  
50:2 51:23 106:7  
106:13,18 110:17  
212:19 214:1  
249:8  
**particularly** 29:22  
36:6 45:6 112:23  
**parties** 22:12,16,18  
23:6,7 62:2,3,9  
62:18 274:17  
**partner** 187:5  
**parts** 25:22 43:12  
221:3 255:4  
**party** 23:8  
**pass** 42:17 177:19  
177:24 179:16,20  
230:8 232:16,18  
233:10,19 237:18  
238:9 250:19  
254:2 269:13  
**passed** 228:18  
229:1,23 230:1  
234:6,15 250:22  
269:17  
**passenger** 149:19  
210:25  
**passengers** 147:1  
211:7 241:18,23  
**passes** 128:6  
**passing** 228:9  
231:13 251:16  
272:8  
**pass-through**  
29:22 127:20  
**pattern** 246:6  
**Paul** 2:19 96:4  
170:23  
**pause** 7:18  
**pay** 174:7 237:22  
**PC** 2:9  
**PDOF** 26:18 28:21  
137:11  
**PDOL** 45:4  
**PE** 50:15 51:4 53:1  
54:6,9,20  
**peer** 55:7,14 56:3,9  
**pencil** 268:19  
**pendency** 57:5  
122:8
- pending** 171:24  
267:8  
**people** 7:10 41:15  
41:24 42:7 43:13  
44:13 66:10  
142:7 170:16  
174:1 175:18  
206:23,25 213:4  
240:19 250:19  
**percent** 173:21  
174:15  
**percentage** 174:1  
**performance** 30:5  
30:9 31:25 32:3  
36:4 40:3 41:2  
62:25 105:1,25  
106:15 174:25  
242:11 250:19  
**performed** 26:10  
29:19 32:9 175:8  
**period** 155:15  
156:13 164:11  
272:8  
**perpendicular**  
90:9,25 91:6,11  
91:17,24 92:10  
92:13 94:19,20  
94:22 95:8,10,14  
95:19 96:2  
**person** 42:13 44:20  
45:21 66:8  
137:20 174:6  
216:6 249:6,7  
266:20  
**personal** 10:20  
**pertains** 74:15  
**PEs** 262:11  
**petition** 50:4,9  
51:16 52:8,13,18  
52:22 154:4  
**petitions** 49:24  
50:1  
**pgs** 4:17  
**phone** 160:15  
**phonetic** 116:16,17  
176:17  
**photo** 4:13,14,15  
4:16 129:19  
132:2 270:15
- photograph** 93:1  
93:15,25 121:5,6  
121:20,23,24  
122:5,14,20,24  
123:9,16,17  
124:22 125:6,22  
126:3,10,12,15  
127:11,23 128:2  
128:11,12,22,22  
128:24 129:8,20  
130:6 131:1,13  
131:15 132:5,23  
132:25 180:1,5,9  
180:15,23 181:1  
181:17,20,25  
182:8 193:15  
194:24 196:22,24  
**photographs** 83:6  
83:11 84:13,16  
84:19 85:18  
89:18 93:5  
101:17,23 102:5  
102:8 115:18  
116:2,12,24  
117:2,3,6,9 130:5  
130:9 131:4,9  
191:22,25 192:6  
**photos** 4:18,20  
85:15 86:5 90:14  
116:19 192:17  
270:12,14 271:13  
271:14,18,19  
272:3,4  
**physical** 10:18  
28:4 30:21 49:2,4  
87:24 142:4,19  
**physically** 31:16  
47:7  
**pickup** 111:2  
**picture** 93:19  
248:2 266:7,12  
**pictures** 83:22,25  
84:4 85:3 266:5  
**piece** 42:14 92:4  
97:9 127:18  
132:9 133:6  
**Pilot** 214:14  
**Pinto** 256:7  
**place** 74:21 128:7
- 168:8,10 170:6  
271:24 274:13  
**placed** 64:10  
**plain** 160:18  
**plaintiff** 2:6 8:2,20  
8:23 9:2,5,6,7,14  
9:25 10:8,12,19  
62:12,13,17 67:9  
67:24 68:1,1,4  
245:5  
**plaintiffs** 9:22  
**plaintiff's** 8:14 9:3  
22:18 23:13 62:6  
62:23 63:20  
67:24 68:16,24  
**Plaintiff(s)** 1:7  
**planning** 177:4  
**plate** 70:15 111:6,8  
112:4 113:8,8,21  
127:15 142:22  
143:7,16,17,22  
145:17 151:9,11  
151:20,22 152:20  
155:16 156:5,9  
156:11,20 163:24  
164:8,10,13,22  
165:1,3,4,5  
166:20,21,23  
167:3,5,9,12,13  
167:16,17 169:6  
172:8 182:2  
228:10,20 229:22  
230:7 231:10  
232:9 233:1  
249:16 258:4  
269:13,16 270:2  
270:20,22 271:11  
**plates** 168:13,15  
**play** 50:17  
**please** 43:15  
163:21 179:17,24  
219:9  
**plus** 80:22 196:10  
**plywood** 252:19  
**PMK** 266:18  
**point** 38:7 64:6  
86:9 88:15 89:8  
89:12 116:19  
146:12 185:2,3,5
- 185:21 193:16,16  
194:10 195:4  
197:24 198:12  
199:1 200:17  
201:4,20 208:13  
210:8 211:10  
234:5  
**pointed** 179:4  
**pointing** 48:25  
94:15 187:10  
**points** 94:7 208:19  
208:19,21 252:13  
253:5  
**pole** 248:8  
**policy** 59:17  
**polyethylene**  
126:20,25 127:6  
**polypropylene**  
145:16  
**portion** 36:23  
65:23 100:22  
120:8 130:10  
132:13 205:3  
269:1  
**portions** 16:24  
**position** 59:6 91:5  
179:14 194:1,6  
243:11  
**possible** 86:15,22  
87:2,4,8,21  
253:14  
**possibly** 176:13  
**post** 8:10 29:10  
71:6 105:23  
129:7 186:24  
187:2 242:17  
**potential** 48:13  
187:22 238:12,20  
239:15  
**potentially** 47:25  
**potentials** 46:21,22  
**pounds** 236:23,23  
**power** 185:2,5  
**practical** 37:24  
148:9  
**prefer** 130:5 191:7  
**preliminary** 50:15  
50:16 52:8,13,22  
54:4,15 55:24



154:2,5  
**premarked** 177:8  
**premised** 242:13  
**prepared** 65:16  
 212:17  
**preproduction**  
 44:15  
**presence** 142:21  
 143:5,6  
**present** 171:1  
 172:15  
**presentation** 185:3  
 185:6,22 243:21  
 244:5  
**presenting** 39:2  
**presents** 56:21  
**preserved** 184:9  
**pressing** 225:9  
**pressure** 218:1  
**pretty** 114:16  
 139:23 166:19  
 171:19 247:10  
 257:2  
**prevalent** 55:13,21  
 56:2  
**previous** 27:6  
 43:16 67:21  
 256:16  
**previously** 125:6  
 131:7 133:7  
 167:20 218:25  
 227:20  
**primary** 156:8  
 164:7 212:4  
 217:3,5 219:19  
**Princeton** 7:25  
**principles** 175:10  
 175:13,16  
**print** 12:3  
**printed** 53:18  
 84:20  
**printing** 168:24  
**prior** 16:14 34:25  
 60:11 72:23  
 73:23 79:6 98:25  
 109:1 119:17  
 131:20 140:8,14  
 141:13 160:24  
 165:7 177:3

180:4 209:13  
 210:18 234:21  
 239:23 274:4  
**privileged** 16:14  
 17:8  
**probabilities** 87:6  
**probable** 87:1,3,9  
 87:23  
**probably** 14:11  
 33:2 81:8 82:12  
 114:18 130:3  
 186:13 193:2  
 197:21 201:1,9  
 204:10 216:19  
 217:15 218:11  
 225:18 231:24  
 239:9 243:13  
 268:19 270:22  
**problem** 46:25  
 47:4,17 48:12  
 156:25 158:5,7  
 159:10 164:19  
 167:10 187:19,21  
 187:22 223:21  
 227:22 228:5  
 249:21 255:10  
**problems** 255:11  
**procedure** 50:8  
**procedures** 49:19  
**process** 184:18  
**produced** 144:20  
 150:5 152:6  
 186:2 242:14  
**produces** 75:19  
**product** 43:9 44:14  
 45:20 169:2  
 171:2 172:16,22  
 177:2,4  
**production** 5:5  
 79:20 110:12,15  
 111:12 127:4,5  
 155:5,13 156:12  
 156:18 164:11  
 165:4 182:12  
 214:15 217:9  
 226:6 235:7  
 236:12 255:5  
 257:20 264:20,20  
 264:22 268:9

**products** 56:12  
 169:6  
**Program** 171:6  
 172:23  
**Programs** 172:9  
**prompted** 52:16  
 52:17,21  
**prop** 235:7  
**proper** 87:8  
**properly** 188:14  
 218:3,16,17  
**properties** 30:21  
**property** 9:8,23  
 10:17  
**proportion** 246:9  
**proposition** 146:4  
**PROSEQUEND...**  
 1:3  
**protect** 132:13  
 133:13 134:16  
 143:18,23 146:15  
 146:25 147:23  
 155:25 156:9  
 163:25 164:8  
 210:24 241:18  
**protected** 102:24  
 130:9,17 133:16  
 145:21 146:5  
 148:11 251:9  
**protecting** 147:11  
 147:16  
**protection** 98:18  
 99:5 102:12,16  
 133:21,25 143:25  
 145:8 146:1,22  
 146:24 147:8,13  
 148:5,7 210:13  
 241:23  
**protective** 32:1,25  
 154:22  
**protects** 132:4  
 133:7  
**prototype** 45:7,7  
 220:19,19 221:1  
 221:2 223:8  
**provide** 85:1  
 154:20 155:3,6  
 221:10  
**provided** 76:24

103:2 109:3  
 211:15,16 216:3  
 216:4 229:24  
**prudent** 57:20  
 58:14  
**Public** 1:20 274:3  
 274:24  
**publications** 166:5  
**published** 241:1,1  
**pull** 246:25  
**pulling** 249:22  
**puncture** 86:14,21  
 87:20  
**pure** 202:14  
**purpose** 69:9  
 156:8 164:7  
**purposes** 34:4  
 92:25 96:14  
 138:19 144:15  
 227:21 266:21  
**pursuant** 107:12  
 157:4 164:4  
**pushed** 88:7 211:7  
**pushing** 118:8  
**put** 44:17,21,22  
 95:3 97:11 99:11  
 128:7 138:21  
 142:9 146:11,13  
 147:8 153:12  
 218:13,15,16,17  
 250:21 252:11  
**putting** 42:14  
 179:6  
**P-21** 165:15  
**p.m** 273:1

**Q**  
**qualify** 230:5  
**Quality** 176:21  
**quarter** 82:25 83:1  
 103:25 104:8  
**quarters** 169:18  
**question** 9:12,21  
 15:9 27:6 33:24  
 34:9,11 37:10  
 38:6,11,13 64:20  
 67:17,20,21 69:2  
 75:15 105:11,13  
 105:14 125:10

130:21,22,24  
 140:16,17 154:15  
 157:8 158:1,3  
 159:5,17 160:16  
 160:18 161:22  
 162:8 171:23  
 173:7 174:17  
 177:15 183:9  
 207:23 208:12,13  
 208:21 209:1  
 214:16 234:7,12  
 236:2 237:10,11  
 238:8,17 239:12  
 256:16 269:18  
**questioned** 178:8  
**questioning**  
 160:25 165:20  
 179:18 216:10  
 242:1 258:21  
**questions** 9:16  
 11:9 45:11 51:10  
 51:14,22 52:3  
 55:1 154:6,7  
 162:11,23 163:7  
 163:10 191:13  
 193:18 225:15  
 272:19  
**quite** 116:25 152:7  
 183:3 225:22  
**quoted** 156:7  
**quoting** 156:6

**R**

**R** 2:1,19 6:1,1  
 274:1  
**rack** 224:5  
**radio** 174:9  
**rail** 25:20 26:11  
 29:21,23 30:1,2,4  
 30:6,10,12,22  
 31:5,16,23 32:3,8  
 42:17 77:19 83:9  
 83:11 89:4,6,6,10  
 97:6,9,11,16 99:9  
 101:18 102:11,11  
 127:11,12,13,17  
 127:17 134:13  
 250:21 251:14,15  
 251:25 252:2,24

253:3	157:17 163:14	190:17 201:18	<b>recognizing</b> 108:14	179:22
<b>rails</b> 77:17 88:19	239:10	204:3 205:7,10	<b>recollection</b> 224:12	<b>reenforcement</b>
89:3 96:16,17,17	<b>real</b> 30:20 120:3	205:24,25 206:5	<b>recommended</b>	230:13,19
96:18,25 97:5	142:7 181:18,18	206:7 207:24,25	242:10	<b>refer</b> 60:24 77:11
99:13,25 101:10	181:19 182:16,19	208:23,25 209:2	<b>reconstruct</b> 25:13	90:2 106:17
101:12,14 102:25	188:2 210:18	209:3,15,19	<b>reconstructing</b>	205:17
103:4 104:7	239:1 241:9,14	210:22 212:15	31:13,21,24	<b>reference</b> 57:11
210:12 257:2,7	257:14	219:23 235:7	<b>reconstruction</b>	66:10 89:8 151:9
258:17,18 264:25	<b>really</b> 23:6 24:9	241:8 242:12	24:6,17,24 25:10	153:6 236:3
<b>raise</b> 51:3	29:20 34:6 37:11	245:23 255:11	25:12,15,19 27:2	<b>references</b> 152:19
<b>raised</b> 62:2	38:12 44:13	256:8,19 259:9	27:9,16 28:13	<b>referencing</b> 158:24
<b>Ram</b> 59:13,14	46:18 113:13	259:14,17,21	31:15,17 33:1,1	<b>referring</b> 11:19
<b>Rams</b> 59:11	147:4 198:12	260:8 263:22	40:6 72:25 74:9	23:12 37:2 62:10
<b>range</b> 70:6 139:21	222:19 252:4	264:7 265:2	76:5 137:20	70:25 99:6 105:3
<b>rare</b> 22:8	<b>real-world</b> 31:3	272:6	142:19	118:12,13 138:3
<b>rate</b> 36:5 135:20	32:21 174:24	<b>rearmost</b> 94:12	<b>reconstructionist</b>	171:9 172:18
136:1 173:16,19	<b>rear</b> 31:2 36:7,22	<b>rearward</b> 144:22	24:14 26:3,17	238:2 259:5
<b>RAWLS</b> 1:9	36:23 55:12,20	<b>reason</b> 15:21	28:8,16,20 81:25	<b>reflect</b> 59:10,13
<b>react</b> 235:16	55:25 56:11	116:18 164:1	137:24 141:24	90:13 267:16
<b>reacted</b> 73:16	61:23 68:13 70:1	178:13 232:24	<b>reconstructionists</b>	<b>reflected</b> 185:25
<b>reaction</b> 66:5	71:20 74:12,19	<b>reasonable</b> 176:1	76:3,24 141:9	<b>refueling</b> 155:20
236:6	75:9,17 76:11,18	<b>reasons</b> 39:15	<b>reconstructionist's</b>	156:1
<b>reactivate</b> 216:15	77:9,21 78:14,15	<b>recall</b> 6:12 11:23	139:16	<b>regard</b> 49:20 65:1
<b>read</b> 11:6 16:20	78:21 81:14	16:1 44:5 122:18	<b>reconstructor's</b>	<b>regarding</b> 15:4
27:5,7 43:14,17	82:13 87:15,18	141:21 155:22	73:2	25:10,12,14 30:3
55:15,22 56:5	88:6,11,13,17,18	164:25 165:9,21	<b>record</b> 13:17 14:22	45:12 49:15
61:12 63:10 64:2	89:14 90:6,15,23	166:1,3,14 170:4	14:24 15:3 38:8	51:15 54:3 72:21
64:5 65:12 67:5	91:4,16 93:18	171:9 173:12,14	59:10,12 61:8	107:12 146:14
67:19,22 70:12	94:11 97:19	173:20 174:8	96:7,9,11,13	169:5 240:20
86:23 91:2	99:13 100:7,12	178:1 179:4,10	115:23 118:20	254:11 259:6
114:22 115:9,10	100:15,20,20,21	206:17,18 245:4	153:13 160:8	<b>regardless</b> 146:13
137:10 141:14	100:23,24 101:5	<b>recalling</b> 222:4	165:11,16,18	<b>reinforced</b> 156:14
142:3 143:9	101:15,20,21	<b>recalls</b> 173:25	172:3,5 173:5	156:16,17 164:12
150:4 154:15	102:6 103:6,10	174:1	209:9 224:12	230:16 265:3
157:6,10,12,21	103:16,23,25	<b>receive</b> 18:19,25	226:13 260:12	<b>reinforcement</b>
158:5 159:8,20	107:22,24 108:5	20:6	267:15 272:19	250:20,22
160:10,25 161:2	109:21 110:11	<b>received</b> 12:17,20	<b>RECORDED</b> 2:23	<b>reinforcing</b> 250:25
162:17,20 163:16	113:4 116:8,20	12:23 17:13	<b>recovery</b> 155:21	<b>rejected</b> 172:8
164:5 165:13	118:25 121:17	18:14,16,20,22	156:1	<b>relate</b> 22:24
171:16,17,20	125:18 129:9	18:24 19:6,15	<b>recreational</b>	<b>related</b> 33:2 55:12
190:20 206:12,24	133:4,5,8,12	20:4 53:9 58:6	132:12	55:20 56:1 67:14
207:21 214:7	134:1 137:15,25	92:22 93:5	<b>reduce</b> 71:8	218:11
219:15 220:7	138:8 140:2,19	115:18 121:1	<b>reduced</b> 78:1,24	<b>relation</b> 193:21
235:21 238:4	144:23 150:5,6	131:9 153:23	83:20	<b>relationship</b> 26:16
241:23 242:5	150:23,23 155:18	180:1 192:17	<b>reduction</b> 78:9,23	232:13
256:14,17 261:1	156:10 164:9	211:25 219:6	79:16 80:7,8,15	<b>relative</b> 36:1 47:17
264:3 268:20	170:3 189:13,22	260:22 267:24	81:6,10,13 85:4	69:13,16,21 72:3
<b>reading</b> 55:17	189:23,25 190:2	<b>recess</b> 49:11	85:18,24 86:5	94:2 110:10
62:20 70:9 153:1	190:9,13,14,15	115:14	<b>redundancy</b> 37:6	201:19 249:23

274:16,19	18:23,24 19:2,5,9	<b>represents</b> 15:11	78:1,10 83:21	83:11 93:16
<b>released</b> 74:23	19:14,15,17,21	58:21	86:15,22 87:21	94:25 95:17,25
<b>relevant</b> 129:2	19:25 20:4,6,11	<b>request</b> 4:22 5:5	164:21 208:9,15	97:25 98:12
149:16	20:21,23 21:1,7	84:25 117:2	209:25 237:9	102:6 109:13
<b>Reliability</b> 176:22	59:25 60:7,10,10	219:6 226:9	243:21 265:14	110:3 117:19
<b>reluctant</b> 99:4	60:13,21 61:2,4	<b>requested</b> 61:13	<b>resultant</b> 28:4	124:19 125:7,20
<b>remained</b> 203:3,6	63:10,22 64:1,2	<b>requests</b> 50:22	30:19 35:7 78:13	125:22 127:24
<b>remains</b> 87:22	64:12,17 65:9,12	<b>require</b> 58:13	82:8 209:11	135:4,18 137:14
<b>remember</b> 7:24 8:1	65:13,20 66:14	119:12 167:4	<b>resulted</b> 256:9	137:17 138:4
41:22 44:11	66:20,22 67:5,13	250:17 258:7	272:7	147:16 152:25
68:20 79:20 83:5	68:2 70:23 72:6	<b>required</b> 54:21	<b>resulting</b> 223:18	157:12 166:10
90:12 139:22	73:11 74:17	259:4	251:14	167:7 170:24
141:16,20,22,23	98:13 116:11	<b>requirement</b> 59:17	<b>results</b> 47:23	174:3,9 187:12
151:3 154:1	119:2,2,3 120:18	<b>requirements</b> 22:4	104:23 106:12	187:15 192:3,25
170:4 171:13	121:1,12 124:14	22:5 35:16,21,24	143:15 146:23	193:3,23 195:9
184:24 190:3	129:3 136:11	36:17,25 37:21	187:20 204:20	195:12,21,25
206:19 222:7,12	139:16 140:24	38:16 70:5	212:24	198:1,14 199:10
222:12,15 223:7	142:20 149:17,24	104:19 135:20	<b>retained</b> 5:13	200:13 201:22
224:16,18 225:17	151:8 152:24	136:3,5,6 155:22	<b>retention</b> 216:14	210:2 211:12
225:19,21 226:1	153:1,1,5 170:10	238:25	216:18	212:15 217:6,11
243:12 245:6,21	171:10 173:6	<b>requires</b> 57:18,19	<b>retested</b> 189:10	219:21 220:13,22
247:3,4,7 249:3	175:7 189:11,19	113:12 135:14	<b>retired</b> 114:9,13,17	225:10 239:8
249:18,19 260:12	221:17 225:1	259:8	177:21	243:8,14 246:11
261:22 265:22	238:15 247:2,5	<b>reread</b> 68:20	<b>retrofit</b> 151:21	249:5,14 250:23
<b>remembered</b> 226:7	247:15 270:11	<b>rereading</b> 64:16	156:23	251:22 252:15
<b>removed</b> 132:24	<b>Reporter</b> 1:21 2:23	<b>research</b> 70:14	<b>retrofitted</b> 219:22	253:9 254:6,14
<b>render</b> 18:10	274:3	175:10,12	219:25	255:6 265:1,5
<b>rendered</b> 8:20 9:13	<b>reports</b> 8:20 11:1	<b>researched</b> 183:17	<b>returned</b> 156:20	267:12
9:24	11:16,18 13:2,3	<b>reshaped</b> 250:16	<b>revealed</b> 45:8	<b>rigid</b> 240:3 259:13
<b>rendering</b> 10:13	14:9 15:5,5,10	251:4	<b>review</b> 107:17	259:21
<b>renew</b> 117:1	21:17 49:25	<b>resolved</b> 164:20	160:10 161:5	<b>rigidity</b> 103:2
<b>repair</b> 155:23	57:10 61:5 64:11	<b>resources</b> 253:13	248:12	231:1,7 251:19
166:23 167:5	64:22 65:22,24	253:23 263:19	<b>reviewed</b> 55:10	251:24 252:4
<b>repaired</b> 167:2	66:2,4,10,12 67:1	<b>respect</b> 36:11	<b>Reynolds</b> 114:10	<b>rise</b> 237:17
<b>repeat</b> 6:19 11:8	67:8 68:3,15,20	43:21 57:4 59:6	114:14,15	<b>risk</b> 56:21 71:8
125:9	122:10 189:12	59:15 64:13	<b>re-answer</b> 126:23	<b>ROBERT</b> 1:16 3:5
<b>repeatability</b> 37:9	213:7,8,11	66:24 73:5	<b>re-looked</b> 250:3	274:6
38:3	234:19,20	102:22 105:10	<b>Ridgedale</b> 2:9	<b>Robertson</b> 167:21
<b>repeatable</b> 187:9	<b>represent</b> 116:10	106:5 134:19	<b>right</b> 11:14 17:2	<b>Rock</b> 1:23 2:4,14
<b>rephrase</b> 27:18	191:23 193:11	141:25 148:17	20:8,9 21:4,8	<b>Rodgers</b> 16:18
<b>report</b> 4:6,7,8,9	236:12 264:22	149:23 216:4	23:8 29:20 31:7	<b>role</b> 43:7 151:22
9:13,25 10:13	268:10	250:8	34:7,11,16,19	161:14 164:13
12:16,19,22 13:5	<b>representation</b>	<b>response</b> 51:25	35:1,20 36:24	214:10
13:7,9,13,13,19	117:9	52:2	38:14,19 46:3,4,6	<b>rollover</b> 217:24
13:25 14:6,7	<b>represented</b>	<b>responses</b> 68:3	46:17 48:8 49:6	218:18 242:12
15:16 16:6,10,21	108:24 111:17	<b>responsible</b> 223:16	56:23 57:23	259:10 265:6
16:22,25 17:18	129:18	<b>rest</b> 203:7,7	59:23 60:22	<b>room</b> 15:17 44:17
17:18,19,24 18:5	<b>representing</b> 16:3	<b>result</b> 26:7 29:5,6	63:15 77:1 79:15	213:5 257:7
18:11,12,15,16	161:9	52:7 54:20 56:15	80:2,22,23 81:4	<b>rotated</b> 89:22

91:13 92:14  
118:4,7  
**rotating** 117:15,16  
**rotation** 81:1,23  
82:5  
**routinely** 45:6  
**rule** 59:24  
**ruled** 152:11  
**rules** 186:10  
**run** 96:20 212:8,10  
212:20,22  
**running** 97:5  
**rupture** 147:12  
204:6,7 246:24  
**rupturing** 147:23  
**rusty** 127:24

---

**S**

---

**S** 2:1,19,19 4:1  
**saddle** 257:22  
**safe** 164:19 204:5  
**safety** 50:3 51:16  
56:21 114:7  
134:20 136:6  
146:14 147:1  
151:11,21,21  
156:23,23 157:1  
165:8 171:2  
172:16 176:21  
177:1,19 180:24  
183:16 211:24  
219:5 253:15  
254:17,18 260:21  
261:25 267:23  
**sale** 155:6,9 170:2  
**sales** 166:16,17  
168:1  
**samples** 35:3  
**Sandra** 245:10  
**sat** 15:17 42:5  
**save** 85:11 168:9  
**saw** 25:25 26:8  
30:15 35:11  
88:20,22 129:15  
187:23 226:5  
240:9 247:8,11  
247:24 267:14,18  
**saying** 16:5 25:23  
29:1 34:17 41:25

48:5,9 49:1 67:14  
75:3 79:24 81:4,5  
81:9 87:10 88:6  
91:23 105:2  
112:13 113:16  
133:12,19 139:25  
140:17 151:5  
152:3 158:7,22  
159:2 167:13  
182:7,10 196:25  
209:17 212:18  
216:23 221:12  
222:1,18 225:8  
225:10 231:1,9  
231:12 233:8  
**says** 13:23 14:6  
23:18 33:24  
42:15 44:21 55:5  
55:9 56:13 69:9  
77:24 100:19  
113:17 121:16  
150:15 161:17  
166:13 167:1  
168:10,23 172:6  
172:6 177:17,17  
177:17,18 179:15  
186:19 188:5  
189:1 207:21,22  
212:3 223:10  
235:23 242:8  
268:18  
**scanned-in** 221:22  
**scenario** 110:16,19  
204:1  
**scenarios** 59:7  
**scene** 83:25  
**schedule** 216:14,18  
**schedules** 216:14  
**scheme** 146:1  
**schooled** 65:11  
**scientific** 26:2  
27:20 30:8,13  
32:4,5,6,12 43:4  
175:9,12  
**scientifically** 30:5  
**scope** 121:11  
124:15 129:3  
140:23 152:24  
153:5 221:16

230:3 238:14  
**screw** 44:22,24  
45:2  
**scrub** 140:8,13  
**se** 254:14,14  
**search** 229:18  
**seat** 178:23,25  
179:2  
**second** 11:23 18:11  
37:18 71:12  
72:24 73:15 77:7  
122:13 137:7  
147:8 151:12  
190:5,13  
**section** 31:5  
119:10 172:12,15  
175:7 188:4  
**secured** 218:4  
**see** 15:14 16:21  
19:23 20:13  
30:18 41:17  
46:13,23,25  
47:16 49:5 77:3  
79:10 82:16  
86:16 88:1 94:6,7  
98:19 119:10  
123:16 124:13  
126:2,9 129:2  
132:14 133:20  
138:13 149:16  
158:6 169:1  
173:2 182:2  
187:21 193:15,21  
194:5,23,24  
195:12,16 196:19  
197:13 198:19  
199:5,7,13,14  
200:17 202:4,24  
214:14 220:12  
247:17,20,21  
248:2 266:5,12  
268:18 270:25  
271:1,5,9  
**seeing** 48:15  
**seen** 50:24 53:14  
53:23 54:1 58:18  
116:4 128:11  
129:11,16 162:13  
162:20 163:7,10

177:10 194:14  
217:23 232:4  
266:11  
**select** 57:21  
**selling** 254:3  
**semantics** 148:13  
**send** 18:7 50:22  
154:6 223:23,24  
244:19  
**sense** 21:23 22:1  
31:18 33:8  
229:15  
**sent** 17:10 20:14  
20:18 51:15,24  
**sentence** 55:22  
62:10,21 69:8  
70:20,21 86:14  
86:16,19 137:8  
137:13 150:15  
156:6,7  
**separate** 26:21  
41:2 203:1,8  
221:20  
**separated** 72:17,22  
202:24 203:3,6  
**separation** 203:21  
220:10 223:18  
**September** 1:17  
13:5,6 15:8 20:15  
21:2 66:13  
155:14 156:13,19  
266:3  
**serve** 164:13  
**server** 84:24,24  
**service** 167:4  
**set** 109:16 194:23  
274:14  
**sets** 50:17  
**settled** 267:2,7  
**seven** 81:9,12  
98:20 104:15  
119:6,7 126:11  
144:19 150:2,3  
**seventies** 150:7  
241:2,3  
**Seventy-nine**  
241:2  
**severe** 22:7 24:1  
75:20 76:11,18

76:22 98:15,23  
139:23  
**severity** 24:9 71:10  
143:13  
**shaft** 235:7  
**shape** 101:19  
105:9  
**sheet** 101:1,3  
103:24  
**Sheridan** 2:19 4:17  
66:15 71:18  
120:20 169:25  
170:23 171:3  
**Sheridan's** 116:11  
120:18,25 171:10  
173:6  
**shield** 145:16,17  
**shielding** 125:12  
**ship** 258:13  
**shoots** 203:14  
**short** 49:11 164:11  
216:12 235:8  
**shot** 118:16  
**show** 53:12 69:19  
85:18,23 86:5,7  
93:1,13,24  
101:25 116:1  
120:13,14 130:8  
152:17 154:19  
165:6 167:19  
185:12 191:21  
218:23 266:1  
**showing** 102:5  
116:18 180:9  
266:6  
**shown** 168:11  
180:5  
**shows** 56:10  
195:20  
**sic** 184:19  
**side** 22:19 30:12  
68:24 79:14,15  
80:23 81:17,19  
82:7,20,22 92:8,9  
96:16,17,18,25  
97:5,6,7,8 99:13  
99:25 102:11  
104:6 123:6  
125:23 127:11,12

127:13,17,17	99:25 100:5,6	172:22 174:18	140:15 141:2,3	53:20 54:3 58:11
134:9,11,13,15	131:9 142:20	180:12 181:8	142:9	59:15 64:10
230:20 231:11	269:10 272:6	190:12 201:8	<b>spend</b> 65:8 244:2	76:23 105:9
242:12 258:8	<b>Sixty-eight</b> 138:15	238:16 247:23	<b>spill</b> 248:19,25	137:19,24 142:10
259:4,6,8,9,11,12	<b>size</b> 228:24 229:22	264:4 269:15	249:1	156:21 170:10
259:17,20,23	231:10 235:6,17	<b>sort</b> 132:13	<b>spite</b> 98:17	176:4 229:7
260:5	236:8 237:8,13	<b>source</b> 170:18	<b>spoke</b> 240:18	243:24
<b>sides</b> 82:24,25 83:1	269:14,16 270:23	<b>Southern</b> 242:7	<b>spoken</b> 159:16	<b>statements</b> 58:22
231:8	<b>skid</b> 70:15 111:6,7	<b>space</b> 98:16,24	<b>sport</b> 71:19 112:11	58:25 64:23
<b>sidewalks</b> 233:14	112:4 113:7,8,21	99:19 100:21	148:20 149:1,4	178:2,8,14
<b>sideways</b> 140:12	127:15 142:22	<b>spacing</b> 182:21	149:12 150:5,9	<b>static</b> 214:10
252:21	143:6,15,17,22	<b>spare</b> 228:11,21,24	150:11,13,16,21	<b>stay</b> 216:16
<b>Sienna</b> 74:11	145:17 151:9,10	229:22 230:7	170:1 240:15	<b>stayed</b> 72:9,12,15
189:14	151:20,22 152:19	231:11 232:9	<b>stabilize</b> 264:8	72:16,23
<b>Sierra</b> 247:12,17	154:21 155:15	235:7,17 236:8	<b>Stabilizing</b> 264:5	<b>staying</b> 73:11
266:7,10	156:5,9,11,20	236:21 237:8,13	<b>stablizing</b> 263:23	<b>steel</b> 264:25
<b>SIGNED</b> 2:22	163:24 164:8,10	238:8 257:15	<b>staff</b> 172:7	<b>steering</b> 254:8,11
<b>significant</b> 79:4	164:13,22 165:1	269:14,17 270:23	<b>stages</b> 51:8	254:17,18,24
80:7 81:6,6,10,13	165:3,4 166:20	271:10	<b>stand</b> 178:9	<b>stenographically</b>
85:4 189:1,2	166:21,23 167:3	<b>sparking</b> 136:18	<b>standard</b> 36:9 37:7	274:12
237:23 249:4	167:5,9,12,12,16	248:9	37:12,24 38:18	<b>step</b> 51:1
256:24 257:2	167:17 168:13,15	<b>speak</b> 184:19	75:7 134:20	<b>stick</b> 84:22 85:21
272:9	169:6 172:7	<b>speaking</b> 208:8	135:4,11 155:12	<b>stills</b> 192:20
<b>significantly</b> 78:1	228:10,20 229:22	<b>speaks</b> 142:5	155:16 156:11	<b>stipulation</b> 241:22
78:24 83:20	230:7 231:10	<b>specific</b> 35:9 54:17	164:10 172:8	242:4,6,25 243:7
<b>silent</b> 270:5	232:9 233:1	62:8 222:8	187:13 214:11	243:16
<b>silhouettes</b> 195:16	249:16 258:3	223:11 236:2	<b>standards</b> 36:12	<b>stoddard</b> 130:1
<b>sill</b> 205:25 206:7	269:13,16 270:2	239:2,25	37:16 134:21,23	218:13,15
207:25 208:24	270:20,22 271:11	<b>specifically</b> 54:24	134:25 135:10	<b>stone</b> 145:16,17
209:3,18	<b>slide</b> 140:12	59:1 66:22 100:9	177:25	<b>stood</b> 179:9,11
<b>similar</b> 128:16	<b>slight</b> 81:22 196:16	105:3 177:11	<b>standing</b> 90:24	<b>stop</b> 147:15 153:10
259:14	196:18,25	189:22	231:11	184:3 245:23
<b>similarly</b> 53:4	<b>slightly</b> 37:25	<b>specifies</b> 36:4	<b>standpoint</b> 27:16	250:23
87:17	<b>Smith</b> 244:24,25	<b>specify</b> 36:5	236:5	<b>stopped</b> 44:6 74:2
<b>simple</b> 28:17	245:1,10 246:8	<b>speculating</b> 217:14	<b>start</b> 15:12 23:4	<b>stopping</b> 73:17,19
216:22	<b>soft</b> 77:14 198:7	<b>sped</b> 142:12	103:13 131:13	<b>storage</b> 168:13
<b>simulator</b> 109:7	<b>sold</b> 150:24 154:23	<b>speed</b> 74:1,13,15	210:9	<b>stored</b> 221:21
<b>Sinclair</b> 240:20	256:4	74:20 75:1,5,6,16	<b>started</b> 6:13 84:7	<b>story</b> 227:11
<b>single</b> 177:22	<b>solely</b> 138:1 142:18	76:1,2,5,8,11,18	208:12 261:21	<b>straight</b> 75:21
<b>sit</b> 15:22 16:5 20:3	<b>solvent</b> 129:25	135:19,20,25	<b>starting</b> 33:25 65:4	160:18
42:10 225:24	218:13,15	138:16,18,21	71:9 184:21	<b>strap</b> 28:18 29:2,3
228:17	<b>somebody</b> 24:10	139:7 140:6,7,8	<b>starts</b> 203:17	29:19
<b>site</b> 49:7 84:2	93:21 221:23	140:13,15,21	<b>state</b> 1:21 2:23 9:4	<b>straps</b> 25:21 26:14
<b>sits</b> 90:9 95:2	<b>sorry</b> 7:17 8:24	141:5,9,13,25	9:5,6,19,22 10:2	123:6
<b>sitting</b> 42:13,23,25	22:15 53:25	142:8,13,18	10:5 15:2 21:15	<b>Stratus</b> 178:22
95:11 113:14	62:22 70:8 72:7	245:17,24 258:1	106:7 153:7	182:4,9,25
<b>situation</b> 50:2	79:12 81:11	259:23,25	274:4,24	<b>streetlight</b> 248:11
<b>six</b> 4:18 44:17	82:23 129:18	<b>speeds</b> 26:18 28:21	<b>stated</b> 23:1	<b>strength</b> 251:13
71:18 99:23,24	143:21 171:7	31:4 70:6 140:2	<b>statement</b> 15:3	<b>strengthened</b>

252:23 253:3  
**strike** 132:8  
 194:15  
**strikes** 109:21  
**stringent** 38:1  
**stripping** 230:11  
**strong** 179:9 256:3  
**stronger** 252:12  
**struck** 74:7,12  
 91:25  
**structural** 230:12  
 230:19 231:1,7  
 251:18,23  
**structure** 8:12  
 25:21 26:13 46:5  
 71:4 94:13  
 100:11,13 102:5  
 102:19,20 103:7  
 103:11,24 104:10  
 104:12 113:4  
 123:21 125:21  
 126:6 134:3  
 145:19 238:22  
 240:3 264:13  
**structures** 44:19  
 45:17 103:20  
 238:24 239:13  
**struggling** 48:17  
**struts** 83:7  
**stuck** 131:20  
**studies** 174:21  
 175:2  
**study** 32:19 40:5  
 51:3,5 54:21  
 61:13 70:14  
 145:25 175:5  
 234:11  
**studying** 272:17  
**stuff** 37:9 40:7  
 104:2 168:2  
 223:15  
**stunt** 179:6  
**subject** 56:20  
 119:18 130:16  
 154:24  
**submissions**  
 165:24  
**submitted** 54:25  
 152:18

**subsequent** 29:13  
 214:9 220:9  
**substance** 126:21  
**substantial** 69:3  
**substantiates**  
 172:14  
**subsumed** 23:18  
**successor** 114:6,8  
 114:10,11  
**sued** 10:8  
**Summary** 69:22  
 136:23 137:5  
**sunshine** 233:13  
 233:15  
**SUPERIOR** 1:1  
**supervisor** 16:19  
**supplement** 28:9  
**supplemental** 4:8  
 12:22 13:7 21:5,6  
 190:6  
**supplied** 107:10  
 108:24  
**supplier** 221:2  
**support** 5:1 85:16  
 87:24 89:5  
**supporting** 26:12  
 243:25  
**supports** 77:2,9,16  
 77:20 87:15 88:8  
 88:14,25 89:10  
 89:11  
**suppose** 119:5  
**supposed** 270:5  
**sure** 11:4 12:3 16:8  
 16:9 21:13 41:11  
 44:8 79:22 80:4,9  
 90:5 92:3 104:5  
 104:11 110:7  
 114:16 139:15  
 142:7 145:3  
 158:13 162:9  
 170:17,24 182:2  
 184:1 185:10  
 200:25 212:11  
 218:19 231:22  
 258:22,24,25  
 263:19 267:10  
 270:20  
**surface** 44:25

97:15,22 98:2  
 124:9,11 132:18  
 214:13  
**surfaces** 28:11  
 125:19 136:19  
**surprised** 246:8  
**surveys** 50:20  
**Susan** 1:4,5,20  
 34:22 36:1 37:20  
 56:25 72:9  
 102:23 103:22  
 105:3,10,18  
 106:7 107:1,3  
 120:9 126:22,25  
 127:8 128:17  
 130:15,18 232:15  
 232:17 234:6,14  
 234:17,22 274:2  
**suspect** 216:21  
**SUVs** 169:17,19  
**sworn** 6:3 274:6  
**system** 8:16 28:14  
 35:22,25 42:6,7  
 44:19 63:7,23  
 69:4 70:5 98:18  
 99:6 102:12,16  
 103:7 104:18  
 105:1 106:12,14  
 136:16 140:3,19  
 146:14 155:21  
 185:5 217:4  
 218:2 242:11  
 249:10 259:15  
**systems** 36:13  
 45:16 46:2

---

**T**

**T** 2:10,19 4:1 6:1,1  
 274:1,1  
**take** 17:16 32:4  
 47:7,12 52:12  
 64:17,24 66:17  
 68:16 79:7 85:7  
 97:6,11,18 102:2  
 115:12 116:25  
 138:20 140:20  
 165:10 175:4  
 185:15 191:7  
 193:4 222:14

226:14,16 229:6  
 244:21 270:6  
**taken** 6:11 25:5  
 49:12 65:25  
 105:22 114:20  
 115:15 116:12  
 121:17 175:18  
 191:23 192:21  
 215:2,5,9 239:6  
 255:12 274:11  
**takes** 103:14 108:9  
 201:24  
**talk** 23:24 24:17  
 24:19 27:19  
 34:16 41:4 48:4  
 50:12 63:8 68:9  
 69:24 76:22 87:5  
 204:15 258:12  
**talked** 34:24 36:16  
 42:9 58:13,22,23  
 58:25 117:21  
 128:13 134:4  
 154:2 162:24  
 184:22 185:4  
 211:16 260:11  
**talking** 8:22 19:20  
 30:25 35:9,11  
 36:11 37:3,4,15  
 38:17 43:19  
 44:12,13 47:13  
 62:3,16 67:16  
 74:25 75:17  
 76:12 87:6 88:11  
 91:17 95:23 97:9  
 103:20 109:12,20  
 110:10 113:13  
 115:24 135:9  
 138:12 142:8  
 145:2 164:17  
 165:9,22,23  
 170:24 173:8  
 175:20 182:15  
 185:11,20 192:2  
 208:11 209:10  
 230:15 233:22  
 242:3 252:5  
 263:9  
**talks** 71:14,18  
**tangent** 38:14

**tank** 22:21 25:21  
 26:14 28:10,18  
 29:19 31:6,7 32:1  
 32:20,24,25  
 42:10,16 45:1,4  
 55:12,20 56:1  
 61:22 62:24,25  
 63:6 68:12,23  
 71:16,20 86:14  
 86:21 87:17,22  
 98:17,25 99:10  
 99:11,14,20  
 102:18,20,23  
 103:5 120:8,11  
 122:22 123:2,7  
 123:18,20 124:10  
 125:5,12,18  
 126:2,5,14,16,22  
 127:4,5,8 128:8  
 129:24 130:10,12  
 131:25 132:4,14  
 132:17,20 133:7  
 133:13,16,22  
 134:16 136:16  
 142:22 143:6,18  
 143:23 144:1  
 145:9,21 146:2,4  
 146:15 147:1,7  
 147:12,14,15,23  
 148:11 150:6,24  
 154:25 155:19  
 156:9 163:25  
 164:9,19 166:15  
 197:17,21 198:1  
 199:22 200:3,7  
 202:16 203:16  
 204:1,6 210:2  
 216:24 218:14  
 220:11,25 223:19  
 238:23 240:2  
 246:24,25 248:19  
 249:19,22 250:14  
 250:15,15 251:1  
 251:4,4,7,9 252:2  
 255:10 256:9,21  
 258:14 264:13,24  
**tanks** 132:21  
 144:22 169:18  
 170:2 257:22

<b>taped</b> 239:5	226:24 227:11	218:24 219:5,6	<b>testing</b> 30:20 31:2	91:21,22 94:4,5
<b>target</b> 183:6 197:7	228:17 235:3,13	219:18,20 220:6	32:21 33:3,11	138:17 148:14
240:4	236:16 250:24	220:15 221:6	34:21,23 35:2	156:7 185:11
<b>taught</b> 186:5	265:18 270:14	222:3,8 223:24	36:4 38:1 40:2	188:16 216:17
190:22	<b>telling</b> 91:13	225:25 226:25	43:5,10 46:16	233:16 236:15
<b>Taurus</b> 194:25	153:10 157:15	227:1,23 228:7,9	50:18,20 57:22	242:3
248:14	161:20 184:4	228:18,25 229:20	59:6,18 69:13,16	<b>things</b> 22:19,23
<b>tax</b> 253:24	228:24 231:18	231:13 236:14,14	69:20 72:2	25:13,21 26:8,18
<b>tearing</b> 86:14,21	<b>tells</b> 166:8 248:6	237:9 238:25	107:13 110:11	26:22 28:12 40:1
87:20 88:3	269:25	249:14,14,16	113:17 122:10	42:3,11 45:5
<b>tear-off</b> 256:25	<b>ten</b> 100:19 206:25	250:17 251:6,17	144:11,12 146:21	47:22,24 49:23
<b>tear-up</b> 257:2	207:1	251:21 255:3	177:23 185:4	50:17,25 51:25
<b>tech</b> 42:6,9 243:22	<b>tend</b> 65:12 89:11	259:15 260:14,21	204:16,19 208:15	66:11,22 67:13
<b>technical</b> 4:6,7,8,9	216:16	260:21 262:18	209:16 219:11,13	96:15 115:24
12:16,19,22 13:4	<b>term</b> 9:10 32:12	263:3 264:17,23	221:10,20 235:14	178:23 206:23
13:9,12,13 18:23	43:24 90:4 93:21	265:5 267:23,23	236:6 237:5,12	222:12 231:15
19:5,9,15,21,25	111:11 134:10,11	268:3,6,12 269:4	253:8 254:5	233:7,9,17,20
20:4,5,11,21 21:7	150:8 173:12,17	269:11,12,24	258:2,8 259:5,11	252:9 257:19
45:21 46:1 62:1	<b>terms</b> 11:16 25:2	270:11,24 271:1	259:12 261:9	<b>think</b> 9:15 11:6,13
62:11,16,19	35:8,9 41:9 48:9	272:3,7	269:23	16:19,19 21:12
175:15,20	87:5,11 173:24	<b>tested</b> 30:1 45:14	<b>tests</b> 33:10,16 45:8	23:3 38:9,12 39:7
<b>technician</b> 216:23	185:21 195:5	104:17 105:20	107:10,11,17,18	47:9,9 48:21 55:5
<b>technicians</b> 47:11	236:24	106:11,20 107:1	107:19,20,24	57:10 58:17
<b>Ted</b> 245:12	<b>test</b> 4:21,22,23,24	110:17,18 111:3	108:23,25 109:8	60:14,16 63:4
<b>Teets</b> 41:21 42:1	32:5 37:7,8,8	111:15 112:5	109:13,17,19	66:9,12 68:23
204:18 205:17	38:3 44:15 45:7	113:12,19,19	112:8 155:18	69:1,5 71:23 73:1
206:24 207:4	47:23 48:1,6 49:7	119:8,22 178:24	177:22 211:14,15	73:18 75:15
261:1,4 262:4,11	57:24,25 58:15	179:5 189:4	216:13 224:3,10	79:21,21 80:10
<b>tell</b> 6:16 9:19 11:13	70:4,4 104:22	190:21 217:25	224:11,22,22	81:7 85:16 87:3
11:17 14:21	106:12 108:5,8,9	227:20 230:1	225:1,12,15,23	89:2 91:7 96:22
15:10 19:13	108:9,11,15,15	250:18 259:6	226:11 227:6,10	101:17,18 104:14
21:20,21 32:7	109:25 110:16,19	<b>testers</b> 205:17	227:12 228:25	105:25 111:24
40:11,20 50:7	113:10 119:13	223:13,17	229:23 231:19	112:5,14,18,19
62:18 68:21 94:1	122:16 129:24	<b>testified</b> 7:3 27:9	232:4 234:23	113:11 114:15
100:9 102:22	144:13 186:23,24	32:14 131:18	235:16 237:17	115:7 121:9,12
105:13 110:4,8	187:2,9,20,20	133:15 145:14	248:13,20,23	122:9 124:1,3,4
115:1,2 123:24	188:19,24,25	176:14 240:14	249:2,9 260:10	124:19 129:13,15
124:21 126:15	190:22 191:24	<b>testifies</b> 6:3	269:10,19,21	140:5 142:12
128:23 129:21	192:21 204:17,20	<b>testify</b> 23:23 274:7	271:12,13 272:6	143:24 145:5,13
132:3 145:1,7	204:24 205:1	<b>testifying</b> 25:11	272:8	147:3 158:15
151:2 160:17	207:9,12 208:9	26:24 28:3,3	<b>Thank</b> 84:12 162:6	161:7,13 163:13
161:7,14,18	209:14 210:1	31:11 74:4 75:25	162:7 211:13	163:16 170:22
167:11,22 171:25	211:14,20,24,24	<b>testimony</b> 7:9 8:19	222:17 226:20	171:18 173:3
173:11 175:11	212:3,7,8,10,12	9:1,13,17,25	<b>thankfully</b> 140:13	174:23 180:7
178:6,21 182:11	212:19,24 213:6	15:20 21:16	<b>theory</b> 68:25	181:13,16,16
184:16 188:7	213:8,9,11,12,17	27:22 39:2 40:15	203:25	183:15 186:17
192:14 205:23	214:1,2 215:13	73:4 74:3 87:7,11	<b>thing</b> 7:1 19:25	188:7 189:17
214:20 217:14	215:24 216:4,6	114:23 115:1	26:16 38:21 49:3	190:5,7 192:6
223:6 224:9	216:23 217:4	274:11	49:4 66:6 88:9	195:22 199:20

- 200:18 201:1,7  
201:10,11 202:23  
204:18 206:16  
221:13 233:2  
234:3 243:20  
244:4,8,11,12  
245:16,25 249:4  
250:8 252:10  
253:4 254:22  
255:1 256:2  
262:23,24 263:7  
263:11 267:1,6,9  
267:10,11 270:25  
**thinking** 9:11  
131:3  
**thinks** 174:6  
**third** 23:24 74:11  
123:9 143:3  
147:9  
**thirty-fives** 139:22  
**THOMAS** 1:3,5  
**thoroughly** 188:14  
**thought** 7:18 14:12  
106:3 117:23  
118:4 138:16  
183:20 251:12  
**thoughts** 26:23  
**three** 7:19,20 13:3  
23:22 56:10  
61:12 69:8,23  
70:3 71:17 73:14  
76:9 151:17,18  
166:5 169:18  
199:12 202:8  
259:9,18  
**three-fourths**  
169:17 170:1  
**threshold** 136:5,6  
242:15 244:3,3  
**threw** 224:6  
**throw** 134:1  
**Thumb** 84:11  
**tied** 133:10  
**till** 269:7,8  
**time** 1:19 6:14 9:24  
17:16 18:1 21:18  
21:22 29:14  
38:19 39:8 49:16  
49:22,23 57:15
- 64:6 65:3,9 67:9  
85:10,12 101:8  
106:8,18 107:13  
108:11 112:17  
115:12 116:12,19  
119:15,16,19  
127:15 132:20  
138:23 139:3  
141:6 142:12  
155:15 156:12  
168:9,24 178:18  
185:1,3 187:7  
189:18 194:7  
196:3 199:13  
202:3 210:19  
211:18,19 212:10  
212:10 216:15,21  
224:7 225:10  
226:11 234:13  
240:8 241:6  
243:12,15 259:13  
272:25 274:13  
**times** 7:2,6,7  
102:11  
**TINKER** 2:9  
**tire** 199:17,23  
201:14 230:7  
233:2 236:21  
238:8 257:15  
**tires** 204:5  
**title** 59:11  
**today** 20:3 51:19  
64:22 73:22  
152:3 176:4  
219:2 224:9  
225:24 228:18  
236:15 269:23  
**told** 9:18 26:9 42:1  
104:12 137:19  
138:5 139:23  
232:15  
**top** 117:16,17  
118:7 144:19  
174:21 245:8  
**torn** 28:18  
**total** 107:19  
**touching** 195:2,3  
195:21,22,23  
196:1 199:16
- tow** 127:15 228:9  
228:19 229:20  
230:6,13,17,21  
231:6,8,8 232:8  
232:25  
**Toyota** 72:10,22  
74:7  
**traditional** 31:18  
**trailer** 70:16  
127:14 142:22  
143:7,16 230:6  
230:21 232:8,25  
271:5,10  
**trailing** 83:7,9,12  
83:15  
**training** 27:2  
**transcript** 2:22  
274:11  
**transfer** 238:23  
**transfers** 77:18  
**transition** 30:15  
**translate** 173:15  
**transport** 29:14  
**travel** 141:1  
**treat** 188:15  
**trend** 257:18  
**trial** 7:4,7,9,22  
21:11,18,22  
72:21  
**trick** 15:22  
**triggered** 226:7  
**truck** 42:8 111:3  
171:5 172:18  
261:6  
**trucks** 112:12,23  
112:23 149:18  
**true** 23:6 25:5  
71:21 97:17  
98:10 146:9  
156:24 233:11  
262:6 274:10  
**truth** 274:7,7,8  
**try** 250:6 257:19  
**trying** 15:21 18:15  
26:21 37:22  
40:16 85:11  
113:6,14 128:4  
150:12 189:18  
224:24 268:13
- TSB** 157:4 166:2  
**tucked** 258:17  
**Tullio** 6:1  
**turn** 45:3  
**turned** 220:21  
**Twenty** 260:4,5  
**twice** 75:22 189:13  
189:20,24 190:1  
190:8  
**twisted** 90:11  
**two** 7:19,19,20  
11:2,16,18 13:2  
13:15 19:18 60:6  
60:13,14 61:1,9  
61:10,25 69:7,23  
69:24 71:5 72:16  
73:8,13 74:17  
79:8,13 83:18  
85:6,16 89:3 93:5  
99:12 102:11  
103:4 110:24  
112:2 113:3  
115:16,18 123:6  
134:6,7 166:4  
173:8 180:21  
189:17 190:15  
192:7 194:5  
195:20 199:5  
202:2,19 208:19  
225:18 234:23  
248:12,19,23  
**two-year** 272:8  
**type** 22:24 25:20  
30:2 108:8  
112:23 125:3  
182:12 218:7  
**types** 113:1  
**typical** 86:8 110:12  
110:14 111:11  
126:24 201:23  
205:1  
**typically** 50:10  
54:19 140:14  
216:13 227:6,7  
227:17  
**typo** 19:18 20:2,7  
150:17
- ultimate** 147:14  
**ultrasonically**  
220:25  
**Um-hum** 144:25  
201:16 261:14  
**uncrushed** 210:9  
**underlining**  
104:24  
**underneath** 123:4  
199:7 257:15  
**understand** 11:14  
26:6,22 27:11  
28:14,24 32:12  
33:25 34:2,5 35:8  
47:3,13 53:2  
75:18 85:13  
87:10 93:11  
125:10 130:23  
142:6 164:17  
173:12 181:14  
211:5 218:22  
221:25 222:19  
223:14 224:19  
230:25 231:9  
232:22 251:5  
263:9  
**understanding**  
50:8 116:25  
176:7  
**understands** 34:8  
130:22  
**understood** 59:24  
**undertaken**  
234:11  
**under-ride** 119:13  
119:22 120:2,5,7  
180:16,20 181:15  
183:10,24 184:17  
184:20 195:25  
196:13,17,18,19  
197:1,4,6 201:4,8  
202:11,13,14,15  
238:12,20 239:3  
239:15 240:1  
252:21 262:18,25  
263:3  
**under-riding**  
182:24 183:2  
240:4
- U**



<b>under-rision</b>	213:17 217:4,5	110:13,17 111:7	260:21 267:13,13	271:13,20
_184:18	219:19,20 227:2	111:11,12,13,17	267:18,23 269:13	<b>view</b> 32:25 65:10
<b>unexpected</b> 22:9	227:7,24 264:17	111:20 113:1,20	269:25 270:3	72:25 92:8,9
24:2	269:12	114:7 116:8,9,13	<b>vehicles</b> 33:12,13	93:23 125:23
<b>uniform</b> 257:19	<b>validations</b> 227:17	117:10 119:8,18	34:23 38:4 49:8	129:23 146:12
<b>unintended</b> 164:21	227:19	119:21,22,25	55:7,15 56:4,10	192:23 194:5
<b>unique</b> 154:21	<b>valve</b> 155:21 156:2	120:9 121:10,20	56:20,24 65:11	195:20 196:3
155:2	156:3,14,17	122:15 123:10	71:23 72:16	197:1 198:11
<b>unit</b> 102:21 264:14	164:12,15	124:24 125:3,11	109:15 112:23	199:5,12 202:2,3
<b>universal</b> 102:17	<b>VANESSA</b> 2:6	125:16,21 126:6	144:20 145:1	202:8,19
<b>unnecessarily</b>	<b>vantage</b> 193:16,16	127:3,8,14	149:2,4 155:25	<b>viewed</b> 47:1,4 84:1
14:16	195:4 198:11	128:17 129:9,10	156:4,12 166:14	116:13
<b>unreasonable</b>	200:17 201:19	129:22 130:16,17	167:2 180:21,25	<b>viewing</b> 35:5 44:17
56:21	<b>vapor</b> 155:21	130:18,18 132:3	181:5 182:12	213:5
<b>unseated</b> 91:4	156:1	132:8,11,12	202:20,24 212:13	<b>views</b> 194:23
<b>untrue</b> 22:23	<b>variation</b> 38:3	134:20 140:3	227:19,20 233:18	<b>vis-à-vis</b> 140:19
172:13	<b>variations</b> 177:23	141:6 143:14	256:13 257:24	147:1 194:1
<b>unusual</b> 246:4	<b>variety</b> 40:1	144:13 148:18	269:23	252:2
<b>unwrecked</b> 210:10	<b>various</b> 31:4 68:4	149:13,22 154:25	<b>vehicle's</b> 136:18,19	<b>voiced</b> 243:1
<b>updated</b> 169:1	<b>vary</b> 48:2	168:3 171:1	<b>vehicle-to-vehicle</b>	<b>Volume</b> 1:16
<b>upgrade</b> 54:9	<b>vast</b> 111:18,19	172:16 176:21	253:7 258:2	<b>volumes</b> 142:5
<b>upgraded</b> 56:17	<b>VC</b> 109:5,7 237:8	177:22 181:11,20	<b>velocities</b> 69:25	<b>Vs</b> 28:21
<b>Upgrading</b> 54:6	<b>VCs</b> 109:4 216:16	181:24 182:1	136:24,25 137:12	<b>vulnerable</b> 210:14
<b>USA</b> 219:19	<b>vehicle</b> 4:21,22,23	183:1,4,5,6 187:3	137:14	<b>V6</b> 266:18
<b>use</b> 12:9 28:20	4:24 8:13 9:2	189:4 192:1	<b>velocity</b> 138:2,5,7	
37:5 61:6 76:6	22:2,3,19 25:17	194:15 197:21	138:12,14,18,21	<b>W</b>
93:22 134:10	26:1,7,9,10 28:5	198:2 199:6,15	138:22 139:2,10	<b>wait</b> 15:2 174:20
150:8 154:24	32:20 33:4 34:22	199:16 203:14,17	139:11	221:7 247:16
173:18,18 175:1	34:25 36:8 39:4	204:23 205:25	<b>vent</b> 214:12 220:10	261:16
<b>uses</b> 103:8 216:15	39:12,25 40:2,4,9	206:6 207:10,25	220:23 223:19	<b>waitress</b> 171:22
<b>usually</b> 140:7,10	40:22,25 41:25	208:14,18,24	<b>verbally</b> 50:13	<b>wall</b> 98:3
208:24	44:16 45:13 47:6	209:2 210:9,10	51:11	<b>want</b> 6:18 12:8
<b>utilities</b> 112:11	48:19 55:13,21	210:23 211:24	<b>verbatim</b> 157:22	13:14 14:15
170:1	56:1,25 59:19,20	212:9,16 213:3	<b>verify</b> 14:8 58:10	15:19,20 17:14
<b>utility</b> 71:19	61:14,17,20,24	216:12 217:10,25	58:21 59:4 170:9	17:15,17 24:19
148:21 149:1,4	68:13 69:12,15	219:6,24 220:18	222:16 223:1	27:14 28:23
149:12 150:5,9	69:20 71:4,20	223:24,25 224:4	<b>version</b> 146:1	29:18 31:10 34:6
150:11,14,16,21	72:2 73:15 74:11	229:24 230:8,11	154:21 155:3,8	37:11 38:14
240:15 248:8	74:24 76:10	230:24 231:2,6	<b>versus</b> 178:7 239:7	42:15,16,17,21
<b>U-shape</b> 89:9	78:15 88:1 89:16	231:13 232:16,18	244:24	43:1,5 47:12
<b>U.S</b> 150:25	89:25 96:15,21	234:6,14,17,22	<b>vertical</b> 98:3	56:19 58:2 59:4,9
	96:24 101:4	236:6,10,12	<b>viable</b> 190:21	62:8 63:21 65:16
<b>V</b>	102:23 103:12	238:21 240:4,16	<b>vice-president</b>	78:11 85:17 86:9
<b>v</b> 1:8 139:12	104:4,16,23	241:17 246:8,14	177:3	89:14 102:4,19
<b>vague</b> 39:18	105:4,10,17,18	247:8,11,18,20	<b>Victoria</b> 1:9 2:11	104:5,11 105:13
<b>valid</b> 251:7	105:19,21,24	247:21,24 248:3	<b>video</b> 191:24 239:5	115:12,23 117:20
<b>validation</b> 108:16	106:4,5,8,9,13,17	248:7 254:3	270:12,14,15	158:10 165:19
212:4,5,7,16,23	106:20 107:1,4,6	255:4,5 256:9	271:18 272:4	166:12 169:19
212:24 213:9,12	109:6,7,13 110:5	257:15 259:19,22	<b>videos</b> 213:5	170:9,23 177:7

185:9 191:21	100:23 176:16	<b>wheelbases</b> 112:25	190:3,10,25	104:24 138:20
192:5,23 193:6	180:8 184:15	<b>wheels</b> 78:19,20,21	191:5,10,14,17	148:5,5 222:15
193:14,16 196:23	189:15 204:16	<b>whichever</b> 130:5	191:20 196:16	<b>words</b> 28:7 77:18
197:9 198:11	217:19 223:10	<b>white</b> 129:16	198:6,24 199:20	88:1 101:9
204:15 211:5,6	224:4	184:12	200:1,10 201:7	105:20 132:19
211:13,20 218:23	<b>weren't</b> 81:24	<b>windshield</b> 179:7	201:22 202:18	134:9 166:20
221:9 222:16	241:4	<b>wires</b> 248:10	204:10 205:1,22	173:25 182:24
225:12 234:13	<b>West</b> 2:4	<b>withdrawn</b> 155:5	206:5,22 208:8	228:23
258:12 259:1	<b>we'll</b> 12:6 24:25	155:13	209:10,25 210:6	<b>work</b> 20:20 41:3,4
260:10,14,17	52:5 64:17 85:7	<b>witness</b> 3:3 8:4	211:3 213:2,22	41:8 43:21,24
264:14 266:1	102:2 157:12	10:6 13:25 14:25	214:5,24 215:13	44:7 45:9 114:3
270:9	218:24 226:16	16:15 32:18 33:9	216:11 217:9,23	174:9 238:24
<b>wanted</b> 92:16	244:21	33:14 44:1 45:25	218:11 220:18	261:7
162:1 179:3	<b>we're</b> 36:11 37:4	47:20 53:23	221:18 222:11	<b>worked</b> 10:9 15:17
215:3 257:13	37:15 38:17 61:8	55:19 59:16	223:6,23 224:16	43:8 175:19
<b>wants</b> 191:19	62:16 65:14 69:1	60:22 65:5,8	225:6,16 226:5	176:16
<b>wasn't</b> 9:7 38:11	75:17 87:6 91:16	67:23 72:15	226:18 227:5	<b>working</b> 40:24
42:13 105:21,22	92:5 109:12,19	73:25 75:10,14	228:14 229:10	119:4 241:7
139:3 150:8	115:22 120:15	80:6 84:11 85:17	230:4,20 231:4	<b>world</b> 30:21 48:2
218:2,4 230:1	128:5 131:4	87:14 92:21	231:17 232:6,21	120:3 150:7
237:10 241:1	132:4 139:21	95:25 100:4	234:3,10,18	239:1 241:10,14
251:6	142:7 145:2	102:4 106:24	235:2 236:20	<b>worse</b> 113:9
<b>watched</b> 43:9	158:12 164:17	107:5 110:22	237:16 238:7,16	<b>worst</b> 57:21 58:1
<b>watching</b> 44:2,4	165:9 170:24	111:24 116:6	239:21 240:7,12	58:15 59:1,6,15
<b>way</b> 6:1 14:8 15:11	176:12 179:11	118:1,21 119:20	240:24 241:16	59:18 110:15,19
26:2,11 38:1	185:11 201:14,17	120:5 122:3	242:2 243:20	111:16,21 112:1
39:16 63:19	201:18 204:4	123:1 124:3,9	245:21 246:21	112:5,8,10,15
78:16 91:3	219:1 221:8	125:2,17 126:18	247:3 248:17	113:7,13,18,19
100:18 105:9	224:8 230:15	128:20 129:7	250:13 251:3,12	229:25 230:6
116:22 117:11	239:4 252:4	130:3,25 132:17	252:7 253:2,18	<b>worth</b> 272:13,16
118:5 143:18,23	263:9	133:17,25 135:3	254:13,22 255:16	<b>wouldn't</b> 11:9
144:17 147:20	<b>we've</b> 48:18 64:22	135:18,24 136:9	255:21 256:2,14	148:3,11 161:23
178:15 180:25	73:11 80:25	137:6,22 139:7	256:18 257:11	161:25 174:5
182:8 191:7	119:3 202:16	140:6 141:8,20	258:22 260:4	183:5 207:12,17
207:11 229:13	204:2 233:2	142:3,17 143:21	261:12 262:9,23	209:20 223:9
251:15 257:23	<b>whatsoever</b> 222:6	144:5 145:15,25	263:7,16 264:3	230:14 232:17
260:25	<b>wheel</b> 182:22	146:8,18 147:4	265:10 266:18	237:23 246:12
<b>website</b> 57:12	206:1,8 207:25	147:20 148:20	267:6 268:9,13	253:25
<b>weighs</b> 236:23,23	208:25 209:3,19	149:18 150:20	268:17 269:7	<b>wrap</b> 102:18
<b>weight</b> 236:10,13	257:6	151:15 157:19	270:9,20 271:9	<b>write</b> 16:6 66:21
236:22,24 260:9	<b>wheelbase</b> 77:25	162:2 167:7,15	271:17,22 272:12	226:18
<b>weights</b> 113:1	78:6,9,12,13,19	167:25 169:10,22	272:15	<b>written</b> 51:11,12
<b>weld</b> 223:7,9,20	78:23 79:13,18	171:13,25 173:2	<b>WJ</b> 19:19 20:2,8	51:14,21 74:16
225:22	79:20 80:3,19	174:11 176:11	60:18 155:12,17	170:15 242:9
<b>welded</b> 103:4	81:7,13,15,18,20	177:13 178:5,12	257:1	268:19
220:24,25 221:2	82:7,17 83:20	180:19 181:4	<b>WK</b> 19:19 20:1,8	<b>wrong</b> 11:14 31:20
<b>welding</b> 223:21	85:5,19,20,24	183:9 184:10	60:18 257:6	47:9,10 91:10
<b>went</b> 16:10 38:13	86:6 102:8	186:17,23 188:2	<b>woman</b> 184:23	118:3,3 179:5
52:25 56:7 90:8	110:25	188:12,22 189:8	<b>word</b> 48:4,18	197:20 221:8

wrote 57:10 224:5

**X****X** 1:14 3:1 4:1**XEE** 166:16,17  
167:12**XI01024** 274:25**XJ** 256:7**Y****yardstick** 123:17  
123:18,23**yeah** 19:24 25:8  
29:15 36:19,23  
46:11 49:2 50:6  
52:2 55:5 59:21  
62:14 65:13 74:1  
75:6,10 76:4 79:8  
79:9 80:23 82:2  
83:2,24 90:10  
92:8 101:6104:14 111:14  
118:16 123:14  
124:6,19 127:20  
129:13 134:6  
141:4 143:4  
146:9 150:10  
151:23 157:9  
166:1 184:10,20  
186:4,12 188:9  
190:10 192:10  
198:6 200:22  
202:5,9,25 203:2  
204:22 207:4  
210:6,8 212:5  
215:10 219:24  
239:9,25 241:5  
242:5 250:2  
253:18 254:15  
262:6,16 266:23**year** 9:1 110:23  
111:20 155:17,19  
155:24 186:7  
222:7 242:8  
260:1**years** 10:7 175:17  
216:19 224:23  
240:25**yellow** 123:3,5,21

131:24 132:9,14

**yield** 173:12,14,17**York** 233:14

247:18

**Z****Z** 1:11 101:18**ZJ** 35:16 36:16

37:20 38:16

41:16,17 44:7

90:16 103:21,22

107:12 108:25

121:16,21,25

123:13 193:14

207:23 208:16

209:1 210:7

219:23 220:1,1

226:6 228:8

229:20 238:11,19

239:14 250:13

255:18 256:6,21

257:1,5 258:4

268:9

**zone** 205:4,5,7,11

205:18,24 206:2

206:18,22 207:1

207:11,18 208:2

208:3,4 209:4,5,6

209:12,20,22

210:10,17 211:11

**Zylik** 41:21 44:18

204:17 205:17,23

206:13 207:6

263:21

**Zylik's** 235:22**0****00** 196:19**000** 194:22**05** 193:24**052** 196:8,10 197:1

199:12

**06** 114:17**07052** 2:4**07927** 2:10**07936** 1:24 2:15**09** 114:18**1****1** 1:12**10** 114:18**10-031** 55:25**10-15-10** 4:19**10:10** 1:19**100** 1:12**101** 80:20,23**102** 5:8**108** 80:3,9 81:8**109** 79:21 80:3,9**11** 4:17 20:14,15

79:14 80:1

120:19 219:1

**115** 4:15,16**119** 200:16,20,21

201:25 202:11

**12** 4:6,7,8 13:5,6

20:15 21:2 80:17

**12th** 15:8**120** 4:17 155:10**131** 4:18**14** 12:16 13:6,23

14:1 17:19 219:1

**14th** 13:3,20,21

14:20 15:7,13,13

15:18 16:21,24

18:21,22 60:2,9

72:6 155:14

156:13 185:14

**15** 4:20 153:22

259:2

**15th** 167:21 219:11

219:13

**153** 4:19**1598** 203:10,10**166** 235:22**17** 123:22,25 124:5

124:20

**18** 124:20**18-gallon** 42:16**180** 4:20**19** 4:9**1984** 240:12**1990** 260:1**1992** 269:2,3**1993** 269:1**1994** 212:21

264:20 269:2,3

**1995** 212:5 217:5

219:10 222:5,8

236:3 269:12

**1996** 219:19**1997** 58:5**1998** 178:7**1999** 155:11**2****2** 130:6**20** 7:7 124:6

165:12 236:23

259:25

**2000** 242:8 243:13**2001** 155:19

156:13

**2002** 155:15,24

156:4,14,19

**2003** 155:17**2004** 155:12**2007** 239:6**2010** 153:22**2011** 6:12 11:22

12:17 13:5,6,7,9

13:19 14:1,7 15:7

15:7,8,8 17:19

19:6,11,16,17,22

19:23 20:12 21:2

70:24 72:6,8

119:4 165:8,12

167:22

**2012** 1:17 120:22

222:7

**211** 4:21**219** 4:22**226** 5:9**24** 13:19 14:6

15:18 19:5,10

20:14

**24th** 14:19 15:7

18:13,15,25

19:22 60:3,5,10

60:15,20 61:4

72:7

**244** 5:10**245** 202:19**25** 5:7 116:1 117:3

118:13

**26** 116:1,2 117:4

212:21

**260** 4:23**267** 4:24**27** 120:21 121:1**28th** 6:12**29** 107:10,18,19

108:23 109:3

211:15 224:10,11

224:22 226:11,21

228:25 229:23

**3****3** 130:6**3-24-11** 4:9**30** 75:22 109:23

110:2 214:9

220:9 236:23

266:18

**301** 36:3,9,10,20

36:23 37:2,3,4,15

37:21,23 38:5,16

48:1 104:19

107:14,18,20,24

108:7,9,10,18,18

108:21 109:16

110:16,18,18

119:9 134:19,20

143:15 155:22

208:15 209:16

212:4,5 217:5

219:19 232:18

236:6 238:25

251:16,21 254:16

258:7,10 259:4,8

259:18

**302** 254:16**303** 254:16**304** 254:16**31st** 239:6 269:11**3196** 6:1**35** 180:11,13**36** 77:10 87:16

88:7,25

**4****4** 19:17,23 20:11

70:24 119:4

130:6 156:13,19

**4th** 13:8 15:8

18:17 19:16,24

72:8 136:12,13  
155:14

**4-12-95** 264:19

**4-4-11** 12:20

**4-8** 5:8

**40** 129:10 192:21

194:16 197:10

201:12

**40-mile** 203:16

204:12 249:20

**414** 2:4

**4472** 234:24

**45** 74:19,24,25

75:4,11 76:13,17

139:23

**45-mile** 122:16

**4561** 234:23 235:6

---

5

**5** 79:15 80:2

240:13 272:5,14

**5-2-97** 4:11

**5/92** 269:7,8

**5:05** 273:1

**50** 7:6 75:7 141:3

158:10 192:24

**50-mile** 249:13

**52** 207:22

**5208** 211:20 212:3

212:19 260:11

**5210** 269:11

**53** 4:10

**5380** 218:23,24

219:13,16 260:11

**5441** 260:15

264:16

**5681** 265:25 268:2

268:22

**58** 4:11

---

6

**6** 3:6 5:10 167:24

177:12

**6-14-11** 177:9

**6-28-12** 183:18

**60** 75:22

**68** 137:22 139:3,8

141:17

---

7

**7** 1:17 2:9 79:13

80:1 266:4

**7-foot-11** 81:3,18

**70** 140:10,11 141:2

248:15

**72** 1:23 2:14

**75** 173:21 248:15

**77** 137:22 138:15

139:4,8 141:17

---

8

**8** 79:14 80:2

**8-foot-5** 80:20,21

81:19

**80** 173:22

**84** 5:7

**845** 202:23

**85** 173:22

**88** 41:21

**89** 41:22

---

9

**9** 5:9 185:14,17

**9-12-11** 12:23

**90** 89:22 90:7 91:6

91:9,14 92:14

173:22

**92** 4:12

**93** 4:13,14 41:17

219:24 220:20

226:6

**94** 212:22 216:20

269:8

**95** 81:3 141:1

173:22 212:23

219:11 222:24

**96** 80:22 193:9,12

219:23 220:1,21

264:22,24,25

265:2,3 268:9

**97** 186:12 230:23

231:4 250:9,13

268:3,4,10