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1	<u>Sieh Exhibits</u>	<u>Received</u>	1	MR. SMITH: HP07-001, that's the application of	
2	1 Map of BDM water	739	2	TransCanada Pipeline, Keystone Pipeline, LP for a permit to	
3	2 John Sieh Direct Testimony	739	3	construct a crude oil pipeline in the State of South Dakota.	
4	<u>Cassels Exhibits</u>		4	When we left off last evening WEB Rural Water, an Intervener in	
5	1 Gene Cassels Direct Testimony	756	5	the case, was putting on their case, and at this point then I	
6	2 Marshall County Resolution	756	6	will look to Reed Rasmussen, counsel for WEB Water, to resume.	
7	<u>Ed Miller Exhibits</u>		7	Please call your next witness, Mr. Rasmussen.	
8	1 Ed Miller Direct Testimony	832	8	MR. RASMUSSEN: Call John Goodman. And as we did	
9	2 Miller Surrebuttal Testimony	832	9	yesterday, Diane Best of the A.G.'s Office will conduct the	
10	3 PowerPoint presentation	832	10	initial examination.	
11	4 CD with NTSB, PHMSA, etc. studies	832	11	MR. SMITH: It's Jim.	
12	<u>George Piper Exhibits</u>		12	MR. RASMUSSEN: John probably isn't here.	
13	1 George Piper Direct Testimony	928	13	MR. SMITH: He's made too much money to be here. Have	
14	2 Photo of James River Stream/Flow	936	14	a seat.	
15	3 Photo of James River Stream/Flow	936	15	(The witness is sworn by the court reporter)	
16	<u>Tim Hofer Exhibits</u>		16	<u>DIRECT EXAMINATION</u>	
17	1 Tim Hofer Direct Testimony	890	17	<u>BY MS. BEST:</u>	
18	<u>Delwin Hofer Exhibits</u>		18	Q. Good morning.	
19	1 Delwin Hofer Direct Testimony	902	19	A. Good morning.	
20	2 Map of personal property	906	20	MS. BEST: For the record, my name is Diane Best. I'm	
21	3 Easement - back page of agreement	906	21	an Assistant Attorney General for the State of South Dakota.	
22	<u>Pam Hofer Exhibits</u>		22	Q. Jim, what is your educational background?	
23	1 Pam Hofer Direct Testimony	919	23	A. I have a Bachelor of Science Degree.	
24	2 Book of structures w/in mile of PS-21	919	24	MR. SMITH: Jim, one second. Could you please grab	
25	<u>Edward Goss Exhibits</u>		25	the ball on that thing and get it up to your mouth so we can	
	1 Ed Goss Direct Testimony	945			
	2 Packet of maps	961			
	3 Pink handwritten paper, map & drawing	961			
	4 Letter to land agent (redacted)	--			
	5 Packet attached to land agent letter	970			
	6 Four pictures of land	970			
	<u>Ben Grote Exhibits</u>				
	1 Ben Grote Direct Testimony	750			

<p style="text-align: right;">1044</p> <p>1 hear you. Thank you.</p> <p>2 A. I have a geologic engineering degree. I graduated from</p> <p>3 South Dakota School of Mines in 1971, and I'm a registered</p> <p>4 professional engineer in South Dakota.</p> <p>5 Q. Where are you employed, Jim?</p> <p>6 A. I'm employed by the State of South Dakota. I work in the</p> <p>7 Department of Environment and Natural Resources, the Water</p> <p>8 Rights Program.</p> <p>9 My responsibilities there, I am -- my title is Natural</p> <p>10 Resources Engineering Director. I'm in charge of the Ground</p> <p>11 Water Program. I handle ground water permit applications for</p> <p>12 the entire state.</p> <p>13 I also -- my people also maintain a monitor well network in</p> <p>14 the state. And some of my other job functions, we keep records</p> <p>15 of wells, permits, domestic wells, that type of thing for the</p> <p>16 entire state. And that information is available to the public.</p> <p>17 Q. Can you give this group here today a general overview of</p> <p>18 what the Water Rights Program does?</p> <p>19 A. Well, the water right -- under South Dakota Law the water</p> <p>20 belongs to the people of the state. And basically in simplest</p> <p>21 form possible, if you want to make use of water resources in</p> <p>22 this state, surface water, ground water, you make an application</p> <p>23 for a permit. We go through then a legal process to either</p> <p>24 grant or deny that permit.</p> <p>25 So other than domestic use in this state, you're required</p>	<p style="text-align: right;">1046</p> <p>1 It's something that happens a lot. For whatever reason, I must</p> <p>2 have been in the office that day because I ended up going to</p> <p>3 this meeting. And that's my extent with the company.</p> <p>4 Q. Okay. What happened at the meeting, Jim?</p> <p>5 A. Well, there was a representative from the different</p> <p>6 divisions -- the regulatory divisions in our department. And</p> <p>7 they basically presented us a map at that meeting showing us the</p> <p>8 potential route. They talked about very briefly what it was</p> <p>9 going to be and asked what kind of -- what kind of permits would</p> <p>10 be required from the water rights, and everyone in the</p> <p>11 department responded to their own area of expertise.</p> <p>12 From a water right point of view, the only thing that would</p> <p>13 be required -- it appears at this time the only thing that would</p> <p>14 be required is they're going to pressure test the lines, and</p> <p>15 they would need a source of water to do that. And that was the</p> <p>16 extent basically of the water permitting.</p> <p>17 Potentially, there's a possibility of some dewatering but</p> <p>18 if that comes up, it will come up. But right now it looks like</p> <p>19 primarily water would be needed to pressure test the line.</p> <p>20 Q. Okay. Have they applied for a permit yet from your</p> <p>21 program?</p> <p>22 A. No, they haven't.</p> <p>23 Q. And when you talk about dewatering can you explain to the</p> <p>24 Commission what you mean?</p> <p>25 A. This is a pipeline they're burying in the ground. There's</p>
<p style="text-align: right;">1045</p> <p>1 to get a permit for the use of the water.</p> <p>2 Q. Have you had any communications with TransCanada Pipeline</p> <p>3 where they've requested information from you?</p> <p>4 A. I've had at least two conversations. The first</p> <p>5 conversation occurred on 25 June of 2007. At that time I talked</p> <p>6 to a person. I believe the name was Granger, Cole Granger. He</p> <p>7 worked for a company called TROW Engineering, and they were out</p> <p>8 of Tallahassee, Florida. That was a phone conversation, and he</p> <p>9 was asking some generic -- at that time I didn't realize what it</p> <p>10 was except he provided me with a list of legal locations and it</p> <p>11 wasn't rocket science to figure out where -- you know, what he</p> <p>12 was looking for.</p> <p>13 And I provided him at that time with a selected group of</p> <p>14 domestic well logs that were within the vicinity of the legal</p> <p>15 locations that he had given me. And I sent them out on e-mail.</p> <p>16 That was the extent of my --</p> <p>17 Two days later we had an in-house office meeting with some</p> <p>18 folks from Keystone that the Department -- it's a typical</p> <p>19 meeting that we would have with a company that would be -- the</p> <p>20 questions were basically what kind of permitting does the State</p> <p>21 of South Dakota require? Can you get everybody from every</p> <p>22 division to come? We need to know do we need water permits, do</p> <p>23 we need discharge permits? What do we have to do to become</p> <p>24 legal to operate our facility in South Dakota?</p> <p>25 It's a common thing we do with a lot of different groups.</p>	<p style="text-align: right;">1047</p> <p>1 a potential to intersect water, and to lay the pipeline they may</p> <p>2 need to dewater.</p> <p>3 Q. That would be a construction type?</p> <p>4 A. That would be a construction. And if I can add this, these</p> <p>5 types of permits are not for construction purposes, and the</p> <p>6 testing are a special group of permits. They're temporary.</p> <p>7 They're for the calendar year. And it's designed under our</p> <p>8 system simply to facilitate construction generally designed for</p> <p>9 road construction, dam building, and that type of thing where</p> <p>10 they would need a source of water for either compaction or to</p> <p>11 dewater, laying sewer lines, water lines around lakes.</p> <p>12 Typically that's the kind of situation you run into.</p> <p>13 And a lot of times these companies may not run into the</p> <p>14 situation -- it might be Friday night when they encounter</p> <p>15 something. They call us on Monday, and we can generally process</p> <p>16 a temporary permit in a few hours for that type of situation.</p> <p>17 It only lasts -- either they specify a time limit, or it's just</p> <p>18 for that particular calendar year we're in. And that's the use</p> <p>19 of the word "temporary."</p> <p>20 Q. Okay. Jim, you also indicated when you had that initial</p> <p>21 contact with Mr. Cole that it wasn't rocket science as to what he</p> <p>22 was looking for. Based on the locations he gave you, there was</p> <p>23 a pattern to the locations, I take it, and you guessed it was a</p> <p>24 pipeline?</p> <p>25 Is that what you're saying?</p>

<p>1048</p> <p>1 A. Well, it was basically a straight line from north to south</p> <p>2 across South Dakota.</p> <p>3 Q. Also have you had any communications with WEB's experts</p> <p>4 seeking information?</p> <p>5 A. Yesterday. I provided that geologic map that's on the</p> <p>6 wall. That's it.</p> <p>7 Q. Okay.</p> <p>8 MS. BEST: Thank you. I have no further questions.</p> <p>9 MR. RASMUSSEN: I realize I have to buy donuts on</p> <p>10 Monday now.</p> <p>11 <u>DIRECT EXAMINATION</u></p> <p>12 <u>BY MR. RASMUSSEN:</u></p> <p>13 Q. Mr. Goodman, so do I understand there's some sort of log or</p> <p>14 a listing of all the domestic wells, at least that your agency</p> <p>15 is aware of?</p> <p>16 A. We have a -- I'm going to call it a collection, but we have</p> <p>17 a -- the well drillers are required to file what's called a</p> <p>18 Completion Report. And we have those on file, and those are</p> <p>19 accessible. They're not accessible on-line. You have to either</p> <p>20 call somebody in the office, and we can provide them to you.</p> <p>21 I'm not going to say we have them all. There are many</p> <p>22 wells that have been drilled in South Dakota in the last</p> <p>23 100 years. And our database is not too bad starting in between</p> <p>24 '76 and '80.</p> <p>25 Q. Is that the information that you provided to is it</p>	<p>1050</p> <p>1 <u>CROSS-EXAMINATION</u></p> <p>2 <u>BY MR. HOHN:</u></p> <p>3 Q. I have a question, sir, regarding the -- I think you</p> <p>4 referred to it as the Completion Report, the data that the well</p> <p>5 driller would provide you?</p> <p>6 A. Yes, sir.</p> <p>7 Q. Is that what it's called is the Completion Report?</p> <p>8 A. Yes, sir.</p> <p>9 Q. And what does that report show?</p> <p>10 A. It tells us a lot of things, but -- if it's filled out</p> <p>11 completely. But it gives us the legal location of the well by</p> <p>12 township, range, and section. We're happy if we're that close.</p> <p>13 It tells us the materials that were drilled through, the</p> <p>14 geologic formations, the clays, the sands.</p> <p>15 It tells us the producing unit because that's what the well</p> <p>16 is screened into. It tells us the size, the diameter of the</p> <p>17 well, the screen, the screen length, the amount of water</p> <p>18 produced, the static water level, and then the well driller's</p> <p>19 required to sign it, and so is the owner of the well.</p> <p>20 Q. Would the well driller give -- in this report as part of</p> <p>21 this report would the well driller give you any estimation of</p> <p>22 layers of material, what the thickness was?</p> <p>23 A. Yes, he would.</p> <p>24 Q. So as close as he could estimate, he would be reporting to</p> <p>25 your agency the depth of layers of sand, clay, shale, and so</p>
<p>1049</p> <p>1 Mr. Granger?</p> <p>2 A. That's the information I provided.</p> <p>3 Q. And that would have been all the way up and down the</p> <p>4 proposed pipeline route?</p> <p>5 A. Yes, sir.</p> <p>6 Q. This meeting you talked about, which that was also in June</p> <p>7 of this year?</p> <p>8 A. Yes. I can check the date. I believe it was June 27.</p> <p>9 Q. Who attended that meeting?</p> <p>10 A. I have the list of attendees.</p> <p>11 Q. Okay. Maybe -- how many people are we talking about?</p> <p>12 A. 12 signed the sheet.</p> <p>13 Q. Why don't you just read those names off.</p> <p>14 A. Steve Craycroft. Keystone ENSR was his affiliation; Leslie</p> <p>15 Petersen, South Dakota Game, Fish & Parks; John Kirk,</p> <p>16 South Dakota Game, Fish & Parks; me; Lacey Morrow, Keystone/UEI;</p> <p>17 Cindy Steele, Natural Resource, NRCS; Stacy Splittstoesser who's</p> <p>18 in our Department, Surface Water Quality; Tammy Staddel, Surface</p> <p>19 Water Quality in our department; Al Spangler from our</p> <p>20 Department, Surface Water Quality; Bill Markley, Ground Water</p> <p>21 Quality; Brian Walsh, Ground Water Quality Program who was our</p> <p>22 contact person; and Ray Sowers, Department of Agriculture.</p> <p>23 MR. RASMUSSEN: Thank you. I believe that's all I</p> <p>24 have.</p> <p>25</p>	<p>1051</p> <p>1 forth?</p> <p>2 A. That's correct.</p> <p>3 MR. CURT HOHN: Okay. Thank you.</p> <p>4 MS. SEMMLER: No questions. Thank you.</p> <p>5 MR. SMITH: Mr. Koenecke?</p> <p>6 MR. KOENECKE: Good morning, Mr. Smith. I have no</p> <p>7 questions for this witness.</p> <p>8 MR. SMITH: You're excused, Jim. Pardon me.</p> <p>9 CHAIRMAN JOHNSON: I don't have any questions. I was</p> <p>10 just giving you a hard time, Mr. Smith.</p> <p>11 MR. SMITH: I was about to say I'm moving to Oklahoma.</p> <p>12 Thanks, Jim.</p> <p>13 Mr. Rasmussen.</p> <p>14 MR. RASMUSSEN: Call Arden Davis.</p> <p>15 MR. SMITH: You can have a seat if you'd like,</p> <p>16 Mr. Davis. We do our swearing in when you're sitting down here.</p> <p>17 (The witness is affirmed by the court reporter)</p> <p>18 <u>DIRECT EXAMINATION</u></p> <p>19 <u>BY MR. RASMUSSEN:</u></p> <p>20 Q. Good morning, Mr. Davis. Could you state your name,</p> <p>21 please.</p> <p>22 A. Arden Davis.</p> <p>23 Q. Where are you from, and what do you do?</p> <p>24 A. I live in Rapid City, and I teach geological engineering</p> <p>25 and ground water courses at South Dakota School of Mines and</p>

<p style="text-align: right;">1052</p> <p>1 Technology.</p> <p>2 Q. You have filed some prefiled direct testimony on behalf</p> <p>3 of -- or at the request of WEB in connection with this matter,</p> <p>4 have you not?</p> <p>5 A. That's correct.</p> <p>6 Q. And we have marked that direct testimony as WEB Exhibit 2.</p> <p>7 If you were to be asked the same questions that are in that</p> <p>8 prefiled testimony today, would you give the same answers that</p> <p>9 are included in that prefiled testimony?</p> <p>10 A. Yes, I would.</p> <p>11 MR. RASMUSSEN: I'd offer WEB Exhibit 2.</p> <p>12 MR. SMITH: Any objection?</p> <p>13 MR. WHITE: No objection.</p> <p>14 MR. SMITH: Hearing none, WEB Exhibit 2 is admitted.</p> <p>15 Q. I would like you to just briefly summarize your testimony.</p> <p>16 I don't want you to go through the whole thing, but just</p> <p>17 basically tell the Commission your concerns with regard to the</p> <p>18 proposed route of the WEB pipe -- or the TransCanada Pipeline.</p> <p>19 A. The ground water resources of eastern South Dakota are a</p> <p>20 valuable present and future resource for the state. And I have</p> <p>21 concerns about the proposed pipeline. If it leaks, it could</p> <p>22 affect ground water quality in several areas.</p> <p>23 I believe that from my experience it's true that prevention</p> <p>24 of pollution before it occurs is better and more cost-effective</p> <p>25 than trying to clean it up after it occurs because in some cases</p>	<p style="text-align: right;">1054</p> <p>1 Q. Dr. Davis, are there particular areas of the pipeline route</p> <p>2 with which you have more concern than others?</p> <p>3 A. Yes, there are.</p> <p>4 Q. And where are those areas?</p> <p>5 A. In Marshall County in particular the proposed route would</p> <p>6 cross a sandy area at the land surface that I believe is in</p> <p>7 hydraulic connection with an underlying glacial aquifer. And</p> <p>8 this is an especially sensitive area.</p> <p>9 In Clark County I think Dr. Rahn will present some</p> <p>10 testimony later showing that in the western part of that county</p> <p>11 the Altamont Aquifer is within about 10 feet of the land</p> <p>12 surface.</p> <p>13 There are other glacial aquifers which have not been mapped</p> <p>14 in detail because they are quite variable in their extent, but I</p> <p>15 notice on the large map that's on the wall over there -- and I</p> <p>16 have a smaller version of that that Perry Rahn --</p> <p>17 Q. Let me interrupt you just a minute. The large map that's</p> <p>18 on the wall and a smaller version that you have and an even</p> <p>19 smaller version we've handed out we have marked as WEB</p> <p>20 Exhibit 3, and that is a map prepared by the South Dakota</p> <p>21 Geological Survey?</p> <p>22 A. That's right.</p> <p>23 MR. RASMUSSEN: I'd offer WEB Exhibit 3.</p> <p>24 MR. WHITE: No objection.</p> <p>25 MR. SMITH: WEB Exhibit 3 is received.</p>
<p style="text-align: right;">1053</p> <p>1 you can never clean up an aquifer completely to its</p> <p>2 pre-pollution state.</p> <p>3 The State of South Dakota has in its records in the</p> <p>4 Department of Environment and Natural Resources a number of</p> <p>5 documented leaks from other pipelines, including the Williams</p> <p>6 Pipeline north of Sioux Falls, South Dakota near Renner where I</p> <p>7 believe the documents say it was something like a 300,000-gallon</p> <p>8 leak.</p> <p>9 There have been other leaks. One near the Sioux Falls</p> <p>10 water supply I believe that the documents say is approximately a</p> <p>11 2,000-gallon leak.</p> <p>12 This proposed pipeline would cross some recharge areas of</p> <p>13 aquifers in Marshall County, in Clark County, Miner, Day County</p> <p>14 and others, and it would cross several areas where alluvium,</p> <p>15 which can sometimes have some very permeable channels in it, is</p> <p>16 exposed especially along the James River Valley but in other</p> <p>17 areas as well.</p> <p>18 Now I believe that the proposed pipeline could have been</p> <p>19 routed in a way that would have minimized at least some of these</p> <p>20 sensitive areas that it would cross, and I also believe that if</p> <p>21 Murphy's Law is true, that if something can go wrong, it will.</p> <p>22 My engineering experience tells me that in a new project</p> <p>23 often it doesn't work perfectly in that leaks could occur. And</p> <p>24 if that does, then I am concerned that ground water would be</p> <p>25 damaged.</p>	<p style="text-align: right;">1055</p> <p>1 Q. Go ahead, Dr. Davis.</p> <p>2 A. The map on the wall, especially the large one over there on</p> <p>3 the left-hand side of the room, shows the alluvium that the</p> <p>4 proposed pipeline would cross. And there are a number of</p> <p>5 streams. And the alluvium is marked clearly on those locations.</p> <p>6 There might be other locations as well that aren't capable of</p> <p>7 being shown at the scale of that map. But, again, alluvium can</p> <p>8 have very permeable channels within it, and where it's</p> <p>9 saturated, that is a valuable ground water aquifer.</p> <p>10 Q. You mentioned Clark County, and we've marked WEB Exhibit 4,</p> <p>11 a map of Clark County; is that right?</p> <p>12 A. Yes.</p> <p>13 Q. And does that map show the other area about which you have</p> <p>14 some particular concerns?</p> <p>15 A. Yes. It shows in the western part of the county this is a</p> <p>16 map of the first occurrence of aquifer materials, and it shows</p> <p>17 sand and gravel within 50 feet of the land surface.</p> <p>18 Q. And this is also a map prepared by the South Dakota</p> <p>19 Geological Survey?</p> <p>20 A. It shows Department of Environment and Natural Resources</p> <p>21 Geological Survey, yes.</p> <p>22 MR. RASMUSSEN: I'd offer WEB Exhibit 4.</p> <p>23 MR. WHITE: No objection.</p> <p>24 MR. SMITH: WEB 4 is admitted.</p> <p>25 Q. Is there anything else you would like to inform the</p>

<p style="text-align: right;">1056</p> <p>1 Commission of before I let you proceed to cross-examination?</p> <p>2 A. I have some printouts of some of the documented leaks from</p> <p>3 pipelines. And I would like to at least mention that these were</p> <p>4 from the website at the DENR Geological Survey that shows -- for</p> <p>5 land shows documented spills.</p> <p>6 Q. Okay. I think we'll get to those later, but all right.</p> <p>7 MR. RASMUSSEN: Thank you, Dr. Davis. That's all the</p> <p>8 questions I have.</p> <p>9 MR. SMITH: Mr. Hohn.</p> <p>10 MR. HOHN: No further questions at this time.</p> <p>11 MR. SMITH: Mr. White, are you taking the --</p> <p>12 MR. WHITE: Yes, I am.</p> <p>13 MR. SMITH: Okay. Please proceed.</p> <p>14 MR. WHITE: Thank you.</p> <p>15 <u>CROSS-EXAMINATION</u></p> <p>16 <u>BY MR. WHITE:</u></p> <p>17 Q. Morning, Dr. Davis.</p> <p>18 A. Morning.</p> <p>19 Q. Just a couple questions about your background. Do you have</p> <p>20 any experience in the area of pipeline integrity?</p> <p>21 A. No, I don't.</p> <p>22 Q. Do you have any experience in the area of pipeline design?</p> <p>23 A. No.</p> <p>24 Q. Are you an expert in pipeline routing?</p> <p>25 A. Before this time I have not looked at proposed routing of</p>	<p style="text-align: right;">1058</p> <p>1 Q. Are you an expert in that area?</p> <p>2 A. Yes.</p> <p>3 Q. I note that you have provided on what's been marked as</p> <p>4 WEB 3 a dashed line. Is that your proposed Keystone reroute, or</p> <p>5 reroute of the Keystone Pipeline?</p> <p>6 A. That was proposed by Perry Rahn, and I agree with him that</p> <p>7 it would have a chance of less likelihood of contaminating</p> <p>8 aquifers from the land surface down.</p> <p>9 Q. And with respect to that proposed reroute, have you taken</p> <p>10 into account the potential impact of a reroute in that area on</p> <p>11 cultural resources?</p> <p>12 A. No, I have not.</p> <p>13 Q. Have you taken into account the potential impact of that</p> <p>14 reroute on grasslands?</p> <p>15 A. No.</p> <p>16 Q. Have you taken into account with respect to that reroute</p> <p>17 the potential impact on threatened and endangered species?</p> <p>18 A. No.</p> <p>19 Q. Have you taken into account the potential impact of that</p> <p>20 reroute on wetlands?</p> <p>21 A. I have looked at some of the areas that could have</p> <p>22 wetlands, and I think with either route there's a potential of</p> <p>23 crossing some wetlands.</p> <p>24 Q. Okay. And is it your opinion that a reroute drawn on a map</p> <p>25 of this scale is of sufficient scale for the Commission to</p>
<p style="text-align: right;">1057</p> <p>1 pipelines.</p> <p>2 Q. And you're not offering an expert opinion here with respect</p> <p>3 to pipeline routing; is that correct?</p> <p>4 A. I am suggesting that an alternate route could be chosen</p> <p>5 that would cross areas of much lower permeability of till and</p> <p>6 clay that would offer less chance of infiltration of</p> <p>7 contaminants.</p> <p>8 Q. And have you conducted any analysis with specific regard to</p> <p>9 the Keystone Pipeline with respect to the likelihood of a spill</p> <p>10 occurring on the Keystone Pipeline?</p> <p>11 A. I have looked at a report that was provided by DNV</p> <p>12 Consulting.</p> <p>13 Q. And I'm asking you whether you've conducted any independent</p> <p>14 analysis of a likelihood of a spill occurring on the Keystone</p> <p>15 Pipeline?</p> <p>16 A. No.</p> <p>17 Q. And have you conducted an independent analysis with respect</p> <p>18 to the frequency or volume of a spill that may occur on the</p> <p>19 Keystone Pipeline?</p> <p>20 A. Not independently of the document that was submitted by</p> <p>21 DNV.</p> <p>22 Q. Have you conducted any sort of an independent analysis on</p> <p>23 the fate and transport of any oil pipeline spill that might</p> <p>24 occur on the Keystone Pipeline?</p> <p>25 A. Not yet, no.</p>	<p style="text-align: right;">1059</p> <p>1 consider a potential reroute of the Keystone Pipeline?</p> <p>2 A. I think it is for a potential reroute in the broad picture,</p> <p>3 but there would be many details that would have to be looked at</p> <p>4 more carefully.</p> <p>5 Q. This would be of inadequate scale to provide the level of</p> <p>6 detail the Commission would have to look at to consider a</p> <p>7 potential reroute?</p> <p>8 A. Well, not necessarily, but I think in raw general terms it</p> <p>9 shows quite clearly that there might be a better route.</p> <p>10 Q. There might be?</p> <p>11 A. Yes.</p> <p>12 Q. You mentioned a spill on the Williams Pipeline; is that</p> <p>13 correct?</p> <p>14 A. Yes.</p> <p>15 Q. And when did that spill occur?</p> <p>16 A. One occurred in 1987 according to the records, and another</p> <p>17 according to the documents was 1990.</p> <p>18 Q. Do you know when that pipeline was constructed?</p> <p>19 A. No, I don't.</p> <p>20 Q. And I believe you mentioned the alluvium, which is depicted</p> <p>21 on your map, WEB 3.</p> <p>22 A. Yes.</p> <p>23 Q. Tell us what you meant by that.</p> <p>24 A. The alluvium is material that was deposited by flowing</p> <p>25 water. When glaciers were melting there was more water that was</p>

<p style="text-align: right;">1060</p> <p>1 flowing. Now the streams are flowing but at a smaller rate.</p> <p>2 And as they meander across the floodplain they deposit material,</p> <p>3 and some of that material is quite permeable, sand and gravel.</p> <p>4 Q. And is that material generally overlain by clays or silt or</p> <p>5 till?</p> <p>6 A. In some areas it is. In some areas it's not.</p> <p>7 Q. And do you know on your proposed reroute here where those</p> <p>8 clays and silts and tills would occur?</p> <p>9 A. In general terms at that scale of 1 to 500,000, yes. And</p> <p>10 there are some county maps that show in greater detail.</p> <p>11 Q. Okay. And you haven't presented those here today?</p> <p>12 A. I have some of those with me. And the one on Clark County</p> <p>13 has been entered. Also I have one for Marshall County and one</p> <p>14 for Beadle County, one for Kingsbury County, one for Miner</p> <p>15 County, and one for Hutchinson County, and one for Yankton</p> <p>16 County.</p> <p>17 Q. Thank you. I'm looking at page 3 of your prepared direct</p> <p>18 testimony. And up towards the top of the page you refer to</p> <p>19 geologically sensitive high consequence areas. Do you see that</p> <p>20 reference?</p> <p>21 A. Yes.</p> <p>22 Q. Could you define for us what a geologically sensitive high</p> <p>23 consequence area is?</p> <p>24 A. An area that would be geologically sensitive and could have</p> <p>25 high consequences in the case of a leak or a spill of</p>	<p style="text-align: right;">1062</p> <p>1 the wall.</p> <p>2 COMMISSIONER HANSON: I was looking at this one and</p> <p>3 didn't listen to that portion of your testimony. I hope I</p> <p>4 didn't miss another portion of your testimony when you explained</p> <p>5 on the northern part up in Marshall -- and perhaps it's just the</p> <p>6 size of this map and the glare on that one, but the route looks</p> <p>7 like it -- that you chose intentionally chooses a particular</p> <p>8 soil in Marshall and Day County and a portion in Clark and</p> <p>9 Kingsbury, but you avoid that soil down in, oh, about</p> <p>10 Hutchinson, Turner, and Yankton County.</p> <p>11 Are those different soil types? It looks like you've</p> <p>12 intentionally tried to avoid that down in --</p> <p>13 THE WITNESS: This is a geologic map. And so the</p> <p>14 surface soils for the first foot or two can be different than</p> <p>15 the underlying geologic materials. But for the most part the</p> <p>16 dashed line that shows the alternate route would be on material</p> <p>17 that would be low permeability till and very tight clay. And</p> <p>18 that would weather to a soil that also would be very low</p> <p>19 permeability and tight.</p> <p>20 COMMISSIONER HANSON: Earlier you were asked a number</p> <p>21 of questions pertaining upon considerations that you gave to</p> <p>22 this pipeline, and I certainly assume you didn't go out and walk</p> <p>23 it or take any sort of a visual examination of it, did you?</p> <p>24 THE WITNESS: No, I did not.</p> <p>25 COMMISSIONER HANSON: If you were asked -- forgive me</p>
<p style="text-align: right;">1061</p> <p>1 contaminants would be one where infiltration into an aquifer</p> <p>2 could occur, and ground water resources would be affected.</p> <p>3 Q. And when you use the term high consequence area, are you</p> <p>4 referring to the high consequence areas that are defined by the</p> <p>5 PHMSA or the Pipeline Hazardous Materials Safety Administration</p> <p>6 in 49 CFR 194 and 195?</p> <p>7 A. I am referring to the high consequence areas as those that</p> <p>8 are defined in that way, yes.</p> <p>9 Q. And which portion of 49 CFR 195 defines a geologically</p> <p>10 sensitive high consequence area? Do you know?</p> <p>11 A. I don't know.</p> <p>12 MR. WHITE: Thank you.</p> <p>13 MR. SMITH: Staff, do you have questions of Mr. Davis?</p> <p>14 MS. SEMMLER: None. Thank you.</p> <p>15 MR. SMITH: Commissioners. Pardon me. Commissioner</p> <p>16 Hanson, are you ready to go?</p> <p>17 COMMISSIONER HANSON: Sure. I'll start it off. I</p> <p>18 only have a couple of questions, I think. Good morning.</p> <p>19 THE WITNESS: Morning.</p> <p>20 COMMISSIONER HANSON: Appreciate you taking the time</p> <p>21 to come here and be with us. You have a real interesting map.</p> <p>22 I'd like to look at it sometime, probably after the hearings are</p> <p>23 all over in a much larger version.</p> <p>24 Is that something that you brought?</p> <p>25 THE WITNESS: The largest version is the one that's on</p>	<p style="text-align: right;">1063</p> <p>1 if you repeat your answer, but in earlier testimony we were told</p> <p>2 there are a number of intakes for rural water lines up in that</p> <p>3 area -- up in the Marshall/Day area.</p> <p>4 Did you consider any of those, take a look at any of</p> <p>5 those?</p> <p>6 THE WITNESS: Could you help me by what you mean by</p> <p>7 the word "intake"?</p> <p>8 COMMISSIONER HANSON: Where a water -- rural water</p> <p>9 company harvests its supply of water.</p> <p>10 THE WITNESS: So, in other words, an underground well</p> <p>11 then? Could be a spring?</p> <p>12 COMMISSIONER HANSON: Could be a ranney. Could be a</p> <p>13 regular -- it could be horizontal. Just what they refer to as</p> <p>14 an intake where they harvest their water prior to purification.</p> <p>15 THE WITNESS: I haven't looked at all of those in</p> <p>16 detail, but I would assume that if they're pulling water from a</p> <p>17 well, it would be far enough under the land surface that the</p> <p>18 surficial materials of till would help protect that area.</p> <p>19 COMMISSIONER HANSON: Are you testifying that you</p> <p>20 believe that the intake in the event of a failure of the</p> <p>21 pipeline or leakage, that it would be protected?</p> <p>22 THE WITNESS: Not necessarily, no.</p> <p>23 COMMISSIONER HANSON: Okay. Then I didn't understand</p> <p>24 your answer to the last question.</p> <p>25 THE WITNESS: Well, in broad terms in general routing</p>

<p style="text-align: right;">1064</p> <p>1 something that could leak over a clay material would offer more</p> <p>2 protection than over sandy material, that is a recharge area for</p> <p>3 an aquifer, and that was what I was referring to.</p> <p>4 COMMISSIONER HANSON: And that is something you put</p> <p>5 into consideration when you were putting your dots and dashes --</p> <p>6 or picking your route?</p> <p>7 THE WITNESS: Those dashes were drawn by Perry Rahn,</p> <p>8 but I agreed in general with those dashes.</p> <p>9 COMMISSIONER HANSON: I see. All right. Thank you</p> <p>10 very much.</p> <p>11 CHAIRMAN JOHNSON: Good morning. Thanks for being</p> <p>12 here, Mr. Davis. Do you have any experience or expertise with</p> <p>13 end leak detection systems?</p> <p>14 THE WITNESS: No.</p> <p>15 CHAIRMAN JOHNSON: Do you have much experience or</p> <p>16 expertise in -- and this has probably been asked and answered.</p> <p>17 With pipeline design?</p> <p>18 THE WITNESS: No.</p> <p>19 CHAIRMAN JOHNSON: Okay. Thanks. I think that's all</p> <p>20 I have. Thanks very much.</p> <p>21 COMMISSIONER KOLBECK: Hi, how are you? I guess I've</p> <p>22 just got -- most of the questions are asked and answered, but on</p> <p>23 page -- line 61, which would be page 2 of your testimony, the</p> <p>24 question was, Have you experience with other petroleum leaks?</p> <p>25 And leaks from pipelines have occurred in the past in</p>	<p style="text-align: right;">1066</p> <p>1 asking about remediation methods or anything like that, or just</p> <p>2 mostly about the soil content?</p> <p>3 THE WITNESS: My knowledge about remediation is more</p> <p>4 in the area of gasoline and some other contaminants such as</p> <p>5 trichloral ethylene and ethylene dibromide. I haven't worked as</p> <p>6 a consultant on a oil crude project, but crude oil contains</p> <p>7 similar chemicals as gasoline.</p> <p>8 COMMISSIONER KOLBECK: All right. Thank you.</p> <p>9 MR. SMITH: Are there any other Commissioner</p> <p>10 questions?</p> <p>11 Do you have any redirect, Mr. Rasmussen?</p> <p>12 MR. RASMUSSEN: Very briefly.</p> <p>13 <u>REDIRECT EXAMINATION</u></p> <p>14 <u>BY MR. RASMUSSEN:</u></p> <p>15 Q. You just were talking about remediation of gasoline.</p> <p>16 What's been your involvement with remediation efforts of</p> <p>17 gasoline spills?</p> <p>18 A. At several sites around the State of South Dakota --</p> <p>19 probably the biggest one is the Williams Pipeline, Hayward</p> <p>20 Elementary School leak, where there was about a 20,000-gallon</p> <p>21 leak of gasoline. And there was migration of dissolved benzene</p> <p>22 and toluene and xylene and other hydrocarbons down gradient.</p> <p>23 One of the biggest was there was a 60-to 80,000-gallon leak</p> <p>24 about a half a mile from the South Dakota School of Mines where</p> <p>25 I work. And over the years I've also been involved some in</p>
<p style="text-align: right;">1065</p> <p>1 South Dakota.</p> <p>2 Could you elaborate on that?</p> <p>3 THE WITNESS: Yes. Those are documented in the</p> <p>4 records of the Department of Environment and Natural Resources.</p> <p>5 I earlier this week called Kim McIntosh and discussed some of</p> <p>6 those with her and then looked them up on-line. And the leaks</p> <p>7 that I mentioned were mainly from Williams Pipeline Company.</p> <p>8 COMMISSIONER KOLBECK: Okay. Which is petroleum</p> <p>9 pipeline; is that correct?</p> <p>10 THE WITNESS: Yes.</p> <p>11 COMMISSIONER KOLBECK: Refined gas.</p> <p>12 THE WITNESS: I think so.</p> <p>13 COMMISSIONER KOLBECK: And it says that you -- the</p> <p>14 question asks have you had experience? What was your experience</p> <p>15 directly involving those leaks?</p> <p>16 THE WITNESS: Because of my experience in ground</p> <p>17 water, I took an interest in those. And at that time Mike Meyer</p> <p>18 of the Department of Environment and Natural Resources, he's</p> <p>19 currently with Geotek Engineering, Mike called me up and talked</p> <p>20 with me about those.</p> <p>21 COMMISSIONER KOLBECK: Okay. Pertaining to the</p> <p>22 geological nature of where the leak was; correct?</p> <p>23 THE WITNESS: Right. And their proximity to the</p> <p>24 permeable wells and the City of Sioux Falls.</p> <p>25 COMMISSIONER KOLBECK: Anything with remediation,</p>	<p style="text-align: right;">1067</p> <p>1 looking at smaller leaks around the state.</p> <p>2 Q. So what was done to remediate the efforts of the -- or the</p> <p>3 effects of those spills?</p> <p>4 A. At the Williams Pipeline site, Hayward Elementary School,</p> <p>5 they put in trenches to try to intercept some of the gasoline.</p> <p>6 They also tried to put in wells to pull out some of the</p> <p>7 contaminated water and the gasoline and then separate the</p> <p>8 gasoline and try to treat the water.</p> <p>9 Q. Thank you.</p> <p>10 MR. RASMUSSEN: I just would state for the Commission</p> <p>11 that this map that you have, WEB 3, was submitted previously on</p> <p>12 disk. And so if further detail is necessary, it can be</p> <p>13 enlarged. And I think the Commission and all the parties have a</p> <p>14 copy of that disk.</p> <p>15 With that, I have no further questions.</p> <p>16 <u>CROSS-EXAMINATION</u></p> <p>17 <u>BY MR. HOHN:</u></p> <p>18 Q. Mr. Davis, I have a couple questions. Regarding the</p> <p>19 equipment that you were referring to that -- the pump that pumps</p> <p>20 the gas off the water, is that a skimmer? Would you refer to</p> <p>21 that as a skimmer?</p> <p>22 A. In some cases they'll have a two-pump system with a lower</p> <p>23 water table depression pump to create a cone of depression and</p> <p>24 try to get the gasoline on top of the water to flow toward a</p> <p>25 second upper skimmer pump.</p>

<p style="text-align: right;">1068</p> <p>1 Q. And does that -- that mechanism or that application, as far</p> <p>2 as you know -- remove all of the material, the fuel material</p> <p>3 from the ground?</p> <p>4 A. No.</p> <p>5 Q. In the projects where you were involved as a consultant on</p> <p>6 these various fuel spills did any of the fuels come in contact</p> <p>7 with the drinking water supply?</p> <p>8 A. Yes.</p> <p>9 Q. And which of those would be that type of spill?</p> <p>10 A. The Williams Pipeline Hayward School leak was above the</p> <p>11 Skunk Creek Aquifer. There are some private wells in that area.</p> <p>12 It has been annexed into the City of Sioux Falls, but I was told</p> <p>13 by the DENR that part of that aquifer had been identified as a</p> <p>14 potential future water source for the City of Sioux Falls.</p> <p>15 In Rapid City the alluvial aquifer is used as a drinking</p> <p>16 water supply, and that has been contaminated by gasoline in some</p> <p>17 cases.</p> <p>18 Q. When you were involved in those spills who was in charge of</p> <p>19 the project? Who did you work for?</p> <p>20 A. For the Williams Pipeline and Hayward School project, at</p> <p>21 that time I was asked by Mike Meyer and some others in the</p> <p>22 Department of Environment and Natural Resources to work on it.</p> <p>23 And I was a new faculty member at South Dakota School of Mines</p> <p>24 so I offered to assist them on that.</p> <p>25 Q. And the other spills that you mentioned that you worked on,</p>	<p style="text-align: right;">1070</p> <p>1 process was overseen by the South Dakota DENR; is that correct?</p> <p>2 A. I believe that they received reports on it, yes.</p> <p>3 Q. And were other agencies involved in overseeing the cleanup</p> <p>4 at that site?</p> <p>5 A. I am not sure if the Petroleum Release Compensation Fund</p> <p>6 was or not. And I think in the investigation of that I think</p> <p>7 that the EPA was looking at some documents, and I think possibly</p> <p>8 the Center For Disease Control also.</p> <p>9 Q. So there's fairly extensive federal and state oversight of</p> <p>10 that cleanup activity; is that correct?</p> <p>11 A. I think that would be fair to say.</p> <p>12 Q. And with respect to that spill, was that spill the result</p> <p>13 of a pipeline spill?</p> <p>14 A. That particular one was an above-ground storage tank for</p> <p>15 gasoline.</p> <p>16 Q. Okay. And do you know what was contained in that</p> <p>17 above-ground storage tank?</p> <p>18 A. Yes. It was unleaded gasoline.</p> <p>19 Q. And was there a disposal site also at that spill site?</p> <p>20 A. I don't think there was a disposal site at the spill site,</p> <p>21 but there were treatment facilities there.</p> <p>22 Q. And what sort of substances were in those treatment</p> <p>23 facilities?</p> <p>24 A. Well, when the contaminated water was pumped out of the</p> <p>25 ground it contained in some cases some free gasoline and that</p>
<p style="text-align: right;">1069</p> <p>1 who were you working with or for?</p> <p>2 A. For most of the others I was either just investigating it</p> <p>3 for my own interest or in some cases I was employed as a</p> <p>4 consultant for companies such as Geotek in Sioux Falls.</p> <p>5 Q. Were you present this morning when the representative from</p> <p>6 the Water Rights Office testified?</p> <p>7 A. Yes.</p> <p>8 Q. And did you hear his statements regarding the Completion</p> <p>9 Report, the Well Driller's Completion Report?</p> <p>10 A. I believe I heard at least part of it, yes.</p> <p>11 Q. Are you familiar with what that means or what that term</p> <p>12 means?</p> <p>13 A. Yes.</p> <p>14 Q. My last question for you, sir, is if -- in your</p> <p>15 professional opinion would it be helpful to decision-makers if</p> <p>16 additional soil borings along the pipeline route were completed</p> <p>17 before a permit was issued?</p> <p>18 A. I think it could be quite helpful.</p> <p>19 MR. HOHN: Thank you.</p> <p>20 MR. SMITH: Mr. White.</p> <p>21 MR. WHITE: Just a couple of questions.</p> <p>22 <u>RECROSS-EXAMINATION</u></p> <p>23 <u>BY MR. WHITE:</u></p> <p>24 Q. I believe you were discussing the cleanup activity at the</p> <p>25 Hayward School spill. And you indicated that that site cleanup</p>	<p style="text-align: right;">1071</p> <p>1 could be gravity separated and then the water itself above --</p> <p>2 or, excuse me, below the gasoline would have dissolved</p> <p>3 hydrocarbons, and that had to be treated I believe before it</p> <p>4 could be discharged into the Sioux Falls city sewer system.</p> <p>5 Q. Okay. And I think your testimony indicates that the</p> <p>6 Hayward School was closed down as a result of this incident?</p> <p>7 A. That's my recollection, yes.</p> <p>8 Q. And was a new school constructed?</p> <p>9 A. I was told that a new building was built somewhere else.</p> <p>10 Q. And do you know who paid for that building?</p> <p>11 A. I think that Williams Pipeline at least contributed to it.</p> <p>12 MR. WHITE: Thank you.</p> <p>13 MR. SMITH: Ms. Semmler.</p> <p>14 <u>CROSS-EXAMINATION</u></p> <p>15 <u>BY MS. SEMMLER:</u></p> <p>16 Q. I have one last question for you as well. In your</p> <p>17 suggestion of the new route did you study the costs of -- did</p> <p>18 you study the cost or environmental impacts of the numerous</p> <p>19 stream crossings that the new route would cross?</p> <p>20 A. Not in detail, no.</p> <p>21 MS. SEMMLER: That's all.</p> <p>22 MR. SMITH: I have one question for you, if I might.</p> <p>23 Do you have a question?</p> <p>24 CHAIRMAN JOHNSON: Go ahead.</p> <p>25 MR. SMITH: You mentioned the -- in the Rapid City</p>

<p style="text-align: right;">1072</p> <p>1 case the presence following a spill of benzene, toluene, the</p> <p>2 usual culprits.</p> <p>3 Are those particular culprits that we usually call</p> <p>4 BTEX, are those the primary constituents of concern in your</p> <p>5 opinion that usually cause the problems?</p> <p>6 THE WITNESS: In my opinion they are. There could be</p> <p>7 others as well, though.</p> <p>8 MR. SMITH: And if you don't know, please say so. But</p> <p>9 when we're talking about gasoline, whether it be unleaded or</p> <p>10 leaded -- leaded is obviously worse, but is it fair to say that</p> <p>11 the concentration of BTEX in refined gasoline is very</p> <p>12 significantly higher than it is in unrefined oil?</p> <p>13 THE WITNESS: Well, not necessarily. I have a</p> <p>14 document here from a textbook on Contaminant Hydrogeology that</p> <p>15 says crude oil contains about 17 percent aromatic hydrocarbons,</p> <p>16 and that includes then some of these things such as benzene,</p> <p>17 toluene.</p> <p>18 MR. SMITH: What report is that?</p> <p>19 THE WITNESS: This is a textbook by Craig Fedder,</p> <p>20 Contaminant Hydrogeology.</p> <p>21 MR. SMITH: Thank you.</p> <p>22 CHAIRMAN JOHNSON: Dr. Davis, you had mentioned</p> <p>23 contamination of water sources in Sioux Falls. And did you also</p> <p>24 say Rapid City as a result of some spills?</p> <p>25 THE WITNESS: Yes.</p>	<p style="text-align: right;">1074</p> <p>1 private water intakes were curtailed as a result?</p> <p>2 THE WITNESS: I don't know for certain. I think there</p> <p>3 were some vapors in basements down gradient.</p> <p>4 CHAIRMAN JOHNSON: Do you have any information on the</p> <p>5 concentration of BTEX downstream?</p> <p>6 THE WITNESS: It was up to about 30 milligrams per</p> <p>7 liter, I believe.</p> <p>8 CHAIRMAN JOHNSON: Can you put that in context?</p> <p>9 THE WITNESS: Well, five parts per billion is the</p> <p>10 maximum contaminant level for benzene, and so 30 parts per</p> <p>11 million would be 6,000 times greater than that.</p> <p>12 CHAIRMAN JOHNSON: And what -- how long was the</p> <p>13 remediation process? Do you know specifically what was done?</p> <p>14 THE WITNESS: They put in trenches, and I think they</p> <p>15 pumped out water, and I am not sure how long that went on, but I</p> <p>16 think it was at least a couple of years. I believe Law</p> <p>17 Environmental did it for Amoco.</p> <p>18 CHAIRMAN JOHNSON: Do you know what the private wells</p> <p>19 downstream did for water in the interim period?</p> <p>20 THE WITNESS: If there were any affected, they</p> <p>21 probably would just have to stop using it. Now a lot of those</p> <p>22 people who might have had wells in that area probably only used</p> <p>23 them for watering their gardens and so forth. Because when that</p> <p>24 area got annexed I think into Rapid City then City water was</p> <p>25 supplied.</p>
<p style="text-align: right;">1073</p> <p>1 CHAIRMAN JOHNSON: Are you familiar with the details</p> <p>2 of the remediation process?</p> <p>3 THE WITNESS: To some degree, yes.</p> <p>4 CHAIRMAN JOHNSON: And I don't have any knowledge, any</p> <p>5 detailed knowledge of those incidences. Can you tell me a</p> <p>6 little bit more about whether or not there were drinking water</p> <p>7 intakes in there, whether or not they had to stop pulling water</p> <p>8 out of those aquifers or water areas?</p> <p>9 Can you give me a little more information?</p> <p>10 THE WITNESS: Yes. In the case of the Rapid City</p> <p>11 Rapid Creek Alluvial Aquifer, Rapid City has an ordinance that</p> <p>12 doesn't allow gasoline stations up gradient from their intakes.</p> <p>13 But the 60- to 80,000-gallon leak from an Amoco station was on</p> <p>14 the eastern side of town. And there weren't any large intakes</p> <p>15 that I know of but I think there were private wells in the area</p> <p>16 and in the '80s I think Rapid Valley still had an infiltration</p> <p>17 gallery down gradient, quite a ways down gradient, but it was</p> <p>18 down gradient from that point.</p> <p>19 CHAIRMAN JOHNSON: Were those water intakes shut down</p> <p>20 as a result of that release?</p> <p>21 THE WITNESS: The ones for the City of Rapid City</p> <p>22 didn't need to be because they were up gradient, and I think</p> <p>23 around that time Rapid Valley stopped using its collection</p> <p>24 gallery and the alluvium.</p> <p>25 CHAIRMAN JOHNSON: Do you know whether or not any</p>	<p style="text-align: right;">1075</p> <p>1 CHAIRMAN JOHNSON: Okay. Thank you very much.</p> <p>2 COMMISSIONER KOLBECK: Do you think that the industry</p> <p>3 in your opinion on the -- I guess this is away from your</p> <p>4 geological expertise, but do you think the industry's gotten</p> <p>5 better in the last 20 years?</p> <p>6 THE WITNESS: I don't know that I could comment on</p> <p>7 that.</p> <p>8 COMMISSIONER KOLBECK: Okay. Yeah. That was probably</p> <p>9 not a very fair question. Sorry.</p> <p>10 MR. SMITH: Do you have any follow-up questions,</p> <p>11 Mr. White?</p> <p>12 MR. WHITE: No.</p> <p>13 MR. RASMUSSEN: Nothing further.</p> <p>14 MR. HOHN: I have a couple of questions.</p> <p>15 <u>RECROSS-EXAMINATION</u></p> <p>16 <u>BY MR. HOHN:</u></p> <p>17 Q. Sir, the state law burden of proof on the Applicant,</p> <p>18 there's four items. The first one has to do with law, and I'm</p> <p>19 not going to ask you about that.</p> <p>20 But the second item asks whether the -- in your opinion --</p> <p>21 I'm asking your opinion. Would the facility pose a threat of</p> <p>22 serious injury to the environment or social --</p> <p>23 MR. WHITE: I'm going to object to this, Mr. Smith. I</p> <p>24 think we're rereading testimony which I think we decided</p> <p>25 yesterday we're not going to do.</p>

<p style="text-align: right;">1076</p> <p>1 MR. SMITH: Can you point to me where it is so I</p> <p>2 can --</p> <p>3 MR. WHITE: Sure. It's on page 4 of the direct</p> <p>4 testimony.</p> <p>5 MR. SMITH: Sustained. You've already testified to</p> <p>6 that. Asked and answered.</p> <p>7 MR. HOHN: Is he allowed to elaborate beyond what's in</p> <p>8 his written testimony?</p> <p>9 MR. WHITE: It would go well beyond the scope of the</p> <p>10 recross and redirect we've had so far.</p> <p>11 MR. SMITH: I'm going to sustain the objection.</p> <p>12 MR. WHITE: Thank you.</p> <p>13 MR. HOHN: Thank you.</p> <p>14 MR. SMITH: I believe you're excused, Mr. Davis.</p> <p>15 Thank you very much. That was interesting.</p> <p>16 THE WITNESS: Thank you.</p> <p>17 (The witness is excused)</p> <p>18 MR. SMITH: Are you ready to go, Mr. Rasmussen?</p> <p>19 MR. RASMUSSEN: Call Dr. Perry Rahn.</p> <p>20 (The witness is sworn by the court reporter)</p> <p>21 <u>DIRECT EXAMINATION</u></p> <p>22 <u>BY MR. RASMUSSEN:</u></p> <p>23 Q. Would you state your name and address, please.</p> <p>24 A. Perry Rahn. Rapid City.</p> <p>25 Q. And what do you do?</p>	<p style="text-align: right;">1078</p> <p>1 COMMISSIONER HANSON: No. The web.</p> <p>2 Q. If Mr. Hohn were to bring the large map over to you, would</p> <p>3 that help?</p> <p>4 A. No. I'll do the small one.</p> <p>5 Q. Okay.</p> <p>6 A. Can I explain this map?</p> <p>7 Q. Yes. Please do.</p> <p>8 A. Okay. It's published in the year 2004 by the State DENR.</p> <p>9 Derric Iles is the State Geologist. And it shows the surficial</p> <p>10 deposits, the glacial deposits that cover the eastern side of</p> <p>11 South Dakota.</p> <p>12 The different colors are the different types of moraines</p> <p>13 composed of till. The yellow of particular interest here is the</p> <p>14 alluvium.</p> <p>15 Now these deposits were brought down by glaciers that</p> <p>16 started up in Canada. Came down. There was the Dakota Lobe,</p> <p>17 Des Moines Lobe, et cetera.</p> <p>18 Till is not very permeable. I mentioned in my paper here</p> <p>19 an age date was found to be about 10,000 years old. So there's</p> <p>20 virtually no movement of water through these glacial moraines.</p> <p>21 And then you'd have to look in detail at the legend to see what</p> <p>22 those different moraines are called. Some are lateral moraines,</p> <p>23 some end moraines, some stagnation moraines. It's all till.</p> <p>24 The aquifers here are outwash and alluvium, been referred</p> <p>25 to in the Sioux Falls study by Neil Koch as alluvium mantled</p>
<p style="text-align: right;">1077</p> <p>1 A. I'm now retired, but I used to teach geology courses at</p> <p>2 South Dakota School of Mines.</p> <p>3 Q. You have provided direct testimony in a written form in</p> <p>4 this case as well as your CV; is that right?</p> <p>5 A. Yes.</p> <p>6 Q. If you were to be asked the same questions -- and we have</p> <p>7 marked that as WEB Exhibit 5. If you were to be asked the same</p> <p>8 questions here today, would you give the same answers as is</p> <p>9 provided in the written direct testimony?</p> <p>10 A. Yes.</p> <p>11 MR. RASMUSSEN: I'd offer WEB Exhibit 5.</p> <p>12 MR. WHITE: No objection.</p> <p>13 MS. SEMMLER: No objection.</p> <p>14 MR. SMITH: WEB Exhibit 5 is received into evidence.</p> <p>15 Q. We've previously received into evidence WEB Exhibit 3,</p> <p>16 which is a version of the large map that is up on the wall. You</p> <p>17 were the one that obtained that large map and put the lines on</p> <p>18 there; is that right?</p> <p>19 A. Yes.</p> <p>20 Q. All right. And tell me about what those lines represent.</p> <p>21 A. Could I go up to the map?</p> <p>22 Q. Actually there's a smaller version. We need you to talk</p> <p>23 into the microphone so if you could do it at the table, that</p> <p>24 would help.</p> <p>25 A. I'd really like to go to the wall. I can talk loud enough.</p>	<p style="text-align: right;">1079</p> <p>1 outwash aquifer is a single unconfined water table aquifer.</p> <p>2 So the yellow bands give you a feeling of where these</p> <p>3 sensitive areas are. These aquifers, they should be avoided.</p> <p>4 And I -- I looked at the proposed Keystone right coming down</p> <p>5 here. There it crossed an aquifer. There's another one.</p> <p>6 There's another one. And I counted -- let's see -- I think 24</p> <p>7 different stream valleys where the alluvium was present before</p> <p>8 you get down to the Missouri. That's quite a few.</p> <p>9 And if you add up the mileage of the alluvial valleys where</p> <p>10 you crossed them, it's like 24 miles where you're on an aquifer.</p> <p>11 It seemed to me like they could find a better route. And I</p> <p>12 looked at this map and if you just go like 8 miles to the east</p> <p>13 and come through those deposits, there's no aquifer crossing at</p> <p>14 all. It's all till. What a wonderful deal.</p> <p>15 Why doesn't TransCanada utilize the geology here? They</p> <p>16 missed the boat. They should put it in an area where in case</p> <p>17 there's a leak it would be contained.</p> <p>18 Now I know the scale of the map is another thing. If you</p> <p>19 do a detail of the area say within the city limits or something,</p> <p>20 you might find a very small little bit of alluvium that's not a</p> <p>21 map this scale of map. But I chose this because it's a brand</p> <p>22 new map, because it shows the whole pipeline route, all of the</p> <p>23 consistent mapping scale and geology.</p> <p>24 So I think really you should ask TransCanada to go back and</p> <p>25 get a route that's much better. I know he's going to say did</p>

<p>1080</p> <p>1 you study the culture there. I know they put a lot of effort</p> <p>2 into the work already, but they should have had -- why didn't</p> <p>3 they consult DENR, the State Geologic Survey people and get them</p> <p>4 to find the favorable route? I don't know why not.</p> <p>5 That's pretty much it. Thanks.</p> <p>6 MR. RASMUSSEN: Tender Dr. Rahn for cross-examination.</p> <p>7 MR. SMITH: Mr. Hohn, do you have any questions?</p> <p>8 MR. HOHN: Not at this time. No thanks.</p> <p>9 MR. SMITH: Mr. White.</p> <p>10 MR. WHITE: Thank you.</p> <p>11 <u>CROSS-EXAMINATION</u></p> <p>12 <u>BY MR. WHITE:</u></p> <p>13 Q. Morning, Dr. Rahn. I see you've anticipated some of my</p> <p>14 questions, but I'll ask them anyway.</p> <p>15 Do you have any expertise in pipeline routing?</p> <p>16 A. Not specifically that.</p> <p>17 Q. Okay. And in developing the dashed line on the map here</p> <p>18 which represents your proposed reroute, have you taken into</p> <p>19 account the impact of the proposed reroute on cultural</p> <p>20 resources?</p> <p>21 A. No.</p> <p>22 Q. Have you taken into account the impact of your proposed</p> <p>23 reroute on grasslands?</p> <p>24 A. No.</p> <p>25 Q. Other sensitive environmental features?</p>	<p>1082</p> <p>1 Q. In looking at your proposed -- or your direct testimony.</p> <p>2 A. Yeah.</p> <p>3 Q. Page 3, beginning at line 129. And I think you indicate</p> <p>4 that if oil leaked into these alluvial deposits, the</p> <p>5 contaminants would move slowly down gradient into the</p> <p>6 James River Valley; is that correct?</p> <p>7 A. If it's written there, it must be what I wrote.</p> <p>8 Q. Did you prepare this testimony?</p> <p>9 A. Oh, yes.</p> <p>10 Q. Did you have others participate in the preparation of the</p> <p>11 testimony?</p> <p>12 A. No.</p> <p>13 Q. And did you conduct an analysis of the transport of crude</p> <p>14 oil from a potential leak from the pipeline?</p> <p>15 A. No.</p> <p>16 Q. Do you know how long it would take crude oil from a spill</p> <p>17 to cover the distance down to the James River Valley from the</p> <p>18 pipeline route?</p> <p>19 A. Well, the big variation there if it seeps into a stream</p> <p>20 that's flowing down into the James River, it wouldn't take long</p> <p>21 at all. But if you're asking if it seeps into an aquifer, then</p> <p>22 by ground water flow how long would it take? It would be a long</p> <p>23 time.</p> <p>24 Q. Quite a long time?</p> <p>25 A. Yeah.</p>
<p>1081</p> <p>1 A. Other than ground water, no.</p> <p>2 Q. Threatened and endangered species?</p> <p>3 A. No.</p> <p>4 Q. Wetlands?</p> <p>5 A. Not per se.</p> <p>6 Q. Rocky areas?</p> <p>7 A. What do you mean by that?</p> <p>8 Q. Areas of consolidated rock.</p> <p>9 A. Well, I should sit down with your geology staff because I</p> <p>10 don't think you're going to find any.</p> <p>11 Q. So you haven't taken a look at that?</p> <p>12 A. Those are hundreds of feet down. The Cretaceous rocks, the</p> <p>13 Dakota Sandstone, Greenhorn, Niobrara. Our median interest is</p> <p>14 the surficial deposits right up where the pipeline goes through.</p> <p>15 Q. And I believe we had some testimony earlier about the</p> <p>16 coteau. Could you identify that on your map?</p> <p>17 A. Yeah. I even made reference to a paper that I wrote, The</p> <p>18 Origin of the Prairie Coteau. The glacier came down from Canada</p> <p>19 and parted right here up near Sisseton and one lobe came down</p> <p>20 through the James River Valley and the other lobe over here in</p> <p>21 Iowa and they piled up lateral moraines and so you have like a</p> <p>22 escarpment about 500 foot high in the valleys here up to the</p> <p>23 prairie coteau.</p> <p>24 Q. Would your proposed reroute be closer to the coteau?</p> <p>25 A. Yes. Uh-huh.</p>	<p>1083</p> <p>1 Q. And did I understand your testimony to be that these</p> <p>2 alluvial we call them fingers, the yellow fingers on the map,</p> <p>3 are generally overlain by tills and --</p> <p>4 A. No, no, no. They're not overlain by anything except grass</p> <p>5 grows on them. No. They are the most recent deposit, the</p> <p>6 yellow deposits along the streams. They are Holocene in age,</p> <p>7 which means roughly they'll last roughly 10 or 15,000 years.</p> <p>8 But beneath them are your glacial deposits and the outwash, for</p> <p>9 instance.</p> <p>10 Q. And those are fairly impermeable?</p> <p>11 A. No. The outwash are the aquifers. There's a number of</p> <p>12 reports by the State Geologic Survey that in detail shows those</p> <p>13 outwash aquifers, how many gallons per minute can be produced by</p> <p>14 the cities and so on there.</p> <p>15 MR. WHITE: Thank you.</p> <p>16 MR. SMITH: Staff, any questions of Mr. Rahn?</p> <p>17 MS. SEMMLER: I do. Thank you.</p> <p>18 <u>CROSS-EXAMINATION</u></p> <p>19 <u>BY MS. SEMMLER:</u></p> <p>20 Q. Did you obtain an opinion on your route from the State</p> <p>21 Geological Survey or DENR?</p> <p>22 A. No.</p> <p>23 Q. Do you have any personal knowledge of the meetings that</p> <p>24 TransCanada may have had with those agencies?</p> <p>25 A. No.</p>

<p>1084</p> <p>1 MS. SEMMLER: Thank you.</p> <p>2 MR. SMITH: Commissioners, do you have any questions?</p> <p>3 Commissioner Hanson.</p> <p>4 COMMISSIONER HANSON: I think I just have one in an</p> <p>5 effort to totally clarify my ignorance.</p> <p>6 How would you define till?</p> <p>7 THE WITNESS: Okay. It's a surficial deposit made by</p> <p>8 a glacier piling its debris that it carries and it's -- there's</p> <p>9 several types of till. For instance, if it's being -- where the</p> <p>10 glacier's melting, that stuff accumulates and then the glacier</p> <p>11 rides over it. It could pack it down pretty hard and form</p> <p>12 what's called a drumlin.</p> <p>13 The other type is when the glacier's melting, global</p> <p>14 warming, you know, and it's going back to Canada and it just</p> <p>15 drops till loose on the surface. That's called an ablation</p> <p>16 till. There's different kinds of tills, but it's virtually</p> <p>17 impermeable.</p> <p>18 COMMISSIONER HANSON: You were speaking of surficial</p> <p>19 deposits and till and a suggested route and giving us somewhat</p> <p>20 of a little bit of a knowledge of what this is all about.</p> <p>21 Can you tell us approximately -- and I know it varies,</p> <p>22 but can you tell us approximately what the depth is of -- this</p> <p>23 is just a map of the surface.</p> <p>24 THE WITNESS: Right.</p> <p>25 COMMISSIONER HANSON: And we don't know by looking at</p>	<p>1086</p> <p>1 THE WITNESS: Well, just barely in time to get it to</p> <p>2 you people.</p> <p>3 COMMISSIONER KOLBECK: Do you remember a date?</p> <p>4 THE WITNESS: I think it was around November 13.</p> <p>5 There was a few typos in that too. I have cleaned it up a</p> <p>6 little. I think it was just a few days before the deadline.</p> <p>7 COMMISSIONER KOLBECK: Okay. Thank you.</p> <p>8 MR. SMITH: Any other Commissioner questions of</p> <p>9 Dr. Rahn?</p> <p>10 Do you have any -- Commissioner Johnson.</p> <p>11 CHAIRMAN JOHNSON: I would just note that I'm in my</p> <p>12 30s, and I can barely read the legend so I'm glad somebody</p> <p>13 brought the large one. That will be helpful.</p> <p>14 THE WITNESS: I can leave it on the wall but I'm going</p> <p>15 back to Rapid City now and someone should promise that we get it</p> <p>16 back.</p> <p>17 COMMISSIONER KOLBECK: We've got it on the CD; right?</p> <p>18 MR. RASMUSSEN: Yeah. And the actual exhibit has a</p> <p>19 larger legend on it also.</p> <p>20 CHAIRMAN JOHNSON: I'm just giving you a hard time,</p> <p>21 Mr. Rahn. We do have it electronically. We can blow it up.</p> <p>22 MR. SMITH: This document we can also procure a large</p> <p>23 copy like that, could we not, from the geological surveys?</p> <p>24 Derric, is that available to us?</p> <p>25 MR. ILES: Yes.</p>
<p>1085</p> <p>1 this if this is a foot or if this is 100 feet; is that correct?</p> <p>2 THE WITNESS: I can give you some rough estimates.</p> <p>3 Sometimes in the legend, if you could read it, the scale there</p> <p>4 that you have, it gives approximate thicknesses of these</p> <p>5 deposits.</p> <p>6 The tills may be up to 300 feet thick. The alluvium</p> <p>7 is probably going to be 50 feet or less thick. And there are</p> <p>8 cross-sections. Some of these reports that I have referenced</p> <p>9 give cross-sections through here that show you the thickness</p> <p>10 before you get down to the cretaceous bedrock. They're</p> <p>11 beautiful reports.</p> <p>12 COMMISSIONER HANSON: It would take a much, much</p> <p>13 larger map than what we have. I appreciate your testimony. I</p> <p>14 found it very interesting. Thank you.</p> <p>15 THE WITNESS: Thank you.</p> <p>16 MR. SMITH: Other Commissioner questions.</p> <p>17 Commissioner Kolbeck.</p> <p>18 COMMISSIONER KOLBECK: Dr. Rahn, have you been</p> <p>19 listening on-line to any of the other testimony given?</p> <p>20 THE WITNESS: No. This is the first I have been here.</p> <p>21 COMMISSIONER KOLBECK: I was just wondering, there has</p> <p>22 been discussion, great discussion, of the James Aquifer, and I</p> <p>23 was just wondering if you agreed with that.</p> <p>24 When did you write your testimony, Dr. Rahn? Do you</p> <p>25 remember the date?</p>	<p>1087</p> <p>1 MR. SMITH: Okay. Thank you. Any redirect,</p> <p>2 Mr. Rasmussen?</p> <p>3 MR. RASMUSSEN: No.</p> <p>4 MR. SMITH: Then you're excused, Dr. Rahn.</p> <p>5 MR. HOHN: I have a question.</p> <p>6 MR. SMITH: Mr. Hohn.</p> <p>7 <u>CROSS-EXAMINATION</u></p> <p>8 <u>BY MR. HOHN:</u></p> <p>9 Q. Mr. Rahn, this is Bulletin 23, geological report for</p> <p>10 Marshall County. It was used by a previous witness,</p> <p>11 Ms. Winkler.</p> <p>12 Are you familiar with this document?</p> <p>13 MR. WHITE: Objection. There was no redirect. I</p> <p>14 don't understand why we're having recross.</p> <p>15 A. Yes.</p> <p>16 MR. SMITH: Mr. Hohn, I think I'm going to have to</p> <p>17 sustain that. There was no redirect, and we're done.</p> <p>18 MR. HOHN: Okay. Thank you.</p> <p>19 CHAIRMAN JOHNSON: Mr. Smith, when Commissioners ask</p> <p>20 questions that might raise new lines of questioning which</p> <p>21 couldn't somebody want to follow up on those lines of</p> <p>22 questioning with some --</p> <p>23 MR. SMITH: I stand corrected. If we're getting into</p> <p>24 something that may have been --</p> <p>25 CHAIRMAN JOHNSON: I mean, Commissioner Kolbeck did</p>

<p style="text-align: right;">1088</p> <p>1 ask some questions about evidence with regard to other maps that</p> <p>2 were offered. And I don't know. Maybe that's not sufficient or</p> <p>3 not. I'm certainly not an attorney.</p> <p>4 MR. SMITH: I can't remember which Commissioner, but</p> <p>5 somebody did ask him about the James Aquifer. And so, Perry, do</p> <p>6 you want to -- did he leave? Do you want to take the stand for</p> <p>7 a minute again. I think you're right, Commissioner Johnson.</p> <p>8 I'm overruling. I'm changing my mind is what I'm</p> <p>9 doing.</p> <p>10 MR. RASMUSSEN: Overruled by a higher court.</p> <p>11 MR. SMITH: That's right.</p> <p>12 MR. HOHN: I just have two questions for you,</p> <p>13 Dr. Rahn.</p> <p>14 Q. You referred to outstanding detailed reports that show</p> <p>15 greater detail in relation to the larger map you've presented.</p> <p>16 Is this an example of one, the Marshall report that I</p> <p>17 showed you just a moment ago?</p> <p>18 A. Yes. The Clark County map has a different scale. Things</p> <p>19 were blown up nicely so you have more detail than you do on the</p> <p>20 big map of the whole -- that shows the whole State of South</p> <p>21 Dakota.</p> <p>22 Q. Then I have two questions very specific, and they're not --</p> <p>23 they're short. Are you familiar with the Marshall County</p> <p>24 detailed maps and Clark County maps?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">1090</p> <p>1 within 50 feet of the surface or deeper than 50 feet but under</p> <p>2 100 feet or over 100 feet.</p> <p>3 MR. HOHN: Thank you.</p> <p>4 MR. SMITH: I just -- I have one question here for</p> <p>5 you, Perry. On the Clark map, the tan material -- I can't see</p> <p>6 this thing either so I -- again, colorwise, I mean, it looks to</p> <p>7 me like the one sort of tannish-yellow material on this map</p> <p>8 appears to be the Dakota Formation.</p> <p>9 Could you please describe for me just really roughly</p> <p>10 what the Dakota Formation is?</p> <p>11 THE WITNESS: That's the bedrock here in the eastern</p> <p>12 part of the state that was utilized back a hundred or so years</p> <p>13 ago. They drilled down 300, 400 feet, and hit an end flow.</p> <p>14 There's some wonderful flowing wells.</p> <p>15 Woonsocket's on it, developed from this aquifer. But</p> <p>16 the water isn't all that good, pretty highly mineralized, and</p> <p>17 it's been dropped in the piesometric level. A lot of those</p> <p>18 wells don't flow anymore. They have to be pumped, and you're</p> <p>19 getting a big draw down. But the Dakota does not crop out here.</p> <p>20 It's over 100 feet deep they say.</p> <p>21 MR. SMITH: So those areas that are Dakota areas,</p> <p>22 they're not -- they're not particularly vulnerable areas?</p> <p>23 THE WITNESS: They're not sensitive, vulnerable, high</p> <p>24 consequence, whatever you want to call it. They're way down on</p> <p>25 the bedrock. Our immediate concern in this whole project are</p>
<p style="text-align: right;">1089</p> <p>1 Q. And with regard to Marshall County, is there a large sand</p> <p>2 vein in that area on the western edge of Marshall County?</p> <p>3 A. You know, we don't like the term vein.</p> <p>4 Q. I'm sorry.</p> <p>5 A. But would you rephrase that question.</p> <p>6 Q. I'm afraid to, Professor. Would you describe based on your</p> <p>7 review of the detailed maps of the Marshall County study, what</p> <p>8 you find in the western area where this pipeline is routed, the</p> <p>9 majority of the soils.</p> <p>10 A. I referred to that report in the written testimony here,</p> <p>11 and I would have to get a copy of my testimony. But I think I</p> <p>12 was referring to the fact that the outwash -- the real good</p> <p>13 aquifers there are connected to the alluvium in many places.</p> <p>14 Q. Okay. And then with regard to the Clark County map, which</p> <p>15 is WEB Exhibit 4, which you held up just a moment ago, the more</p> <p>16 detailed map, does that show a similar -- or what does that show</p> <p>17 on the western edge of that county map? I believe there's a</p> <p>18 legend in the upper right.</p> <p>19 A. The yellow is alluvium. Is that what you're referring to,</p> <p>20 what's the yellow color?</p> <p>21 Q. Yes. Are the yellow and grays similar soils that would</p> <p>22 accept -- that have quantities of water I guess is what I'm</p> <p>23 asking?</p> <p>24 A. I'm having trouble with my eyes too. The legend on this</p> <p>25 map shows first occurrence of aquifers color coded to -- if it's</p>	<p style="text-align: right;">1091</p> <p>1 the surficial materials and stuff right up close to the land</p> <p>2 surface, I mean, within a few feet.</p> <p>3 MR. SMITH: Thank you. Unless there are other</p> <p>4 Commissioner questions, you're excused then. Thank you very</p> <p>5 much.</p> <p>6 (The witness is excused)</p> <p>7 MR. SMITH: I think -- the Commissioners have asked to</p> <p>8 take a short break, Mr. Rasmussen, if that's okay.</p> <p>9 MR. RASMUSSEN: That's fine.</p> <p>10 MR. SMITH: Thank you.</p> <p>11 (A short recess is taken)</p> <p>12 MR. SMITH: Thanks, everybody. Following a 10-minute</p> <p>13 break we're back in session. And, Mr. Rasmussen, you may</p> <p>14 proceed.</p> <p>15 (The witness is sworn by the court reporter)</p> <p>16 <u>DIRECT EXAMINATION</u></p> <p>17 <u>BY MS. GIEDD:</u></p> <p>18 Q. Would you state your name for the record, please.</p> <p>19 A. Derric Iles.</p> <p>20 Q. What's your business address?</p> <p>21 A. Akeley-Lawrence Science Center, University of South Dakota.</p> <p>22 Q. In Vermillion?</p> <p>23 A. In Vermillion somewhere on Clark Street.</p> <p>24 CHAIRMAN JOHNSON: 414 East Clark.</p> <p>25 A. Thank you. Vermillion, South Dakota 57069.</p>

<p style="text-align: right;">1092</p> <p>1 Q. Has it been a long week?</p> <p>2 A. Apparently.</p> <p>3 Q. What's your educational background, Derric?</p> <p>4 A. I have a bachelor's degree in geology from the University</p> <p>5 of Northern Iowa obtained in 1975, master's degree in geology</p> <p>6 obtained from Iowa State University in 1977.</p> <p>7 Q. Have in the course of your career you taught any college</p> <p>8 courses?</p> <p>9 A. Yes, I have.</p> <p>10 Q. What?</p> <p>11 A. I have taught Introductory Geology Laboratories at the</p> <p>12 University of South Dakota, and I have also taught an</p> <p>13 Environmental Earth Science course at the University of South</p> <p>14 Dakota.</p> <p>15 Q. Who are you employed by?</p> <p>16 A. The State of South Dakota Department of Environment and</p> <p>17 Natural Resources, Geological Survey Program. We're more</p> <p>18 commonly known as the South Dakota Geological Survey.</p> <p>19 Q. And what position do you hold in that program?</p> <p>20 A. I am State Geologist and administrator of that program.</p> <p>21 Q. What does South Dakota Geologic Survey do?</p> <p>22 A. A concise way of putting it might be that we investigate</p> <p>23 and document the natural resources of the state. Particularly</p> <p>24 the geologic and ground water resources. We write reports. We</p> <p>25 produce maps and make the information available to the public.</p>	<p style="text-align: right;">1094</p> <p>1 So for those two reasons we've done most of our drilling in</p> <p>2 the eastern part of the state.</p> <p>3 Q. Have you also acted as an expert on behalf of the</p> <p>4 Department of Environment and Natural Resources on certain cases</p> <p>5 and permit proceedings?</p> <p>6 A. Yes, I have.</p> <p>7 Q. Do any of those include spills of hydrocarbon sites? Sites</p> <p>8 of hydrocarbon spills? I said that backwards.</p> <p>9 A. I was just trying to recall whether I actually testified,</p> <p>10 but I think the answer is yes, I did as an expert in at least</p> <p>11 one spill case.</p> <p>12 Q. Okay. Did you hear any of the testimony either in person</p> <p>13 or over the Internet of this proceeding?</p> <p>14 A. Yes, I did.</p> <p>15 Q. Have you reviewed the Application itself?</p> <p>16 A. No, I have not seen the Application at all.</p> <p>17 Q. Have you seen any of the prefilled testimony?</p> <p>18 A. One. I had occasion to read the testimony of Dr. Arden</p> <p>19 Davis.</p> <p>20 Q. Okay. During the testimony today there was some discussion</p> <p>21 of two maps that were developed, I believe, by South Dakota</p> <p>22 Geologic Survey. One was the big one. And I don't have an</p> <p>23 exhibit number. It was --</p> <p>24 MR. SMITH: I think it's WEB 3.</p> <p>25 Q. WEB 3, which is that large one, Derric. Would you explain</p>
<p style="text-align: right;">1093</p> <p>1 Q. Do you maintain a database?</p> <p>2 A. We maintain several databases on-line for public access as</p> <p>3 well as industry and government access.</p> <p>4 Q. Do you also do any drilling activities?</p> <p>5 A. We have a very robust drilling program that South Dakota</p> <p>6 has been fortunate enough to have for roughly the past 50 years.</p> <p>7 We very actively investigate the subsurface geology in the state</p> <p>8 through drilling of test holes and installation of monitoring</p> <p>9 wells.</p> <p>10 Most of our drilling activities have been directed at the</p> <p>11 eastern half of our state. And by that I mean the area east of</p> <p>12 the Missouri River. And during the drilling time that we have</p> <p>13 had over the past 50 years or so we have drilled approximately</p> <p>14 24,000 test holes of our own to help investigate eastern</p> <p>15 South Dakota as well as parts of western South Dakota.</p> <p>16 I might add the reason that we've concentrated the drilling</p> <p>17 activities in eastern South Dakota is for a number of reasons.</p> <p>18 One is that most of the state's population resides in the</p> <p>19 eastern half of the state.</p> <p>20 Another reason is that the glacial deposits that the</p> <p>21 Commission has heard testimony about occur in the eastern part</p> <p>22 of the state. And in my opinion those deposits are much more</p> <p>23 difficult to characterize in terms of where the ground water</p> <p>24 resources are than would be to characterize the ground water</p> <p>25 resources in the western part of the state.</p>	<p style="text-align: right;">1095</p> <p>1 the map that South Dakota Geologic Survey developed there?</p> <p>2 A. That is called the Geologic Map of South Dakota. We</p> <p>3 referred to it as General Map No. 10, published in 2004. And it</p> <p>4 is the most up-to-date representation of the surface geology of</p> <p>5 our state. It is intended to be used at a scale no larger -- no</p> <p>6 more detail than what you saw hanging on the wall earlier today.</p> <p>7 I heard some comments about we have it electronically, we</p> <p>8 have it on disk, we can blow it up, we can look at it. That's</p> <p>9 very, very true. You can do that. But its intended use is at</p> <p>10 no more detail than you can see hanging on the wall.</p> <p>11 In many ways it is a cartoonish version of the surface</p> <p>12 geology of our state because you cannot show a great amount of</p> <p>13 detail at that scale. It represents the compilation of geologic</p> <p>14 mapping clear back into the 1800s. We took all of the available</p> <p>15 geologic maps. We compiled them. We massaged them. We tried</p> <p>16 to make them match. We put it all together.</p> <p>17 Some of the mapping was done by geologists that are</p> <p>18 currently on staff. Some of the mapping was done by geologists</p> <p>19 who are long gone from the face of the earth. So it is a</p> <p>20 compilation of all of the best geologic information that we</p> <p>21 could put together. And it's available not only in the paper</p> <p>22 format that you saw hanging on the wall. It's available in</p> <p>23 digital format as well.</p> <p>24 There were comments made by Dr. Rahn regarding the</p> <p>25 alluvium, or those yellow band or stripes that you could see on</p>

<p style="text-align: right;">1096</p> <p>1 the map. I believe the unit description is alluvium. Clay to</p> <p>2 boulder-sized class with locally abundant organic material.</p> <p>3 Thickness up to 75 feet.</p> <p>4 That's a very generic description, and it implies that we</p> <p>5 could have some very large aggregate particles in it up to</p> <p>6 boulder size and it could be very thick up to 75 feet. So one</p> <p>7 comment I'll make is about the thickness and about the way that</p> <p>8 Dr. Rahn characterized the alluvium.</p> <p>9 My understanding of his testimony is that the impression he</p> <p>10 was leaving is that we have this thin veneer of alluvium that</p> <p>11 the clay silt-sized particles that may be underlain by aquifers,</p> <p>12 the glacial outwash or the sands and gravels.</p> <p>13 While that is certainly the case along the route of the Big</p> <p>14 Sioux Aquifer, which is in no way, shape, or form part of our</p> <p>15 discussion here about the pipeline, I would expect that that</p> <p>16 would not be the case over most of the alluvium that would be</p> <p>17 crossed by the pipeline.</p> <p>18 In fact, I would guess -- and I emphasize guess. I would</p> <p>19 guess that we would be looking at a thin veneer of clays and</p> <p>20 silts that might not be underlain by any significant amount of</p> <p>21 sand and gravel along most of the pipeline route. So that's one</p> <p>22 clarification.</p> <p>23 And I can't get anymore detailed than that because I have</p> <p>24 not studied it. I haven't looked at the available test hole</p> <p>25 information. Nor have I personally done the geologic mapping.</p>	<p style="text-align: right;">1098</p> <p>1 A. It may have just been the way that I understood the</p> <p>2 testimony of Dr. Rahn, but I got the impression that he was at</p> <p>3 one point trying to say that the map that was just referred to</p> <p>4 was in some way just a larger or blown-up version of the State</p> <p>5 Geologic Map. And that is in no way, shape, or form what that</p> <p>6 map is.</p> <p>7 The map that was just referred to is called the First</p> <p>8 Occurrence of Aquifer Materials in Clark County, South Dakota.</p> <p>9 It's part of a map series that the Geological Survey is</p> <p>10 producing to help county commissions, city planning groups,</p> <p>11 farmers, ranchers, my regulatory friends in DENR help to wade</p> <p>12 through the volumes of geologic information, hydrologic</p> <p>13 information, and look at just a snapshot view of how deep is it</p> <p>14 to the first mappable aquifer unit under my particular piece of</p> <p>15 property.</p> <p>16 And the reason that's important is because DENR has permits</p> <p>17 that reference the three depth categories that Dr. Rahn</p> <p>18 mentioned in his testimony.</p> <p>19 That's what that map is. It's not a different version of</p> <p>20 the State Geologic Map. It is our best interpretation with the</p> <p>21 available data as to how deep you would have to drill below land</p> <p>22 surface before you would encounter the first mappable aquifer</p> <p>23 unit. And we've separated it into those three depth categories,</p> <p>24 which are basically 0 to 50 feet, 50 to 100 feet, and greater</p> <p>25 than 100 feet.</p>
<p style="text-align: right;">1097</p> <p>1 Another clarification I'd like to make about the map is</p> <p>2 whenever you use a map you have to understand its basis. And</p> <p>3 you have to understand the limitations. One of the artifacts I</p> <p>4 guess of the production of this map is that in general if you</p> <p>5 were to actually see a copy of the map that you could look at</p> <p>6 without straining your eyes, you would notice that the alluvium</p> <p>7 that is mapped in the western part of the state or west of the</p> <p>8 Missouri River is in many cases much narrower in representation</p> <p>9 on that map than the alluvium mapped east of the Missouri River.</p> <p>10 And it's because the way that the map was compiled and put</p> <p>11 together. Many of the areas of eastern South Dakota were taken</p> <p>12 from previously published maps of a greater detailed scale, but</p> <p>13 still the width of the alluvium on those maps was</p> <p>14 overrepresented just because of the way those maps were made.</p> <p>15 That overrepresentation of the width of the alluvium was</p> <p>16 then transferred to the map that you saw hanging on the wall.</p> <p>17 And the reason that's important and that I'm even talking about</p> <p>18 it is that there was a number thrown out as to the number of</p> <p>19 miles of alluvium that the pipeline would cross.</p> <p>20 I would expect that if we would go out into the field and</p> <p>21 conduct geologic mapping over the next few weeks or month, we</p> <p>22 would come up with a much smaller number than was thrown out.</p> <p>23 So those are two things about the map that I wanted to clarify.</p> <p>24 Q. There was also, I believe it's WEB 4, a smaller map. What</p> <p>25 is that map of?</p>	<p style="text-align: right;">1099</p> <p>1 So it's a way that you don't have to be a geologist or a</p> <p>2 hydrologist. You just have to be able to read and see color,</p> <p>3 and you can tell what kind of aquifer material you would likely</p> <p>4 first encounter and in which of those three depth categories you</p> <p>5 would likely encounter it.</p> <p>6 Q. By the way, Derric, do you design pipeline routes?</p> <p>7 A. No.</p> <p>8 Q. For anybody?</p> <p>9 A. No.</p> <p>10 Q. It's not one of your duties?</p> <p>11 A. Not in any way, shape, or form.</p> <p>12 MS. GIEDD: Thank you.</p> <p>13 <u>DIRECT EXAMINATION</u></p> <p>14 <u>BY MR. RASMUSSEN:</u></p> <p>15 Q. You mentioned that you had seen or reviewed Dr. Davis'</p> <p>16 prefiled testimony. How did that come about?</p> <p>17 A. After I left here yesterday I was listening to testimony</p> <p>18 over the Internet, and I just had occasion to go on and read it</p> <p>19 because I knew that Dr. Davis was going to testify.</p> <p>20 Q. Are you acquainted with Dr. Davis?</p> <p>21 A. Yes, I am.</p> <p>22 Q. How is that? How do you know him?</p> <p>23 A. I've known Dr. Davis since the time that he worked on his</p> <p>24 first Williams Pipeline project.</p> <p>25 Q. And do you know Dr. Rahn also?</p>

<p style="text-align: right;">1100</p> <p>1 A. Yes, I do.</p> <p>2 Q. And how do you know him?</p> <p>3 A. I've known Dr. Rahn for a long, long time. And, in fact,</p> <p>4 Dr. Rahn is a co-author on one of our geologic maps that we</p> <p>5 published in the Black Hills, and I've worked with Dr. Rahn on</p> <p>6 that project as well as consulted with him on some others.</p> <p>7 Q. Are both he and Dr. Davis well respected in the field?</p> <p>8 A. Yes.</p> <p>9 Q. You mentioned in talking about the alluvium that you would</p> <p>10 guess it would be a certain way, but you don't know for sure.</p> <p>11 Do you remember that testimony?</p> <p>12 A. Yes. And that's correct. Just as no one else can look at</p> <p>13 the map and say that alluvium's underlain by a great amount of</p> <p>14 sand and gravel.</p> <p>15 Q. How would one find that out?</p> <p>16 A. Field work. Either feet on the ground doing geologic</p> <p>17 mapping, looking at well logs that were referred to by</p> <p>18 Jim Goodman from the Water Rights Program, looking at drillers'</p> <p>19 logs and route completion logs that are available on our on-line</p> <p>20 database. And then if you aren't satisfied with that, then</p> <p>21 additional drilling.</p> <p>22 Q. And do you know if that sort of stuff has been done in</p> <p>23 connection with this project?</p> <p>24 A. I have no idea.</p> <p>25 Q. Have you been involved in consulting with anyone relative</p>	<p style="text-align: right;">1102</p> <p>1 A. Yes.</p> <p>2 Q. And which case was that?</p> <p>3 A. It was a Williams Pipeline leak north of Sioux Falls. And</p> <p>4 I do not recall the year. And I was only on the stand briefly</p> <p>5 as a witness. I had not done any work at the site. I had come</p> <p>6 to the site. I had just observed a few things, and then I was</p> <p>7 called to the witness stand to answer a few questions.</p> <p>8 Q. And what were you testifying about?</p> <p>9 A. To be honest, I can't recall.</p> <p>10 Q. If you were to be asked to comment on a pipeline route, is</p> <p>11 that something you would do, or is that totally outside what</p> <p>12 you're authorized to perform?</p> <p>13 A. It's outside of my area of expertise. If the questions</p> <p>14 involved interpretations of geology or hydrology, then I would</p> <p>15 feel comfortable doing so.</p> <p>16 Q. Okay. And you have not been asked to do that in this</p> <p>17 particular case?</p> <p>18 A. No, I have not.</p> <p>19 MR. RASMUSSEN: Thank you. That's all I have.</p> <p>20 MR. SMITH: Mr. Hohn.</p> <p>21 <u>CROSS-EXAMINATION</u></p> <p>22 <u>BY MR. HOHN:</u></p> <p>23 Q. Is the information in your maps and the documents available</p> <p>24 in your agency used by engineers for designing rural water</p> <p>25 wells?</p>
<p style="text-align: right;">1101</p> <p>1 to this project in any manner?</p> <p>2 A. No.</p> <p>3 Q. I think there was a witness yesterday, Ms. -- help me out.</p> <p>4 MS. SEMMLER: Winkler.</p> <p>5 Q. Testified about talking to you. Did you talk with her at</p> <p>6 some point?</p> <p>7 A. If that's what you mean by consulting with somebody, yes.</p> <p>8 I did talk with Bryan Murdock and Brenda Winkler and a third</p> <p>9 party from Bay West wherein they were asking for information</p> <p>10 that we may have regarding the geology and hydrology of</p> <p>11 South Dakota.</p> <p>12 And I directed them to our website where it's all available</p> <p>13 for free and tried to highlight those reports and those parts of</p> <p>14 our database that I thought might be most useful to them.</p> <p>15 Q. Did you have any conversations with anyone connected with</p> <p>16 the Keystone Pipeline?</p> <p>17 A. One conversation, and that was with Mr. Koenecke when he</p> <p>18 called to find out why I thought I might have been subpoenaed.</p> <p>19 Q. Okay. And do you have any idea?</p> <p>20 A. I had no idea.</p> <p>21 Q. Other than Mr. Koenecke, you haven't had any conversations</p> <p>22 with anyone connected with TransCanada or the pipeline?</p> <p>23 A. No, I have not.</p> <p>24 Q. You testified that you had -- you had previously testified</p> <p>25 in a spill case?</p>	<p style="text-align: right;">1103</p> <p>1 A. Yes, they are.</p> <p>2 Q. And from your observation working with engineers who design</p> <p>3 rural water wells, what kind of detail are they looking for when</p> <p>4 they come to you for information?</p> <p>5 A. They're looking for the most detail that they can get.</p> <p>6 Dr. Davis mentioned Murphy's Law in his testimony, and I am also</p> <p>7 a believer in Murphy's Law. And we usually don't have the level</p> <p>8 of detail in our information that people are seeking.</p> <p>9 Our information is statewide, county-wide, or over several</p> <p>10 square miles. We often don't have the level of -- or the amount</p> <p>11 of information necessary to make the very detailed</p> <p>12 interpretations that people are asking us for at a specific</p> <p>13 location.</p> <p>14 Q. Is it fair to say, though, that they come to you because</p> <p>15 you probably have most of the detail -- the best source of</p> <p>16 detailed information that's available?</p> <p>17 A. I'd like to think that's true.</p> <p>18 Q. The map you have in front of you, I'm not sure of the</p> <p>19 number, the large rollup map showing the pipe route through</p> <p>20 Marshall County, do you see that portion of the map at the top?</p> <p>21 A. Yes, I do.</p> <p>22 Q. Looking at the copy that we have here on the table, which</p> <p>23 is the copy of the same thing that you have, there's a -- in the</p> <p>24 western edge of Marshall County there's a light-colored area on</p> <p>25 that map.</p>

<p style="text-align: right;">1104</p> <p>1 What do you see that showing from Britton west?</p> <p>2 A. If we're looking at the same part of the map, it is labeled</p> <p>3 as lacustrine sediments.</p> <p>4 Q. Would that be a sandy material?</p> <p>5 A. My experience in drilling in the Redfield area in those</p> <p>6 sediments is no, it's not sandy. It's primarily clay and silt.</p> <p>7 Q. The area along -- there's a highway going through that area</p> <p>8 east to west, Highway 10. Do you see that on your map? Is that</p> <p>9 shown in detail? I think it is.</p> <p>10 A. I'll take your word that it says 10.</p> <p>11 Q. Okay. Have you looked -- let me rephrase. Is there a</p> <p>12 detailed study done on Marshall County, a detailed geologic</p> <p>13 study?</p> <p>14 A. There was a cooperative effort done many years ago for</p> <p>15 Marshall County. The cooperation was between the U.S.</p> <p>16 Geological Survey and the South Dakota Geological Survey wherein</p> <p>17 we contacted with the County Commission, and we proceeded to</p> <p>18 investigate the geologic and ground water resources of</p> <p>19 Marshall County, as we have done for I believe 34 other counties</p> <p>20 with published reports in eastern South Dakota with seven other</p> <p>21 reports still in progress for eastern South Dakota.</p> <p>22 The study involved the mapping of the surface geology, the</p> <p>23 drilling of a number of test holes, and perhaps installation of</p> <p>24 monitoring wells. And then the U.S. Geological Survey would</p> <p>25 write a general reconnaissance level report of the ground water</p>	<p style="text-align: right;">1106</p> <p>1 you may see that they might not match exactly with the State</p> <p>2 Geologic Map. And it's not because one is right and one is</p> <p>3 wrong. It's just that the State Geologic Map reflects the</p> <p>4 newest interpretation.</p> <p>5 Q. Just one last question then. Has there been any -- has</p> <p>6 there been anymore detailed report done since 1975 on</p> <p>7 Marshall County?</p> <p>8 A. Not on the county as a whole, no.</p> <p>9 Q. Thank you very much.</p> <p>10 MR. SMITH: Is it Mr. Koenecke or Mr. White this time?</p> <p>11 MR. KOENECKE: I've just got one question, Mr. Smith.</p> <p>12 <u>CROSS-EXAMINATION</u></p> <p>13 <u>BY MR. KOENECKE:</u></p> <p>14 Q. Good morning, Mr. Iles.</p> <p>15 A. Good morning.</p> <p>16 Q. My question for you is the following: It's certainly</p> <p>17 possible that TransCanada or Keystone representatives could have</p> <p>18 gathered information available from your office through the</p> <p>19 website?</p> <p>20 A. Oh, it's very possible.</p> <p>21 Q. I guess I've got two questions. Are there other sources of</p> <p>22 information from your office, published books and references?</p> <p>23 A. All of our 700 plus publications are available on our</p> <p>24 website. The databases that we maintain on-line contain much of</p> <p>25 the raw data that went into making some of those reports and</p>
<p style="text-align: right;">1105</p> <p>1 resources in and under Marshall County, and we, the South Dakota</p> <p>2 Geological Survey, would write a companion report of the</p> <p>3 geologic resources.</p> <p>4 Q. And to your knowledge is that the most detailed report on</p> <p>5 Marshall County -- geologic report from Marshall County? Let me</p> <p>6 rephrase that.</p> <p>7 Based on your knowledge of the data available in</p> <p>8 South Dakota on geology, is that the -- is that report the most</p> <p>9 detailed report for Marshall County?</p> <p>10 A. It has a map of the geology or probably more than one map</p> <p>11 of the geology that is at a scale more detailed than the State</p> <p>12 Geologic Map. I believe the maps for Marshall County are</p> <p>13 published at a scale at or near 1 to 100,000 scale as compared</p> <p>14 to the 1 to 500,000 scale State Geologic Map.</p> <p>15 I believe that report was published in or around 1975. And</p> <p>16 the reason I'm mentioning that is that geologists that may have</p> <p>17 done their work 30 some years ago may have had a certain</p> <p>18 understanding, a certain way of interpreting the subsurface</p> <p>19 information gathered from the drilling and a certain way of</p> <p>20 mapping and categorizing the surface geology units.</p> <p>21 So the reason for saying that is over the years we may have</p> <p>22 modified the way that we interpret things due to 30 years more</p> <p>23 of information and experience and that sort of thing, and the</p> <p>24 importance of that is that you might then look at the more</p> <p>25 detailed maps available in the Marshall County study report and</p>	<p style="text-align: right;">1107</p> <p>1 publications.</p> <p>2 The items that we might have in-house that wouldn't be</p> <p>3 available on-line might be the old files of working maps,</p> <p>4 working documents that went into the publication of the final</p> <p>5 report.</p> <p>6 MR. KOENECKE: Very good. I have nothing further.</p> <p>7 Thank you.</p> <p>8 MR. SMITH: Staff, do you have questions?</p> <p>9 MS. SEMMLER: I do have one question.</p> <p>10 <u>CROSS-EXAMINATION</u></p> <p>11 <u>BY MS. SEMMLER:</u></p> <p>12 Q. For clarification we looked at I believe it was WEB 3 and</p> <p>13 WEB 4, two different maps, and you described earlier the</p> <p>14 difference between those two maps.</p> <p>15 Are there other maps that show the surficial geology over</p> <p>16 the depicted aquifer materials in WEB 4? Are there other maps</p> <p>17 aside from that map that will show the surficial geology in</p> <p>18 those areas?</p> <p>19 A. I believe we have a published report for Clark County</p> <p>20 similar to the one in Marshall County that would have a surface</p> <p>21 geologic map of more detail than the State Geologic Map.</p> <p>22 Q. Can you comment on what surficial materials lie over those</p> <p>23 Clark County first occurrence materials along the route of the</p> <p>24 pipeline?</p> <p>25 A. If I'm allowed to look at the State Geologic Map, I can.</p>

<p style="text-align: right;">1108</p> <p>1 Q. Please do.</p> <p>2 MR. SMITH: You're looking at -- Derric, I think what</p> <p>3 they're looking at is that Clark First Occurrence Map? Okay.</p> <p>4 Thanks.</p> <p>5 A. According to the red line that's drawn on the State</p> <p>6 Geologic Map that I have my hand on, the pipeline route in</p> <p>7 western Clark County traverses over a unit that is labeled QLTG.</p> <p>8 And it is described as till ground moraine.</p> <p>9 There was a question asked earlier I believe of Dr. Rahn,</p> <p>10 you know, how do you define till. I'll give my own definition</p> <p>11 of it. It is a heterogenous mixture of clay, silts, sand,</p> <p>12 gravel, and sometimes boulders, but it is primarily clays and</p> <p>13 silts.</p> <p>14 And I would concur with Dr. Rahn's general assessment of</p> <p>15 those types of sediments in that I believe that usually they are</p> <p>16 of relatively low permeability, meaning they would not allow</p> <p>17 fluid to move through them very rapidly.</p> <p>18 MS. SEMMLER: Thank you. Nothing further.</p> <p>19 MR. SMITH: Commissioners, do you have questions of</p> <p>20 Mr. Iles?</p> <p>21 COMMISSIONER KOLBECK: I do have one question. I'm</p> <p>22 sorry, Mr. Iles. Thank you for being here.</p> <p>23 Have you been listening on-line to -- or you've been</p> <p>24 here.</p> <p>25 THE WITNESS: I was here yesterday morning, and I</p>	<p style="text-align: right;">1110</p> <p>1 A. My name is Bill Markley.</p> <p>2 Q. And by whom are you employed?</p> <p>3 A. I'm employed by the South Dakota Department of Environment</p> <p>4 and Natural Resources.</p> <p>5 Q. And how long have you been employed by the Department?</p> <p>6 A. Too long. 31 years. Older than dirt I guess you could</p> <p>7 say.</p> <p>8 Q. And what's your current position?</p> <p>9 A. I'm the administrator of the Ground Water Quality Program.</p> <p>10 Q. And tell me what the Ground Water Quality Program does.</p> <p>11 A. Okay. We do more than just ground water quality. We're</p> <p>12 broken out into -- I have four different teams under me. One</p> <p>13 team that you'll be talking to here later is headed up by</p> <p>14 Kim McIntosh. And that's I would call our spills group so that</p> <p>15 if there's any spills out there, they're reported to that group,</p> <p>16 and we track them basically from cradle to grave when it first</p> <p>17 comes in through the assessment through the cleanup and then</p> <p>18 through the monitoring that goes on afterwards until we finally</p> <p>19 decide that they've met state requirements and we give them</p> <p>20 closure after that.</p> <p>21 Also in that group we have a fund, which is called the</p> <p>22 Regulated Substance Response Fund. This is a State fund that we</p> <p>23 use to go out to clean up contamination out there. If there's</p> <p>24 an emergency or there's an unknown spill or something that's</p> <p>25 happening that we can't get the responsible party out there</p>
<p style="text-align: right;">1109</p> <p>1 listened on-line for probably two hours late yesterday.</p> <p>2 COMMISSIONER KOLBECK: I can't remember who it is and</p> <p>3 you'll have to excuse me, but there was a statement made that</p> <p>4 95 percent of the route has glacial till underneath it.</p> <p>5 Would that be something you'd agree or disagree or --</p> <p>6 I don't want to put you on the spot where you would make a</p> <p>7 decision on the spot, but have you given any thought to that?</p> <p>8 THE WITNESS: The thought that I've given to it is</p> <p>9 right now as I'm looking at the red line drawn on this map. And</p> <p>10 based on not a very detailed study of this map but my general</p> <p>11 knowledge of what this map contains, I would say that that</p> <p>12 probably isn't too far off, that till is the primary sediment</p> <p>13 through which the pipeline route would pass.</p> <p>14 COMMISSIONER KOLBECK: All right. Thank you.</p> <p>15 MR. SMITH: Mr. Rasmussen, any --</p> <p>16 MR. RASMUSSEN: Nothing further.</p> <p>17 MR. SMITH: You're excused, Derric. Thanks for</p> <p>18 coming.</p> <p>19 (The witness is excused)</p> <p>20 MR. SMITH: Call your next witness, please.</p> <p>21 MR. RASMUSSEN: Bill Markley.</p> <p>22 (The witness is sworn by the court reporter)</p> <p>23 <u>DIRECT EXAMINATION</u></p> <p>24 BY MS. GIEDD:</p> <p>25 Q. State your name for the record, please.</p>	<p style="text-align: right;">1111</p> <p>1 right away to clean that up, we have this what I call the fund</p> <p>2 of last resort there to use to go out and take care of what</p> <p>3 might be an emergency situation.</p> <p>4 So that's in that group. And I'm sure I'm probably missing</p> <p>5 a few things.</p> <p>6 But then we have the what I call our tank section, which is</p> <p>7 underground storage tanks and aboveground storage tanks. And</p> <p>8 this is a federally delegated -- underground storage tanks is</p> <p>9 federally delegated to South Dakota. And we send inspectors out</p> <p>10 to make sure that underground storage tanks are in proper shape.</p> <p>11 We have an aboveground storage tank program which has no</p> <p>12 federal -- there is no federal comparable to this. We went</p> <p>13 ahead and did this after the -- it was talked about the</p> <p>14 Williams Pipeline spill earlier today. And we can get into that</p> <p>15 later if you want so we have that.</p> <p>16 We also have what's called the Leaking Underground Storage</p> <p>17 Tank Trust Fund, which is another federally delegated program</p> <p>18 that we can use for leaking underground storage tanks.</p> <p>19 Then we have what I would call our Superfund Project</p> <p>20 section, large projects. We have certain responsibilities for</p> <p>21 Superfund projects like the Gilt Edge Mine out in the Black</p> <p>22 Hills. Ellsworth Airforce Base is another Superfund Project.</p> <p>23 The Badlands Bombing Range. I could probably go on and on. And</p> <p>24 Williams. I'll throw Williams in there too. That's in that</p> <p>25 section.</p>

<p style="text-align: right;">1112</p> <p>1 And then finally the fourth section is I would say our</p> <p>2 Ground Water Quality section where we have ground water quality</p> <p>3 standards. We have ground water discharge permits. We have</p> <p>4 underground injection control. We have wellhead protection, and</p> <p>5 we have source water protection in that area.</p> <p>6 And I'm sure I'm missing something somewhere.</p> <p>7 Q. Okay. Let's start with what you talked about last, which</p> <p>8 is the Ground Water Quality Standards Program. Tell me about</p> <p>9 the ground water quality standards. Are these things that</p> <p>10 you've developed for ground water in the state?</p> <p>11 How does that work?</p> <p>12 A. Right. And, again, this is a State program. This is not</p> <p>13 based on any federal program. There are no federal ground water</p> <p>14 quality standards. We developed our own ground water quality</p> <p>15 standards here in the state. And we based them basically on the</p> <p>16 EPA, MCL. Maximum contaminant limit, I think is what it is.</p> <p>17 And so we have set parameters that we protect the ground water</p> <p>18 quality for.</p> <p>19 Q. And by set parameters can you give me an idea of what kind</p> <p>20 of things we're talking about?</p> <p>21 A. Sure. And I think probably a contaminant of concern here</p> <p>22 is benzene. Benzene is -- blow it here, but parts per billion</p> <p>23 with a B. And so, you know, if there's a problem out there --</p> <p>24 and that's drinking water standard too. And we wanted to</p> <p>25 protect the ground waters of the state for drinking water out</p>	<p style="text-align: right;">1114</p> <p>1 Q. And how did you develop those and why?</p> <p>2 A. Again, the vast majority of them are based on, again, EPA's</p> <p>3 maximum contaminant level, which is the standard for drinking</p> <p>4 water. And if they don't have -- if they don't have that set,</p> <p>5 they've also set what are called health-based advisory levels.</p> <p>6 And we've gone with those health-based advisory levels if EPA</p> <p>7 has not set the MCL.</p> <p>8 And if they haven't set either of those, we say nondetect,</p> <p>9 which means through laboratory analysis you can't pick it up.</p> <p>10 Q. You can't find it?</p> <p>11 A. You can't find it.</p> <p>12 Q. Before we talk about source water protection and wellhead</p> <p>13 protection areas, I want to talk just generally with you about</p> <p>14 spills and leaks.</p> <p>15 A. Sure.</p> <p>16 Q. And Kim McIntosh of your staff was also subpoenaed by WEB</p> <p>17 today and will be talking about it. Is that your understanding?</p> <p>18 A. Correct.</p> <p>19 Q. But generally can you give me an idea of the number of</p> <p>20 hydrocarbon -- just hydrocarbon spills or releases that we have</p> <p>21 presently active in South Dakota?</p> <p>22 A. Oh, presently active? I can't give you a number, but I</p> <p>23 would say -- oh, man. I would say maybe 3 to 400 maybe.</p> <p>24 Q. And by presently active what are we talking about?</p> <p>25 A. Those that have not met state standards yet that are still</p>
<p style="text-align: right;">1113</p> <p>1 there. So it is 5 parts per billion with a B. So that's just</p> <p>2 one example without having, you know, the huge list of</p> <p>3 parameters here in front of me.</p> <p>4 Q. There is a huge list, though, of parameters?</p> <p>5 A. Yes.</p> <p>6 Q. Are there other parameters that are on that list that are</p> <p>7 associated with hydrocarbon pollutants?</p> <p>8 A. Sure. Well, for instance, we have what's called a total</p> <p>9 petroleum hydrocarbon standard. That one is 10 parts per</p> <p>10 million, milligrams per liter, if you will. Now that's outside</p> <p>11 of -- and we can get into this later if you want -- wellhead</p> <p>12 protection. But some of the areas out there for wellheads are</p> <p>13 zoned. There's Zone A and Zone B.</p> <p>14 And anything within the Zone A is -- the standard is</p> <p>15 different. It's lower. It's at 0.1 milligrams per liter. And</p> <p>16 that's based on taste and odor. So within Zone A of wellhead</p> <p>17 it's 0.1. And outside of that it's 10, again, milligrams per</p> <p>18 liter.</p> <p>19 Q. Well, and we'll talk about source water protection in a</p> <p>20 minute, but right now I want to focus on ground water quality</p> <p>21 standards.</p> <p>22 A. Sure.</p> <p>23 Q. Are the standards you established health-based standards in</p> <p>24 any sense?</p> <p>25 A. Yes, they are.</p>	<p style="text-align: right;">1115</p> <p>1 being remediated or have gone through remediation and now we're</p> <p>2 watching them through our monitoring program to make sure that,</p> <p>3 you know, enough work was done to clean them up and now we're</p> <p>4 just watching it to make sure that, you know, we're not going to</p> <p>5 see an increase in contaminants. It's not going to get away</p> <p>6 from us and move out. That it is stabilizing and it is</p> <p>7 decreasing and it is approaching our numbers that we can, you</p> <p>8 know, close it out.</p> <p>9 Q. And just generally how do you find out about spills and</p> <p>10 leaks?</p> <p>11 A. Most spills and -- well, state law says that if you have a</p> <p>12 spill or a release, you are to report that immediately to the</p> <p>13 department. So they're called in to us after hours. You know,</p> <p>14 if you do have a spill or leak out there, you can call it in to</p> <p>15 State Radio, and they'll get that to us 24 hours a day, seven</p> <p>16 days a week.</p> <p>17 Q. And so after the release, and Kim will talk about this in</p> <p>18 more detail, but there is an active program in regard to</p> <p>19 remediation?</p> <p>20 A. Yes. Again, we determine who the responsible party is out</p> <p>21 there that has caused the contamination. We then work with them</p> <p>22 to get an environmental contractor out there to assess the</p> <p>23 amount of contamination and clean it up, and then, again, track</p> <p>24 it and make sure that it meets our standards.</p> <p>25 Now also, I mean, just to kind of back up a little bit, if</p>

<p style="text-align: right;">1116</p> <p>1 there's an emergency out there, you know, we want them on scene</p> <p>2 immediately to stop it, contain it, and then start the</p> <p>3 remediation after that.</p> <p>4 Q. What do you do if you can't find the person responsible?</p> <p>5 A. What do we do? We have contractors again with our</p> <p>6 Regulated Substance Response Fund, and a lot of this stuff kind</p> <p>7 of came out of the Williams Pipeline problems that we had in the</p> <p>8 past. We saw -- I mean, we cut our teeth on that deal. And we</p> <p>9 saw where the gaps were with the federal programs, and the State</p> <p>10 went in and filled those gaps with I think a good array of</p> <p>11 programs at this point.</p> <p>12 Q. Can you -- excuse me, Bill. I'm going to do something</p> <p>13 unusual.</p> <p>14 MS. GIEDD: Can you read back that last question for</p> <p>15 me.</p> <p>16 (Reporter reads back the last question)</p> <p>17 Q. Would you answer that, please.</p> <p>18 A. Oh, I didn't answer that. What do we do? Well, we'll go</p> <p>19 out there and take care of it. We have contractors ready to go</p> <p>20 if need be to send them out to, again, contain and clean up, if</p> <p>21 need be.</p> <p>22 Q. Do you also file lawsuits?</p> <p>23 A. Sure.</p> <p>24 Q. To do what?</p> <p>25 A. Well, to force somebody to do that work, if need be. But I</p>	<p style="text-align: right;">1118</p> <p>1 There is also another distinction. We have wellhead</p> <p>2 protection on the books in law in South Dakota, and source water</p> <p>3 is not on the books in South Dakota. And what that law does, it</p> <p>4 says that local entities, counties, and cities can establish</p> <p>5 wellhead protection zones and then within those zones they can</p> <p>6 zone for various types of industry or whatever that could</p> <p>7 potentially get into that wellhead area.</p> <p>8 Now I mentioned before that a lot of the communities out</p> <p>9 there and counties will have two zones, a Zone A and a Zone B.</p> <p>10 The Zone As are usually that area of an aquifer that will draw</p> <p>11 water into the public water supply well over a ten-year time of</p> <p>12 travel. In other words, if you have a drop of water out here,</p> <p>13 it's going to take that drop of water 10 years to get into your</p> <p>14 well.</p> <p>15 So that's the area that you really want to protect the</p> <p>16 most, those areas. And then the Zone B can be, you know, the</p> <p>17 rest of the aquifer in a county or something like that.</p> <p>18 And I also should say to, again, clarify things that</p> <p>19 wellhead protection and source water protection are only for</p> <p>20 public water supplies and not for private.</p> <p>21 Q. And it sounds like the wellhead protection statutes and</p> <p>22 program really is a local in terms of zoning level of statutory</p> <p>23 authority?</p> <p>24 A. Yes, it is.</p> <p>25 Q. So does the Department actually do anything with regard to</p>
<p style="text-align: right;">1117</p> <p>1 have to say the majority of the people in South Dakota are --</p> <p>2 you know, have been over the years good citizens and want to do</p> <p>3 the right thing, get out there and get it cleaned up.</p> <p>4 Q. When you have to spend Regulated Response Funds on a leak</p> <p>5 do the statutes provide you with any remedy to recover those</p> <p>6 costs?</p> <p>7 A. Yes. We are to -- once we find out who the responsible</p> <p>8 party is, then we are to go recover those costs.</p> <p>9 Q. Are you also allowed to file liens?</p> <p>10 A. Yes, we are.</p> <p>11 Q. In turning to your Source Water Protection Program, would</p> <p>12 you describe what that is?</p> <p>13 A. Okay. Thumbnail version?</p> <p>14 Q. Yes.</p> <p>15 A. Okay. Source water -- and there's been two words kind of</p> <p>16 talked about here. There's wellhead protection, and there's</p> <p>17 source water. And to try to draw a distinction, if you will,</p> <p>18 think of wellhead protection as part of source water. Wellhead</p> <p>19 protection is kind of what it sounds like. You're out there to</p> <p>20 protect the wellhead of a public water supply.</p> <p>21 Now source water protection will take in those wellheads,</p> <p>22 but it will also take in surface water intake so that if you've</p> <p>23 got a reservoir or something like that out there, that's also</p> <p>24 included in source water but it's not included in wellhead. So</p> <p>25 that's that distinction there.</p>	<p style="text-align: right;">1119</p> <p>1 wellhead protection?</p> <p>2 A. The Department established guidelines for -- that local</p> <p>3 communities can use. And we have staff available to assist</p> <p>4 any -- this can be an advertisement over the Internet, I guess,</p> <p>5 but any community out there that would like to work with us in</p> <p>6 setting up their wellhead protection areas. And we've got</p> <p>7 people available to help out on that.</p> <p>8 Q. So for wellhead protection DENR is a resource?</p> <p>9 A. Yes.</p> <p>10 Q. You're a resource agency?</p> <p>11 A. Yes.</p> <p>12 Q. Okay. For source water protection I think you said that</p> <p>13 it's a statewide program, but there are no statutes involved?</p> <p>14 A. Right. We have a statewide program, and there are no</p> <p>15 statutes on the books for that at this point.</p> <p>16 Q. Is this also just a resource program the Department has</p> <p>17 developed?</p> <p>18 A. Yes. Again, that was -- both of these programs are based</p> <p>19 on federal programs. And the federal legislation stated that</p> <p>20 the states needed to do source water protection areas for all</p> <p>21 public water supplies out there. I think we initially did 760</p> <p>22 in the state, and in those then what we were to do is to find</p> <p>23 the boundaries again of what could get into wells or intakes and</p> <p>24 identify potential sources of pollution and what the possibility</p> <p>25 would be for those to get into either, again, a wellhead or an</p>

<p style="text-align: right;">1120</p> <p>1 intake out there.</p> <p>2 And that was really to be the extent of the program, to do</p> <p>3 that, to provide that information to the local communities, or</p> <p>4 providers of water I should say for public, and then they could</p> <p>5 go ahead and do with those as they pleased.</p> <p>6 Q. And so the department has compiled data with regard to</p> <p>7 source water protection areas?</p> <p>8 A. Yes.</p> <p>9 Q. And did you or any of your staff provide that information</p> <p>10 to TransCanada?</p> <p>11 A. They asked for it, and I don't know the -- all the exact</p> <p>12 information that was provided. One of the people that works for</p> <p>13 me, Brian Walsh, senior hydrologist with us, I believe will be</p> <p>14 called later on, and he can talk about which information was --</p> <p>15 you know, the details on the provided information, I guess.</p> <p>16 Q. Did you review the source water protection areas where the</p> <p>17 TransCanada Application was?</p> <p>18 A. Did I review them? No.</p> <p>19 Q. Okay. There's been some discussion about the Hayward</p> <p>20 Elementary School and the Williams Pipeline release that led to</p> <p>21 that school relocation.</p> <p>22 Are you familiar with that?</p> <p>23 A. Yes, I am.</p> <p>24 Q. And how are you familiar with that?</p> <p>25 A. I lived there for a while. No. We were on site.</p>	<p style="text-align: right;">1122</p> <p>1 but they kept throwing everything and anything into that pit.</p> <p>2 And we made them clean that up too.</p> <p>3 Q. Was any of that contamination related to a pipeline</p> <p>4 release?</p> <p>5 A. This was all at the terminal.</p> <p>6 Q. All tank releases?</p> <p>7 A. Well, tank plus that pit.</p> <p>8 Q. I think there was some reference to a Mr. Mike Meyer being</p> <p>9 involved with Mr. Davis on this.</p> <p>10 A. Right. Mike worked for me.</p> <p>11 Q. He was one of your staff?</p> <p>12 A. Yes, he was. Yes.</p> <p>13 Q. Okay. Was there an aquifer involved with this release?</p> <p>14 A. Yeah. It's right on the edge of the aquifer right there.</p> <p>15 Q. And what's the current status of that?</p> <p>16 A. The current status is -- and I think this is pretty neat --</p> <p>17 that we were able to get them to get that place cleaned up and</p> <p>18 all the contamination has been pulled back onto the site where</p> <p>19 the Hayward School was contaminated by Tank 1341 -- I don't have</p> <p>20 a very good memory, but some numbers are ingrained in my head</p> <p>21 and that tank's number is there. 1341, that's all cleaned up.</p> <p>22 If you're in Sioux Falls, I think that's where now Wheel City is</p> <p>23 now located.</p> <p>24 And between the City and us we insisted that Williams build</p> <p>25 a new Hayward School and they built it up gradient from their</p>
<p style="text-align: right;">1121</p> <p>1 Q. Was DENR responsible for the remediation of that spill?</p> <p>2 A. For the remediation?</p> <p>3 Q. Well, were you responsible to direct and control the</p> <p>4 remediation of that spill?</p> <p>5 A. Yes. We directed -- yes. We went out and -- I guess I</p> <p>6 could go on this, but we went out and assessed and found that,</p> <p>7 yes, indeed Williams Pipeline was the culprit that had polluted</p> <p>8 Hayward School.</p> <p>9 Those of you that lived through that at that time if you</p> <p>10 remember they were -- Williams said they didn't do it. They</p> <p>11 were pointing the finger at Bonus Apco, I believe, which was</p> <p>12 right next door. And we went out, and we -- working with the</p> <p>13 Geological Survey, and Dr. Davis did some modeling for us on</p> <p>14 site. He modeled data that we collected and through a variety</p> <p>15 of entities and people we determined that Williams Pipeline did</p> <p>16 indeed cause the problem.</p> <p>17 We tracked -- then after they did admit to it we tracked</p> <p>18 their further assessment and cleanup of that plume at Hayward</p> <p>19 School. And I might add that there were other sources of</p> <p>20 contamination on the site. I think somebody asked if there</p> <p>21 was -- something about a waste site. They had a pit in the</p> <p>22 northeast section of the property that was called the burn pit.</p> <p>23 And they used to take all kinds of sludge and everything else</p> <p>24 and throw it in that pit and burn it.</p> <p>25 And then, you know, I think they were told not to burn it,</p>	<p style="text-align: right;">1123</p> <p>1 facility.</p> <p>2 Q. And there have been other -- well, not other but there have</p> <p>3 been pipeline spills in South Dakota, have there not?</p> <p>4 A. Yes, there has.</p> <p>5 Q. And Kim is going to discuss those?</p> <p>6 A. Kim will talk about those.</p> <p>7 Q. Let me ask you about crude oil. Are there any crude oil</p> <p>8 wells in South Dakota?</p> <p>9 A. Crude oil wells.</p> <p>10 Q. Well, are there any oil wells in South Dakota?</p> <p>11 A. There are oil wells in South Dakota.</p> <p>12 Q. That produce?</p> <p>13 A. Crude oil. Right. Harding County and Fall River County.</p> <p>14 Q. And have we ever had any leaks or releases associated with</p> <p>15 our oil fields?</p> <p>16 A. We have had leaks and releases in our oil fields, yes.</p> <p>17 Q. Now would you characterize them as generally being small?</p> <p>18 A. Why don't you ask Kim that question.</p> <p>19 Q. Will do.</p> <p>20 MS. GIEDD: Thank you.</p> <p>21 <u>DIRECT EXAMINATION</u></p> <p>22 <u>BY MR. RASMUSSEN:</u></p> <p>23 Q. On the Williams matter that you talked about, how did that</p> <p>24 leak occur? What happened?</p> <p>25 A. You mean, okay, the one from Tank 1341?</p>

<p style="text-align: right;">1124</p> <p>1 Q. Right.</p> <p>2 A. We're not really sure but we think that for a time they</p> <p>3 stored liquid fertilizer in those tanks and we think that might</p> <p>4 have possibly caused corrosion in the bottom of the tanks.</p> <p>5 Q. And how far did the contaminants travel?</p> <p>6 A. Contaminants traveled I would say a couple hundred yards,</p> <p>7 crossed West 12th Street and into -- underneath Hayward</p> <p>8 Elementary School. And there were enough fumes in there that</p> <p>9 people could smell it in the school, and we had to evacuate the</p> <p>10 school.</p> <p>11 Q. Kids were probably happy about that.</p> <p>12 A. I tell you what, the school district wasn't happy.</p> <p>13 Q. You talked about the wellhead and source water protection</p> <p>14 areas and the public water systems. What's the definition of a</p> <p>15 public water supply?</p> <p>16 A. Well, that can be -- I'm probably not the best person to</p> <p>17 ask. I think you have other people that can give you the exact</p> <p>18 definition of public water supply.</p> <p>19 Q. Is it a certain number, though, that if it serves a certain</p> <p>20 number of people?</p> <p>21 A. Yeah. A certain number of people and depending on, you</p> <p>22 know, if they're permanent or transitory or whatever.</p> <p>23 Q. All right.</p> <p>24 A. It gets kind of complicated.</p> <p>25 Q. Okay. Is there any -- did your office get involved at all</p>	<p style="text-align: right;">1126</p> <p>1 was over Memorial Day 1986 that her kids came in and noticed</p> <p>2 that there were fumes in the basement. And they contacted the</p> <p>3 City, and the City came in -- Dubbe (phonetic). Mrs. Dubbe</p> <p>4 wasn't it? Yeah. Murtle Dubbe.</p> <p>5 MR. SMITH: The Dubbe house.</p> <p>6 THE WITNESS: It takes a while.</p> <p>7 A. And also if you ask me to look at any maps, I'm color blind</p> <p>8 so I can't tell you about the colors. Anyway, so we started</p> <p>9 working with Williams at that point saying, you know, there's a</p> <p>10 school across the road here. Be careful. You know, do you have</p> <p>11 this under control? And they were saying, oh, yeah, no problem.</p> <p>12 Well, then that was -- okay. That was Memorial Day, May.</p> <p>13 The first day of school, first or second day of school is</p> <p>14 when -- which would have been in September is when the City --</p> <p>15 or the school folks then noticed the fumes in the elementary</p> <p>16 school.</p> <p>17 At that point we said to Williams, hey, we think you guys</p> <p>18 did this, and they're saying, no, we don't think so. It's this</p> <p>19 mom-and-pop gas station over here. So at that point then we</p> <p>20 began an intensive investigation. And it was finally -- I mean,</p> <p>21 we lived out there basically during this time period before</p> <p>22 Christmas to gather the data and to show where it was really</p> <p>23 coming from, and I think it was probably March then of the next</p> <p>24 year we had enough information for Governor Mickelson to pull</p> <p>25 those guys in and say, look. Here it is. We've got it. You</p>
<p style="text-align: right;">1125</p> <p>1 in protecting private wells or contamination of a private water</p> <p>2 source, a concern of your agency in any way?</p> <p>3 A. Did you say protecting?</p> <p>4 Q. Yeah. Well, yeah. Well, first of all protecting I guess.</p> <p>5 A. Okay. No we have no rules or regulations for protecting.</p> <p>6 But in saying that, again, our ground work quality standards are</p> <p>7 set for drinking water.</p> <p>8 So if there would be a problem with somebody's private well</p> <p>9 out there, I mean, if it would get contaminated, then, yes,</p> <p>10 we're involved, and we make sure that either whoever did it</p> <p>11 cleans it up and if they can't clean it up for some reason, that</p> <p>12 they provide a new source of water for those people.</p> <p>13 MR. RASMUSSEN: Thank you for all the information this</p> <p>14 morning. That's all I have.</p> <p>15 <u>CROSS-EXAMINATION</u></p> <p>16 <u>BY MR. HOHN:</u></p> <p>17 Q. Mr. Markley, on the Williams Pipeline leak, how long after</p> <p>18 the leak was verified did it take for the State and the City and</p> <p>19 others involved to get Williams to accept their responsibility?</p> <p>20 A. Well, that's kind of an interesting question. And I can't</p> <p>21 give you -- I can't give you, you know, a succinct answer on</p> <p>22 that. Because they had an initial release, and there was a</p> <p>23 lady, Mrs. Murtle -- I can't think of her name now. I just lost</p> <p>24 it. I'm getting older, I think.</p> <p>25 Anyway, her property was right there on the corner. And it</p>	<p style="text-align: right;">1127</p> <p>1 clean it up. And they at that point admitted to doing it.</p> <p>2 Q. To your knowledge was there any bond posted by Williams?</p> <p>3 Was there any cash bond or insurance that covered that, or was</p> <p>4 that part of a settlement, legal settlement?</p> <p>5 A. Covered to --</p> <p>6 Q. The cost of cleanup.</p> <p>7 A. Oh, they cleaned it up themselves.</p> <p>8 Q. Okay.</p> <p>9 A. And they paid for the school themselves.</p> <p>10 Q. On a public -- you mentioned the public water system. Is a</p> <p>11 well or a water system that serves more than 20 people, is that</p> <p>12 considered public?</p> <p>13 A. Again, I don't know the exact --</p> <p>14 Q. Okay.</p> <p>15 A. I don't know the exact definition but --</p> <p>16 MR. HOHN: I think that concludes my questions. Thank</p> <p>17 you.</p> <p>18 MR. SMITH: Mr. White? Mr. Koenecke?</p> <p>19 MR. KOENECKE: Thank you, Mr. Smith.</p> <p>20 <u>CROSS-EXAMINATION</u></p> <p>21 <u>BY MR. KOENECKE:</u></p> <p>22 Q. I'm going to back up a few pages. That was extensive</p> <p>23 testimony. Appreciate that. Good morning, Mr. Markley.</p> <p>24 If I understand correctly, under existing state laws then</p> <p>25 you were able to force Williams Pipeline Company to clean up and</p>

<p>1128</p> <p>1 remediate the site in Sioux Falls?</p> <p>2 A. Yes.</p> <p>3 Q. And have you added to and strengthened those laws since</p> <p>4 that time?</p> <p>5 A. Yes, we have.</p> <p>6 Q. And under those existing laws you were able to force</p> <p>7 Williams to -- or I believe you said you and the City of Sioux</p> <p>8 Falls together --</p> <p>9 A. Right. Yeah.</p> <p>10 Q. -- were able to force Williams to build a new school in</p> <p>11 Sioux Falls?</p> <p>12 A. Right.</p> <p>13 Q. Would your response to remediation be any different if a</p> <p>14 spill was located in Marshall County?</p> <p>15 A. No. We'd make them clean it up.</p> <p>16 Q. So if TransCanada was to have a pipeline spill or incident</p> <p>17 in Marshall County, you'd make TransCanada clean it up?</p> <p>18 A. We would make them clean it up.</p> <p>19 Q. Under -- using existing state law?</p> <p>20 A. Yes, we would.</p> <p>21 MR. KOENECKE: I have nothing further at this time.</p> <p>22 Thank you.</p> <p>23 MR. SMITH: Staff, do you have questions?</p> <p>24 MS. SEMMLER: None. Thank you.</p> <p>25 MR. SMITH: Commissioners? Commissioner Kolbeck</p>	<p>1130</p> <p>1 statement. I'm just going to ask some questions. I don't want</p> <p>2 to be testifying here.</p> <p>3 Were you -- were you in the room -- it was in Governor</p> <p>4 Mickelson's small conference room when he made the phone call to</p> <p>5 Williams? Do you remember that?</p> <p>6 THE WITNESS: No. I was not in the room.</p> <p>7 COMMISSIONER HANSON: Okay. Hearsay evidence if I</p> <p>8 asked you -- are you aware of any additional authority the DENR</p> <p>9 needs to sufficiently regulate petroleum spillage?</p> <p>10 THE WITNESS: I think we have sufficient legislation,</p> <p>11 laws and rules on the books now to take care of it to make sure</p> <p>12 it gets cleaned up.</p> <p>13 COMMISSIONER HANSON: What about enforcement of</p> <p>14 remediation? Are there any rules, regulations, laws? Are you</p> <p>15 strapped in any way from that standpoint for remediation</p> <p>16 purposes?</p> <p>17 THE WITNESS: I believe we have it all.</p> <p>18 COMMISSIONER HANSON: Okay. You spoke a little bit of</p> <p>19 the pit area.</p> <p>20 THE WITNESS: Uh-huh.</p> <p>21 COMMISSIONER HANSON: And the dumping that took place</p> <p>22 up there. Was that later or through your work classified as a</p> <p>23 Superfund site?</p> <p>24 THE WITNESS: Yes. That was classified as a Superfund</p> <p>25 site and cleaned up and removed from the Superfund list.</p>
<p>1129</p> <p>1 appears ready.</p> <p>2 COMMISSIONER KOLBECK: Thank you for being here.</p> <p>3 Where does the -- there's been a lot of talk of no one will</p> <p>4 clean up my land. Where does the separation between private</p> <p>5 land and state taking over the cleanup happen?</p> <p>6 Obviously you're not just talking about state lands</p> <p>7 that you'll clean up, it's all land. How does that separation</p> <p>8 take place, or is there no separation, a spill's a spill and you</p> <p>9 go where you need to?</p> <p>10 THE WITNESS: A spill's a spill. We make them clean</p> <p>11 it up if it's public, private, whatever. We make sure that</p> <p>12 whoever caused it cleans it up.</p> <p>13 COMMISSIONER KOLBECK: And existing state law gives</p> <p>14 you that authority to go on private land --</p> <p>15 THE WITNESS: Oh, to go on.</p> <p>16 COMMISSIONER KOLBECK: Well, to make sure that spill's</p> <p>17 cleaned up on private land.</p> <p>18 THE WITNESS: Yes.</p> <p>19 COMMISSIONER KOLBECK: Do you know who the mayor of</p> <p>20 Sioux Falls was --</p> <p>21 THE WITNESS: I'm sorry, I don't. I can't answer</p> <p>22 that. Yes. I know.</p> <p>23 COMMISSIONER HANSON: I am compelled to speak.</p> <p>24 Actually there's a lot more to that, but there's a number of</p> <p>25 different things that I'd like to talk about from Mr. Kolbeck's</p>	<p>1131</p> <p>1 COMMISSIONER HANSON: There's been a number of</p> <p>2 questions about that particular site over by the Hayward School</p> <p>3 area.</p> <p>4 Are you familiar with the spill that took place again</p> <p>5 by Williams on the northwest -- outside the City limits but</p> <p>6 northwest of Sioux Falls?</p> <p>7 THE WITNESS: Yes.</p> <p>8 COMMISSIONER HANSON: And was that over an aquifer</p> <p>9 area?</p> <p>10 THE WITNESS: That was within a quarter mile of</p> <p>11 Sioux Falls' source water protection -- or wellhead overlay</p> <p>12 district, Ground Water Program. It was right on the edge. I</p> <p>13 mean, we were lucky.</p> <p>14 COMMISSIONER HANSON: Were you associated at all with</p> <p>15 remediation of that?</p> <p>16 THE WITNESS: Yes, we were.</p> <p>17 COMMISSIONER HANSON: And was that fully remediated?</p> <p>18 THE WITNESS: Yes, it was.</p> <p>19 COMMISSIONER HANSON: And was that a different type of</p> <p>20 occurrence that created the spillage? I'm calling it a</p> <p>21 spillage, but it was the result of what?</p> <p>22 THE WITNESS: I believe that was a result of -- and I</p> <p>23 think Kim can get into this a little bit more. That was her --</p> <p>24 she was the project officer on that. But I think it was a -- I</p> <p>25 can't -- a weld. I think there was a deficiency in the weld,</p>

<p>1132</p> <p>1 and that was an old pipeline from the late 1940s.</p> <p>2 COMMISSIONER HANSON: Thank you. Were there</p> <p>3 monitoring wells put in place as a result of the gasoline spill</p> <p>4 in the Hayward area?</p> <p>5 THE WITNESS: Yes.</p> <p>6 COMMISSIONER HANSON: And are you aware of who put</p> <p>7 those wells in?</p> <p>8 THE WITNESS: Some of the wells -- oh, initially some</p> <p>9 of the wells we put in, the State did, and then after Williams</p> <p>10 admitted to being the responsible party, then they took over and</p> <p>11 put in additional wells around -- I mean, we literally had that</p> <p>12 facility ringed with wells.</p> <p>13 COMMISSIONER HANSON: Are you aware of subsequent</p> <p>14 development south of that area down gradient closer to</p> <p>15 Skunk Creek for water purposes --</p> <p>16 THE WITNESS: Not right -- no.</p> <p>17 COMMISSIONER HANSON: Okay. All right. Have those</p> <p>18 monitoring wells, do you have any information from those</p> <p>19 monitoring wells of recent?</p> <p>20 THE WITNESS: Yes. In fact, the -- and Brian Walsh</p> <p>21 who will be testifying I believe later is project officer on</p> <p>22 that, but he can give you updated information on the wells</p> <p>23 around Williams -- well, actually now it's Magellan, Magellan,</p> <p>24 the 12th Street facility.</p> <p>25 But the wells are showing that it's good, that they've</p>	<p>1134</p> <p>1 COMMISSIONER KOLBECK: I forgot.</p> <p>2 MR. SMITH: Commissioner Kolbeck.</p> <p>3 COMMISSIONER KOLBECK: I did forget two questions that</p> <p>4 I actually wanted to -- you spoke of many funds, Superfund.</p> <p>5 Which fund if a pipeline was built in South Dakota and there</p> <p>6 was -- if there was a spill, which fund would fund cleanup if</p> <p>7 they couldn't afford it?</p> <p>8 THE WITNESS: If there was a pipeline spill?</p> <p>9 COMMISSIONER KOLBECK: Yeah.</p> <p>10 THE WITNESS: Well, first we would make them use their</p> <p>11 own funds and, what, if they were --</p> <p>12 COMMISSIONER KOLBECK: If they couldn't afford it or</p> <p>13 if they couldn't pay for it, you said there was a fund in place.</p> <p>14 Would that be the Superfund?</p> <p>15 THE WITNESS: Well, we have what we call the Regulated</p> <p>16 Substance Response Fund, and it's a State fund. And in that</p> <p>17 fund any environmental penalties that we collect or interest or</p> <p>18 anything else like that goes into that fund. So --</p> <p>19 And I call it again our fund of last resort. Because</p> <p>20 the first thing we do is get the responsible party to clean it</p> <p>21 up. If we can't find them or for some reason they're gone, then</p> <p>22 if we can find a federal fund to go in and take care of it,</p> <p>23 we'll do that.</p> <p>24 And if neither of those things are going to work, then</p> <p>25 we'll use your Regulated Substance Response Fund.</p>
<p>1133</p> <p>1 remediated the site. In fact, the old Hayward School site, that</p> <p>2 was cleaned up to State standards, and I believe that's where</p> <p>3 Wheel City is now located or something out there.</p> <p>4 COMMISSIONER HANSON: Would it surprise you to know --</p> <p>5 to learn if it were presented here that the City of Sioux Falls</p> <p>6 put in wells for the purpose of drinking water and have a green</p> <p>7 sand purification area in that area?</p> <p>8 THE WITNESS: No. That would not surprise me.</p> <p>9 COMMISSIONER HANSON: Thank you.</p> <p>10 CHAIRMAN JOHNSON: Mr. Markley, do you remember who</p> <p>11 the Secretary for Department of Environment and Natural</p> <p>12 Resources was for most of the cleanup period?</p> <p>13 THE WITNESS: Yeah. Some old dude over there. No.</p> <p>14 John Smith.</p> <p>15 CHAIRMAN JOHNSON: Did Mr. Smith perform as admirably</p> <p>16 in his job as the mayor of Sioux Falls did during that same time</p> <p>17 period during that period to your knowledge?</p> <p>18 MS. GIEDD: The only answer is yes.</p> <p>19 THE WITNESS: Yes.</p> <p>20 MR. SMITH: It takes one to know one.</p> <p>21 CHAIRMAN JOHNSON: Well, thank you. I just wanted to</p> <p>22 call attention. We do have a few people up here who are quite</p> <p>23 familiar of the incidents of which you speak so thanks very</p> <p>24 much. I believe I was sports editor of the USD Volante. I</p> <p>25 don't want to get left out.</p>	<p>1135</p> <p>1 COMMISSIONER KOLBECK: And it's funded by fines and</p> <p>2 interest and that?</p> <p>3 THE WITNESS: Right.</p> <p>4 COMMISSIONER KOLBECK: That's the total funding for</p> <p>5 that?</p> <p>6 THE WITNESS: Right. There's no other general funds</p> <p>7 or anything else that go into it. So it sits there. It's ready</p> <p>8 to go if we need it.</p> <p>9 COMMISSIONER KOLBECK: How long does that process take</p> <p>10 if you needed to get money out of there?</p> <p>11 THE WITNESS: No. Right away. We'll do. We'll get</p> <p>12 on it. I'll try to get ahold of our department secretary or</p> <p>13 division director, and if I can't, I'll make the command</p> <p>14 decision, I guess, to do that.</p> <p>15 COMMISSIONER KOLBECK: So it wouldn't take very much</p> <p>16 time to get your hands on that money and get something going.</p> <p>17 THE WITNESS: No. We have, again, contractors on</p> <p>18 board that we would call and say, you know, get out there and</p> <p>19 get on it.</p> <p>20 MR. SMITH: Commissioner Hanson, another question.</p> <p>21 COMMISSIONER HANSON: Thank you. Mr. Markley, I'm</p> <p>22 going to slice this perhaps just a little bit thinner, but</p> <p>23 Mr. Kolbeck's questions peaked some -- I think we have the</p> <p>24 answer we need to know. However, more specifically, there have</p> <p>25 been a number of concerns brought up pertaining to who would be</p>

<p>1140</p> <p>1 could. It was something Mr. Wade raised.</p> <p>2 A. If I can expand a little bit more, again, Brian Walsh will</p> <p>3 be speaking later, and, you know, he looked through -- I don't</p> <p>4 know if that's one that's close to Williams -- I'm sorry.</p> <p>5 TransCanada or not. But, you know, he'll be able to tell which</p> <p>6 source water areas and which wellhead areas are the ones close.</p> <p>7 MR. HOHN: Thank you very much.</p> <p>8 MR. SMITH: Mr. Koenecke?</p> <p>9 <u>RECROSS-EXAMINATION</u></p> <p>10 <u>BY MR. KOENECKE:</u></p> <p>11 Q. Mr. Markley, Mr. Hohn just asked you about 10 years' time</p> <p>12 of travel and whether that would be quite a distance.</p> <p>13 Could you give me a reference in feet or inches or yards or</p> <p>14 miles as to what quite a distance you were referring to?</p> <p>15 A. Well, again, it's going to depend on the aquifer and that</p> <p>16 sort of thing. But, yeah, we could be talking miles.</p> <p>17 Q. Approximately how many?</p> <p>18 A. I don't know.</p> <p>19 Q. Very good. You referred to the Williams Pipeline site as</p> <p>20 being classified as a Superfund site; is that correct?</p> <p>21 A. Correct, in that it was the burn pit area where they were</p> <p>22 dumping the material into a pit. That was the only part that</p> <p>23 was a Superfund of that site. So there was other parts of the</p> <p>24 terminal that were not part of the Superfund site.</p> <p>25 Q. Does the Superfund site classification mean that the fund</p>	<p>1142</p> <p>1 <u>DIRECT EXAMINATION</u></p> <p>2 <u>BY MS. GIEDD:</u></p> <p>3 Q. State your name for the record.</p> <p>4 A. My name is Kim McIntosh.</p> <p>5 Q. And who do you work for?</p> <p>6 A. I work for the South Dakota Department of Environment and</p> <p>7 Natural Resources Ground Water Quality Program.</p> <p>8 Q. And what do you do in the Ground Water Quality Program?</p> <p>9 A. I am an environmental senior scientist with the Ground</p> <p>10 Water Quality Program, and I head up the section that</p> <p>11 Mr. Markley spoke of earlier referred to as the spill section.</p> <p>12 Q. And are you involved in the entire range of activities that</p> <p>13 the spill section does?</p> <p>14 A. Yes, I am.</p> <p>15 Q. And tell me what those are.</p> <p>16 A. Those activities involve anything from initial notification</p> <p>17 of spills or releases, emergency response to spills and</p> <p>18 releases, directing the cleanup, assessment, naming responsible</p> <p>19 parties, following up on those sites either through additional</p> <p>20 testing, cleanup. We do site visits. Some of my staff have</p> <p>21 been assigned to go out in the field and actually do follow-up</p> <p>22 inspections and watch the cleanup activities that are performed</p> <p>23 up to the point where the site meets state laws and regulations</p> <p>24 and can be closed.</p> <p>25 Q. And when you say up to the point where it meets state laws</p>
<p>1141</p> <p>1 paid for the remediation of that site?</p> <p>2 A. Well, actually the responsible party paid for that. If</p> <p>3 there is -- let's say there is no responsible party out there.</p> <p>4 Then the Superfund would come into effect, and the money that's</p> <p>5 out there could pay for that assessment, cleanup, that sort of</p> <p>6 thing.</p> <p>7 Q. I just want to be clear, though. Williams Pipeline</p> <p>8 Company, as I understand your testimony, paid for the</p> <p>9 remediation and cleanup at this site we've been discussing?</p> <p>10 A. Correct.</p> <p>11 MR. KOENECKE: Thank you. I have nothing further.</p> <p>12 MS. SEMMLER: Nothing.</p> <p>13 MR. SMITH: Are we done?</p> <p>14 MR. RASMUSSEN: As far as I'm concerned.</p> <p>15 MR. SMITH: You may step down then, Bill, and thank</p> <p>16 you very much.</p> <p>17 THE WITNESS: Thank you.</p> <p>18 (The witness is excused)</p> <p>19 MR. SMITH: Do you need a break, Reed, or are you</p> <p>20 ready to forge ahead?</p> <p>21 CHAIRMAN JOHNSON: Mr. Markley aside, most of them --</p> <p>22 (Discussion off the record)</p> <p>23 MS. GIEDD: Kim McIntosh will be called.</p> <p>24 (The witness is affirmed by the court reporter)</p> <p>25</p>	<p>1143</p> <p>1 and regulations, are you referring in particular to any</p> <p>2 standards?</p> <p>3 A. We have both ground water quality standards and some soil</p> <p>4 standards in this state that deal with petroleum substances.</p> <p>5 Q. And those standards establish what?</p> <p>6 A. They establish limits, levels that can remain in the soil</p> <p>7 based on particular site conditions, location of the spills or</p> <p>8 releases and what is at risk from those spills and releases.</p> <p>9 And so cleanup is conducted to the point where the contamination</p> <p>10 no longer poses a risk.</p> <p>11 Q. And so does that mean you actually do leave some</p> <p>12 hydrocarbon contaminants in the soil?</p> <p>13 A. In some situations, yes, we do allow for some contamination</p> <p>14 to remain in place if that contamination is not going to</p> <p>15 continue to spread or is not going to pose a further risk to the</p> <p>16 environment or cause an impact to citizens via drinking water</p> <p>17 supplies, whether private or public.</p> <p>18 Q. So does the contamination just stay there forever?</p> <p>19 A. Contamination -- and I'm not a microbiologist to get into</p> <p>20 all the specifics and details, but contamination has a tendency</p> <p>21 over time to break down. The microbes that exist in the soil</p> <p>22 will continue to eat on those hydrocarbon compounds and break</p> <p>23 them down.</p> <p>24 Q. And we're talking with reference to hydrocarbon</p> <p>25 contamination?</p>

<p style="text-align: right;">1144</p> <p>1 A. Yes. My section's involved in all types of spills and 2 releases from fertilizer spills, ag chemical spills, solvent 3 spills, but I'm kind of limiting my testimony today to talk 4 about petroleum in nature. 5 Q. And when you referred to that hydrocarbons that remain will 6 be broken down by bugs, what kind of activity are you talking 7 about? 8 A. Well, there are actual microbes that exist in the soil and 9 on the fringes of the ground water that actually consume those 10 hydrocarbons and eat them and use them for a fuel source. 11 They're able to break those hydrocarbons down and render them, 12 you know, less hazardous type of substance. 13 Q. Okay. I just want to have you -- if you would, describe 14 remediation activity with regard to a hydrocarbon spill. What 15 kind of activities are we talking about? 16 A. Well, my experience in South Dakota -- and I've been 17 working for the Ground Water Program in this capacity for about 18 17 years. I've actually been employed by the Department of 19 Environment and Natural Resources for just under 22. 20 But my experience has been that in South Dakota we have the 21 ability based on our population and a lot of other factors to 22 actually go in and excavate contaminated soil. And that is 23 probably one of our most efficient and effective means to 24 actually clean up a lot of the petroleum sites, go in and 25 actually remove that contaminated soil and take it to another</p>	<p style="text-align: right;">1146</p> <p>1 There is also what we call sparging and venting the soils 2 where you actually inject oxygen down into the soil, and it 3 actually allows the microbes in place to -- they become happier, 4 and they're more -- they've got what they need to actually grow 5 more bugs and eat more petroleum products. So there's several 6 different things that we have done in this state. 7 Q. And after your excavation and ground water treatment, are 8 there any other activities you use for remediation? 9 A. We follow both, of course, codified law and the regulations 10 that are in place. But in addition to that, our program has 11 developed a very extensive handbook that outlines a lot of 12 details as to what a responsible person or a responsible party 13 or as law defines corporations, limited liability partnerships, 14 the whole gamut, what those people are obligated to do under 15 state law. 16 And so in our handbook it outlines a lot of different 17 procedures that they have to adhere to, most importantly that we 18 follow up on the remediation that's taken place by requiring a 19 length of time of ground water monitoring to make sure that the 20 work that was done was sufficient. 21 Q. Now in terms of spills that are reported to the department, 22 what kind of -- I mean, obviously there's more than hydrocarbon 23 spills that get reported to you. 24 A. That's correct. I and my section act as a 24-hour seven 25 days a week sort of notification. So my staff and myself</p>
<p style="text-align: right;">1145</p> <p>1 location where it can either be treated, it can be incinerated. 2 I mean, there's lots of different ways to manage that 3 contaminated soil and in this state at this point is probably 4 one of the cheaper options. 5 And it's always -- the decision to what form of remediation 6 is used is based on a lot of different factors. It's based on 7 the size of the spill. It's based on the location. It's based 8 on whether there's a need to try to remove that soil immediately 9 or whether it can actually be treated in place. 10 So there's lots of different decision factors that have to 11 be made before you decide what form of remediation you're going 12 to use. But in South Dakota we typically like to see that 13 soil -- it's easiest to get that soil dug up, get it out of the 14 ground water, and if we do have impacted ground water, look at 15 some sort of treatment of that ground water, if necessary. 16 Q. And what kind of treatment options of ground water have you 17 worked with and required in the state? 18 A. We've required some pump and treat where you actually try 19 to pump up the ground water, run it through a series of filters 20 and that sort of thing and then re-inject. We've also done 21 other treatment systems where we -- you know, it's pumped to 22 keep it contained. I don't know that those are exactly the most 23 popular ways to treat the ground water, but they seem to be 24 fairly efficient -- or actually quite efficient when it comes to 25 petroleum products.</p>	<p style="text-align: right;">1147</p> <p>1 receive all types of spills. Under South Dakota Law and 2 regulations it outlines exactly what substances must be reported 3 in this state. And there's a very, very lengthy list all 4 defined in law and regulation what those substances are. 5 It does include petroleum substances, petroleum stock, 6 petroleum mixed with other substances, and it also specifically 7 includes crude oil. 8 Q. Is that a limit on the size of a leak that before -- I 9 mean, can you have a small, tiny leak before it has to be 10 reported? 11 A. The regulations define two different types of situations. 12 They define suspected releases and what constitutes a suspected 13 release. So if a facility was having some sort of mechanical 14 upset or those sort of situations, they have 24 hours to report 15 that upset to us, and then they have a certain period of time to 16 confirm that upset, whether it was actually a release. 17 And then there's also other provisions that say if there 18 was a release of a regulated substance greater than 25 gallons, 19 that that must be reported to the office immediately. 20 It also says that if there are other types of releases 21 smaller than 25 gallons and they're not cleaned up immediately 22 or within 24 hours, those also have to be reported. And there 23 are also other sections of that -- of those rules that say if 24 there is a smaller quantity release and it reaches a water body 25 or threatens to harm human health or the environment such as</p>

<p style="text-align: right;">1148</p> <p>1 wetlands, streams, that sort of thing, in quantities smaller</p> <p>2 than 25 gallons, those would also have to be reported.</p> <p>3 So those regulations are very important in looking at. So</p> <p>4 for the most part unless you have a release that is under</p> <p>5 25 gallons and you've cleaned it up right away, under state law</p> <p>6 it's required to be reported.</p> <p>7 Q. Has the Department received a number of reports of spills</p> <p>8 or releases of hydrocarbon products?</p> <p>9 A. Our office and our program receives hundreds of spills each</p> <p>10 year of hydrocarbon type releases.</p> <p>11 Q. And I actually asked you to prepare a list for me of</p> <p>12 hydrocarbon pipeline releases that the Department has received,</p> <p>13 did I not?</p> <p>14 A. Yes, you did.</p> <p>15 Q. And that's been marked as WEB 6?</p> <p>16 A. That's correct.</p> <p>17 Q. And would you describe for us what the source of this</p> <p>18 information is?</p> <p>19 A. Our program maintains what we call an environmental events</p> <p>20 database, and what this environmental events database is is a</p> <p>21 list of -- it's a database of all types of releases and some</p> <p>22 instances that are reported to us that are later unconfirmed.</p> <p>23 You know, we go out and investigate them and determine that</p> <p>24 there really wasn't a release.</p> <p>25 It also contains complaints. It contains environmental</p>	<p style="text-align: right;">1150</p> <p>1 Williams Pipeline releases that are identified as Williams</p> <p>2 Pipeline releases that are dated 1991.</p> <p>3 And the reason I refer to these as historic is because the</p> <p>4 information behind those releases is very vague. Those releases</p> <p>5 were reported to our office as a result of the -- some of the</p> <p>6 other activities that happened at Williams Pipeline in primarily</p> <p>7 the 1992 at Renner, which I can talk about if you wish.</p> <p>8 But some of those releases were never confirmed. There was</p> <p>9 an actual investigation done by our office and by Williams</p> <p>10 Pipeline, and those releases were never confirmed. Those were</p> <p>11 information that we received during some of our work with</p> <p>12 Williams, and we asked them to go back and try to confirm</p> <p>13 whether those releases ever occurred.</p> <p>14 You can see the data. Some of those were like 1967 is when</p> <p>15 they were supposed to have happened. Our Department -- not our</p> <p>16 Department but our program, a lot of the environmental</p> <p>17 regulations were modified and greatly beefed up as a result of</p> <p>18 the Williams Pipeline 12th Street incident. So we really had no</p> <p>19 reporting requirements before that incident. Just trying to</p> <p>20 give you a little background about some of that data.</p> <p>21 Q. If you would look at the 1987 Williams Pipeline release,</p> <p>22 it's the first one under historic releases, would you tell me</p> <p>23 about that one?</p> <p>24 A. That was a release that was reported to Williams Pipeline</p> <p>25 from a third party that actually identified the release as being</p>
<p style="text-align: right;">1149</p> <p>1 data that was collected on a piece of property maybe for a</p> <p>2 property transfer where the -- where no contamination was ever</p> <p>3 found. And we've started documenting that in an environmental</p> <p>4 events database because that's become so important for future</p> <p>5 development that people be aware of all of that type of data.</p> <p>6 So this is really just some information that I have pulled</p> <p>7 together off that environmental event database which is located</p> <p>8 out on our department website that's accessible to the public.</p> <p>9 And I've had to go through here and sort a little bit to pull</p> <p>10 out just pipeline releases because, you know, we have this</p> <p>11 database contains about 11,000 records, and so this is just the</p> <p>12 ones -- the pipeline releases that we identified.</p> <p>13 Q. And just hydrocarbon pipeline releases; is that right?</p> <p>14 A. Correct.</p> <p>15 Q. Now as a result, the Hayward School release would not</p> <p>16 appear on this document?</p> <p>17 A. That's correct. Because this is just -- I had them look at</p> <p>18 just pipeline releases.</p> <p>19 Q. Okay. You have a number of historic -- you have two</p> <p>20 sections; one is historic releases, and then you have a list</p> <p>21 that goes from '92 to 2004. Is there a reason they were</p> <p>22 categorized separately like that?</p> <p>23 A. They were categorized that way -- and I did that when I put</p> <p>24 this little spreadsheet together more for myself. Though, I do</p> <p>25 want to point out looking at this list there are a number of</p>	<p style="text-align: right;">1151</p> <p>1 petroleum substance coming up inside the sleeve that actually</p> <p>2 went underneath a railroad crossing where the pipeline --</p> <p>3 Williams Pipeline actually went under the railroad crossing.</p> <p>4 There was a sleeve that had been installed over that pipeline</p> <p>5 facility, and at some point a release then occurred in the</p> <p>6 sleeve -- on the pipeline in the sleeve area and was actually</p> <p>7 coming out one end of the sleeve.</p> <p>8 So that release was estimated at about 2,000 gallons of</p> <p>9 petroleum. That release was in the Sioux Falls well field. And</p> <p>10 there was a lot of work done by Williams Pipeline and their</p> <p>11 environmental consultants to assess, clean up, and treat the</p> <p>12 ground water in that area and that work was done and our file</p> <p>13 was closed on that. It did meet state standards.</p> <p>14 Q. Do you know what the actual cause of the leak in the</p> <p>15 pipeline was at that site?</p> <p>16 A. The information that I saw in the file was that it was a</p> <p>17 corrosion aspect on the line.</p> <p>18 Q. And you also mentioned the Renner Williams Pipeline</p> <p>19 release. Which one is that?</p> <p>20 A. That's the 1992 release. Mr. Markley testified earlier</p> <p>21 that that was a project that I was the project manager for.</p> <p>22 That was a release on the pipeline itself. This release was</p> <p>23 outside the actual Big Sioux Aquifer, but it was very close. It</p> <p>24 was about a quarter of a mile from the Big Sioux Aquifer.</p> <p>25 This release was identified to Williams Pipeline by a third</p>

<p style="text-align: right;">1152</p> <p>1 party. Petroleum products were actually noted on the surface of</p> <p>2 the ground from that release. The estimated quantity of</p> <p>3 petroleum, and it was gasoline, diesel -- crude -- or not crude</p> <p>4 oil. Gasoline, diesel, fuel oil, numbers 1 and 2 were released</p> <p>5 from that pipeline, and it was estimated between 400 and 800,000</p> <p>6 gallons was lost.</p> <p>7 That site Williams Pipeline was extremely aggressive in</p> <p>8 getting in there, stopping the leak, beginning cleanup</p> <p>9 immediately. It was a very large excavation. There was</p> <p>10 actually excavators that were in the bottom of the pit</p> <p>11 approximately 30 to 40 feet deep digging up the contaminated</p> <p>12 soil. There were lots of forms of remediation used on that site</p> <p>13 to get that site cleaned up very, very quickly.</p> <p>14 One of the things I noted my experience has been with the</p> <p>15 pipeline releases that happened is that the pipeline facilities</p> <p>16 react very, very quickly. For a number of reasons. One, they</p> <p>17 need to get in there. They need to stop that leak. They need</p> <p>18 to make sure that they get the releases cleaned up very quickly</p> <p>19 because the longer the release sits there the more apt it is to</p> <p>20 spread, and they need to get those pipelines back up and</p> <p>21 running. Those are dollars being lost by the pipeline being</p> <p>22 shut down.</p> <p>23 Q. And what's the current status of that cleanup?</p> <p>24 A. That cleanup was completed, and I don't know exactly the</p> <p>25 date, but it was a very short period of time. It was a very</p>	<p style="text-align: right;">1154</p> <p>1 assessment of that spill and during their assessment actually</p> <p>2 bored into the pipeline and then caused a much larger release</p> <p>3 that's now resulted in remediation and cleanup. So those were</p> <p>4 really third-party damage to the line.</p> <p>5 Those cases have not been officially closed out, though.</p> <p>6 In talking to the project manager it's just a matter of time.</p> <p>7 They've met all of our standards, but they're waiting to pull</p> <p>8 some of the testing equipment. And once that's done, we'll</p> <p>9 close those files.</p> <p>10 Q. In your experience has there been any permanent natural</p> <p>11 resource damage done as a result of a pipeline leak that</p> <p>12 couldn't be remediated?</p> <p>13 A. No.</p> <p>14 Q. Have you ever had a municipal well shut down by a</p> <p>15 hydrocarbon leak?</p> <p>16 A. No.</p> <p>17 Q. And there was some testimony this morning by Mr. Davis -- I</p> <p>18 believe it was about a spill in Rapid City. Do you know what</p> <p>19 spill he's referring to?</p> <p>20 A. You know, there was really two that he could have been</p> <p>21 talking about that occurred in Rapid City that the responsible</p> <p>22 party was Amoco Pipeline. In both of those cases because I</p> <p>23 don't know specifically which spill he was talking about, I</p> <p>24 asked staff to investigate that for me, and they've indicated</p> <p>25 that in neither one of those Amoco Pipeline cases in Rapid City</p>
<p style="text-align: right;">1153</p> <p>1 aggressive cleanup that they conducted. Met state standards,</p> <p>2 and it was closed out within two years.</p> <p>3 Q. And I don't know if I asked you that. With regard to the</p> <p>4 Renner spill, is that site remediated for the Renner spill?</p> <p>5 A. I'm sorry. That was the Renner spill I was telling you</p> <p>6 about.</p> <p>7 Q. I'm sorry. Yes, the Sioux Falls well field site?</p> <p>8 A. That site also met state standards and was closed out in</p> <p>9 our files.</p> <p>10 Q. Do you remember how long that remediation took?</p> <p>11 A. I do not.</p> <p>12 Q. In terms of all of the pipeline leaks that you have on your</p> <p>13 list here, are there some of them that have not been closed out?</p> <p>14 A. The only ones on this list that have not been closed out --</p> <p>15 and I'll explain this, I guess. There are a couple of releases</p> <p>16 that are identified on here as being Ellsworth at Ellsworth</p> <p>17 Airforce Base. There's a pipeline that actually runs outside of</p> <p>18 Rapid into Ellsworth Airforce Base.</p> <p>19 Back in 1986 -- I'm sorry. Back in -- make sure I get this</p> <p>20 right. Yeah. 1996 there was a -- repairs done to that pipeline</p> <p>21 by both Ellsworth Airforce Base and the company that operated it</p> <p>22 at that time. There were two small releases that occurred.</p> <p>23 Then what happened was is later in 2000, and it really was</p> <p>24 1998 but it wasn't reported to us until 2000, Ellsworth Air</p> <p>25 force Base sent in an environmental contractor to do further</p>	<p style="text-align: right;">1155</p> <p>1 were there any private wells that were impacted by the</p> <p>2 contamination.</p> <p>3 They're unaware and -- well, their answer was there were no</p> <p>4 city or municipal wells that were impacted and shut down and our</p> <p>5 files -- those projects have met state standards and have been</p> <p>6 closed.</p> <p>7 Q. And a question was asked of Mr. Markley with regard to how</p> <p>8 far you go -- I mean, do you go on private property to remediate</p> <p>9 spills? Could you talk a little bit about that?</p> <p>10 A. Well, as Mr. Markley explained, we require the responsible</p> <p>11 party to do the work. And if the responsible party cannot do</p> <p>12 the work or refuses to do the work, that's when we look to</p> <p>13 hiring the contractors that we already have on contract.</p> <p>14 We have a contract standing in place with those contractors</p> <p>15 now because we don't want to take the time that it would take to</p> <p>16 actually develop a contract and go through all of those sort of</p> <p>17 procedures. So the state has six contracts in place right now</p> <p>18 for both emergency response sort of activities and remediation</p> <p>19 and cleanup activities.</p> <p>20 So if by chance we needed to go on to a private property,</p> <p>21 we ask them. And I don't know that we've ever been turned down</p> <p>22 unless they were the people responsible and they were just not</p> <p>23 wanting to cooperate with our agency. In that case then we</p> <p>24 initiate lawsuits and begin the legal process to get permission</p> <p>25 to get on there and get the cleanup done and do what we need to</p>

<p>1156</p> <p>1 do to make sure it doesn't spread and cause any other impacts.</p> <p>2 Q. But you're often directing the contractors of either the</p> <p>3 responsible party or your contractors to go on to private</p> <p>4 property to clean up sites?</p> <p>5 A. All the time, yes.</p> <p>6 Q. A couple more questions. One has to do with private wells.</p> <p>7 Do your remediation activities protect private wells?</p> <p>8 A. If there is a release from whatever source, we would</p> <p>9 require that the area -- the extent of that contamination be</p> <p>10 completely defined both in soil and ground water. And that's</p> <p>11 done through soil testing and samples of ground water. We would</p> <p>12 then make them -- we would then look at what is at risk from</p> <p>13 that contamination.</p> <p>14 And it makes no difference to us whether that is a</p> <p>15 municipal well or if it's a private well being used either for</p> <p>16 consumption in home or whether it's a well-being used to water</p> <p>17 cattle. We protect those all the same and if we had to clean up</p> <p>18 the ground water to protect those, we would do that.</p> <p>19 Q. And if you can't clean up the ground water to protect</p> <p>20 those, what do you do?</p> <p>21 A. In an instance where we would be completely unable to</p> <p>22 protect a well by cleaning up the contamination, then our</p> <p>23 requirements for the responsible party are is that they provide</p> <p>24 an alternate drinking water source. Now that may be a deeper</p> <p>25 well, a well in a different location.</p>	<p>1158</p> <p>1 utilities will chose to upgrade to a different type of PVC or</p> <p>2 a -- or some other type of ductile iron or some other type of</p> <p>3 material that's more petroleum resistant.</p> <p>4 MS. GIEDD: Thank you. I have nothing further.</p> <p>5 MR. RASMUSSEN: I'd like to offer WEB Exhibit 6, which</p> <p>6 she was testifying about.</p> <p>7 MR. SMITH: Objection anyone?</p> <p>8 MR. KOENECKE: No objection.</p> <p>9 MS. SEMMLER: No objection.</p> <p>10 MR. SMITH: Okay. WEB 6 is received. I don't know</p> <p>11 how much you've got, Reed. Should we start now, or do you want</p> <p>12 to start our break at this point?</p> <p>13 MR. RASMUSSEN: I don't have a whole lot. I guess</p> <p>14 it's up to you.</p> <p>15 MR. SMITH: I tell you what. I know Kara Semmler has</p> <p>16 a personal -- she has a house closing over noon, and so we've</p> <p>17 got to -- we'll try to accommodate that. So I'm just letting</p> <p>18 you know that.</p> <p>19 MR. RASMUSSEN: Well, that just sounds like a personal</p> <p>20 problem.</p> <p>21 MS. SEMMLER: Karen Cremer's here too for staff. She</p> <p>22 can take my place.</p> <p>23 MR. SMITH: That's fine. Fire away.</p> <p>24</p> <p>25</p>
<p>1157</p> <p>1 Sometimes there are people that are very interested in</p> <p>2 hooking up to rural water because the water quality may be a lot</p> <p>3 better too. So we look at all of those aspects in talking with</p> <p>4 the landowner and seeing what do they want, what works best for</p> <p>5 them. We don't want to do something that's going to create an</p> <p>6 additional expense for them when they were not responsible for</p> <p>7 that release.</p> <p>8 Q. Have you been involved in situations where you have a</p> <p>9 public water supply line, pipeline, running through soil that's</p> <p>10 been contaminated by a petroleum or hydrocarbon leak?</p> <p>11 A. Yes, we have.</p> <p>12 Q. And what do you do in those cases?</p> <p>13 A. Well, one of the responsibilities of my staff is to make</p> <p>14 sure that when new systems are going in or lots of different</p> <p>15 types of projects in the state happen that we go ahead and we</p> <p>16 try to let those people know whether it's the water system or</p> <p>17 whether it's the city or community, let them know what spills</p> <p>18 and releases are that we have on the files. What information do</p> <p>19 we know about them so that they can make decisions in planning</p> <p>20 where they want to put those water lines and whether they want</p> <p>21 to actually run them through areas where we know there's still</p> <p>22 some soil or ground water contamination.</p> <p>23 In a lot of those cases if it's decided that they need to</p> <p>24 run that utility through that area of contamination that's still</p> <p>25 there that hasn't yet met state standards, then typically those</p>	<p>1159</p> <p>1 <u>DIRECT EXAMINATION</u></p> <p>2 <u>BY MR. RASMUSSEN:</u></p> <p>3 Q. You were asked about whether there had been any permanent</p> <p>4 damage from any pipeline spills. I want to expand on that a</p> <p>5 little bit.</p> <p>6 Has there been any permanent damage anywhere from any type</p> <p>7 of spill that you're aware of?</p> <p>8 A. No. My experience is that with time and money spills can</p> <p>9 all be cleaned up.</p> <p>10 Q. How about any municipal water systems? Have any been shut</p> <p>11 down due to any type of spill, not just a pipeline spill?</p> <p>12 A. I am aware of some systems being asked to shut down because</p> <p>13 of the potential that they could have been impacted. They were</p> <p>14 not impacted. But those were not petroleum releases that</p> <p>15 were -- that we're dealing with.</p> <p>16 I'm trying to remember. I think there was a manure release</p> <p>17 into the Big Sioux River, which some of the systems actually</p> <p>18 were asked to shut down so they did not pull contamination into</p> <p>19 their intakes.</p> <p>20 Q. I want to ask you about a few of the other releases that</p> <p>21 are listed on No. 6. First of all, with the Renner release, as</p> <p>22 I understand it, that happened due to a -- well, it says a</p> <p>23 pinhole and a seam in the pipe; is that right?</p> <p>24 A. Yeah. That was an older pipe that was in the ground at</p> <p>25 that time. I think Mr. Markley said in the '40s it was</p>

<p style="text-align: right;">1160</p> <p>1 installed. I do not recall, but I know it's quite old. And</p> <p>2 that was a -- it was an actual pinhole leak that had developed</p> <p>3 in a weld is what I think the real thing was. It took some work</p> <p>4 to determine exactly what the source of that leak was.</p> <p>5 Q. And that was a belowground pipe; correct?</p> <p>6 A. Correct. Yes.</p> <p>7 Q. Just going down the list quickly starting from the top, the</p> <p>8 first one is a 2004 KANEB, 250 barrels of gas. How did that</p> <p>9 leak occur, if you know?</p> <p>10 A. That was a third-party damage to the pipeline. It was a</p> <p>11 contractor -- using the word contractor -- that had been hired</p> <p>12 by a farmer to put up a hay barn in a pasture. And the</p> <p>13 contractor scraped the side of the pipeline.</p> <p>14 Q. The next one, Ellsworth, is that what you previously talked</p> <p>15 about?</p> <p>16 A. That's where the contractor drilled into the line, yeah.</p> <p>17 Q. All right. The next one at KANEB was a gasket on a pump</p> <p>18 station. Do you know anything further or have any further</p> <p>19 information about that?</p> <p>20 A. No. That was an actual aboveground release that occurred</p> <p>21 at that pump station.</p> <p>22 Q. The next one, 1998, KANEB. Clay Rural Water apparently hit</p> <p>23 the line while they were doing some work; is that right?</p> <p>24 A. That's correct.</p> <p>25 Q. And caused a hole in the pipe?</p>	<p style="text-align: right;">1162</p> <p>1 Quality. It was 200 barrels, estimated at 200 barrels. And the</p> <p>2 release was actually in the Big Sioux River.</p> <p>3 Q. And you say there were no identified impacts from that</p> <p>4 release?</p> <p>5 A. No. We sent people to the site. There was no fish killed.</p> <p>6 There was no evidence by the time we got there of any sort of</p> <p>7 release.</p> <p>8 Q. Then we have another 1993 Williams Pipeline. Pipeline</p> <p>9 indicated low pressure. So do I take that to mean that their --</p> <p>10 some system indicated there was a leak but nothing was found?</p> <p>11 A. That's correct.</p> <p>12 Q. And I think you said in that situation they have to report</p> <p>13 it to you and then tell you what they find; is that right?</p> <p>14 A. Correct. So it was put on our books, and then we closed</p> <p>15 the file right away.</p> <p>16 Q. And then you've already talked about the Renner one, but I</p> <p>17 guess I did have one more question about that. You said it was</p> <p>18 gasoline, diesel fuel, and something else?</p> <p>19 A. Fuel oil, both the fuel oils, number 1 and 2, I understand.</p> <p>20 Q. Were those all in the same pipeline?</p> <p>21 A. That's correct.</p> <p>22 Q. And then you talked about the one that was near the</p> <p>23 Sioux Falls well field already; correct?</p> <p>24 A. That's the 1987 release, yes.</p> <p>25 Q. All right. And the rest of them are just -- you don't have</p>
<p style="text-align: right;">1161</p> <p>1 A. Yes.</p> <p>2 Q. The next one is another KANEB from '98. What happened in</p> <p>3 that one? That was a pump station leak?</p> <p>4 A. That was another pump station leak. That was kind of an</p> <p>5 interesting release because it was actually reported to KANEB</p> <p>6 from an anonymous party. So I don't really know exactly who</p> <p>7 caused that release, whether it was the anonymous party. But</p> <p>8 KANEB reported it to us as soon as they received notice that</p> <p>9 there was a release there.</p> <p>10 Q. And it says 4,500-2,800 gallons.</p> <p>11 A. Yeah. They estimated between 4,500 gallons and 2,800</p> <p>12 gallons. Sorry.</p> <p>13 Q. Okay. 1998, Amoco. What happened on that one?</p> <p>14 A. This release showed up on my list. And to be very honest</p> <p>15 with you, I'm not convinced that this was an actual petroleum</p> <p>16 pipeline. I think this is probably a natural gas release. It's</p> <p>17 a petroleum substance that maybe was used at that facility for a</p> <p>18 backup generator.</p> <p>19 Q. Okay. And then the next two, that again goes -- is that</p> <p>20 that same Ellsworth incident?</p> <p>21 A. That's correct.</p> <p>22 Q. All right. Then we go down to another Amoco one in '93.</p> <p>23 What do you know about that one?</p> <p>24 A. This release actually happened on the Iowa side. We were</p> <p>25 notified by Amoco and the Iowa Department of Environmental</p>	<p style="text-align: right;">1163</p> <p>1 any specific knowledge about any of those, I take it?</p> <p>2 A. The rest of them, yeah. That's correct.</p> <p>3 MR. RASMUSSEN: Okay. Thank you. That's all I have.</p> <p>4 MR. SMITH: Thank you. And should we wait until after</p> <p>5 lunch to begin cross-examination? Do you want to forge ahead?</p> <p>6 Okay. Mr. Hohn?</p> <p>7 <u>CROSS-EXAMINATION</u></p> <p>8 <u>BY MR. HOHN:</u></p> <p>9 Q. Would your office be involved in responding to leaks in</p> <p>10 small towns or if there was an anticipation of a contamination</p> <p>11 in a small community?</p> <p>12 A. I'm sorry. I don't -- anticipation of a release?</p> <p>13 Q. Let me rephrase that. If there was an expected fuel</p> <p>14 release in a small community in South Dakota, your office would</p> <p>15 be called to investigate; is that correct?</p> <p>16 MR. KOENECKE: I don't understand that question myself</p> <p>17 now.</p> <p>18 MR. SMITH: Do you mean suspected?</p> <p>19 MR. HOHN: Yes. That's what I mean.</p> <p>20 A. Yes.</p> <p>21 Q. Are you aware of a -- an incident in Conde, South Dakota</p> <p>22 within the last two years? If not, that's fine.</p> <p>23 A. I know that we have a spill site in Conde. I believe we</p> <p>24 actually have more than one in our files on Conde. I don't know</p> <p>25 specifically which one you're talking about.</p>

<p style="text-align: right;">1164</p> <p>1 Q. The one I'm -- well, there may be more. The one I'm asking 2 about would be related to a gas spill. 3 A. A large majority of all the releases that we deal with are 4 petroleum related and mostly associated with gas stations. 5 Q. Are you familiar with the spills in Conde that your agency 6 dealt with? 7 A. I am not the project manager so I don't know a lot of the 8 intimate details about those spills. I do know that there were 9 spills in Conde. 10 Q. Based on -- based on your experience with other fuel spills 11 near water lines, have there been complaints filed with your 12 office -- been complaints filed with your office of people 13 noticing either taste or odor -- petroleum taste or odor in 14 drinking water? 15 A. Oh, yeah. I mean, we investigate those type of releases if 16 they suspect there's contamination getting into their water 17 line. Typically we find those are service lines that become 18 impacted, not water mains. 19 Q. By service line, what do you mean by service line? 20 A. A smaller diameter line that runs from the mains to the 21 home or the residence or in the case of some of the complaints 22 or problems that have surfaced they've been black poly water 23 lines that have been installed by rural water systems. Those 24 lines are much flimsier wall thickness and are much more 25 susceptible to penetration by petroleum substances.</p>	<p style="text-align: right;">1166</p> <p>1 limited -- I can speak in a number of different ways, but 2 typically our Department works with -- directly with the 3 responsible party or their environmental consultants, and it's 4 typically the environmental consultant, not even the responsible 5 party. We work with them to direct and explain to them exactly 6 what we expect from them as far as remediation -- or assessment 7 and remediation. 8 If property owners are interested, we're very happy to sit 9 down and explain to them what we're planning to do, how we're 10 planning to do it, and provide them, of course, with copies of 11 all the documents that are produced. 12 Typically we don't find that to be the case. Typically the 13 property owners are more interested in making sure that their 14 land is restored as to, you know, pre conditions. Or if it has 15 to be a large excavation and cleanup, that they have that land 16 restored and that they're able to produce their crops and deal 17 with things from that standpoint. 18 We don't really see them ever getting -- they don't direct 19 what needs to be done. They don't tell anybody what needs to be 20 done. But we do listen to them if they have concerns on what is 21 being done on their property. 22 MR. KOENECKE: Thank you. I have nothing further. 23 MR. SMITH: Staff. 24 MS. SEMMLER: No questions. Thank you. 25 MR. SMITH: Commissioners?</p>
<p style="text-align: right;">1165</p> <p>1 Q. And by penetration are you saying that some of the 2 substance actually goes through the wall and gets into the 3 water? 4 A. Yes. 5 Q. Enough -- enough of it gets into the water that people 6 notice it at the tap in their kitchen? 7 A. Yes. 8 Q. And when you have investigated those, you or your staff 9 have investigated those, as part of your investigation do you 10 actually go in the house and sample the water? 11 A. Yes. 12 Q. And have you got positive test samples when you've done 13 that? 14 A. Yes. 15 MR. HOHN: Okay. Thank you very much. 16 MR. SMITH: Mr. Koenecke? Mr. White? 17 MR. KOENECKE: Well, it is good afternoon I guess at 18 this point. 19 <u>CROSS-EXAMINATION</u> 20 <u>BY MR. KOENECKE:</u> 21 Q. How are you? I have a question, and I'd like to know what 22 the extent of the involvement of a landowner is in remediation 23 plans for a spill site. 24 A. The extent of the landowner is really very limited to 25 factors outside of the actual remediation. They may be</p>	<p style="text-align: right;">1167</p> <p>1 Commissioner Kolbeck. 2 COMMISSIONER KOLBECK: On all of these on your sheet 3 here, do you know who paid for all of these cleanups? Would it 4 be the company? 5 THE WITNESS: My experience has been that all pipeline 6 releases are paid for by the pipeline company. Now if there are 7 third-party damages, they may go back and try to cost recover 8 those damages but my experience is the company gets in there and 9 they want to get it cleaned up just as quick as possible. 10 COMMISSIONER KOLBECK: So you don't know if that 11 farmer was charged? 12 THE WITNESS: Well, it was the farmer's contractor who 13 actually drilled in. So I don't know in that case whether KANEB 14 went back and pursued any sort of settlement against the 15 contractor. Because in that situation I understand that 16 One-Call was not used at all. 17 COMMISSIONER KOLBECK: So that would actually go to 18 the contractor's insurance probably? 19 THE WITNESS: That would be my understanding, but I 20 don't know that for sure in this case. 21 MR. SMITH: Commissioner Hanson, do you have a 22 question? 23 COMMISSIONER HANSON: Hi. Good afternoon. Thank you 24 very much for your testimony. I very much appreciate it. 25 On two of the instances that have been referred to on</p>

<p style="text-align: right;">1168</p> <p>1 your list of events that have taken place two of them show</p> <p>2 grader hit pipeline. And I'd assume whoever typed this meant</p> <p>3 road grader or something of that nature.</p> <p>4 Do you know if that, in fact, was the type of</p> <p>5 equipment that struck it or what type of equipment it was?</p> <p>6 THE WITNESS: Those are what I refer to as the</p> <p>7 historic spills, and our data from those spills is very, very</p> <p>8 vague. And those were actual reports to our office that were</p> <p>9 kind of hearsay sort of thing is -- they were basically reported</p> <p>10 to us that somebody thought they remembered this sort of</p> <p>11 incident happening.</p> <p>12 And when I looked at the files it looked to me they</p> <p>13 were very closely -- the reports were so close that they</p> <p>14 appeared to be the same incident. Williams Pipeline was asked</p> <p>15 to go back and investigate all of those historic ones and were</p> <p>16 not able to confirm that a release had occurred at those</p> <p>17 locations.</p> <p>18 COMMISSIONER HANSON: Okay. Thank you very much.</p> <p>19 Appreciate it.</p> <p>20 COMMISSIONER KOLBECK: I'm sorry. I just have one</p> <p>21 more, Kim.</p> <p>22 Do you feel that your agency, the DENR, is ready for a</p> <p>23 project like Keystone? Do you have the proper resources and</p> <p>24 knowledge to deal with a crude oil spill if it were to occur?</p> <p>25 THE WITNESS: My program and my staff have dealt with</p>	<p style="text-align: right;">1170</p> <p>1 So they may have a main that is made more of a stronger PVC</p> <p>2 material, but they run this thin-walled black poly line. And</p> <p>3 it's been my experience that those are at more risk and more</p> <p>4 threat to all types of -- I mean, we've had reports of</p> <p>5 contamination in people's homes as a result of a heating fuel</p> <p>6 tank outside the home that has gotten over to those lines.</p> <p>7 Q. And do you know whether those lines are the responsibility</p> <p>8 under the ownership of the homeowner or the service taker or do</p> <p>9 you know -- or are they part of the rural water system and owned</p> <p>10 and operated by them? Do you know?</p> <p>11 A. I don't know for sure, but I suspect that those lines are</p> <p>12 being installed by the homeowners, that there's like a well pit</p> <p>13 that rural water takes the water up to, and then it's the</p> <p>14 homeowner's responsibility to go from the well pit to the home.</p> <p>15 MR. KOENECKE: Very good. Thank you. Thanks for the</p> <p>16 latitude. I appreciate it.</p> <p>17 MR. SMITH: Any redirect following up on that?</p> <p>18 MR. RASMUSSEN: No.</p> <p>19 MR. SMITH: Okay. I think you're excused. Thank you</p> <p>20 very much.</p> <p>21 (The witness is excused)</p> <p>22 MR. SMITH: I think maybe it's an appropriate time to</p> <p>23 take our noon break. I can't see that clock. I'm sorry.</p> <p>24 MR. GERDES: 10 after 12.</p> <p>25 MR. SMITH: Let's shoot for 1:15. How is that?</p>
<p style="text-align: right;">1169</p> <p>1 crude oil spills out in Harding County. Yes. We have the laws</p> <p>2 and regulations in place that will help us require a responsible</p> <p>3 party to go in and assess and clean up these releases.</p> <p>4 COMMISSIONER KOLBECK: Okay. Thank you.</p> <p>5 MR. SMITH: Any last Commissioner questions?</p> <p>6 CHAIRMAN JOHNSON: No, sir.</p> <p>7 MR. SMITH: Any redirect?</p> <p>8 MR. RASMUSSEN: No.</p> <p>9 MR. KOENECKE: I'd like to ask another question if I</p> <p>10 could have a little latitude, please, Mr. Smith.</p> <p>11 MR. RASMUSSEN: I object.</p> <p>12 MR. SMITH: Now we're going to go to the goose and</p> <p>13 gander rule. You may proceed.</p> <p>14 MR. KOENECKE: Thank you.</p> <p>15 <u>RECROSS-EXAMINATION</u></p> <p>16 <u>BY MR. KOENECKE:</u></p> <p>17 Q. Going back to your previous testimony about flimsy lines of</p> <p>18 rural water companies, do you remember that line of questioning?</p> <p>19 A. Yes.</p> <p>20 Q. Is it your testimony the service lines from the mains to</p> <p>21 the homes are flimsy?</p> <p>22 A. Yes. Some of the lines that are installed are what I refer</p> <p>23 to and maybe it's not the right industry term but is the black</p> <p>24 poly water line, which is a very thin-walled pipe that is used a</p> <p>25 lot of times in the rural water distribution systems.</p>	<p style="text-align: right;">1171</p> <p>1 (A lunch recess is taken)</p> <p>2 MR. SMITH: The hearing in Docket HP07-001 is</p> <p>3 reconvened following our noon recess. We were in the midst of</p> <p>4 WEB Water's case. But I have a request from an individual</p> <p>5 Intervener who has a time emergency. And if Mr. Rasmussen would</p> <p>6 be so kind, I would request that they be allowed to let him</p> <p>7 testify now because he has an urgency to leave.</p> <p>8 MR. RASMUSSEN: That's fine.</p> <p>9 MR. SMITH: Okay. At this point then, Mr. Anderson,</p> <p>10 please come up here and take a seat here at the center. And</p> <p>11 then in a second when you get up there then we'll need to have</p> <p>12 you turn to the reporter, and she'll swear you in.</p> <p>13 (The witness is sworn by the court reporter)</p> <p>14 MR. SMITH: Why don't you start out, Mr. Anderson, by</p> <p>15 introducing yourself and tell us where you live, and then you</p> <p>16 can proceed to describe your testimony that you filed.</p> <p>17 MR. ANDERSON: Okay. My name is Scott Anderson. I'm</p> <p>18 from Langford, South Dakota.</p> <p>19 MR. SMITH: And did you prefile testimony in this</p> <p>20 case?</p> <p>21 THE WITNESS: Yes, I did.</p> <p>22 MR. SMITH: And is that what you're holding in front</p> <p>23 of you there?</p> <p>24 THE WITNESS: Yes. Some of it.</p> <p>25 MR. SMITH: Okay. And if you were to testify today</p>

<p style="text-align: right;">1172</p> <p>1 under oath as to the same materials that you have in your</p> <p>2 prefiled testimony, would your testimony be essentially the</p> <p>3 same?</p> <p>4 THE WITNESS: I've got a few things I'd like to add.</p> <p>5 MR. SMITH: But as far as the things that are in</p> <p>6 there, you would testify the same today? There's nothing you'd</p> <p>7 want to change?</p> <p>8 THE WITNESS: Correct.</p> <p>9 MR. SMITH: Okay. At this point in time would you</p> <p>10 want to offer your prefiled into evidence in the case?</p> <p>11 THE WITNESS: Yes.</p> <p>12 MR. SMITH: Why don't we mark that -- and it's</p> <p>13 Scott Anderson; right?</p> <p>14 THE WITNESS: Yes.</p> <p>15 MR. SMITH: That will be marked as Scott Anderson</p> <p>16 Exhibit 1. And it's been offered. Is there an objection?</p> <p>17 MR. KOENECKE: No objection.</p> <p>18 MR. RASMUSSEN: No objection.</p> <p>19 MR. HOHN: No objection.</p> <p>20 MS. SEMMLER: No objection.</p> <p>21 MR. SMITH: Scott Anderson Exhibit 1 is admitted into</p> <p>22 evidence. Why don't right now, Scott, go ahead and give us your</p> <p>23 testimony or summarize what you filed and whatever else you</p> <p>24 think is pertinent for the Commission to know.</p> <p>25 THE WITNESS: Okay. One of the first things I'd like</p>	<p style="text-align: right;">1174</p> <p>1 it back up? That's another question I have.</p> <p>2 And will there be any bond in place? You know, is</p> <p>3 TransCanada going to put up some money if there is a leak? You</p> <p>4 know, what's going to happen there? I think it would be good</p> <p>5 faith to put up serious amounts of money to take care of that.</p> <p>6 And in the event of a leak -- this come up Saturday --</p> <p>7 in a snow storm, something happens -- the winter of '96 to '97</p> <p>8 you could not get from point A to point B for several days at a</p> <p>9 time. You know, what happens then?</p> <p>10 The other thing that's been going on lately in the</p> <p>11 area, there's been several surveying crews around. And they</p> <p>12 are -- they won't tell us what they're surveying so I can't say</p> <p>13 they're surveying for TransCanada. But they're in the area.</p> <p>14 They won't say nothing. They are chopping holes in the roads in</p> <p>15 places in county roads, and nobody seems to have a real good</p> <p>16 answer as to what these guys are doing around or who's</p> <p>17 responsible for fixing these roads after they -- not that</p> <p>18 they're big holes they're putting in there, but once you start</p> <p>19 one they tend to get bigger with the freeze/frost cycles.</p> <p>20 Q. And with this pipeline running from the information I have</p> <p>21 it's 75 to 80 degrees will this ground ever freeze back up</p> <p>22 again, allowing rodents, insects, diseases to -- you know, we</p> <p>23 don't have to worry about a lot of that stuff when the ground's</p> <p>24 froze. Like, you know, soybean rust in the south, just</p> <p>25 different insects.</p>
<p style="text-align: right;">1173</p> <p>1 to say is I rent land from my parents. We farm. I have not</p> <p>2 been contacted by TransCanada or anybody -- you know, if it</p> <p>3 wasn't for what's going on as far as me being notified, I'd have</p> <p>4 no idea this was even going on.</p> <p>5 The other thing I want to bring up has to do with a</p> <p>6 lot of the drainage issues where we live. We're in a pretty big</p> <p>7 water shed, the Crow Creek Watershed, and if you so much as farm</p> <p>8 that ground in the wrong direction, it will wash out 3 to 4 feet</p> <p>9 deep. And we're not allowed to move any dirt in that area.</p> <p>10 And I'm kind of concerned if you put a 30-inch pipe in</p> <p>11 the ground, what are we going to do with the dirt that took up</p> <p>12 that area? And is there going to be a berm left up top there?</p> <p>13 What's going to happen there? When that water comes is it going</p> <p>14 to be a dike, or is it going to wash this pipe out? That's one</p> <p>15 of my big concerns on this whole project.</p> <p>16 You know, and if they were to come through with more</p> <p>17 pipes, you know, the more times we dig that up -- the drainage</p> <p>18 is a big issue in that area. And I just would like to know</p> <p>19 what's going to be done to stop some of those issues.</p> <p>20 And this morning they were talking about the new</p> <p>21 energy bill they were trying to pass in Congress. By 2020 they</p> <p>22 want to implement -- they think we'll have to import half the</p> <p>23 crude oil we do now. If this line were to be put in and used</p> <p>24 for a while then discontinued use, what happens there? I mean,</p> <p>25 is this thing just going to corrode in the ground? Do they take</p>	<p style="text-align: right;">1175</p> <p>1 I have a big concern that that will never grow anything</p> <p>2 again because we dig in a lot of water lines. We run a feedlot.</p> <p>3 And wherever we dig these water lines in when we cross an area</p> <p>4 where grass grows or we do farm it no matter how good a job we</p> <p>5 do at putting that back together, nothing ever seems to grow</p> <p>6 there again.</p> <p>7 You can see that pipeline five to seven years in the</p> <p>8 future -- we had one cave in this summer actually going through</p> <p>9 my yard that had been there seven years. And due to a lot of</p> <p>10 rain it just washed it out. And that was a pretty small deal</p> <p>11 compared to this. This was a 2-inch line compared to a 30-inch</p> <p>12 line. So those are some of my main concerns.</p> <p>13 MR. SMITH: Thank you. You don't have any other</p> <p>14 exhibits or anything you want to introduce?</p> <p>15 THE WITNESS: No.</p> <p>16 MR. SMITH: Okay. At this point in time then what we</p> <p>17 do is tender you for cross-examination. It means questions from</p> <p>18 the other parties in the case. So I'm going to do that right</p> <p>19 now.</p> <p>20 And we begin with the Applicant. Is it you,</p> <p>21 Mr. Koenecke?</p> <p>22 MR. KOENECKE: It is, Mr. Smith. Thank you.</p> <p>23 <u>CROSS-EXAMINATION</u></p> <p>24 <u>BY MR. KOENECKE:</u></p> <p>25 Q. Good afternoon, Mr. Anderson.</p>

<p style="text-align: right;">1176</p> <p>1 A. Good afternoon.</p> <p>2 Q. Have you been in the room at all here today?</p> <p>3 A. No. I just got here.</p> <p>4 Q. I see. So you wouldn't have heard the testimony this</p> <p>5 morning?</p> <p>6 A. No.</p> <p>7 Q. Have you been listening to the testimony during the week at</p> <p>8 all?</p> <p>9 A. No, I haven't.</p> <p>10 Q. I noted in your testimony that you discussed relics and</p> <p>11 cultural resources. Can you turn to the back page, please.</p> <p>12 A. Okay.</p> <p>13 Q. Are you looking at the last paragraph of your testimony</p> <p>14 entitled Cultural Resources?</p> <p>15 A. Uh-huh.</p> <p>16 Q. Do you have any particular experience or expertise in</p> <p>17 relics or cultural resources?</p> <p>18 A. I don't have any expertise, but I know we do find a lot of</p> <p>19 relics in that area.</p> <p>20 Q. You find them on your own land?</p> <p>21 A. Yes.</p> <p>22 Q. Where you're currently farming?</p> <p>23 A. Yes.</p> <p>24 Q. You farm over the top of them?</p> <p>25 A. They come up -- yeah. You maybe see a rock and get out to</p>	<p style="text-align: right;">1178</p> <p>1 Q. Do you use that for all your water needs?</p> <p>2 A. No.</p> <p>3 Q. Do you have other sources of water that you use?</p> <p>4 A. Where I live that's the only source of water we have at my</p> <p>5 house. At the feedlot we have surface wells.</p> <p>6 Q. Approximately how many?</p> <p>7 A. Seven, eight of them.</p> <p>8 Q. And do you know how far off the line you are, the proposed</p> <p>9 pipeline route?</p> <p>10 A. I would say I am 2 miles.</p> <p>11 Q. And that's at your house and feedlot both?</p> <p>12 A. No. That's at my house. I live a mile west of the</p> <p>13 feedlot.</p> <p>14 Q. So the feedlot would be within a mile of the line?</p> <p>15 A. Correct.</p> <p>16 Q. And your house is yet another mile west?</p> <p>17 A. Correct.</p> <p>18 MR. KOENECKE: Nothing further. Thank you very much.</p> <p>19 MR. SMITH: Mr. Rasmussen.</p> <p>20 MR. RASMUSSEN: No questions.</p> <p>21 MR. SMITH: Mr. Hohn, do you have any questions?</p> <p>22 MR. HOHN: Yes, I do.</p> <p>23 <u>CROSS-EXAMINATION</u></p> <p>24 <u>BY MR. HOHN:</u></p> <p>25 Q. Mr. Anderson, on the second page of your testimony, second</p>
<p style="text-align: right;">1177</p> <p>1 pick it up and you find an arrowhead or Indian hammer. Things</p> <p>2 like that.</p> <p>3 Q. Approximately how many times have you done that?</p> <p>4 A. Half a dozen.</p> <p>5 Q. Over how many years?</p> <p>6 A. 15.</p> <p>7 Q. In looking at -- or could you look please further up the</p> <p>8 page at your Landowner Relations paragraph.</p> <p>9 A. Uh-huh.</p> <p>10 Q. I believe it was your testimony previously here today that</p> <p>11 you've had no contact with Keystone?</p> <p>12 A. No.</p> <p>13 Q. No, that isn't your testimony or --</p> <p>14 A. No. I've had no contact with Keystone. They have not</p> <p>15 contacted me.</p> <p>16 Q. So when you state here that, Land agents' actions that were</p> <p>17 not proper, you don't have any personal knowledge of that?</p> <p>18 A. Just what happened in my parents' yard.</p> <p>19 Q. You've been a witness to that?</p> <p>20 A. My wife was there.</p> <p>21 Q. But not you yourself?</p> <p>22 A. Not me personally.</p> <p>23 Q. Very well. On page 2 you state that you're currently now</p> <p>24 on BDM water?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">1179</p> <p>1 paragraph, about the fifth line up where it starts out, Pipes</p> <p>2 running 75 to 80 degrees, do you see that?</p> <p>3 A. Yes.</p> <p>4 Q. In the next sentence it states that, That would be a great</p> <p>5 breeding ground for spores from soybean rust. Why do you say</p> <p>6 that, or what do you mean by that?</p> <p>7 A. Soybean rust is a disease that's been moving up from the</p> <p>8 south. It's more prevalent down there because the ground</p> <p>9 doesn't freeze, doesn't get cold enough to kill it down there.</p> <p>10 Here if you have a chunk of ground that's not freezing, you</p> <p>11 know, whenever you have nonfrozen ground it just allows more</p> <p>12 diseases to happen.</p> <p>13 Q. So you're saying the normal seasons here where we get a</p> <p>14 deep frost, 3, 4, 5 feet deep, that's beneficial?</p> <p>15 A. Right.</p> <p>16 Q. And if the pipeline goes through that property, how is that</p> <p>17 going to change that?</p> <p>18 A. Well, if it's going to be 75 to 80 degrees, I can't imagine</p> <p>19 that ground will ever freeze on top of that line and for a</p> <p>20 certain area around it.</p> <p>21 Q. Okay. On that same page, third paragraph, you make</p> <p>22 reference to BDM rural water system. In response to</p> <p>23 Mr. Koenecke's question you said that you use it in your house?</p> <p>24 A. Yes.</p> <p>25 Q. Is the supply adequate for other uses?</p>

<p style="text-align: right;">1180</p> <p>1 A. Yes.</p> <p>2 Q. And you stated when he asked you the question about whether</p> <p>3 you use it at the feedlot you said you use wells.</p> <p>4 Would the BDM water system be able to meet your water needs</p> <p>5 at the feedlot?</p> <p>6 A. Yes.</p> <p>7 Q. Is there a cost associated with that?</p> <p>8 A. Yes.</p> <p>9 Q. The water source you use now are shallow wells? Is that</p> <p>10 what you stated?</p> <p>11 A. Yeah. 15 to 20 feet deep.</p> <p>12 Q. And you had eight of them?</p> <p>13 A. Yes.</p> <p>14 Q. Do the shallow wells water your entire feedlot?</p> <p>15 A. Yes, they do.</p> <p>16 Q. Have you ever checked with BDM to see what that would cost</p> <p>17 you if you were forced to buy all your water from BDM?</p> <p>18 A. No, I haven't, but it would be, I mean, a substantial</p> <p>19 amount. It's \$50 a month just for my house and if you were to</p> <p>20 put a thousand head of cattle on there, I'm assuming it would be</p> <p>21 a lot.</p> <p>22 Q. Do you happen to know -- once you've paid the minimum bill,</p> <p>23 do you happen to know what the cost per thousand is on BDM?</p> <p>24 A. I do not.</p> <p>25 Q. Okay. If you know, can you state how many head of</p>	<p style="text-align: right;">1182</p> <p>1 this summer when we had the 7-to 9-inch rains there for quite a</p> <p>2 while it's just like the ground gave way under there. The whole</p> <p>3 line actually caved in.</p> <p>4 COMMISSIONER KOLBECK: You put that line in?</p> <p>5 THE WITNESS: Yes.</p> <p>6 COMMISSIONER KOLBECK: Have you had any trouble with</p> <p>7 your I guess I'll call them professionally installed -- I don't</p> <p>8 mean as a derogatory comment to you but your BDM lines?</p> <p>9 THE WITNESS: Yes. We've had them cave in too.</p> <p>10 COMMISSIONER KOLBECK: It's more of --</p> <p>11 THE WITNESS: Soil issue.</p> <p>12 COMMISSIONER KOLBECK: Not isolated incident? That's</p> <p>13 what I needed to know. Thanks.</p> <p>14 COMMISSIONER HANSON: Thank you very much for stopping</p> <p>15 by and for the testimony and information you've provided to us.</p> <p>16 Could you give me an idea -- I'm not sure if you're</p> <p>17 aware of the mile markers that we have used for locating</p> <p>18 properties on a pipeline. And you may not have an exhibit close</p> <p>19 to you there, but can you give us some idea what the location is</p> <p>20 of your property?</p> <p>21 You'll find an MP and then a number once you find your</p> <p>22 property.</p> <p>23 COMMISSIONER KOLBECK: Is it the same as -- it's the</p> <p>24 same as your mom's?</p> <p>25 THE WITNESS: Correct. That the pipeline actually</p>
<p style="text-align: right;">1181</p> <p>1 livestock do you have on your feedlot or some general number of</p> <p>2 how many cattle?</p> <p>3 A. About 700.</p> <p>4 MR. HOHN: Thank you.</p> <p>5 MR. SMITH: Staff, questions of Mr. Anderson?</p> <p>6 MS. SEMMLER: None. Thank you.</p> <p>7 MR. SMITH: Commissioners, do you have questions of</p> <p>8 Mr. Anderson?</p> <p>9 CHAIRMAN JOHNSON: Scott, thanks for coming very much.</p> <p>10 Just from your general knowledge do you know if there are any</p> <p>11 crude oil pipelines in Minnesota or Canada?</p> <p>12 THE WITNESS: I know there's one in Minnesota.</p> <p>13 CHAIRMAN JOHNSON: Okay. Do you have any knowledge of</p> <p>14 whether or not that ground over those pipelines freezes?</p> <p>15 THE WITNESS: I do not.</p> <p>16 CHAIRMAN JOHNSON: Okay. Thanks very much.</p> <p>17 MR. SMITH: Commissioner Kolbeck.</p> <p>18 COMMISSIONER KOLBECK: Yeah. I just have one</p> <p>19 clarifying. I noted your concerns down here. Could you</p> <p>20 explain -- I think your concern is years down the road with the</p> <p>21 trench; is that correct?</p> <p>22 Could you explain what happened in your mom's yard</p> <p>23 again?</p> <p>24 THE WITNESS: Oh, yeah. I put a water line in that</p> <p>25 goes through my yard where I live actually seven years ago, and</p>	<p style="text-align: right;">1183</p> <p>1 goes through, yes.</p> <p>2 COMMISSIONER KOLBECK: Okay. Would that be -- maybe I</p> <p>3 can help you out here. Page 1, last mile post is 238.</p> <p>4 THE WITNESS: Uh-huh.</p> <p>5 COMMISSIONER KOLBECK: And then on page 2, the top</p> <p>6 mile post is 239. Is that your area?</p> <p>7 THE WITNESS: Yes.</p> <p>8 COMMISSIONER KOLBECK: Okay.</p> <p>9 COMMISSIONER HANSON: Thank you. And thank you,</p> <p>10 Mr. Kolbeck. Thank you, Mr. Smith.</p> <p>11 MR. SMITH: Any additional Commissioner questions?</p> <p>12 CHAIRMAN JOHNSON: No, sir.</p> <p>13 MR. SMITH: Did you have any last things to say in</p> <p>14 response to any of the questions that have been asked?</p> <p>15 THE WITNESS: No.</p> <p>16 MR. SMITH: Okay. Then you're excused, Mr. Anderson,</p> <p>17 and thank you very much.</p> <p>18 THE WITNESS: Thank you.</p> <p>19 (The witness is excused)</p> <p>20 MR. SMITH: Appreciate it. I think with that then,</p> <p>21 we're back to your case, Mr. Rasmussen.</p> <p>22 MR. RASMUSSEN: We'll call Kelli Buscher.</p> <p>23 (The witness is sworn by the court reporter)</p> <p>24</p> <p>25</p>

<p style="text-align: right;">1184</p> <p>1 <u>DIRECT EXAMINATION</u></p> <p>2 BY MS. GIEDD:</p> <p>3 Q. Would you state your name for the record.</p> <p>4 A. Kelli Buscher.</p> <p>5 Q. And what's your educational background?</p> <p>6 A. I have a bachelor of science degree in civil engineering.</p> <p>7 Q. Are you a registered professional engineer?</p> <p>8 A. I am.</p> <p>9 Q. Whom are you employed by?</p> <p>10 A. The South Dakota Department of Environment and Natural</p> <p>11 Resources.</p> <p>12 Q. And how long have you been employed for the Department?</p> <p>13 A. I've been with the Department full time for 16 years. I</p> <p>14 also spent two summers in college.</p> <p>15 Q. What program do you work for currently?</p> <p>16 A. I work for the Surface Water Quality Program.</p> <p>17 Q. And what do you do for that program?</p> <p>18 A. I'm a natural resources engineering director for the</p> <p>19 Surface Water Quality Program. I'm responsible for directing</p> <p>20 the team that administers the Surface Water Discharge Permitting</p> <p>21 Program in the state.</p> <p>22 Q. Would you describe the Surface Water Quality Program,</p> <p>23 please.</p> <p>24 A. The Surface Water Quality Program is responsible as the</p> <p>25 name implies for protecting surface water in state. In</p>	<p style="text-align: right;">1186</p> <p>1 those would be?</p> <p>2 A. We have standards in the state for total suspended solids.</p> <p>3 It varies based on the use. Anything from about 90 milligrams</p> <p>4 per liter or parts per million up to as high as 165 parts per</p> <p>5 million.</p> <p>6 Q. Are there standards that are imposed on petroleum</p> <p>7 hydrocarbons in surface water?</p> <p>8 A. Yes, there are.</p> <p>9 Q. And what are those standards?</p> <p>10 A. Again, it depends on the use. Most of the water bodies in</p> <p>11 the state have a numeric criteria for oil and grease as</p> <p>12 10 milligrams per liter. We also have a parameter for total</p> <p>13 petroleum hydrocarbons of 10 milligrams per liter. If something</p> <p>14 is classified for domestic water supply, meaning drinking water</p> <p>15 use, then we have a standard of 1 milligram per liter.</p> <p>16 Q. You indicated that point sources are required to get</p> <p>17 permits to discharge into waters of the state?</p> <p>18 A. That's correct.</p> <p>19 Q. First let me start out with what are waters of the state?</p> <p>20 A. Our definition of waters of the state is very broad.</p> <p>21 Basically it's listed in State Statute. I don't have that in</p> <p>22 front of me, but to summarize, it's everything, as I mentioned,</p> <p>23 from wetlands, dry draws, tributaries, all the way up to the</p> <p>24 Missouri River or large impoundments.</p> <p>25 Q. And what kind of point sources are regulated?</p>
<p style="text-align: right;">1185</p> <p>1 particular we issue permits to point sources that discharge</p> <p>2 pollutants into the state, into waters of the state. We also</p> <p>3 are responsible for setting water quality standards for water</p> <p>4 bodies in the state, making sure that those water resources are</p> <p>5 protected.</p> <p>6 Q. And how do you establish water quality standards?</p> <p>7 A. EPA, the Federal Environmental Protection Agency, does a</p> <p>8 lot of the science behind it and provides us with information</p> <p>9 that helps us determine what kind of water quality parameters we</p> <p>10 have to set.</p> <p>11 The State is responsible for determining the different uses</p> <p>12 of water bodies in the state. Basically not all water bodies</p> <p>13 are created equal. We have wetlands. We have dry draws. We</p> <p>14 have resources like the Missouri River. And all of those get a</p> <p>15 different level of protection.</p> <p>16 Q. And after you establish the uses of surface water bodies,</p> <p>17 are there standards of quality for those waters then?</p> <p>18 A. Yes. Then we have specific water quality parameters that</p> <p>19 apply to each of those uses. We also have a number of we call</p> <p>20 them narrative standards. We have both numeric and narrative.</p> <p>21 Narrative is something like no toxics in toxic amounts as</p> <p>22 opposed to a specific number on a parameter.</p> <p>23 Q. And some of your parameters are actually numbers?</p> <p>24 A. Yes.</p> <p>25 Q. Can you just give us an idea of what kind of parameters</p>	<p style="text-align: right;">1187</p> <p>1 A. The program that I'm responsible for is the municipal and</p> <p>2 industrial sources. For example, if a city has a waste water</p> <p>3 treatment facility if they're going to release any water into</p> <p>4 waters of the state, they have to have a permit from us.</p> <p>5 A couple of local examples would be the City of Pierre and</p> <p>6 the City of Ft. Pierre. They have very different systems, but</p> <p>7 they both have permits under our program for releasing any water</p> <p>8 from those treatment systems.</p> <p>9 We also regulate industrial sources. For example, John</p> <p>10 Morrell, the Gold Mines out in the Black Hills. Sources like</p> <p>11 that also have permits from us to discharge into waters of the</p> <p>12 state.</p> <p>13 Q. And do these permits establish limits for the discharges?</p> <p>14 A. Yes. We put specific limits allowing -- if they meet those</p> <p>15 limits, they're allowed to discharge into waters of the state.</p> <p>16 Those limits are developed based on the criteria that I</p> <p>17 mentioned a few minutes ago.</p> <p>18 We also look at federal levels that EPA has set on specific</p> <p>19 types of discharges. We have to look at both sources when we're</p> <p>20 developing those limits.</p> <p>21 Q. And if you're not a point source, are you allowed to</p> <p>22 discharge into waters of the state?</p> <p>23 A. I can't say you're not. EPA basically puts people into</p> <p>24 classifications, nonpoint source and point source. We regulate</p> <p>25 the point sources. They have to have a permit from us. A</p>

<p style="text-align: right;">1188</p> <p>1 nonpoint source would be something like agricultural runoff.</p> <p>2 That's not required to have a permit.</p> <p>3 Q. If there's a spill or a leak that occurs into waters of the</p> <p>4 state, is that considered a discharge?</p> <p>5 A. It would be -- I guess we look at it more as a spill,</p> <p>6 though, as an unintentional or accidental release.</p> <p>7 Q. So you wouldn't go back and require a permit for a spill or</p> <p>8 a release?</p> <p>9 A. No.</p> <p>10 Q. Are you generally familiar with TransCanada's proposed</p> <p>11 operation?</p> <p>12 A. Very preliminarily.</p> <p>13 Q. Did you have some staff assigned to work on this matter?</p> <p>14 A. Yes. I've had some people attend meetings that TransCanada</p> <p>15 has had with our Department. You know, and they got the</p> <p>16 overview of the project. I've also received some -- I think it</p> <p>17 must have been on a mailing list. I received some general</p> <p>18 mailings that they sent out.</p> <p>19 Q. Did your program ever make a determination about whether a</p> <p>20 Surface Water Discharge Permit would be required of TransCanada</p> <p>21 for any portion or for its proposed operation?</p> <p>22 A. Yes, we did.</p> <p>23 Q. And what determination did you make?</p> <p>24 A. Based on the information that had been presented to us, in</p> <p>25 addition to I guess based on our general understanding of</p>	<p style="text-align: right;">1190</p> <p>1 point. We process their application and give them coverage</p> <p>2 under that permit. It's something we can turn around in a day</p> <p>3 or two. So we usually tell people to get the application in</p> <p>4 before they start construction. But they don't need to have the</p> <p>5 permit until they'd have a discharge.</p> <p>6 Q. Is there also a Storm Water Construction Permit that you</p> <p>7 handle through your office?</p> <p>8 A. Yes, there is.</p> <p>9 Q. And is that one of the permits that you looked at to</p> <p>10 determine whether or not it would be required?</p> <p>11 A. We did look at that. And actually they will be exempt from</p> <p>12 having to get coverage under that permit.</p> <p>13 Q. And that exemption is established where?</p> <p>14 A. That was established by Congress. In 2005 Congress passed</p> <p>15 the Energy Policy Act. Under this Act they clarified some</p> <p>16 requirements under an earlier version of the Federal Clean Water</p> <p>17 Act. And that provision of the 2005 Act said that any energy</p> <p>18 transmission lines, the construction of energy transmission</p> <p>19 lines, is exempt from the federal permitting program.</p> <p>20 I didn't speak to that earlier, but there is the program</p> <p>21 that we implement, has actually been turned over to us by the</p> <p>22 Federal Government. At the federal level it was authorized by</p> <p>23 the Federal Clean Water Act. And EPA originally issued permits</p> <p>24 under there. They've turned the program over to the State.</p> <p>25 Now in that 2005 Act Congress specifically said that we</p>
<p style="text-align: right;">1189</p> <p>1 pipeline construction, we told them that they would need to have</p> <p>2 a permit if they discharged in the water related to construction</p> <p>3 dewatering.</p> <p>4 I was here when Jim Goodman testified earlier this morning,</p> <p>5 and he referred to that. There's a couple of different permits</p> <p>6 you'd have to have if you were pumping any water out of a trench</p> <p>7 or dewatering that construction site. He referred to the water</p> <p>8 rights permits.</p> <p>9 We also have a permit if they're going to discharge that</p> <p>10 water into waters of the state. So we told them in that case if</p> <p>11 they were going to have that kind of discharge, they would have</p> <p>12 to have a permit from us.</p> <p>13 We also told them -- it's very common with pipeline</p> <p>14 construction that you have to test the integrity of the line.</p> <p>15 Water is usually used to do that. If they use that water and</p> <p>16 then need to discharge that, they would also need to have a</p> <p>17 permit for that discharge.</p> <p>18 Q. And when do you normally get applications for those kind of</p> <p>19 permits?</p> <p>20 A. Shortly before the construction starts is typically when we</p> <p>21 see them. We have a general permit, and in this case or these</p> <p>22 types of discharges the permit's already been issued. The</p> <p>23 limits, the requirements, have all been set and are established.</p> <p>24 Then people are allowed to request to be covered under that</p> <p>25 permit. And it's a paperwork exercise on our part then at that</p>	<p style="text-align: right;">1191</p> <p>1 cannot issue permits under the authorities of the Clean Water</p> <p>2 Act, either state or EPA.</p> <p>3 Q. And that would be for the Storm Water Discharge Permit?</p> <p>4 A. For the Storm Water Discharge Permit for energy</p> <p>5 transmission lines.</p> <p>6 Q. Not for the previous dewatering permit you talked about?</p> <p>7 A. No. That would be a separate permit, and they're still</p> <p>8 required to have that one.</p> <p>9 MS. GIEDD: Okay. I have nothing further.</p> <p>10 <u>DIRECT EXAMINATION</u></p> <p>11 <u>BY MR. RASMUSSEN:</u></p> <p>12 Q. You mentioned some meetings that were held. What was the</p> <p>13 subject matter or purpose of those meetings?</p> <p>14 A. I was not in attendance at those meetings.</p> <p>15 Q. Do you know what was discussed at those meetings or why</p> <p>16 were they called?</p> <p>17 A. I understand they were called to discuss the project, but</p> <p>18 beyond that I wasn't there to discuss the details.</p> <p>19 Q. I was a little unclear on the discharge permit that would</p> <p>20 be needed when they do the hydrostatic testing of the line.</p> <p>21 What has to be done to obtain that permit?</p> <p>22 A. That's a general permit. We have a short application form</p> <p>23 that would need to be filled out and submitted to the</p> <p>24 Department. Then we write up the cover page for the permit and</p> <p>25 send out a letter.</p>

<p style="text-align: right;">1192</p> <p>1 Q. So that's the paperwork --</p> <p>2 A. That's the paperwork that we have to do.</p> <p>3 Q. So your office doesn't really do any particular evaluation</p> <p>4 or do any work necessarily other than fill out the paperwork?</p> <p>5 A. The initial work on the permit was done when we issued the</p> <p>6 general permit. We looked at what levels could be discharged</p> <p>7 safely into any water in the state. So we established those</p> <p>8 levels, and that has to be reevaluated every five years.</p> <p>9 When someone submits an application we determine if they're</p> <p>10 eligible to be covered under that permit. But then we write the</p> <p>11 information to them on how they comply with that permit.</p> <p>12 Q. So the general permit applies to anyone that wants to</p> <p>13 discharge water in a situation like this?</p> <p>14 A. In a temporary discharge situation, yes. And hydrostatic</p> <p>15 testing and construction dewatering are two very common types of</p> <p>16 discharges that would be covered by this permit.</p> <p>17 MR. RASMUSSEN: Thank you. I don't have anything</p> <p>18 else.</p> <p>19 MR. SMITH: Mr. Hohn, do you have questions?</p> <p>20 MR. HOHN: Yes.</p> <p>21 <u>CROSS-EXAMINATION</u></p> <p>22 <u>BY MR. HOHN:</u></p> <p>23 Q. On the Storm Water Discharge Permit did I hear you</p> <p>24 correctly, TransCanada would be exempted?</p> <p>25 A. That's correct. They're exempt from the Construction Storm</p>	<p style="text-align: right;">1194</p> <p>1 pipe?</p> <p>2 A. I believe that's required on the application, yes.</p> <p>3 Q. And would your office or another office in the Department</p> <p>4 of Environment and Natural Resources issue the withdrawal</p> <p>5 permit?</p> <p>6 A. Someone else in our office would, yes, based on the</p> <p>7 information in that application. We have developed a form that</p> <p>8 is trying to streamline the process. It covers both the</p> <p>9 appropriation of water, which Jim Goodman spoke about, and the</p> <p>10 discharge of the water that I mentioned.</p> <p>11 Q. And on that withdrawal is there any sampling of the water</p> <p>12 used to fill the line before it's placed in the line for</p> <p>13 hydrostatic testing as far as you know?</p> <p>14 A. You're asking if there's any sampling before it's placed in</p> <p>15 the pipe?</p> <p>16 Q. Is the water that's placed in the pipe for testing sampled</p> <p>17 when it's placed in the line for testing?</p> <p>18 A. I guess I couldn't speak to what the Water Rights Program</p> <p>19 would require. We wouldn't require testing before it was placed</p> <p>20 in the line.</p> <p>21 Q. When the -- at the point of discharge, wherever they -- and</p> <p>22 there could be -- is there one discharge point, or could there</p> <p>23 be a number of discharge points?</p> <p>24 A. In this particular case I would anticipate the potential</p> <p>25 for a number of discharge points.</p>
<p style="text-align: right;">1193</p> <p>1 Water Permit.</p> <p>2 Q. Are storm water permits required for state highway</p> <p>3 projects?</p> <p>4 A. Yes.</p> <p>5 Q. Are they required for rural water systems?</p> <p>6 A. Yes.</p> <p>7 MR. KOENECKE: I'm going to object on relevance. We</p> <p>8 heard they're not applicable.</p> <p>9 MR. SMITH: Sustained. She's testified it's a matter</p> <p>10 of federal law.</p> <p>11 Q. Well, let me ask you, do you have any -- are you aware of</p> <p>12 why they're exempted, the specifics as to why a steel oil pipe</p> <p>13 would be exempt and a plastic rural water would not?</p> <p>14 MR. KOENECKE: I'll object on relevance. It just</p> <p>15 doesn't matter.</p> <p>16 MR. SMITH: I'm going to sustain that. It either is</p> <p>17 exempt or it's not.</p> <p>18 MR. HOHN: Okay. Thank you.</p> <p>19 MR. SMITH: We're not going to be able to amend the</p> <p>20 law here.</p> <p>21 Q. Regarding the water use for hydrostatic testing, that's</p> <p>22 done with a lot of pipelines; correct?</p> <p>23 A. Yes.</p> <p>24 Q. Would you know based on the discharge permit that will be</p> <p>25 filed, does it show you where the water came from to fill the</p>	<p style="text-align: right;">1195</p> <p>1 Q. Okay. Thank you. At the point of discharge would your</p> <p>2 office monitor the discharged water and take samples?</p> <p>3 A. We would not take samples. We would require the permittee,</p> <p>4 in this case TransCanada.</p> <p>5 Q. And would they need to send those samples to a certified</p> <p>6 lab, or how would they go about testing it?</p> <p>7 A. We don't have a certification program for labs on the waste</p> <p>8 water side, as I know you're aware of on the drinking water</p> <p>9 side. They would be required to use approved methods. So as</p> <p>10 long as either the lab or if they personally had the capability</p> <p>11 of doing the test, they have to use the required methods for</p> <p>12 analyzing it.</p> <p>13 Q. With regard to the discharge location, the permit, I</p> <p>14 assume, would state where the water would be discharged?</p> <p>15 A. In a pipeline situation, as I mentioned, there's a</p> <p>16 potential for a number of different discharge locations. What</p> <p>17 we do is develop requirements based on the most restrictive</p> <p>18 standard that would apply along the entire course.</p> <p>19 Q. And so if the water were going to be discharged into a</p> <p>20 creek at one location and open ground in another, would the</p> <p>21 permit vary because of those?</p> <p>22 A. If it was covered under one permit, no. In some cases if</p> <p>23 there's going to be substantial differences, I think we've</p> <p>24 allowed people to permit segments of the pipeline. But if it</p> <p>25 was all covered under one permit, it would be based on the most</p>

<p>1 restrictive requirements.</p> <p>2 Q. And would the permit require a settling pond at the point</p> <p>3 of discharge, or is that up to the Applicant to propose to you</p> <p>4 how they'll discharge?</p> <p>5 A. The permittee would have to meet the limits that we set.</p> <p>6 How they go about meeting that is their responsibility.</p> <p>7 Q. Would you -- would you know or be able to estimate what</p> <p>8 volume of water would be needed to fill a 30-inch pipe</p> <p>9 220 miles?</p> <p>10 A. Not without my calculator.</p> <p>11 Q. Would it be safe to say it would be a lot of water?</p> <p>12 A. Seems like it would be a lot of water.</p> <p>13 MR. HOHN: Thank you.</p> <p>14 MR. SMITH: Mr. Koenecke, is it you?</p> <p>15 MR. KOENECKE: It is. Thank you.</p> <p>16 <u>CROSS-EXAMINATION</u></p> <p>17 BY MR. KOENECKE:</p> <p>18 Q. Good afternoon, Ms. Buscher. How are you today?</p> <p>19 A. I'm fine. Thank you.</p> <p>20 Q. I have one line of questioning. I understood your</p> <p>21 testimony to be that Keystone would require a Surface Water</p> <p>22 Discharge Permit for construction. Am I right?</p> <p>23 A. Construction, dewatering.</p> <p>24 Q. Correct. Do you have any knowledge of whether there's a</p> <p>25 Surface Water Discharge Permit required from operations of the</p>	<p>1196</p> <p>1 A. Mark Mayer.</p> <p>2 Q. And what is your educational background, Mark?</p> <p>3 A. I have a Bachelor of Science in civil engineering from</p> <p>4 South Dakota State University, and a Master's of Science in</p> <p>5 civil engineering from the University of Kansas.</p> <p>6 Q. Are you a registered professional engineer?</p> <p>7 A. In the State of South Dakota, yes.</p> <p>8 Q. And you're employed by the Department of Environment and</p> <p>9 Natural Resources?</p> <p>10 A. Yes.</p> <p>11 Q. And what do you do?</p> <p>12 A. I'm the administrator of the Drinking Water Program.</p> <p>13 Q. And how long have you been doing that?</p> <p>14 A. A little over two years.</p> <p>15 Q. And did you work for the Department before that?</p> <p>16 A. Before that I was the engineering director for the Drinking</p> <p>17 Water Program since May 2003.</p> <p>18 Q. And would you describe the Drinking Water Program, please.</p> <p>19 A. The Drinking Water Program is the regulatory program within</p> <p>20 the Department that regulates public drinking water systems to</p> <p>21 ensure that they're complying with the Safe Drinking Water Act.</p> <p>22 Q. And what is the Safe Drinking Water Act?</p> <p>23 A. The Safe Drinking Water Act is a -- federal regulations</p> <p>24 that the State has primacy of, meaning that they have been</p> <p>25 delegated the requirements to implement that. That covers the</p>
<p>1197</p> <p>1 pipeline?</p> <p>2 A. There would be no permit required for that.</p> <p>3 MR. KOENECKE: Very good. Thank you.</p> <p>4 MR. SMITH: Staff, do you have any questions?</p> <p>5 MS. SEMMLER: No questions. Thank you.</p> <p>6 MR. SMITH: Commissioners, do you have questions of</p> <p>7 Ms. Buscher? None?</p> <p>8 Commissioner Kolbeck.</p> <p>9 COMMISSIONER KOLBECK: Do you know usually when</p> <p>10 they're testing these pipes hydraulically if they're testing in</p> <p>11 segments, or is it from end to end?</p> <p>12 THE WITNESS: I'd be speculating.</p> <p>13 COMMISSIONER KOLBECK: Okay. Thank you.</p> <p>14 MR. SMITH: Ms. Giedd, do you have any --</p> <p>15 MS. GIEDD: I do not.</p> <p>16 MR. SMITH: Mr. Rasmussen, any redirect?</p> <p>17 MR. RASMUSSEN: Nothing further.</p> <p>18 MR. SMITH: You're excused, Ms. Buscher. Thank you</p> <p>19 very much. Next witness.</p> <p>20 (The witness is excused)</p> <p>21 MR. RASMUSSEN: Mark Mayer.</p> <p>22 (The witness is sworn by the court reporter)</p> <p>23 <u>DIRECT EXAMINATION</u></p> <p>24 BY MS. GIEDD:</p> <p>25 Q. State your name for the record.</p>	<p>1199</p> <p>1 water quality standards necessary to deliver safe drinking water</p> <p>2 to the public.</p> <p>3 Q. And what are the public water systems that are regulated by</p> <p>4 these requirements?</p> <p>5 A. Public water system is a water system that serves either</p> <p>6 15 connections or an average of 25 people more than 60 days of</p> <p>7 the year. The public water system is broken down into three</p> <p>8 separate categories. There's a community water system, which is</p> <p>9 the -- what we would typically think of as a town or a rural</p> <p>10 water system. And that's a system that serves 25 or more</p> <p>11 year-round customers or 15 service connections.</p> <p>12 The other two categories are noncommunity systems. There's</p> <p>13 a nontransient noncommunity system, which is a water system such</p> <p>14 as a school or a factory. They serve water to the same</p> <p>15 25 people for more than six months of the year. And then</p> <p>16 there's also a subset called a transient noncommunity system,</p> <p>17 and that's more like a cafe or a rest stop. And that's 25 or</p> <p>18 more people for 60 days of the year, but they don't have to be</p> <p>19 the same people.</p> <p>20 Q. Do you regulate rural water systems?</p> <p>21 A. Yes. Rural water systems would be considered a community</p> <p>22 water system.</p> <p>23 Q. And are there certain parameters or constituents in the</p> <p>24 water that you're regulating?</p> <p>25 A. Yeah. The Safe Drinking Water Act established chemical and</p>

<p style="text-align: right;">1200</p> <p>1 bacteriological standards that are necessary to meet, and those</p> <p>2 are health-based standards.</p> <p>3 Q. Were those established by EPA?</p> <p>4 A. Those are established by EPA, yes.</p> <p>5 Q. And do you require public water systems to test for these</p> <p>6 parameters?</p> <p>7 A. Yes. Public water systems are required to test, depending</p> <p>8 on their classification. You know, a transient versus a</p> <p>9 noncommunity versus a community water system have different</p> <p>10 testing requirements. The community water systems will have the</p> <p>11 most extensive amount of testing.</p> <p>12 Q. In addition, do you provide any engineering functions with</p> <p>13 regard to public water systems?</p> <p>14 A. The Drinking Water Program is also responsible for</p> <p>15 reviewing plans and specifications of drinking water system</p> <p>16 projects that can consist of distribution or treatment.</p> <p>17 The Drinking Water Program specifically that I work with</p> <p>18 and for, we only review plans and specifications for drinking</p> <p>19 water system projects that do not involve state or federal</p> <p>20 funding.</p> <p>21 Q. Would you have any reason to have reviewed the plans and</p> <p>22 specifications for TransCanada's proposed pipeline?</p> <p>23 A. No, I would not.</p> <p>24 Q. It does not fall within your authority or jurisdiction?</p> <p>25 A. No, it does not.</p>	<p style="text-align: right;">1202</p> <p>1 they would have to get additional samples. They probably</p> <p>2 sample, depending on their frequency but probably annually and</p> <p>3 then if they were to have a detection, then they would have to</p> <p>4 sample quarterly to get a running annual or an annual average of</p> <p>5 that level.</p> <p>6 And if they exceeded those maximum contaminant levels, they</p> <p>7 would have a violation, and then we would be working with that</p> <p>8 water system to address that violation.</p> <p>9 Q. And what do you do to -- when you say work with them, what</p> <p>10 would happen?</p> <p>11 A. Well, they would be required to notify the public that</p> <p>12 they've had the violation, and then they would be working on a</p> <p>13 compliance strategy to lower the levels below the maximum</p> <p>14 contaminant level if it were being exceeded.</p> <p>15 MR. RASMUSSEN: Okay. Thank you. That's all I have.</p> <p>16 MR. SMITH: Mr. Hohn, do you have questions?</p> <p>17 MR. HOHN: Yes.</p> <p>18 <u>CROSS-EXAMINATION</u></p> <p>19 <u>BY MR. HOHN:</u></p> <p>20 Q. Mr. Mayer, are you familiar with the term Consumer</p> <p>21 Confidence Report?</p> <p>22 A. Yes, I am.</p> <p>23 Q. And could you explain what that report is and why it's</p> <p>24 required or what it requires?</p> <p>25 A. The Consumer Confidence Report is a requirement of the Safe</p>
<p style="text-align: right;">1201</p> <p>1 MS. GIEDD: Thank you.</p> <p>2 <u>DIRECT EXAMINATION</u></p> <p>3 <u>BY MR. RASMUSSEN:</u></p> <p>4 Q. You mentioned the parameters for a community water system.</p> <p>5 Do you know what those are for what we refer to as BTEX?</p> <p>6 A. I believe BTEX, those compounds would be covered under the</p> <p>7 volatile organic chemicals classification, which there are</p> <p>8 numerous ones of those. But the benzenes and toluenes and</p> <p>9 xylenes, those kind of things are contaminants that are tested</p> <p>10 under the volatile organic chemical rule.</p> <p>11 Q. Do you know what the level is for, for instance, benzene?</p> <p>12 A. For benzene I do have the -- I do have the Part 141 of the</p> <p>13 Federal Regulations here, and I did anticipate that question.</p> <p>14 Q. Very good.</p> <p>15 A. The level for benzene would be .005 milligrams per liter,</p> <p>16 which is the equivalent of five parts per billion.</p> <p>17 Q. What about toluene?</p> <p>18 A. Toluene, the MCL or maximum contaminant level is</p> <p>19 1 milligram per liter.</p> <p>20 Q. And what about whatever else makes up BTEX? Do you have</p> <p>21 that too?</p> <p>22 A. Xylenes are 10 milligrams per liter.</p> <p>23 Q. Okay. And if a drinking water system was to exceed any of</p> <p>24 those levels, what happens?</p> <p>25 A. If the drinking water system exceeds those levels, then</p>	<p style="text-align: right;">1203</p> <p>1 Drinking Water Act that each community water system must issue a</p> <p>2 annual water quality report to their consumers. The report in</p> <p>3 South Dakota, our Department generally prepares a vast majority</p> <p>4 of that report and provides it to the system, and then they can</p> <p>5 add to it for public relations measures or if they need to</p> <p>6 specifically address a violation that they may have had in the</p> <p>7 prior year, they can have an opportunity or they need to take</p> <p>8 that opportunity to inform their consumers what they've done to</p> <p>9 address that violation.</p> <p>10 Q. Are you aware of any community or public water system in</p> <p>11 South Dakota that has had to report a benzene exceeding the</p> <p>12 maximum contaminant level?</p> <p>13 A. I am not aware of that.</p> <p>14 Q. Same question with regard to toluene. Are you aware of</p> <p>15 any?</p> <p>16 A. No.</p> <p>17 Q. And xylene?</p> <p>18 A. No.</p> <p>19 Q. You mentioned when Mr. Rasmussen asked you about sampling</p> <p>20 you said that at least annually. Are there some things that are</p> <p>21 sampled more on than annually?</p> <p>22 A. I'm not exactly the right person to ask specifics on the</p> <p>23 volatile organic chemicals rule as far as sampling frequency.</p> <p>24 But the -- within the parameters that are sampled for, there are</p> <p>25 different frequencies. Certainly bacteriological sampling is</p>

<p style="text-align: right;">1204</p> <p>1 done typically monthly. Some sampling is done annually. Some</p> <p>2 is done triennially, some quarterly.</p> <p>3 Q. The sampling that's required for the Consumer Confidence</p> <p>4 Report, the data that goes into that report, how many -- do you</p> <p>5 know how many items are actually sampled for or required to be</p> <p>6 sampled currently in South Dakota?</p> <p>7 A. I don't have that exact number off the top of my head.</p> <p>8 It's a lot -- it's quite a list.</p> <p>9 Q. Is it in the 80 to 90 range, would you think?</p> <p>10 A. Yes.</p> <p>11 Q. 80 to 90 different tests?</p> <p>12 A. Yes.</p> <p>13 Q. The testing for the petroleum products and benzene, toluene</p> <p>14 byproducts, are those expensive tests to run as far as you know?</p> <p>15 A. They are -- well, it depends on what you consider</p> <p>16 expensive, I guess. I don't know what the exact number is off</p> <p>17 the top of my head, but it's not cost prohibitive, I don't</p> <p>18 believe.</p> <p>19 Q. If a rural water system crossed by this pipeline were to</p> <p>20 get a positive sample that they couldn't account for, couldn't</p> <p>21 explain where it came from, your office would then try to help</p> <p>22 them deal with that issue?</p> <p>23 A. If we had any water system, whether it was a rural water</p> <p>24 system or any public water system that reported, you know, a</p> <p>25 level of those chemicals, we would be working with them to help</p>	<p style="text-align: right;">1206</p> <p>1 they need to be concerned about but they need to be aware of it,</p> <p>2 you know, that kind of --</p> <p>3 Like, for instance, a nitrate. If it's an infant or a</p> <p>4 pregnant woman or whatever, those chemicals -- that population</p> <p>5 would be more concerned than a healthy adult.</p> <p>6 Q. I gather from your earlier response that your office has</p> <p>7 never had a benzene, toluene, or xylene sample that you had to</p> <p>8 deal with. But if you encountered that, is there -- what are</p> <p>9 the remedies that a consumer could take to deal with water that</p> <p>10 had levels?</p> <p>11 A. I'm not aware of those. I'm not saying that we have never</p> <p>12 had one. I'm just personally not aware of that.</p> <p>13 In terms of what remedies -- are you asking me what</p> <p>14 remedies a water system might take if they had those levels or</p> <p>15 those constituents found in their source or what a consumer</p> <p>16 would do?</p> <p>17 Q. Essentially I'm asking both, I guess. What could the</p> <p>18 system do, and what could a consumer do?</p> <p>19 A. Well, the system would either need to look into alternative</p> <p>20 sources or blending of that water to -- with other water that</p> <p>21 has less -- or an acceptable level so that the blended water</p> <p>22 would be below the standard. Or perhaps a treatment system</p> <p>23 could be installed that would reduce that.</p> <p>24 As far as what the consumer themselves would do, I'm not</p> <p>25 sure off the top of my head.</p>
<p style="text-align: right;">1205</p> <p>1 them try and figure that out.</p> <p>2 Q. And in the meantime, until the source was found and</p> <p>3 corrected, would the water system be required to continue to</p> <p>4 publish notice on a periodic basis?</p> <p>5 A. If they were in violation of the standard, they would, yes.</p> <p>6 Otherwise, the Consumer Confidence Report, that has a table in</p> <p>7 there that identifies any detections of any of the regulated</p> <p>8 contaminants over a period of five years. And that's presented</p> <p>9 to them annually.</p> <p>10 Q. Would it ever get -- would it ever get to a point where the</p> <p>11 water could not be used? Is there a level that is reached in</p> <p>12 any of these three elements, benzene, toluene, and xylene, where</p> <p>13 the water system might have to not provide water, drinking</p> <p>14 water?</p> <p>15 A. I don't know that -- the answer to that specific question.</p> <p>16 Q. The purpose of the notice to the public is so that the</p> <p>17 public can make a judgment. Is that the purpose?</p> <p>18 A. Yes. The public notice is designed to give the public --</p> <p>19 to allow the public an awareness of what contaminants have been</p> <p>20 detected in their water. And then there's required language</p> <p>21 that describes what the health-based effects of that particular</p> <p>22 detected contaminant are, and then it also would identify</p> <p>23 additional measures that they might need to take, whether</p> <p>24 it's -- if it's a bacteriological contaminant, that perhaps they</p> <p>25 need to boil the water or if it's -- if it isn't something that</p>	<p style="text-align: right;">1207</p> <p>1 Q. If a rural water system were to build a pipeline to provide</p> <p>2 water to consumers, before that could be built would their plans</p> <p>3 need to be reviewed and approved by your office or some office</p> <p>4 in the Department?</p> <p>5 A. Yes.</p> <p>6 Q. And the reason for that review is what?</p> <p>7 A. We're required to review the plans and specs of water and</p> <p>8 waste water system components to ensure that they are following</p> <p>9 the appropriate design standards for that type of construction.</p> <p>10 Q. And is there a safety component too that you're looking at</p> <p>11 when you review the plans?</p> <p>12 A. Well, the design standards typically have some level of</p> <p>13 safety inherent in them.</p> <p>14 Q. I realize you're involved with water projects and water</p> <p>15 systems. Can those projects be built before you've signed off</p> <p>16 on their plans?</p> <p>17 A. They're not supposed to be.</p> <p>18 Q. Let me ask another question. Are you aware of any rural</p> <p>19 water systems that have built a system without your approval?</p> <p>20 A. No.</p> <p>21 Q. Thank you. The last question I have for you is are you</p> <p>22 aware of any state agency that would have review approval for a</p> <p>23 petroleum or crude oil pipeline and would review the plans</p> <p>24 similar to what you review with a water system, review the plans</p> <p>25 before the pipeline is built in the state?</p>

<p style="text-align: right;">1208</p> <p>1 A. Any state agency?</p> <p>2 Q. Yes.</p> <p>3 A. I don't know.</p> <p>4 MR. HOHN: Thank you.</p> <p>5 MR. SMITH: Mr. Koenecke.</p> <p>6 <u>CROSS-EXAMINATION</u></p> <p>7 <u>BY MR. KOENECKE:</u></p> <p>8 Q. Mr. Mayer, good afternoon. How are you. I represent</p> <p>9 TransCanada and the Keystone project in this proceeding, and</p> <p>10 I've got just a couple questions for you.</p> <p>11 Do you recall the last question of Mr. Hohn regarding a</p> <p>12 state agency reviewing plans before construction?</p> <p>13 A. Yes.</p> <p>14 Q. Is it your understanding that's what the PUC is doing in</p> <p>15 this proceeding?</p> <p>16 A. I've had very little involvement in this so I'm -- if the</p> <p>17 Application which I've never seen includes plans and</p> <p>18 specifications, then I guess that would be the case.</p> <p>19 Q. Thank you.</p> <p>20 A. But I don't know that for certain.</p> <p>21 Q. You mentioned I believe in your previous testimony water</p> <p>22 treatment plants?</p> <p>23 A. Yes.</p> <p>24 Q. And BTEX compounds?</p> <p>25 A. Yes.</p>	<p style="text-align: right;">1210</p> <p>1 Mr. Rasmussen?</p> <p>2 MS. GIEDD: Not by me.</p> <p>3 MR. RASMUSSEN: Nothing further.</p> <p>4 MR. SMITH: You're excused, Mr. Mayer. Thank you.</p> <p>5 (The witness is excused)</p> <p>6 MR. SMITH: Call your next witness.</p> <p>7 MR. RASMUSSEN: I think that takes care of the</p> <p>8 witnesses from the State that WEB subpoenaed, but I believe</p> <p>9 Mr. Walsh has been subpoenaed by TransCanada.</p> <p>10 MR. KOENECKE: Mr. Smith, I guess I talked to</p> <p>11 Ms. Giedd. I haven't talked to anybody else. But it seems</p> <p>12 appropriate to follow the same regime with these witnesses from</p> <p>13 DENR that we've been following.</p> <p>14 MR. SMITH: Is that okay?</p> <p>15 MS. GIEDD: Fine with me.</p> <p>16 MR. SMITH: Is that okay, Mr. Rasmussen?</p> <p>17 MR. RASMUSSEN: Oh, yeah. That's fine.</p> <p>18 MR. SMITH: Okay. Mr. Walsh, do you want to take the</p> <p>19 stand.</p> <p>20 (The witness is sworn by the court reporter)</p> <p>21 <u>DIRECT EXAMINATION</u></p> <p>22 <u>BY MS. GIEDD:</u></p> <p>23 Q. Would you state your name for the record, please.</p> <p>24 A. Yes. My name is Brian Walsh.</p> <p>25 Q. What's your educational background?</p>
<p style="text-align: right;">1209</p> <p>1 Q. And I'm trying to make sure I understand. You've had a</p> <p>2 short tenure in your current position. Am I right?</p> <p>3 A. Right.</p> <p>4 Q. Do the water treatment plants currently in place in</p> <p>5 South Dakota treat for BTEX compounds?</p> <p>6 A. They wouldn't necessarily treat for them unless there was a</p> <p>7 known -- you know, unless that was a known component in their</p> <p>8 source water.</p> <p>9 Q. And would your testimony be that those treatment plants</p> <p>10 could be -- existing could be modified to treat for BTEX</p> <p>11 compounds, or would it be that an additional treatment plant</p> <p>12 would have to be created or installed?</p> <p>13 A. Well, it's possible that they would need to have an</p> <p>14 additional treatment system added to their current treatment</p> <p>15 plant to address that.</p> <p>16 Q. I'm trying to understand. Was it your testimony that</p> <p>17 South Dakota's never had BTEX in the water or that it's not</p> <p>18 within your own personal knowledge?</p> <p>19 A. It is not within my own personal knowledge.</p> <p>20 MR. KOENECKE: I've got nothing further. Thank you.</p> <p>21 MR. SMITH: Staff?</p> <p>22 MS. SEMMLER: No questions. Thank you.</p> <p>23 MR. SMITH: Commissioner questions?</p> <p>24 CHAIRMAN JOHNSON: None. Thank you.</p> <p>25 MR. SMITH: Is there redirect by either the State or</p>	<p style="text-align: right;">1211</p> <p>1 A. I have a Bachelor or Science degree in environmental</p> <p>2 science with a co-major in biology from Creighton University in</p> <p>3 Omaha, Nebraska.</p> <p>4 Q. And who are you employed by?</p> <p>5 A. The South Dakota Department of Environment and Natural</p> <p>6 Resources.</p> <p>7 Q. And what program do you work in?</p> <p>8 A. The Ground Water Quality Program.</p> <p>9 Q. And what do you do for the Ground Water Quality Program?</p> <p>10 A. I am a member of the Superfund and federal facilities team.</p> <p>11 My tasks in that team are to provide State oversight on projects</p> <p>12 being conducted under the State with Circle Authority, and</p> <p>13 Circle has the federal law creating Superfund. Those projects</p> <p>14 include forest service action on federal land because they can</p> <p>15 tuck those cleanup actions under Circle Authority. An example</p> <p>16 would be like Riley Pass, the abandoned uranium mine.</p> <p>17 In addition to those activities which also include formerly</p> <p>18 used defense sites and other projects, I'm the project manager</p> <p>19 for the -- formerly what's Williams Pipeline, now Magellan</p> <p>20 Pipeline, 12th Street terminal in Sioux Falls and their</p> <p>21 Watertown terminal in Watertown, South Dakota. Also included in</p> <p>22 that group is the still Williams Pipeline abandoned terminal in</p> <p>23 Sioux Falls.</p> <p>24 And then in addition to that, I provide oversight State</p> <p>25 management on spill cases. We've had quite a bit of talk about</p>

<p style="text-align: right;">1212</p> <p>1 spill cases today of both petroleum and nonpetroleum and both</p> <p>2 responsible party lead, meaning the responsible parties cleaning</p> <p>3 it up, and State investigations and cleanup being conducted</p> <p>4 either with Regulated Substance Response Funds or the Last Trust</p> <p>5 Funds, which is federal money.</p> <p>6 Q. Now at some point you became involved in TransCanada's</p> <p>7 Application for a pipeline?</p> <p>8 A. I became involved with the project not specifically with</p> <p>9 their Application to the PUC, but as we started to hear about</p> <p>10 the project I was designated as the DENR's point of contact</p> <p>11 coordinator for our efforts on anything we would need to be</p> <p>12 involved in with the pipeline.</p> <p>13 Q. And so would you just generally describe what your -- what</p> <p>14 you've been doing as the point of contact on the TransCanada</p> <p>15 Application?</p> <p>16 A. Certainly. I've had the pleasure to go to all the meetings</p> <p>17 as a representative of the -- for the State for the DENR.</p> <p>18 Excuse me. And in addition to that, my job was to attempt to</p> <p>19 coordinate the people that I believed were necessary to be at</p> <p>20 the meeting or may have some need to be at the meeting, the</p> <p>21 Surface Water Quality Program or other programs.</p> <p>22 In addition, if we received public inquiries about the</p> <p>23 project or we received information requests either from</p> <p>24 TransCanada or, for example, the contractors working for the PUC</p> <p>25 about information DENR could provide them, I was the point of</p>	<p style="text-align: right;">1214</p> <p>1 A. No problem.</p> <p>2 Q. Approximately how many meetings have you had with</p> <p>3 representatives of the Keystone project?</p> <p>4 A. I believe it's five or six.</p> <p>5 Q. When you say that, you mean face-to-face meetings?</p> <p>6 A. Yes.</p> <p>7 Q. Do you know when the first one was?</p> <p>8 A. February of -- I think it was '05, I believe.</p> <p>9 Q. And when was the last one?</p> <p>10 A. The last one I was at was in October of this year.</p> <p>11 Q. Do you have meetings scheduled in the future which haven't</p> <p>12 occurred yet?</p> <p>13 A. Not currently, no.</p> <p>14 Q. Do you expect that there might be some of those?</p> <p>15 A. There may be if they have additional information requests.</p> <p>16 Q. Will you continue to be the agency's contact -- as I</p> <p>17 understand it, you're the DENR contact for Keystone?</p> <p>18 A. That's correct. I will be until I'm directed not to be any</p> <p>19 longer.</p> <p>20 Q. I sympathize with that remark. Appreciate that.</p> <p>21 Did you say you're also the agency contact for Williams</p> <p>22 Pipeline from Sioux Falls to Watertown?</p> <p>23 A. Right. And to be clear, they are now Magellan. Those are</p> <p>24 formerly owned and operated by Williams Pipeline, is now</p> <p>25 Magellan Pipeline.</p>
<p style="text-align: right;">1213</p> <p>1 contact for that information. So I could assemble it and return</p> <p>2 it to them or act as sort of the first draft for our responses</p> <p>3 to the public and get that process going.</p> <p>4 Q. And did you have any contacts -- did TransCanada or</p> <p>5 TransCanada's consultants contact you and request information</p> <p>6 from the Department?</p> <p>7 A. Yes, they did.</p> <p>8 Q. And just generally would you describe what information?</p> <p>9 A. The predominant request through -- that came through me was</p> <p>10 for information on source water protection areas, locations of</p> <p>11 them and more detailed information that we had on it.</p> <p>12 Q. And what about PUC's consultants? Did you have contacts</p> <p>13 with PUC's consultants?</p> <p>14 A. I did.</p> <p>15 Q. And what was that about?</p> <p>16 A. Basically the same topic, source water protection areas.</p> <p>17 There was also additional questions potentially about water well</p> <p>18 logs or water rights or geology information, which I tried to</p> <p>19 direct those inquiries to the appropriate people in DENR.</p> <p>20 MS. GIEDD: Mr. Koenecke, I will turn him over to you.</p> <p>21 MR. KOENECKE: Thank you, Ms. Giedd.</p> <p>22 <u>DIRECT EXAMINATION.</u></p> <p>23 <u>BY MR. KOENECKE:</u></p> <p>24 Q. Thank you for coming today, Mr. Walsh. Appreciate that</p> <p>25 very much.</p>	<p style="text-align: right;">1215</p> <p>1 Q. Are there other petroleum pipelines in South Dakota for</p> <p>2 which you're responsible?</p> <p>3 A. Only if those pipelines would have a release and I would be</p> <p>4 assigned that case. Now it's likely if a Magellan Pipeline had</p> <p>5 a release, I would likely be assigned that case.</p> <p>6 Q. So if the KANEB Pipeline going through WEB Water's</p> <p>7 territory had a release, would you be assigned to that as well,</p> <p>8 or would that be someone else?</p> <p>9 A. Potentially I would be assigned it. That would be up to my</p> <p>10 supervisor to assign that case.</p> <p>11 MR. KOENECKE: I've got nothing further. Thank you.</p> <p>12 THE WITNESS: Thank you.</p> <p>13 MR. SMITH: Mr. Rasmussen.</p> <p>14 <u>CROSS-EXAMINATION.</u></p> <p>15 <u>BY MR. RASMUSSEN:</u></p> <p>16 Q. Who is your supervisor?</p> <p>17 A. Mr. Bill Markley.</p> <p>18 Q. I think you said you've been the project manager for some</p> <p>19 hydrocarbon spills in the past?</p> <p>20 A. That's correct.</p> <p>21 Q. Which ones have you been involved with?</p> <p>22 A. Again, many of those spills are at the Magellan Pipeline</p> <p>23 Terminal, 12th Street, which is an operational bulk storage</p> <p>24 facility. Also the Magellan Watertown Terminal, which is an</p> <p>25 operational bulk storage facility for refined product. And then</p>

<p style="text-align: right;">1216</p> <p>1 additional gas station releases in Pierre, South Dakota here in</p> <p>2 town. And that would include my -- the projects I'm managing</p> <p>3 and the State lead projects with the State funds.</p> <p>4 Q. Have you been a project manager for any pipeline spills?</p> <p>5 A. No.</p> <p>6 Q. Okay.</p> <p>7 MR. RASMUSSEN: Thank you. That's all I have.</p> <p>8 <u>CROSS-EXAMINATION</u></p> <p>9 BY MR. HOHN:</p> <p>10 Q. Mr. Walsh, what was the first meeting you attended with</p> <p>11 TransCanada representatives, if you recall?</p> <p>12 A. I believe that was the February -- I believe it was the '05</p> <p>13 meeting. There was several people from my agency there. I want</p> <p>14 to say that most of the State agencies were also represented in</p> <p>15 addition to there being staff from TransCanada and with their</p> <p>16 contractors.</p> <p>17 Q. Okay.</p> <p>18 A. Well, was that the first one? I'm trying to think back if</p> <p>19 that was the first one or not. It may have been a smaller one</p> <p>20 first with Mr. Greg Moffit (phonetic) -- I think that's</p> <p>21 correct -- from TransCanada.</p> <p>22 Q. Okay. Are you familiar with the scoping meetings that were</p> <p>23 held on the project in South Dakota?</p> <p>24 A. I am.</p> <p>25 Q. And when were they held approximately?</p>	<p style="text-align: right;">1218</p> <p>1 Q. Yes.</p> <p>2 A. I usually get that information request. If there is a</p> <p>3 piece of information they requested I am not aware of who to get</p> <p>4 it from in the DENR, I would take that to Mr. Bill Markley and</p> <p>5 ask him. And if he wasn't aware, it would end up in the</p> <p>6 Division Director's office so we could determine who needed to</p> <p>7 get that response for TransCanada.</p> <p>8 Q. Okay. In the meetings that have been held thus far -- let</p> <p>9 me back up. Are you familiar with what blueprint drawings look</p> <p>10 like on a construction project?</p> <p>11 A. Yes. I'm familiar with that.</p> <p>12 Q. And do they detail the plans and specifications as to what</p> <p>13 is going to be built? Is that a fair statement?</p> <p>14 A. In general I would agree with that, yes.</p> <p>15 Q. Okay. As of this date, have you seen detailed blueprint</p> <p>16 drawings on the TransCanada Pipeline?</p> <p>17 A. No, I have not.</p> <p>18 Q. Have there been discussion on detailed blueprint drawings</p> <p>19 as to when they might be available?</p> <p>20 A. Not with me. Although, our agency wouldn't review the</p> <p>21 detailed blueprint drawings because we have no siting authority</p> <p>22 over the pipeline.</p> <p>23 Q. I realize that. But at some point would you expect to see</p> <p>24 those, or have you been told you'll see those?</p> <p>25 A. I don't believe I've been told that. Nor do I believe</p>
<p style="text-align: right;">1217</p> <p>1 A. Were those the scoping meetings for the Draft Environmental</p> <p>2 Impact Statement or the PUC public meetings?</p> <p>3 Q. I believe it would be the initial scoping meetings where</p> <p>4 TransCanada went out and met with the public.</p> <p>5 A. I don't recall the date of those meetings.</p> <p>6 Q. Did you attend those, do you think?</p> <p>7 A. No, I did not.</p> <p>8 Q. Okay. And then you mentioned the EIS meetings. How many</p> <p>9 of those were there in the state that you might have attended?</p> <p>10 A. I didn't attend the scoping meeting. I did attend a public</p> <p>11 comment meeting in Yankton in September of this year.</p> <p>12 Q. Okay. And then the State department has held meetings,</p> <p>13 published notices and held meetings at various places in the</p> <p>14 state on the Draft EIS.</p> <p>15 Did you attend those?</p> <p>16 A. We did not -- I did not attend those, no.</p> <p>17 Q. Okay. With regard to this project, who do you report to</p> <p>18 regarding TransCanada?</p> <p>19 A. Mr. Bill Markley.</p> <p>20 Q. Okay. With regard to liaison, how is information</p> <p>21 distributed through the various agencies? If an issue comes up</p> <p>22 that you're looking at with TransCanada and they need</p> <p>23 information on, who decides where to send that or distribute to</p> <p>24 the various agencies or programs?</p> <p>25 A. Within the DENR?</p>	<p style="text-align: right;">1219</p> <p>1 there's a State requirement for them to provide them to us.</p> <p>2 Q. What I asked I guess was have you been told your agency</p> <p>3 will see those?</p> <p>4 A. Not to my knowledge.</p> <p>5 MR. HOHN: Thank you.</p> <p>6 MR. SMITH: Staff, do you have questions?</p> <p>7 <u>CROSS-EXAMINATION</u></p> <p>8 BY MS. SEMMLER:</p> <p>9 Q. I believe we heard about your Department's jurisdiction</p> <p>10 earlier in some testimony. And your specific Department's</p> <p>11 jurisdiction would only require action on your part after a</p> <p>12 spill takes place; is that correct?</p> <p>13 A. That is correct. And in addition to the permits we've</p> <p>14 discussed in testimony that may be required if they take certain</p> <p>15 action during construction.</p> <p>16 MS. SEMMLER: Thank you.</p> <p>17 MR. SMITH: Commissioners, do you have questions of</p> <p>18 Mr. Walsh?</p> <p>19 CHAIRMAN JOHNSON: Mr. Walsh, the process you've</p> <p>20 described with the interaction between your agency and the</p> <p>21 proposed Keystone Pipeline, would that be any different for any</p> <p>22 other hydrocarbon pipeline?</p> <p>23 THE WITNESS: No, it would not.</p> <p>24 CHAIRMAN JOHNSON: Okay. Thank you.</p> <p>25 MR. SMITH: Other Commissioner questions?</p>

<p style="text-align: right;">1220</p> <p>1 Commissioner Kolbeck.</p> <p>2 COMMISSIONER KOLBECK: Would you feel that the</p> <p>3 proposed pipeline would put any additional burden or</p> <p>4 unachievable expectations of your job or your Department?</p> <p>5 THE WITNESS: No. I don't believe so.</p> <p>6 COMMISSIONER KOLBECK: Thank you.</p> <p>7 MR. SMITH: Ms. Giedd, do you have redirect?</p> <p>8 MS. GIEDD: I do not.</p> <p>9 MR. SMITH: Mr. Koenecke?</p> <p>10 MR. KOENECKE: I do not.</p> <p>11 MR. SMITH: You may step down.</p> <p>12 THE WITNESS: Thank you very much.</p> <p>13 (The witness is excused)</p> <p>14 MS. GIEDD: Mr. Smith, I think that's the last of the</p> <p>15 State-subpoenaed witnesses. I want to thank the Commissioners</p> <p>16 and all the parties for giving me such leeway in allowing me to</p> <p>17 facilitate their direct.</p> <p>18 Thank you.</p> <p>19 MR. SMITH: Uh-huh. You're welcome.</p> <p>20 MR. RASMUSSEN: And thank you for questioning</p> <p>21 everybody for us.</p> <p>22 CHAIRMAN JOHNSON: No offense to the other attorneys,</p> <p>23 Ms. Giedd, but you were very efficient. No one's more efficient</p> <p>24 than you were.</p> <p>25 MS. GIEDD: Thank you.</p>	<p style="text-align: right;">1222</p> <p>1 MR. SMITH: I'm thinking you've probably been here</p> <p>2 long enough this week to pretty well know the drill. So I'll</p> <p>3 walk you through it if you need me to help you.</p> <p>4 THE WITNESS: You sure can.</p> <p>5 MR. SMITH: Okay. Well, why don't we start out by</p> <p>6 having you introduce yourself. You've been sworn.</p> <p>7 MR. MOECKLY: Yes.</p> <p>8 MR. SMITH: Why don't you start by introducing</p> <p>9 yourself, name and address, and then we'll move on from there.</p> <p>10 MR. MOECKLY: Okay. My name is Kent Moeckly. And my</p> <p>11 address is Box 903, Britton, South Dakota 57430.</p> <p>12 I'd like to thank you for the opportunity to be here</p> <p>13 and actually to be here all week because I've learned an awful</p> <p>14 lot. As much as on the road traveling up and down the state</p> <p>15 with everybody at the hearings that we've had. As much. I'm</p> <p>16 going to say more because we really had some good testimony.</p> <p>17 Especially this morning. I was really impressed.</p> <p>18 I'm a landowner -- well, before I start that, I wanted</p> <p>19 to resubmit this resolution concerning TransCanada Keystone</p> <p>20 Pipeline, which has already been received.</p> <p>21 MR. SMITH: Is that the --</p> <p>22 THE WITNESS: Marshall County Resolution.</p> <p>23 MR. SMITH: It's in. You know, it's already an</p> <p>24 exhibit, but if you want to resubmit it, that's fine. Why don't</p> <p>25 we call that Moeckly 2. How's that?</p>
<p style="text-align: right;">1221</p> <p>1 (Discussion off the record)</p> <p>2 MR. SMITH: We're in recess for approximately 7 to 10</p> <p>3 minutes.</p> <p>4 (A short recess is taken)</p> <p>5 MR. SMITH: Okay. We're back on the record and back</p> <p>6 in session following our recess. At this time I -- here's what</p> <p>7 I'm going to propose is that given the hour of the day and the</p> <p>8 length of the week we've had and the number of people that are</p> <p>9 from out of town here, is that we take Mr. Moeckly who's been</p> <p>10 unbelievably patient in waiting all week and then call it a</p> <p>11 week, and we'll reconvene Monday morning at 9:30.</p> <p>12 How does that strike everybody?</p> <p>13 That's what we had scheduled, and it just seems like</p> <p>14 on Monday that way people if they're traveling have time to get</p> <p>15 here and so on.</p> <p>16 How does that strike everyone?</p> <p>17 MR. RASMUSSEN: That's fine. We'll probably come up</p> <p>18 with some more extra witnesses over the weekend.</p> <p>19 MR. SMITH: We'll be looking forward to that.</p> <p>20 COMMISSIONER HANSON: There are 8,000 more State</p> <p>21 employees.</p> <p>22 MR. SMITH: Are you prepared, Mr. Moeckly, for going</p> <p>23 now? And I do really thank you for being flexible and</p> <p>24 accommodating various people here. Thank you for that.</p> <p>25 (The witness is sworn by the court reporter)</p>	<p style="text-align: right;">1223</p> <p>1 THE WITNESS: And I might as well offer also to</p> <p>2 resubmit the Argus Leader Newspaper dated December 5, 2007,</p> <p>3 article entitled PUC Posts County's Pipeline Stipulations Along</p> <p>4 with the Resolution.</p> <p>5 MR. SMITH: Those offers of exhibits I've got to</p> <p>6 inquire whether there are objections. The resolution, we're</p> <p>7 going to call that Moeckly 2 because I'll preserve 1 for</p> <p>8 prefiled testimony.</p> <p>9 MR. RASMUSSEN: No objection.</p> <p>10 MR. KOENECKE: No objection.</p> <p>11 MR. SMITH: To the resolution. It's already been</p> <p>12 received once.</p> <p>13 MS. SEMMLER: No objection.</p> <p>14 MR. SMITH: And now we turn to Moeckly 3, which is</p> <p>15 going to be the offered newspaper.</p> <p>16 MR. KOENECKE: Haven't seen it yet.</p> <p>17 MR. SMITH: Okay.</p> <p>18 THE WITNESS: And I have copies. Do you want to have</p> <p>19 copies to distribute to everyone?</p> <p>20 MR. SMITH: I don't know that we need that.</p> <p>21 MR. KOENECKE: I am going to object to this. It</p> <p>22 discusses the Marshall County Resolution. That's in evidence.</p> <p>23 It speaks for itself. I don't see why we need the Argus</p> <p>24 Leader's thoughts on it.</p> <p>25 MR. SMITH: I think I'm going to sustain that on the</p>

<p style="text-align: right;">1224</p> <p>1 Best Evidence Rule. The resolution does speak for itself.</p> <p>2 THE WITNESS: Hopefully everyone read it in the Argus</p> <p>3 Leader anyhow so --</p> <p>4 MR. SMITH: I think it was pretty well read to us</p> <p>5 here. So we haven't had time to read the paper, but we did hear</p> <p>6 what it said. And thank you.</p> <p>7 THE WITNESS: I forgot. Again, I am a landowner in</p> <p>8 Marshall County, South Dakota, a county clear up here on the</p> <p>9 north side of the state. We butt up against the North Dakota</p> <p>10 border. And as it's been testified to in a very, very, very wet</p> <p>11 area. Not only tremendous rainfall in the last many years, but</p> <p>12 we've always had a high ground water level up in our neck of the</p> <p>13 woods.</p> <p>14 And this is my home. I grew up on the farm I'm living</p> <p>15 in right now, which is 6 miles west of Britton, went to school</p> <p>16 there, and am now back living on the family farmstead.</p> <p>17 This foreign company from a foreign country, as we</p> <p>18 heard earlier in the hearings sometimes called TransCanada,</p> <p>19 sometimes called TransCanada Keystone Pipeline, LP -- one of the</p> <p>20 Keystone TransCanada employees told me that, again, that it's --</p> <p>21 Keystone is a wholly owned subsidiary of TransCanada, the</p> <p>22 Canadian company.</p> <p>23 We heard earlier that this Keystone -- was it referred</p> <p>24 to as a company? It looks like it's a partnership. LP would</p> <p>25 lead me to believe it's a limited partnership, is owned</p>	<p style="text-align: right;">1226</p> <p>1 comes from the east, the right of the page and meanders down off</p> <p>2 the coteau until it crosses our land at about mile post marker</p> <p>3 230, I believe it is. 230. You can see it there. Right there.</p> <p>4 It runs parallel with a structure that is called the</p> <p>5 Crow Creek Ditch westerly, east and west. The water runs</p> <p>6 westerly to some marsh and water land that you can see before</p> <p>7 the end of the left side of the map called Renzienhausen Slough.</p> <p>8 And then from this Renzienhausen Slough it meanders</p> <p>9 southwesterly to the Jim River at a place called Tacoma Park.</p> <p>10 Now the water is flowing through that creek right now.</p> <p>11 And in the springtime of the year when all of the coteau melts</p> <p>12 the water rages down that creek going over roads, going under</p> <p>13 roads, doing whatever it can, to find I tell way to the</p> <p>14 Jim River.</p> <p>15 And when it gets down into our land it swells out into</p> <p>16 a very wide body of water and uses the ditch. It uses the</p> <p>17 overflow. There was a levy that was put up to control this</p> <p>18 water, the spring rains and water especially, and it just stays</p> <p>19 a column of water all the way west to the Brown County line.</p> <p>20 I realize that some experts have testified here before</p> <p>21 you that this Crow Creek is of major importance to the drainage</p> <p>22 to the Jim River from the coteau. And I concur. It really is.</p> <p>23 It is a -- it's been a large body of water or channel for water</p> <p>24 for my life, since the Native Americans were here, and it will</p> <p>25 be in the future.</p>
<p style="text-align: right;">1225</p> <p>1 exclusively by TransCanada and was organized in the State of</p> <p>2 Delaware, curiously enough. We're in South Dakota. But this</p> <p>3 Canadian company had to go to Delaware to set up some sort of an</p> <p>4 entity that would start to force its way down through our</p> <p>5 property in South Dakota. And not just me. All of us.</p> <p>6 Well, this entity, wherever it came from and whoever</p> <p>7 it belongs to, we think it's TransCanada, is attempting to take</p> <p>8 my land against my will.</p> <p>9 These foreigners are attempting to destroy four</p> <p>10 quarters of my land with a hazardous liquid pipeline. A</p> <p>11 hazardous liquid pipeline. Our own government calls it a</p> <p>12 hazardous liquid pipeline.</p> <p>13 Now if that doesn't raise a few flags, I don't know</p> <p>14 what should. I mean, the Governor should be down here sitting</p> <p>15 with me right now saying what are the ramifications, what are</p> <p>16 the repercussions, what on earth is going on here. Instead, I</p> <p>17 see a picture of the Governor in the paper in a TransCanada ad</p> <p>18 for heaven sakes saying we need Canadian oil. Thanks, Gov.</p> <p>19 You're there when I need you.</p> <p>20 One of the quarters that's crossed has a creek running</p> <p>21 east to west, and I guess if you look on your Exhibit 16, which</p> <p>22 is a map, you can see Crow Creek plainly on the bottom half</p> <p>23 of -- is that Exhibit 16, that map?</p> <p>24 COMMISSIONER KOLBECK: TC 16.</p> <p>25 THE WITNESS: Okay. And it's kind of clear that it</p>	<p style="text-align: right;">1227</p> <p>1 My grandfather was around and involved in the digging</p> <p>2 of this Crow Creek ditch. And my father, of course, lived to be</p> <p>3 93 years old and knew this ground completely, so much better</p> <p>4 than myself I wish he was here because he could tell you where</p> <p>5 every drop of water goes every direction.</p> <p>6 I'm just going over this because this is one of I'm</p> <p>7 going to guess several crossings of this proposed corridor. And</p> <p>8 we've heard testimony -- I'll say I, but we all have --</p> <p>9 testimony this morning from Dr. Davis and I believe Dr. Rahn who</p> <p>10 stated that a leak in one of these waterways would be so</p> <p>11 catastrophic because it would find its way to other channels and</p> <p>12 to the Jim River and to the Missouri River.</p> <p>13 Now I don't know how anybody can take that lightly. I</p> <p>14 honestly don't see how anybody could take a hazardous liquid</p> <p>15 pipeline and cavalierly run it through an area like this and</p> <p>16 say, well, the probability of a leak is very, very, very slim.</p> <p>17 But what if it happens? It's too late. The horses</p> <p>18 are out of the barn. It's over. And I know we had testimony</p> <p>19 this morning from all of these good State employees that said,</p> <p>20 oh, we have all kind of plans, by gosh. We can remediate, and</p> <p>21 we can do this and do that. And I even heard that -- what was</p> <p>22 it? It was thousands of gallons of gasoline had dumped into the</p> <p>23 Sioux River and everything was fine. Probably not for</p> <p>24 Sioux City, but everything was fine for us.</p> <p>25 The importance of this issue, the water issue alone --</p>

<p style="text-align: right;">1228</p> <p>1 I mean, I'm worried sick that that pipe's going to break up on 2 our land somewhere else. And I've seen the pictures, Minnesota, 3 Canada, all over the world. When these things break it is the 4 worst, sickest site in the world. And everybody has told us in 5 this room that can you get it all? Well, no, we can't. Well, 6 how much can you get? Well, that depends on the soil, the this, 7 the that. It depends. Probability.</p> <p>8 The only thing that I'm assured of here is that it's 9 going to be a hazardous liquid pipeline. That's 100 percent 10 clear. We know that. But it's the contingency that's bugging 11 all of us. What the heck are we going to do when that thing 12 breaks?</p> <p>13 And by the way, it's going to break. I know that 14 TransCanada has said, oh, gee, one person said 39 years, another 15 person said 7 years, this and that. Well, Murphy's Law was 16 brought up here a couple of times this morning, and I'm not so 17 sure we better be careful about Murphy's Law on a hazardous 18 pipeline. Because Murphy's Law will dump that thing and I don't 19 want it to dump on me and I don't want it to dump on anybody.</p> <p>20 And the problem is once it dumps, we're right back to 21 the same question: How do we clean it up? How do we do it? 22 Nobody knows. Nobody knows.</p> <p>23 TransCanada says they'll do the best they can. They 24 say, well, gee we'll try. We'll try. But nobody knows. The 25 people that are in the business say, well, we'll do the best we</p>	<p style="text-align: right;">1230</p> <p>1 from a foreign country has just barged into my life and many 2 lives on down the line, and they're saying, well, we'll do the 3 best we can. We'll do the best we can.</p> <p>4 I had submitted this Marshall County Resolution and 5 the paper clipping, but Jim Bush and I -- to give you some 6 background, Jim Bush -- and some of you have talked to Jim Bush 7 because he spoke at the Britton hearing, if I'm not mistaken.</p> <p>8 Jim Bush and I decided to go talk to the Marshall 9 County Commissioners. And I had heard that they weren't -- you 10 know, they were thinking about this thing not in this light, in 11 it's reality time light. They were thinking like it's so easy 12 for people to do and say, oh, it's progress. It is progress. 13 Oh, they were thinking about all of these taxes that they were 14 going to get.</p> <p>15 So Jim Bush and I went up to the courthouse to meet 16 with them and sitting around a table much like this. And after 17 we told them everything we knew about it and just what we're 18 looking at here as far as a threat not only to us but, you know, 19 to them as County Commissioners and their county -- it's their 20 county -- and told them, look, we're in this together and you're 21 the Commissioners, we're the landowners, we should be on the 22 same side here of looking out for our best interests.</p> <p>23 And so after a lot of discussion and we left, they 24 thanked us for coming and low and behold while we're here down 25 in Pierre we find out that this resolution has been passed by</p>
<p style="text-align: right;">1229</p> <p>1 can. Well, if that takes place up north by me up by the 2 North Dakota border, where our rural water -- I drink that rural 3 water, BDM rural water -- sure the wells over -- they're a 4 little deeper north of Britton, but the aquifer runs right 5 straight west right over to where this pipe is going to -- I 6 learned the word, surficial aquifer, which is the upper ground 7 water, I guess.</p> <p>8 And there was a map here -- not a map. It was the 9 staff's witness, Brenda Winkle (sic); is that right?</p> <p>10 MS. SEMMLER: Winkler.</p> <p>11 THE WITNESS: Yeah. Staff Exhibit 19, which it 12 couldn't be clearer. Our BDM James Aquifer runs westerly and 13 ties right into this surface aquifer that even comes up 14 literally to the surface, and some of the farmers north of me 15 were here testifying to that.</p> <p>16 That's always been wet ground. Always been wet 17 ground. And these are hooked together. So now not only do I 18 have to worry about a breakdown here where I am at Crow Creek or 19 a break on my land anywhere that it hits me on all four 20 quarters, but I have to worry about this son of a gun breaking 21 north of me, contaminating the water, one aquifer to the next 22 until it gets to BDM, and then they'll pump it back to me. 23 Petroleum water. Probably not drinkable. Could probably light 24 your cigarette with it, but you couldn't drink it.</p> <p>25 So this foreign company, private company, by the way,</p>	<p style="text-align: right;">1231</p> <p>1 the board.</p> <p>2 And they are very obviously now with their eyes more 3 opened saying let's take a look at this thing, and let's see 4 what's going on here. And they started realizing that there was 5 some financial ramifications, some environmental ramifications 6 here, some tax ramifications that they maybe have had overstated 7 to them. And they're now saying, look, TransCanada, let's just 8 sober up here, and let's stop this craziness of barging into the 9 country, barging into the state --</p> <p>10 MR. KOENECKE: I'm going to object to this. We've let 11 the witness have a lot of latitude, but testifying as to what 12 somebody else thinks and says, that's far outside the bounds I 13 think, Mr. Smith.</p> <p>14 MR. SMITH: I think that's true. Let's try to hold -- 15 this is the evidence part of this, and to the extent you can, 16 Mr. Moeckly, I know you're emotional about this, but let's try 17 to keep it to the facts, if we could, please.</p> <p>18 THE WITNESS: Okay. The fact is Marshall County has 19 passed a resolution. You can read it. And it doesn't just hug 20 TransCanada anymore.</p> <p>21 MR. KOENECKE: It's in evidence, Mr. Moeckly. We all 22 know what it says.</p> <p>23 THE WITNESS: Would you like it read?</p> <p>24 MR. KOENECKE: I sure wouldn't. I've seen it, read 25 it, and so has everybody else.</p>

<p style="text-align: right;">1232</p> <p>1 MR. SMITH: I think it's been read to us once, and</p> <p>2 we've all read it.</p> <p>3 THE WITNESS: Well, people need to know that we have a</p> <p>4 County Commission that's now with open eyes, and they want</p> <p>5 answers. Just like we want answers.</p> <p>6 MR. KOENECKE: Once again, the resolution speaks for</p> <p>7 itself. You're testifying as to what their eyes are. This is</p> <p>8 way out of bounds, I think, Mr. Smith.</p> <p>9 THE WITNESS: Okay.</p> <p>10 MR. SMITH: I think he's agreed generally to -- I'm</p> <p>11 going to overrule that just because he's agreed generally to</p> <p>12 stick to the facts.</p> <p>13 CHAIRMAN JOHNSON: And just by way of suggestion,</p> <p>14 Mr. Moeckly, we know very much what your opinions are on this</p> <p>15 pipeline. At the end of the day we are looking for evidence and</p> <p>16 facts on the effect of this pipeline if it were to be approved.</p> <p>17 If you have any other facts on that, we really need to get them</p> <p>18 before we make a decision.</p> <p>19 THE WITNESS: Sure. You bet. Well, I'm hoping that</p> <p>20 part of the evidence is what I can bring to you from my corner</p> <p>21 of the state. And that's why I'm discussing this. I just don't</p> <p>22 want anything minimized anymore on this matter. Because it just</p> <p>23 seems like this thing has been whisked so fast. And I just</p> <p>24 can't imagine that reasonable people would allow something this</p> <p>25 important to be whisked through.</p>	<p style="text-align: right;">1234</p> <p>1 two-way deal. But I found out otherwise with TransCanada.</p> <p>2 Now I've tried to ask myself, you know, why. Why is</p> <p>3 all of this happening? My life has stopped this year since all</p> <p>4 of this stuff started. And, of course, I think it comes back to</p> <p>5 money. There's no question about it. I mean, it's a money</p> <p>6 deal. This isn't the Salvation Army coming through here.</p> <p>7 But it's fossil fuel money. Some people call that</p> <p>8 black money. And so with that I suppose goes all of what I've</p> <p>9 experienced and what apparently other people have experienced.</p> <p>10 In sitting through these hearings I've listened to a</p> <p>11 lot of objections to this thing, to this preposterous pipeline,</p> <p>12 and I've learned that the barrels apparently on the Application</p> <p>13 per day was 435,000 and in the middle of this process has jumped</p> <p>14 to what, 590,000? And I've learned that the original pressure,</p> <p>15 psi, was 1,400 with the Application and now has magically turned</p> <p>16 out to be over 1,700 psi.</p> <p>17 MR. KOENECKE: Well, I object to that. I don't know</p> <p>18 where that fact's in evidence.</p> <p>19 COMMISSIONER KOLBECK: I agree.</p> <p>20 MR. SMITH: Yeah. I think that's a misstatement of</p> <p>21 the record.</p> <p>22 COMMISSIONER KOLBECK: Can I explain why?</p> <p>23 THE WITNESS: Yeah. Go ahead.</p> <p>24 COMMISSIONER KOLBECK: Your testimony is dated on</p> <p>25 October 30, I think, and it states in there 1,400 to 1,700 psi.</p>
<p style="text-align: right;">1233</p> <p>1 The land men that have stopped by to talk with me, the</p> <p>2 TransCanada land men, one gentleman was by the name of Scandlin</p> <p>3 (phonetic). And another gentleman was O'Rork (phonetic) I</p> <p>4 believe it was. And I know we've heard some testimony about</p> <p>5 some pretty tough dealings with landowners. And I'm sorry to</p> <p>6 hear that. And I can tell you that in my dealings with -- my</p> <p>7 brief visits with these two men there was an attitude that we're</p> <p>8 bigger than you are, our pockets -- we have more money was a</p> <p>9 statement and that we are going to have our way, and you can</p> <p>10 resist us but it's futile.</p> <p>11 And, of course, that doesn't make you happy when you</p> <p>12 meet somebody like that. Now I realize they're supposed to</p> <p>13 negotiate with us. They're supposed to negotiate. They're</p> <p>14 supposed to come in and sit down and say here's who I am, here's</p> <p>15 what we'd like to do, dah-dah-dah, and then hand me an easement</p> <p>16 that lists terms and say where are we on this thing? Let's</p> <p>17 negotiate.</p> <p>18 There was never an ounce of negotiation. Never. It</p> <p>19 was -- people have said take it or leave it. That's exactly</p> <p>20 what it was. We'll pay you this amount of money. Sign it, and</p> <p>21 I'm out of here. And apparently other people have had similar</p> <p>22 experiences from what I've heard before this Commission.</p> <p>23 I don't understand anybody that wants somebody to do</p> <p>24 something for them using this kind of tactic. I'm just</p> <p>25 surprised. Negotiation is usually a -- I thought it was a</p>	<p style="text-align: right;">1235</p> <p>1 So it's kind of hard for me to believe you just realized this</p> <p>2 when you were sitting in the --</p> <p>3 THE WITNESS: Well, no. I probably didn't just</p> <p>4 realize it here, but I'm sure I've heard it here.</p> <p>5 COMMISSIONER KOLBECK: Okay.</p> <p>6 THE WITNESS: Thank you. But the point is -- the</p> <p>7 point is what's going on here? We've got this big fancy State</p> <p>8 Department Application, and the numbers are changing as we're</p> <p>9 rolling.</p> <p>10 More pressure. Thinner wall. I'm sure I heard</p> <p>11 testimony here from somebody saying, oh, look, it's better</p> <p>12 material. The product is better. We build it better so we can</p> <p>13 make it thinner. And it's stronger.</p> <p>14 Why does that fall hard for me to believe that you can</p> <p>15 thin something and make it stronger and that you can also</p> <p>16 decrease the corrosiveness of it, if that's the right word.</p> <p>17 I'm very suspicious of all of this. The crude oil is</p> <p>18 toxic. I've heard all of this testimony, how many chemicals it</p> <p>19 has, how dangerous it is. It's dangerous. It dangerous to my</p> <p>20 land. It's dangerous to my health. It's dangerous to my</p> <p>21 business. And it's permanent. It doesn't evaporate. It just</p> <p>22 sits in the soil. And I'm lucky if it sits in the soil.</p> <p>23 But we know that, what is it called, the dilutants in</p> <p>24 it that are put in it to make it move, which are highly</p> <p>25 explosive or flammable, run right through once it hits the soil</p>

<p style="text-align: right;">1236</p> <p>1 on a leak and goes into the water apparently. Did I hear</p> <p>2 soluble?</p> <p>3 Well, this project apparently there is so much money</p> <p>4 around that I was looking at November 25, '07 Aberdeen American</p> <p>5 Newspaper, and I found an insert in the middle with all the</p> <p>6 advertising that's the glitziest thing I've ever seen. And it</p> <p>7 has a lovely family standing out -- TransCanada has a lovely</p> <p>8 family standing out in a grain field, I guess.</p> <p>9 Now this had to cost a lot of money.</p> <p>10 MR. KOENECKE: I object. I don't know what the</p> <p>11 relevance is to this whatsoever.</p> <p>12 THE WITNESS: It's yours. It's yours.</p> <p>13 MR. SMITH: Mr. Moeckly, I just think, you know --</p> <p>14 well, I'm going to sustain the objection. We've seen all kinds</p> <p>15 of flyers and whatever from all kinds of parties, including some</p> <p>16 people who have your point of view. And I'm not speculating on</p> <p>17 the amount of money that costs, and I don't know that it's</p> <p>18 relevant here.</p> <p>19 THE WITNESS: Well, thank you. Let's look at the --</p> <p>20 according to TransCanada's words estimated annual taxes Keystone</p> <p>21 will pay to South Dakota school districts they've published in</p> <p>22 the paper. I would imagine everybody's seen it because it's in</p> <p>23 every paper I look at.</p> <p>24 TransCanada has claimed by their little advertisement</p> <p>25 here that the Britton-Hecla School, now that's my little high</p>	<p style="text-align: right;">1238</p> <p>1 educational taxes. The first fund is called the general fund.</p> <p>2 And then the other two, three, and four, special education fund,</p> <p>3 a pension fund, and a capital outlay fund. He said these three,</p> <p>4 special education fund, pension fund, and the capital outlay</p> <p>5 fund will receive a benefit from TransCanada's investment. He</p> <p>6 said the general fund will receive nothing. And I don't</p> <p>7 understand it totally but something about if the money comes in</p> <p>8 in one place, it goes out in the other, and it stays the same.</p> <p>9 But in the other three funds there's a formula. And</p> <p>10 so he did some calculations just estimating because I think</p> <p>11 the -- the amount of investment at Marshall County is about</p> <p>12 30 million, if I'm not mistaken. He did the first calculation.</p> <p>13 He said let's do it for 100 million because it's easier to</p> <p>14 figure.</p> <p>15 Under the mill levies for each one of these,</p> <p>16 \$100 million investment would estimate \$470,000 in taxes. So he</p> <p>17 said that's what we're looking at in those two school districts.</p> <p>18 Now it's not a \$100 million investment. It's down around 30, I</p> <p>19 think. 25 to 35, somewhere in there.</p> <p>20 So a third, 30. We're looking at about a little over</p> <p>21 \$100,000 in taxes to come to our two school districts. Now he</p> <p>22 said unless they told me wrong, this is my understanding of it.</p> <p>23 Well, the published amount was at 700,000. And really</p> <p>24 when I talked to somebody that knows it looks like it's only</p> <p>25 about 100,000. So I'm saying we haven't heard straight stuff</p>
<p style="text-align: right;">1237</p> <p>1 school, will receive annual taxes -- Keystone will pay to</p> <p>2 South Dakota school districts \$409,000 -- \$409,145.21. And</p> <p>3 Langford is the school district in the southern part of</p> <p>4 Marshall County, and it says that Langford school will receive</p> <p>5 \$302,142.55. So it's roughly 700,000 that the county, our two</p> <p>6 school districts, are estimated to receive, estimated annual</p> <p>7 taxes Keystone will pay to South Dakota.</p> <p>8 I called our superintendent who is Mr. Don Kirkegaard,</p> <p>9 and I thought I just have to -- because it's very complex how</p> <p>10 they do these things --</p> <p>11 MR. KOENECKE: Objection. Hearsay.</p> <p>12 MR. SMITH: I'm going to overrule that. Please</p> <p>13 proceed.</p> <p>14 THE WITNESS: Okay. And -- thank you. Mr.</p> <p>15 Kirkegaard, he said, come on over. Come up to the office. And</p> <p>16 I went over. He was very gracious. And I said, do you know</p> <p>17 anything about this? And he said, I do.</p> <p>18 MR. KOENECKE: Same objection. Hearsay. What</p> <p>19 somebody else said is not evidence.</p> <p>20 THE WITNESS: I can give it my understanding as</p> <p>21 opposed to referring to a third party.</p> <p>22 MR. SMITH: Just proceed, and why don't you just tell</p> <p>23 us what he told you.</p> <p>24 THE WITNESS: Okay. I was told and it was my</p> <p>25 understanding that there are four funds involved in state</p>	<p style="text-align: right;">1239</p> <p>1 from these people that are asking you for a permit. They</p> <p>2 haven't really told everybody the whole truth. And I think that</p> <p>3 has a bearing on your decision.</p> <p>4 I would think that you wouldn't want to deal with</p> <p>5 somebody that's not straight up.</p> <p>6 So I learned a little bit in this venture into the</p> <p>7 school taxation. But I -- I'm bothered by it. I'm bothered by</p> <p>8 not the numbers so much. I'm just bothered by the fact that it</p> <p>9 looks like the numbers are way off. And that's a credibility</p> <p>10 thing.</p> <p>11 There was some talk about materials in these hearings,</p> <p>12 the material that the pipe is made out of, and the source of the</p> <p>13 product, where it's going to come from. And I think it was</p> <p>14 Florida, Oregon, and India. And Mr. Buster Gray had told us up</p> <p>15 at the Marshall County, one of the early meetings that was in</p> <p>16 a -- we met at a Hutterite colony that's right near us.</p> <p>17 And he had made the comment because somebody had said,</p> <p>18 well, where are you going to get all of that steel? And he had</p> <p>19 made the comment to us that, well, sure. China. China's going</p> <p>20 to be a supplier just like probably a lot of people. But China.</p> <p>21 China is going to be a supplier.</p> <p>22 I have a little problem with products from China. And</p> <p>23 I've dealt with their tools and this and that, and I know that</p> <p>24 the quality isn't there. And on something like this that is</p> <p>25 high tension, high pressure and we're going to resort to going</p>

<p style="text-align: right;">1240</p> <p>1 to a supplier in China to get our high-quality steel, it should</p> <p>2 make us all nervous. It really should. It makes me nervous.</p> <p>3 Mr. Ed Miller testified to the statistics --</p> <p>4 MR. KOENECKE: Yes, he did. And we don't need to hear</p> <p>5 them again. I'm going to object to a recitation of the Miller</p> <p>6 testimony.</p> <p>7 THE WITNESS: But I'm referring to it. I'm not --</p> <p>8 MR. SMITH: Let's not go over it again, though,</p> <p>9 because we went over that in detail yesterday.</p> <p>10 THE WITNESS: No. No. But what I want to do, thank</p> <p>11 you, is simply say that what I learned here is that there are a</p> <p>12 lot of spills, a lot of oil leaks. He has the numbers. Our own</p> <p>13 what is it, pipeline safety hazardous office, they have their</p> <p>14 statistics. They print them. And they've told us about all the</p> <p>15 leaks and spills and -- some large, some small.</p> <p>16 So we have those figures. And Enbridge, another</p> <p>17 pipeline company, we have their figures apparently. They all</p> <p>18 talk about the same thing.</p> <p>19 And then one graph, gee whiz, it showed TransCanada</p> <p>20 down here and all the rest of them up here. Credibility. You</p> <p>21 know, I know when you want to sell a car you'll say that it's</p> <p>22 never been in an accident or maybe a fender-bender or something</p> <p>23 like that because you want to make the sale. But doggone it,</p> <p>24 this is a big deal. And I just think that we have to get the</p> <p>25 truth if we're going -- if we're going to be able to know who</p>	<p style="text-align: right;">1242</p> <p>1 neighbors, land people up there are negotiating for an awful lot</p> <p>2 more money per acre across.</p> <p>3 Now I guess it hasn't been that way in the past. But</p> <p>4 they are now doing it. The pipelines are coming to the table,</p> <p>5 and they're treating those landowners up there fairer.</p> <p>6 And so I think TransCanada could be treating people</p> <p>7 fairer here. I can't imagine why not.</p> <p>8 Now John Sieh wisely advised that the PUC needs to put</p> <p>9 the brakes on and obtain the legislative authority to require</p> <p>10 this company to post cash bonds. Put the brakes on. Stop.</p> <p>11 There was an editorial in the -- the Aberdeen paper a while back</p> <p>12 and said slow this thing down. When I try to do something fast,</p> <p>13 I make mistakes.</p> <p>14 Now that applies to everything, all of us. We need to</p> <p>15 slow this whole thing down and look at it. Ms. Winkler</p> <p>16 testified this morning that -- originally that there should</p> <p>17 be -- should have been borings through our water land north of</p> <p>18 us.</p> <p>19 MS. SEMMLER: I believe that's a misstatement of the</p> <p>20 record. I don't believe she testified there should have been.</p> <p>21 THE WITNESS: You testified again -- you asked</p> <p>22 questions again, and then she went back and went with you on</p> <p>23 that and said, well, maybe after the project's --</p> <p>24 MS. SEMMLER: Mischaracterization of the record. I'll</p> <p>25 object to that statement.</p>
<p style="text-align: right;">1241</p> <p>1 we're dealing with here.</p> <p>2 Now I see people sighing and wishing that I would be</p> <p>3 quiet and wishing that I would go away and I will go away, you</p> <p>4 know, but this is really important. This is really important.</p> <p>5 And I know it's just another deal for a lot of people probably</p> <p>6 here. But it's an important deal for me and my neighbors up and</p> <p>7 down this state.</p> <p>8 If TransCanada would have simply come to us and had an</p> <p>9 easement, an agreement that they would have signed and shown</p> <p>10 that they're behind this thing, that they're somebody that's</p> <p>11 going to be there, and would have put terms in it where in plain</p> <p>12 language they just accept, we'll assume the liability, we'll</p> <p>13 take the responsibility, look, it's our idea we're wanting to</p> <p>14 bring this thing through your land, and, sure it's a hazardous</p> <p>15 liquid but we're going to assume and accept all of the liability</p> <p>16 and we're going to put it in a document that we're going to sign</p> <p>17 just like you're going to sign and we're going to assume if</p> <p>18 anything goes wrong, it's ours unless you really negligently do</p> <p>19 something horrible -- and I understand that. That's simple.</p> <p>20 That's simple to understand.</p> <p>21 But if they would have just been up front and put a</p> <p>22 document together that really was a good document so that we're</p> <p>23 both protected and we both can go away saying, jeez, we got a</p> <p>24 good deal, we got treated fairly -- the wind power, they're</p> <p>25 offering annual monies up in -- your neighbors up in Canada, our</p>	<p style="text-align: right;">1243</p> <p>1 MR. SMITH: Well, her testimony speaks for itself.</p> <p>2 THE WITNESS: Okay. TransCanada does not have an</p> <p>3 emergency response plan. And I think the record says it won't</p> <p>4 be completed until '09. 2009. I believe that's what the record</p> <p>5 said. Somebody testified to it here.</p> <p>6 Now jamming a project this dangerous through and not</p> <p>7 having all these plans, even the EIS isn't out -- I guess it's</p> <p>8 going to be out soon, but that's not even completed.</p> <p>9 Ms. Winkler I believe did say that there was some data</p> <p>10 that was insufficient. I have it scribbled down here.</p> <p>11 MS. SEMMLER: Again, I think the record speaks for</p> <p>12 itself. I don't think we need to repeat her testimony.</p> <p>13 THE WITNESS: It will. Thank you. I suppose that my</p> <p>14 time is running short and I do appreciate this opportunity and I</p> <p>15 do want to thank you for this opportunity.</p> <p>16 I am -- I'm thinking that this project, based upon the</p> <p>17 water that this pipe is going to go through north of us that's</p> <p>18 our source water for BDM rural water alone should force a</p> <p>19 reroute on this. Absolutely. I mean, if this project were</p> <p>20 approved after everything we know about where this pipe goes</p> <p>21 through, the water, the sand, after all of this testimony, after</p> <p>22 all of the research that's been done and everyone in this room</p> <p>23 knows that that pipe is going to go into sandy water, a source</p> <p>24 water for our drinking, if this project is not rerouted, if this</p> <p>25 project is approved and the inevitable will happen, people will</p>

<p style="text-align: right;">1244</p> <p>1 be hanging by their thumbs. And we could avoid it. We could</p> <p>2 absolutely avoid it.</p> <p>3 I believe Dr. Davis said that it's so much easier to</p> <p>4 avoid the problem than to create it.</p> <p>5 I appreciate this opportunity to talk before you,</p> <p>6 TransCanada, everyone. And I ask you to use your best judgment,</p> <p>7 Commissioners. Thank you.</p> <p>8 MR. SMITH: Mr. Moeckly, at this time with respect to</p> <p>9 your prefiled testimony and with respect to the matters that you</p> <p>10 asserted in there, if given under oath today, would anything in</p> <p>11 your testimony change?</p> <p>12 THE WITNESS: No.</p> <p>13 MR. SMITH: I realize you've added some things in</p> <p>14 this, but, I mean, with respect to the things in your testimony.</p> <p>15 With that, would you like to offer your prefiled</p> <p>16 testimony into evidence?</p> <p>17 THE WITNESS: Yes, I would. Thank you.</p> <p>18 MR. SMITH: We'll label that, Cheri. We'll label that</p> <p>19 Moeckly 1.</p> <p>20 It's been offered. Is there an objection?</p> <p>21 MR. KOENECKE: No objection.</p> <p>22 MR. RASMUSSEN: No objection.</p> <p>23 MR. HOHN: No objection.</p> <p>24 MS. SEMMLER: No objection.</p> <p>25 MR. SMITH: Moeckly 1 is received into evidence. At</p>	<p style="text-align: right;">1246</p> <p>1 blew up, it would really literally destroy it. But if it did</p> <p>2 not blow up, the value of the -- the loss of the property would</p> <p>3 be incredible of the farming unit, the farm.</p> <p>4 Q. Would it be down to zero?</p> <p>5 A. We would have to see.</p> <p>6 Q. So you think it's possible that the value of your property</p> <p>7 would go down to zero?</p> <p>8 A. I think anything is possible with something like this.</p> <p>9 Q. If I understand correctly, you're here testifying on your</p> <p>10 own behalf today?</p> <p>11 A. Yes.</p> <p>12 Q. As well as two corporations?</p> <p>13 A. A family corporation.</p> <p>14 Q. One or two?</p> <p>15 A. No. Merl Moeckly Company.</p> <p>16 Q. What about MMP, Inc.?</p> <p>17 A. Well, that's another corporation. It's a family</p> <p>18 corporation, but Merl Moeckly Company is the farming company.</p> <p>19 Q. So are those private corporations?</p> <p>20 A. Yes.</p> <p>21 Q. So could I buy shares in that?</p> <p>22 A. No. No. I guess you could -- I tell you what. After this</p> <p>23 pipe goes through and breaks, I'll sell you --</p> <p>24 Q. I'm in the phone book. So are those South Dakota</p> <p>25 corporations?</p>
<p style="text-align: right;">1245</p> <p>1 this point in time, Mr. Moeckly, I think you know the drill on</p> <p>2 this, tender you for questions from the parties. And we'll</p> <p>3 begin with Mr. Koenecke.</p> <p>4 MR. KOENECKE: Thank you, Mr. Smith. Thank you,</p> <p>5 Mr. Moeckly. I do some have questions about your testimony here</p> <p>6 today.</p> <p>7 <u>CROSS-EXAMINATION</u></p> <p>8 <u>BY MR. KOENECKE:</u></p> <p>9 Q. You testified you live 6 miles west of Britton?</p> <p>10 A. Yes.</p> <p>11 Q. And you've lived there all your life?</p> <p>12 A. Yes. Well, it's my childhood home and I was away and then</p> <p>13 I'm back.</p> <p>14 Q. How far is your home from the pipeline route?</p> <p>15 A. I would say about a quarter of a mile.</p> <p>16 Q. And if I understand correctly, it crosses four quarters of</p> <p>17 your land?</p> <p>18 A. Yes.</p> <p>19 Q. And you said that it would destroy your land to have the</p> <p>20 pipeline brought through it?</p> <p>21 A. Yes.</p> <p>22 Q. So it's your testimony that a 30-inch pipeline buried</p> <p>23 4 feet under four quarters of land would destroy the entire</p> <p>24 property?</p> <p>25 A. It would destroy it from a land value point of view. If it</p>	<p style="text-align: right;">1247</p> <p>1 A. South Dakota. You bet.</p> <p>2 Q. And your testimony was that TransCanada is a private</p> <p>3 foreign corporation?</p> <p>4 A. Yes.</p> <p>5 Q. And so if I can buy shares of TransCanada on the New York</p> <p>6 Stock Exchange, doesn't that make that a public corporation?</p> <p>7 A. Well, it may be a public corporation, but it's definitely a</p> <p>8 private company.</p> <p>9 Q. I guess I don't understand that. Either it's a public</p> <p>10 company or a private company, isn't it?</p> <p>11 A. Well, it's a private company to me. If its shares are</p> <p>12 traded publicly, then so be it.</p> <p>13 Q. You could call in to Britton to an investment advisor and</p> <p>14 buy shares in TransCanada, couldn't you?</p> <p>15 A. I'm taking your word for it. I don't know. I don't know</p> <p>16 anything about that.</p> <p>17 Q. Why do you have these corporations?</p> <p>18 A. It was for estate planning when my folks were alive.</p> <p>19 Q. Is it some kind of corporate shell game?</p> <p>20 A. No, no. It's straight up. Didn't go through Delaware at</p> <p>21 all.</p> <p>22 Q. Seeking to avoid liability?</p> <p>23 A. No. Absolutely not.</p> <p>24 Q. Seeking to avoid taxes?</p> <p>25 A. No. Tax planning.</p>

<p style="text-align: right;">1248</p> <p>1 Q. That would be avoiding taxes, wouldn't it?</p> <p>2 A. Well, I would call it tax planning.</p> <p>3 Q. You've sat here through the entirety of the hearing this</p> <p>4 week, haven't you?</p> <p>5 A. Yes, I have.</p> <p>6 Q. And, in fact, you've had an opportunity to cross-examine</p> <p>7 each and every witness that's been at the stand?</p> <p>8 A. I have.</p> <p>9 Q. Do you remember how many of those witnesses you've</p> <p>10 examined?</p> <p>11 A. I think just one. Mr. Jones.</p> <p>12 Q. I believe your testimony earlier this afternoon was that</p> <p>13 nobody knows what the effects of the pipeline or a pipeline</p> <p>14 spill would be; isn't that correct?</p> <p>15 A. I'm not sure if I said that.</p> <p>16 Q. I think you sat there and said nobody knows.</p> <p>17 A. Nobody knows what again? Nobody knows what?</p> <p>18 Q. I wrote down nobody knows. What was it that nobody knows?</p> <p>19 A. Nobody knows what? I'll have to ask you to repeat it.</p> <p>20 Q. I wrote down you said nobody knows. Do you disagree with</p> <p>21 that statement? Do you disagree with me, my recollection?</p> <p>22 A. What is the whole statement? That nobody knows what? I</p> <p>23 don't remember.</p> <p>24 Q. That's all I've written down. You said it. You said</p> <p>25 nobody knows. I'm asking you are you now saying you didn't say</p>	<p style="text-align: right;">1250</p> <p>1 resolution?</p> <p>2 A. With Jim Bush and I?</p> <p>3 Q. Yes.</p> <p>4 A. No. We were the only two that day.</p> <p>5 Q. Did anybody appear opposing this resolution?</p> <p>6 A. I don't know. Not at the same time we were there, no.</p> <p>7 Q. Well, on what date were you there?</p> <p>8 A. What's the date of the resolution?</p> <p>9 Q. If I said November 27, would you believe me?</p> <p>10 A. I would have to.</p> <p>11 Q. That's what it says.</p> <p>12 A. Okay. November 27. You know, I don't know. I do not</p> <p>13 recall the date that we went up there.</p> <p>14 Q. It wasn't passed the same day you were there?</p> <p>15 A. Well, it had to be before we were there. I don't suppose</p> <p>16 it would have to be. But I assume it was.</p> <p>17 Q. Did they vote in your presence on this resolution?</p> <p>18 A. No. No. No. No.</p> <p>19 Q. Very good. Is there anything that you told the Marshall</p> <p>20 County Commission that isn't in this resolution?</p> <p>21 A. There has to be. Because that's not anything verbatim from</p> <p>22 myself or Jim Bush.</p> <p>23 Q. What did you tell the Marshall County Commission?</p> <p>24 A. I remember telling them that they really have to be careful</p> <p>25 of you.</p>
<p style="text-align: right;">1249</p> <p>1 nobody knows?</p> <p>2 CHAIRMAN JOHNSON: Mr. Koenecke, I think we understand</p> <p>3 the point you're trying to make. I'm not sure how it adds to</p> <p>4 the evidentiary record.</p> <p>5 MR. KOENECKE: I'll move on, Commissioner. Thank you.</p> <p>6 Q. You've failed to exercise your opportunity to test the</p> <p>7 credibility of every other witness this week other than</p> <p>8 Mr. Jones, have you not?</p> <p>9 A. No. I didn't fail. I chose.</p> <p>10 Q. But you haven't done it?</p> <p>11 A. I chose not to.</p> <p>12 MR. SMITH: Mr. Koenecke, I don't know that that's</p> <p>13 relevant to the evidence here.</p> <p>14 Q. How many occasions have you -- upon how many occasions have</p> <p>15 you spoken to the Marshall County Commission?</p> <p>16 A. Jim Bush and I went up -- well, about TransCanada?</p> <p>17 Q. Yes.</p> <p>18 A. Once.</p> <p>19 Q. Have you spoken to the Commissioners individually?</p> <p>20 A. I may have to a couple, but it was just in passing.</p> <p>21 Q. It's your testimony that you and Jim Bush are the people</p> <p>22 responsible for getting the Commission to pass the resolution?</p> <p>23 A. I don't think I would claim that. I would like to think</p> <p>24 so, but I doubt it. They have their own minds.</p> <p>25 Q. Is there anybody else who appeared in favor of this</p>	<p style="text-align: right;">1251</p> <p>1 Q. Of me?</p> <p>2 A. TransCanada.</p> <p>3 Q. Very well. It must have been more than that.</p> <p>4 A. No. That was pretty much the essence, that they really</p> <p>5 have to be careful because this thing is so much deeper than an</p> <p>6 advertisement saying you're going to get so many taxes or the</p> <p>7 glitzy stuff that, you know, I was mentioning. There's just</p> <p>8 more substance here that has to be looked at.</p> <p>9 Q. And how long were you there speaking, I should add?</p> <p>10 A. Well, you know, because we were just in and then they had</p> <p>11 business. Jim spoke for just -- I suppose 15 minutes maybe. It</p> <p>12 wasn't very -- I don't remember. But it wasn't very long. 15,</p> <p>13 20 minutes.</p> <p>14 Q. Jim spoke for 15 or 20?</p> <p>15 A. No. The two of us together I think probably.</p> <p>16 Q. So would have the presentation been in essence what you've</p> <p>17 given us here this afternoon?</p> <p>18 A. Oh, no. If I would have had the benefit of the expert</p> <p>19 testimony that has been presented here, I would have held them</p> <p>20 two hours.</p> <p>21 MR. KOENECKE: Very good. I have nothing further.</p> <p>22 Thank you.</p> <p>23 MR. SMITH: Mr. Rasmussen.</p> <p>24 MR. RASMUSSEN: I'm sorry, but I bet you the</p> <p>25 Commission's probably happy you didn't have that at the time. I</p>

<p>1252</p> <p>1 have no questions.</p> <p>2 MR. SMITH: Mr. Hohn.</p> <p>3 <u>CROSS-EXAMINATION</u></p> <p>4 BY MR. HOHN:</p> <p>5 Q. I just have two questions, Mr. Moeckly. Do you plan to go</p> <p>6 to any other counties?</p> <p>7 A. I'd like to.</p> <p>8 Q. Okay. I just -- one question I'd like to clarify or get</p> <p>9 you to clarify for us. You spoke of more money being paid in</p> <p>10 Canada and you spoke of language in the resolution that you felt</p> <p>11 placed liability on you and deflected it away from TransCanada.</p> <p>12 Of those two, which is the more important, the money or the</p> <p>13 liability to you?</p> <p>14 A. Oh, the liability. Absolutely the liability. That's --</p> <p>15 Q. And one last quick question. Your family corporation, do</p> <p>16 you mind telling the Commission who owns the property with you?</p> <p>17 A. My two sisters and I.</p> <p>18 MR. HOHN: Thank you.</p> <p>19 MR. SMITH: Ms. Semmler, does staff have any questions</p> <p>20 of the witness?</p> <p>21 MS. SEMMLER: No questions. Thanks.</p> <p>22 MR. SMITH: Do the Commissioners have questions of the</p> <p>23 witness?</p> <p>24 COMMISSIONER KOLBECK: Yeah.</p> <p>25 MR. SMITH: Commissioner Kolbeck.</p>	<p>1254</p> <p>1 even more.</p> <p>2 COMMISSIONER KOLBECK: Learning that they need permits</p> <p>3 to cross every road and learning that it's been in the works</p> <p>4 three years and learning that the liability rests with the</p> <p>5 company according to DENR's testimony and all of that?</p> <p>6 Do you think that would shock them that they are</p> <p>7 concerned for things that don't exist?</p> <p>8 THE WITNESS: That don't exist? You mean the --</p> <p>9 COMMISSIONER KOLBECK: You know, I think I'll just let</p> <p>10 it go.</p> <p>11 Like the liability issue. I think DENR testified that</p> <p>12 the liability lies with the pipeline company. The roads, the</p> <p>13 testimony I believe would state that they need permits to cross</p> <p>14 every county road, things like that.</p> <p>15 Having that knowledge, I wonder if we'd have the same</p> <p>16 outcome.</p> <p>17 THE WITNESS: Well, you would. Because the roads is a</p> <p>18 very important issue. Really important to the County. But the</p> <p>19 fact that the -- that there's a fund somewhere that could pick</p> <p>20 up if the company can't do it or is gone, disappears, then they</p> <p>21 would be hesitant all over again.</p> <p>22 COMMISSIONER KOLBECK: Okay.</p> <p>23 THE WITNESS: I mean, to me -- excuse me, but that's</p> <p>24 the importance of a deposit, of having TransCanada make a</p> <p>25 deposit here at the state level. Call it a bond. But it needs</p>
<p>1253</p> <p>1 COMMISSIONER KOLBECK: Very brief. Having sat here</p> <p>2 through the testimony would you tell anything different to the</p> <p>3 Marshall County Commission than you have now -- than you did</p> <p>4 previously?</p> <p>5 THE WITNESS: Yes.</p> <p>6 COMMISSIONER KOLBECK: Would you mention that they --</p> <p>7 they need county road encroachment permits to cross every county</p> <p>8 road?</p> <p>9 THE WITNESS: Yes. Oh, sure.</p> <p>10 COMMISSIONER KOLBECK: Would you maybe tell them that</p> <p>11 the first meeting with the State that TransCanada had was three</p> <p>12 years ago, three and a half years ago, to maybe help them with</p> <p>13 their determination of what whisking is?</p> <p>14 I think you were trying to insinuate that it was</p> <p>15 rushed and you wanted people to slow down. Do you think maybe</p> <p>16 the County Commissioners would have a different opinion now</p> <p>17 after testimony that it's been three years it's been in the</p> <p>18 works?</p> <p>19 THE WITNESS: That's a -- if they had the benefit of</p> <p>20 the testimony I heard this week.</p> <p>21 COMMISSIONER KOLBECK: Do you think maybe they</p> <p>22 wouldn't have written a resolution?</p> <p>23 THE WITNESS: Oh, if they had this testimony?</p> <p>24 COMMISSIONER KOLBECK: Yes.</p> <p>25 THE WITNESS: Oh, no. No. No. This will shock them</p>	<p>1255</p> <p>1 to be something liquid, not just a promise. Because you can't</p> <p>2 go with a promise anymore in any business it seems like. I</p> <p>3 mean, a bank needs collateral. South Dakota needs collateral,</p> <p>4 cash, for a disaster cleanup. Not a payment but for cleanup.</p> <p>5 COMMISSIONER KOLBECK: All right. Thank you,</p> <p>6 Mr. Moeckly.</p> <p>7 THE WITNESS: The county needs cash. The landowner</p> <p>8 needs cash. Yep. Thanks.</p> <p>9 MR. SMITH: Any other Commissioner questions?</p> <p>10 COMMISSIONER HANSON: No.</p> <p>11 CHAIRMAN JOHNSON: Nope.</p> <p>12 MR. SMITH: I think that's it then, Mr. Moeckly.</p> <p>13 THE WITNESS: Thank you very much.</p> <p>14 MR. SMITH: I think you're excused, and thanks for</p> <p>15 your patience in sitting here.</p> <p>16 THE WITNESS: No. It's my pleasure. Thanks.</p> <p>17 (The witness is excused)</p> <p>18 MR. SMITH: With that, unless someone else has other</p> <p>19 business they want to bring before the Commission right now, I'm</p> <p>20 going to declare us in recess until 9:30 a.m. on Monday morning.</p> <p>21 (The proceedings are in recess at 3:50 p.m.)</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>

1 STATE OF SOUTH DAKOTA)

2 :SS CERTIFICATE

3 COUNTY OF HUGHES)

4

5 I, CHERI MCCOMSEY WITTLER, a Registered Professional
6 Reporter, Certified Realtime Reporter, and Notary Public in and
7 for the State of South Dakota:

8 DO HEREBY CERTIFY that as the duly-appointed shorthand
9 reporter, I took in shorthand the proceedings had in the
10 above-entitled matter on the 7th day of December 2007, and that
11 the attached is a true and correct transcription of the
12 proceedings so taken.

13 Dated at Pierre, South Dakota this 2nd day of January
14 2008.

15

16

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18

Cheri McComsey Wittler,

19

Notary Public

Registered Professional Reporter

Certified Realtime Reporter

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