MACKENZIE VALLEY ENVIRONMENTAL

IMPACT AND REVIEW BOARD

JAY PROJECT EA1314-01

TECHNICAL SESSIONS

Facilitator Bill Klassen

HELD AT:

Yellowknife, NT Tree of Peace April 21, 2015 Day 2 of 5

			2
1	APPEARANCES		
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TABLE OF CONTENTS Page No. 3 List of Homework 4 List of Commitments 5 List of Undertakings 7 Opening Comments 9 Presentation by Dominion Diamond - Caribou 10 Ouestion Period 12 Certificate of Transcript

1		LIST OF HOMEWORK
2	Number	Description
3	7	DDEC is to clarify size of crush to be
4		used for caribou crossings on the Jav
5		road (and how it compares to existing
6		Miserv road crossings) tomorrow if
7		possible morning
8	8	DDEC is to provide information regarding
9		the dust impacts on lichen (after
10		closure) after consultation with the
11		companv's closure expert by the end of
12		the Technical Sessions
13	9	DDEC is to provide a table of
14		information related to the area affected
15		bv the blasting tomorrow morning if
16		possible; to be submitted to the Review
17		Board for posting on the Public Registry
18	10	IEMA is to provide
19		presentation/documents regarding dust
20		impacts from an IEMA workshop to the
21		Review Board to be posted on the Public
22		Registry
23		
24		
25		

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1		LIST OF HOMEWORK (Con't)
2	Number	Description
3	11	DDEC is to consider the request to
4		include Jav underground as an RFD as it
5		mav contribute to cumulative effects on
6		caribou, and respond to this request
7		tomorrow
8	12	(Re IR 24 and 7 from KIA). Dominion to
9		clarifv responses from these IRs and
10		justification for the contradictorv
11		statements
12		
13		
14		
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1		LIST OF COMMITMENTS
2	Number	Description
3	2	DDEC is to complete a draft Wildlife
4		Effects Monitoring Plan (WEMP) and
5		Wildlife and Wildlife Habitat Protection
6		Plan (WWHPP) that incorporates Jav
7		Proiect bv Aua. 1st, 2015
8	3	Traffic Management Plan or Wildlife and
9		Roads Mitigation Plan) to an appendix to
10		WEMP. Input sought into plan that lavs
11		out the steps which will include linkage
12		between monitoring and mitigation and
13		incorporate input. Dominion to set out
14		a plan on how it will incorporate those
15		suagestions
16	4	DDEC will submit anv draft plans or
17		existing management plans (e.g. those
18		under review bv WLWB) that mav be used
19		for reference bv the Review Board (but
20		not for review under the EA process); to
21		be submitted to the Review Board and
22		posted on the Public Registry
23		
24		
25		

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			-
1		LIST OF UNDERTAKINGS	
2	Number	Description	
3	1	DDEC is to provide a rough map with the	
4		location of berms along the Jav road	
5		where caribou crossings will not be	
6		located. Include total length of roads	
7		and proportion that are caribou	
8		crossings	
9	2	DDEC is to conduct a full analvsis for	
10		Anne Gunn's proposed road alternative	
11		(4), as was done for the other proposed	
12		roads; to be submitted as an addendum to	
13		table 28.1 and 28.2 to the Review Board	
14		and posted on the Public Registrv	
15	3	DDEC is to provide information regarding	
16		light pollution mitigation strategies	
17		from other industrial and mining sites	
18		and their applicability to Jav Project	
19			
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--- Upon commencing at 9:02 a.m. 1 2 THE FACILITATOR: Good morning, 3 I would like to ask you to take your seats 4 evervone. so that we can get today's session on caribou underway. 5 Thank you. 6 7 Similar to vesterday, I'll just cover a 8 few general topics before we get underway. My name is Bill Klassen. I've been asked by the Mackenzie Vallev 9 10 Environmental Impact Review Board to facilitate these 11 sessions. 12 So just so everyone is aware of them, there are two (2) exits from this hall at that end of 13 14 the room. The washrooms are over there. Coffee and 15 water are over on the -- the sideboard. I would ask 16 you to put your cell phones on mute. 17 And the other thing that I didn't ask people to do vesterday and that the staff of the Board 18 19 has requested, is that would you please sign in so that they have a record of who participated in these 20 21 sessions? So the sign-in sheet is at the table at --22 at the door. 23 There is present with us today an 2.4 interpreter, Tony Buggins, who will be available to 25 interpret in the Chippewayan language for those

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Chippewayan speakers who wish to talk about caribou 1 today but aren't comfortable speaking in English. So 2 Tony Buggins will interpret for those people. It's not 3 simultaneous interpretation, and so when the 4 Chippewayan speaker has said what he or she wants to 5 say, then -- then Tony will then interpret for us. And 6 I thank you for being present. 7 8 The -- the topic today is caribou, and 9 so there are different participants today than there 10 were vesterday. And so that we are all aware of who is in the room, I would like, as we did vesterday, to have 11 12 introductions again. And I will start on my left here with Chuck. 13 14 MR. CHUCK HUBERT: Chuck Hubert, with 15 the Review Board. 16 MS. SACHI DE SOUZA: Sachi De Souza, 17 with the Review Board. 18 THE FACILITATOR: We'll go to the Board 19 staff, and then we'll come back. And we'll go around the room, and then lastly the people that are at the 20 21 tables closest in. 22 MS. KATE MANSFIELD: Kate Mansfield, 23 with the Review Board. 24 DR. ANNE GUNN: Anne Gunn, with the 25 Review Board.

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(BRIEF PAUSE) 1 2 3 MR. JOHN DONIHEE: I'm John Donihee. I'm Board counsel. 4 MR. SIMON TOOGOOD: Simon Toogood, with 5 6 the Review Board. 7 MR. CHRIS ROSE: Chris Rose, with the 8 Review Board. MR. DOUG DOAN: Doug Doan, with the 9 10 Independent Environmental Monitoring Agency. MR. KIM POOLE: Kim Poole, on behalf of 11 12 the Agency. 13 MR. KEVIN O'REILLY: Kevin O'Reillv, 14 with the Agency. 15 MR. TEE LIM: Tee Lim, with the Agency. MR. MARC d'ENTREMONT: Marc 16 17 d'Entremont, technical advisor to the DKFN. MR. TODD SLACK: Todd Slack, with the 18 19 Yellowknives. 20 MR. PETER UNGER: Peter Unger, LKDFN. 21 MR. BOYAN TRACZ: Bovan Tracz, 22 Wek'eezhii Renewable Resources Board. 23 MR. SJOERD VAN DER WIELEN: Sjoerd Van 24 Der Wielen, Tlicho Government. MR. SHIN SHIGA: 25 Shin Shiga, North Slave Metis Alliance.

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MR. TONY BUGGINS: Tony Buggins, 1 2 interpreter. 3 MR. TOM UNKA: Tom Unka, NWT Metis 4 Nation. MR. SHAWN MCKAY: Shawn McKav, Fort 5 6 Resolution Metis Council. MR. ARTHUR BECK: Arthur Beck, Fort 7 8 Resolution Metis President. 9 MS. TAMIKA MULDERS: Tamika Mulders, 10 with Golder Associates. MS. EMILY NICHOL: Emilv Nichol, with 11 12 Golder. 13 MS. SHANNON ALLERSTON: Shannon 14 Allerston, Golder -- Golder Associates. 15 MR. DAMIAN PANAYI: Damian Panavi, 16 Golder. 17 MR. CHARLES KLENGENBERG: Charles 18 Klengenberg, Dominion Diamond. 19 MS. GILLIAN WEBSTER: Gillian Webster, 20 with GNWT-DAAIR. 21 MS. SARAH ROBERTSON: Sarah Robertson, 22 with CanNor NPMO. 23 MS. MONICA WENDT: Monica Wendt, 24 ENR/GNWT. 25 MR. MIKE REDDY: Mike Reddv, GNWT

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1 Justice. MS. MELISSA PINK: Melissa Pink, GNWT 2 3 Lands. 4 MR. PAUL MCCURDY: Paul McCurdv, GNWT 5 Lands. 6 MR. LUBAKI ZANTOKO: Lubaki Zantoko, 7 GNWT-CIMP. MS. TANNIS BOLT: Tannis Bolt, 8 9 Kitikmeot Inuit Association. 10 MS. STACEY MENZIES: Stacev Menzies, 11 with the Review Board. 12 MR. JOHN CUNNING: Hi. John Cunning, 13 with Golder. DR. JOHN VIRGIL: John Virgil, Golder. 14 15 MS. KRISTINE MASON: Kristine Mason, 16 Golder. 17 MS. FIONA ESFORD: Fiona Esford, 18 Golder. 19 MR. HARRY O'KEEFE: Harry O'Keefe, 20 Dominion Diamond. 21 MS. AMY LANGHORNE: Amv Langhorne, 22 Golder. 23 MR. STEVEN STRAWSON: Steve Strawson, 24 Golder. 25 DR. DAN COULTON: Dan Coulton, Golder

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1 Associates. 2 DR. JIM RETTIE: Jim Rettie, Golder 3 Associates. MR. RICHARD BARGERY: Richard Bargerv, 4 5 Dominion Diamond. 6 MS. CLAUDINE LEE: Claudine Lee, 7 Dominion Diamond. MR. ERIC DENHOLM: Eric Denholm, 8 9 EDenholm Consulting. 10 MR. PATRICK DUFFY: Patrick Duffv, 11 legal counsel for Dominion. 12 THE FACILITATOR: Over here on this 13 side please. Maybe you can use the mics that are on 14 the table. MR. JAN ADAMCZEWSKI: Jan Adamczewski, 15 16 with the Wildlife Division, Government of the Northwest 17 Territories/ENR. MS. ANDREA PATENAUDE: Andrea 18 19 Patenaude, GNWT-ENR. 20 MS. KARIN CLARK: Karin Clark, GNWT-ENR 21 Wildlife Division. 22 MS. LYNDA YONGE: And Lynda Yonge, 23 GNWT-ENR. THE FACILITATOR: Thank you very much. 24 25 Just to clarify again the approach that we'll be

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1 taking. The purpose, of course, is to focus on the 2 Information Request responses that Dominion Diamond has 3 provided. And we want to as much as possible resolve 4 any outstanding technical issues. So the information 5 that's gathered in these sessions will inform a second 6 round of Information Reguests, should that be 7 necessary.

8 And there will also be commitments made, as there were vesterday, I expect, on this topic. And 9 10 the Board staff will be tracking what those commitments The meeting is being transcribed, so when you 11 are. speak would vou please give your name so that the 12 13 record will be accurate as to who said what. The --14 we'll be breaking for lunch just before 12:00 and we'll 15 take other breaks during the day as it seems to be 16 necessary.

17 Before I go over the -- the agenda for 18 today there were some items, some commitments, that Dominion Diamond made vesterday as to information they 19 would be bringing to this session or these sessions 20 21 during the week that they weren't able to provide 22 vesterday. And there's one (1) such topic that I think 23 the Dominion Diamond staff present are able to address. 24 But before I ask Richard -- and that one (1) had to do 25 with a -- a question about grizzly bears and the

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effects on grizzly bear populations of the decline and 1 in the caribou numbers. 2 But before I ask Richard to comment on 3 that, I've just been reminded that I forgot to ask the 4 people who are on teleconference to introduce 5 themselves. So for those who are joining us by 6 telephone would vou please introduce vourselves? 7 8 MS. MAUREEN FLAGLER (BY PHONE): 9 Maureen Flagler, Aboriginal Affairs in Gatineau. 10 THE FACILITATOR: Thank you. MR. CHRISTOPHER AGUIRE (BY PHONE): 11 12 Hello. This is Christopher Aquire, from Transport 13 Canada in Winnipeg. 14 THE FACILITATOR: Thank you. Is there 15 anyone else joining us by telephone? 16 17 (BRIEF PAUSE) 18 THE FACILITATOR: Okav. Hearing no one 19 20 else then, we'll assume there are just two (2) 21 telephone participants. And I will try to give you an 22 opportunity to ask your questions as well as we go 23 along. 2.4 So would you then respond to the 25 guestion regarding grizzlies, Richard, if you have that

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information? 1 2 MR. RICHARD BARGERY: So just the -just -- Richard Bargery, Dominion Diamond. Just for 3 clarity, do you want us to deal with the undertakings 4 that were the homework assignments? Do you want us to 5 deal with the grizzly bear populations? And as far as 6 7 the translation's concerned, are we trying to be slow 8 to accommodate that? 9 THE FACILITATOR: For those 10 undertakings that were given vesterday to bring information back, if you have that information, let's 11 12 get it on the record now, and then we'll proceed. 13 MR. RICHARD BARGERY: Okav. Richard 14 Bargerv, Dominion Diamond. So in response to Brvan 15 Watts's question regarding the recommendations stated in section 15 of the Jay Project Pre-feasibility Dike 16 17 Design Report prepared by Golder on December 8th, 2014, submitted along with Dominion Diamond's response to the 18 19 IRs as Appendix A. So that's Homework Assignment 20 number 1. 21 Our recommendations were organized under two (2) headings: 1) evaluation of foundation 22 23 conditions, and 2) evaluation of potential construction 24 materials. 25 Under the first heading related to

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1 foundation conditions, all recommendations had to be 2 carried out or in the process of being carried out as 3 part of the 2015 geotechnical investigation program 4 except the first item.

5 This recommendation involves conducting 6 an underwater visual assessment of the lake bed surface 7 for the presence of cobbles and boulders. During the 8 summer of 2015, surveying to visually assess the 9 presence of boulders on the lake bed surface will be 10 carried out.

Under the second eading -- heading, 11 sorry, Newfoundlander, 'H's are sometimes a problem --12 mixed design testing on till samples obtained from the 13 14 Pigeon pit have been carried out. Additional till samples will be collected from Lynx pit during pre-15 16 stripping operations, and testing will be conducted. 17 Once a crusher contractor is selected to produce the fine and coarse filter material, then 18 19 samples will be collected and testing conducted. The design -- the dike design team is confident that 20 21 suitable data has been provided by Dominion to support 22 the dike design used in the DAR, which we believe is 23 acceptable for the environmental assessment stage of 2.4 the regulatory process.

25

So Homework Assignment number 2 asked by

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-- by Mr. Slack from the YKDFN with respect to the 1 number of lake beds altered. This guestion arose --2 excuse me. This guestion arose in discussion of Stream 3 C-1 which will need to be permanently diverted to 4 accommodate a conceptual elongation of the Jav waste 5 rock storage area to the north. The diversion of 6 Stream C-1 would likely require in-stream fish habitat 7 8 for all life stages and species of fish. 9 There are two (2) diversions of this 10 nature at the Ekati mine: the Panda Diversion Channel and the Pigeon Stream Diversion. Both of these 11 channels are permanent diversion channels that contain 12 in-stream habitat for all life stages and species of 13 14 fish. These diversions were designated Fisheries Act compensation for loss of the original streams. 15 The Fisheries Act authorizations held by 16 17 the Ekati mine identify thirteen (13) lakes that have been unavoidably lost, and four (4) lakes that have 18 19 been altered. Many of these lakes were lost or altered during the initial construction of the Ekati mine. The 20 21 alteration or loss of those lakes have been fully 22 compensated through the Fisheries Act. 23 Homework Assignment number 3, wildlife 2.4 mitigation and monitoring plans. That came up and I 25 believe was asked by the GNWT by Andrea Patenaude, and

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-- and there were some follow-up questions. 1 Dominion Diamond will provide a draft 2 document that is consistent with the GNWT's draft 3 guidelines for a Wildlife and Wildlife Habitat 4 Protection Plan and Wildlife Effects Monitoring Plan, 5 GNWT 2013, by August 1st, 2015, which we think is --6 will be in -- in advance, hopefully a couple of weeks 7 8 in advance, of the -- of the public hearings. This document will provide details on 9 10 the existing mitigation practices and procedures and describe the adaptive management process that is 11 already in place at the Ekati mine and how they will be 12 expanded to include the Jay project. The WEMP will 13 14 then provide details on the study designs and sampling 15 methods used to test effects, predictions, and the effectiveness of mitigation. 16 Upon the approval of the Jav project, it 17 18 is expected that these new documents will replace the 19 Ekati Wildlife Effect Management Plan and the current Ekati Wildlife Effects Monitoring Program. The Ekati 20 21 Wildlife Road Mitigation Plan -- the Traffic Management 22 Plans, as we were referring to it vesterday -- will be 23 distributed for comment at the end of April, as per the 2.4 previous commitment that we made. 25 The final document will become an

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appendix of the Ekati Wildlife and -- and Wildlife 1 Habitat Protection Plan. The same mitigation practices 2 and proce -- procedures will be applied to the Jav 3 project pending approval. 4 We have another one -- another homework 5 assignment which is not complete yet with the list of 6 management plans, and we're still working through that. 7 8 And hopefully, in the next day or two (2) we'll -we'll have that -- that, as well. 9 10 THE FACILITATOR: Thank you. I guess since I have asked the rest of you to identify 11 12 vourselves, I better say that I'm Bill Klassen. And thank you, Richard. We'll wait for that additional 13 14 information. I'm not going to entertain guestions now about the information that has been provided. I would 15 16 like to proceed with caribou. 17 If you have further questions about the information that has been provided, I'll ask you to 18 hold those. And we'll have opportunity later this week 19 20 to come back to those. But because there are people 21 present here today specifically on the caribou topic, I 22 would like to proceed with -- with caribou. 23 24 (BRIEF PAUSE) 25

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1 THE FACILITATOR: I'm informed there's 2 one (1) more homework item, but I'm not sure exactly 3 what that is. Can vou ment -- I'll ask Chuck to speak 4 to that.

MR. CHUCK HUBERT: Yes, thanks, Bill. 5 Chuck here, with the Review Board. The -- the question 6 7 was to ENR, and it was regarding bird nesting sites in 8 pits and to -- asking whether some type of compensation for bird nesting sites which would be affected during 9 10 pit re-flooding, if ENR has a response for that today? 11 MR. ANDREA PATENAUDE: Hi. Andrea Patenaude, ENR. In response to that question from 12 vesterday, GNWT feels that the mitigations proposed for 13 14 preventing nesting and minimizing impacts to nesting 15 falcons that are proposed are sufficient and that, as 16 the habitat descri -- or created by mine pits is 17 created habitat, that no compensation is required. 18 May I also take this opportunity just to 19 jump in on something that came up vesterday that we didn't really get in on guick enough, but that was in 20 21 response to reporting of incidents, vehicle collision 22 incidents related for caribou. It is related to 23 today's topic. 24 We just wanted to make it clear for the

25 record and for the -- I don't know if I see her, but

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for the questioner, that there is a legal obligation in 1 the Wildlife Act to report these types of incidents to 2 an ENR officer as soon as prac -- practicable and that 3 this is -- this fact is assisted but -- or this is 4 assisted by the fact that during the winter road season 5 there is a check station that's set up -- a joint check 6 station set up by GNWT and YKDFN at Gordon Lake. This 7 8 is discussed in response to IR from the Yellowknives Dene at -- or 18, and that the regional office would be 9 10 the ones to -- in this case, North Slave office, to --11 to receive those reports. 12 THE FACILITATOR: Thank you for that additional information. It's Bill Klassen. The agenda 13 14 for today then, we have --15 MR. RICHARD BARGERY: Sorrv, Bill. 16 Bill, sorrv. 17 THE FACILITATOR: All right. 18 MR. RICHARD BARGERY: The one (1) issue 19 we haven't dealt with, the first question you asked, sorry, Richard Bargery, Dominion Diamond, was the 20 21 grizzly bear resilience guestion that Dr. Gunn asked 22 vesterday. And we do have a response to that even 23 though it wasn't a homework assignment. And we're wondering if -- if the ti -- if it's best to do that 24 25 now or best to do it during the -- the -- vou know,

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during the session, so. 1 THE FACILITATOR: Well, it's on the 2 topic of caribou so -- or at least directly or 3 4 indirectly. Please proceed with -- with that then, and then we'll get onto the main topic of caribou. 5 MR. RICHARD BARGERY: Richard Bargery, 6 7 Dominion Diamond. I'd ask Dan Coulton from Golder to -8 - to respond to -- to that guestion from Dr. Gunn. 9 DR. DAN COULTON: Dan Coulton -- Dan 10 Coulton, with Golder Associates. To -- to provide clarification on -- from Dr. Gunn's question on the 11 confidence in the impact predictions regarding the 12 resilience of grizzly bear populations, given the 13 14 decline of Bathurst caribou herd, the measurement indicators considered in the assessment of grizzly 15 bears included habitat quantity, habitat arrangement 16 and connectivity, habitat guality, survival and 17 reproduction, abundance, and distribution. 18 19 The Bathurst caribou population has a history of being cyclical. Carnivore populations that 20 21 depend on caribou have been exposed to these cvcles in 22 the past. The determination of significance concluded 23 that the effect sizes or magnitudes of the changes in 2.4 the measurement indicators predicted for grizzly bears 25 are within the adaptive capacity, and resilience in the

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presence of cyclical patterns of barren-ground caribou. 1 2 A number of ecological conservatives --3 conservatisms were assumed in the DAR to predict maximum effects, manage uncertainty, and provide 4 confidence in the determination of significance. 5 THE FACILITATOR: Bill Klassen. Thank 6 7 you. On the subject -- the larger subject then of 8 caribou that we'll be addressing today, behind me on the screen is a list of the topics: baseline roads and 9 10 utilities, dust mitigation. And in vour agenda vou've also got two (2) further items, cumulative effects and 11 population modelling, and then assessment endpoints and 12 thresholds for significance. 13 14 What I would appreciate, given that this 15 is a fairly broad topic and of great interest to many 16 in the room, is if you would try to keep your questions 17 grouped by topics. The approach we'll take is that I will ask for parties in the room that have questions on 18 19 baseline to ask those questions. And then when there 20 are no more questions by individuals in the room then I 21 will ask staff of the Board to ask guestions on that 22 topic. 23 I know that there's going to be some 24 overlap from one (1) area to another, but as much as 25 possible could we stay focussed on those bulleted

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topics: baseline roads and utilities, dust -- I know 1 there's overlap between roads and dust -- mitigation. 2 And we'll see how that -- how that works. 3 So first of all, though, we have a 4 presentation from Dominion Diamond on caribou. 5 Т believe that's the case. 6 7 MR. RICHARD BARGERY: Richard Bargery, 8 Dominion Diamond. Yes, that's the case and Jim Rettie from -- from Golder will -- will do that, if we're --9 10 if we're ready for that? THE FACILITATOR: Okav. We'll need the 11 12 lights dimmed. 13 14 PRESENTATION BY DOMINION DIAMOND - CARIBOU: 15 DR. JIM RETTIE: Good morning. Jim Rettie, from Golder Associates. This morning my 16 17 presentation includes a brief review of the assessment 18 approached used in the Developer's Assessment Report, 19 and the conclusions we've reached for barren-ground 20 caribou. 21 First, following submission of the DAR 22 we completed an addendum to include the Sable project 23 and Diavik's A21 pit. The -- the adequacy review and 2.4 the IRs that followed had a number of specific requests 25 and some common themes. These include the need for

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modelling of population trends in the Bathurst herd; 1 the significance of development given the current 2 decline of the Bathurst herd; identification of 3 ecological thresholds; detailed information on traffic 4 patterns on -- and road, pipeline, and powerline 5 designs; Wildlife Effects Monitoring Program, and 6 Wildlife and Wildlife Habitat Protection Plan. 7 8 Barren-ground caribou are an important 9 cultural and economic resource for the people of the 10 Northwest Territories, and were identified as a valued component in the terms of reference. As for the 11 wildlife VCs you heard about vesterday, the assessment 12 endpoint was self-sustaining, and ecologically 13 14 effective populations. Long-term population viability is 15 frequently applied as an ecologically relevant target 16 17 by conservation biologists and resource managers. Self-sustaining populations are healthy, robust 18 19 populations capable of withstanding environmental change and accommodating random demographic processes. 20 21 Maintaining ecologically effective 22 populations in communities goes beyond what may be 23 required to only achieve a self-sustaining population. 2.4 It also requires that healthy ecological relationships 25 are maintained among species. The measurement

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1 indicators used in the assessment process are habitat 2 guantity, habitat arrangement and connectivity, habitat 3 guality, survival and reproduction, and abundance and 4 distribution.

The approach used in the DAR was to 5 assess development effects against key elements of the 6 7 environment that are to be protected; in this case, 8 self-sustaining and ecologically effective barrenground caribou populations. The assessment is based on 9 10 a series of answers to questions that link the project to the assessment endpoint, including what happens to 11 the environment with the project, what are the effects 12 13 of changes to the environment on the measurement 14 indicators, what do the changes to the indicators mean 15 to the endpoint, and what would make a significant 16 effect.

Ecological thresholds for wildlife value components do not exist in the Northwest Territories, so effects of changes in measurement indicators were qualitatively assessed against known or inferred resilience in adaptive capacity for determination of significance.

23 Seventeen (17) potential effects 24 pathwavs are identified in -- in the TOR at -- at 25 scoping sessions and from past environmental

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assessments. These potential pathways all link Jay 1 project activities to the assessment endpoint of self-2 sustaining and ecologically effective populations. 3 After applying design and mitigation 4 features, fourteen (14) pathways did not require 5 further assessment because they would be removed by 6 mitigation or by environmental design features or have 7 8 a minor change but a neglable -- negligible residual effect. 9 10 Three (3) primary pathways were identified and carried forward for further analysis, 11 and they're listed on this slide. They're direct loss 12

and fragmentation of habitat from the project footprint 13 14 and is cause -- and how it causes change in caribou abundance and distribution; sensory disturbance and 15 barriers to movement that cause change to caribou 16 17 distribution and behaviour, and changes to energetics and reproduction; and the increased traffic on the 18 19 Miserv and Jav roads and the above-ground power line 20 along these roads that may create barriers to caribou 21 movement, change migration routes, and reduce 22 population connectivity.

23 Conservative assumptions were made to 24 predict maximum effects of the Jav project to 25 measurement indicators. For example, larger than

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expected development footprints were assumed, which
 increases changes to habitat quantity, habitat quality,
 and fragmentation.

These considered the ability of caribou 4 to absorb and adapt to cumulative effects, given life 5 history traits and calculated, and predicted changes in 6 existing and future amounts of available habitat, 7 8 existing and future landscape connectivity, factors that limit calf production, key agents of mortality, 9 10 and current and future population abundance and distribution. 11

12 Since the filing of the DAR, the -- the following have been completed. First, a reassessment 13 of the reasonably foreseeable development case, 14 including Sable pit and road and Diavik's A21 pit. 15 The largest cumulative effects -- the 16 17 largest cumulative changes from reference conditions to the reasonably foreseeable development were for rock 18 19 association habitat, which was reduced by between 5 and -- and 16 percent depending on the season. 20 21 Now, by way of explanation, rock 22 association is exposed bedrock or boulder fields with 23 verv little vegetive cover and it is -- it's a rare habitat in all seasonal ranges. 2.4 25 Also included was a decrease in esker

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17

habitat by between .9 and 1.6 percent, and a decrease in preferred habitat quality of between 1.9 percent and 17.4 percent per seasonal range. And here I've included 2014 fires, which I'm going to come to in a moment. But for purposes of summary rather than doing it twice, that's the effect, including fires.

8 the effects of pipeline on caribou movements in a number of the IRs. And the descriptions that we 9 10 provided noted that caribou cos -- crossing that would be provided had flatter slopes and used finer crushed 11 rock, and the main section of the Jay road will be 12 constructed with frequent and wide caribou crossings. 13 14 There were additional analyses conduct -15 - conducted after the Jav project adequacy review. 16 These included an assessment of seasonal rain shifts

through time, the addition of the 2014 fires to the

18 winter range effects assessments, and population 19 modelling of the Bathurst herd.

From the seasonal range analyses, we determined that post-calving in autumn ranges became more concentrated between 1996 and 2013. The autumn range has moved further north through time, and migration is completed -- autumn migration is completed later. It's important to note that the seasonal ranges

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continue to span the project areas. Animals are moving 1 northward and southward annually past and through the 2 project area. Similar fidelity to seasonal ranges was 3 observed for all seasons from 1996 through 2013. 4 Temporal trends in weather were not 5 supported by the data. That was a part of the request 6 on seasonal rain shifts. 7 8 An incremental loss of 11.5 percent of preferred winter habitat was noted from the 2014 fires. 9 10 And there was an additional energetic cost -- there were additional energetic costs of movement that are 11 not expected to decrease population resilience and 12 increase risk to the Bathurst herd at any phase of the 13 population cycle. And that was a consequence of our 14 15 population modelling. So all of these additional pieces of 16 17 work do not change the residual impact classification and determination of no significant effects that was 18 19 presented in the DAR. 20 I'd like to provide an example here of 21 the conservative approach to our -- our analyses; in 22 this case, for energetic costs. For this part of our 23 analysis, there were two hundred and sixty-nine (269) 24 individual caribou pathways that were examined. So 25 these were from data that were collected from 1996

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through 2013, and they spanned a time period from mid-1 2 June till the end of October in each year. Encounters with developments were 3 measured as both residency time within the zones of 4 influence, and the number of path intersections with 5 the zones of influence. So these pathways were plotted 6 by connecting radio telemetry points for individual 7 8 animals. And they were plotted initially against the zones of influence around developments that were 9 10 present in the year in which the data were collected. So for animals that were being tracked in 2002, it was 11 initially mapped against the 2002 dis -- developments 12 and zones of influence around them. 13 14 The figure on the right illustrates that 15 these four (4) -- the four (4) paths -- the four (4)16 paths that are noted on the figure encounter the zone 17 of influence. And we calculate the time of -- the time within the zone of influence by identifying the date of 18 19 entry and the date of exit. 20 And for purposes of counting the numbers of encounters, zones of influence were plotted over top 21 22 of one another. So in the top pathway here where we 23 see an animal that passes through two (2) zones of influence that overlap, that would have been counted as 24 25 two (2) encounters.

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When animals were in the -- within a 1 zone of influence for three (3) days, we calculated a 2 separate encounter for each day. And -- and they were 3 counted regardless of how close to the centre or to the 4 peripherv of the zone of influence. They were -- they 5 were all counted as -- as an encounter. 6 7 So the energy models were based on 8 previously published models in the scientific literature. And we made conservative assumptions. 9 The 10 effect of disturbance for each day was constant, regardless of the distance from the development. 11 Exposed animals were considered to be excited for a 12 twelve (12) hour period. There was -- there was an 13 assumed weight loss that was permanent. There was no 14 15 compensating foraging or change in behaviour that 16 allowed them to compensate for that. 17 When we then took those same sets of 18 pathways and we plotted them against what the landscape 19 would look like with the Jav project on it in the 20 application case, the max -- oops, the maximum number 21 of -- of encounters, mean -- mean number of encounters 22 for any one (1) year on -- against the application case 23 and the zone of influence around the developments at 24 that point in time was twenty-one (21). In the 25 historic baseline data, it was nineteen (19).

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When we looked at the reasonably 1 foreseeable development case, the maximum number of 2 encounters with those zones of influence that would 3 occur in the future was thirty-four (34). The mean at 4 that period of time was twenty (20). 5 So looking at the -- at all of the 6 7 animals that have been tracked over the -- over the 8 period from 1996 to 2013, the mean number of encounters with that zone of influence was twenty (20). And in 9 10 our models, we used the vear that had the maximum number -- average number of encounters for an 11 12 individual animal. 13 So we used that maximum value rather 14 than a mean value. We projected forward and, with the 15 energetic costs associated with those -- with those 16 disturbances from encounters, we determined that there 17 was a body mass loss of 1.08 kilograms. The energetic model also assumed that 18 19 caribou would not cross Miserv, Sable, or Jav roads. We incorporated caribou migration routes that were 20 21 identified through traditional knowledge; those are the 22 green -- those are the green lines that appear on this 23 figure. Animals that encountered the contiguous zone 2.4 of influence around Ekati and Diavik were assumed to go 25 all the way around, and follow migration routes.

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So an animal encountering this area, 1 perhaps moving from the northeast, was assumed to then 2 encounter the -- the influence from these projects, and 3 to then go either north and then -- or, sorry -- yeah, 4 north and then west, or south and then -- then west 5 from the southern point. And we did -- we looked at 6 7 the possible places in which an animal -- a migrating 8 animal might encounter that place where they would be deflected around the projects, and we determined that 9 10 the maximum deflection distance around the project in either direction was 59.8 kilograms (sic). 11 12 So rather than adopting the median distance, and rather than assuming that any animals 13 14 were moving through here, we assumed that all animals 15 took the longest possible route to avoid the combined 16 footprint and zone of influence of Ekati and Diavik. 17 The body mass loss associated with such a movement was determined to be .44 kilograms. 18 19 We also estimated insect -- an insect 20 harassment index from weather data from both Diavik and 21 Snap Lake. In the assessment we used the single year 22 at a single location with the greatest number of insect 23 harassment davs. So they're -- they're based on -- on 2.4 temperature and -- and wind. 25 And rather than looking at range-wide

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conditions or looking at average conditions, we looked 1 at the worst year for a single station. And we 2 concluded that that would have given us forty-four (44)3 days of insect harassment and that that would equate to 4 a body mass loss of 5.37 kilograms. 5 In the final step, we combined all these 6 7 sources of body mass loss to an annual total of 6.88 8 kilos. Next, we have assumed a rapid linear decline in productivity. So the figure that's shown on this slide 9 10 shows what the body mass loss that's listed on the Xaxis would result -- would -- what result it would have 11 in terms of the decline in productivity of caribou. 12 The green line represents the model that 13 14 we used where we showed a linear decline from -- from a 15 hundred percent down to zero percent productivity with 16 a body mass loss of 20 percent. 17 The curve is representative of -- of an equation produced from work done in Alaska by Cameron 18 19 and Ver Hoeff. And it shows that initially there is relatively minor decrease in loss of productivity with 20 21 body mass loss, and then it becomes more pronounced

22 later on as -- as body mass loss increases.

23 So for the -- the reasonably foreseeable 24 development case that we looked at with thirty-four 25 (34) encounters and forty-four (44) insect harassment

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days, our model shows that we'd have a body mass loss -1 - or a probability of -- of calving that declined to --2 reading from this graph, approximately point six five 3 (.65). And had we applied the model of Cameron and Ver 4 Hoeff, we would have been up close to -- close to a 5 hundred percent, somewhere in the high nineties (90). 6 7 If we had used the mean number of 8 encounters rather than the maximum number of encounters, and if we had used the mean number of 9 10 insect harassment days -- or sorry, the -- the maximum number of mean number of insect harassment days across 11 the two (2) stations, we would still have a number that 12 13 was up here close to 98 percent. So our -- our loss of 14 productivity was estimated at a much greater level than 15 that that would correspond with what's in the 16 literature. 17 There were a number of IRs that 18 requested information about the Jav and Miserv roads, 19 especially the Jav road, and there were a number of points that were provided in response. The mitigation 20 21 for the roads is arranged in a hierarchy. The first of the -- first point in that hierarchy is avoidance. And 22 23 for the -- mitigation for the Jay and Miserv roads 2.4 there is a plan for temporary road closures to avoid 25 the barrier effects of traffic on migration.

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Minimization as a mini -- mitigation 1 strategor -- strategy includes engineered caribou 2 crossings, particularly including where the Jav road 3 cuts through the esker. Because of the importance of 4 the esker for caribou movement as identified through 5 community engagement, the portion of the Jay road that 6 cuts through the esker will be constructed as a caribou 7 8 crossing. The pipelines will be covered over with crushed along this section of the road, except where 9 10 there are valves or joints that require visual inspection for safe operation. Dominion Diamond will 11 strategically construct the pipelines to reduce the 12 number of joints or valves through the esker crossing. 13 14 Other mitigation strategies include ore stockpiling and design of ore hauling; staged 15 monitoring of the Bathurst caribou herd to track 16 17 migratory movements through acquisition of satellite radio-collar information and road surveys; adaptive 18 19 management of monitoring; modification of traffic patterns and road closures that will reflect the number 20 21 of group composition -- and group composition of 22 caribou near the mine site; and finally reclamation. 23 There will be a reclamation of the esker following closure and removal of pipeline and power lines. 2.4 25 The caribou effects study area was based

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1 on the seasonal ranges of and effects to the Bathurst 2 caribou herd, as the Bathurst herd has a greater 3 likelihood of being affected by the project relative to 4 the Ahiak and Beverly herds. The DAR used multiple 5 approaches and best practices to provide confident and 6 ecologically relevant impact predictions.

7 Caribou annual ranges remain intact, so 8 habitat is not limiting now or during recovery. Caribou have space to find food, avoid predators, and 9 10 maintain seasonal migrations. There's no fragmentation of populations. There's traffic manipulation 11 mitigation for the Miserv, Jav, and Sable roads. And 12 there's no strong mechanism causing a long-term or 13 14 irreversible change in reproduction or survival rates. 15 We are confident that the amount and number of ecological conservatisms and associated 16 overestimation of effects, including the changes in the 17 magnitude of effects from the project and other 18 developments. We are confident that this is true 19 during periods of high and low population abundance and 20 21 when the trend is either increasing or decreasing. 22 The existing Ekati Mine Wildlife Effects 23 Monitoring Program will be applied to the project, 2.4 including the extent and direct disturbance to 25 vegetation communities, mine-related wildlife

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mortalities and interaction with the site, pit-wall 1 nesting by raptors, mitigation and waste management 2 effectiveness, contribution to regional monitoring of 3 cumulative effects. The curr -- the current WEMP 4 monitors caribou as well as grizzly bears, wolverine, 5 gray wolf, fox, raptors, waterbirds, and upland birds. 6 7 The Wildlife and Wildlife Habitat 8 Protection Plan will be provided to meet the requirements of the NWT Wildlife Act and the Ekati 9 10 Wildlife Road Mitigation Plan, which will be applied to the Jav project is forthcoming. Thank you. 11 12 13 OUESTION PERIOD: 14 THE FACILITATOR: Thank you. My name 15 is Bill Klassen, and we'll now begin with questions. 16 And the -- the first topic is baseline information. 17 Are there questions from the parties present about baseline information? 18 19 MR. TODD SLACK: I'll go first. And it's Todd Slack, with the Yellowknives. In terms of 20 21 the assessment end point, how many caribou are YKDFN 22 harvesting as part of your -- your submission here? 23 THE FACILITATOR: I'm sorry, could I 2.4 just interrupt? It's Bill Klassen. The -- the 25 question topic is baseline. You've jumped immediately

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to assessment end points. So I -- do you have 1 questions relating to baseline? Or help me understand 2 how your guestion relates to baseline information. 3 MR. TODD SLACK: It's Todd Slack, with 4 the Yellowknives. Sorry, I don't see assessment end 5 points on there. I just assumed that how they got to 6 7 this point would be the starting position where we're 8 coming from. But if we're going to deal with that at a later date, so be it. Okav. I hear 'ves'. Moving on. 9 10 The -- the Company seems to agree that 11 12 caribou avoid the mine site. I think we have agreement on that. But the question that I have is: Why did it 13 14 take two (2) decades for the Company to come around to 15 the predictions that the traditional knowledge holders made at the original EA? 16 17 18 (BRIEF PAUSE) 19 20 THE FACILITATOR: So Bill Klassen. 21 While Dominion Diamond is conferring, Todd, to clarify, 22 there's a second slide of the agenda which shows the 23 cumulative effects in population modelling, and then 2.4 assessment endpoints. So we'll get to that. 25

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(BRIEF PAUSE) 1 2 3 MR. RICHARD BARGERY: Yeah. Richard Bargerv, Domin -- Dominion Diamond. Important point, 4 5 the second part, Dominion Diamond, which we've been, you know, the owners of Ekati for two (2) years. And 6 so I -- I can't speak with -- with great certainty 7 8 about the twenty (20) year period for the mine. 9 What I can sav is we modelled -- the 10 modelling that we did was based on caribou avoid -avoiding the mine. I'll leave it at that. 11 12 13 (BRIEF PAUSE) 14 MR. TODD SLACK: I need a minute to 15 16 think about this. GNWT...? 17 THE FACILITATOR: Okay. Thank you. It's Bill Klassen. Are there other questions on the 18 19 topic of baseline? 20 21 (BRIEF PAUSE) 22 23 THE FACILITATOR: I'll ask Board staff 24 then whether they have guestions on that topic. 25 DR. ANNE GUNN: Anne Gunn, for the

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1 Board. Mv questions were answered through the 2 responses to the Information Requests. I have no 3 follow-up.

4 THE FACILITATOR: Thank vou, Anne. Moving then to roads and utilities, are there questions 5 from the parties present on that general topic area? 6 7 Jan here, and then the person just seating himself. 8 MR. JAN ADAMCZEWSKI: Jan Adamczewski, with GNWT-ENR. I just wanted to talk a little bit 9 10 further. I -- I appreciate Mr. Rettie -- Dr. Rettie's presentation on -- on how they approached the caribou 11 avoiding the roads and moving around them and so on. 12 But I -- I'm kind of coming back to the 13 14 question that was asked vesterday about the Traffic 15 Management Plan because, you know, as I look at one (1) 16 of the maps from one (1) of the Information Requests, 17 it seems fairly clear from traditional knowledge, from trails that were mapped and, you know, just -- just 18 19 from the collar information itself that that corridor is fairly important as a crossing corridor, and 20 21 probably has been for some time. So I guess I'm coming back to the 22 23 traffic management and whether you can provide a little 24 more information on that, because that can mean 25 anything from, you know, a lower speed limit to not as

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many trucks, or maybe you don't run them during the day 1 2 or you run them at night. I mean, it -- it may well be that you're 3 not going to see a lot of caribou in that area because 4 of the avoidance, which I think we all acknowledge. 5 But I would ask if you could provide, I quess, a little 6 7 more information. 8 What -- what exactly would that mean in terms of road closures? Are we talking no trucks at 9 10 all for days on end? How would that be triggered? And can you just provide a little bit more on that subject? 11 12 13 (BRIEF PAUSE) 14 THE FACILITATOR: It's Bill Klassen, in 15 16 Yellowknife. For the benefit of the person who just 17 joined the conference, we have a question about to be answered by the developer on traffic management on the 18 19 road. 20 MR. IGNACIO DUOUE (BY PHONE): Thank 21 vou. 22 MR. RICHARD BARGERY: Richard Bargery, 23 Dominion Diamond. So first, we -- we are going to 2.4 provide the -- the Wildlife Road Mitigation Plan 25 sometime in the next -- the next couple of weeks here

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before the -- or the next ten (10) davs, I quess,
 before the end of the month which will lav out the
 procedures here.

But what we're talking about is -- is 4 having a stockpile at -- at the Miserv site and another 5 stockpile at the mine site, at -- at the -- by the 6 7 processing plant, the main -- main site, that will 8 allow us, when caribou are moving through in -- in large numbers, to be able to shut the mine down. And 9 10 that -- that could be for -- vou know, for a larger 11 period of time.

12 And then, of course, all the -- the 13 current practices that we have with respect to -- with 14 respect to wildlife today, allowing wildlife the right-15 of-way. And all those kinds of practice, when there 16 are a few caribou moving through, we would continue 17 with those kinds of practices on both the Jav and the -18 - and the -- the Misery roads.

MR. JAN ADAMCZEWSKI: Jan Adamczewski, GNWT-ENR. I guess this is probably something vou're agoing to be hearing throughout the day, but the status of the Bathurst herd is such that small differences make a difference. And so I think just exactly the -the nature of the shutdowns and -- and how significant those are, that these are not trivial matters now given

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the -- the status of the herd. So just -- just a 1 comment for your consideration. 2 3 THE FACILITATOR: We have -- it's Bill There's another question here. 4 Klassen. MR. PETER UNGER: Hi. Peter Unger, 5 Lutsel K'e Dene First Nation. I -- I asked a guestion 6 7 about this in the IRs, and -- and you did answer. And 8 maybe I just asked the poorly, and maybe I -- I just don't understand fully. I wanted to know a little bit 9 10 more about how you evaluated road avoidance. So my understanding was you did surveys 11 12 going up and down the road. Caribou within 200 metres of the road were recorded. I understand there was some 13 cameras set up, and then there was some tracks looked 14 15 at along the road. And then, on top of this, there 16 were some aerial surveys and collar data. 17 My -- my question is: I mean, is it not possible that caribou avoid the road a little bit 18 19 earlier than 200 metres? So caribou outside 200 metres are not recorded? And do aerial surveys and collar 20 21 data really give an accurate idea of road avoidance? Ι 22 guess the collar data would make sense to me. The 23 aerial survey, unless you're flying over all the time, 24 I -- I don't see how that would -- how that would do 25 it.

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So I was just hoping you could maybe 1 break it down a little more for me than -- than it 2 3 already has been broken down. Thank you very much. DR. JIM RETTIE: 4 Thank vou. Jim Rettie, Golder Associates. For the purposes of the --5 the assessment of the effects of the Jav project, our 6 7 analysis assumed that no animals crossed the roads. 8 While we recognize that there are animals that do cross the roads, for the purposes of assessing the maximum 9 10 effect of the project, we assumed that all animals were deflected and went around the combined Jay and -- or 11 sorry, Diavik and Ekati projects, as I described in the 12 presentation a little earlier. 13 14 So in terms of -- of assessing the 15 effect, by making that assumption, we've maximized the 16 potential effect, and we came to the conclusion that 17 the end result was not significant. 18 MR. PETER UNGER: Yeah. I mean, in 19 terms of the end conclusion -- sorry, Peter Unger, Lutsel K'e Dene First Nation -- that's not my issue. 20 Ι -- I am just curious to know how many caribou are going 21 22 to be walking around near the road, will the caribou be 23 walking around near the road, and having maybe a good 24 idea of that which is something would -- that I would 25 have loved to have evaluated.

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In terms of your model, that's not what 1 I'm contentious about. I just -- I want to know if 2 caribou are walking across the road or not, or if it is 3 spooking them. And -- and I was curious if -- if you 4 think that was adequately looked at. Thank you. 5 6 7 (BRIEF PAUSE) 8 9 DR. JIM RETTIE: Jim Rettie, Golder 10 Associates. We can confirm that there are animals that do cross the road. We don't know what proportion of 11 the animals that are in that area do cross the road, 12 but for the purposes of this assessment, we feel that 13 14 it's been adequately examined. 15 MR. PETER UNGER: Peter Unger, LKDFN. 16 Thank you very much. 17 THE FACILITATOR: Thank you. Bill Klassen. Kim Poole...? 18 19 MR. KIM POOLE: Kim Poole, for IEMA. First I apologize if my questions blend over your 20 21 topics behind vou on the screen 'cause I don't know how 22 to break them apart. They -- they just overlap too 23 much. 2.4 In Appendix C, which is the traffic 25 report, with -- with respect to the long-haul truck

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trips, Dominion Diamond writes, and I quote: 1 2 "However, a hundred percent efficiency is not a practical 3 assumption. Therefore, if it is Δ assumed each truck/driver is 60 5 percent efficient on an annual basis 6 7 then twelve (12) long-haul trucks 8 will be required to meet the demand 9 as opposed to seven (7) trucks." 10 End of guote. After the statement, there was no change in the calculation of average time 11 12 between haul truck -- haul traffic. 13 Could Dominion Diamond, please, clarify 14 that if eleven (11) or twelve (12) trucks are on the roads instead of seven (7) used in the calculations, 15 that no change in the number of long-haul truck 16 17 passages would occur? So it still amounts to 18 approximately, on average, a hundred and ten (110) 19 passages per dav. 20 21 (BRIEF PAUSE) 22 23 MS. FIONA ESFORD: Fiona Esford, Golder 24 Associates. It's the same volume of material that's 25 being transported. So you can recognize that trucks

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will occasionally need maintenance; the driver's take 1 lunch, and are not driving 100 percent of the time. So 2 the actual distance -- the time between a truck passing 3 in a given spot remains the same because the same 4 volume of material is being transported, whether it 5 takes seven (7) trucks or ten (10) trucks because of 6 maintenance and breaks, that's a different thing. 7 8 MR. KIM POOLE: Kim Poole, with IEMA. 9 So the 60 percent efficiency doesn't relate to the 10 amount of ore that's in the trucks; it's the amount of how many drivers -- or how fast the driver -- not fast, 11 but how many drivers are on the road as -- at a given 12 time, essentially? 13 14 MS. FIONA ESFORD: Yes. The truck 15 capacity is not assumed to be a hundred percent. 16 That's taken into the calculation. The size of your 17 fleet is not a hundred percent efficient. MR. KIM POOLE: Okav. Thank vou. 18 Another guestion. This relates to the Tibbitt-19 Contwoyto winter road. In the same traffic report it 20 21 states that the Ekati traffic will be about four 22 thousand (4,000) loads per season, which generally 23 covers the months -- the months of February and March, 24 approximately sixty (60) days or whatever, depending on 25 the -- how the season goes. Table 1 in the

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Appendix C traffic report suggests that approximately 1 10 percent of the northbound loads have southbound back 2 hauls, but could -- there's multiple parts to this 3 question, I apologize. Can Dominion Diamond clarify 4 that the four thousand (4,000) loads per seasons 5 represents eight thousand (8,000) round trips, assuming 6 7 that all trucks are returning south? And that the 8 winter road traffic on the Miser road -- Misery road will average approximately a hundred and thirty (130) 9 10 passages per day, which will be in addition to the eightv (80) to a hundred and ten (110) round trips per 11 12 day from the normal mine operations? In other words, we're up into the 13 14 hundred and sixty (160) to two hundred and ten (210) 15 passages per day range. Oh, sorry. Actually, no. 16 Sorry. This means that we're up into the two hundred 17 and ninety (290) to three hundred and forty (340) passages per day for the months of February and March, 18 19 which will reduce the estimated time between vehicles from the approximately seven (7) to nine (9) minutes 20 21 that's found in Table T -- Table 3 to roughly four (4) 22 to five (5) minutes. 23 Given shifts in caribou seasonal 2.4 distribution with changes in abundance that these are

25 difficult to predict, if caribou were to winter in the

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Ekati area to a greater extent, what additional 1 mitigation would Dominion Diamond propose? 2 3 4 (BRIEF PAUSE) 5 MR. RICHARD BARGERY: Richard Bargery, 6 7 Dominion Diamond. So the answer to the first question, 8 Kim, hopefully I'll get the -- the four thousand (4,000) loads, obviously those are return trips. So --9 10 so eight thousand (8,000) one (1) way trips, I guess, is the answer to that question. The Appendix C deals 11 with the -- the incremental traffic from Jav. So the -12 - I -- we don't have -- I can't do the guick 13 calculation if your numbers are right, in terms of 14 15 those months. 16 We would see the same kind of 17 mitigations that we've proposed for Jav for those roads would -- would occur, including, you know, potentially 18 19 shut down when large numbers of caribou are -- are 20 going across the -- the Misery road, which is the road 21 that -- that's -- that's critical in this discussion. 22 And, Jim, I think, can answer -- answer the other 23 portion of the question. 24 DR. JIM RETTIE: Jim Rettie, Golder 25 Associates. Yeah, vou asked about the wint -- over-

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wintering near the Jay and Ekati projects. In response 1 to one (1) of the adequacy review items from the --2 from the Board we provided an assessment of the -- of 3 winter ranges and how they've changed through time. 4 And -- and if you look at that figure you can see that 5 -- and that's in -- we've labelled it as "DAR MVEIRB-6 9." And that's a -- and that's in response to adequacy 7 8 review Item 8.2. And in our response we -- we present the changing centroids for all the winter ranges 9 10 through time. And -- and we're still a long wav awav 11 from -- from the mine sites for over-wintering. 12 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. Just -- I just -- I just want to add 13 14 a cou -- another point or two (2). I mean, this is the 15 situation today and it's been the situation, you know, 16 in -- in terms of the numbers in large part since 17 Ekati's been operational. And -- and we've been successful -- successfully operating for -- for sixteen 18 19 (16) or seventeen (17) vears now, vou know. 20 And -- and we've got practices in place 21 so all those mitigations that are in place today, the wildlife had the right-of-way, all those kinds of 22 23 things that have been successful today, those will 24 continue in place. So we think we have a good track 25 record in terms of wildlife crossing roads and -- and

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our interaction with wildlife when they do cross roads, 1 including caribou, obviously. MR. KIM POOLE: 2 Kim Poole, with IEMA. Yeah, just a follow-up to that. 3 With numbers changing dramatically with the Bathurst 4 herd, as Jan pointed out, and with probable decline in 5 the adjacent Beverly and Ahiak herds, depending what 6 you want to call them, it's not unexpected that there 7 8 will be shifts in wintering range from within tree line to above tree line for both those herds. 9 10 So it is a reasonable expectation that at some time in the future you might have caribou in 11 larger numbers than you see now wintering within the 12 general vicinity of the Ekati and Diavik mines. 13 14 DR. JIM RETTIE: Jim Rettie, Golder 15 Associates. Thank you. I -- I understand that there 16 is -- there can be changes in the future. 17 MR. KIM POOLE: And given if my 18 calculations are correct, then I encourage you to check 19 them. If we are down to a passage during February and March of every three (3) to four (4) minutes, given 20 21 behavioural effects of -- it's not just the physical 22 barrier of a truck being in the way, but it's probably, 23 vou know, the -- so many seconds or minutes before a 24 truck goes by -- comes and so many seconds or minutes 25 before a truck goes by -- we're going to turn that road

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in February and March into essentially a barrier. 1 Right now it's a filter. We all 2 acknowledge that. But it's guite reasonable that could 3 end up being a barrier during those months if the 4 volumes are correct as I've calculated them. 5 MR. RICHARD BARGERY: Richard Bargery, 6 7 Dominion Diamond. We will -- we will look at those 8 calculations, Kim, and -- and we may come back with a further answer on this particular -- this particular 9 10 issue after we have a chance to talk about it. But I think we need a -- we might need a chance to just have 11 a further discussion on this. 12 THE FACILITATOR: Sorry. It's Bill 13 14 Klassen. It's not entirely clear to me where we ended 15 up on that. Are you saying that you'll be providing 16 further information once vou've had time to consider 17 those calculations? 18 MR. RICHARD BARGERY: Richard Bargery, 19 Dominion Diamond. We will look at the calculations and -- and, ves, we'll come back. We'll come back with a -20 21 - with a -- with a -- more of an explanation on -- on 22 this particular issue. 23 THE FACILITATOR: Okav. It's Bill 2.4 Klassen. So is that an undertaking that the staff can 25 record here for something that will be responded to

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before the end of the sessions or within the two (2) 1 week time period? 2 3 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. I think before the end of the 4 sessions for this particular one. 5 THE FACILITATOR: Thank you. Bill 6 7 Klassen. Are there other questions from parties in the 8 room before -- I see that Anne is indicating that she wants to speak. Yes. Is it Karin? 9 10 MS. KARIN CLARK: Yeah. Karin Clark, with ENR-GNWT. Sorry, I'm battling a cold so I've got 11 a really scratchy throat. You had just mentioned 12 earlier that your assumption was that any caribou 13 14 encountering the zone of influence is deflected around 15 the road, and that's how you calculated the energetic 16 costs. 17 There's an equation that you use for calculating the proportional decrease in parturition 18 19 rate. It's got a multiplier in there of point fivefive (.55). It's based on 55 percent of caribou 20 21 displaving a behavioural response when they encounter 22 ZOI. 23 So how -- can vou just clarify for me 2.4 how those things are reconciled? So are -- are you 25 assuming that only 55 percent of caribou are deflected

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around, or is it 100 percent? 1 2 DR. JIM RETTIE: Jim Rettie, for Golder Associates. The -- the 55 percent number in that 3 equation that you mentioned related to the encoun --4 the energetic cost of -- of an encounter. So if you 5 recall, I -- I broke down the -- the total energetic 6 costs and the total body mass loss into three 7 8 components. 9 One (1) of them was insect harassment. 10 One (1) of them was -- was an encounter, so an animal that -- that found itself within a zone of influence 11 and -- and the behaviour that it would exhibit that 12 would cost it energy. And then the third one was 13 14 deflection around the mine. 15 So we did assume that 100 percent of 16 animals that -- that -- we assumed that no animals went through the -- through the -- the mine area. And so 17 the -- that 55 percent was the proportion of animals 18 19 that would res -- or the proportion of encounters that 20 would elicit a response that was energetically costly. 21 So keeping in mind that this is at a 22 zone of influence that's out -- 15 kilometres out from 23 the edge of the footprint. So we -- we assumed that of 24 -- any animal that encountered that zone of influence, 25 on 55 percent of the occasions, there -- it would

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exhibit the behaviour that would be energetically 1 2 costly to it. The other ones -- but the deflection was a hundred percent. 3 4 5 (BRIEF PAUSE) 6 7 MR. TODD SLACK: Hi. It's Todd Slack, 8 with the Yellowknives. I've got three (3) sort of questions -- or three (3) series of questions. And the 9 10 first relates to IR-17, impacts of the winter road, which the Project did not respond to at all. So I'm 11 12 not going to ask the guestion again, but I'll ask it a 13 different way. 14 When the Project is a sole operator of the northern half of the winter road -- let's call it 15 16 the northern half; you guys can come up with the exact 17 number if you want -- do you intend to operate it in any -- in a different manner with additional 18 19 monitoring, with any different mitigations in place, than the current operational plan for the Tibbitt-to-20 21 Contwovto winter road? 22 23 (BRIEF PAUSE) 24 25 MR. RICHARD BARGERY: Richard Bargery,

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Dominion Diamond. I don't anticipate that we would --1 we would operate it in a different manner than it's 2 operated by the -- by the joint venture at this point. 3 That seems to be successful, in terms of the operation 4 of the road. 5 MR. TODD SLACK: Okay. Thanks for 6 7 that. Turning to the -- the road and the caribou 8 monitor -- or the camera monitoring. This is IR number 23. And the pro -- the Project did not answer a number 9 10 of these questions either. I'll ask these separate --11 or in a different way. 12 In the -- in the DAR, the Project states the camera had an effective range of 500 metres. Have 13 14 vou undertaking any work to look at detection bias? 15 Five hundred metres is a pretty long way for a picture. 16 Can you provide certainty for us that 17 you are dete -- because, essentially, what you are saving is, We are detecting all animals out to 500 18 19 metres. Can vou provide any discussion or information on what the detection bias may be? 20 21 22 (BRIEF PAUSE) 23 24 DR. JIM RETTIE: Jim Rettie, Golder 25 Associates. The information from the -- from the

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camera monitoring along the road was not used in the 1 assessment of the -- of this project. We -- we 2 assumed, as I've mentioned, that all animals are 3 deflected all the way around the project, in terms of 4 energetic costs. 5 So in terms of predicting the maximum 6 7 effect of the project, we've accounted for it by 8 considering that no animals go through this area, no animals cross the road. While we recognize they do for 9 10 the -- to maximize the effects of the project in our 11 assessment, that's the approach we took. 12 MR. TODD SLACK: It's Todd Slack, with the Yellowknives. Thanks for that -- that answer. One 13 14 (1) of the things I'm trying to understand is the 15 efficacy of these mitigation measures that you guys 16 bring up. And let's discuss whether they're actual 17 mitigation measures. 18 And the camera project is cited as -- or 19 has been used in some of the foundations to see 20 actually that these measures are effective. So I think 21 this is relevant to this -- this conversation. So I 22 guess I'll re-ask that guestion. 23 Have you done any work that looks at the 2.4 detection bias of noting caribou in the photographs? 25 Because I think you said there was, I don't know, a

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couple hundred thou -- you'll provide the correct 1 number, a couple hundred thousand photos. And that's a 2 lot of photos for eves to look through. 3 4 So do we have any -- anything that tells us how often vou're detecting them? 5 6 7 (BRIEF PAUSE) 8 9 MR. RICHARD BARGERY: Richard Bargery. 10 Dominion Diamond. Just for clarity, the issue is, you know, whether the cameras are detecting the -- the 11 caribou or whether there's a num -- a number of photos, 12 13 and -- and people need to -- to be able to detect them 14 in the -- in the photos. Is that -- I -- I don't 15 really understand the guestion. 16 MR. TODD SLACK: I'm happy to provide 17 clarification, and I'll do it by way of an analogy. 18 You know, when you see a bird out there. You take 19 pictures with vour camera. I have a great collection of dots, photographic dots, that are not birds. Now, 20 21 were vou to scan through several hundred thousands of 22 those, you wouldn't know what you're looking at. 23 Now, I would suspect in looking at many 2.4 pictures, caribou that are further out and are going to 25 be smaller and harder to detect for the observer, are

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going to be -- you know, there is a detection bias 1 2 attached to that. So I am wondering, has the Project done 3 any work to understand how often they are detecting 4 animals at what ranges? Is it -- okav, I'm getting a 5 nod. 6 7 MR. HARRY O'KEEFE: It's Harry O'Keefe, 8 for Dominion Diamond. Todd, one (1) of the recognized weaknesses of the program is its ability to detect 9 10 caribou at distance, and in addition assess any sort of behaviour with these caribou. The -- the program 11 itself does not include for the purposes of its 12 analysis caribou whose behaviour cannot be detected at 13 14 range. 15 MR. TODD SLACK: Todd Slack. Thanks for that -- thanks for that answer. Now, 16 17 notwithstanding that, the trigger range of a camera is 30 metres in addition to the time -- the -- the regular 18 19 time interval that -- that it goes. And guestion 20 number 2 that I would like to come back to is, At any 21 one (1) point in time can you provide the amount of 22 coverage on that road? 23 So vou have 'X' number of cameras. You 2.4 have 60 degree field of view. How much area are you 25 actually covering with this program?

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(BRIEF PAUSE) 1 2 3 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. Just give us a second. I think this 4 was addressed in an IR, but we're -- we're just 5 checking. 6 7 8 (BRIEF PAUSE) 9 10 MR. HARRY O'KEEFE: So for the purposes of the -- the last camera -- oh, Harry O'Keefe, 11 12 Dominion Diamond. For the purposes of the -- the latest camera program, we had sixty (60) cameras 13 14 deployed. And using a trigger distance of -- effective trigger distance of 35 metres for the cameras, we would 15 have 2.1 kilometres of the road covered in a linear 16 17 direction. It's important to remember that the 18 19 purpose of this program is to define the barrier effect 20 of the road to caribou that reach the road. 21 MR. TODD SLACK: Okav. Thanks, Harry. Todd, with the Yellowknives. So can you then tell me 22 23 how often caribou are selecting for the caribou 24 crossing verse selecting against them? 25

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(BRIEF PAUSE) 1 2 3 DR. JIM RETTIE: Jim Rettie, Golder 4 Associates. The answer is, no, we don't have an assessment of the proportion of time where animals are 5 crossing at caribou crossings. It -- it's an 6 7 assessment of the road as a whole. 8 MR. RICHARD BARGERY: Richard Bargery, 9 Dominion Diamond. Just -- just one (1) further point 10 with respect to the Jav road. Our intention is to 11 construct the Jay road as much as possible as a caribou 12 crossing. So it's -- it's a different design criteria than -- than the Misery road, where the road was 13 14 designed and the caribou crossing sort of came 15 afterwards. But for Jay it's -- we are proposing, 16 17 you know, where it's technically feasible to -- to make the Jav road essentially a caribou crossing. 18 19 MR. TODD SLACK: Todd Slack, with the Yellowknives. Thanks for that add-on, Richard. It's a 20 21 good -- good point. 22 Can you tell us how -- for this project 23 how much -- how -- the distance of new roads to be 2.4 constructed, and the proportion of which will be 25 constructed as caribou crossings, similar to what we've

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seen at Lvnx, the ones vou've just submitted, for 1 2 instance? 3 4 (BRIEF PAUSE) 5 6 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. I'll get -- I want to get back with 7 8 the -- with the correct calculations here. So rather than -- so let -- let us just dig out those numbers and 9 10 we'll come back with -- with the correct numbers. Perhaps by lunch we can get those. 11 12 MR. TODD SLACK: Fair enough. Can I --13 thank you. 14 THE FACILITATOR: Bill Klassen. So 15 we'll record that as a -- a homework items for Dominion Diamonds on the calculations of -- of that cross 16 17 sections of roads that serve as caribou crossings. MR. RICHARD BARGERY: Richard Bargery. 18 19 As opposed to homework maybe we can do it at recess, 20 and... 21 THE FACILITATOR: All right. 22 23 (BRIEF PAUSE) 24 25 THE FACILITATOR: I've been asked to

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seek clarification on the wording of our Homework item 1 number 1. I had it as -- mv -- mv shorthand just savs, 2 "Further calculations of numbers to be provided." But 3 mv memorv is so short I can't remember what those 4 numbers were for. So if you could provide that 5 clarification, Richard. 6 7 MR. RICHARD BARGERY: Sure, Todd (sic). 8 Correct me if -- Richard Bargery, Dominion Diamond -if I'm -- if I'm wrong, but I think Todd had asked for 9 10 the total amount of roads for the Jav project and the 11 amount that would be constructed as caribou crossings. 12 THE FACILITATOR: Okav. It's Bill 13 Klassen. Do you have a further question, Todd? MR. TODD SLACK: I think I have two (2) 14 15 further questions. So the project has relied rather heavily 16 17 -- sorry, Todd Slack, with the Yellowknives. The project's relied rath -- rather heavily -- and I 18 19 understand that in this assess -- the assessment end point you've said, We're going all the way around or 20 21 that caribou will be going all the way around. But in 22 the DAR it relies rather heavily on the camera project 23 for the road and it states, "One percent of road encounters resulted in a deflection." But then what 2.4 25 we've heard here is vou don't know if caribou are using

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the caribou crossings preferentially, and we only have 1 a maximum of 2.1 linear kilometres of the road being 2 monitored at any one (1) time. 3 Given that, you know, shouldn't we be 4 recognizing that there's some uncertainty attached to 5 these conclusions, particularly given the other road 6 7 work that you guys have done? 8 9 (BRIEF PAUSE) 10 DR. JIM RETTIE: Jim Rettie, Golder 11 12 Associates. Given our assumption of all animals being deflected around the project there is no uncertainty in 13 14 our assessment of the significance of this project on 15 barren-ground caribou. The uncertainty lies with the 16 effectiveness of camera monitoring as -- as I 17 understand your questions. 18 MR. TODD SLACK: Thanks. And, ves. 19 And, you know, we'll come to the assessment end points later today. Now, given the uncertainty the previous 20 21 work has identified berm heights and -- as one (1) of 22 the principle issues. And the Yellowknives asked the 23 project for a commitment that they would limit berm 24 height to -- I think it was less than 1.8 metres. I'd 25 have to read really guickly here. But I -- I think

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that's the case. And I think that was based on work 1 that you guys have done. And the project has stated 2 that, No, we're not going to do that because caribou 3 cross the road anyhow as seen in this EN -- camera 4 5 report. 6 Now, given the uncertainty and the 7 limited scope of your assessment, shouldn't we be 8 looking to minimize impacts to caribou? And if road height and berm height is one (1) of those, shouldn't 9 10 that be a commitment that this Company can make to the 11 communities and the people to try to preserve what I 12 think you described as a "critical cultural component" in your first sentence? 13 14 15 (BRIEF PAUSE) 16 17 MS. FIONA ESFORD: Fiona Esford, Golder Associates. When the road fill thickness exceeds 3 18 19 metres, there's required to be a safety berm. It's part of the Mines Act. It's part of the regulation 20 21 that we're required to have a safety berm that is two 22 thirds (2/3) -- no, three guarters (3/4) the height of 23 the tallest tire of the trucks using that road. 24 MR. TODD SLACK: Todd Slack, with the 25 Yellowknives. I -- I'm forced to ask the follow-up.

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So I understand that Workers' Comp. issue but wouldn't the solution in two (2) wavs be keep it less than 1.8 metres in ev -- in all possible examples? Clearly, vou aren't going to be able to do that all the time, but this should be a commitment from the Company to reduce impacts to caribou.

7 And this is -- sorry, I'll add one (1) 8 last bit. This is an effective mitigation, and we know 9 that.

MS. FIONA ESFORD: Fiona Esford, Golder Associates. Dominion Diamond has stated that, where feasible, we will minimize the amount of road fill thickness, so that we're not looking to put 3 metres or more everywhere. But you can understand that you have variation in terrain, and there's some places that you need that much.

MR. TODD SLACK: Todd Slack, with theYellowknives. Thank vou for that commitment.

And, Mr. Chair, I'd like to re-ask that auestion from this morning, if I might. And, vou know, the Yellowknives recognize that Dominion Diamonds themselves have only had this project for a little while. But vou have, vou know, twenty-five (25) odd vears of experience with vour consultant and staff as part of vour team there. So I'll re-ask the guestion.

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Why is it that it took two (2) -- almost 1 two (2) decades for the TK presented at the -- at the 2 original hearing to be recognized? And I'll -- I'll 3 update this to something relevant or that is directly 4 related to the project. The -- the recent study 5 undertaken by your consultant to look at the timing of 6 7 migrations, this was also driven by TK. But again, it 8 wasn't a fact until the consultants had done their report. 9 10 Less than two (2) years ago, your Company president, Mr. Bell (phonetic), president, said 11 that caribou have not been impacted by this mine. 12 That goes against what many TK holders have said over the 13 14 vears repeatedly to you, to the government, at every 15 forum. This -- this is a repeated view. So I'm 16 looking to understand why TK isn't treated the same as 17 western science, just as a starting point. 18 MR. RICHARD BARGERY: Richard Bargery, 19 with -- with Dominion Diamond. A number of statements, but I think I'll try to get to the guestion that --20 21 that Todd asked. I -- I think the first point, I mean, we 22 23 placed -- Dominion Diamond, as I said, vou know, we've owned Ekati for virtually -- well, exactly two (2) 24 25 vears I think now, April 2013. We placed an emphasis

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on trving to work with -- with our IBA (phonetic) 1 communities and -- and other potentially affected 2 communities to identify TK and how we could build it 3 into -- the project into the operation of Ekati. We've 4 done a number of projects, including a project last 5 summer with the YKDFN, on -- on TK. 6 7 We recognize and acknowledge that --8 that TK has stated that -- vou know, that caribou avoid mines. So, you know, from your earlier question this 9 10 morning, Todd, I think the point from -- from our perspective, based on the question, as I understand in 11 what you said this morning, is for the analysis, you 12 know, that we undertook, the zone of -- the zone of 13 14 influence was based on -- on recently published data. 15 And -- and that, you know, doesn't include the TK that 16 -- for -- for that particular -- for -- for this 17 particular analysis. 18 So -- so it's -- vou know, I'll leave it 19 at that for now. 20 THE FACILITATOR: Thank you. It's Bill 21 Klassen. I'll ask Anne Gunn to ask the questions that 22 she has, and then we'll take a short break. 23 DR. ANNE GUNN: Ann Gunn, for the 2.4 Board. I would like to ask Dominion -- I would like to 25 thank Dominion for Appendix C because it added some

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clarity. I'd ask that you advise Table 2 to make it 1 clear in response to what Kim asked, that there'll be 2 an additional eight thousand (8,000) trips on the 3 Miserv road during the winter road season. And the --4 I think also to make it clear that the -- they're not 5 round -- the -- the round trips, or actually give the 6 7 number of actual trips would give clarity, and to make 8 it easier for people to -- to see just what the caribou are being exposed to. 9

10 The reason I think this is so important, my objective in this, is that we need to understand the 11 potential deflection rates, and the associated 12 behaviour, because the caribou are not just being 13 14 deflected by the road but they're changing their 15 behaviour accordingly. Jan has already mentioned the 16 perilous state of the Bathurst herd, and the need for 17 enhanced mitigation.

It seems like the current mitigation is not particularly effective, otherwise there wouldn't be the deflection rates and the changes in behaviour. So I think the measured effects of the road are evidence for a change in mitigation.

23 Understanding how the caribou are 24 exposed and responding to the road is the key to 25 improving mitigation. You've got the crossings on the

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1 road, but Jim did state that vou don't know to what 2 extent thev're being used. That would make it verv 3 difficult to improve them.

So as well as seeing a revision to Table 4 2 to include the winter traffic, I think it's important 5 to notice that there's a higher rate of traffic for Jav 6 7 than there is for Miserv without the winter road 8 traffic. So the exposure of caribou to Jav because of the Lac du Sauvage crossing is likely greater, but 9 10 given the higher rate of traffic there's probably a need for greater mitigation and more flexibility in it. 11 12 So I think it comes to -- to your Traffic Management Plan. There's a lot more input into 13 what is actually required in that, and it's to link the 14 15 monitoring to the -- to the mitigation using such 16 approaches as decision trees. 17 And I think some of the points that IEMA 18 offered in a response to one of the Board's IRs, they

18 offered in a response to one of the Board's IRs, they 19 gave a series of pointers that would be helpful in 20 developing adaptive militation for both the Jav road 21 and the Miserv road.

22 So to summarize, I realize what Jim is 23 saving about vour model assumes a hundred percent 24 deflection rate. Deflection rates, understanding them 25 is still really important because they're the key to

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1 designing effective mitigation.

Mitigation isn't working that well. You don't have the evidence to show that. But given that there are still effects, there's obviously perhaps more that could be done. And so I think that relates to the Traffic Management Plan, and to using all the available expertise to develop those mitigations.

8 So I'm looking for the Table 2, I think 9 that's pretty guick to do, a change in how the 10 monitoring will improve the mitigation for both the Jav 11 road and the Misery road.

12 And in our IR we asked for the historic 13 traffic levels on Misery, and you can calculate those 14 the same way as you project them for the Jay and the 15 Miserv. You know the amount of all that hauled, you 16 know the size of the trucks, so you should be able to 17 retroactively give us an estimate of the traffic when 18 the deflection rates were very high. Because at the 19 moment the monitoring is going to be based on the 20 cameras. There may actually be a rationale for using 21 the winter track surveys. And it may be that the 22 difference between the deflection rates measured by the 23 winter track surveys and the cameras might do more with the level of traffic. 2.4

25

When the cameras were on the level of

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traffic was guite low the first couple of years and it 1 only increased in 2013, when the amount of heavy 2 traffic increased. And I -- somewhere I have the 3 numbers here, but you have them, too. But I think in 4 2013, it was up to over a hundred heavy trucks a day. 5 And so how that compares to the deflection rate when it 6 goes up to a couple of hundred. 7 8 9 (BRIEF PAUSE) 10 11 THE FACILITATOR: It's Bill Klassen. Anne, if you could clarify. I think you said there 12 13 were two (2) points that you wanted Dominion Diamonds 14 to respond to. And one (1) was adjustment, I think, of 15 information in one (1) of the tables. And then you were asking for a decision tree as -- could you just 16 17 clarify those two (2) points for our benefit? MS. ANNE GUNN: Yeah, I -- I spoke a 18 19 bit more than perhaps I should have done. The first point is -- this is Anne Gunn, for the Board -- is 20 21 revision of Table 2 and the traffic rates. The second 22 point is several revisions, including decision trees, 23 to making it clear in the Traffic Management Plan that 24 it's adaptive management; that the monitoring 25 technique, be it surveys, be it the use of the cameras,

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there are alternate techniques as well, are closely 1 tied to the levels of mitigation. So it actually is 2 adaptive management and it's measurable. 3 4 THE FACILITATOR: Thank vou. Go ahead, Richard. 5 MR. RICHARD BARGERY: Richard Bargery, 6 7 Dominion Diamond. So we'll -- as a commitment we'll 8 look at the ta -- Table 2, I believe, and of Appendix -- Appendix C. And we'll also look at -- you made a 9 10 number of suggestions for the -- for the Traffic Management Plan, I think, which we'll consider in the -11 - on -- on the -- you know, it's in the final draft 12 now. And we've made a commitment to -- to provide that 13 14 by the end of April. So we'll have to try to consider 15 those suggestions in the context of that timeframe and 16 that commitment that we've made. 17 I do want to say -- I think it's 18 important to sav, I mean, obvi -- obviously, vou know, 19 we recognize the issues with the health of -- of the herd. We have tried to build in additional mitigations 20 21 for the Jav road, you know, which will be detailed in 22 the Traffic Management Plan. But the types of things 23 I've tried to described earlier including, you know, 24 potentially shutting down the road for -- the 25 stockpiling of ore so we could continue to -- to feed

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1 the process plant, but still be able to shut down the 2 - the roads when -- when caribou are -- are migrating
3 through there.

The construction of the Jav road, 4 essentially as a caribou crossing itself, not with 5 these smaller car -- caribou crossings that came sort 6 7 of after the construction of the -- the Misery roads. 8 We -- we have tried to -- to ramp up the -- the mitigation for the Jav road, you know, in recognition 9 10 of some of those issues and -- and the -- vou know, the -- the historic use and -- of the caribou of that area 11 down towards through -- through -- down the esker 12 13 towards -- towards the narrows, so. But we -- we'll look at -- at that -- at both those issues in -- that 14 15 Anne has raised. 16 THE FACILITATOR: It's Bill Klassen. Ι

17 -- iust for clarification then these are -- are two (2) 18 commitments that Dominion Diamond is making. And vou 19 anticipate to respond by what time?

20 MR. RICHARD BARGERY: Oh, I think the 21 table we can respond to -- the -- the revision of the 22 table can be responded to relatively guickly. The --23 the second issue of looking at some of the suggestions 24 that have been made in the context of the -- the 25 Traffic Management Plan, I just want to get a sense of

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-- of where we are with the final draft of that and --1 and what's been built and what we're required -- what 2 work will be required to -- to do that. Because I 3 think if I'm -- I think that's what you asked, Dr. 4 5 Gunn. 6 7 (BRIEF PAUSE) 8 9 THE FACILITATOR: It's Bill Klassen. T 10 have two (2) -- two (2) other people who want to ask questions before the break. One (1) is Noeline 11 12 Villebrun and then -- here. 13 And so we are -- right now we've completed the baseline, and hopefully we will complete 14 15 guestions related to the road and utilities before the 16 break. So I -- I trust vour comments are both related 17 to those items. 18 Excuse me, Ms. Villebrun. Apparently 19 Anne wants to make one (1) addendum. Is that correct? 20 DR. ANNE GUNN: Chuck's going to do it. 21 THE FACILITATOR: Okav. Chuck is going 22 to speak for Anne. That should be interesting. 23 MR. CHUCK HUBERT: Chuck Hubert, with 2.4 the Board. I -- I would not dare to do that, actually. 25 But as a suggestion perhaps regarding the traffic

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management or the -- or the Wildlife Roads Management 1 Plan, if that's the mitigation plan, if that's the 2 term, would -- would Dominion consider a type of 3 technical group made up of -- of various parties to --4 to assist in the -- the preparation of -- of that plan 5 and -- and to offer suggestions on its preparation? 6 7 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. I -- I think at this point, given 8 sort of where we are with -- with this, I'd -- I'd want 9 10 to review it in the context of some of the suggestions 11 that have been made. 12 Our current plan, and the agreement that 13 we currently have, is that we -- we're going to send this out in draft and have the parties -- have parties, 14 15 interested parties, comment on it, and then revise the 16 plan. 17 So with respect to the technical group, 18 the specific suggestions on the technical group, I'll 19 come back on that. But I -- I want to have a discussion about it, but I think we'll stick with our 20 21 original commitment at this point. 22 MR. CHUCK HUBERT: Chuck Hubert, with 23 the Board. Okav. I'd be interested in -- once vou've 24 thought a bit about -- about the idea of a technical 25 group for it, I'd be interested to hear your response

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later on. Thanks. 1 2 MS. NOELINE VILLEBRUN: (CHIPPEWAYAN 3 LANGUAGE SPOKEN). 4 (INTERPRETED FROM CHIPPEWAYAN INTO ENGLISH) 5 6 7 MS. NOELINE VILLEBRUN: My name is 8 Noeline Villebrun. 9 10 (INTERPRETATION CONCLUDED) 11 12 THE FACILITATOR: We have Tony Buggins 13 present as an interpreter. I wonder, Mr. Buggins, if 14 you could come up and interpret what Mrs. Villebrun has 15 just said for us, please. 16 17 (INTERPRETED FROM CHIPPEWAYAN INTO ENGLISH) 18 19 MS. NOELINE VILLEBRUN: Yes. Mv name 20 is Noeline Villebrun. I'd like to thank everyone for 21 coming here to talk about this very important topic, 22 caribou discussions. Caribou is very important to the 23 Dene. It's a very important part of Dene life, and 24 also we have to remember that this is Dene land. 25 This caribou discussion is very

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important to the Dene. We survive off caribou, and 1 this is Dene land and caribou is very important to us. 2 3 4 (INTERPRETATION CONCLUDED) 5 MS. NOELINE VILLEBRUN: One (1) of the 6 7 observations I -- I just made and the point I'm trying to make here, too, one (1) is the -- when vou talk 8 about traditional knowledge, my language is part of 9 10 traditional knowledge. And I don't see it reflected 11 here at all. 12 And I'd like to thank the representative 13 from the YK Dene for bringing that issue up, that the -14 - vou know, it's only been aft -- after how many vears 15 that the traditional knowledge has been incorporated 16 into their report? 17 Now, when Dene -- before development, as 18 mentioned in my language, caribou is a -- is a very 19 important diet. This is what we ate and sustained 20 ourselves and used the hide to clothe ourselves. And 21 it also housed us because we used the hide to -- to 22 make our tepees with. And over time, because of 23 development, all of that has been taken away. 2.4 And how? Through a process like the 25 Wildlife Act, and the mining acts, so that they can --

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society and the civilians can make room for 1 development, for more bigger communities. But the one 2 thing that I was taught as a young girl but growing --3 as I was growing up, not just by my grandparents but a 4 lot of Dene Elders that hunted, and not too long ago, 5 about five (5) years ago I was up in the Arctic area 6 talking to Elders about caribou. 7 8 And this elderly lady said, You know, today the younger generation don't understand the 9 10 caribou. That when the caribou start migrating, you let the first leaders go through because they're no 11 different than human beings. They have their leaders. 12 And when you talk about gas emissions, 13 14 smells, caribou smell. We're told that when we go 15 hunting. You go downwind from the animals so they 16 don't smell vou. So how does the mine figure they can 17 get around that whole topic that the caribou can think. 18 When I look at that picture and it savs, "Caribou 19 crossing," it's -- for me, I -- I see a picture, a comical picture. 20 21 You know, all these scientists and --22 and researchers and consultants talking to the caribou. 23 Which crossing do vou want to take? How do vou want us 24 to build it up? Because caribous -- caribou is not 25 like human beings. Sometimes we have to think for

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1 them. And this is why the Creator gave us that 2 responsibility to protect the animals, the land, and 3 the water.

That's Dene responsibility. And somewhere along the line that responsibility was taken away by these types of Boards. And it's common sense. You use common sense. That's how Dene lived. All of this is new.

9 I have a concern with the trucks. You 10 talk about -- vou know, when vou had a figure of four 11 thousand (4,000) loads and vou didn't calculate the 12 return, for me that's -- that's not good -- not good 13 practice because that lessens (sic) the impacts.

Because I've gone out and observed mvself, and I watched those trucks. And they're -they -- they are not following protocol. They are not following the regulations. It's supposed to be four (4) trucks every twenty (20) minutes. It's not. These trucks are doing whatever they want basically.

It's not just the trucks, the gas emissions, but these trucks that are breaking down, the leaks. You talk about the ice road crossing. It's not just the caribou, it's also the fish but the -- we'll come to that later.

25

So my concern is the gas emission from

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the increase in the loads. Has it been considered in 1 the first report, and is it being considered in the 2 second? Because there's the big movement to lower the 3 gas -- green gas emissions, or -- vou know. The -- I 4 think it's called the Kvoto Protocol. 5 THE FACILITATOR: Mrs. Villebrun, I 6 7 wonder if we could ask Dominion Diamond to respond to 8 vour concern about greenhouse gas emissions? I believe it has been addressed. 9 10 MR. RICHARD BARGERY: Richard Bargerv, Dominion Diamond. Yes, the -- the emissions have been 11 -- have been considered in the assessment -- included 12 13 in the assessment. 14 THE FACILITATOR: It's Bill Klassen. 15 Do you have further questions, Noeline, about the road 16 and road use? I have one (1) more person -- two (2) --17 MS. NOELINE VILLEBRUN: M-hm. THE FACILITATOR: -- two (2) more 18 19 people that want to speak -- three (3) more people now. 20 My goodness, we aren't going to get a break until 21 lunchtime. 22 MS. NOELINE VILLEBRUN: Well, vou 23 shouldn't anyways. You guvs are all paid to do a job 24 here, and to listen and take notes, okav, so, yeah. 25 THE FACILITATOR: I wonder... I --

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1 ves, I --2 MS. NOELINE VILLEBRUN: Okav, just one 3 (1) more then. 4 THE FACILITATOR: One (1) more. 5 MS. NOELINE VILLEBRUN: Yes. THE FACILITATOR: And then we'll take a 6 7 break because there are some of us that need to use 8 other facilities --9 MS. NOELINE VILLEBRUN: Okav. 10 THE FACILITATOR: -- besides the road. 11 MS. NOELINE VILLEBRUN: Okav, just one 12 (1) guick observation and comment that I'd like to make. When Rich mentioned that Dominion Diamond was 13 14 bought out in 2013 and that you guys only had two (2) vears to do whatever, well, you know, for people like 15 myself, I've been in the North all my life, and I've 16 17 seen one of you over time in different positions, so. And I know Diamond Dominion has hired 18 19 consultants and whatnot to help them, advise them, so 20 you can't say that this is a new company or whatever 21 because the people that are hired around vou are 22 advisors. I see them. They're ex-regional directors. 23 They're ex, you know, leaders, bureaucrats that have 2.4 been hired to advise Diamond Dominion. 25 So a lot of this issue here shouldn't be

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an issue because these people should be helping you 1 guys figure out what needs to be done properly. That's 2 my concern as a Dene woman because remember this is our 3 territory that you guys are in. And you guys will only 4 be here the life of the project, which is, I think, 5 thirty-three (33) years. I see a thirty-three (33) 6 number, so I just have to make sure. 7 8 And, you know, I feel like I'm singled out all the time. I'm always told: Noeline, stick to 9 10 the point. Stick to ... And I am. I know you guys have an agenda, and it's usually cut and dry; for Dene, 11 12 it's not cut and dry. Thank you very much. THE FACILITATOR: Thank you. 13 We**'**ll 14 take at least a five (5) minute break. And then we'll 15 come back. And I think I've got Ms. Patenaude, Jan, 16 and Kevin, and -- and a forth one. 17 --- Upon recessing at 10:54 a.m. 18 19 --- Upon resuming at 11:03 a.m. 20 THE FACILITATOR: Well, good morning 21 22 again. I'd like to begin the discussion again. I have 23 three (3) people on the list that will... I used to have one (1) of those old-fashioned school bells, and 24 25 next time, I'll bring it.

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25

1 So the -- the first person that I have 2 on the list is Andrea, then Jan, then Kevin. And then 3 another gentleman towards the back.

Yesterdav morning I acknowledged that we
are meeting within the traditional territory of the
Yellowknives Dene and I would like to recognize Chief
Sangris of the Yellowknives Dene is present with us.
Thank vou for attending. Andrea, I think we'll begin
with vou. That's fine if, Jan, vou want to go first.
Go ahead.

MR. JAN ADAMCZEWSKI: Good morning 11 again. Jan Adamczewski, with GNWT-ENR. My point is --12 is not entirely new, but it just kind of reinforces I 13 guess some of the points that Kim Poole and Anne Gunn 14 15 made previously. At the traffic levels that are --16 that Kim Poole is suggesting, then we're -- we'd be 17 talking about a truck every four (4) to five (5)minutes on the Miserv road and -- and likely on the Jav 18 19 road and guite a bit on Tibbitt to Contwovto. 20 And there is published information, most 21 of this comes from Alaska, from Prudhoe Bay oil field 22 that would suggest once you have traffic levels that 23 high that road does become a fairly serious barrier. It's much less of a barrier if it's an isolated road 24

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with very little traffic. So you're kind of getting up

into a realm where you should actually expect that it 1 will not just be a deflection, but a serious barrier to 2 caribou that -- that pass through there. 3 So again, I think just to underscore the 4 status of the herd and the need for, I quess, the 5 strongest mitigations possible. So I think that 6 7 traffic plan, in the event that you have caribou in the 8 area, should -- should provide some clear windows at least part of the day or part of the night, or 9 10 whatever, where caribou can pass. Because at that 11 level of traffic you -- you should expect there will be fairly -- fairly serious barrier effects. Especially 12 if you add a transmission line and possibly a pipeline. 13 14 Those things do become additive. So I just wanted to 15 underscore that point. 16 17 (BRIEF PAUSE) 18 19 MR. RICHARD BARGERY: Richard Bargery, from Dominion Diamond. So we -- we are looking at the 20 21 numbers now, and I think at lunch I just -- I'd just ask Kim if -- if we can walk through sort of what --22 23 what our recalc -- our recalculations are just to make sure that -- that we are accurate with -- with what he 24 25 was describing or -- or our method -- methodology was -

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- was accurate. And we -- we certainly understand the 1 larger point Jan's raised a couple of times about the 2 health of the herd. So we understand that point. I 3 want to -- I want to make that clear. 4 And we also hear, I think, what a number 5 of people have said about the mitigations and the 6 7 importance of putting in appropriate mitigations. So 8 we will come back as I -- as I stated earlier, I think, and undertook earlier to come back on -- on that 9 10 particular issue. So I'm not sure what else I can add 11 other than the fact that we will come back with a further answer on -- on that particular -- that 12 particular issue. 13 14 THE FACILITATOR: Thank vou. 15 Andrea...? 16 MS. ANDREA PATENAUDE: Hi. Andrea 17 Patenaude, GNWT-ENR. Okay. So coming back to the discussion on the -- on the traffic plan and 18 19 understanding that it -- okav, it's going to come out in the end of April. And I like the idea that you want 20 21 to attach it to the WEMP. This is good. I just have 22 specific guestions about the content and I'm not sure 23 whether the monitoring aspect is going to be captured 24 in that plan or whether that would be more in the WEMP 25 or the WWHPP or where that would be captured.

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But one (1) with regards more to --1 okay, well, with respect to the monitoring. I'm just 2 curious whether this traffic plan and/or other plans 3 will be including a monitoring program with an explicit 4 objective of monitoring deflection rates at various 5 distances from the road. That's guestion 1. 6 7 Should I just continue or do you want to 8 answer them as I go? Specific --9 THE FACILITATOR: Let's take them one 10 (1) at a time. MS. ANDREA PATENAUDE: Okav. 11 12 THE FACILITATOR: So we'll give 13 Dominion Diamond an opportunity to respond to that. 14 MR. RICHARD BARGERY: The Traffic 15 Management Plan -- since we can't use the new name --16 the -- that's -- that's us -- that's me, as well 17 because it's -- it's a brand new name. But, no, monitoring isn't included in that. That's in the -- in 18 19 the -- the WEMP, the monitoring. 20 MS. ANDREA PATENAUDE: And so would 21 that type of monitoring program with that kind of 22 objective -- since it seems to be quite related to a 23 number of the concerns about impacts and the barrier 24 effect of the road, do you project that that would -- a 25 monitoring program of that type would be included?

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(BRIEF PAUSE) 1 2 3 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. I won't -- I don't think it's going 4 to have the level of -- of monitoring and -- and the 5 type of, you know, monitoring that you're looking for, 6 7 or what vou just stated. Or perhaps maybe vou can 8 clarify it exactly one (1) more time. But I -- I think we won't meet -- we won't meet -- meet what vou're 9 10 asking, at this point anyway. 11 THE FACILITATOR: Could you for the -it's Bill Klassen. Could you for the record identify 12 vourself again? 13 14 MS. ANDREA PATENAUDE: Oh, right. 15 Sorry. Didn't do that last time. Andrea Patenaude, 16 GNWT-ENR. So, I mean, we have the camera program that 17 you were talking about. I mean -- and I believe in 18 response to one of the IEMA questions, you're like, 19 Well, okav, ves, the -- the deflection rates that you're talking about through that report, we're looking 20 21 right at the road within the field of view of the 22 camera. 23 You also have another method where --24 that showed higher deflection rates, and there are 25 seasonal considerations and distance consider -- so I'm

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just wondering like if -- if, at the road, even if we 1 accept that deflections are happening at 1 or 2 percent 2 right at the road. I think people acknowledge that 3 deflection could be happening at further away. 4 So the guestion was just rather there 5 would be a monitoring program that explicitly looks at 6 7 deflection rates at various distances from the road and 8 -- or whether the -- that the camera program could be modified to capture that. 9 10 MR. HARRY O'KEEFE: Harry O'Keefe, 11 Dominion Diamond. So with respect specifically to the camera program, we do not believe that it can be 12 13 effectively or managely -- manageably expanded to -- to 14 look much more than 250 metres away from the road. 15 That's something we're attempting to 16 play with operationally right now is detection limits, 17 but the effort required and the -- the sheer number of cameras set up in some form of grid system would not 18 19 make it feasible to expand that program without sacrificing our ability to detect what is happening at 20 21 the road. 22 So for the purposes of the camera 23 program, it won't be expanded or changed. It -- it's 24 very good at answering the specifics question it 25 addresses right now, which is: What is happening at

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the road and at specific locations along the road? 1 2 MS. ANDREA PATENAUDE: Andrea Patenaude, GNWT-ENR. Thank you for that. Okav. We'll 3 just move on there for that and we'll see what's coming 4 up or what other comments on that might be. 5 Another question is -- and whether it's 6 7 in the traffic section or other plans, does Dominion 8 Diamond intend to continuously monitor traffic levels on the Jav and Miserv roads? 9 10 MR. RICHARD BARGERY: Richard Bargerv, Dominion Diamond. Yes. 11 12 MS. ANDREA PATENAUDE: Andrea 13 Patenaude, GNWT-ENR. Can you clarify where the details 14 on that might be, which plan we might seek it out in? 15 16 (BRIEF PAUSE) 17 18 MR. RICHARD BARGERY: Richard Bargery, 19 Dominion Diamond. Reported annually through the WEMP. 20 MS. ANDREA PATENAUDE: Andrea 21 Patenaude, ENR. Can vou confirm that your traffic -and I'm pretty -- I'm thinking this would be in the 22 23 traffic plan section -- can vou confirm that there will 2.4 be -- that the plan will contain some staged thresholds 25 for road closures, and detailed procedures for response

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based on caribou numbers, distance from road, group 1 size, composition, season, any of that kind of 2 information? 3 MR. HARRY O'KEEFE: Understanding that 4 the -- Harry O'Keefe, Dominion Diamond. 5 So understanding that the plan is going to be distributed 6 for comment, and it is a draft plan that -- that will 7 8 be adapted based on comment and input from parties, Dominion's current operational policy is management 9 10 through monitoring. We don't believe that thresholds can be 11 sufficiently protective of smaller groups of caribou, 12 and take into account the variability and behaviour and 13 14 activity. Our current -- our current policies would be 15 to have somebody go out and be on site, monitoring. 16 We have two (2) staff dedicated to wild 17 -- wildlife monitoring at site, and it would be their job to control traffic based on the caribou, whether --18 19 whether it's proximity to road or behaviour, or impacts 20 observed. 21 MS. ANDREA PATENAUDE: Andrea 22 Patenaude, GNWT. So just to clarify, these monitors 23 will not necessarily have some kind of structured plan upon which to base their decisions for whichever 2.4 25 mitigations might be required, given what they observe?

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MR. HARRY O'KEEFE: That is not I 1 believe -- Harry O'Keefe, again for Dominion Diamond. 2 3 That is not the exact, I quess, message I was trying to 4 convev. They -- they will have clear direction 5 on -- on what is acceptable. And what's acceptable is 6 the caribou will have the right-of-way and should not 7 be impacted by traffic. And the specific wording will 8 come out at the end of April. 9 10 MS. ANDREA PATENAUDE: Andrea Patenaude, GNWT-ENR. Okav. We'll look forward to 11 that. And -- okay, enough on that. Just a guestion 12 though that kind of came up amongst us prior to the 13 14 break with respect to the assumption of the total 15 barrier effect of the road in the modelling that's been 16 conducted. 17 We're just wondering whether, indeed, that is the worst-case scenario? Deflection from the 18 19 road, I mean, the amount of disturbance that -- the -the disturbance effects that a caribou might exhibit as 20 21 they approach the road, and are perhaps in an excited 22 state, depending on how many times they tried to cross 23 the road -- maybe they successfully crossed the road 2.4 but have been agitated to such a state as they do so 25 that perhaps long-distance movements around the site --

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I mean, caribou are long-distant moving animals. 1 Thev do that rather efficiently, is my understanding. 2 But the additional disturbance and 3 stress undergone by simply crossing the road, if that's 4 kind of a big event for them, we're just wondering if 5 you had considered whether, indeed, that might be more 6 7 of a worst-case scenario than an actual barrier effect? 8 9 (BRIEF PAUSE) 10 DR. JIM RETTIE: Jim Rettie, Golder 11 Associates. I think that for the -- in -- in terms of 12 the energetic cost, the information that we have on 13 14 animals that -- that enter zones of influence and the 15 amount of time that they spend there, we applied a 16 factor to that and a cost to that as well. 17 So based on the pathways of animals that have been monitored over a seventeen (17) year period 18 19 starting in the 1990s, and whose -- whose movement pathways were examined both relative to the 20 developments in the zones of influence present at the 21 22 time, as well as those that will come with the Jav 23 project and with future developments, we did account for the -- the number of days and the amount -- the 2.4 25 number of encounters that they had with those zones of

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influence based on historic information. 1 2 So based on all observations that have occurred in the past, we have accounted for animals 3 that, had they entered that zone of influence and 4 remained in close proximity to the road, we did apply 5 an energetic cost to them entering that area and 6 7 remaining there. So -- so we -- we feel that we've 8 accounted for that. 9 MR. ANDREA PATENAUDE: Okav. Andrea 10 Patenaude, GNWT. No further questions on this topic. 11 THE FACILITATOR: It's Bill Klassen. 12 Thank you. There are three (3) people that have indicated that they wish to speak on this topic, Kevin 13 14 and Anne and Kim. So I think I'll ask Kevin and Kim to 15 speak first, and then Anne. MR. KEVIN O'REILLY: Thanks. Kevin 16 17 O'Reilly, for the monitoring agency. This is sort of like a hot pursuit to homework item number 2 that Todd 18 19 Slack had asked earlier about when the Company committed, as I understood it, to provide some 20 21 information about the caribou crossings on the Jav 22 Road. 23 And in response to our Information 2.4 Request number 27, this is on page 2 of it, there's a 25 statement that reads as follows.

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"Dominion Diamond proposes to 1 2 construct an increased number of caribou crossings along the main 3 section of the Jav Road." 4 And I guess that sort of begs the 5 question of what's meant by, "increased number," 6 increased compared to what; the Misery Road perhaps? 7 Ι 8 don't know. I guess what we -- what I'd like to do is maybe just refine that homework a little bit more to: 9 10 Can the Company actually provide us with a map showing where the crossings -- caribou crossings on the Jav 11 12 Road are actually going to be located? Because I can't seem to find that anywhere, in either the DAR or the 13 14 additional information that's been submitted. I'm looking at Map 94-1. It shows 15 16 fifteen (15) crossings that were constructed on the 17 Misery Road, but I can't seem to find anything for the Jav Road. So can the Company commit to add that 18 information when they do the homework item number 2 in 19 response to Mr. Slack? Thanks. 20 21 MR. RICHARD BARGERY: Richard Bargerv, 22 Dominion Diamond. I -- I don't think we can give you 23 the map at this point, Kevin, because I'm just trying 24 to -- to look at the -- the IR that you mentioned, 25 but...

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So the -- the intention with the Jav 1 2 Road is that we're going to construct the road in -- in such a way that it's -- it's a caribou crossing except 3 where we're going to need -- the areas where we need 4 5 berms for safety reasons or where we need access to the pipes for valves and such for -- for access -- access 6 to the -- to the pipelines for -- for maintenance and -7 8 - and we don't have that detailed design vet, and I'm not sure we can do it. 9 10 So, I think we have a fairly good idea on the length of road that would, essentially, act as a 11 caribou crossing and the amount of road that will be 12 13 needed, you know, where we -- where we won't be able to 14 put a caribou crossing for the types of reasons that I 15 just said, and we'll -- we'll flesh that out for you. 16 So I'm not sure that at this point we 17 can give you a map showing exactly where we're going to ha -- need access to the pipes, those kinds of things. 18 19 We don't have that detailed design vet. 20 MR. KEVIN O'REILLY: Thanks. Kevin 21 O'Reilly, for the monitoring agency. That's helpful. 22 And I -- I think I understand the need 23 to -- vou don't have a detailed design of where the 24 pipeline values and so on are going to be. But can you 25 at least tell us -- or give us a map that would show

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where you're going to have the road 3 metres above 1 grade that it requires the berm on the side so that vou 2 cou -- those are areas where clearly you cannot put the 3 caribou crossings. 4 Some sort of map that at least gives us 5 some indication of where the caribou crossings are 6 7 likely to be or where they can't be would be really 8 helpful. Thanks. 9 MR. RICHARD BARGERY: Richard Bargery, 10 Dominion Diamond. I -- I think we can do what -- what 11 vou're asking in terms of the berm -- berm, so -- and we might be able to give you sort of a rough map, but -12 - but obviously it's not based on the -- on the final 13 14 detailed design so. 15 THE FACILITATOR: Bill Klassen. I'm wondering, Richard, what the time line would be for 16 17 that. Is it something that can be done before the end of the week or is this something that you'll need the 18 19 two (2) week time period for? 20 MR. RICHARD BARGERY: Richard Bargery, 21 Dominion Diamond. I -- I -- a little bit more time on 22 this particular -- on this particular one. We'll need 23 some review by a number of -- a number of people on 24 this one. It's not something that we can do relatively 25 quickly. So certainly with -- well within the -- the

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two (2) week undertaking period, hopefully guicker than 1 that, but -- but maybe not before the end of the week. 2 If -- if something changes and we can get it by the end 3 of the week we will, but -- but I can't commit to that. 4 5 THE FACILITATOR: Okav. Thank vou. Bill Klassen. Kim Poole...? 6 7 MR. KIM POOLE: Kim Poole, with IEMA. 8 Or for IEMA. To follow-up on Andrea's question about mitigation related to the road. I'm not trying to beat 9 10 a dead horse here, but just for clarity. The DAR was predicated on the fact that the road's a barrier and 11 that was to be conservative. Depending which 12 monitoring program you look at, the -- the road does 13 14 have anywhere from a 60 to a 1 percent deflection rate, 15 although it's -- it's very encouraging to hear that 16 Dominion Diamond is saying that it's the -- with the 17 cameras it's the deflection rate of caribou that are actually at the road. Because that was not necessarily 18 19 evident when the first reports from the cameras came 20 out. But the fact that a caribou cross the 21

22 road's not in question. I think what we want here is 23 that we all want that the road be as permeable as 24 possible, and to minimize impacts or changes to 25 behaviour to caribou as possible.

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So this is perhaps less of a question 1 than a comment. In -- in response to Andrea, we're 2 still hearing words like that the road will be 3 monitored and large numbers of animals will be able to 4 pass, will be allowed to pass, the road will be -- the 5 wildlife have right-of-way, and -- and comments like 6 that. Or that traffic will be moni -- will be man --7 8 will be modified as required. 9 And I think what people in this room are 10 looking for is a bit more clarity on these details. Are we talking one (1) caribou? Are we talking ten 11 (10)? Are we talking fifty (50)? Are we talking the 12 caribou, do they have to be 20 metres from the road for 13 a reaction to take place? Can they be 500 metres from 14 15 the road and coming towards the road? That begs the 16 question of between the road monitoring and the satellite collars there's a large scale difference 17 between how the monitoring will be accomplished. 18 But what I think people are looking for 19 20 in this traffic -- what are we calling it? Whatever. 21 The decision tree, whatever. What we want is triggers. 22 They have to be explicit because otherwise people won't 23 have any faith that it's going to be on the whim of the 24 environmental to monitor -- environmental monitor or 25 the truck driver, or whoever, saving: Oh, well, they

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seem to be fine. Let's not worry about it. Let's just 1 keep driving. 2 So I urge you to make this as explicit 3 as you're able to when we get the draft at the -- the 4 end of this month or whenever that is. So less of a 5 question, but go for it. 6 7 THE FACILITATOR: Do you have a 8 response? 9 MR. RICHARD BARGERY: Richard Bargerv, 10 Dominion Diamond. I think -- I think we've heard the 11 point, and perha -- perhaps the Traffic Management Plan, if it fit into our work schedule a couple of 12 months earlier, might have been -- may have been useful 13 14 given the -- vou know, the level of detail that -- that 15 people are -- are looking for here to -- here today. But just -- just to reit -- reiterate 16 17 the -- the plan for the plan. It will go out in draft, vou know, with an invitation for comment. 18 19 And certainly we've heard the points that -- that various people have made -- made today, so 20 21 we'll take that into account. We've also, I think, 22 made a commitment to come back with -- with a further 23 answer on this some time this week, so in -- including 24 some of the points that -- that Dr. Gunn made. 25 So we have heard the message on -- on

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this particular one. But this is going to be an -- you 1 2 know, a bit of a -- a consultative process in -- in any event, and there's going to be opportunity for people 3 to comment, so. Thank vou. 4 5 THE FACILITATOR: Thank you. Anne, has a guestion and a -- another gentleman back here. I --6 7 sorry, I can't remember the name. So, Anne, please 8 proceed. 9 DR. ANNE GUNN: Anne Gunn, for the 10 Board. I just want clarification that the Traffic Mitigation Plan is an adaptive management plan, that it 11 will include the monitoring necessary to trigger, to 12 intensify, or reduce mitigation; that the monitoring is 13 not going to be in a separate plan. Even if it meant 14 15 repetition say between the WWHPP and the WEMP, the 16 monitoring for the mitigation should be tied together 17 in the same document. 18 And I think, as part of that is 19 developing the level of mitigation that you're hearing from people that they expect, is that it would be very 20 21 useful to understand Dominion's flexibility in their 22 operational planning as to how they can best supply the 23 level of mitigation needed for the caribou. 24 For example, I imagine one (1) of your 25 overriding priorities is to maintain even flow to the

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1 processing plant. Hence, vou have a couple of sort of 2 spare rock piles that vou can use if the caribou are on 3 the road. But I think it would be verv useful to have 4 more details like that.

There was the figure of fifteen (15) 5 days when there would be no traffic because of 6 blizzards or caribou. I think it would be useful to 7 8 give the summary of how many days are used up historically by the blizzards. And I imagine that 9 10 information would be available from your airport. And 11 then that would give the rest of us a sense of how many days, if there was high numbers of caribou, that the 12 road could be shut down. 13

14 So I think it's -- it's a give and take, tradeoff between Dominion's operational requirements, 15 16 the costs -- like the costs of the tradeoffs --17 relative to the needs of the caribou and the people who depend on them. So I think you -- it would be wise to 18 19 build that -- at least I'd like clarity that that could be built into the Traffic Management Plan for bet --20 21 one (1) of the better term. 22 And I think I like the idea of the 23 drafts because you hear about strong concerns, but 24 there's a considerable amount of expertise that you 25 could draw on in a collaborative approach through the

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drafts, or even -- even, if necessary, meetings, but 1 the idea of pooling everyone's experience with this. 2 So those were my three (3) points that -3 - that it's clear that it's adaptive management in the 4 Traffic Management, so monitoring being included, an 5 idea of Dominion's tradeoffs and flexibility, and then 6 7 the support for the collaborative approach. So thank 8 vou. 9 THE FACILITATOR: It's Bill Klassen. 10 Thank vou, Anne. There was a gentleman back here that had 11 questions or comments, presumably related to the road. 12 MR. BRUNO CROFT: Thank you, Mr. Chair. 13 Bruno Croft with ENR North Slave. It's about the 14 15 energetic model, and just a com -- a comment more than 16 a question. If it's not appropriate at this time, I can wait later. Not a big deal. But since Jim 17 18 presented something on this, there's a guestion that 19 keeps popping back into my mind, and I'd like to share 20 that a bit. 21 First, I'm glad to see that we continue 22 to dig into this energetic modelling approach, 23 something that John Virgil started a few years ago, and -- and we're getting a little farther ahead. I don't 24 25 think we have arrived yet, and the conclusions we heard

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today, I don't think we can really say or agree what 1 they -- they're saving. 2 There's one (1) point I'd like to share, 3 based on my own experience. Jim mentioned the -- the -4 - one (1) of the variables in the equation of his 5 modelling is that number of insect days, and I think 6 the number I read and heard is forty-four (44) insect 7 8 days during the summer potentially that occur moving forward. 9 10 I know first hand from having spent summers out following the caribou with a grad student 11 for that specific purpose, to study insect avoid --12 avoidance by caribou, and see how it could affect their 13 14 feeding behaviour and other movement and distribution 15 during the summer, that insect can take its toll on --16 on the energetic balance of the animals. And forty-17 four (44) days is a lot of days in the summer, and especially if you get into August, for example, which 18 19 is probably the critical time for the animal to replenish all those nutrients that they've lost through 20 21 parturition and other things that the caribou do, it's 22 adding up guite a bit. 23 So in my own mind, and again I 24 appreciate all the work you have done in -- in moving 25 forward a difficult question, I think energetic

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modelling is the way to go moving forward. We need to 1 be able to put numbers on -- on this whole thing once 2 you add them natural and non-natural stressors. 3 I don't think we've pinned that one down vet. 4 So I would encourage to continue 5 promoting further research going beyond what we now 6 7 know. Of course, we look at literature, research, 8 what's been done before. Again, I think that we need to do more and not take for granted that we have 9 10 answered that question, because I don't think we have. 11 One more comment, Mr. Chair, if we can, and it's just me. Once again we heard, you know, all 12 the additional costs to this footprint, either now or 13 14 in the future, is not a big deal. We don't think it's 15 going to add up too much even if the caribou get in 16 higher numbers. Not a -- not a big, big thing. 17 We keep going back in this whole thing looking at one (1) footprint at a time, go through 18 19 those public hearings, technical exercises, and we focus on that one thing that we are looking at. Again, 20 21 in this case, Jav-Cardinal. 22 At the end of the day, it's all -- they 23 all add up together, and we cannot detach ourselves and 24 sit down here and wait, and come to the conclusion that 25 we hear on one of those things, and keep popping up one

(1) footprint at a time on the landscape. At some 1 point it's going to catch up, it just makes sense. 2 So it's -- those are comments. I don't 3 4 expect any -- any answers to all these things. Again, I would encourage that we continue digging in -- into 5 this energetic modelling thing, and -- and the dynamics 6 supporting and -- and little bit of change as it is 7 8 impacted by various stressors, so. In a nutshell. 9 THE FACILITATOR: It's Bill Klassen. 10 Thank you for your comments. And perhaps to your last 11 point we'll get to some of that at least when we discuss cumulative effects. But, Richard, did vou have 12 13 a comment in response, or... DR. JIM RETTIE: Yeah, Jim Rettie, 14 15 Golder Associates. Bruno, in response to your -- your 16 question about one (1) footprint at a time, the work 17 that we did looked at the cumulative effects of all of the previous existing mines, as well as guite a large 18 19 number of reasonably foreseeable developments. And I -- I mean, I've got the list in front of me. It's --20 21 it's fairly extensive. And it's -- they are listed in 22 the DAR. 23 So just -- just so vou know that we --2.4 we have accounted for what we see -- what we know of 25 that's coming in the future, and -- and accounted for

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the cumulative effects of those things as well in our 1 2 assessment. 3 THE FACILITATOR: Okay, thank you. It's Bill Klassen. And if that's the extent of the 4 guestions generally on roads and utilities, then... 5 6 7 (BRIEF PAUSE) 8 9 THE FACILITATOR: Okav. I wonder 10 whether this would be the appropriate point, rather than saving them all up as I had suggested earlier, if 11 people have questions or -- or comments regarding 12 assessment endpoints and thresholds for significance 13 14 related to roads and utilities. You might consider 15 raising them now. 16 And that way -- what I'm trying to 17 avoid, as the facilitator, is going through all of these topics that we have on the agenda for today, 18 19 baseline roads and utilities, dust mitigation, cumulative effects, and then having one (1) large 20 21 session on -- on assessment endpoints and thresholds, 22 and it -- for me at least it's easier to tie them to 23 the topic that we've just discussed. So if that's acceptable, then we will deal with that now. 2.4 25 Do -- Todd, do you have a question about

-- you -- you began there, so I'll come to you. Do you 1 have a question or comment regarding assessment 2 endpoints and thresholds for significance related to 3 the roads and utilities aspect of the discussion? 4 MR. TODD SLACK: Thanks. Thanks, Mr. 5 Chair -- Mr. Facilitator. I -- as a -- I know this is 6 7 a surprise, but I do have a question on this matter. 8 In terms of your assessment endpoint, how many caribou are YKDFN harvesting? 9 10 DR. JIM RETTIE: Jim Rettie, Golder Associates. In our -- in the population modelling that 11 we did, we -- we did account for some harvest at 12 different levels based on different models. We didn't 13 14 -- we didn't describe those animals harvested to any 15 particular group of people. MR. TODD SLACK: How many animals were 16 17 harvested in these different scenarios then? DR. JIM RETTIE: If vou give me a 18 19 moment, I can -- I can find them for vou. 20 21 (BRIEF PAUSE) 22 23 THE FACILITATOR: While -- it's Bill 2.4 Klassen. While that information is being searched out, 25 I was asked when we would be breaking for lunch. And I

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1 suggest at 11:55. We'll take a one (1) hour break and 2 be back in here bv 12:55 so we can get underwav at 3 1:00.

MR. JIM DR. JIM RETTIE: Jim Rettie, 4 Golder Associates. For the majority of the population 5 models that we ran, looking at a population in a 6 7 declining phase at a low population, we allowed for a harvest of fifty (50) individual animals. For an 8 increasing population, the models that we ran allowed 9 10 for 4 percent -- an annual harvest of 4 percent of -and this is of adult female animals. We -- we didn't -11 12 - our models were strictly based on females. MR. TODD SLACK: It's Todd Slack, with 13 14 the Yellowknives. Do you think that fifty (50) animals 15 is, what's the phrase, ecologically effective for the Yellowknives Dene? 16 17 18 (BRIEF PAUSE) 19 20 MR. RICHARD BARGERY: Richard Bargery, 21 Dominion Diamond. With respect, I think that's --22 that's an assessment for the -- for the YK Dene to --23 to make, not for -- not for Dominion Diamond to make. 2.4 MR. TODD SLACK: Todd Slack, with the 25 Yellowknives. Well, and case in point, you have made

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that assessment by declaring that there will be no 1 significant impacts if that's your assessment end 2 3 point. So are you effectively saving that, if 4 there are fifty (50) animals to be harvested, that 5 represents an ecologically effective population? 6 7 8 (BRIEF PAUSE) 9 10 DR. JIM RETTIE: Jim Rettie, Golder 11 Associates. Our assessment was not on what opportunities are acceptable and sig -- and significant 12 to different groups of people. Our assessment was on 13 whether or not there were still harvesting 14 15 opportunities and whether or not a population could sustain harvesting at different points in its 16 17 population cycle. The Bathurst caribou herd, like other 18 19 barren-ground caribou populations, goes through cycles, and has done so historically. And the ability of those 20 21 populations to sustain harvest varies with the -- the 22 status and the trend of the population at the time. So 23 the numbers that we've worked into our models were 2.4 there as an indication of what contribution a harvest 25 might be making to a population at the level that it's

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at right now. 1 2 MR. TODD SLACK: Just as a final clarification on this, the project has asserted that 3 4 there will be -- sorry. The project has said that the 5 assessment endpoint of fifty (50) animals being available for harvest for Dene harvesters is 6 7 acceptable. 8 Is -- do I understand that right? 9 10 (BRIEF PAUSE) 11 12 DR. JIM RETTIE: Jim Rettie, Golder Associates. What our assessment has said is that the 13 14 project is not having a significant effect on the selfsustaining ability of the Bathurst caribou population 15 16 or on its ability to be ecologically effective and play 17 an appropriate ecological role. MR. TODD SLACK: Todd Slack. And that 18 19 ecologically effective role is fulfilled with fifty 20 (50) harvesting opportunities. Is that a fair way to 21 ask that question? 22 23 (BRIEF PAUSE) 24 25 DR. JIM RETTIE: Jim Rettie, Golder

Associates. The -- those fifty (50) hunting 1 opportunities are based on a modest harvest of a 2 current population, but our assessment is of the 3 contribution of the project to the population's ability 4 to be self-sustaining and ecologically effective. 5 And our cont -- our conclusion is that the project is not 6 having a significant effect on that assessment end 7 8 point. MR. TODD SLACK: Todd Slack, with the 9 10 Yellowknives. Can I just ask for a de -- vour definition of what 'ecologically effective' represents 11 to -- in terms of harvesting opportunities in that 12 case? Clearly, I'm not understanding what you're 13 14 saving. 15 DR. JIM RETTIE: Jim Rettie, Golder Associates. Yeah, the definition of' ecologically 16 17 effective' that I'm using is that an ecologically effective population of an interactive species is a 18 19 population that's large enough to maintain ecosystem function. So that -- that's based on the understanding 20 21 that local and traditional knowledge also recognized 22 the importance of caribou to the health of the land, to 23 the predators, and to people. So a population that fulfills that role 24 25 is one (1) that's ecologically effective. And that

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we've assessed the effect of the project on the ability 1 of that population to be ecologically effective and 2 concluded that it does not have a significant effect on 3 that ability. 4 MR. TODD SLACK: Okav. I think I've 5 got this. Do you view the Dene as part of that 6 7 ecosystem? 8 DR. JIM RETTIE: Jim Rettie, Golder 9 Associates. Yes, we do. 10 MR. TODD SLACK: And their -- Todd Slack, with the Yellowknives. Their role as a key 11 agent of mortality, to use your term, is limited to 12 fifty (50) animals in certain scenarios? 13 14 15 (BRIEF PAUSE) 16 17 DR. JIM RETTIE: Jim Rettie, Golder Associates. It's not the role of the -- of Dominion 18 19 Diamond to limit anybody's harvest opportunity at all. That was -- those were numbels -- numbers that were 20 21 placed into a model. And it's important to understand 22 the population models help to understand the relative 23 contributions of different factors. They don't give vou absolute predictions of future population numbers. 24 25 They don't give you absolute limits as to harvest.

They give you relative values and provide a relative 1 trend through time as a consequence of different 2 environmental factors acting on a population. 3 MR. TODD SLACK: And I'll just -- one 4 (1) last time. So in that case the model does not 5 predict a significant impact according to your 6 definition as long as that key agent of mortality is 7 8 limited to no more than fifty (50) animals. 9 Is that a fair statement? 10 DR. JIM RETTIE: Jim Rettie, Golder Associates. No, that's not what it says. 11 12 MR. TODD SLACK: Can you restate what it says using that example please? 13 DR. JIM RETTIE: Jim Rettie, Golder 14 15 Associates. Could vou repeat your example? MR. TODD SLACK: You have said that 16 17 this model -- that you do not say whether fifty (50) animals, blah, blah, blah. And -- but that this model 18 makes a prediction based on a number of variables. And 19 one (1) of those variables is that Dene harvesters, in 20 21 this case, would be limited to fifty (50) animals as their contribution to mortality, and in that case the 22 23 model does not predict that there would be a 2.4 significant impact. 25 DR. JIM RETTIE: Jim Rettie, Golder

Associates. The models that we ran, correct. They do 1 not predict that there was a significant effect from 2 the mine and this project on the Bathurst caribou herd. 3 THE FACILITATOR: It's Bill Klassen. 4 Ι suggest that we've probably gone back and forth on this 5 as much as we can to try and achieve some clarity. 6 Mv sense is that the -- well, that if -- if there's a bit 7 8 of a gulf that's not being bridged. I would like to suggest that we take a break for lunch right now, and 9 10 then we'll come back to the discussion of assessment endpoints and thresholds for significance after the 11 lunch break. And please be back here and ready to go 12 at one o'clock. Thank you. 13 14 15 --- Upon recessing at 11:49 a.m. 16 --- Upon resuming at 12:59 p.m. 17 18 THE FACILITATOR: Good afternoon. Мv 19 name is Bill Klassen, which hasn't changed from this morning, but other things have changed. We had some 20 discussion over the lunch hour amongst the Board staff, 21 22 and there's still a number of topics that need to be 23 addressed todav under the general heading of caribou. 24 So with your indulgence, we'll have as 25 an agenda for this afternoon what you see on the screen

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here behind me. We'll look at road alternatives. 1 Т know that Anne Gunn has a question about the 2 consideration of alternative road routes, guestions 3 regarding the reconstruction of the esker and a 4 discussion of an overpass. 5 The waste rock storage area, we had some 6 discussion on vesterday. I'd like to have a bit more 7 8 about that. And then, rather than addressing dust as a separate topic, dust, light, and noise and the zone of 9 10 influence of those, then mitigation and cumulative 11 effects. 12 And contrary to what I was starting to 13 do this morning, the assessment of endpoints and 14 thresholds of significance, instead of trving to deal 15 with those at the end of each of these topics, we'll 16 address that at the very end. 17 I apologize for changing it. And as was observed, these sessions are driven by an agenda, and I 18 don't apologize for that. We have a chunk of work to 19 get done, so the agenda has been modified somewhat. 20 And we've got roughly four (4) hours to finish these 21 22 topics so we can -- we can stay on time. 23 So I would like to open by asking Anne 2.4 to make the point about road alternatives. I think 25 there may be a map on the screen behind me. Please,

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1 vou're on. 2 DR. ANNE GUNN: Thank you. Dominion, I think, took a really innovative, useful approach to 3 using the information on the caribou tracks. And I 4 really welcome this approach because I think it really 5 lays out some of the considerations. 6 7 The -- they had three (3) alternatives 8 in the DAR for the Jav road. And I think the track survey actually followed on after those three (3) 9 10 alternatives had been chosen. So my question is: Are there other 11 12 alternatives based on the density of the caribou tracks that you would be considering in order to avoid effects 13 14 on the caribou for the Jav road? And just sort of as a 15 straw dog, I, in purple on the map, put up a possible alternative that minimizes exposure to the -- to the 16 17 moderate and high caribou use. 18 So my -- my question is -- is: Are you 19 considering now, based on the -- on the mapping, other 20 alternatives for the Jav road? 21 22 (BRIEF PAUSE) 23 24 MR. RICHARD BARGERY: Richard Bargery, 25 Dominion Diamond. We aren't considering other

alternatives for the road. We -- we had a number of 1 alternatives. We did a -- a variety of engagement with 2 communities on, vou know, the best routing. As vou 3 said, we also looked at -- at caribou trails, those 4 kinds of things in -- in the selection of -- of the 5 route. So at this point, no, we -- we weren't looking 6 7 at an -- an alternate route for the Jay road. 8 DR. ANNE GUNN: Thank you for the answer. I guess that -- that clarifies it. The -- the 9 10 number of cells of the moderate and high caribou use didn't differ that much between the three (3) 11 alternatives. And that's why I wondered about, as 12 adaptive management con -- with more information, in 13 other words, monitoring the caribou cells, could lead 14 15 to a different decision. But I'll leave it there. 16 Thank you. 17 THE FACILITATOR: Thank you. Could we have the lights back up? Another topic that's already 18 19 been raised is -- is the esker and the caribou use of it and the -- the road crossing it. Are there 20 21 questions concerning the reconstruction of the esker 22 and the consideration of -- of an overpass as an 23 alternate? Okav. 24 MR. CHUCK HUBERT: Chuck Hubert, with 25 the Review Board. The Board thanks Dominion for its

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response to the Board's Information Request on the 1 overpass. And, vou know, an example was given by 2 Dominion on -- on how an overpass could -- has been 3 done in the Banff Park. 4 We also noticed that a response to one 5 (1) of the IRs showed a plan view of the -- the road 6 7 crossing the -- the esker, the -- the response to the -8 - the Board's guestion on -- on the potential for an overpass to -- to allow caribou to move across the 9 10 esker and -- and trucks beneath. Part of the response included the -- the 11 height of the -- that would be required for this --12 13 this overpass as being a -- a limiting factor in the --14 in the -- the value of it. 15 But the -- the Board would be interested 16 in seeing what a cross-section of such an overpass 17 might look like so that -- so that trucks could move 18 beneath the overpass and caribou could move along the 19 esker, and -- and there wouldn't -- and that would avoid disturbance for caribou passing and -- and trucks 20 21 going underneath. 22 Is that -- would such a cross-section, 23 conceptual cross-section, be possible? 24 25 (BRIEF PAUSE)

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MR. RICHARD BARGERY: Richard Bargery, 1 Dominion Diamond. My understanding just from the guick 2 discussion that we just had is that the overpass would 3 have to be 10 to 15 metres above the esker. I guess, 4 from our perspective, for a variety of reasons, we're 5 not sure it's feasible. So to do a cross-section of --6 7 vou know, for the overpass for something that we're -we're, vou know, not -- not prepared to do. I'm not 8 sure what the -- what -- you know, how meaningful that 9 10 work would be for -- for the process, but... 11 MR. CHUCK HUBERT: Thanks. Chuck Hubert, with the Board. The -- there are a number of 12 mitigation measures in -- in place and that have been 13 14 proposed to mitigate impacts for caribou disturbance 15 and displacement along the road. The -- the overpass 16 option has been used in other applications across the 17 country, and -- and the Board would like to see some analysis of -- of an overpass at this location. 18 19 The Board believes that it's incumbent on -- on the Developer in this case to do -- explore 20 21 ever -- every avenue possible to -- to reduce impacts 22 from disturbance and displacement along the road. So 23 again, the -- the Board would like to see some type of conceptual cross-section or -- or -- veah, some work 2.4 25 towards what an overpass could look like.

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(BRIEF PAUSE) 1 2 3 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. So one of the other considerations 4 in -- in the review of this when we did the IR --5 sorry, just getting the IR pointed out to me now -- was 6 apparently for an overpass of this kind to be effective 7 8 also you would need a continuous fence on either side of the road that would exclude caribou from crossing 9 10 anywhere, and then -- I mean, you are essentially then creating a physical barrier. 11 12 MR. CHUCK HUBERT: Thanks. Chuck Hubert, with the Board. No, we -- I agree that a fence 13 14 at this location would be a poor idea for caribou, obviously. But the -- the idea of having crossing 15 ramps, which Dominion has proposed, along the route 16 17 where possible, at least where it's less than 3 metres and -- and vour pipe valves aren't -- aren't a 18 19 constraint. 20 So having those -- those caribou 21 crossing locations along the Jav road, as well as the 22 option for an overpass, no fencing involved, which 23 could provide another option for caribou to get across the road when -- when trucks are passing. That's the 2.4 25 intent.

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(BRIEF PAUSE) 1 2 3 MR. RICHARD BARGERY: The -- veah, I 4 mean, I think we, you know, provided a response to the There -- there are a number of -- sorry, Richard 5 TR. Bargery, Dominion Diamond. That's a difficult thing to 6 7 remember, to say your name every time. 8 You know, there are a number of factors to -- to consider in -- and we think are, you know, 9 10 challenges to -- to doing an overpass. We've laid it 11 out in -- in the response to the IR. 12 But I -- I take it even with that 13 response and sort of the challenges to the -- to the process, you still want to see some sort of conceptual 14 15 engineering drawing of what an overpass would look 16 like. Is that -- is that the gist here? 17 MR. CHUCK HUBERT: Chuck Hubert, with 18 the Board. I wouldn't say an engineered drawing, no. 19 I would sav a -- a -- per -- perhaps a schematic 20 showing the relative height of the esker, the relative 21 of the highest vehi -- vehicle or -- or shovel, and --22 and how -- what type of overpass would need to be 23 constructed to -- to make that work. 2.4 So -- and -- I mean, I'll -- it's 25 possible there may be a -- a second round of

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Information Requests and we can -- we can perhaps ask 1 it then. But I'm -- I'm interested in something fairly 2 -- fairly simple, relative height of the esker, 3 relative height of the tallest vehicle, and -- and how 4 -- how an overpass could conceivably work. 5 MR. RICHARD BARGERY: Richard Bargery, 6 7 Dominion Diamond. Yeah, I -- I think at this point I -8 - I'd be reluctant to -- to make that commitment to -to do that work given, you know, the challenges that we 9 10 see with -- with this type of a -- with type of structure, both in terms of the construction of it, the 11 -- the height issues, the cost issues, whether it would 12 actually be effective. There are a whole variety of 13 14 challenges here so I think it would be difficult for us 15 to -- to make that co -- that commitment at this point. 16 THE FACILITATOR: Thank you. It's Bill Klassen. I -- I think we'll leave that one (1) there 17 and the Board can make the determination about whether 18 19 that will be the substance of a further Information Request. I understand that Anne has one (1) more 20 21 question on the topic of the road before we move on to 22 the waste rock storage area. 23 DR. ANNE GUNN: Yes, thank you. This 2.4 is a point of clarification about the surface of the 25 caribou crossings. In your response to IEMA-27 you

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refer to using 200 millimetre crushed rock as a surface 1 for caribou crossings. Two hundred (200) millimetres 2 is pretty coarse crush and would be sharp-edged. The 3 average caribou hoof is only a hundred millimetres 4 wide. 5 6 So I -- my -- what I'm asking is 7 clarification. Is -- is that your intent to use 200 8 millimetre crush? And could you consider a much finer crush or even the esker mat -- I mean, I know you want 9 10 to salvage the esker material, but could vou use it 11 temporarily on the crossings rather than -- than this 12 rather coarse, sharp-edged material? Thank you. 13 14 (BRIEF PAUSE) 15 16 MR. RICHARD BARGERY: Richard Bargery, 17 from Dominion Diamond. That is what we use currently for caribou crossings and that's -- that's why we 18 19 proposed -- proposed that -- that type of a -- that type of material for -- for Jay. And... 20 21 22 (BRIEF PAUSE) 23 24 MR. RICHARD BARGERY: Sorrv. Richard 25 Bargerv, Dominion Diamond. That -- I mean, that --

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that is the maximum size that we'd use. It -- we have 1 -- you know, caribou do use those caribou crossings 2 now. We've had community members up there looking at -3 - at this. This was sort of one (1) of the -- the 4 5 requests that we had was to use that material when we did our community consultation -- or community 6 7 engagements with communities. We think it's 8 appropriate -- appropriate -- an appropriate size material to use for the -- for the caribou crossings 9 10 and -- and for the -- then therefore for the Jav road. 11 DR. ANNE GUNN: Anne -- Anne Gunn, for I wonder then about perhaps some more 12 the Board. detailed monitoring in order to look at the caribou 13 responses as they approach material like that. Because 14 as I understand it, you don't have a great deal of 15 evidence for the efficiency of the use of these 16 17 crossings. And so without that evidence you can't really tell how effective their use is and whether in 18 19 fact the material, the footing, is anything to do with this. So I would suggest as a contribution towards 20 21 adaptive mitigation perhaps some monitoring using the 22 cameras to look at the caribou responses to the use of 23 the material, so thank you. 24 MR. RICHARD BARGERY: Richard Bargery, 25 Dominion Diamond. Yes, I think what we committed to --

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or what I committed to this morning is that we would, 1 you know, consider all of those suggestions that have 2 been made in terms of monitoring and mitigation, 3 recognizing the -- the -- you know, the -- the health, 4 the current health of the -- the herd, and -- and the 5 need to be -- to be mindful of that, and we'll -- we'll 6 7 consider that. 8 And I think we're going to come back with -- with a bit more of a response on what we're 9 10 doing with respect to soliciting input for -- on the monitoring and -- and mitigation through various plans 11 later this week, and so we'll -- we'll make note of 12 13 that, too, Dr. Gunn. 14 THE FACILITATOR: Thank vou. Thank 15 vou. It's Bill Klassen. Todd, were vou indicating 16 that you had a guestion with respect to that? 17 MR. TODD SLACK: Todd Slack, with the Yellowknives. I'm going to translate 200 millimetres 18 to 8-inch crush. We're fair on that? Okav. Well, 19 20 then no question. But that math is a little wonky, 21 isn't it, two point five-four (2.54)? So 8-inch or 6-22 inch? 23 MR. RICHARD BARGERY: Richard Bargery, 24 Dominion Diamond. Eight (8) inch. 25 MR. TODD SLACK: Okav. Well, then the

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question is still valid. In the -- I -- I realize that 1 this is what vou have used in the past. One (1) of the 2 -- I can't speak for other communities, but certainly 3 from the Yellowknives, one (1) of the concerns that you 4 heard a number of times was the smaller material. 5 Τn response to this, as part of the Lynx process, you 6 submitted as-builts that had 6-inch crush. 7 8 So, well, yeah, 8-inch might have been the case in the past, you know, the -- the concern from 9 10 the community was not to use 8-inch, it was to use smaller. And I thought what we were seeing at length 11 was, Hey, this is our response to that community 12 13 concern. 14 So can vou give us some certainly on --15 are you responding to community concerns? 16 MR. RICHARD BARGERY: Richard Bargery, 17 Dominion Diamond. I think we may have -- have some issues here in the conversion, so I think we'll --18 19 we'll look at -- at this issue because -- veah, we'll look at this issue. We'll come back in the morning and 20 21 clarify exactly that, and -- and also with the -- with 22 the Lvnx content. 23 But just on your last point with respect 24 to community input, this is one (1) of the issue. And 25 we -- vou know, we had numerous discussions over the

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course of our engagement last year, including site 1 2 visits about the need to -- to use smaller material. As vou -- as vou noted, Todd, and -- and 3 4 this was sort of the -- the mitigation that we had proposed and the -- and also now extending, you know, 5 the -- as much as possible, the Jav road and -- to be a 6 7 caribou crossing, not just at intervals like we -- you 8 know, we did at the Miserv road, which -- which, of course, was constructed without -- without caribou 9 10 crossings, and those -- those came afterwards. 11 THE FACILITATOR: It's Bill Klassen. Richard, just for clarification, then the information 12 that you'll be bringing back tomorrow morning, could 13 14 vou clarify for me what that will be, the measurement 15 of what 200 millimetres converts to? 16 MR. RICHARD BARGERY: Rich -- Richard 17 Bargerv, Dominion Diamond. We may -- we may do that, as well. They're just issues with what's coming out of 18 19 the crusher, the size and -- and what it is in metric 20 versus imperial and -- and what we're actually going to 21 be putting on. So we may have -- there may be a little 22 bit of confusion here, and we just need to -- to come 23 back on that because we think we're -- it's the 6-inch 24 material, so that's -- that's going on. 25 So I just needed to double check that

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with -- with our operations group, and -- and that's 1 what we'll bring back. So what -- what material we're 2 posing to put on is, I guess, and what the size of that 3 material is, is -- is ultimately the commitment. 4 5 THE FACILITATOR: Thank vou. Todd, did vou have a further question, and Kel -- Kevin after 6 7 vou? 8 MR. TODD SLACK: Just as a -- as a potential follow-up, depending on the Project's 9 10 response, will we have an opportunity to comment on 11 that tomorrow? Yeah. 12 THE FACILITATOR: I turned myself off 13 here, sorry. There will be an opportunity to -- to 14 respond to these assignments. Exactly when that will 15 happen I -- I can't say right now, but, ves. Thank 16 vou. Kevin O'Reilly...? 17 MR. KEVIN O'REILLY: Thanks. Kevin 18 O'Reilly with the Agency. I never want to cut Todd 19 off. Other folks I'm okav with, but not him. 20 I'm looking at a photo that we took when 21 we were out at the site in June of last year. And I'm 22 looking at a -- a caribou crossing on the Miserv Road, 23 and there's no way that that's 6 or even 8-inch gravel. I've got the photo on here if you want to put it up on 24 25 the screen, but it's way finer than that.

UNIDENTIFIED SPEAKER: Which is it? 1 MR. KEVIN O'REILLY: It's 'D' --2 DCSM5406. 3 THE FACILITATOR: It's Bill Klassen. 4 5 Kevin, did vou sav that the -- the crush that we'll have the picture of is -- is finer than 6 inches? 6 7 Okav. 8 MR. KEVIN O'REILLY: Yes. Definitelv. 9 Thanks. 10 THE FACILITATOR: Thank vou. 11 12 (BRIEF PAUSE) 13 14 THE FACILITATOR: Kevin...? 15 MR. KEVIN O'REILLY: Thanks, Bill. It's Kevin O'Reilly, with the Agency. So a couple of 16 17 things, I guess, some points I want to make about this. We understood this to be a new caribou crossing that 18 19 was recently constructed. And if you zoom in even at the feet of the people that are out there, there's no 20 21 way that that's 6 or 8-inch crush. They would be 22 stumbling along through that stuff. 23 It's got a much finer cover on top of it 24 than 6 or 8-inch crush. So that looks good to me. I'm 25 not a caribou, but we could easily walk up and down

that. So there's no way that's 6 or 8-inch crush. 1 2 Thanks. 3 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. I -- I don't know. I may have --4 when -- when was -- I don't -- I don't know if I was 5 there or what -- or that particular one. But it's --6 7 so it's a 6-inch -- mine says the distribution when we 8 do it. 9 So why don't -- why don't we just come 10 back with some clarity? Because I there's -- there may 11 be -- we may have lost something in the conversion here and clarity on that. I don't -- I don't know which --12 13 which of the caribou crossings that is. 14 THE FACILITATOR: It's Bill Klassen. 15 So, Richard, vou'll provide some clarity as to this 16 particular crossing tomorrow morning then when you 17 provide information on the -- the other topic related to crossings and crush. Do I understand that 18 19 correctlv? 20 MR. RICHARD BARGERY: Richard Bargery, 21 Dominion Diamond. No. I was going to provide clarity 22 on sort of what we're doing for the Jay road and what 23 we're proposing for the Jav road. And -- and I also 2.4 committed to Todd I think to -- in comparison to the --25 to the commitment that we made for the -- for the Lynx

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project to make sure we're consistent. 1 2 THE FACILITATOR: Okay. Thank you. Bill Klassen. Could we have the lights back up? 3 Todd, I think I may have moved on to 4 Kevin before vou were finished. You okay? Okay. 5 Can we move then to the waste rock 6 storage area. I know we had a bit of a discussion 7 8 about that vesterday, but are there other questions related to the waste rock storage area? Todd and then 9 10 Anne. Thanks, Mr. Chair. 11 MR. TODD SLACK: I 12 think there was a commitment vesterday that didn't get incorporated at the end of the day. Okay. Wait. 13 14 Never mind. 15 MS. SACHI DE SOUZA: So there was a homework item vesterday that Todd had brought up which 16 17 was not on our list and I have put on today's list. And the specific question was: At what waste rock 18 19 volume would Dominion have the flexibility to modify the shape and orientation of the waste rock storage 20 21 area, with the understanding from the information vesterday that one-third (1/3) -- a one-third (1/3)22 23 reduction of the waste rock storage volume was not 24 enough for the shape and orientation to be altered. 25 Fair?

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1 THE FACILITATOR: It's Bill Klassen,
2 Sachi. I -- I see some guizzical looks over here on
3 Dominion Diamond's side. Would vou repeat that again,
4 please.

MS. SACHI DE SOUZA: 5 Sure. The question vesterday was: At what waste rock volume 6 7 would Dominion have the flexibility to modify the shape 8 and orientation of the waste rock storage area for the Jav project? And this question was raised after the 9 10 discussion that a reduction of one-third (1/3) of the volume was not sufficient for changing the -- the shape 11 12 and orientation of the pile.

MR. TODD SLACK: It's Todd Slack, with 13 14 the Yellowknives. If I can add some context perhaps to 15 jar your memory, given the guizzical look, sorry. There -- there was -- you said something -- I'm 16 17 paraphrasing obviously, and we can go to the record. 18 But you said something along the lines 19 of, I don't think it's a good idea to do back of an 20 envelop calculation, and then that's where this came 21 out of. Or back -- I think you said napkin, to be 22 precise. 23 MR. RICHARD BARGERY: Richard Bargery,

24 Dominion Diamond. That does sound like something I'd 25 sav. I -- I remember the discussion. What I don't

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remember is the commitment to -- to do exactly that. 1 Ι -- I can remember -- I mean, vou had asked, vou know, 2 if you -- if you reduced the -- the waste rock pile by 3 the amount that you could put in Misery and Lynx, what 4 would that mean in terms of the size? I said, 5 Approximately a third less. I can remember that 6 7 discussion. 8 But I don't remember making the commitment to actually come back -- it is sort of a bit 9 10 of a hypothetical commitment that, you know -- I mean, I -- I just want to reiterate what we said vesterday 11 there -- that with respect to the waste rock pile, and 12 the placement of it and the size, and the point that 13 vou made, Todd, about putting the waste rock in the 14 15 Miserv Pit, that there are a variety of trade outs. 16 We think that we've, you know, chosen an 17 appropriate and responsible way to deal with the waste rock because we're utilizing the Miserv pit for the 18 19 management of -- of mine water as opposed to having to 20 use the North Slave Arm which would have to be the 21 other option because I don't see what the other option 22 would be to -- to manage the mine water if you're not 23 using Miserv pit. There would be issues of traffic to haul 24 25 the waste rock out to the Miserv pit, and there would

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be an associated cost with that. So there are a 1 variety of -- of things that would -- would prohibit 2 that. That -- that's the discussion that -- that I 3 4 remember vesterdav. THE FACILITATOR: Bill Klassen. 5 Т wonder whether, so as not to prolong the discussion on 6 this topic too much, is this something that the Board 7 8 or the staff can then take into account in determining whether there's a need for a further Information 9 10 Request? Is that satisfactory? Okav. 11 Are there other questions then related to the waste rock storage area? Anne Gunn has one (1), 12 and Peter has one (1). Let's go with Peter first, 13 14 Anne. 15 MR. PETER UNGER: Hi. Peter Unger, 16 Lutsel K'e Dene First Nation. I'm sorry I couldn't be 17 here vesterday, so I apologize if this is -- this is 18 alreadv asked. 19 Mv question was, I already asked this in 20 the Information Request and I got a response and my 21 question is about -- the response was, The plan for the 22 waste rock storage area is that it's going to freeze 23 and that is going to contribute to preventing any 24 leaching. And my question was, Has climate change been 25 taken into account in this?

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And I see that it has to an extent under 1 the A1B (phonetic) greenhouse gas emission scenario, 2 which is moderate. And I was curious to know if the --3 the A2 scenario, which is high emissions which is also 4 guite possible, was considered in anyway, and if this 5 would mean that the waste rock pile would thaw later 6 7 on? Thank you. 8 THE FACILITATOR: Peter, it's Bill Klassen. I think Sachi has a response, in part at 9 10 least, to that. MS. SACHI DE SOUZA: Mainly for the 11 12 timing of this question. So we didn't discuss the 13 waste rock storage area vesterday for -- for alternatives, and we're going to keep discussions 14 15 because your concern, I'm thinking, is leading to 16 questions about seepage management, so we're going to leave that to the water dav tomorrow, if that's okav 17 with vou? 18 19 MR. PETER UNGER: Peter Unger, again. Yeah, that's fine. Thank you. 20 21 THE FACILITATOR: Thank you. It's Bill 22 Klassen. Okav. We'll hold that until then. 23 Are there other questions related to the 24 waste rock storage area? Kevin...? 25 MR. KEVIN O'REILLY: Thanks. Kevin

O'Reilly, with the monitoring agency. Sorry, Bill, 1 it's not about the waste rock storage area, but I was 2 chatting with Kim here about the discussion we had 3 earlier about the alternative road routes. We're 4 wondering if we could ask that Anne Gunn's slide 5 showing Alternative number 4 be filed on the public 6 registry? That's -- so that's one (1) request. 7 8 Because I don't think it's on the registry right now. 9 And secondly, we weren't clear if the 10 Company was actually going to carry out an evaluation of that route. They did an evaluation of the route in 11 response to one (1) of our IRs, if I can find it here. 12 13 14 (BRIEF PAUSE) 15 16 MR. KEVIN O'REILLY: Sorry. Yeah, I 17 can't find the IR off the top of my head right now, but there's a table in there where they identified the --18 19 the different units that would be disturbed by the -the alternate routings and -- in terms of the caribou 20 21 habitat, and we're just -- would like to have that 22 analysis done for this fourth alternative. 23 It's Table 28.1, so it's in response to 24 our IR number 28. There's a nice table that shows the 25 estimated frequency of -- for the disturbance caused by

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1 the three (3) route -- three (3) routings. We would 2 like the same analysis done for this alternative if we 3 could. Thanks.

THE FACILITATOR: I -- it's Bill 4 Klassen and I see that the Dominion people are having a 5 bit of a conference on it. Hopefully, it's to address 6 vour -- your question. So I -- I trust that you heard 7 8 Kevin's request for analysis of the units of habitat that may be disturbed by this fourth alternative? 9 10 MR. RICHARD BARGERY: Yeah. Richard Bargery, Dominion Diamond. We -- just a guick 11 discussion. We -- I mean, we can do an analysis of --12 13 of the -- of this alternative route. And we -- I think 14 we can -- we think we can do it within the two (2) week 15 undertaking period. We'll do the full analysis, not just, you know, of -- of the caribou trails, but it 16 17 would be a full analysis of the -- of the route. So -and I -- people are nodding behind me. We can do it 18 19 within -- before -- before May 8th. Whatever the -whatever the two (2) week period is post -- post-20 21 Fridav. 22 THE FACILITATOR: Okav. It's Bill 23 Klassen. As I understand it then we'll be referring to 24 Table 28-2, and it's the agency's request -- I'm trying 25 to decipher Chuck's handwriting here. He should have

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been a doctor. Is -- is that number 28? 1 2 MR. CHUCK HUBERT: Yeah. THE FACILITATOR: And so what I 3 understand the undertaking from Dominion Diamond is to 4 do the same analysis for this fourth route as was done 5 for the three (3) other routes, and you'll have that 6 done by whatever two (2) weeks from the start of the 7 8 hearings was to -- May the 8th. 9 MR. RICHARD BARGERY: Richard Bargerv, 10 Dominion Diamond. We'll have it within two (2) weeks of the end of the hearings, is that what I heard? 11 Because I -- if I heard that then -- at the end of the 12 session, sorry. The -- the Friday. The end of Friday. 13 14 Yeah. May -- May 8th is the correct date? Okay. 15 THE FACILITATOR: Sorrv, I was trving 16 to crowd you there a little I guess unintentionally. 17 It's Bill Klassen. Are there -- did vou have more on that, Kevin? 18 19 MR. KEVIN O'REILLY: Thanks. Kevin O'Reillv, with the agency. Just to be crystal clear. 20 21 Not only would we like Alternative 4 added to Table 22 28.1, but also Table 28.2. I think that's what Rick 23 was talking about doing the full analysis. There's another table that sort of -- veah, we'd like 24 25 Alternative 4 added to Table 28.1-1 and 28. -- or dash

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two (2). Thanks. 1 2 MR. RICHARD BARGERY: Richard Bargerv, 3 Dominion Diamond. Yes. THE FACILITATOR: Thank vou. 4 Bill Klassen, again then. Ouestions related to comments 5 related to the waste rock storage area. Anne Gunn...? 6 7 DR. ANNE GUNN: Anne Gunn, for the 8 Board. This is a followup to an Information Request we had, number 85, on the -- and Dominion's -- it was on 9 10 the use of the rock pile, the exposure with the caribou to the waste rock pile. And Dominion noted that the 11 caribou were not anticipated to regularly use the rock 12 pile, but they may be occasionally present. 13 And then, subsequently, we -- as another 14 15 response to an IR we got the table of camera sightings. 16 And the camera sightings are only for three (3) years, 17 2011 to '13. The highest rate of sightings was on the 18 waste rock pile, or where the waste rock pile will be. 19 So it suggests that, even though exposure may be one (1) year out of three (3), that it 20 21 may be very high. In fact, it was three hundred and 22 seventy-eight (378) total caribou recorded by the 23 cameras, which is guite substantially beyond any other 2.4 sights. 25 And so my question to you is -- the

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sightings come from Table 91.1 (phonetic), if you're 1 looking. So my question is about adaptive mitigation 2 and how you will monitor to accommodate when you get 3 infrequently but very high numbers of caribou during 4 the construction and the maintenance of the rock pile? 5 6 7 (BRIEF PAUSE) 8 9 MR. ERIC DENHOLM: This is Eric Denholm 10 speaking. So there would -- we would anticipate, Anne, there would be, as there has in the pas -- in the past, 11 a construction phase monitoring plan because there is -12 - of the activities unique to construction acti --13 14 phase, and then an operating phase monitoring plan. 15 DR. ANNE GUNN: Anne Gunn, for the 16 Board. Can you tell me -- give me some idea of what --17 how during construction you would, first of all, monitor, and then how you would mitigate, and then how 18 19 that would differ from how you would monitor during operation of the rock pile and mitigate? 20 21 And it's probably not fair to ask you 22 for specifics. But if the answer was to include words 23 like 'decision trees' and details like that, that would 2.4 be helpful. 25 MR. ERIC DENHOLM: Yeah, it's Eric

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Denholm speaking. I mean, vou're -- I mean, vou 1 anticipated our answer. I mean, it will be in the mon 2 -- we don't have the monitoring -- those plans here, 3 so, I mean -- or written. So when the time comes, 4 we'll put that together and we'll have all the 5 appropriate information for construction monitoring and 6 mitigation. 7 8 So I'm suggesting we'll get there. We'll -- the -- the Company will have a construction 9 10 phase monitoring plan and an operation phase monitoring plan, and it will be -- contain all the things that are 11 12 appropriate for those plans. DR. ANNE GUNN: Anne Gunn, for the 13 Board. Well -- well, thank vou, Eric, but it's quite 14 hard to assess the residual effects when guite a large 15 number of caribou may be exposed and we don't know what 16 17 the monitoring for that exposure will lead to, what level of mitigation. 18 19 So accepting your answer, that you -you don't have an answer yet, then when will you have 20 21 it in terms of being able to assess the residual 22 effects? 23 24 (BRIEF PAUSE) 25

MR. RICHARD BARGERY: Richard Bargery, 1 Dominion Diamond. That -- that plan would -- I mean, 2 obviously, it would -- would come pre-construction. It 3 would come -- would likely be developed during the --4 during the permitting phase of -- of the regulatory 5 6 process. 7 DR. ANNE GUNN: Anne Gunn, for the 8 Board. The level of exposure of caribou to the site of the waste rock pile was unexpected, as I read your DAR. 9 10 Like it was three hundred and seventy-eight (378) caribou. That's in order of magnitude between all the 11 12 other sites that were given in Table 91. 13 So it does suggest that the potential 14 exposure of the caribou is guite high. So -- I mean, I 15 don't need to reiterate the state of the caribou herd. 16 So I think waiting to understand what the effects will 17 be the permitting stage is -- is a rather long time to 18 wait. 19 I do suggest that because the waste rock gets trucked, and so I assume the mitigation would 20 21 include a change in the frequency of the trucks as to 22 why you couldn't include this in your Traffic 23 Mitigation Management Plan. 24 25 (BRIEF PAUSE)

MR. RICHARD BARGERY: Richard Bargery, 1 Dominion Diamond. Just -- just one (1) more minute, 2 please, Bill. Sorry. 3 4 5 (BRIEF PAUSE) 6 7 MR. RICHARD BARGERY: Sorry. Richard 8 Bargerv, Dominion Diamond. You know, the -- the monitoring and mitigation plan for -- for the waste 9 10 rock storage area would be based on, vou know, our current practices and procedures. It would -- it would 11 be a -- it would an adaptive management process that 12 would depend -- vou know, we'd -- we'd have mitigations 13 14 in place that would -- would be based on the number and 15 frequency of caribou around the waste rock storage 16 area. 17 And that -- I mean, that would be the basis -- basis for the plan, similar to, you know, how 18 19 we've operated in the past, and -- and the mitigation measures and -- and the new traffic mitigation measures 20 21 that we will put in place for -- for the Jav project. 22 So in that way, I guess, it's tied to the -- to the 23 Traffic Management Plan that we're developing for 24 comment. 25 DR. ANNE GUNN: Anne Gunn, for the

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Board. Okav, thank you for the clarification. 1 2 THE FACILITATOR: It's Bill Klassen, again. Are there other questions relating to the waste 3 rock storage area? 4 5 (BRIEF PAUSE) 6 7 8 THE FACILITATOR: Can we move on then to dust, light, and noise, and consideration of the 9 10 zone of influence of -- of those, and focussing on Information Requests related to those and Dominion 11 12 Diamond's responses? Does anyone have any questions for the Developer on those topic areas? The zone of 13 14 influence of dust, light, and noise. Todd...? 15 MR. TODD SLACK: It's Todd, from the 16 Yellowknives. In one of our IRs, and I know it's here, 17 I can find it if you want it, we asked the question: For those areas which have been dusted how long will it 18 19 take to -- for these areas to return to their pre-20 development state? The Project says they don't know. 21 My question is when will they know? 22 23 (BRIEF PAUSE) 24 25 MR. RICHARD BARGERY: Richard Bargery,

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Dominion Diamond. Could vou -- could vou just clarify 1 the -- the question, or give us the -- the reference 2 for the IR? We are trying to find it but I -- I'd just 3 like to know the context for the -- for the question. 4 MR. TODD SLACK: Okav. Can I just 5 suggest you give it to someone else, and I'll find the 6 7 exact reference? 8 THE FACILITATOR: Thank you. It's Bill Klassen again. Are there questions from others 9 10 regarding dust, light, and noise in zone of influence? 11 12 (BRIEF PAUSE) 13 14 THE FACILITATOR: Anne has a question. 15 16 (BRIEF PAUSE) 17 18 DR. ANNE GUNN: Mv -- Anne Gunn, for 19 the Board. My first question is about blasting. There were two (2) IRs that raised questions about the 20 21 effects of blasting, and the first one suggested that 22 the caribou would be removed from the area prior to 23 blasting. And the area was determined by the mine --2.4 mine inspection regulations, and so it's an area 25 basically defined for human safety, presumably from

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1 flvrock. 2 The second area that was mentioned was in respect of low frequency noise, that it is unlikely 3 to travel more than 5 kilometres. 4 So it's a point of clarification as to 5 whether the caribou will, in anticipation of blasting, 6 7 be removed just a short distance or whether it will be 8 the 5 kilometres so as they're not exposed to the -- to the low -- low frequency sounds? 9 10 (BRIEF PAUSE) 11 12 MS. CLAUDINE LEE: Claudine Lee, 13 14 Dominion Diamond. We would only remove caribou if they 15 were within the blast radius, not to 5 kilometres. 16 DR. ANNE GUNN: Anne Gunn, for the Board. Thank you for the clarification. 17 As a follow-up to that clarification, to 18 19 what extent is -- does Dominion have flexibility in the timing of the blasting and the frequency of it if 20 21 vou're not able to displace the caribou from the 5kilometre zone, which is the transmission zone for the 22 23 low frequency sounds as a mitigation for the effects --2.4 any effects of the blasting, can you -- are you 25 flexible -- can you change the timing of the blasting

relative to the distribution of the caribou? Thank 1 2 vou. 3 4 (BRIEF PAUSE) 5 6 MS. CLAUDINE LEE: Claudine Lee, 7 Dominion Diamond. We do have flexibility in our 8 scheduled blasting. If there were caribou inside the blast radius that we -- we couldn't properly address, 9 10 we do have that flexibility to make that decision at that time. 11 12 DR. ANNE GUNN: Anne Gunn, for the 13 Board. 14 Can vou include some idea of the range of vour 15 flexibility? I mean, can you wait a day? An hour? 16 Whatever. 17 MS. CLAUDINE LEE: Cla -- Claudine Lee, Dominion Diamond. We do have flexibility and -- and 18 19 that decision would be made based on what was happening at that time at the operation. I -- I couldn't say 20 21 right now if it would be one (1) hour or one (1) day, but there is some flexibility. And the key there with 22 23 -- with all of our wildlife management is the protection of the caribou. So that would be the 2.4 25 consideration.

DR. ANNE GUNN: Anne Gunn, for the Boar 1 -- for the Board. Thank you for that. That is really 2 useful to hear that there would be a commitment to 3 schedule the blasting to provide maximum protection for 4 the caribou. So thank you. 5 MR. CHUCK HUBERT: Chuck Hubert, with 6 7 the Board. Anne, thanks for tho -- thanks for the 8 wording on that. Can I get Dominion's agreement on that commitment that -- as it was termed? That... 9 10 MR. RICHARD BARGERY: Richard Bargerv, 11 Dominion Diamond. I'm not sure that we made a commitment. I -- I think what Claudine was describing 12 13 was -- was how we operate and the flexibility that we 14 have now because we do blast now. And, you know, we --15 the protection of the caribou, as she said, is -- is 16 paramount so caribou would be outside -- outside of the 17 blast area before we blast. 18 And we do have some flexibility in the 19 operations, but it is an operational issue. So I'm not sure what the commitment is. If the commitment is that 20 21 we'll continue our -- our current operational practices 22 with respect to blasting then -- the answer is ves. 23 DR. ANNE GUNN: Anne Gunn, for the Board. I think the -- the clarity I was looking for 2.4 25 was the 5 kilometre zone which is the transmission of

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the low frequency sound. And... 1 MR. RICHARD BARGERY: Richard Bargerv, 2 Dominion Diamond. No, that isn't -- that isn't what we 3 said. We were talking about the blast area itself as 4 5 opposed to the 5 kilometre zone. And that's -- that's -- you know, as -- as that's the operational procedure 6 7 that we -- that we do -- that's at Ekati todav that's 8 in place today. 9 DR. ANNE GUNN: Anne Gunn, for the 10 Board. So if -- if I understand you correctly, just for clarification, you -- you're just staying with the 11 ongoing practices which is to remove caribou from sort 12 13 of the flyrock zone and not any additional protection 14 in terms of the transmission of the low frequency 15 sound? 16 17 (BRIEF PAUSE) 18 19 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. So, veah, I mean, I think from our 20 21 perspective the operational procedures that are in place today would -- would be applicable. I -- I would 22 23 note -- note that the Jav pit itself would be isolated 24 somewhat because it is in the dike area. So it does 25 have -- there is sort of a distance there. I -- we

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don't know exactly what that distance is right now in 1 terms of -- but there -- there would be some just sort 2 of a isolation naturally because of the placement of 3 the Jav pit itself. 4 5 THE FACILITATOR: It's Bill Klassen. 6 7 Do you have any comment on that response, Anne? 8 MS. CLAUDINE LEE: Sorry, I -- Claudine Lee, Dominion Diamond. I just wanted to make one (1) 9 10 clarification. We don't actually move the caribou. We delay the blasting if there are caribou in the 11 designated blast area where we set up our protection. 12 That's not the 5 kilometres. Yeah, we wait. And we --13 14 we have done that in the past for caribou, foxes, and 15 other animals that have been in that area. 16 DR. ANNE GUNN: Anne Gunn, for the 17 Board. As a follow-up to that, I -- I think it would be useful to keep track of the number of instances 18 19 where vou have delayed blasting, when vou have modified the -- your operations because that information is --20 21 is largely lacking both in the WEMPs, in the previous 22 WEMPs, and in the DAR. And it would give a much 23 greater reassurance as to actually what you're doing 24 rather than sometimes to generalize narrative. But I 25 won't go on there, so thank you.

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THE FACILITATOR: Okav, it's Bill 1 Klassen. I see Kim has his hand up. Todd, did vou 2 find the Information Request number? Do you want to 3 restate your guestion, and then Kim? 4 MR. RICHARD BARGERY: Can I respond to 5 -- to Anne's point just on the reporting because --6 Richard Bargery, Dominion Diamond. I'll ask Harry --7 8 Harry O'Keefe to respond, but I think we are starting to track and -- and report those incidents now. So 9 10 Harry can maybe expand on that. MR. HARRY O'KEEFE: Yeah. And it was 11 12 pointed out -- oh, Harry O'Keefe, Dominion Diamond. 13 I'm not great at remembering the name. So it -- it has 14 been pointed out previously by concerned parties that 15 we don't record and -- and hadn't recorded the -- the, 16 I would say, operational mitigations that we take and -17 - and deviations from operational activities. 18 So in the last two (2) years, the --19 that table has now been included in the WEMP and we've been more actively recording and reporting each event 20 21 where I say there was a reduction in speed limit in 22 that duration or a road closure in that duration or a 23 delav to a blast. 24 THE FACILITATOR: Thank vou. Т 25 apologize for not seeing that you were going to

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respond. I quess my peripheral vision is not --1 doesn't reach that far. Todd, please go ahead. 2 3 MR. TODD SLACK: Thanks, Bill. Todd, with the Yellowknives. And that's why I'm sitting, 4 like, front and centre here. IR-4, question 2, talks 5 about the project re -- noted reduced diversity of 6 vegetation abundance and complexity in and around 7 8 destination sources. "Please provide the recovery curve 9 10 and recolonization for return of abundance to those impacted areas." 11 12 I'll direct you to the final response of your -- sorry, final paragraph of the response. The 13 14 paragraphs sav, Hev, lichen is more effective than other species. But the final paragraph says: 15 "The amount of time for vegetation to 16 17 recover following mine closure and removal of dust sources is not 18 19 known." 20 Well, I understand that, in particular, 21 the -- the surveys look at more localized areas. This 22 also has implications on the wider dust deposition and 23 potentially the palatability of lichens and whatnot further afield. 2.4 25 So the question is: If you don't know

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how long it will take, when will you know and are you -1 - and if you don't know that either, why is this not a 2 matter of focus or why are you not looking at other 3 closure projects to try and get at this answer so that 4 we can have an understanding when this site is 5 abandoned, how soon can we expect it to be productive? 6 7 8 (BRIEF PAUSE) 9 10 DR. JIM RETTIE: Jim Rettie, Golder Associates. In our modelling for caribou habitat for 11 the areas within the zones of influence and the habit -12 - and the changes to habitat guality as a consequence 13 14 of all sensory disturbances, including dust, we modelled that decline in habitat guality right through 15 16 to the reasonably foreseeable development cases if that 17 habitat is -- if its value has -- has decreased at the outside and -- and remained at a low value. 18 19 And in terms of carrying forward --20 carrying that forward in our assessment, that impact 21 was -- was retained. And we came to the conclusion 22 that, for -- for caribou, this was -- the overall 23 effect was not significant on their -- on our 2.4 assessment end point. 25 So we -- we -- while we anticipate that

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-- that there will be a recovery, we modelled it as if 1 there was not to account for maximum effects, and 2 concluded that, overall, there would not be a 3 significant effect on caribou. 4 MR. TODD SLACK: It's Todd, with the 5 Yellowknives. Thank you for that response, but it 6 doesn't really answer the question. The Yellowknives 7 8 Dene will be the inheritors of this long after you're gone. So I think the guestion remains -- well, let's 9 10 recognize your response and say include that as part of this guestion. 11 12 So how far -- how -- how far out does that projection go? I'm assuming it's 2033, the end of 13 this project, 20 whatever? I'll let you answer that in 14 15 terms of vears. 16 But secondly, the question was: You don't know the rate of recovery. Are you looking at 17 this? And if not, why not? 18 19 20 (BRIEF PAUSE) 21 22 MR. RICHARD BARGERY: Richard Bargery, 23 Dominion Diamond. I think what we'd like to do is take 24 this -- that particular guestion away. Our closure 25 expert, Mr. Novv, is not here with us todav, so we'll -

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- we'd want to consult with him on some of the research 1 projects that we're doing. And -- and we'll get back 2 to you with an answer on this before the end of the 3 4 week. THE FACILITATOR: It's Bill Klassen. 5 Thank you. I understand then there will be a response 6 to this question regarding how long it might take for 7 8 lichen affected by dust to return to productivity. And vou'll have that answer before the end of the week. 9 10 Okav. Todd, do vou have anything further? 11 12 MR. TODD SLACK: Not on that question. 13 Thank vou. 14 THE FACILITATOR: Thank you. It's Bill 15 Klassen. Kim Poole had a question, and then Andrea. 16 MR. KIM POOLE: Kim Poole, with IEMA. 17 Just to follow up on Anne's questioning about the blasting, could vou clarify for us, because I can't 18 19 remember off the top of my head if we were even talking about the 5-kilometre zone, which is basically a -- a 20 21 sensorv zone. 22 But can you give me an idea how big the 23 blast zone is that you clear people and animal -- or 24 make sure there are people and animals not in it, or 25 the flvrock zone, whatever vou want to call it? How

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big is that in general? 1 2 MS. CLAUDINE LEE: Claudine Lee, Dominion Diamond. That zone is dependent on the blast 3 size and some other conditions. That's set out in a 4 blasting table that is required by the Mines Act for us 5 to follow, so it depends. 6 7 MR. KIM POOLE: Kim Poole, with IEMA. 8 Could you -- I appreciate that it varies with conditions, et cetera. But can vou ballpark it? Are 9 10 we talking 100 metres? Are we talking 2,000 metres in 11 general? 12 And I'm thinking more -- obviously, if you're blasting at the bottom of a pit that's 300 13 14 metres down, the blast zone's probably not going to be 15 that far, or as far as it was if it was a surface 16 blast. 17 So at a surface blast under average conditions, what we are talking? What kind of range? 18 19 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. We don't have that available here 20 21 with us, but -- but I'm sure we can -- we can easily --22 easily provide the case or we can provide the table. 23 Mavbe that might be the better -- the better -- the 2.4 better -- better response. 25 THE FACILITATOR: It's Bill Klassen.

Richard, that -- is that response as to the area that 1 may be affected by the blast, will that be available by 2 the end of the week, or is this something you need more 3 time on? 4 5 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. I think we -- we can answer that in 6 7 the morning. We could come back in the morning with --8 with that response first thing. So we can get that -get that this afternoon or this evening. 9 10 THE FACILITATOR: Okav. We'll look for that. It's Bill Klassen. We'll look for that response 11 12 in the morning then. 13 Kim, did vou have anything further? 14 15 (BRIEF PAUSE) 16 17 THE FACILITATOR: Are there other questions related to waste rock storage area? 18 19 Peter...? I thought I saw your hand up. Sorry. 20 MR. PETER UNGER: No. I apologize. Ι 21 thought we were on dust, light, and noise zone of 22 influence. 23 THE FACILITATOR: For -- thank you for 24 that reminder. Senility is setting in this time in the 25 afternoon. You're right. We are on the dust, light,

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and noise zone of influence. I hadn't checked off the 1 other ones, so I went back to that list. Thank you. 2 MR. PETER UNGER: Pete -- Peter Unger, 3 Lutsel K'e Dene First Nation. My question is about 4 above-ground power lines and their emission of 5 ultraviolet light, which in similar species has been 6 7 shown to be a deterrent. I was curious what kind of 8 research you've done on that, and if there are any mitigation measures to prevent above-ground power lines 9 10 being a deterrent to caribou. Thank you. 11 12 (BRIEF PAUSE) 13 14 MR. ERIC DENHOLM: Yeah, it's Eric 15 Denholm speaking. So as -- as far as I could -- could 16 take that discussion, veah, we have been aware of that 17 -- that reference. I think it was from reindeer in Finland, and so on, and -- and we had incorporated that 18 19 into our -- our work on the submissions for the Miserv power line and had -- and had rolled it into -- into 20 21 that -- that piece of work. 22 So -- and so -- so to say that we are 23 aware of that, and have considered that in our -- that -- that reference, and have considered that in our 24 25 assessment -- our own assessments of power lines, veah,

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it's... 1 2 MR. RICHARD BARGERY: One -- just one further comment. So just I think in the response to... 3 4 5 (BRIEF PAUSE) 6 7 MR. RICHARD BARGERY: To EC -- is that 8 the -- is that -- that's not the right -- hang on -to LKDFN IR-16, we -- we do talk about the -- discuss 9 10 the effects of the power lines on caribou, and -- and point, I think, to the -- to the different sections of 11 12 the DAR where that's -- where that's addressed. MR. PETER UNGER: Thank vou. Peter 13 14 Unger, Lutsel K'e Dene First Nation. You do. My -- my 15 point is -- is that you -- your response says that --16 it suggests above-ground power lines have smaller 17 effects on caribou movement and distribution than roads and traffic. And then the next sentence savs: 18 19 "Therefore, the focus of mitigation 20 and modering -- monitoring for the 21 power distribution lines Jav and 22 Miserv roads is directed at Jav road 23 design, caribou crossings, 24 modification, or traffic patterns and 25 road closures."

These are -- those all seem like traffic 1 measures and my question is: What do -- are you doing 2 specifically to address the power lines? Are you 3 positioning them somewhere differently? Are vou 4 burving them where you can? Are you shielding them, or 5 are -- are you doing anything about them? That's my 6 7 question. Thank you. 8 9 (BRIEF PAUSE) 10 11 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. In -- a number of things that we're 12 13 doing. So we'll use single poles as opposed to the 14 double poles. We reduce the -- the use of the guv 15 wires, which create a bit -- more of a barrier. One of 16 the things that we -- that came out of some community 17 engagement on a -- on a separate project last year was 18 to -- to not utilize the rock boxes to place the --19 place the -- the poles in, and -- as opposed to 20 drilling down and -- and putting the -- the poles in 21 the ground. So those are the kinds of things that --22 that we're doing with -- with power lines. 23 MR. PETER UNGER: Thank you. Peter 24 Unger, Lutsel K'e Dene First Nation. But I mean in 25 terms of the issue -- I mean, we're on light right now.

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In terms of the issue of ultraviolet light, are you 1 2 doing anything to minimize that impact, or is that just -- is -- is anything being done to address that, is my 3 4 question. MR. RICHARD BARGERY: Richard Bargery, 5 Dominion Diamond. No, nothing -- nothing on that 6 7 particular... 8 MR. PETER UNGER: Thank you very much. 9 THE FACILITATOR: Thank you. It's Bill 10 Klassen. Andrea had a guestion. MS. ANDREA PATENAUDE: Andrea 11 12 Patenaude, GNWT-ENR. Okav. So in response to GNWT IR-66, regarding whether DDC expects to see a change in 13 14 either the size or magnitude of the zone of influence 15 of their operation -- or the project expansion, they 16 stated that: "Dominion Diamond does not anticipate 17 a change in the magnitude or 18 19 disturbance coefficients or size, the 20 spatial extent of the assumed zone of 21 influence used in -- to predict 22 changes in caribou habitat quality 23 and energetics related to active mine 24 sites, such as Ekati and Diavik, as a 25 result of the Jav project."

Then in Appendix D where they were 1 revising their cumulative effects monitoring for the 2 post-Diavik closure scenarios with and without the Jav 3 4 project, they state that: "The Jav project will increase the 5 spatial extent of the zone of 6 7 influence asso -- associated with the 8 Ekati mine and extend the operating 9 life of the Ekati mine until 2013 10 (sic)." 11 So either way -- anyway, could you just 12 clarify whether ves or no there is -- what the 13 prediction is, please? 14 15 (BRIEF PAUSE) 16 17 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. It just takes a moment just to find 18 19 those -- those two (2) references. 20 21 (BRIEF PAUSE) 22 23 DR. JIM RETTIE: Jim Rettie, Golder 24 Associates. Just trying to get you to -- I'm wondering 25 if I could get you to clarify your guestion. Perhaps,

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ask it again. I'm going to try to follow along as we 1 qo. I've got both documents in front of me now so that 2 3 should help. MS. ANDREA PATENAUDE: There we go. 4 And I found the second part. Okay. So in response to 5 GNWT IR-66 the statement is that: 6 7 "Dominion Diamond does not anticipate 8 a change in the magnitude or size of 9 the assumed spa -- zone of influence 10 used to predict changes in caribou habitat quality and energetics 11 12 related to active mine sites." Blah, blah, blah. "Such as." So that 13 14 was the first sentence in the response to the question. Okav. Part A. Part B, Appendix D where you kind of 15 revised the modelling you did with scenarios for post-16 17 Diavik closure, both with and without the Jay project. And I believe the statement I'm looking in particular 18 19 is -- well, I mean, with the explanation, but 20 culminating in the statement at the end of the one (1), 21 two (2), three (3) -- third paragraph: 22 "The Jav project will increase the 23 spatial extent of the zone of 24 influence associated with the Ekati 25 mine and extend the operating life of

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the Ekati mine until 2030." 1 The first part of that sentence anyway. 2 So I'm just asking for clarifi -- clarification on --3 on that apparent discrepancy. 4 DR. JIM RETTIE: If I've -- if I've got 5 this right. Sorry, Jim Rettie, Golder Associates. In 6 -- in Appendix D the -- the question was -- that we 7 8 were addressing was whether or not the -- the addition of the Jay project to the existing Ekati mine would 9 10 change the zone -- the overall zone of influence, 11 right. So you add the -- you add the Jay project on and the zone of influence at 15 kilometres changes the 12 13 total area from -- from what it is currently. 14 And in response to I -- IR -- GNWT IR-66 15 the response was that the -- the zone of influence in 16 terms of a distance was not going to change. So the 17 distance around a development. And in the -- in the response in 18 19 Appendix D it was, When we add this project because we've increased the footprint of the mine, and it's 20 21 extended out to the east and to -- then the overall 22 total area of the zone of influence will expand, but 23 it's -- but the -- it's still 15 kilometres out from 2.4 the footprint. 25 I hope that answers it.

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MR. ANDREA PATENAUDE: Andrea 1 Patenaude, GNWT. Yes, that helps. Thank vou. 2 So either way, it's still a prediction, 3 right? Okav. So with -- with respect to monitoring, 4 they mention in, I believe, the IR-66 -- they, being 5 you folks -- mention that their approach to zone of 6 influence monitoring will be guided by what the zone of 7 8 influence technical task group recommendations are. 9 And so just for -- that's a task group 10 of folks who are developing a guideline for when and how zone of influence monitoring is appropriate for use 11 12 in say forums such as this. And so still in draft form, but as far -- the guidance so far states that: 13 14 "Projects for which zone of influence 15 monitoring is deemed appropriate, 16 considerations involved in that] 17 they're advised to produce an initial 18 19 estimate of zone of influence during 20 the operation phase of the project." 21 And we can probably agree that you have 22 this. 23 "Repeat monitoring should be 24 conducted when the project is 25 expected to change due to a major

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shift in the project, such as a mine 1 2 phase change expansion would fall under that] a 3 chan -- a major change in mitigation 4 practices or other cause." 5 So we're just wondering if Dominion can 6 7 confirm that zone of influence monitoring to 8 investigate impacts of this project expans -- expansion will be included in the monitoring plan for Jav? 9 10 (BRIEF PAUSE) 11 12 13 MR. HARRY O'KEEFE: Harry O'Keefe, 14 Dominion Diamond. As the GNWT is aware, we had stepped 15 away from our current operational monitoring of zone of influence under the understanding that current 16 17 population levels do not allow for what I would cal -what we would describe in our agreement, anyways, as 18 19 reasonable expectation of receiving -- of -- of getting data that would change the results. 20 21 So Dominion would be willing to 22 entertain resumption of zone of influence monitoring. 23 active zone of influence monitoring, when there is a reasonable expectation of our ability to detect change. 2.4 25 MR. ANDREA PATENAUDE: Okav. Andrea

Patenaude, GNWT. No more further questions. Thanks. 1 2 THE FACILITATOR: Okav, I have -- it's Bill Klassen. I have Anne Gunn wanting to ask a 3 follow-up, and then over here. 4 DR. ANNE GUNN: Anne Gunn, for the 5 Board. This is a question of clarity about the 6 certainty of the 15 kilometre zone of influence. In 7 8 the cumulative effects assessment and elsewhere in the DAR, it's referred to 15 kilometres as -- with no 9 10 variance around it, just as a single figure, implying a certain degree of certaintv. 11 12 There's already been a bit of discussion about how the zone of influence might be varying. But 13 14 my question is for -- for Diavik, there was a 15 15 kilometre zone in -- measured by Golder in -- in four (4) years. And then in three (3) years -- four (4) 16 17 vears, the zone of influence was between 30 and 40 kilometres. And this was for Diavik, not Diavik/Ekati 18 19 combined. 20 Now, this was a -- a different 21 statistical analysis, but using the same data as John 22 Boulanger and -- well, John Virgil could correct, but -23 - but I think vou're all using the same set of data 24 which is the -- the collar data. Then, when there are 25 different analyses, there's guite a variability going

from 30, 40 kilometres to 15 kilometres. 1 So my guestion is: How do you 2 incorporate that annual variability into the single 3 measure vou use? Like, how do vou adjust the certainty 4 of the 15-kilometre zone? 5 DR. JOHN VIRGIL: John Virgil, Golder 6 7 Associates. Anne, vou're right. So those reports, those analyses go back through time. And some of them 8 were based on a different statistical approach using a 9 10 quadratic function that turned out to be having scaling 11 problems. 12 Some of them -- the most recent one that 13 you refer to used a piecewise regression which was more 14 similar to John Boulanger's work. In our work, we also looked at the distance to lake as a coefficient, and 15 that one showed up just as likely to be influencing the 16 17 caribou distribution than Diavik itself. Some of it is based on -- in John B.'s 18 19 work it's based on distance to the core of the -- of 20 the study area, of the -- sorry, of the footprint, 21 whereas others, it's based on to the edge of the 22 footprint. There's a whole load of measurement error 23 in there due to the statistical approach and how 24 measures from caribou distance to the -- to the mine 25 footprint was calculated.

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So there's -- I would say that John 1 Boulanger's work, in terms of looking at it with one 2 (1) statistical approach that seemed -- that I would --3 I would -- that -- that actually turned out to be a 4 more robust statistical approach rather than the 5 guadratic function that was used earlier by both John 6 Boulanger, myself, and Chris Johnson, was -- had more 7 8 certainty around it. The confidence of intervals themselves 9 10 around John Boulanger's work shows that. And since his 11 work looked at basically during the entire decline of the -- of the Bathurst herd, we chose to use that work 12 as the -- as the spatial extent of the zone of 13 14 influence. 15 DR. ANNE GUNN: Anne Gunn, for the Board. Thank you for that clear explanation. But 16 17 regardless of -- particularly like when you're using

18 the quadratic approach, did vou see anv evidence for 19 anv annual trends when vou look at Diavik and Ekati 20 combined?

21 DR. JOHN VIRGIL: John Virgil, Golder 22 Associates. The -- the work that we did didn't take 23 into account the -- the Ekati footprint. We did see 24 trends. Some of those trends actually showed in some 25 years no avoidance of the mine. In other years, it --

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1 it ranged, but in some vears -- we also looked at just 2 nurserv groups, so cows with calves. And it actually 3 showed that some of those groups in some vears seem to 4 be attracted to the mine.

So again -- but it was all dependent on 5 those different types of analyses, and at the end of 6 the day we chose to publish work by Boulanger to be 7 8 representative of the average zone of influence that could occur around any particular mine site. And in 9 10 our -- of application of that, we applied it to -- to mine sites that likely would have a smaller zone of 11 influence than Ekati and Diavik, such as Snap Lake 12 which is an underground mine. 13

14 So overall, we're confident in the 15 predictions that we made are conservative. They don't 16 -- they don't capture the annual variation that you 17 would like to have if you had different ZOIs for different operations across the landscape with 18 19 different levels of activity, different topography around them, that can all influence caribou movement 20 21 and behaviour. 22 We used the best information available, 23 Anne. 24 DR. ANNE GUNN: Anne Gunn, for the 25 Board. Thank you for that explanation. I appreciate

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its clarity. I still wonder why or how you would 1 incorporate uncertainty. 2 I mean, you've just described a fair 3 amount of uncertainty. Given, vou know, the -- the 4 zone of influence is so fundamental to your approach to 5 -- to cumulative effects in particular. I wonder why 6 7 you wouldn't incorporate a measure of uncertainty that 8 would capture the measurement rate, any annual trends -- and I also wonder, and I -- if you have a comment on 9 10 this. Although caribou abundance has changed, 11 although in the last few years the frequency of 12 incidental sightings and the camera sightings has 13 14 declined, the encounter rate, which is based on the 15 zone of influence, has not changed. It doesn't -- it 16 shows minimal variation, and it shows no trend over 17 time since 1996. And given the change in -- in the camera 18 19 capture, given the change in incident which -sightings, given the change in the herd size, is there 20 21 a relationship between the uncertainty with the zone of 22 influence and the lack of a trend in the encounter 23 rate? 24 DR. JIM RETTIE: Jim Rettie, Golder 25 Associates. For the encounter rates, because they were

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based on radio-collared animals, regardless of the size 1 of the population at the time, the population of 2 interest here is the population of marked individuals. 3 And it has varied very little through time. 4 So the encounters with the zones of 5 influence by animals wearing radio collars when there's 6 the same number of animals out there, more or less, on 7 8 an annual basis is not surprising. 9 DR. ANNE GUNN: Anne Gunn, for the 10 Board. If -- if the zone of influence was double, if it was say fourteen (14) -- I mean 40 kilometres, 11 there's a greater chance of the collared cows 12 encountering it. So does the lack of a trend in the 13 14 encounter rate support the -- the conservatism, or the lack of uncertainty, in the zone of influence? That's 15 16 -- that's what I'm trying to get at. 17 18 (BRIEF PAUSE) 19 20 DR. JIM RETTIE: Jim Rettie, Golder 21 Associates. I apologize, Anne. Could I get vou to 22 repeat your question? Could I get you to repeat your 23 question? 24 DR. ANNE GUNN: Anne Gunn, for the 25 Board. My -- my main question is how you're going to

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account for uncertainty in the 15 kilometre zone of 1 influence? My follow-up question to that was to see if 2 the zone -- the magnitude of the zone of influence, the 3 variance in it, is -- does it have any relationship to 4 the lack of a trend in the encounter rates. 5 And I don't think the variability in the 6 sample size of the collars is -- it doesn't show a 7 8 trend. And it doesn't vary that much over time. So there must be another factor driving the lack of a 9 10 trend in the encounter rate. Because if the zone of influence is varying, the encounter rate should be 11 12 varying more than they are. DR. JIM RETTIE: Jim Rettie, Golder 13 14 Associates. The encounter rate that we've calculated 15 is fixed. Sorry, the zone of influence against which 16 we've -- we've assessed encounter rates is effectively 17 fixed. It changes slightly as new projects are added. So -- so there may be some variance in the way the 18 19 different methods of calculation account for zones of 20 influence and what they suggest the appropriate zone of influence is. But in our analysis we used the 15 21 22 kilometre zone of influence at all times so that it 23 didn't varv in our assessment. 24 DR. ANNE GUNN: Anne Gunn, for the 25 Board. So if there was -- if -- if vou used

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uncertainty, so if you used the variability, like, the 1 measurement area that -- that John described or the 2 possibility of annual trends, you would then be able to 3 see more variability in the encounter rates. I mean, I 4 think using the zone of influence as a constant is 5 quite misleading as to what might be happening with 6 cumulative effects. And I think you could take -- one 7 8 (1) possibility would be to look at a more variable approach to the zone of influence. 9 10 One (1) of the surrogate values for looking at the variability in the zone of influence 11 might be to look at the changes in dust fall that have 12 occurred both across Ekati and Diavik. Over the years 13 14 there's been marked changes in the amount of dust fall. 15 And whether -- it was -- actually it was a -- this was 16 also going to be a follow-up. 17 Because we asked -- the Board asked this -- this guestion of you in one (1) of the Information 18 19 Requests, was to what the correlation was with the changes in dust fall with dust mitigation or whether it 20 21 was just driven by when the mines went underground, and 22 could you use that correlation between mine activity 23 and dust fall to look at the changes in the zone of 24 influence. 25

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(BRIEF PAUSE) 1 2 3 DR. JIM RETTIE: In re -- Jim Rettie, 4 Golder Associates. In response to the -- the question about the -- the focus is on dust and its relationship 5 with the zone of influence. One (1) of the things that 6 7 our zones of influence include -- well, dust is only 8 one (1) of the things that the zones of influence would -- would account for. 9 10 All of the other sensory disturbances that might -- that might be forthcoming from a mine, 11 whether it's light, noise, human activity, and -- and 12 13 observations of that, those are all incorporated in the 14 -- in a zone of influence. And -- and we don't know 15 what -- which of those factors is responsible for the 16 extension of that zone of influence out to where it is. 17 I mean, to do so would require some sort of an 18 experimental process where you could isolate one (1) of 19 those factors from another. 20 And it becomes very difficult to -- to 21 account for why the zone of influence should be a 22 different size on account of -- of one (1) factor or 23 another. The -- the most recent information for the --24 for the Bathurst herd was the -- as from the Boulanger 25 work. And that's where we acquired -- his -- his value

was 14 kilometres, so we -- we moved it out a little 1 bit and we worked with fifteen (15) as our zone of 2 influence. That's -- that's the most current 3 information for this herd, and it's conducted 4 empirically with -- you know, with the difference of 5 these developments in mind. 6 7 DR. ANNE GUNN: What were the 8 confidence limits around John's estimate of 14 9 kilometres? 10 DR. JOHN VIRGIL: John Virgil here. Anne, vou're -- vou're stretching my memory capacity 11 here. I think -- and you can't, like, guote me on this 12 now. Okay, we can go back and check, but I -- I 13 14 haven't got -- I haven't got his paper with me, but we 15 can go online and check it out, but I'm thinking it was in the neighbourhood of around somewhere between eleven 16 17 (11) and seventeen (17) or something like that. Oh, Jim's got it, so. So if I'm wrong, 18 19 wipe that from the record, please. 20 21 (BRIEF PAUSE) 22 23 THE FACILITATOR: I wonder -- I have 2.4 two (2) other people that have indicated an interest, 25 Kim is a third. I wonder if we can conclude with this.

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I find it all very interesting, but I wish I'd paid 1 more attention during statistics and scientific 2 sampling courses I took, which was a long time ago, 3 just after they invented the process, actually. 4 So do vou have one (1) further response 5 there, Richard? 6 7 MR. RICHARD BARGERY: Just -- Richard 8 Bargerv, Dominion Diamond. Just that we're -- we'll look for that -- for that number. And when we have it, 9 10 maybe after the break, we'll -- we can provide that. Jim's -- Jim's busy looking. Rather than wait, we can 11 12 probably move on --THE FACILITATOR: Okav. 13 14 MR. RICHARD BARGERY: -- if that's --15 that's okav with -- with vou, Anne. 16 THE FACILITATOR: Okav, Kim has the 17 number. 18 MR. KIM POOLE: Kim, with IEMA. The 19 number on the range is -- the confidence intervals is twelve point zero (12.0) to fifteen point five (15.5). 20 21 You're paving attention, John? 22 THE FACILITATOR: Okay, perhaps we are 23 getting up close to where we should be taking a break. I believe Mr. Croft has a guestion. And then we'll 24 25 take a break. And then I'll come back to this. Thank

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1 vou. 2 MR. BRUNO CROFT: Thank you, Mr. Chair. I'll make it shorter than I had originally planned. 3 Anne touched a little bit on the dust here, and Jim 4 answered part of it. For me, dust dissemination has 5 always been a question mark in a zone of influence, and 6 I don't think we've nailed it yet. 7 8 I had some anecdotal information I would have liked to shared with you. Maybe I'll wait a bit 9 10 later on that. But my simple question at this stage to follow up on this, Jim or John or others: 11 How 12 confident are we that the current mitigation measures for dust dissemination are effective, they're doing 13 14 their job, what you've got in place, minimize the spread of the dust at different time of year, 15 16 summertime, windy conditions, so on and so forth? 17 If -- if vou can answer that for me. 18 I'm probably going to have more follow-up questions, 19 but I'll wait a bit on that one. 20 21 (BRIEF PAUSE) 22 23 MS. CLAUDINE LEE: Claudine Lee, 2.4 Dominion Diamond. So the current operation uses a 25 couple of different types of mitigation for dust

including the use of dust suppression on site and road 1 watering in combination. We look at that on an annual 2 report and then report it on a three (3) years basis. 3 That three (3) year air guality report with the -- with 4 the dust information has just come out. 5 In the report, we say that the dust 6 7 suppression program is effective at mitigating dust in 8 its application on the longer haul roads with the larger traffic. 9 10 We get this information from the dust fall array that is put out along the long haul roads 11 including Miserv and Fox where we see results that show 12 a majority of the dust does settle out within 30 13 metres, and that within 90 metres the results show 14 we're below the BC objective of 2.9 milligrams per dust 15 16 metre squared per day. And at 1 kilometre, 17 everything's back to baseline against our -- our reference locations. 18 19 So from that, we determined that our dust suppression program is effective. 20 21 MR. BRUNO CROFT: Thank vou. Bruno, 22 from ENR North Slave. How would you rate this in that 23 whole equation of things that, you know, Jim just 24 mentioned? We don't really know how to tease out which 25 one has more of an impact In the zone of influence; the

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fact is there is one. 1 2 I'm not so sure what you just mentioned, that it says that the dust is not really a factor. And 3 again, I cannot bring numbers. Like vou pointed out, 4 you saw we are still in the process trying to figure 5 out how to monitor things and -- and probably 6 demonstrate that it has a significant impact. 7 8 But just a few stories I'd like to share 9 with vou if I may do so here be --10 THE FACILITATOR: Could vou keep --MR. BRUNO CROFT: We don't have the 11 12 time. 13 THE FACILITATOR: -- the stories short? 14 Okav. 15 MR. BRUNO CROFT: That's fine. We'll -- we'll -- I think we should probably pursue that a 16 17 little further in the ZY group. I'm not convinced that dust doesn't have more of an impact that is claimed to 18 19 be. And I'll leave it at that for now. 20 THE FACILITATOR: Okav. Thank you. Ι 21 -- I enjoy stories probably more than others enjoy 22 telling them, but we -- we are -- we've got three (3) 23 more topics to -- to address this afternoon. So I 24 suggest we take about a ten (10) minute break, and then 25 we'll come back. And unless there are other pressing

matters related to zone of influence, we'll move to 1 2 mitigation next. 3 --- Upon recessing at 2:46 p.m. 4 --- Upon resuming at 3:00 p.m. 5 6 7 THE FACILITATOR: Good afternoon. Ι 8 would invite you to take your seats again so we can get 9 underway. 10 (BRIEF PAUSE) 11 12 13 THE FACILITATOR: I'm aware that there 14 are a few more people that would like to -- to ask questions or talk about this topic of the zone of 15 influence. And Chuck Hubert with the Board staff on my 16 left here is one of them, but there's a gentleman here 17 whose name I don't know that has indicated an interest 18 19 in asking a guestion or commenting. 20 So we'll -- we'll start with you, sir. 21 If you could give us your name, please. 22 MR. ARTHUR BECK: Good afternoon. I'm 23 sorrv I wasn't here vesterday. My name's Arthur Beck. I'm from Fort Resolution Metis Council. I'm a hunter, 2.4 25 trapper, traditional knowledge holder, and I just got

back from hunting last week. That's why it was a 1 little hard to get a hold of me. I know Dominion was 2 trying to meet with us for a bit, but kind of busy, 3 Anyways, I'm not here to ask any questions. I'm 4 too. going to give you a little history on this caribou. 5 I've been part of this caribou board 6 7 since the late '90s, and I sat on almost every committee. I know Anne Gunn verv well. I know a lot 8 of people here very well. 9 10 I'm not going to repeat all the stuff 11 that's been said, but I started hunting caribou with my father in the early '70s, and the caribou has changed 12 greatly. They're totally different. And if I watch 13 14 the news all over, everywhere there is mining industry 15 there is problems with caribou, right in -- right down 16 to Russia. All over. We -- there is problems with 17 mining. And the stuff I see, I look at -- at the 18 19 agenda, some of the stuff on the agenda I brought out 20 in the 90s, and no -- never dealt with. Now it's good 21 to see that they're dealing with it now, but we're 22 almost twenty (20) years late that they're finally 23 starting to listen to traditional knowledge. 24 Well, right now I just came back from a 25 caribou hunt. I did an organized caribou hunt for our

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community of Fort Resolution. Three (3) of us went 1 We harvest thirty-four (34) animals. Out of that 2 out. thirty-four (34) animals, there was twenty (20) --3 twenty (20) cows. Out of that twenty (20) cows, there 4 was no fat on any of our animals. Our animals are very 5 There's no fat on them. And there was nothing -6 poor. - there was no -- hardly any food in their stomach. So 7 8 -- and there was -- out of twenty (20) cows, there was only two (2) fetuses, and they -- which were very 9 10 small. So nature just tells vou right there, common sense, just tells you. 11 12 See, I was -- I professionally raised

13 dogs for years, too, so I know a lot about breeding 14 dogs; and caribou is the same thing. When -- if I was 15 going to breed a female dog, if I wanted ten (10) pups what I would do is I would feed that female very, very 16 17 well. Have her overweight so her body is telling her that she could pro -- she could feed more animals. So 18 19 the caribou is the same thing. When the caribou is very thin, nature is telling them that they can't 20 21 survive, they can't feed more, so that's why there's 22 very little calving -- calves coming now. 23 So I -- that's one -- one of the main 24 concerns. I speak the language very well, traditional 25 -- my Chippewayan language very well. In our language

-- everything about the animal in our language -- I 1 take a word in our language and I translate it into 2 English, and it tells me the problem. 3 And right -- right now the -- there is a 4 lot of problems. And I noticed this scientific 5 technical session here, you break everything up into 6 little pieces. And I noticed your chairperson up there 7 8 stopping people from wandering. You know, I -- kind of listen guite a bit. But I'm like a caribou. You can't 9 10 control me. I flow, and I go -- go wherever I want. And vou'll notice that. 11 12 But my concern really is, It's good to -- it -- it's not a concern. It's good to see that 13 14 vou're finally starting to work with the Aboriginal 15 people, so now within -- just -- I just noticed it the 16 last few years that you're starting to look at 17 traditional knowledge a lot more. With traditional knowledge and 18 19 scientific knowledge together, there's a chance that we will -- I guess I shouldn't say save the caribou 20 21 because the caribou is not dead, they just moved. You 22 changed their food. You changed their diet. Forrest 23 fires involved. I know you like to blame stuff on the 24 bugs, but that's only -- there's no bugs this winter 25 right now and the caribou are still skinny.

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So it's all combined. The activity, 1 exploration, the mining, the fires, the predators, the 2 Aboriginal hunters; everything combined is just too 3 much for the animal to handle. So what we have to do 4 here is handle our -- we have to manage our activities 5 around the caribou herd, around everything. 6 7 We manage the activities, exploration, 8 and to -- the trucks hauling on the roads, we manage human beings then the caribou will manage themselves. 9 10 So that's my advice, is that we have to start managing 11 the humans. Thank you. 12 THE FACILITATOR: Thank you. Chuck Hubert, I believe, has a comment. Kim, did vou have --13 14 okav, let's start with Kim then. 15 MR. KIM POOLE: Kim Poole, for IEMA. 16 This goes back to Anne's guestions about uncertainty, 17 annual variability in the zone of influence. As Andrea pointed out, we've had this zone of influence -- I can 18 19 never remember the name -- technical task group, working group, whatever. And for that, going back to 20 21 this Boulanger et al paper that everybody's 22 referencing, because of the way that it was computed, 23 not the stats per se, but the way it was computed it 24 was -- it basically needed six (6) years of data to 25 come up with this magical 14 kilometres ZOI that

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1 everybody's auoting.

2 Advances have been made in the computation and the methods used to analyze that kind 3 of data so that now John Boulanger is able to come up 4 with annual zone of influence calculations. And he 5 retrospective -- or he looked at the 2003 to 2008 data 6 that we used for the wildlife biology paper and came up 7 8 with annual measures for all of those which showed interesting trends, a little bit of variability, but it 9 10 was able -- vou able -- vou were able to map it on an 11 annual basis. 12 I'm wondering if it would be useful to -- to look at -- to add a little more individual years 13 14 to this whole data set is that subsequent to our 2000 15 and -- 2012 paper which looked at data up to 2008, 16 there were aerial surveys conducted in 2009 and 2012. 17 So we have two (2) -- you look perplexed. There were two (2) -- there are two (2) more full-year data sets 18 19 that could be examined to come up with these annual estimations of ZO -- ZOI as have been -- have been 20 21 shown in the -- in the ZOI draft document that Andrea 22 has circulated a month or two (2) back. 23 So my recommendation is that Dominion 2.4 Diamond should consider either doing their own analyses 25 if that can be done or getting John Boulanger. He can

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do them fairly quickly if the data is set up to look at 1 -- it gives us two (2) more data points over time. 2 My second and final point is that --3 final point for now is that the dust answer to Bruno's 4 question, I think that what was meant when it goes to 5 background at 1 kilometre is that the fugitive dust is 6 7 unmeasurable compared to background at 1 kilometre. CALPUFF modelling, lichen sampling, and 8 snow sampling is showing that dust is being 9 10 disseminated out to approximately twelve (12), fourteen (14), sixteen (16), 18 kilometres out from the Ekati 11 Diavik footprint. And that is why we came to the 12 conclusion that Boulan -- conclusion in the Boulanger 13 14 et al paper that there may be some correlation between 15 the zone of influence that we're detecting and a 16 mechanism. And it seemed to -- you know, dust seemed 17 to be one (1) that -- that made sense. Granted, it's challenging to mitigate 18 19 dust in the situation at Miserv. I've been there a 20 number of times. Despite the mitigation, every time a 21 truck goes by, every time a plane lands, you see a 22 massive plume of dust. 23 One (1) of the earlier comments as well 2.4 was that we can't really separate out dust from visual, 25 from light, from noise, from whatever that causes a

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zone of influence. But one (1) way to possibly get a 1 handle on it would be to do some serious dust 2 mitigation for a year or two (2) and then re-measure 3 the zone of influence with aerial surveys if it was 4 applicable. 5 6 So there are ways to kind of tease this 7 through rather than just shutting it off saying that, 8 We don't know what's driving the zone of influence so there's not much more we should be doing about dust 9 10 suppression. So I would just ask that Dominion Diamond consider -- consider that. Thank vou. 11 12 13 (BRIEF PAUSE) 14 15 MR. RICHARD BARGERY: Richard Bargerv, from Dominion Diamond. So the first -- I think the 16 17 first question was use -- looking at using the two (2) additional data -- data points from 2009, 2012. So I 18 19 want to make clear from our perspective at least, vou know, for the purposes of the EA we -- we feel that 20 21 we've done what -- what's required and -- and what's 22 appropriate for the assessment. 23 In the longer term we're prepared to 2.4 work with researchers to continue to improve science 25 and ensure there's appropriate adaptive management and

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1 mitigation in place.

2 So for the purposes of the Jav project, I guess, I -- I don't think we need to -- to do that --3 or we don't think we need to do that. In terms of the 4 dust mitigation at site, well, we do what we think is 5 fairly extensive mitigation now. When you say serious 6 7 dust mitigation at site, I'm not sure I completely understand what -- what's required to -- to do that and 8 what -- vou know, what -- vou know, what -- what 9 10 magnitude more -- or order of magnitude more than --11 than what we do today. 12 MR. KIM POOLE: Kim Poole, for IEMA. 13 At the environmental workshop that IEMA held in November, we went through a day presentation, and Harry 14

15 was there at that time, that looked at potential or 16 proposed best management practices for dust suppression 17 related to mining operations. It was more of a structured approach to how these things could be done. 18 19 It measured the dust off the trucks a little more accurately and you had kind of a caribou tree-type 20 21 thing where vou would sav, Okav, well, if it's this 22 much dust, then we should be doing this and that. 23 Water does not seem to work more than 24 two (2) or three (3) in some cases. Claudine and 25 others have -- have acknowledged that. And we

1 appreciate that -- that that's touch. There's no wav 2 vou can keep continuously watering a 30-kilometre road 3 every two (2) to three (3) hours without a massive 4 amount of effort, so something else has to be done. 5 Does it mean more DL10? Does it mean looking at some 6 of the other options, dust stop? There were a number 7 that were raised.

8 But clearly, from a community point of view and possibly linked back to caribou, dust is a 9 10 huge issue. I don't think it's fair to characterize it as beyond a kilometre it's not an issue. A lot of 11 people are concerned by it. So I think what people are 12 looking for is going that extra step somehow, 13 14 appreciating it's going to be difficult, but something 15 more has to be done. 16 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. We'll -- we're prepared to look at -17 - at the -- the outcomes of -- of that workshop that 18 19

19 vou sav from Januarv. Was that -- when was the 20 workshop, sorrv?

21 MR. KIM POOLE: It was the IEMA 22 environmental workshop in early December. And Harry 23 was present and made a presentation at that time, as 24 well as a number of others, including one (1) that IEMA 25 put together. We could file the presentation, if that

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would be useful, or make sure you have it. 1 2 THE FACILITATOR: So it's Bill Klassen. Kim, IEMA will be providing the results of that 3 workshop to the Mackenzie Vallev Environmental Impact 4 Review Board? Okav, thank you. Chuck Hubert has a 5 question in this whole topic area. And then I'd like 6 7 to move along to mitigation. 8 MR. CHUCK HUBERT: Chuck Hubert, with 9 the Review Board. Dominion responded to a Board IR --10 on a recent one, from April the 10th, a response just 11 last Friday on -- on noise and light, specifically the 12 light one. The -- the request asked for some 13 examples of mitigation that Dominion was using on site 14 at Ekati to reduce the impacts of light pollution and 15 16 give some examples of successful mitigation techniques that have been used at other mines or industrial sites. 17 18 There was a response from Dominion. Τt 19 was -- it was guite general. It was stating that some directional lighting was used on site and that 20 21 headlights, of course, were necessary for -- for 22 vehicles. The Board was hoping for a little bit more 23 detail, a little bit more of an elaborate response. 2.4 And I know the time line was tight, so that perhaps had 25 something to -- to do with it.

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But if there could be a bit more -- a 1 bit more detail on -- on specifics of wavs that Ekati 2 is currently mitigating -- or -- or reducing the 3 impacts of light from a -- from a disturbance 4 perspective to caribou in particular, it'd be helpful. 5 MR. RICHARD BARGERY: Richard Bargery, 6 7 Dominion Diamond. So just -- just so I'm clear, what -8 - what you'd look for -- for us, any specific examples that we do at Ekati today or that potentially are done 9 10 at -- at other -- at other mine sites of -- similar 11 kinds of mine sites? 12 MR. CHUCK HUBERT: Chuck Hubert, with 13 the Board. I would say both. So what are some 14 examples -- specifics of what Ekati currently does to 15 mitigate light -- light pollution? What could be done 16 at Ekati based on the experiences and practices at 17 other mines and industrial sites above and beyond what -- what Ekati currently does? Thanks. 18 19 20 (BRIEF PAUSE) 21 22 MR. RICHARD BARGERY: Richard Bargery, 23 Dominion Diamond. I -- the latter part of the second 2.4 question I think is -- is where we -- we didn't give a 25 fulsome enough answer, I think. So I -- I think we'd

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undertake to -- to look at that part of -- I can't 1 remember the IR number, but that particular part of 2 that IR, and -- and come back with a -- with a --3 hopefully a -- a better answer on -- particularly on 4 other sites because I -- I think it's a -- a limited 5 number of things that we do at -- at Ekati at present. 6 So within the -- within the two (2) week undertaking 7 8 period. 9 MR. CHUCK HUBERT: Thanks. Chuck 10 Hubert, with the Board. So that undertaking for Mav the 8th would be for Dominion to explore other light-11 reducing mitigation techniques at -- at other 12 industrial and mining sites, and -- and consider their 13 14 applicability for Ekati. THE FACILITATOR: It's Bill Klassen, 15 16 and the time line for the provision of that response? 17 MR. RICHARD BARGERY: Just to be clear, applicability to Jav I think is -- at this point is --18 19 is how I'd -- I'd characterize it. And I think for -from our perspective it would be within the -- before 20 21 the Mav 8th undertaking -- by May -- by May 8th. 22 MR. CHUCK HUBERT: Chuck Hubert. 23 Thanks. I misspoke. It should be for Jav then. 2.4 Thanks. 25 THE FACILITATOR: It's Bill Klassen

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again. And I'd like to ask on the -- the subject of 1 mitigation, and it's already come up under other topic 2 areas, are there questions that anyone present has 3 regarding mitigation perhaps related to the Information 4 Requests that might have been submitted and responded 5 to by the Company? 6 7 Todd, we'll start with you. 8 MR. TODD SLACK: Thanks. Todd Slack, with the Yellowknives. I have two (2) sort of lines of 9 10 thought here, and the first is, we've heard today guite a bit about how useful it would be to have the -- the 11 respective plans to understand exactly what the 12 13 mitigations are, to see these, you know, written down 14 and incorporated as commitments as part of this 15 process. 16 And I'd just point out that the Company 17 has referenced the way that they operated in the past 18 as part of that. And so you're not starting from zero 19 here. It's -- it's something. 20 But from an environmental point of view, 21 the way that this process has operated in the past is 22 the consultant was able to prepare a WWHPP for the 23 Gahcho Kue process. So we had something, a draft 24 document, to be sure, but we had something on paper 25 that was incorporated as part of the documents and as

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part of the commitments. 1 So theoretically, we understood what 2 those mitigations were going to be in a very clear and 3 transparent manner. 4 So I'm guessing the guestion there is: 5 What is -- why can't we do that in this case, 6 considering you're -- where you're starting at, 7 8 considering the experience of the Propo -- or the consultant and the -- that it's emerged as a bit of a 9 10 best practice? 11 12 (BRIEF PAUSE) 13 14 MR. RICHARD BARGERY: Richard Bargery, 15 from Dominion Diamond. So the commitment this morning 16 I think was to come back with the WEMP and the WWHPP --17 pardon? Yeah, August 1 of -- of this year, incorporating the Jav project into those management 18 19 plans to provide the Wildlife Road Mitigation Plan, erstwhile known as the Traffic Management Plan, by the 20 21 end of -- by the end of the month for comment from 22 folks. 23 And the -- the other commitment that we 24 made, which we didn't respond to this morning to Mr. 25 O'Reillv, was to provide a list of sort of the -- the -

- at least the critical plans, management plans, their 1 status, and when they were going to be updated. And --2 and perhaps through that process we could also talk 3 about how and when they could be -- could be 4 considered. 5 But many of those plans are established. 6 7 They could -- they have their own processes so it's --8 it's hard to sort of generalize on those particular plans. They have their own processes, you know, either 9 10 through -- other regulatory processes that they need to -- to be reviewed through. 11 12 So there's a variety of -- of plans that 13 are established for Ekati and I'm sure, Todd, you've 14 reviewed many of them in -- in various other forums. 15 So it's -- it's a little different, as you -- as you 16 quite rightly note from a new operation that's starting that doesn't have a basis -- a management -- vou know, 17 18 a basis to start from. Ekati does, so. 19 So we'll provide that list. I think the 20 commitment on that one was by the end of -- the end of 21 this -- this week. 22 MR. TODD SLACK: Okav. Thanks for

23 that. Sorrv. And I hadn't heard that be presented as 24 clear as it was. So I apologize and -- to everyone 25 here for having wasted some time.

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Getting on with it, I want to ask a 1 question, it's related to a number of YKDFN IRs, and 2 the principal focus can be found in IR number 1, 3 question 3. And this asks about the -- the narrows, 4 and caribou returning to this area. 5 And I'll point out the -- that this is 6 7 the third time that we've asked this particular 8 question. And the Company says there's no reason to expect that caribou will not continue to use the 9 10 narrows. And the first response -- or the first 11 12 clarification I -- I would ask is: What happens if you're wrong? 13 14 15 (BRIEF PAUSE) 16 17 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. I -- I suppose our answer is -- is 18 19 what we said in the -- in the response to you, is that we do expect caribou will continue to -- to move 20 21 through -- down to the narrows. 22 MR. TODD SLACK: It's Todd, with the 23 Yellowknives. Is there a possible -- let -- let me re-24 ask this. Is there a possibility that you are wrong? 25 MR. RICHARD BARGERY: I suppose vou can

ask -- Richard Bargery, Dominion Diamond -- you can ask 1 it a number of different ways, Todd, but the answer is 2 going to remain the same from -- from our perspective, 3 4 so. MR. TODD SLACK: Well, accepting that 5 the Project is not going to respond to the question, 6 7 I'll -- I'll ask: From a post-closure -- if caribou 8 are not returning and using this area that has been used for thousands of years, what consequences would 9 10 accrue to the Company? 11 12 (BRIEF PAUSE) 13 14 MR. RICHARD BARGERY: Richard Bargery, 15 Dominion Diamonds. So we have a -- we have a interim 16 Closure and Reclamation Plan that's been approved by 17 the Land and Water Board which has closure objectives, and we wouldn't be relinguished, you know, from the 18 19 project until those closure objective are met. 20 We have a conceptual closure plan 21 contained in the -- in the DAR for this project, and eventually the ICRP, if the Jav project is approved and 22 23 proceeds, the ICRP would be updated to included the Jav 24 project, include -- and I don't -- I don't expect that 25 those closure objectives would change greatly, but --

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but we would have to meet those closure objectives in 1 order to be relinguished. 2 MR. TODD SLACK: Todd, with the 3 4 Yellowknives. Are vou willing to -- sorry, is the Project willing to accept the return of caribou, and 5 the use and crossing of the narrows, as a closure 6 objective? 7 8 MR. RICHARD BARGERY: Richard Bargery, 9 Dominion Diamond. We have an approved ICRP that's gone 10 through the appropriate regulatory process in which, vou know, all parties have a chance to -- to comment 11 on, including the Yellowknives Dene First Nation. And 12 updates to that ICRP occur on a regular basis, on an 13 14 annual basis. There are progress reports on an annual 15 basis, and would be updated to include Jav if it's 16 approved and -- and proceeds. And that's the 17 appropriate forum, I think, for those to be -- to be debated, and certainly YKDFN would have full 18 19 opportunity and full -- full ability to -- to comment 20 on the ICRP as it is today or -- or when it includes 21 Jav. 22 MR. TODD SLACK: Mr. Bargery, thank you 23 for that answer. It's Todd, with the Yellowknives. So 24 vou don't believe -- and correct me if I'm wrong, but 25 do -- do vou believe that discussing post-closure

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impacts is for -- is a appropriate matter for the 1 environmental assessment phase of this project? 2 MR. RICHARD BARGERY: Richard Bargery, 3 Dominion Diamond. I think the conceptual closure plan 4 that we have in -- in the -- in the DAR is appropriate 5 for the environmental assessment process. That's what 6 7 we -- we believe. That's the appropriate discussion we 8 have. You were talking about a specific closure objective, which is contained in the -- in the ICRP for 9 10 the Company, which goes through the Land and Water 11 Board process, and that's the appropriate process to -to lav out those -- those closure objectives. If the 12 discussion and -- and your views on -- on closure 13 objectives, that's on the record here. That -- I think 14 15 that's appropriate for you to put your views on the --16 on the record. 17 MR. TODD SLACK: Were the Yellowknives 18 Dene to recommend this as a measure, one (1) of the pre 19 -- one (1) of the next steps becomes the criteria. And while I appreciate that these can be discussed at the 20 21 regulatory phase, and they are set in stone at that 22 point, the Yellowknives Dene adopt a cradle-to-grave 23 approach with the mining developments, otherwise you 24 end up with situations in which you get unintended or

25 unpredicted outcomes.

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And I will point out that your ICRP 1 process repeatedly referred back to the predictions of 2 the EA and repeatedly referred back to the -- the 3 hearings as -- as some of their -- their background. 4 So this is clearly the appropriate forum. 5 And then once we start to look at that 6 criteria, the question is, how would we assess whether 7 8 these are being used again? And this relates to IR-25, I believe. Perhaps IR-20 -- 20 -- what -- what --9 10 whatever it is. I can get you the -- the exact reference if you need it. And in that the Company 11 response is, There are no metrics to understand how 12 13 many caribou are crossing now. 14 Do I have that right? 15 16 (BRIEF PAUSE) 17 18 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. Yes, that's correct. There are no 19 specific monitoring programs. 20 21 MR. TODD SLACK: Thanks. That's it. 22 THE FACILITATOR: Kim Poole. 23 MR. KIM POOLE: Kim Poole, for IEMA. 24 Just a clarification on the list of management plans. 25 And I apologize if this was addressed vesterday, but

I'm -- I wasn't here. In 2001, the last version of the 1 Wildlife Management Plan was released, and there has 2 been no update since. And I'm getting a little bit 3 lost whether this Wildlife Management Plan is now being 4 replaced by the WWHPP and the -- perhaps the traffic 5 thing. Definitely not the WEMP. 6 7 Could you clarify, please? 8 MS. CLAUDINE LEE: Claudine Lee, Dominion Diamond. Yeah, that -- that's correct. We're 9 10 -- that's the update that we're working on right now to 11 meet the -- the requirements in the Wildlife Act. 12 13 (BRIEF PAUSE) 14 15 MR. KIM POOLE: So -- Kim Poole, with 16 IEMA. That's to clarify that the -- the Wildlife 17 Management Plan -- that's okay. The Wildlife 18 Management Plan as we knew it back in 2001 is now a 19 dead issue? 20 21 (BRIEF PAUSE) 22 23 MR. HARRY O'KEEFE: Harry O'Keefe, 2.4 Dominion Diamond. As was stated this morning, we will 25 be proposing a -- presenting a draft WWHPP and WEMP as

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they're outlined in the GNWT draft guidelines. And 1 those documents will be for Ekati and describe how --2 for the purposes of this assessment, how they will be 3 extended to accommodate the Jav project. 4 And so the Ekati portion, not including 5 Jav, would replace the Wildlife Effects Monitoring Plan 6 and the Wildlife Effects Monitoring Program as they 7 8 exist now in operation. 9 MR. KIM POOLE: Kim Poole, with IEMA. 10 Sorrv, Harrv, but I missed that. Just a simple, 'ves', 11 'no'. The Wildlife Management Plan that was last written in 2001, is it a -- still a living document, or 12 13 has it been replaced by these other plans that you mentioned, 'ves' or 'no'? 14 15 MR. HARRY O'KEEFE: Yes, it's in the 16 process of being replaced. 17 MR. KIM POOLE: Another question, if I 18 mav, on mitigation. 19 THE FACILITATOR: Excuse me, Kim. 20 MR. KIM POOLE: Oh, sorry. 21 THE FACILITATOR: I -- I think Sachi 22 has a guestion that bears on this exchange. 23 MS. SACHI DE SOUZA: That -- I have two 24 (2) guestions. The first one we'll do is actually to 25 the GNWT. Given the conversation that just happened

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about the plans that relate to the Wildlife Act and 1 wildlife, it would be, I think, helpful for everyone in 2 the room to understand the requirements for the WWHPP 3 and the WEMP as -- in legislation, and what 4 specifically GNWT has asked Dominion or expects 5 Dominion to do to comply with those requirements. 6 7 8 (BRIEF PAUSE) 9 10 MS. LYNDA YONGE: Lvnda Yonge, GNWT-ENR. As I explained vesterday, under the new Wildlife 11 Act, there is a requirement for a wildlife management 12 and monitoring plan. That's the term that's used in 13 14 the legislation for the purposes of the legislation. An accepted Wildlife and Wildlife Habitat Protection 15 Plan, a WWHPP, and a Wildlife Effects Monitoring Plan, 16 17 WEMP, will serve as the Wildlife Management and Monitoring Plan required under the act. 18 19 Did that make any sense? So -- so what 20 I'm saving, so the requirements under the act, the --21 the WWHPPs and WEMPs that are being developed now meet 22 the requirements under the new act. 23 MR. RICHARD BARGERY: Can I -- so just 24 -- Richard Bargerv, Dominion Diamond. Just to be 25 clear, what we said this morning is that we would

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provide -- sorrv, I got -- glasses, a -- a draft 1 document that is consistent with the GNWT's draft 2 guidelines for a Wildlife and Wildlife Habitat 3 Protection Plan and a Wildlife Effects Monitoring Plan 4 as per vour 2013 legislation by -- by Aug -- August 5 1st, 2015. That's what we -- that's what we said --6 said this morning. 7 8 And a subsequent part of that was that the -- the Traffic Management Plan, which is at 9 10 appendices -- appendix, would come in a -- in another 11 ten (10) days or so. 12 THE FACILITATOR: Okav, Sachi, did vou 13 have a -- it's Bill Klassen. Did vou have a second 14 question, or John Donihee? 15 MR. JOHN DONIHEE: Thank vou, Mr. 16 Chairman. It's John Donihee. I -- I'm just trying to 17 figure out -- I mean, I understand what the legislation savs. And I have a general idea of what those plans 18 19 are supposed to include. I guess the confusion that 20 vou're -- that this shift has -- has caused for me is 21 just that, as Mr. Poole indicated a little while ago, 22 there are other plans out there that have been placed 23 for a rather long time and that are not just important 24 from a wildlife management standpoint, but they're 25 important from an impact assessment and mitigation

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1 standpoint.

2 And so the fact that Dominion may be 3 moving forward to the new format that the legislation requires is great. But I guess what I would -- you --4 you could help us with is to explain what that does to 5 the other plans that have been out there that people 6 have been working with for a while, and particularly, 7 8 from the Board's standpoint, how you see those new plans filling the gap, I guess, that -- that happens 9 10 when those other -- other management tools are 11 replaced. 12 MS. LYNDA YONGE: Lynda Yonge, GNWT-13 ENR. And I love the way John asks me questions, 14 because they're always hard to answer. The intent of 15 the provision in the act is to fill what was a gap, a 16 regulatory gap, for the requirement of a wildlife management and habitat plan. 17 18 So the plans that are currently in 19 place, provided that they are approved and that they have all -- all the parts in it that are required, 20 21 would just be adopted as meeting the requirements under 22 the Act. Does that answer your question, John, or no? 23 MR. JOHN DONIHEE: It's John Donihee 24 again. Well, that -- that does help. That's the first 25 part of my question, which is we -- we do understand

that the WWHPP and the WEMP are going to satisfy the 1 requirements of the new wildlife legislation. 2 I -- I guess the other part of the 3 question is: What happens to the other management 4 plans? You know, how do they get divided up or -- or 5 handled? And have you given any -- any thought in your 6 conversations with Dominion Diamonds about the 7 8 transition that -- that will inevitably take place as we move forward to the framework that's in the new 9 10 legislation? 11 12 (BRIEF PAUSE) 13 14 MS. LYNDA YONGE: Okav. So the earlier 15 plan -- so we haven't had this conversation, but the 16 earlier plans -- I think we need to not get hung up on 17 what they're called, provided that they perform the same function that's required under what we now call a 18 19 WWHPP and a WEMP. And so -- or whatever it's called under the Wildlife Act. 20 21 So the earlier plan still fulfilled 22 those requirements, regardless of what it was called 23 and how it was divided up. So we would consider that 24 earlier plan to be a live document until such time as 25 it's replaced with a new document that fulfills the

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1 requirements.

The Act itself doesn't demand a WWHPP and a WEMP. It demands a plan that savs, These are the proposed -- these -- these are what we think the problems might be, this is how we're going to mitigate them.

7 MR. JOHN DONIHEE: Just one question 8 arises from that, I guess, Mr. Klassen. It -- thank vou for your answers. The -- the guestion is actually 9 10 to Dominion Diamond then, and I guess what arises, you know, for me is the sense that we're transitioning from 11 -- to -- to a new format and framework, and I -- I note 12 your reference on several occasions to August the 1st. 13 I'm just wondering whether, vou know, is 14 15 -- whether it's possible that those plans might be 16 readv earlier than that. That's -- that's running 17 rather close to the time when the parties have to file 18 interventions, and close enough to the hearing that 19 it's not going to leave a lot of time for everybody to 20 get used to the new formats and, you know, ask any 21 questions they might have about those plans if -- if 22 there are questions. 23 MR. RICHARD BARGERY: Richard Bargery,

24 Dominion Diamond. I -- I much more enjoved it when vou 25 were asking guestions of the GNWT, I must admit.

The -- I think we're -- it's a little 1 bit of a -- I hope all issues don't go this way. It's 2 a little bit of a schedule creep. We -- we were asked 3 vesterday, so we -- we were working on draft WWHPP and 4 WEMP to meet the requirements of the new Wildlife Act 5 for Ekati, which is -- which is in progress. 6 7 We were asked vesterday if we could 8 incorporate -- have that available, incorporating Jav, for this process. And so we went back and looked at 9 10 that last night, and we were asked I think, specifically by -- I think it was by Andrea, whether we 11 12 could do that in advance of the public hearings. And our discussion last night is, you 13 14 know, we could -- we could do -- we could do this work 15 by August 1st. If we can do it faster, we'll provide 16 it faster. But right now, based on the -- you know, 17 the discussion that we've had, we -- we can commit to August 1st but I'm not sure I could commit to any 18 19 faster than that. 20 Unless, of course, the -- the public 21 hearings were -- were -- I -- we figured out a way, I 22 quess, if the public hearings were -- were earlier. 23 That was just a -- that was just a joke. Sorrv, I know 2.4 it's... 25

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(BRIEF PAUSE) 1 2 3 THE FACILITATOR: It's Bill Klassen. Ι think Sachi has another guestion. 4 MS. SACHI DE SOUZA: Sachi De Souza, 5 with the Board. To follow up on the -- the number of 6 plans that have been discussed over the past two (2) 7 8 days which include traffic and air and the WWHPP and the WEMP. I understand that some of them are -- are 9 10 going see -- be submitted by August 1st, and also that others are potentially under review with the Land and 11 12 Water Board right now. The plans that are referenced today and 13 14 the plans that are relevant to the decision-making 15 process for the environmental assessment -- or some of them will be relevant and are relevant for the EA, and 16 17 we would appreciate Dominion putting those plans in draft form onto the registry once they are submitted to 18 19 the Land and Water Board, and then, once the comment period is over, submitting those comments in their 20 21 finalized form to the registry as well. 22 So submit the draft document, and then 23 once the review period is over on that draft document 24 on the Land and Water -- with the Land and Water Board, 25 submitting those comments as well, or allowing us to

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1 move that over. 2 3 (BRIEF PAUSE) 4 5 MR. RICHARD BARGERY: It's Richard Bargery, Dominion Diamond. So just to be clear, what 6 we committed to Mr. O'Reilly vesterday was to prepare a 7 8 table of sort of the critical management plans, to talk about their current status, where they are in the 9 10 regulatory process -- because they are -- I mean, they 11 are living, breathing documents, and -- and in -- we have -- you know, we have a -- a ongoing operation now, 12 what the update schedule was for the Ekati operations 13 for those particular management plans, and an updated 14 15 schedule for Jav. And that's -- that was the 16 commitment that -- that we made. 17 We don't foresee -- and -- and each of 18 those have their -- you know, their own review process 19 in which many parties that are parties to this process comment on. We don't -- so I -- this is -- this isn't 20 21 for the purpose of commenting on those -- those sort of 22 plans for this -- this proc -- I don't -- I don't --23 I'm not sure I follow completely the -- the question. 24 MS. SACHI DE SOUZA: Okav. Sachi De 25 Souza, with the Board. We're not suggesting that

there's an additional review period that happens 1 through the Review Board's process. It's just that if 2 it's -- plans have been referenced that are in draft 3 form right now, and those draft plans need to be on our 4 record, and right now they're -- they're not on our 5 record. 6 7 For example, I think there's a -- a Lynx 8 road crossing plan, something like that, on the Land and Water Board site --9 10 MR. RICHARD BARGERY: M-hm. MS. SACHI DE SOUZA: -- or anv draft 11 plan that's with a different regulatory agency, we need 12 those to be on our record. We don't need --13 14 MR. RICHARD BARGERY: Okav. 15 MS. SACHI DE SOUZA: -- to be a 16 reviewer for those. We just need them on the record. 17 18 (BRIEF PAUSE) 19 20 MR. RICHARD BARGERY: Okay. Richard 21 Bargerv, Dominion Diamond. Okav. I -- I mean, I think 22 we -- I think we can -- can do -- we've -- we've 23 referenced a lot of plans. A lot of them have their 24 own -- like I say, their own -- their own processes. 25 They're going to Land and Water Board reviews, parties

1 are commenting. There's a Lvnx road crossing review, 2 which may or not -- may or may not be finished, the 3 comment period. I don't -- I don't recall on -- on 4 that particular one.

So, veah, I mean, we can -- if it's --5 if it's -- it's for information purposes and we -- we 6 7 can try to make sure that we -- we do get the -- you 8 know, get the right -- the right references and put them on -- on the registry for the parties, but I would 9 10 make the point again that, you know, in terms of the regulatory process and the review of those plans, that, 11 you know, virtually all the parties here are parties to 12 that process as -- as well, and have opportunities to 13 14 comment, so.

15 THE FACILITATOR: Bill Klassen. I 16 think Mark Cliffe-Phillips has a guestion.

17 MR. MARK CLIFFE-PHILLIPS: Thanks, Rich. Just to -- to clarify, in terms of any materials 18 19 that are referenced or any of these plans that will inform the Review Board's decision at the end of the 20 dav, because there is updates being provided in 21 reference to the -- the Jay projects itself, we need to 22 23 have that transferred onto our registry, because if the 24 Board is to consider that information, it has to be on 25 our record.

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1 So we're not asking for parties to 2 comment through our process on those plans. If it's a 3 regulatory process it is dealing with that, but that 4 information would then inform the Board's decisions and 5 any outcomes from this process may fall from -- from 6 that information.

7 MR. RICHARD BARGERY: Richard Bargery, 8 from Dominion Diamond. Yeah, we'll -- we'll attempt to make sure that we get -- get those plans tre -- you 9 10 know, sent to you to -- to put on the registry. And if -- hopefully if -- if we do omit some, because we have 11 talked about guite a few, that -- that Chuck or Sachi 12 13 or someone from the Board can -- can just -- just 14 remind us that we have -- have missed something. 15 THE FACILITATOR: Thank you. It's Bill 16 Klassen. Are there other comments or questions related 17 to the topic of mitigation? Kim Poole. 18 MR. KIM POOLE: Kim Poole, for IEMA. 19 Two (2) of the mitigation measures that are provided in the DAR to reduce the barrier effect of car -- to 20 21 caribou movement are that wildlife have right-of-way 22 and we've heard that many times. And the use of, 23 quote: 24 "Modified traffic patterns and road

25 closures as necessarv to protect

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caribou and people." 1 2 And this responds to the IEMA IR-25 and among many others. The question I have relates to the 3 monitoring. What has been proposed as far as I 4 understand is updates on the -- or more frequent 5 updates from the ENR collaring satellite collars, which 6 7 will give a larger scale view of how the caribou are 8 moving, coupled with what I think was termed road -road monitoring by environmental technicians. 9 10 But what I'm curious about is that the scale of those two (2) doesn't always -- it doesn't 11 seem to me -- the -- the road monitoring will get you a 12 handle on caribou when -- when they're with -- when 13 14 they're within a couple hundred metres, 3-, 400 metres 15 max of the road. The collars give you a broad idea of when herds or portions of the herd may be there, 16 17 acknowledging that the collars don't always represent the entire herd. There can be groups that have no 18 19 collars in -- in them. 20 So how is -- how is Dominion Diamond 21 going to be able to realistically at perhaps the 2 to 3 22 kilometre range be able to detect numbers of caribou? 23 And I -- I would hope that there would be triggers in 24 there somehow for the numbers and types and seasons and 25 -- and sex and age group, et cetera. How are they

going to be able to figure out when traffic management, 1 which will be detailed hopefully in the next few weeks, 2 will occur? 3 4 5 (BRIEF PAUSE) 6 7 MR. RICHARD BARGERY: Richard Bargery, 8 Dominion Diamond. So just a -- a couple of -- of points here. First, vou know, we have a -- vou know, 9 10 we have an operation now that -- that we think from our perspective at least is -- is operated well in terms of 11 -- of traffic interaction with -- with caribou. And --12 13 and that -- you know, the -- so that's one (1) of the bases for going forward with the -- with the Jav 14 15 mitigations and the additional mitigations. 16 I'd say that, you know, additional -- we 17 would -- we would be looking for other non-impactful mitigations, viewing far away from the road as sort of 18 19 -- and how we do that is -- is not something we'd be looking at. The third and I think the most important 20 21 point from our perspective from the discussion over the 22 course of the last -- the last day and a half, I guess, 23 so it -- it raised vesterday a little bit, is that we 24 are going to come back to talk a little bit more about 25 how we are going to solicit suggestions on monitoring

and mitigation with respect to the Wildlife Road
 Mitigation Plan.

And we'll -- we'll talk about that. So 3 that -- that is sort of one (1) thing that we would 4 look for -- look for suggestions on how we can improve 5 or what will go in the draft plan and that -- that 6 would be one (1) of the things that goes out in ten 7 (10) days. Or it might be a little bit -- a little bit 8 -- veah, we'll -- we'll come back with the answer, but 9 10 it -- it'll be by the end of -- the end of April, so. 11 I think that's an important point, from -- from our perspective, so we'll talk about the 12 process then for -- for that plan. And that's -- I 13 14 think we made that -- that commitment by the end of the 15 week, but I -- there are a number of them, so I -- I can't rightly recall the -- the timing on that. 16 17 THE FACILITATOR: Okav. It's Bill 18 Klassen. I'm just looking at my watch here. We're 19 approaching four o'clock. With your agreement, I'd like to move on then to cumulative effects and 20 21 population modelling. Are there guestions that 22 representatives of different parties here have on that 23 topic, so cumulative effects and population modelling? 24 Yes, Jan, please. 25 MR. JAN ADAMCZEWSKI: Jan Adamczewski,

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with GNWT-ENR Wildlife. So I'm working from a document 1 called DAR MVEIRB-15 Februarv 2015. And basically, 2 this is a summary of the -- the population modelling, 3 Table 15.6. And really I think this is kind of one (1) 4 of the -- the crucial bits of work because, ultimately, 5 that -- that's a key question, I think, for everybody 6 7 in the room, what -- what are the implications to the 8 Bathurst herd and its likely trend. 9 And I want to sav, initially, I -- I 10 assume this is Jim Rettie that was doing most of the work, but I appreciate the approach that was taken. I 11 think there was a reasonable attempt to -- to kind of 12 take a conservative approach and, in some cases, almost 13 14 a worst-case approach. 15 And I guess what I'm looking at in your 16 Table 15.6, the base case with 2014 development percent 17 change and final abundance in the caribou herd. So basically, the rate of decline is projected as thirteen 18 19 point seven (13.7), so a decline of 13.7 percent. And then the application, one (1) base case plus Jay, you 20 21 get a decline of 14.9 percent, so a small increase in 22 decline there. 23 And then the next one, reasonable future 2.4 developments application plus RFD developments, vou've

25 got a projection of 27.5 percent decline. Now, I

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recognize these are -- these are not predictions; these 1 are indications of relative change. 2 With the Bathurst herd in its current 3 situation, as best we understand, fairly -- verv low 4 numbers and declining trend, even small changes, even 5 small increases in potential decline are fairly serious 6 7 ones. 8 And so I guess my guestion to Dominion Diamond, given these model projections, you say that 9 10 the incremental effect of Jav in terms of your population modelling is relatively small. And it's 11 reasonable giving the modelling that you've done, but 12 it's not zero. And with the cumulative effects 13 14 scenario, vou're projecting a fairly substantial increase in -- in decline. 15 16 So I guess my guestion is: Where -- at what point would you say that this is actually a 17 significant effect? I -- I can accept from 13.7 to 18 19 14.9 percent is -- is not a big difference, but it's not zero. And the reasonable future development 20 21 scenario, vou're actually projecting a fairly 22 substantial increase in decline. 23 And so I quess my question is, I'm --2.4 I'm just asking for a little bit of clarification: At 25 what point would you consider those changes to be

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significant to the caribou herd, given its current 1 state of low numbers and declining trend? 2 3 4 (BRIEF PAUSE) 5 DR. JIM RETTIE: Jim Rettie, Golder 6 Associates. In terms of the significance of the 7 8 chained -- the significance of the effect, as you -- as you correctly pointed out, these are -- these are not 9 10 predictions. These are an assessment of -- it's --11 it's a way to demonstrate the relative magnitude of effects that might be accounted for by different 12 13 factors. 14 The verv small change in -- in the trajectory of the -- of the herd with the application 15 of the Jay project, when we looked at it -- whether --16 17 whether we looked at it with high levels of insect harassment or low levels of insect harassment, or 18 19 whether we looked at it with population vital rates that were consistent with an increasing trend in -- in 20 21 the Bathurst herd, regardless of whichever one of those 22 scenarios we looked at, it was the -- the base vital 23 rates that -- that drove the population in its -population trajectory. 2.4 25 It was not the incremental effect of

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1 development that -- that was -- that couldn't turn the 2 population around one (1) direction or another. So the 3 -- the basic underlying vital rates of the population, 4 the survival and fecundity rates, were peculiar to the 5 indivi -- to the population phase that the population 6 was in, and right now, it's in a decline.

7 And the effects of development on those 8 trends didn't change them. So in terms of the 9 significance of the effect, it would have to be where 10 those -- those effects actually drove the population 11 trend, and -- and they don't. They're -- it's the 12 underlying vital rates that do.

13 MR. JAN ADAMCZEWSKI: Thank you for -sorry, Jan Adamczewski, with GNWT-ENR. Thank vou for 14 15 that, Jim. And -- and I -- I think the approach that 16 vou've taken is reasonable. I mean, there are plentv 17 of cases of caribou herds that have declined where there were no mines. There's the case of the central 18 arctic herd in the 1970s in Alaska that was on a slow 19 increase while they built the Prudhoe Bay oil field on 20 21 its -- on its calving grounds.

So caribou herds have -- vou know, thev can have increasing phases, declining phases. I guess for us, the -- the big concern remains that right now, this herd is on a declining phase, and even small

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changes in trend, productivity, are not trivial 1 matters. And so -- veah, I guess the guestion still 2 3 remains. At what point does that incremental 4 effect that you're projecting from -- from Jay, at what 5 point does that actually become something that we have 6 to take a little more seriously? 7 DR. JIM RETTIE: Jim Rettie, Golder 8 9 Associates. 10 (BRIEF PAUSE) 11 12 DR. JIM RETTIE: Jim Rettie, Golder 13 14 Associates. I can't provide vou with a quantitative 15 threshold that would correspond to a level at which the -- the effect is significant. The -- it's not 16 17 established for this -- for -- for populations here. And gualitatively, the -- the relative 18 19 effect, the relative magnitude of the changes that 20 we've observed as a consequence of development in our -21 - in our -- in all of our modelling where we've -- vou know, those -- those declines that you see in those 22 23 population model outcomes were based on -fundamentally based on energetic loss and loss of 2.4 25 productivity.

And I demonstrated this morning how we 1 went with a maximum estimate for absolutely every step 2 in terms of -- in terms of the energetic cost of -- of 3 encounters, energetic cost of deflection, the energetic 4 costs of deflection, the energetic costs encoun --5 accoun -- accounted for, for insect harassment, and 6 7 then the -- the total body mass loss and what the 8 effect on productivity was. And we still see this very small effect here. 9 10 One (1) other thing that I'd like to point is, with the Bathurst herd, while overall it has 11 been in decline for the last close to thirty (30) 12 vears, there are periods where that's not the case. 13 Ι mean, from 2009 to 2012, vou had a -- a lambda rate 14 15 with a -- an annual rate of decline of about 1 1/2 16 percent. 17 You know, in the three (3) years prior 18 to that, your survey data show that your -- that your 19 lambda value was point six seven (.67) for -- annually. 20 So you -- you were losing approximately a third of the 21 population in each successive year for three (3) years, 22 and then you had three (3) where effectively you lost 23 nothing. 24 And now, based on the reconnaissance 25 survey from last year, it looks like there's another

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decline. So this is far from consistent, and this is 1 with the same development footprint on the landscape. 2 So there's clearly some other things that can cause a 3 population that oscillates between a -- a 33 percent 4 annual decline to stability, and possibly to a more 5 extreme decline more recently. 6 7 The -- the small incremental effect that 8 -- that we could account for as a consequence of this project is -- pales by comparison to the magnitude of 9 10 the -- of the changes that we've seen even recently in 11 this population. 12 THE FACILITATOR: Jan has a comment, 13 and then Anne has a question. 14 MR. JAN ADAMCZEWSKI: Yeah. Just one 15 (1) -- one (1) last point. Jan Adamczewski, with GNWT-16 ENR, and thank you, Jim. I think, fundamentally, I --17 I don't disagree. And, you know, we have argued that, 18 even if you had no mines on the Bathurst range, this 19 herd would have gone through a major decline because that's what these herds do and that's what they have 20 21 done for some time. 22 But it was refreshing to see your 23 evaluation here which, vou know, doesn't show a big 24 effect from Jav. But from a cumulative effects 25 perspective at the population scale, these are actually

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1 not trivial numbers. And I think that -- that is
2 something that we're concerned about at that larger
3 scale.

Your projections, vour modelling projections, are kind of saving, If we have all these future mines and proposals added, those incremental effects at the population scale start to mount. So that -- that is of some concern to us. And I'll stop there.

10 THE FACILITATOR: Anne Gunn...? 11 DR. ANNE GUNN: Anne Gunn, for the 12 Board. Before I start mv question, I'd like to make a 13 correction about the central Arctic herd. Jan is 14 correct that the central Arctic herd has one of the 15 largest oil fields in North America built on its 16 calving ground.

17 The initial response of the herd was to 18 continue its increase because the management goal was 19 the tradeoff between the cost of development and 20 harvesting. So the harvest was kept at 1 to 2 percent 21 of the adult cows. So if there were any costs of 22 development, they were obscured by that management. 23 The herd is -- is -- it's -- it's on a 2.4 coastal plain. It has guite different dynamics from 25 like the Bathurst herd on the Canadian Shield. It's

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1 probably much more resilient.

2 The herd is now declining, although the harvest rate is still low. The decline looks like it's 3 being driven mostly by variations in productivity. And 4 the underlying mechanism for changes in productivity 5 includes the loss of calving and post-calving ranges 6 because they're a developed oil field. So the oil 7 8 field is starting to show an effect at the population 9 level.

Now, it's complicated because there are environmental changes, there are changes in management. But the point is that there was a tradeoff made at the verv beginning between the level of harvesting and the effect of the oil field, and it was a deliberate management decision. So that's the correction I wanted to make.

17 Now, the cumulative effects. Actually, 18 I hardly know where to start, because I -- I have 19 technical disagreements with how the energetics model 20 was done. I think there were errors, which in response 21 to a Information Request, haven't been corrected vet. 22 I think the -- the use -- the -- the model is over --23 overly conservative to the point of being probably 24 incorrect. Using the boreal caribou example as a 25 source of disturbance when Dominion had its own

disturbance data that would have been more realistic. 1 I think that's what they did. Using the example from 2 Alberta was too conservative. 3 The model itself to cast the energy is -4 - only looks at the energetic costs. It doesn't look 5 at any changes to the intake of the animal. So it's 6 kind of like half a model. But I don't think there's 7 8 much to be gained at this late in the day going through all those details. The population model, as I 9 10 understand it, did not use the energetics pregnancy 11 rate. 12 Is that right? 13 DR. JIM RETTIE: By, "Not use the 14 energetics pregnancy rate," are you talking about not having used the loss of productivity that we accounted 15 for? 16 17 DR. ANNE GUNN: Yeah. 18 DR. JIM RETTIE: No, no, that's not 19 right. We did use that. 20 DR. ANNE GUNN: You did use that. And 21 that was --22 DR. JIM RETTIE: Sorry, Jim Rettie. 23 DR. ANNE GUNN: Oh, veah. Well, I'm 24 Anne Gunn, for the Board. So the -- the cumulative 25 effect was about -- could be as high as 3 percent

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change in productivity? 1 2 3 (BRIEF PAUSE) 4 DR. JIM RETTIE: I apologize, Anne. 5 It -- it depends on the model that we have here. But -6 - well, there's -- there's several different --7 8 DR. ANNE GUNN: Okav. 9 DR. JIM RETTIE: -- scenarios. 10 DR. ANNE GUNN: But it --DR. JIM RETTIE: Jim Rettie again. 11 12 DR. ANNE GUNN: -- but it -- its plausible value. This is the problem we're having --13 14 DR. JIM RETTIE: Yeah. 15 DR. ANNE GUNN: -- trving to have a 16 conversation. I mean, a 3 per -- a 3 percent change in productivity when you have extremely low adult survival 17 could actually play a large role in determining the 18 trend of the population. The problem, I think, for 19 Dominion, and therefore the problem for all of us, 20 21 because it's a risk we're collectively taking, is that 22 we don't know the underlying demographic mechanism. We 23 don't know why the population appears to be collapsing. 24 That is just the worst position to be in, when you have 25 indications of a change and you don't know why it's

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1 happening.

2 But what you do know that any additive pressure, even to the extent of verv low pregnancy 3 rates, could make a difference. It's not the relative 4 scale. It's not industry compared to the costs of 5 insect harassment. It's one (1) thing adding on to 6 another that is driving those changes. There's -- both 7 ENR and Dominion have made a lot of reference to this 8 being a natural cycle. There's always been cycles, and 9 10 therefore the -- the implication is that there will be 11 a recovery. 12 I think my question to Dominion and to -- to ENR and to the other parties would be: Where is 13 14 the evidence? What is the confidence that this is not 15 an unusual -- that this is an unusual low in the cycle, 16 and what are the implications of that for recovery? 17 18 (BRIEF PAUSE) 19 20 DR. JIM RETTIE: Jim Rettie, Golder 21 Associates. There's a -- a couple of -- a couple of 22 things that I just wanted to make a -- a point of 23 first. First, vou -- vou -- earlier, vou issued a 24 challenge about the calculations that we put into our 25 energetic model. Back in January, the Board hosted a

workshop on the energetic model. I -- you were on by 1 phone, and Don Russell (phonetic) was there in person. 2 And -- and we went through the modelling, and my 3 understanding was that it's been -- it was determined 4 to be adequate for the -- for the purposes of this 5 assessment, so that energetic modelling I'm hoping is -6 7 - is behind us. 8 And in terms of -- sorrv, there was a question you had, and I... Oh, right, yes, you -- you 9 10 were inquiring about the -- the -- vour concern over the population and whether or not it was -- it was 11 going to turn the corner and recover. 12 13 The -- our assessment was to look at the effect of the Jav project on the Bathurst caribou pro -14 15 - population, and we -- we've done that. There is --16 there is no strong mechanism that accounts for a 17 population decline brought about by these projects. The energetics modelling that we used, 18 19 as I mentioned earlier in response to Jan's question, 20 we demonstrated how conservative we were in terms of 21 our estimates of energetic costs to animals, so overestimating them. 22 23 A couple of other points that are 2.4 important to recognize in relation to the population 25 models that we built was that the -- the basic vital

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rate matrix that we used which we adopted from the --1 the most recent ordinary least squares regression model 2 that came form John Boulanger's work after the 2012 3 calving-ground photo census. 4 That was a from a population -- well, 5 this population, the one (1) population. That was from 6 7 a population of animals that -- that was empirical data 8 from a population of animals that had already been subjected to insect harassment, that had already been 9 10 subjected to the effects of development and all of the 11 energetic costs that might be associated with it. 12 So all of those things were -- all of 13 those things were already included in the data that generated that basic vital rate matrix that we built 14 15 our population models on. So when we then went in and 16 we added the additional ef -- we added the effects 17 again of the energetic costs associated with -- with --18 that had come out of our very conservative assessment 19 of -- of energetic expenditure associated with this -with this -- with the Jay project. 20 21 And so, consequently, we -- we 22 overestimated the energetic costs. We overestimated 23 the relationship between those -- those energetic 24 losses and body mass losses and the costs on 25 productivity. And then we added effects onto a

population where the data that we were using basically 1 already included those effects. So we've been 2 3 incredibly conservative in our assessment here. 4 And there is -- as I mentioned earlier, there's no strong mechanism that this -- that -- by 5 which this development is causing population decline in 6 7 the Bathurst herd. 8 DR. ANNE GUNN: Anne Gunn, for the Board. My point is I wasn't saving that Dominion or 9 10 any of the other mines are responsible for the current decline. What I was arguing, that any small change, 11 given the extent of the herd's vulnerability, any small 12 13 change can be additive to whatever is happening. 14 And I think vou documented vou -- I 15 mean, vour model, veah, is conservative, it's 16 ultraconservative, but it does suggest there will be a 17 change cumulative effects-wise to productivity. I think that is an added risk to a herd that is already 18 19 so vulnerable. And I think the answer lies partly with the Government of the Northwest Territories. But I 20 21 think the answer also lies with enhanced mitigation to 22 ensure that that low effect on productivity isn't 23 realized, that projected effect. 24 So that was the point I was trying to 25 make. The reason I probably stepped beyond the Board

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procedures and threw it out to the other parties is I 1 think it's important to know is your evidence, 2 Dominion's evidence, for whether this is an unusual. 3 unprecedented low in the population cvcle. 4 The same question to GN and to the other parties because I 5 think, given the extent of the risk, then the language 6 7 starts to take you towards the precautionary principle 8 if there's huge uncertainty as to what's happening. 9 THE FACILITATOR: Jan...? 10 MR. JAN ADAMCZEWSKI: Jan Adamczewski, with GNWT-ENR. Just a little bit of clarification for 11 12 -- for Anne Gunn. In terms of, I guess, our understanding of caribou cycles and where the Bathurst 13 14 herd is, the fact that these migratory herds go through 15 large changes in abundance is nothing new. Aboriginal people have known that for many generations. It's been 16 17 documented in various places in Northern Canada and 18 Alaska. 19 I would certainly not suggest that the existence of those long-term cycles implies that the 20 21 Bathurst is necessarily going to recover. Our level of 22 concern is very high as to where the herd is going to 23 go. 24 And just to give some examples, some 25 people might be familiar with the 40-mile herd in -- in

25

Alaska, which was once estimated at three hundred (300) 1 or more thousand, dropped to very low numbers, and then 2 sat there for -- very low numbers for something on the 3 order of fifty (50) vears. 4 So it is possible for one (1) of these 5 herds to drop very low and stay very low. And we have 6 7 at this point no reason to think that the Bathurst herd 8 is recovering. All the indicators are -- are negative. And as much as Anne might disagree, we're basically --9 10 we're basically on the same page that any small incremental negative effects are something that we take 11 12 very seriously. And right at this point, nothing in the 13 demographics of the herd would indicate that it's 14 15 recovering. It's probably not even stable. Thank you. 16 THE FACILITATOR: Thank -- thank you. 17 It's Bill Klassen. I appreciate the -- the discussion on this topic. I think that it probably has provided 18 19 the staff of the Board with information that the Board 20 can then take into account when it carries out its 21 assessment. 22 I am aware that Kim Poole, who was not 23 here vesterday and apparently will not be here 24 tomorrow, does have some perspective on a topic that

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came up vesterday, which I believe Anne Gunn raised,

which had to do with the relationship between the
 declining caribou herd and the assessment related to
 grizzly bears.

And Kevin O'Reillv mentioned at the end of the dav that Kim might have some perspective on that. So I -- I realize I'm not giving much notice here, Kim, but are vou able to comment? MR. KIM POOLE: Kim -- Kim Poole, for

9 IEMA. I am. I -- I feel like it's a little out of 10 context with the current discussion though. I almost 11 wouldn't mind the current train of discussion to 12 continue rather than get side-railed into grizzly bears 13 at the moment.

14 THE FACILITATOR: I recognize that it's 15 out of context. I'm also mindful, unless -- I mean, 16 the Board has engaged me to be here from 9:00 to 5:00. 17 I'm guite happy to continue past 5:00, but I don't know 18 that everybody else will be. So I'm mindful of the 19 clock and wanting to at least touch on all of the 20 topics to some extent today.

If there is continued -- or usefulness in continuation of this discussion on cumulative effects and population model, then as the -- the Chair, I'm guite happy to have that. I just didn't want to lose the opportunity of your perspective on the

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potential effects of a declining population -- caribou 1 population on the grizzly bear population. 2 So I take your advice. Is there further 3 discussion on this topic of cumulative effects and 4 population modelling? Peter Unger...? 5 MR. PETER UNGER: I'll -- I'll try to 6 7 keep it guick. Peter Unger, LKDFN. It kind of relates 8 to an earlier question. So just to break it down simply, the population model has a number of different 9 10 variables for different potential impacts, insect harassment, habitat loss, community harvest. And you 11 inputted various values into this which were relatively 12 conservative and then came out with the conclusion that 13 14 the population will be self-sustaining and ecologically 15 effective. 16 Is that correct? 17 DR. JIM RETTIE: Jim Rettie, Golder 18 Associates. The conclusion that we came out to was 19 that the project will not have an effect on the ability of the population to be self-sustaining and 20 21 ecologically effective. 22 MR. PETER UNGER: Thank you very much. 23 So back to the earlier question then. In terms of 24 harvest, when you're entering the value for harvests, 25 you entered an approximation of fifty (50) animals per

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vear. That's -- that's correct? 1 2 DR. JIM RETTIE: Jim Rettie, Golder Associates. Yes. For many of the assessments we did, 3 there were some where we modelled potentially 4 increasing population, and we modelled at a higher 5 harvest rate, at about 4 percent of the adult female 6 population, to -- to account for the fact that, if the 7 8 population vital rates reached a point where they were supporting -- promoting an increase in the population, 9 10 that there would be harvest available. There would be animals available to harvest without compromising the 11 12 ability of the population to recover. MR. PETER UNGER: Peter Unger, LKDFN. 13 14 My question is: Is there a number of animals harvested 15 that would interact with impacts from the project that would lead to the population no longer being self-16 17 sustaining and ecologically effective? Let's assume harvests were much higher than that. 18 19 DR. JIM RETTIE: Jim Rettie, Golder Associates. Yes, it's conceivable that there could be 20 21 a harvest that would -- regardless of the -- of the 22 development, that there could be a harvest that renders 23 the population unsustainable and puts its self-24 sustaining ability at risk. 25 MR. PETER UNGER: Thank vou. I quess

it's a two (2) part question. One, do you have a 1 ballpark figure? Which maybe is a little bit unfair on 2 the spot, I understand. And then the second one: 3 Would vou estimate that that number would be higher or 4 lower or the same, were the pro -- if the project were 5 to go ahead or -- or not go ahead? 6 7 DR. JIM RETTIE: Sorry, I -- I can 8 answer your first question. And the second one I missed part of. Jim Rettie, Golder Associates. Do I 9 10 have a ballpark figure? No. So that's -- that's the answer to the first one. And if you could repeat the 11 12 second one, I'd be happy to answer it. MR. PETER UNGER: Yeah. Would you --13 14 would vou assume that that number, that harvest number, would be the same number if there was no Jav pit? 15 Would -- would this number be the same if there was a 16 Jav pit as if there was not a Jav pit, or would it be a 17 higher number if there was no Jav project or -- is --18 19 is my question. 20 DR. JIM RETTIE: Jim Rettie, Golder 21 Associates. I would say that, given the magnitude of 22 the -- that we modelled for the Jay pit, it would be 23 virtually the same. 24 MR. PETER UNGER: Perfect. That's all. 25 Thank you very much.

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THE FACILITATOR: Thank you, Peter. Ι 1 2 think Chuck Hubert has a guestion. 3 4 (BRIEF PAUSE) 5 MR. CHUCK HUBERT: Chuck Hubert, 6 7 with the Review Board. The -- the Board had several 8 IRs on reasonably foreseeable developments. And I think they're 79 to 81, or maybe it was 78 to 80. And 9 10 the responses were provided by -- by Dominion. 11 The -- the questions asked Dominion to 12 consider scenarios where, for the purpose of cumulative effects, the Jay underground might be included as a 13 14 reasonably foreseeable development, as -- as well as two (2) other scenarios. One (1) was just a --15 generally an additional pipe in the vicinity of Ekati, 16 and -- and a third for Kennadv Diamonds down by Kennadv 17 18 Lake. 19 Now, the rationale was provided for -for why those -- those reasonably foresee -- or those 20 21 projects were not considered to be reasonably 22 foreseeable developments. So -- but I'd like to focus 23 on the -- the possibility of Jav underground as reasonably foreseeable. 2.4 25 And the reason for this is that,

originally, the -- the application and project 1 description to the Land and Water Board of course did 2 include both Jay underground and Cardinal. So there --3 so there is an argument to be made that the Jav 4 underground could be included in your tier 3 for 5 reasonably foreseeable developments. 6 7 So I guess, once again -- or further to -- to your response to IR-79, I'd like Dominion to 8 consider, from a scenario analysis perspective for 9 10 cumulative effects on caribou, the Jav underground as a reasonably foreseeable development. 11 12 13 (BRIEF PAUSE) 14 MR. RICHARD BARGERY: Sorrv, vou -- vou 15 16 had referenced three (3). So you -- you're just asking 17 for Jay underground, not -- not for Cardinal and -- and Kennady Lake were the other two (2) -- the other two 18 (2) are these, I think? 19 20 MR. CHUCK HUBERT: Chuck Hubert, with 21 the Board. Yes, that's correct. Just -- just the 22 underground as a reasonably foreseeable development on 23 its own. 2.4 MR. RICHARD BARGERY: So -- so from our 25 perspective, you know, the DAR and the supplemental

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1 work that we did on Sable and A21 contains a -- a
2 comprehensive analysis of all reasonable foreseeable
3 developments. The Jav project itself is, vou know, a
4 ten (10) vear project. Open pit mining of the pipe.
5 Underground is not part of that project or of -- of the
6 application.

7 And I think it's important to -- to 8 point out that significant exploration will be required to adequately assess the feasibility of underground 9 10 mining. Additional information to support engineering design and environmental assessment will be required. 11 None of that information exists at this time. In our 12 view, you know, without any of -- any of those -- any 13 14 of that information, any assessment of the Jav 15 underground as an RFD would require so many assumptions 16 that the quality and the utility of such work would not 17 be meaningful.

That -- that's our view. I think the 18 19 other point that I'd -- that I'd make here is that Jav, and potentially Sable, which -- which is, you know, 20 21 still -- still verv much in doubt, given that we've only done drilling this -- this winter, and have no 22 23 results. What Jav and potentially Sable, if it -- if it did prove economic, there would be sufficient mill 24 25 feed through -- through 2034.

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So the Jay underground would be twenty 1 (20) vears out, and -- and we don't -- and when we 2 simply don't have any of the engineering or economic 3 information, we have, you know, no result. We don't 4 5 know if there is a -- a mineral resource there at all at any point. So we're not -- we're not sure what we 6 7 would accep -- what we would -- what we would assess or 8 what we would include, you know, as a reasonably foreseeable development. 9 10 MR. CHUCK HUBERT: Chuck Hubert, with the Review Board. Thanks for that. However, about a 11 vear ago, Dominion, in fact, included the Jav 12 underground in its project description, and a terms of 13 14 reference was written for the -- the submission of a 15 DAR by Dominion with that understanding. So there must 16 be some level of information about -- about the -- the 17 Jav underground. And -- and for that reason, I think 18 it -- it validates to -- to some extent the request for 19 a type of scenario analysis with whatever assumptions might be required for the Jay underground. 20 21 The -- the Board believes that this 22 would be useful, and I quess my -- my request here is -23 - is will Dominion commit to doing one? 24 MR. RICHARD BARGERY: Richard Bargery, 25 Dominion Diamond. Just for clarity, are you just

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asking us to do the RFD for -- for caribou? Is that 1 the extent of the RFD that we're talking about? Is 2 that -- that's manageable, because that won't require 3 the engineering. That may be manageable because it --4 it doesn't require the engin -- any engineering work 5 which we don't have. 6 7 MR. CHUCK HUBERT: Chuck Hubert, with 8 the Board. That's correct. It would -- the RFD would be for the impacts to cumulative effects to caribou 9 10 from -- from the Jav under -- underground. 11 12 (BRIEF PAUSE) 13 14 MR. RICHARD BARGERY: Richard Bargery, 15 Dominion Diamond. Just give me -- just give me one (1) second, please. 16 17 18 (BRIEF PAUSE) 19 20 MR. RICHARD BARGERY: So Richard 21 Bargerv, Dominion Diamond. We'll -- we -- we think for 22 caribou, you know, which doesn't require work which we 23 don't have done, it -- it may be possible. But I'd 2.4 like the opportunity to talk with the full team tonight 25 just to understand, you know, what would be required

1 and -- and what the time frame would be for us to -- to
2 respond.

3 We think on -- particularly on -- on, vou know, cumulative effects on caribou, perhaps just 4 in our quick discussion, we may be able to respond 5 relatively guickly, but -- but I'd -- I'd just like to 6 7 -- to just talk that through what that means. But we'd 8 have a -- we'd have an answer on that question the first thing in the morning, if that's acceptable. 9 10 THE FACILITATOR: It's 4:30, and we still have assessment end points and thresholds for 11 significance to consider. Are there more questions? 12 I -- I take it there's at least one (1), Kevin O'Reilly, 13 14 related to cumulative effects and population modelling? 15 MR. KEVIN O'REILLY: Thanks, Mr. Chair. 16 Kevin O'Reilly, for the agency. It's actually a -- a 17 comment on the last exchange there about the scope of the work that Dominion might be asked to do with regard 18 19 to including Jav underground and a -- and a cumulative 20 effects assessment. 21 I understand that the Company would like 22 to limit the scope of that work to the issue of caribou 23 only, or impacts to caribou only, but I know we're 24 supposed to be talking about wildlife today. But 25 what's far more important is what would happen with

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water management, and including the underground, 1 2 because the deeper you go, the saltier the water gets. So it's -- I guess the agency did not 3 ask this IR, because the Review Board had already asked 4 it, but I would hope that the consideration of the 5 scope of this request of the -- Dominion is not just 6 7 for caribou, but would also include water management. 8 Thanks. 9 THE FACILITATOR: Thank you. I -- I 10 think maybe your request -- it's Bill Klassen --Richard, was left hanging. You asked whether it was 11 just caribou. I think Chuck responded to that. But 12 13 now we have this additional request that -- I haven't read all the IRs, so I -- I'm assuming it's related to 14 15 an -- an Information Request that the -- the Board put 16 to the developer. And vour concern is that the response 17 focus not just on caribou. If -- if the Jav 18 19 underground is considered, it should be broader than 20 that. Could I get your reaction to that, please, 21 Richard? 22 MR. RICHARD BARGERY: Richard Bargery, 23 Dominion Diamond. That -- that's much more problematic 24 for -- for us to do. As I said earlier, vou know, we 25 don't have any drill results that indicate any mineral

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resource at this point for Jay underground. We have no 1 -- you know, little to no engineering work. 2 So, you know, the assumptions that would 3 had to be made to do that RFD, in our view, would 4 render it virtually meaningless. So we're not sure the 5 utility of -- of actually doing that work is -- you 6 7 know, as -- you know, as opposed to the very general 8 statement which Kevin made at the -- the start, the deeper you go, the -- the saltier the water gets, even 9 10 that -- vou know, that statement, vou know, I -- I can come back in the morning on the -- on the issue of 11 whether we can do the -- the -- you know, the RFK -- RD 12 -- RFD case for -- for caribou with respect to the Jav 13 14 underground. 15 But the answer on -- the answer on Jav 16 underground with respect to water, I think, is -- is 17 what I just said, is that the amount of assumptions that we would have to make given the lack of 18 19 information here, and the fact that -- the other fact, 20 that this is a -- a project that would be virtually 21 twenty (20) years out, given where we are with respect

22 to -- to mill feed, we would -- we would ask, I quess, 23 the question of -- of what the utility of that work 24 would be.

25

THE FACILITATOR: I think -- it's Bill

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Klassen. I think where we stand, then, is we'll await 1 vour response in the morning. And we'll let people 2 sleep on the other aspects of it, and see where the 3 4 discussion ends up tomorrow morning on that topic, 5 then. 6 So I'm just checking my watch here, 7 again. Are there, then, further comments on cumulative 8 effects and population or modelling, or can we now move to assessment endpoints and thresholds for 9 10 significance? 11 12 (BRIEF PAUSE) 13 14 THE FACILITATOR: Okav. Seeing no further indication of -- of guestions on that 15 cumulative effects population modelling area, and 16 17 before we move on then to assessment endpoints, is this an appropriate time, Kim Poole, to talk about grizzly 18 19 bears? 20 MR. KIM POOLE: Kim Poole, with -- for 21 IEMA. Sure. I'll make it short and sweet. My main 22 point is that in the 2014 final Lac du Gras regional 23 grizzly bear DNA report, the densities were provided at the super population, or the detecin -- detection 2.4 25 frequency level.

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So this does not account for the edge 1 effect, or closure, within the study area. In other 2 words, it's a density that is derived from any animal 3 that has a part of the home range that would have hit 4 any of the -- of the tripods within the study area. 5 The problem with this is -- well, for 6 twofold. One (1) is if you're monitoring populations 7 8 over time and you want to track density over time, and if there are impacts of declining caribou on the 9 10 grizzly bears, then you -- then you want an apples-toapples comparison of density so that the next time you 11 guvs check density in maybe 2017, I think Harry has 12 13 mentioned, then you can make it comparable. 14 If, let's sav, because of declining 15 caribou numbers, and grizzly bears in that area do eat 16 a lot of caribou, then their home range patterns 17 change, their seasonal movements are higher, and their seasonal ranges are higher, then you could conceivably 18 19 get the same number of bears hitting portions of the study area and getting their hair caught and 20 21 identified, but they're actually -- those -- those same 22 number of bears are actually representing a far larger 23 area. 24 So I would encourage the Company to do 25 the analysis, and again Boulanger has done a lot of

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these, I'm sure John Virgil has, as well, that accounts 1 for closure and edge effect so that you come up with a 2 population density estimate that is, A) comparable over 3 time, and B) comparable to other density estimates that 4 are out there so you can put everything into a larger 5 context. That was the main point I wanted to make. 6 7 THE FACILITATOR: It's Bill Klassen. 8 Thank you, Kim. Are there comments or questions related to assessment endpoints and thresholds for 9 10 significance at this time? Chuck Hubert...? MR. CHUCK HUBERT: 11 Thanks. Chuck Hubert, with the Review Board. The -- the Review Board 12 issued a Information Request 77, I believe it was, to 13 14 the parties asking them to provide their views on 15 Dominion's choice of assessment endpoints for -- for 16 caribou in this -- in this context. 17 Helpfully IEMA responded, as did GNWT. And in particular I'll -- I'll comment on IEMA's 18 19 response in which they suggest an assessment endpoint for caribou that could -- could enhance the ecological 20 21 assessment endpoint that Dominion had proposed, which 22 was self-sustaining and ecologically effective. 23 IEMA had suggested an additional 2.4 endpoint, which would be safe -- safety of caribou for 25 human consumption, as well as continued ability of our

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Aboriginal harvesters and communities to -- to 1 sustainably harvest caribou. 2 Now, I -- I would be interested in other 3 parties in the room, such as are left, to -- to comment 4 on how they view those assessment endpoints proposed by 5 IEMA. More -- more the -- more the human use of 6 caribou endpoints. I -- I'd be interested in anybody 7 8 who might want to weigh in on that, be it -- okay. 9 MR. MARC D'ENTREMONT: Marc 10 d'Entremont, on behalf of the DKFN. So I quess in -in this regard one (1) thing to consider would be what 11 the impact or infringement on community members' right 12 to practice traditional rights, and specifically to --13 14 to hunt caribou, as Arthur kind of mentioned 15 previously. It's a pretty common practice, though. I 16 quess, just to rephrase it, as an assessment endpoint, 17 it's a measurement of that ability to practice treaty 18 riahts. 19 THE FACILITATOR: It's Bill Klassen. Thank you. In response to Chuck Hubert's request for 20 21 assistance on this topic of endpoints insofar as human 22 harvest, Aboriginal First Nation hunter harvest is 23 concerned, are there others who have responses that 2.4 would assist the Board? 25

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(BRIEF PAUSE) 1 2 MR. SHIN SHIGA: Shin Shiga, with NSMA. 3 I would agree with IEMA, that human consumption is an 4 important end goal for an NSMA. 5 THE FACILITATOR: Thank you. I -- I 6 see that representatives of the Government of the 7 8 Northwest Territories are conferring here. I'll wait until you finish, and then I'll ask you whether you 9 10 have some observations. 11 12 (BRIEF PAUSE) 13 14 MR. ANDREA PATENAUDE: Andrea 15 Patenaude, GNWT. So the -- those proposed endpoints 16 that IEMA suggested, I mean, they do seem to capture 17 the societal values, and apparently in a way that is acceptable to other parties that have an interest in 18 19 exercising those rights, we're just not sure how that would still be measured. 20 21 And considering the fact that we're in a situation where, for those -- most part, that's not 22 23 being exercised, like, that doesn't -- regardless of what the effect of the project is, that is somewhat 2.4 25 independent, because it's a function of those laws that

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1 are in place. 2 MS. LYNDA YONGE: And actually, just to add to that, not so much a function of the laws that 3 are in place, but the herd is currently at a state 4 where it's very difficult for Aboriginal people to 5 exercise that right to harvest. 6 7 So as an endpoint, I -- I don't think 8 vou can -- vou can put it on a -- a proposed development to get us to that place when we're not 9 10 there now for -- because of other reasons. So that's 11 our -- that's where we struggle with that. 12 We'd certainly, though, do agree that 13 the ability for not just Aboriginal people, but others, 14 to harvest from the herd is a desirable endpoint for 15 the herd. 16 THE FACILITATOR: Thank you. Peter, I 17 see you've just seated yourself at a microphone. Do 18 vou have a comment on this? 19 MR. PETER UNGER: That's all. I just 20 wanted to add LKDFN's support to that, that sustainable 21 use of the caribou in the traditional manner is -- is essential for the community, and we agree completely 22 23 that that should be a key endpoint. THE FACILITATOR: Thank you. It's Bill 24 25 Klassen. Chuck has another question.

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MR. CHUCK HUBERT: Chuck Hubert, with -1 - with the Board. I guess this is to Dominion, so as 2 follows. If the assessment endpoint is self-sustaining 3 and ecologically effective populations, aren't the 4 Bathurst caribou already at or currently below this 5 threshold? And as -- as a follow-up, how would this 6 7 affect the assessment of significance? 8 DR. JIM RETTIE: Jim Rettie, Golder Associates. Our assessment for -- is on the effects of 9 10 this project on the ability of the population to be self-sustaining and ecologically effective. And the 11 state of the population right now, and the -- and the 12 models that we've run, we don't see that there's a 13 14 significant effect of the project on the ability of the 15 Bathurst herd to sustain itself or to be -- to fulfill its ecological role. 16 17 THE FACILITATOR: Kim Poole...? MR. KIM POOLE: Kim Poole, for IEMA. 18 19 Just to follow on this vein, the agency believes that because the caribou herd has declined to such a low 20 21 level, and because the herd is no longer large enough 22 to support Aboriginal use for country food, the 23 existing effect is significant and adverse. 24 And although we agree that the Jav 25 project would cont -- contribute a small and difficult

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to measure adverse effect to what is already a 1 significant adverse effect, we would conclude that this 2 3 is a significant adverse cumulative effect on the -- on the herd. 4 THE FACILITATOR: Thank you, Kim. 5 T -it's Bill Klassen. I think that's an observation, or a 6 conclusion that IEMA is drawing for the benefit of the 7 8 Board in its assessment of the project, so I'm not going to ask Dominion to respond to that. 9 10 Yesterday afternoon at the end of the session we read out a list of the commitments or 11 homework assignments that Dominion had agreed to during 12 the day, and I think we're in the process of putting 13 14 those on the screen behind me here. Is there any --15 before that list goes up, is there anything else that 16 anyone would like to say on assessment? 17 The KIA representative. Could you come to a microphone, please? Sure. Or use that one. 18 19 MS. TANNIS BOLT: Tannis Bolt, with Kitikmeot Inuit Association. I just have one (1), I 20 21 quess, question of clarification for DDC. In the 22 report cited as ERM-RESCAN-214(a) there is a statement 23 that savs: "Deflections did not appear to be 24 25 affected by changing traffic levels

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on the Miserv Road over the duration 1 2 of the study." And then in their response to KIA IR-24 3 they respond by saving: 4 "Considering the results of these two 5 (2) intensive studies on the Miserv 6 7 road, Dominion Diamond feels that the 8 data have been correctly interpreted, 9 and the conclusions presented in the 10 DAR are a good estimate of the effects of traffic and the Miserv 11 12 road on caribou behaviour." 13 However, in IR -- in their repose to IR-14 7 thev state that: "An attempt to correlate caribou 15 responses in photos triggered by 16 caribou within 30 metres of the 17 camera to traffic observed in 18 19 surrounding cameras would require a 20 large increase in the level of 21 effort. As the time photographs are 22 collected every ten (10) minutes. 23 likelv far too large a time scale to 24 compare the vehicles causing caribou 25 reaction."

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So what the clarification that we're 1 looking for is -- or the contradiction in the two (2) -2 - two (2) statements that I read first to their 3 response and our -- their response to our IR-7. In one 4 (1) they say deflections do not appear to -- or in the 5 report they say deflections do not appear to affect 6 change due to changing traffic levels, and then in 7 8 another response they say likely the time scale is far too large to capture vehicles causing those reactions 9 10 bv caribou. 11 12 (BRIEF PAUSE) 13 14 MR. RICHARD BARGERY: Richard Bargery, 15 Dominion Diamond. Just -- sorry, we're trying to -- to 16 just get the two (2) references and get the context for 17 those references. 18 19 (BRIEF PAUSE) 20 21 MR. RICHARD BARGERY: Richard Bargery, 22 for Dominion Diamond. Given -- given the time it's 23 going to take to try to find and -- and just go through 2.4 and get the context, Tannis, we'll come back in the 25 morning and -- and explain -- explain the different --

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1 the -- the two (2) IRs and the two (2) responses, if 2 that's -- that's acceptable. It's just going to take a 3 bit -- a bit of time and I recognize the clock is close 4 to 5:00.

5 THE FACILITATOR: Okav. Thank vou. It's Bill Klassen. I didn't catch the details on that. 6 7 So I wonder if -- and we -- we're -- we're putting the 8 commitments on the -- the screen now, so I wonder if, Ms. Bolt, you can provide the -- the details to the 9 10 staff here and then Dominion Diamonds will respond tomorrow. They -- they caught the details obviously, 11 so we'll look for that response for them -- from them 12 tomorrow, if that's acceptable to you. Thank you. 13 14 MR. CHUCK HUBERT: Could vou please 15 clarify the wording of that just so we can write it 16 down in a reasonable kind of way? 17 MR. RICHARD BARGERY: We know the 18 statements in the -- in the two (2) IRs that -- IR-24 19 and IR-27. So we'll -- we're locating them. We'll get 20 the exact wording and -- and provide that to the Board 21 staff so they can record it and -- and make sure that 22 Tannis is -- is comfortable that that's correct -- the 23 correct question that she's asking. 2.4 MS. SACHI DE SOUZA: Sorrv. And -- and 25 vou're just asking for clarification on the responses

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to IR-27 and 24 from KIA? Is that the... 1 MS. TANNIS BOLT: IR-7, not 27. Yeah. 2 I -- sorry. I quess I'm more -- not necessarily a 3 clarification to the response, but a clarification or 4 justification on why there's two (2) statements that 5 contradict each other. 6 7 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. Yes, that's -- that's our 8 understanding, but we just -- we want to understand the 9 10 context for -- for the actual statement, so. And if there is a -- if there is a contradiction so we'll --11 12 we'll have to -- we'll have to look at the context. 13 THE FACILITATOR: Okay. We're 14 approaching five o'clock. So I wonder whether we could 15 -- I -- I think, Sachi, vou've got it on your screen. 16 If you can put it on the board for us on the screen behind me the list of -- of commitments and make sure 17 that we've captured that correctly. 18 19 MR. CHUCK HUBERT: Sachi does all the 20 work, and I just get to read. So -- Chuck Hubert, with 21 the Board. So from day 2, here -- so we've -- there 22 were six (6) from vesterday, so we -- we've considered 23 the -- or continued the numbering system from seven 2.4 (7). 25 So number 7: Diavik is to review

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traffic estimate calculations and revise Table 2, DAR 1 Appendix C, to correct this information in order to 2 understand caribou deflection rates and behavioural 3 changes. The intention is still to complete this 4 change by the end of the technical session, to be 5 submitted to the Review Board and posted to the public 6 7 registry. Good? 8 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. We did provide a -- a revised table 9 10 with -- with estimates at just after lunch, is -- I 11 just want to make sure that that's -- that's correct -the correct -- that we met that commitment, that 12 homework's done. 13 14 MR. CHUCK HUBERT: Thank vou, Rich. 15 Now that you remind me, yes, you did give it to me. 16 And so we are striking homework 7. 17 Number 8: Diavik will provide correct figures regarding total number of roads and which of 18 19 those are used as caribou crossings by the end of -- of the day, to be submitted to the Review -- Review Board 20 21 and post a -- posted to the registry. 22 MS. SACHI DE SOUZA: That's -- oh, can 23 I just add some -- I'll add some words to that. That 24 it should be the total distance of roads for the Jav 25 project and the proportion of that road distance that

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will be used for caribou crossings. 1 MR. RICHARD BARGERY: Richard Bargerv, 2 with -- so Richard Bargery, Dominion Diamond. So a --3 a couple of points here. For Jav, we provided -- for 4 the Jav roads is what we -- I think we committed to --5 to do it for. 6 7 And -- and then there was a subsequent 8 question or request from Kevin about doing a map. And we felt we'd combine that into -- to one (1) would make 9 10 the most sense rather than just numbers. So I think that that's what we'd provide. 11 12 And in terms of timing, just hang on a 13 sec. 14 15 (BRIEF PAUSE) 16 17 MR. RICHARD BARGERY: Yeah, because it -- because it would -- sorry. Richard Bargery, 18 19 Dominion Diamond. Because it would take just a little bit of time to put together the map, we would -- we 20 21 would see this within the two (2) week undertaking per 22 -- period -- undertaking period. I'm not sure if 23 that's a good term, but -- but that period to Mav 8th. 2.4 MS. SACHI DE SOUZA: We'll fix the 25 numbering of these in -- before we post it.

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MR. CHUCK HUBERT: It's Chuck Hubert, 1 with the Board. Homework number 9 from day 2: 2 Dominion to clarify size of a crush to be used for 3 caribou crossings on the Jav road and how it compares 4 to the crush used on the existing Miserv road 5 crossings. 6 7 Number -- homework number 10: Dominion 8 is to provide information regarding dust impacts on lichen after closure, and how long it would take lichen 9 10 to return to baseline conditions. There's -- there's also homework 11 12 regarding blasting. Dominion is to provide a table of information related to the area affected by blasting 13 14 tomorrow morning. So that's the -- the blasting zone, 15 however that was described. There was a homework directed at IEMA. 16 17 IEMA to provide presentation documents regarding dust impacts from the IEMA workshop held earlier, a few 18 19 months back. Is that correct? 20 MR. KIM POOLE: Already sent to you. 21 MR. CHUCK HUBERT: Okav. So thanks. 22 Also, this one is directed at Dominion. Dominion is to 23 consider the request to include the Jay underground as a reasonably foreseeable development as it may 24 25 contribute to cumulative effects on caribou, and

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respond to this request tomorrow. We just discussed 1 that not long ago. 2 Number 14: This was regarding IR-24 and 3 number 7 from KIA. Dominion is to clarify the -- the 4 responses to these IRs and determine, first of all, if 5 they're contradictory, and -- and rationale, if in fact 6 7 they are. 8 9 (BRIEF PAUSE) 10 MR. CHUCK HUBERT: Commitment number --11 12 number 2 regarding baseline, Dominion is to complete a Wildlife Effects Monitoring Plan and Wildlife and 13 14 Wildlife Habitat Protection Plan by August the 1st, 15 2015. Number 3, Dominion will make efforts to 16 17 improve mitigation measures and final plans, Traffic Management Plan, or the Wildlife and Roads Mitigation 18 19 Plan, the official term, through responses to these draft plans in order to link monitoring to mitigation 20 21 measures in this Traffic Management Plan and take a 22 collaborative approach to drafting these plans. 23 So again, we anticipate, as vou've 2.4 committed to the Traffic Management Plan or Wildlife 25 and Roads Mitigation Plan by the end of this month.

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1 We'll -- there's more... Yeah.

MR. RICHARD BARGERY: Sorrv, Richard 2 Bargery, Dominion Diamond. I do -- I do have a number 3 of comments on -- on some of these. I don't know if 4 you can scroll back up, Chuck. So just on number 9 and 5 number 11, which we -- which is for tomorrow, I just --6 I just want to be clear that we have to talk to our 7 8 operations and blasting teams to -- to get a little bit of information. So we're certainly going to strive for 9 10 tomorrow morning, but I -- I just -- I don't want to make an absolute firm commitment because they -- they 11 have other things to do in their regular jobs. So we 12 need to get a hold of them, and -- and we're working on 13 14 that. 15 So hopefully tomorrow morning, but -but just -- just if it -- if it doesn't happen, it may 16 17 be a day later or something. And then if you scroll down, I have -- I have a couple of other comments. 18 19 MS. SACHI DE SOUZA: Do they relate to the homework or the commitments? 20 21 MR. RICHARD BARGERY: Sorrv, the ...? 22 MS. SACHI DE SOUZA: Are your comments 23 for the homework questions or the commitments? 24 MR. RICHARD BARGERY: So the first 25 comment is -- was on homework 9 and homework 11 and the

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-- the size of the crush and the -- the blasting 1 information, and those both sav tomorrow. And I -- I 2 just -- I just want to make -- I want to have a little 3 bit of latitude, if I can. And if we can't answer it 4 tomorrow, then it may be a day later or something, 5 that's all. 6 7 And then I have some more -- on the 8 commitments I have a couple of comments, as well. 9 MS. SACHI DE SOUZA: While Chuck is 10 typing here, we're just going to add one (1) more homework item that we forgot, which was a question that 11 Anne had asked about the traffic estimates for when the 12 deflection was very high along the Misery road. 13 14 15 (BRIEF PAUSE) 16 17 MR. RICHARD BARGERY: Richard Bargery, Dominion Diamond. I'm not -- we're just trying to 18 19 remember the commitment. I can't remember making that commitment. Not to say I... And I'm not exactly sure 20 21 what the commitment is, so. 22 DR. ANNE GUNN: Anne Gunn, for the 23 Board. Actually, I -- it -- it wasn't clearly a 2.4 commitment, it was a follow-up to an existing IR that 25 hadn't been followed up. And so I think that's how it

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got listed in this. So it would be useful to have it 1 sometime, it doesn't have to be tomorrow or the next 2 day, but it's information that -- that will relate to 3 the mitigation for the road. 4 5 MR. RICHARD BARGERY: Okav, maybe we can -- can we -- I don't want to make the commitment. 6 7 I'd like to understand what I'm committing to, so can I 8 -- can we maybe have a discussion afterwards about the IR and exactly what we need to pro -- provide, because 9 10 we'll have to go and -- and find the information, so I'm happy to have that discussion, and then we can --11 you know, we can bring it back if it's a commitment at 12 13 some point, or undertaking at some point. Does -- that 14 would -- would that be an acceptable approach? 15 MR. CHUCK HUBERT: Yes, thanks. 16 THE FACILITATOR: So are we comfortable 17 then -- it's Bill Klassen -- with the commitments and 18 homework as is set out on this table now on the screen? 19 Is that satisfactory? 20 MR. RICHARD BARGERY: No, I have some 21 comments on the commitments. So -- sorry, it's Richard 22 Bargery, Dominion Diamond. Sorry. I see with glasses, 23 sometimes without. 24 Yeah, number -- number 2 is a draft --25 complete a draft of WWHPP and WEMP that incorporates

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That's -- that was the commitment that we made, I 1 Jav. think, in advance of the -- the public hearings, and we 2 used the August 1st date. And this was, Andrea, in 3 response to your -- your request from vesterday. 4 And so on the commitment number 3, I 5 think in the first -- the first line, I -- I think we 6 7 do that, make efforts to improve mitigation measures 8 and final plans, as a general -- a general way we operate. What I committed to was to come back with a 9 10 further response on how we would solicit comments on 11 the Traffic Management Plan when we -- when we -- you know, when we're centred for -- for -- at the end of 12 the month, and sort of a way forward on -- on that. 13 14 I'm not sure how to word that, but I -- I'm not sure 15 the wording there exactly captures the commitment. 16 17 (BRIEF PAUSE) 18 19 MS. SACHI DE SOUZA: Just a guestion 20 about the -- one of the homework assignments from 21 vesterday, which was to provide a -- the list of 22 documents and then have those relation -- the 23 relationships between those plans. Is that now an 24 undertaking as opposed to a homework assignment? 25 MR. RICHARD BARGERY: Richard Bargery,

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Dominion Diamond. I -- I think that's still a homework 1 assignment but we -- we -- I think we asked for the end 2 of the week for that particular -- that particular one. 3 We are working on it, and once the people that are 4 working on it get -- get away from the -- the session 5 here, we can work some more on it. 6 7 But -- but hopefully our -- our hope is 8 that we'll have that by Friday before the end of -before the end of the session here ... 9 10 THE FACILITATOR: It's Bill Klassen here. Are there any other edits that need to be made 11 to these commitments or other items on the list before 12 we adjourn? 13 14 MR. RICHARD BARGERY: Yeah. Richard 15 Bargerv, Dominion Diamond. So I would sav submit plans 16 as opposed -- I mean, in some cases, it's -- we've 17 referenced plans that are not necessarily draft. 18 MS. SACHI DE SOUZA: Hev, it's -- can -19 - in the interests of time and people, is it okay if Dominion and the Board just go through the fine tune of 20 21 that wording right after this? 22 MR. RICHARD BARGERY: Richard Bargery, 23 Dominion Diamond. That would be good. 24 THE FACILITATOR: There -- probably 25 others in the room agree with that. I think that

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brings us to the end of the -- the second day of these 2 technical sessions, then, and I -- I thank you all for 3 attending and participating. And so we will continue 4 tomorrow at 9:00 a.m., and the topic is water. So 5 we'll see you all tomorrow at 9:00. --- Upon adjourning at 5:11 p.m. 11 Certified correct, 15 Robert Keelaghan, Mr.

MVEIRB re JAY PROJECT 04-21-2015 Page 277 of 347

r	IICODEI 01	21 2010 10	ige 277 01 011	
1	,23 196:1	10th 199:10	15-kilometre	89:14 96:2
1 11:3	198:24		176:5	98:16
18:22,24	203:17	11 7:5 9:3		101:18,24
20:20,22	205:3	53:14	16 33:20	102:19
25:2 26:18	208:18,19	184:17	57:19	104:19
28:24	224:13	271:6,25	195:11	105:1
37:22	225:4,7	11.5 35:8	160 55:14	145:14,20
47:15,16	226:4,20	11:03 90:19	17 31:23	146:7,10
54:25	229:2		57:19	147:1
56:10 57:2	231:10,15	11:49 122:15	100:18	153:20
61:9,10	232:15	11:55 116:1	184:17	159:18
64:14	233:20			160:5
66:8,21	237:6	110 53:18	17.4 34:3	170:19
68:9 70:2	239:6	55 : 11	18 26:9	171:21
71:3,21	242:5	12 7:7 9:8	195:11	184:24
72:9 73:7	247:15	37:13		191:9
79:14,15	251:15	53:7,14	19 37:25	194:17,18,
82:11,19	252:13	195:10	1970s 229:19	22 195:2
85:6,8	256:7			196:3,17
88:16	258:11	12.0 185:20	1990s 100:19	197:24
89:3,4,12	262:20	12:00 18:14	1996 34:22	198:3
90:24	264:5	12:55 116:2	35:4,25	201:7
94:1,6,10	268:9		38:8	202:9
95:8 96:2	272:10	12:59 122:16	179 : 17	211:24
105:14	1.08 38:17	13 22:17	1st 10:7	218:7
106:11		147:17	23:6 213:6	222:19
108:24	1.6 34:1		216:13	223:11,21
109:21	1.8 71:24	13.7 226:19	217:15,18	233:20
111:3,5	73:2	227:18	217:13,18	246:1
112:18		130 55:9	270:14	247:15
113:1,16	1.9 34:2		274:3	248:18,19
114:20	1/2 231:15	14 32:5	2/4.3	263:6
116:1	1/2 100 00	180:11		264:2,3,16
119:25	1/3 139:22	184:1,8	2	265:1,18
121:5,20	140:10	193:25	2 1:22 10:3	266:5,21
126:6	1:00 116:3	195:11	11:9 12:13	267 : 1
130:17,20	10 7:4 8:18	270:3	19:20	268:21
132:4	49:1 54:6	14.9 226:21	20:22,23	269:2
134:2,4,24	55:2	227:19	21:25 22:9	270:12
142:12,13	106:12	15 20:16	24:8 28:11	273:24
144:7,12	127:4	61:22	36:23,25	2,000 164:10
147:20	188:24	102:16	41:12	
151:2	191:15	102:10	45:14 46:6	2.1 67:16
155:21	213:11	127:4	57:14 60:1	71:2
158:9	225:8	172:12,23	66:20	2.54 133:21
171:20	249:4	175:7,9,14	70:14 73:2	2.9 187:15
177:3	263:22	176:1	74:1,2,10,	2.3 10/:13
182:8,10,1	269:7	181:1,21	24 76:1	2/3 72:22
8		184:2	77:5 78:8	2:46 189:4
183:6,8,18	10:54 90:18		79:13,17,2	
,22 185:5	100 54:2	15.5 185:20	1 80:8	20 38:5,9
187:16	61:1,15	15.6	81:17	40:16 46:8
195:6,7,17	164:10	226:4,16	82:10	87:18
			88:16,18	106:13

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY PROJECT 04-21-2015)
----------------------------------	---

Page 278 of 347

162:14	2030 172:1	145:1	116:10	59.8 39:11
190:22		146:6	123:21	
191:3,4,8	2033 162:13	147:16,20	144:6	5-kilometre
209:9	2034 249:25	171:21	146:21,25	163:20
250:2	01 1 01	175:16	175:16	
254:21	21 1:21	187:3,4	245:6	6
	37:24	188:22		6 133:21
200 50:12,19	210 55:14	191:1	4,000 54:22	136:23
131:1,2,7	23 63:9	197:24	55:5 56:9	137:6,21,2
133:18		198:3	87:11	4 138:1
135:15	24 9:8 266:1	205:4	4:30 252:10	193:24
2000 194:14	25 73:23	223:14,21	40 175:17	266:22
2001	250 96:14	231:17,21,	176:1	6.88 40:7
210:1,18		22 235:25	180:11	
211:12	269 35:23	236:16	400 223:14	60 53:5
2002	27 101:24	248:5,16	400 223:14	54:9,24
	266:2	270 : 16	40-mile	66:24
36:11,12		274:5	241:25	67:13
2003 194:6	27.5 226:25	3/4 72:22	44 7:10	105:14
2008	276 7:12	3:00 189:5	39:18	65 41:4
194:6,15	28 144:24		40:3,25	66 169:13
	146:1,25	30 66:18	111:7,17	
2009 194:16		175:17	,	67 231:19
196:18	28.1 11:13	176:1		6-inch 134:7
231:14	144:23	187:13	5	135:23
2011 147:17	146:22	231:12	5 1:22 33:19	138:7
2012	28.1-1	263:17	55:22 86:6	
194:15,16	146:25	300 164:13	90:14	
194:13,10	28.2 11:13	242:1	91:17	7
231:14	146:22		154:4,8,15	7 8:3 9:8
239:3		30-kilometre	,21 156:25	53:9,15
	28-2 145:24	198:2	157:5	54:6 55:20
2013 23:6	29 7:9	33 90:6	158:13	263:14
34:22 35:4		232:4	5.37 40:5	266:24,25
36:1 38:8	290 55:17	34 38:4	5:00	267:16
74:25		40:25	243:16,17	270:4
79:2,5	3	40.23 191:2 , 3	265:4	70s 190:12
89:14	3 10:8 11:15			77 257:13
170:9	22:23	340 55:17	5:11 276:7	
213:5	32:10 37:2	35 67:15	50 106:12	78 247:9
2014 20:17	55:21	378 147:22	116:8,14	79 247:9
34:4,17	58:20	150:10	117:5	
35:9	62:8,9	100.10	118:5,20	8
226:16	72:18		119:1	
255:22	73:13	4	120:13	8 7:3 8:8
2015 1:21	88:19	4 10:16	121:8,17,2	133:24
10:7	90:23	11:11	1 242:4	267:17
21:3,8	101:12	22:18	244:25	8,000 55:6
23:6 213:6	104:1	36:15	500 63:13,18	56:10 76:3
226:2	110:3	55:21	106:14	8.2 57:8
270:15	124:7,9	58:20		
2017 256:12	125:11	87:18	55 60:20,25	80 55:11
-01 , 200.12	128:17	91:17	61:3,18,25	

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY PROJECT 04-21-2015	MVEIRB	re JAY	PROJECT	04-21-2015
----------------------------------	--------	--------	---------	------------

Page 279 of 347

	FRODECI 04-2	21 2015 18	age 273 01 34	
247:9	66:9 96:20	27:18 31:3	162:2	act
81 247:9	117:20	32:15	177:23	22:14,16,2
	118:15,16	33:10	181:1,19	2 26:2
85 147:9	119:4	43:20	183:9,21,2	44:9 72:20
8-inch	120:1,4	55:24	2 232:8	85:25
133:19,21	174:24	160:7,11	242:20	103:11
134:8,10	207:19	179:11	245:7	164:5
136:23	244:19	226:17	256:1	210:11
137:21,24	245:12,24	241:15	accounted	212:1,12,1
138:1	257:25	accep 250:7	64:7	8,20,22
8th 20:17	258:17		101:3,8	214:15,22
145:19	260:13	accept 96:2	113:24,25	215:20
146:8,14	261:10,14	207:5 227:18	228:12	216:2
201:11,21	able	227:18	231:6	217:5
268:23	18:21,23	acceptable	235:15	acti 148:13
200.20	49:9 65:13	21:23 99:6	accounts	acting 121:3
	73:4 78:16	114:24	238:16	_
9	81:1	117:12	257:1	active
9 8:13 34:1	103:13	118:7	237.1	169:23
55:20 57:7	104:12	252:9	accrue	171:12
269:2	106:4	259:18	206:10	174:23
271:5,25	107:4	265:2,13	accurate	actively
9:00 243:16	112:2	273:14	18:13	159:20
276:4,5	149:21	accepted	50:21	
9:02 12:1	154:21	212:15	92:24 93:1	activities
9:02 12:1	182:3	accepting	accurately	32:2
90 41:6	194:4,10	149:19	197:20	148:13
187:14	202:22	206:5	197:20	159:17 193:5,7
90s 190:7,20	223:21,22	200.5	achieve	
	224:1	access	30:23	activity
91 150:12	243:7	103:5,6,18	122:6	98:14
91.1 148:1	252:5	accommodate	acknowledge	178:19
94-1 102:15	Aboriginal	20:8 22:5	48:5 59:3	182:22
	19:9	148:3	75:7 96:3	183:12
98 41:13	192:14	211:4	a almowladged	193:1
	193:3	accommodatin	acknowledged	acts 85:25
A	241:15	g 30:20	91:4 197:25	actual 54:3
a.m 12:1	258:1,22	-		64:16 76:7
90:18,19	260:5,13	accomplished	acknowledgin	64:16 /6:/ 100:7
122:15	261:22	106:18	g 223:17	266:10
276:4	above-ground	according	acquired	
	32:19	121:6	183:25	actually
A1B 143:2	166:5,9			55:15
A2 143:4	167:16	accordingly	acquisition 42:17	64:20
A21 29:23	absolute	76:15	4∠:⊥/	66:25 76:6
33:15	120:24,25	accoun 231:6	across 41:11	77:14
249:1	271:11	account	52:3 56:20	78:20 80:2
		98:13	126:9	82:24 92:1
AANDC 5:5	absolutely	100:23	127:16	102:10,12 105:18
abandoned	231:2	107:21	128:23	124:9
161:6	absorb 33:5	115:12	178:18	130:13
ability 33:4	abundance	142:8,25	182:13	130:13
	abundance	,		100.20

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 280 of 347	7
141:9	172:11,19	18:23	advance	135:10
144:10	194:13	123:16	23:7,8	273:8
158:10,23	260:3,20	145:6	217:12	against
177:4,24	267:23	155:9	274:2	31:6,20
178:2	272:10	168:3	Advances	36:8,12
182:15	added 75:25	169:3	194:2	37:18,22
185:4	146:21,25	188:23		67:24
211:24	181:17	addressed	adverse	74:13
216:9	233:6	67:5 88:9	261:23	181:15
227:17,21	239:16,25	122:23	262:1,2,3	187:17
229:10	240:18	167:12	advice	222.2E
230:6	addendum	209:25	193 : 10	age 223:25
232:25	11:12	addresses	244:3	agency
234:17	29:22	96:25	advise 76:1	14:10,12,1
236:18	82:19		89:19,24	4,15
252:16		addressing		101:17
254:6	adding	28:8 123:8	advised	103:21
256:21,22	111:22	172:8	173:18	136:18
260:2 272:23	237:6	adequacy	advisor	137:16
212:23	addition	29:23	14:17	144:1
Adamczewski	34:17	34:15		146:20
4:6 17:15	55:10	57:2,7	advisors	220:12
47:8 49:19	66:10,18		89:22	252:16
91:11,12	172:8	adequate	aerial	253:3
225:25		238:5	50:16,20,2	261:19
229:13,14	additional	adequately	3 194:16	agency's
232:14,15	21:14	52:5,14	196:4	145:24
241:10	24:13	249:9	Affairs 19:9	- - 10 1
Adams 6:18	26:13	adjacent		agenda 18:17
	34:14	58:6	affect	26:13 28:10
adapt 33:5	35:10,11,1		111:13	
adapted 98:8	6 56:1 62:18 76:3	adjourn	261:7	45:22 90:11
adaptive	80:20	275:13	264:6	114:18
23:11	100:3	adjourning	affected	122:25
27:25	100:3	276:7	8:14 25:9	123:18,20
31:21	112:13		43:3 75:2	190:19
42:18	157:13	adjust 176:4	163:8	
77:20	196:18	adjustment	165:2	agent 120:12
79:24 80:3	220:1	79:14	262:25	121:7
108:11	224:15,16	admit 216:25	269:13	agents 33:9
110:4	239:16		afield	
125:13	247:16	adopt 208:22	160:24	agitated
132:21	249:10	adopted		99:24
148:2	253:13	214:21	aft 85:14	ago 74:10
151:12	257:23	239:1	afternoon	86:5,6
196:25			122:18,25	110:23
	additive	adopting	165:9,25	185:3
add 57:13	92:14	39:12	188:23	213:21
73:7 92:13	237:2	adult 116:11	189:7,22	250:12
93:10	240:13	233:21	262:10	270:2
102:18	add-on 68:20	236:17	afterwards	agreed
112:3,15,2 3 140:14	address	245:6	68:15	262:12
5 140:14			00:10	

VEIRB re JAY	PROJECT 04-2	21-2015 Pa	age 281 of 347	1
agreement	175:12	103:12	99 : 10	180:1,6,7
45:12	202:2	109:24	101:9	191:2,3,5
83:12	239:8,9,13	141:4	106:2	18 238:21
156:8	240:2,18	160:16	163 : 15	239:7,8
174:18	253:4	179:4	169:10,11	244:25
225:19	261:5	182:14	171:4	245:11,14
Berning E.O	262:1	198:4	173:1	Ann 75:23
Aguire 5:2	269:20	254:17	174:25	AIII 75:25
19:11,12	alteration	amounts 33:7	193 : 17	Anne 2:8
ahead 80:4	22:21	53:17	194:21	4:24 11:1
91:10	22:21		217:11	13:24
110:24	altered	Amy 3:3	259:14	46:25 47:
160:2	22:2,19	16:21	274:3	60:8
246:6	139:24	analogy	Descharge	75:21,23
Ahiak 43:4	alternate	65:17	Andrea's	79:12,18,
			105:8	0 81:15
58:6	80:1	analyses	anecdotal	82:19,20,
air 187:4	125:7,23	34:14,20	186:8	2 91:14
218:8	144:20	35:21		101:14,15
	alternative	175:25	animal 36:23	108:5,7,9
airport	11:10	176:8	38:12	110:10
109:10	123:3	178:6	39:1,7,8	123:2,23
al 193:21	124:16	194:24	61:10,24	124:2
195:14	144:4,6,22		111:19	125:8
N 1 1 1 1 1	145:2,9,13	analysis	163:23	130:20,23
Alaska 40:18	146:21,25	11:9 32:11	192:1	132:11
91:21		35:23 51:7	193:4	139:10
229:19	alternatives	66 : 13	235:6	142:12,14
241:18	123:1,24	75:12,17	256:3	142:12,14
242:1	124:7,10,1	127:18	animals 35:1	144:5
Alberta	2,20	144:22	36:8,11	
235:3	125:1,2,12	145:2,8,12	37:1,12	148:10,15
	143:14	,15,17	38:7,23	149:13
Allerston	am 51:21	146:5,23	39:13,14	150:7
3:7	66:3 90:10	175:21		151:25
15:13,14	242:22	181:21	51:7,8,10	153:14,18
Alliance 6:8	242:22	248:9	52:10,12	154:16
14:25	243.9	249:2	61:16,18	155:12
	America	250:19	63:18	156:1,7,2
allow 49:8	233:15	256:25	64:3,8,9	157:9
126:9	among 30:25	0001000	66:5 68:5	158:7,16
174:17	223:3	analyze	71:12	175:3 , 5
allowed	223.5	194:3	86:15 87:2	176:7
37:16	amongst	and/or 94:3	100:1,14,1	177:15
106:5	99 : 13	Andrea 3:15	7 101:3	178:23,24
116:7,9	122:21		106:4	180:9,21,
	amount 43:15	17:18	111:16	4 181:24
allowing	54:10	22:25	115:14,16	184:7,11
49:14	66:21	25:11	116:8,11,1	185:15
218:25		91:2,8	4 117:5	186:4
already	70:10,11	93:15,16	118:5	190:8
23:12 51:3	73:12	94:11,20	120:13	232:13
76:15	78:15 79:2	95:14,15	121:8,18,2	233:10,11
1.0	99 : 19	97:2,12,20	1 1 5 0 1 5	
125:18	100:15,24	98:21	1 158:15	235:17,20

236:5,8,10	246:8,11,1	172:2	apples	110:7,22
,12,15	2 252:8	anyways	256:11	124:3,5
240:8	254 : 15	88:23	apples-to	132:14
241:12	272:4	174:18	256:10	173:6
242:9,25	answered	190:4	230.10	176:9,23
272:12,22		190:4	applicabilit	177:3,5,
• · · · · · · · · · · · · · · · · · · ·	47:1 48:18	anywhere	y 11:18	179:5
Anne's 159:6	112:10	102:13	201:14,18	182:9
163:17	186:5	105:14		197:18
193:16	answering	128:10	applicable	208:23
annual 40:7	96:24		157:22	226:11,1
43:7 53:6	50.21	apart 52:22	196:5	14 229:1
116:10	answers	apologize	application	
	31:10	52:20 55:4	37:20,22	270:22
176:3	113:4	123:17,19		273:14
177:19	172:25		178:10	approached
178:16	216:9	142:17	187:8	29:18
179:8		159:25	226:20,24	47:11
180:8	anticipate	165:20	228:15	- · •
182:3	63:1 81:19	180:21	248:1	approaches
187:2	148:10	204:24	249:6	43:5 77:
193:17	161:25	209:25		
194:5,8,11	169:17	236:5	applications	approachin
,19 207:14	171:7		127:16	225:19
231:15	270:23	apparent	applied 24:3	266:14
232:5		172:4	30:16 41:4	appropriat
252.5	anticipated	apparently	43:23	93:7
annually	147:12	82:18	44:10	110:16
35:2 97:19	149:2	128:7	100:15	114:10
231:19	anticipation	242:23		
	154:6		178:10	118:17
answer 50:7	154:0	259:17	apply 101:5	132:8
56:7,11,22	anybody	appear 38:22	. .	141:17
59:9 63:9	258:7	262:24	applying	149:6,12
64:13		264:5,6	32:4	173:11,1
66:16 68:4	anybody's		appreciate	181 : 20
93:12 94:8	120:19	APPEARANCES	28:14	196:22,2
107:23	anyhow 72:4	2:1 3:1	47:10	207:10,1
125:9	-	4:1 5:1	111:24	208:1,5,
148:22	anyone 19:15	6:1	164:8	11,15
149:2,19,2	152:12	appears		209:5
0 156:22	202:3	236:23	178:25	255:18
161:4	262:16	230:23	198:1	
162:7,14	a muth i ma	appendices	208:20	approval
	anything	213:10	218:17	23:17 24
163:3,9	47:25 65:4		226:11	approved
165:6	102:17	appendix	242:17	
186:17	132:19	10:9 20:19	appreciating	206:16,2
195:4	163:10	24:1 52:24	198:14	207:9,16
200:25	165:13	55:1 56:11	190:14	214:19
201:4	168:6	75:25	approach	approximat
205:18	169:2,3	80:8,9	17:25	y 41:3
206:2	262:15	170:1	28:17 31:5	y 41.5 53:18
207:23		171:15	35:21	
214:14,22	anyway 95:10	172:7,19	64:11	54:24
225:9	143:5	213:10		55:1,9,2
240:19,21	170:11	267:2	99:21	141:6
∠¬∪•⊥IJ , ∠⊥		201:2	109:25	195 : 10

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 283 of 34	7
231:20	152:13,18,	209:7	243:2	53:24
approximatio	19	249:9	249:11,14	56:25
n 244:25	160:11,21	250:7	252:11,20	58:15 61:3
	161:12	assessed	255:9,17	63:25 68:4
April 1:21	202:3	31:20	257:9,15,1	71:12
23:23	aren't 13:2	120:1	9,21	72:18
74:25	73:4 88:20	181:16	258:5,16	73:11
80:14	124:25		261:3,7,9	100:12
93:20 99:9	124.23	assessing	262:8,16	113:15
199:10	261:4	51:9,14	assessments	115:11
225:10		assessment	32:1 34:18	116:5
arctic 86:6	argued	21:6,23	166:25	117:11
229:19	232:17	27:15	245:3	118:13
233:13,14	arguing	28:12	243:5	119:1 , 16
	240:11	29:17,18	assignment	120:9 , 18
area 8:14		30:12	20:19	121:11,15
22:6 28:24	argument	31:1,9,11	21:25	122:1
35:3 39:1	248:4	32:2,6	22:23 24:6	161:11
42:25 47:6	arises	34:16	26:23	170:24
48:4 52:12	216:8,10	39:21	274:24	172:6
56:1 61:17		44:21	275:2	176:7
64:8 66:24	Arktis 4:16	45:1,5,24	assignments	177:22
81:11 86:6	Arm 141:20	51:6 52:13	20:5	179:25
92:8 101:6		57:3	136:14	180:21
123:6	arose 22:2,3	64:2,11	262:12	181:14
130:22	arranged		274:20	183:4
139:7,9,21	41:21	68:5,7 70:19		228:7
140:8			assist 83:5	230:9,14
142:12,22	arrangement	71:14,19 72:7	258:24	237:21
143:13,24	27:16 31:2	88:12,13	assistance	244:18
144:2	array 187:11	114:2,13,2	258:21	245:3,20
147:6	arrived	1 115:2,8		246:9,21
151:10,16	110:25	1115:2,8	assisted	261:9
152:4			26:4,5	
153:22,23,	Arthur 6:5	117:1,2,11	asso 170:7	association
24 154:2	15:7	,13 118:5,13		16:9
156:17	189:22,23	119:3,7	associated	33:19,22
157:4,24	258:14	119:3,7	38:15	262:20
158:12,15	as-builts	122:10	39:17	assume 19:20
165:1,18	134:7	161:20,24	43:16	61 : 15
172:13,22			76:12	150:20
176:20	Asc 6:13	166:25 175:8	142:1	226:10
182:2	aspect 93:23	181:23	170:7	245:17
199:6	- 115:4	196:22	171:24	246:14
205:5			239:11,17,	assumed 28:3
206:8	aspects	208:2,6 211:3	19	33:1 37:14
255 : 16	255:3		Associates	
256:2,5,15	asserted	213:25	2:23 3:2	38:18,24
,20,23	118:3	218:15	4:15	39:2,14
269:13		228:10	15:10,14	40:8 45:6
	assess 21:8	238:6,13	17:1,3	51:7,10
areas 35:1	31:6 66:10	239:18	27:10	53:5 54:15
103:4	70:19	240:3	29:16 51:5	61:16,23

103:4 70:19 240:3 29:16 51:5 104:3 149:15,21 242:21

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

64**:**3

52:10

169:20	ns 22:16	162:24	134:16	22
171:9		174:15	135:16,17	1
	autumn	224:18	138:3,20	barren 31:
assumes 77:23	34:21,22,2	275:5	140:23	71:15
11:23	4	axis 40:11	145:10,11	barren-
assuming	available	axis 40:11	146:9	ground
39:13 55:6	12:24 33:7		147:2	28:1 29:
60:25	78:6	В	150:1	30:8
162:13	109:10	B.'s 176:18	151:1,7,8	117:19
253:14	118:6	background	152:25	barrier
assumption	164:20	195:6,7	156:10	41:25
51:15 53:4	165:2	209:4	157:2,19	58:22
60:13	178:22		159:5,7	59:1,4
71:12	217:8	balance	162:22	67:19
99:14	245:10,11	111:16	164:19	91:23,24
	avenue	ballpark	165:5	92:2,12
assumptions	127:21	164:9	167:2,7	94:23
32:23 37:9		246:2,10	168:11	99:15
249:15	average	Banff 126:4	169:5	100:7
250:19	38:11 40:1	Banii 126:4	170:17	105:11
254:3,17	53:11,18	Bargery 2:15	185:7,8,14	128:11
ate 85:19	55:9 131:4	17:4	196:15	168:15
attach 93:21	164:17	20:2,3,13,	198:16	222:20
	178:8	14	200:6,22	h
attached	avoid 39:15	26:15,18,2	201:17	barriers
66:2 71:5	41:24 43:9	0 27:6	203:14	32:16,20
attempt	45:12	29:7	205:17,25	base 98:24
222:8	46:10	46:3,4	206:1,14	226:16,2
226:12	50:18 75:8	48:22 56:6	207:8,22	228:22
263:15	111:12	57:12	208:3	based 31:
	114:17	59:6,18	209:18	37:7 39
attempting	124:13	60:3 62:25	212:23,24	42:25
96:15	126:20	65 : 9 67:3	216:23	46:10
attending	avoidance	68:8	219:5,6	60:20 7
91:8 276:3	41:22 48:5	69:6,18	220:10,14,	75:11,1
attention	50:10,21	70:7,8	20,21	78:19
185:2,21	111:13	74:18 80:6	222:7	98:1,8,1
	177:25	81:20 83:7	224:7	100:17
attracted		88:10	248:15,24 250:24	101:1,2
178:4	avoiding	92:19		104:13
Aug 10:7	46:11	94:14 95:3	251:14,20, 21 253:22	111:4
213:5	47:12	97:10,18	264:14,21	115:13
	await 255:1	102:21	264:14,21 265:17	116:12
August 23:6 111:18	aware 12:12	104:9,20	266:7	119:2,20
203:17	13:10	107:9	267:8	121:19
	166:16,23	116:20	268:2,3,17	124:12,
213:5 216:13	174:14	124:24	,18	151:10,
216:13 217:15,18	189:13	127:1	271:2,3,21	155:19
	242:22	128:3	,24 272:17	176:9,1
218:10		129:3,6	273:5,20,2	9,21
270:14 274:3	away 57:10	130:6	2 274:25	179:14
	85:23 87:6	131:16,24,	275:14,15,	180:1
authorizatio	96:4,14	25 132:24 133:23	2,0.11,10,	200:16

MVEIRB re JAY	PROJECT 04-	21-2015 Ра	age 285 of 34	7
217:16	228:21	234:13	Bell 74:11	45:20
230:23,24	231:11	begs 102:5	bells 90:24	46:18
231:24	232:18	106:15		48:15 50:3
baseline	233:25		beneath	52:17
28:9,19	238:14	behalf 14:11	126:10,18	59:13,23
29:1 37:25	240:7	258 : 10	benefit	60:6 69:14
44:16,18,2	241:13,21	behaviour	48:16	70:12
5 45:2,3	242:7	32:17	79 : 17	75:20
46:19	261:5,15	37 : 15	262:7	79:11
82:14	battling	61:12 62:1	berm	81:16 82:9
114:19	60:11	66:11,13	71:21,23	88:14 95:12
187 : 17	Bay 91:21	76:13,15,2	72:9,19,21	95:12 101:11
269:10	229:20	0 98:13,19	104:2,11	104:15
270:12		105:25		105:6
bases 224:14	BC 187:15	111:14	berms 11:4	110:9
	bear 19:1	178:21	103:5	113:9
basic 229:3	20:6 26:21	263:12	besides	114:4
238:25	27:13	behavioural	89 : 10	115:23
239:14	244:2	58:21	best	122:4,19
basically	255:23	60 : 21	26:24,25	130:16
87:19	bears 18:25	267:3	43:5	133:15
153:25	27:16,24	behind 28:8	108:22	135:11
163:20	44:5	52:21	125:3	137:4,15
177:11	211:22	123:1,25	178:22	138:14
193:24	243:3,12	145:18	197:16	139:3
226:2,18	255:19	238:7	203:10	140:1
240:1	256:10,15,	262:14	227:4	142:5
242:9,10	19,22	266:17		143:8,21
basis 53:6			bet 109:20	144:1
151:18	beat 105:9	beings	better 24:12	145:4,22
180:8	became 34:21	86:12,25	109:21	146:17
187:3	Beck 4:4 6:5	193:9	164:23,24	147:4
194:11	15:7	believe	201:4	151:3
204:17,18	189:22,23	21:22	Beverly 43:4	152:2
207:13,14,		22:25 29:6	58:6	153:8
15	become 23:25	80:8 88:8	beyond 30:22	158:6
Bathurst	91:23	95:17	112:6	159:1
27:14,19	92:14	96:12	147:23	160:3
30:1,3	230:6	98:11 99:2	198:11	163:5,14
34:19	becomes	171:18	200:17	164:25
35:13	40:21	173:5	240:25	165:11
42:16	183:20	185:24		169:9 175:3
43:1,2	208:19	193:13	bias	199:2
49:22 58:4	bed 21:6,9	207:24,25 208:7	63:14,20	201:15,25
76:16		209:9	64:24 66:1	213:13
117:18	bedrock	242:25	bigger 86:2	218:3
118:15	33:22	257:13	Bill 1:12	2213:35
122:3	beds 22:2		3:25 12:9	222:15
177:12	begin 44:15	believes	24:12 25:5	225:17
183:24	90:22 91:8	127:19	26:13,15,1	242:17
226:8		250:21	6 28:6	253:10
227:3	beginning	261:19	5 20.0	254:25

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 286 of 34	7
257:7	246:2	83:23	258:24	177:2,10
258:19	265:3	108:10	261:2	239:3
260:24	268:20	122:21	262:8	boulder
262:6	271:8	125:25	265:20	33:22
265:6	272:4	126:15	266:16,21	33:22
273:17	bits 226:5	127:12,17,	267:6,20	boulders
275:10	DIUS 220.5	19,23	269:2	21:7,9
biologists	blah 121:18	128:13	272:23	boxes 168:18
30:17	171:13	129:18	275:20	
	blame 192:23	130:18	Boards 87:6	Boyan 5:16 14:21
biology	blast 154:15	132:12		14:21
194:7	155:9	142:7	Board's	Bradley 4:22
bird 25:7,9	156:14,17	147:8	77:18	brand 94:17
65:18	157:4	148:16	126:1,8	
birds 44:6	158:12	149:14	214:8	Braun 4:3
65:20	159:23	150:8	220:2	break 51:2
	163:23	152:1	221:20 222:4	52:22
bit 47:9	164:3,14,1	153:19		75:22
48:11	6,17 165:2	154:17	Bob 2:18	82:11,16
50:9,18		155:13 156:2,7,24	body 38:17	88:20 89:7
73:8 79:19	blasting	158:2,7,24	39:17	90:14
83:24	8:15	157:10	40:5,7,10,	99 : 14
91:19	153:19,21,	175:6	16,21,22	116:1
102:9	23	177:16	41:1 61:7	122:9,12
104:21	154:6,20,2	178:25	191:17	185:10,23,
106:10 108:2	4,25 155:8 156:4,22	180:10,25	231:7	25 188:24
110:20	158:11,19	181:25	239:24	192:6
111:22	163:18	182:17	Bolt 6:13	244:8
113:7	164:5,13	189:16	16:8	breaking
122:7	269:12,13,	190:6	262:19	18:14
123:7	14 271:8	199:5,9,22	265:9	87:21
133:9	272:1	200:13	266:2	115:25
135:22		201:10		breaks 18:15
139:7	blend 52:20	206:17	boreal	54:7
141:9	blizzards	208:11	234:24	
145:6	109:7,9	218:6,12,1	bottom	breathing
168:15	Boar 156:1	9,24	164:13	219:11
175:12		219:25	bought 89:14	breed 191:15
184:2	board 1:3	220:9,25	-	breeding
186:4,9,19	8:17,21	221:24	Boulan	191:13
190:3	10:19,21	222:13	195:13	
192:9	11:13	233:12	Boulanger	Brett 3:16
194:9	12:10,18	235:24	175:22	bridged
199:22,23	13:15,17,1 8,23,25	237:25	177:7	122:8
200:1,2	0,23,25 14:4,6,8,2	240:9,25	178:7	brief 14:1
202:11	2 16:11	242:19 243:16	183:24	19:17
203:9	18:10 25:6	243:16	193:21	24:24
210:3	28:21	247:7 248:2,21	194:4,25	29:17
217:2,3	46:23 47:1	250:11,21	195:13	45:18
224:23,24	57:3 75:24	251:8	256:25	46:1,13,21
225:8	79:20	253:4,15	Boulanger's	48:13 52:7
227:24	82:24	257:12	176:14	53:21 56:4
241:11		201.12		00.21 00.4

MVEIRB re	e JAY	PROJECT	04-21-2015
-----------	-------	---------	------------

Page 287 of 347

			-	
62:5,23	218:1	Bryan 2:10	calculations	241:17
63:22 65:7	219:3	20:14	53 : 15	Canadian
67:1,8	220:18	Dunning	58:18	233:25
68:1	224:5	Buggins 12:24 13:3	59:8,17,19	255:25
69:4,23	228:4		69:8,16	CanNor 15:22
71:9 72:15	230:11	15:1	70:3 194:5	CanNor-NPMO
79:9 82:7	236:3	84:12,13	237:24	6:17
92:17 95:1	237:18	bugs 192:24	267:1	
97:16	247:4	build 75:3	calf 33:9	capable
100:9	248:13	80:20	Call 33:9	30:19
114:7	251:12,18	86:24	CALPUFF	capacity
115:21	255:12	109:19	195:8	27:25
116:18	259:1,12		calves 178:2	31:21
117:8	264:12,19	built 82:2	191:22	54:15
118:10,23	268:15	109:20		184:11
120:15	270:9	229:20	calving 41:2	
124:22	272:15	233:15	191:22	capture 96:9
126:25	274:17	238:25	229:21	178:16
128:1		239:14	233:16	179:8,19
129:1	Brights 4:25	bulleted	234:6	259:16
131:14,22	bring 20:10	28:25	calving-	264:9
137:12	64:16		ground	captured
144:14	90:25	bureaucrats	239:4	93:23,25
148:7	136:2	89:23		266:18
149:24	188:4	burying	camera	
150:25	273:12	168:5	63:8,13	captures
151:5	bringing		64:1,18	274:15
152:6,23	18:20	busy 185:11	65 : 19	car 81:6
153:12,16	85:13	190:3	66 : 17	222:20
154:11	135:13	Byers 5:14	67:11,13	Cardinal
155:4			70:22	248:3,17
157:17	brings 276:1	C	71:16 72:4	
161:8	broad 28:15		95:16,22	caribou 7:9
162:20	223:15	C-1 22:4,7	96:8,12,22	8:4 9:6
165:15		cal 174:17	147:15,16	11:5,7
166:12	broader	calculate	179:13,18	12:5
167:5	253:19	36:17	263:18	13:1,8
168:9	broke 61:6	78:13	cameras	19:2
170:15,21	broken 51:3	87:11	50 : 14	24:16,21,2
174:11			65:11	2 25:22
180:18	brought	calculated	66:23	27:3,5,14,
183:1	139:16	33:6 37:2	67:13,15	19,21
184:21	190:19	59:5 60:15	78:20,23,2	28:1,8
186:21	238:17	176:25	5 79:25	29:5,14,20
189:11	Bruno 4:8	181:14	96:18	30:8 31:9
196:13	110:13,14	calculating	105:17,19	32:14,16,2
200:20	113:15	60:18	132:22	0 33:4
203:12	186:2		147:23	34:8,10,13
205:15	187:21	calculation	263:19	35:24
206:12	188:11,15	53:11		38:19,20
209:16		54:16	Cameron	40:12
210:13,21	Bruno's	56:14	40:18 41:4	42:2,5,7,1
212:8	195:4	140:20	Canada 4:18	6,22,25
215:12		181:19	5:2 19:13	43:2,7,9
			·	

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB r	ce JAY	PROJECT	04-21-2015
----------	--------	---------	------------

Page 288 of 347

44:5,21	124:4,12,1	222:21	119:13	centre 37:4
45:12	4,17	223:1,7,13	121:5,21,2	160:5
46:10	125:4,10,1	,22 224:12	2 127:20	
47:11 48:4	4,19	226:17	134:9	centred
49:8,16	126:9,18,2	228:1	164:22	274:12
50:12,18,1	0 127:14	229:17,22	203:6	centroids
				57:9
9 51:21,22	128:9,14,2	234:24	226:16,20	
52:3	0,23	238:14	229:18	certain
55:23,25	130:25	241:13	231:13	120:13
56:19	131:2,4,18	243:2	254 : 13	175:11
58:2,11	132:2,9,13	244:1	cases 161:16	certainly
60:13,20,2	,22	248:10	197:24	-
5 63:7	135:7 , 9	251:1,9,22	226:13	93:1
64:24	136:22	252:4,22,2	229:17	104:25
65:12,24	137:18,25	3	275:16	107:19
66:10,11,1	138:13	253:7,12,1		134:3,14
3 67:20,23	144:20	8 254:13	cast 235:4	207:18
68:6,11,14	145:16	256:9,15,1	catch 113:2	241:19
,18,25	147:10,12,	6	265:6	260:12
69 : 17	22 148:4	257:16,20,		271:9
70:11,21,2	149:16	24	Catherine	certainty
5 71:1,15	150:8,11,1	258:2,7,14	4:3	46:7 63:16
72:3,8	4,15	260:21	Catholique	175:7,11
73:6 74:12	151:15	261:5,20	5:25	176:4
75:8	153:22	263:12,15,		177:8
76:8,13,23	154:6,14,2	17,24	caught	1//:0
77:8	1	264:10	256 : 20	Certificate
81:2,5,6,1	155:1,8,24	267:3,19	265:11	7:12
1 84:22,25	156:5,15,1	268:1	cause	Certified
85:1,2,18	6 157:12	269:4,25	32:14,16	276:11
86:7,10,14	158:10,11,		52:21	270.11
,17,18,22,	14	caribous	174:5	cetera 164:9
24 87:23	161:11,22	86:24	232:3	223:25
92:3,7,10	162:4	Carnivore	232.3	chained
98:1,12,18	166:10	27:20	caused	228:8
99:7,20	167:10,17,		144:25	
100:1	23 169:22	carried	213:20	Chair 73:19
101:21	171:10	21:2,10,14	causes 32:14	110:13
101:21		32:11	195:25	112:11
	176:17,24	carries		115:6
103:3,12,1	178:20	242:20	causing	139:11
4 104:4,6	179:11		43:13	186:2
105:17,21,	190:5,6,11	carry 144:10	240:6	243:23
25	,12,15,25	carrying	263:24	252:15
106:11,13	191:14,19	161:19,20	264:9	Chairman
108:23	192:9,20,2		cell 12:16	
109:2,7,12	1,25	case 26:10		213:16
,17	193:6,9	29:6,8	cells	chairperson
111:11,13,	197:20	31:7 33:14	125:10,14	192:7
21 112:15	198:9	35:22	census 239:4	challenge
115:9	200:5	37:20,22		237:24
117:18,19	205:5,9,20	38:2 40:24	central	23/:24
118:15	206:7	72:1	229:18	challenges
119:22	207:5	112:21	233:13,14	129:10,13
122:3,23	209:13	116:25		

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

130:9,14 challenging 195:18 Chamber 6:15	55:24 58:16 76:20	13:1,5	145:25	163:18
195:18 Chamber 6:15		04 0 5 17		TODITO
195:18 Chamber 6:15	76:20	84:2,5,17	chunk 123:19	170:12,25
Chamber 6:15		191 : 25		210:7,16
	105:3,24	choice	circulated	221:18
· · · · · ·	161:13	257:15	194:22	265:15
chan 174:4	169:22		cited 64:18	269:3
chance	171:10	chose 177:12	262:22	270:4
59:10,11	172:12	178:7	civilians	clarity 20:4
180:12	181:17	chosen	86:1	65:10
192:19	182:12,14,	124:10		76:1 , 7
207:11	20,23 227:5,25	141:16	Cla 155:17	105:10
	230:1,19	Chris 2:7	claimed	106:10
change 30:20	232:10	14:7 177:7	188:18	109:19
32:8,14,16 ,21 35:17	234:5,11	Christopher	clarifi	122:6
37:15	235:6	5:2	172:3	138:10,12,
43:14	237:7	19:11,12		15,21
53:11,16	241:15		clarificatio	156:24
76:22 78:9	267:4	Chuck 2:2	n 27:11	175:6 179:1
113:7	changing	13:13,14	65:17	250:25
142:24	57:9 58:4	25:3,5,6	70:1,6	
150:21	76:14	82:21,23	81:17	Clark 4:9
154:25	123:17	83:22 125:24	108:10 118:3	17:20
169:13,18	140:11	125:24	130:24	60:10
171:8	262:25	128:12	130.24	classificati
172:10,16	264:7	129:17	135:12	on 35:17
173:25		146:2	152:1	Claudine
174:2,4,20	Channel	156:6	154:5,17,1	2:17 17:6
,24	22:10	189:16	8 157:11	154:13
179:18,19,	channels	193:12	158:10	155:6,17
20 206:25	22:12	199:5,8	172:3	156:12
226:17	characterize	200:12	205:12	158:8
227:2	198:10	201:9,22	209:24	164:2
228:14 229:8	201:19	222:12	227:24	186:23
236:1,16,2	Charles 2:20	247:2,6	241:11	197:24
5	15:17	248:20	262:21	210:8
240:11,13,		250:10	264:1	clear 25:24
17 256:17	chatting	251:7	265:25	47:17
264:7	144:3	253:12	266:4	59:14
267:5	check 26:6	257:10,11 258:20	clarifies	76:2,5
changed 57:4	58:18	258:20 260:25	125:9	79:23 92:8
96:23	135:25	261:1	clarify 8:3	93:4 99:5
122:19,20	184:13,15	265:14	9:9 17:25	110:4
179:11,15	256:12	266:19,20	45:21	144:9
190:12	checked	267:14	53 : 13 55:4	146:20
192:22	166:1	269:1,21	60 : 23	163:23
changes	checking	270:11	79:12,17	177:16
27:23	67:6 255:6	271:5	95:8 97:13	196:19
31:13,14,1		272:9	98:22	200:7
9 32:17	Chief 91:6	273:15	134:21	201:17 203:3
33:2,6,17	Chippewayan	Chuck ' s	135:14	203:3
43:17	12:25	82:20	153:1	207.24

MVEIRB re JAY	PROJECT 04-	21-2015 P	age 290 of 34	7
212:25	222:25	com 110:15	207:11,19	203:15,23
219:6	clothe 85:20	combination	218:19	204:20
271:7		187:2	219:20	219:16
clearly 73:3	Cluff 3:17		221:3,14	225:14
104:3	co 130:15	combine	222:2	267:12
119:13		268:9	232:12	270:11
198:8	coarse 21:18	combined	243:7	271:11
209:5	131:3,12	39:15 40:6	252:17	272:19,20,
232:3	coastal	51:11	257:18	21,24
272:23	233:24	175:19	258:4	273:6,12
	cobbles 21:7	177:20	260:18	274:1,5,15
Cliffe-	CODDIES 21:7	193:1,3	271:25	commitments
Phillips	coefficient		commenting	7:4 10:1
2:3	176:15	comes 58:24	189:19	18:8,10,18
221:16,17	coefficients	77:12	219:21	81:18
climate	169:19	91:21	221:1	202:14
142:24		149:4	-	202:14
	Coffee 12:14	comfortable	comments 7:7	262:11
clock 243:19	cold 60:11	13:2	82:16 97:5	265:8
265:3		265:22	106:6	266:17
close 37:4	collaborativ	273:16	110:12	271:20,23
41:5,13	e 109:25	comical	113:3,10	272:8
101:5	110:7	86:20	114:12	273:17,21
185:23	270:22	00:20	147:5	275:12
216:17,18	collapsing	coming 45:8	195:23	
231:12	236:23	47:13,22	218:20,25	committed
265:3	collar 47:19	84:21	222:16	101:20
closely 80:1	50:16,20,2	93:17 97:4	255:7	132:25
_	2 175:24	106:15	257:8	133:1
closest		113:25	271:4,18,2 2 272:8	138:24 219:7
13:21	collared	135:18	273:21	268:5
closure	180:12	191:22	274:10	270:24
8:10,11	collaring	commencing		274:9
42:24	223:6	12:1	commit	
159:22	collars	comment 19:3	102:18	committee
160:17	106:17	23:23 50:2	105:4	190:8
161:4	180:6	83:15	217:17,18	committing
162:24	180.0	89:12	250:23	273:7
170:3	223:6,15,1	98:7,8	commitment	common 29:25
171:17	7,19	106:2	23:24	
174:2		107:18	71:23	87:6,7 191:10
206:16,17,	collected	108:4	72:10	258:15
19,20,25	21:15,19	110:15	73:5,18	
207:1,6	35:25	112:11	80:7,13,16	communities
208:4,8,12	36:10	113:13	83:21	30:22
,13 256:2	263:22	115:2	107:22	43:25
257:2	collection	136:10	130:8,15	72:11
269:9	65 : 19	151:24	136:4	75:2,3
closures	collectively	158:7	138:25	86:2 125:3
41:24	236:21	167:3	139:12	132:7
42:20 48:9		179:9	141:1,9,10	134:3
97:25	collision	193:13	156:3,9,12	258:1
167:25	25:21	203:21	,20	community

	PROJECT 04-2	1=2013 Pa	ige 291 of 347	
42:6	37:15	34:22	110:25	consequence
132:3,6	compensation	conceptual	263:9	35:14
134:10,12,	22:15	22:5	conditions	121:2
15,24	25:8,17	126:23	20:23 21:1	161:13
168:16	23:0,17		33:17 40:1	230:20
191:1	complete	127:24		232:8
198:8	10:3 24:6	129:14	164:4,9,18	
244:11	82:14	206:20	186:16	consequence
258:12	267:4	208:4	269:10	206:9
260:22	270:12	concern	conduct 11:9	consequentl
	273:25	87:9,25	34:14	239:21
Comp 73:1		88:8 90:3		
company	completed	134:9,13	conducted	conservatio
45:11,14	29:22	143:15	21:16,19	30:17
72:10 73:5	33:13	192:12,13	34:15	conservatis
74:11	34:24	229:24	99:16	180:14
89:20	82:14	233:8	173:24	
	completely		184:4	conservatis
101:19	197:7	238:10	194:16	s 28:3
102:10,18	219:23	241:22	conducting	43:16
144:10	260:22	253 : 17	21:5	conservativ
149:9	200:22	concerned	21:5	32:23
202:6,16	complexity	20:7	conference	
205:8	160:7	159:14	48:17	35:21 37:
206:10	a a mail i a a ta d	198:12	145:6	105:12
208:10	complicated	233:2		178:15
209:11	234:10	258:23	conferring	226:13
252:21	comply 212:6		45:21	234:23
256:24		concerning	259:8	235:3
company's	component	125:21	confidence	238:20
8:11	30:11	concerns	27:12 28:5	239:18
0.11	72:12	34:7 94:23	177:9	240:3,15
comparable	components	109:23	184:8	244:13
256:13	31:18 61:8		185:19	conservativ
257:3,4		134:4,15 191:24	237:14	s 28:2
	composition	191:24	237.14	S 28:2
compare	42:21 98:2	conclude	confident	consider 9:
263:24	comprehensiv	184:25	21:20	59:16
compared	e 249:2	262:2	43:5,15,19	80:11,14
102:7	e 249.2		178:14	83:3 95:2
195:7	compromising	concluded	186:12	114:14
237:5	245:11	27:22 40:3	C	129:9
	computation	84:10 85:4	confirm	131:8
compares 8:5	194:3	120:3	52:10	133:2,7
79:6 269:4	194:5	162:3	97:21,23	194:24
comparison	computed	conclusion	174:7	
138:24	193:22,23	51:16,19	confusion	196:11
232:9	105 10	112:24	135:22	201:13
	con 125:13		213:19	215:23
256:11	conceivable	119:6		221:24
	245:20	161:21	connecting	227:25
compensate		195:13	36:7	247:12
<pre>compensate 37:16</pre>			001	
37:16	conceivably	244:13,18		248:9
37:16 compensated	130:5	244:13,18 262:7	connectivity	248:9 252:12
37:16	_			

MVEIRB re JAY PROJECT 04-21-2015 Page 292 of 347

MVEIRD IE JAI	PROJECT 04-	21-2013 Pa	age 292 of 34	1
considerable	102:16	contentious	contrary	207:24
109:24	129:23	52:2	123:12	209:19
consideratio	135:9			210:9
	137:19	CONTENTS 7:1	contribute	233:14
n 50:2	construction	context	9:5 142:23	244:16
123:3		80:15	261:25	245:1
125:22	20:23 22:20	81:24	269:25	248:21
152:9	81:4,7	83:10	contribution	251:8
155:25	130:11	140:14	44:3	265:22,23
253:5	148:5,12,1	153:4	117:24	267:2,11,1
consideratio	3,17	243:10,15	119:4	2,17
ns 95:25	149:6,9	257:6,16	121:22	269:19
124:6		264:16,24	132:20	276:11
128:4	consult	266:10,12	contribution	corrected
173:17	163:1	contiguous	s 120:23	234:21
considered	consultant	38:23		
27:15 33:4	73:24 74:6	continuation	control	correction
37:12	202:22	243:22	98:18	233:13
88:1,2,12	203:9	243:22	192:10	234:15
100:6	consultants	continue	Contwoyto	correctly
143:5	74:8 86:22	35:1 49:16	54:20	138:19
166:23,24	89:19	57:24	62:21	157 : 10
204:5		80:25 94:7	91:19	228:9
247:21	consultation	110:21	conversation	263:8
253:19	8:10 132:6	112:5	64:21	266:18
266:22	consultative	113:5	211:25	correlate
considering	108:2	156:21	215:15	263:15
64:8	Consulting	196:24	236:16	correlation
124:13,19,	3:13 17:9	205:9,20	conversation	182:19,22
25 203:7,8		233:18 243:12,17	s 215:7	195:14
259:21	consumption	243:12,17 276:3		
263:5	257:25		conversion	correspond
consistent	259:4	continued	134:18	41 : 15
23:3 139:1	cont 119:6	243:21	138:11	230:15
213:2	261:25	257:25	converts	corridor
228:20	Con't 3:1	266:23	135:15	47:19,20
232:1	4:1 5:1	continuous	convey 99:4	cos 34:10
	6:1 9:1	128:8	-	
constant		continuously	convinced	cost 35:10
37:10	contain	97:8 198:2	188:17	61:5,13
182:5	22:12		core 176:19	100:13,16
constraint	97:24	contractor		101:6
128:19	149:11	21:17	corner	130:12
construct	contained	contradict	238:12	142:1
42:12	206:21	266:6	correct	231:3,4
68:11	208:9	contradictio	58:18 59:5	233:19
102:2	contains	n 264:2	65:1	costly 61:20
103:2	249:1	266:11	69:8,10	62:2
constructed	content		70:8 82:19	costs
34:13 42:7	ontent 93:22	contradictor	122:1	35:11,22
68:24,25	134:22	y 9:10	146:14	38:15
70:11	197.22	270:6	175:22	60:16 61:7
/ U • I I				

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MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 293 of 347	7
64:5	112:7	187:21	167:23	243:22
109:16	135:1,9	188:11,15	267:19	244:4
112:13	199:21	cross 38:19	268:1	247:12
231:5	217:20	51:8	269:4,6	248:10
233:21	224:22	52:11,12	cross-	251:9
235:5	248:2	52:11,12 58:1 64:9	section	252:4,14,1
237:5				9 255:7,16
238:21	Courses	69:16 72:4	126:16,22,	262:3
239:11,17,	185:3	99:22	23	269:25
22,24	cover 12:7	105:21	127:6,24	
cou 57:14	33:23	crossed 51:7	crowd 146:16	Cunning 3:5 16:12
104:3	137:23	99:23	crucial	10:12
	coverage	crossing	226:5	curious
Coulton 2:25	66:22	34:10		51:21 52:4
16:25		42:8,13	crush 8:3	94:3 143:3
27:7,9,10	covered 42:8	47:20	131:3,8,9	166:7
Council 6:5	67 : 16	57:25	133:19	223:10
15:6	covering	67:24	134:7	curr 44:4
189:24	66:25	68:6,12,14	137:5,21,2	Cull 11.1
109:24		,18 77:9	4 138:1,18	current
counsel	covers 54:23	,10 //:9 81:5	269:3,5	23:19 30:2
2:13,22	cows 178:2	86:19,23	272:1	33:10 44:4
14:4 17:11	180:12	86:19,23 87:22	crushed	49:13
counted	191:4,8	87:22 100:4	34:11 42:9	62:20
36:24	233:21		131:1	76:18
37:4,6		103:3,12,1	121:1	83:12
57:4,0	cradle-to-	4 125:20	crusher	98:9,14
counting	grave	126:7	21:17	119:3
36:20	208:22	128:9,15,2	135:19	133:5
country	create 32:20	1 135:7	crystal	151:11
127:17	168:15	136:22	146:20	156:21
261:22		137:18		174:15,16
	created	138:16	culminating	184:3
couple 23:7	25:16,17	207:6	171:20	186:12,24
48:25	creating	209:13	cultural	219:9
65:1,2	128:11	220:8	30:9 72:12	227:3
79:1,7		221:1		228:1
93:2	Creator 87:1	crossings	cumulative	240:10
107:12	creep 217:3	8:4,6	9:5 28:11	243:10,11
109:1	criteria	11:5,8	33:5,16,17	currently
137:16	68:12	34:13 42:3	44:4 45:23	83:13
186:25	208:12	68:6 , 25	113:12,17	131:17
223:14	208:19	69 : 17	114:1,20	172:13
224:8		70:11 71:1	123:10	200:3,14,1
237:21	critical	76:25 81:6	170:2	200:3,14,1 8 214:18
238:23	56:21	101:21	175:8	8 214:18 260:4
268:4	72:12	102:3,11,1	179:6	
271:18	111:19	6 104:4,6	182:7	261:5
272:8	204:1	130:25	225:20,23	curve 40:17
coupled	219:8	131:2,11,1	227:13	160:9
223:8	Croft 4:8	8	232:24	cut 90:11,12
	110:13,14	132:2,9,17	234:17	136:18
course 18:1 49:12	185:24	135:10	235:24	
//		138:13,18	240:17	cuts 42:4,7

1 - 25-14	24 102 24	010.0	45.14 74.0	220.22
cycle 35:14	24 193:24	218:8	45:14 74:2	229:23,2
117:17	194:4,6,14	225:8	December	234:2
237:9,15	,15,18	DCSM5406	20:17	243:2
241:4	195:1,2	137:3	198:22	244:1
cycles 27:21	196:18	DDC 169:13	desimber	256:9,1
117:19	231:18		decipher	decrease
237:9	235:1	262:21	145:25	33:25 3
241:13,20	239:7,13	DDEC	decision	35:12
	240:1	8:3,8,13	77:16	40:20
cyclical	263:8	9:3	79:16,22	60:18
27:20 28:1	date	10:3,16	106:21	
	36:18,19	11:3,9,15	125:15	decreased
D	45:9		148:23	161:17
Damian 3:12	146:14	de 2:4 13:16	155:10,19	decreasin
15:15	274:3	119:10	221:20	43:21
		139:15	234:15	
Dan 2:25	Dave 4:19	140:5		dedicated
16:25	day 1:22	143:11	decision-	98:16
27:7,9	18:15 24:8	211:23	making	deemed
DAR 21:22	37:3,10	218:5	218:14	173:15
		219:24	decisions	
28:3 29:21	48:1 49:21	220:11,15	98:24	deeper 25
31:5 33:12	53:19	265:24		254:9
35:19 43:4	55:10,12,1	267:22	222:4	define 67
57:6 63:12	5,18 79:5	268:24	declaring	derine 07
70:22	92:9	271:19,22	117:1	defined
102:13	112:22	272:9	dealize 10 1	153:25
105:10	139:13	274:19	decline 19:1	Definitel
113:22	143:17	275:18	27:14 30:3	137:8
124:8	155:15,21		40:8,12,14	
150:9	178:7	dead 105:10	58:5	210:6
158:22	187:16	192:21	161:15	definitio
167:12	197:14	210:19	177:11	119:11,
175:9	221:21	deal 20:4,6	226:18,19,	121:7
206:21	224:22	45:8	21,22,25	
208:5	235:8		227:6,15,2	deflected
222:20	243:5	110:17	2 229:6	39:9 51
226:2	262:13	112:14	231:12,15	60:14,2
248:25	266:21	114:24	232:1,5,6,	64:4 71
250:15	267:20	123:14	19 234:3	76:14
263:10	269:2	132:15	238:17	deflectio
267:1	271:17	141:17	240:6,11	39:10
207.1	272:5	dealing		61:14 6
dare 82:24		190:21	declined	70:24
dash 146:25	273:3	222:3	41:2	
	276:1		179:14	76:12,2 77:24
data 21:21	days 37:2	deals 56:11	229:17	
35:6,25	39:23 40:4	dealt 26:19	261:20	78:18,2
36:10	41:1,10,11	190:20	declines	79:6 92
37:25	48:10 49:1		230:22	94:5
39:20	54:24	Dean 3:17		95:19,2
50:16,21,2	100:24	debated	declining	96:4,7
2 75:14	109:6,8,12	207:18	116:7	99:18
174:20	111:6,8,17		227:5	105:14,
175:21,23,	213:11	decades	228:2	231:4,5

MIND IE UNI	PROJECT 04-2	21-2015 Pa	age 295 of 347	
267:3	Denholm 3:13	described	30:4 80:21	142:8
272:13	17:8	51:12	97:25	236:18
deflections	148:9,25	72:12	103:8,19,2	deterrent
96:2	149:1	80:23	3 104:14	166:7,10
262:24	166:14,15	179:3	132:13	
		182:2	224:2	develop 78:
264:5,6	densities 255:23	269:15	details	developed
degree 66:24	200:20	describing	23:9,14	150:4
175:11	density	-	97:13	212:21
delay 158:11	124:12	92:25		234:7
159:23	256:3,8,11	156:12	106:10	
100.20	,12	description	109:4	developer
delayed	257:3,4	8:2 9:2	148:23	48:18
158:19		10:2 11:2	235:9	127:20
deliberate	d'entremont	248:2	265:6,9,11	152:13
234:14	14:16	250:13	dete 63:17	253:16
234:14	258:9			Developer's
demand 53:8	d'Entremont	descriptions	detecin	29:18
216:2	5:22 14:17	34:9	255:24	29:18
demands	258:10	design 20:17	detect	developing
216:3		21:13,20,2	65:13,25	77:20
	depend 27:21	2 32:4,7	66:9 96:20	108:19
demographic	109:18	42:15	174:24	151:23
30:20	151:13	68:12	223:22	173:10
236:22	dependent	103:8,19,2		
domographics	164:3	3 104:14	detected	development
demographics 242:14	178:5	167:23	66:13	30:2 31:6
242:14		249:11	detecting	33:1,14,1
demonstrate	depending	249.11	63:18	37:11 38:
188:7	33:20	designated	65:5,11	40:24
228:11	54:24 58:6	22:14	66:4	85:17,23
demonstrated	99 : 22	158:12	195:15	86:2
	105:12	designed		152:20
231:1	136:9	68:14	detection	161:16
238:20	depends	68:14	63:14,20	172:17
Dene 26:9	164:6	designing	64:24 66:1	226:16
50:6 51:20		78:1	96:16	227:20
84:23,24	236:6	designs	255:24	229:1,7
85:1,2,13,	deployed	23:14 30:6	determinatio	230:20
17 86:5	67 : 14	23:14 30:6		232:2
87:4,7	deposition	desirable	n 27:22	233:19,22
90:3,11	160:22	260:14	28:5 31:21	239:10
91:6,7	TONIZZ	Despite	35:18	240:6
116:16,22	Der 6:10	-	130:18	245:22
118:6	14:23,24	195:20	determine	247:14
	derived	destination	270:5	248:11,22
120:6 121:20		160:8		250:9
	256:3	dotoch	determined	260:9
142:16	descri 25:16	detach	34:21	269:24
162:8	describe	112:23	38:16	
166:4		detail	39:9,18	development
167:14	23:11	107:14	153:23	36:3,9,12
168:24	115:14	199:23	187:19	37:23
	1.1.4.1.0	= -	000 4	
207:12 208:18,22	174:18 211:2	200:2	238:4	43:19

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 296 of 34	7
113:19	131:17,25	267:9	237:4	157:24
184:6	132:25	268:3,19	differences	dimmed 29:12
208:23	133:24	271:3	49:22	
226:24	134:17	272:18		direct 32:12
247:8,22	135:17	273:22	different 13:9 54:7	43:24
248:6	138:4,21	275:1,15,2	62:13,18,1	160:12
249:3	140:24	3	9 63:2,11	directed
deviations	145:11 146:4,10	Diamonds	68:12	167:22
159:17	140:4,10	69 : 16	86:12	269:16,22
Diamond 2:15	150:2	73:21	89:17	direction
7:9 15:18	151:2,8	79:13	115:13,17	39:11
16:20	153:1	206:15	117:13,16	67:17 99:5
17:5,7	154:14	215:7	120:23	229:2
18:2,19,23	155:7,18	247:17	121:2	directional
20:3,14	156:11	265:10	125:15	199:20
23:2 26:20	157:3,20	Diamond's	144:19	
27:7	158:9	20:18	167:11	directly
29:5,8,14	159:7,12	140:3	175:20,25	27:3 74:4
42:11	162:23	152:12	176:9	directors
45:21	164:3,20	Diana 4:4	178:6,17,1	89:22
46:4,5	165:6		8,19	dis 36:12
48:23	168:12	Diavik 38:24	181:19	
53:1,13	169:6,17	39:16,20	183:22	disagree
55:4	170:18	51:12	186:15,25	232:17
56:2,7	171:7	58:13 169:24	190:13	242:9
57:13	174:14	171:17	204:15	disagreement
59:7,19 60:4 63:1	185:8	175:14,18	206:2 220:12	s 234:19
65:10 66:8	186:24	176:17	225:22	discrepancy
67:4,12	194:24 196:10,16	177:19	228:12	172:4
68:9 69:7	198:10,10	178:12	233:24	
70:8 73:11	200:7,23	182:13	236:7	discuss
74:19,23	203:15	195:12	244:9,10	64:16
80:7 81:18	205:18	266:25	264:25	113:12
83:8	206:1	267:17	differently	143:12 167:9
88:7,11	207:9	Diavik/Ekati	168:4	
89:13,18,2	208:4	175:18		discussed
4 92:20	209:19		difficult	26:8
94:13 95:4	210:9,24	Diavik's	55:25 77:3	114:23
96:11	212:24	29:23	111:25	208:20
97:8,11,19	216:10,24	33 : 15	129:6	218:7
98:5 99:2	219:6	diet 85:19	130:14	270:1
102:1,22	220:21	192:22	183:20	discussing
104:10,21	222:8	differ	198:14	207:25
105:16	223:20	125:11	260:5 261:25	discussion
107:10 116:21,23	224:8	148:19		22:3 56:21
116:21,23	227:9	difference	dig 69:9	59:12
124:25	250:25	49:23	110:22	63:19
127:2	251:15,21 253:23	49:23 78:22	digging	83:20
128:4	263:7	106:17	113:5	84:25
129:6	264:15,22	184:5	dike 20:16	90:22
130:7	266:8	227:19	21:20,22	93:18
	200.0		LI.LU,LL	

127:3 139:7 distrib	Duted DL10 198:5 98:6 DNA 255:23 Doan 5:8 31:4 14:9 ,17 doctor 4 23:3,9,25 108:17 194:21 7,21 202:24 7 211:12	70:8	158:9 159:7,12 162:23 164:3,20 165:6 168:12 169:6,17 170:18 171:7 174:6,14,2 1 185:8
123:5,7 23:23 127:3 district 139:7 district 140:10,25 27:18 141:7 32:15 142:3,6 33:11 144:3 55:24 145:12 111:1 166:16 138:7 175:12 155:1 208:7,13 167:1 217:13,17 176:1 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 143:14 200:4 displace 235:1	98:6 DNA 255:23 Doan 5:8 14:9 31:4 14:9 doctor 146: doctor 146: 4 23:3,9,25 108:17 194:21 7,21 202:24 7 211:12	59:7,19 60:4 63:1 65:10 66:8 67:4,12 68:9 69:7,15 70:8 73:11,21 74:19,23 75:24,25	162:23 164:3,20 165:6 168:12 169:6,17 170:18 171:7 174:6,14,2
123:5,7 23:23 127:3 distrik 140:10,25 27:18 141:7 32:15 142:3,6 33:11 144:3 55:24 145:12 111:1 166:16 138:7 175:12 155:1 208:7,13 167:1 217:13,17 176:1 224:21 disturk 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 143:14 200:4 displace 235:1	98:6 DNA 255:23 Doan 5:8 14:9 31:4 14:9 doctor 146: doctor 146: 4 23:3,9,25 108:17 194:21 7,21 202:24 7 211:12	60:4 63:1 65:10 66:8 67:4,12 68:9 1 69:7,15 70:8 73:11,21 74:19,23 75:24,25	164:3,20 165:6 168:12 169:6,17 170:18 171:7 174:6,14,2
127:3 distrik 139:7 distrik 140:10,25 27:18 141:7 32:15 142:3,6 33:11 144:3 55:24 145:12 111:1 166:16 138:7 175:12 155:1 208:7,13 167:1 217:13,17 176:1 224:21 disturk 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 143:14 200:4 displace 235:1	DNA 255:23 Doan 5:8 31:4 14:9 doctor 146: doctor 1	1 65:10 66:8 67:4,12 68:9 69:7,15 70:8 73:11,21 74:19,23 75:24,25	165:6 168:12 169:6,17 170:18 171:7 174:6,14,2
140:10,25 27:18 141:7 32:15 142:3,6 33:11 144:3 55:24 145:12 111:1 166:16 138:7 175:12 155:1 208:7,13 167:1 217:13,17 176:1 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 143:14 200:4 displace 235:1	31:4 Doan 5:8 14:9 17 doctor 146: 4 23:3,9,25 108:17 194:21 202:24 7	67:4,12 68:9 69:7,15 70:8 73:11,21 74:19,23 75:24,25	168:12 169:6,17 170:18 171:7 174:6,14,2
141:7 32:15 142:3,6 33:11 144:3 55:24 145:12 111:1 166:16 138:7 175:12 155:1 208:7,13 167:1 217:13,17 176:1 224:21 disturk 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 143:14 200:4 displace 235:1	,17 doctor 146: document 4 23:3,9,25 108:17 194:21 7,21 7 202:24 7 211:12	1 68:9 69:7,15 70:8 73:11,21 74:19,23 75:24,25	169:6,17 170:18 171:7 174:6,14,2
142:3,6 33:11 144:3 55:24 145:12 111:1 166:16 138:7 175:12 155:1 208:7,13 167:1 217:13,17 176:1 224:21 disturk 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 143:14 200:4 displace 235:1	,17 doctor 146: document 23:3,9,25 108:17 194:21 7,21 7 202:24 7 211:12	1 69:7,15 70:8 73:11,21 74:19,23 75:24,25	170:18 171:7 174:6,14,2
144:3 55:24 144:3 111:1 166:16 138:7 175:12 155:1 208:7,13 167:1 217:13,17 176:1 224:21 disturk 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 143:14 200:4 displace 235:1	4 document 4 23:3,9,25 108:17 194:21 7,21 202:24 7 211:12	70:8 73:11,21 74:19,23 75:24,25	171:7 174:6,14,2
145:12 111:1 166:16 138:7 175:12 155:1 208:7,13 167:1 217:13,17 176:1 224:21 disturb 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 143:14 200:4 displace 235:1	4 23:3,9,25 108:17 7,21 202:24 7 211:12	73:11,21 74:19,23 75:24,25	174:6,14,2
166:16 138:7 166:16 155:1 175:12 155:1 208:7,13 167:1 217:13,17 176:1 24:21 disturk 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 134:25 169:1 143:14 200:4 displace 235:1	7,21 7 7	74:19,23 75:24,25	
175:12 155:1 208:7,13 167:1 217:13,17 176:1 224:21 disturk 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 143:14 200:4 displace 235:1	7,21 7 7	75:24,25	1 185:8
208:7,13 167:1 217:13,17 176:1 224:21 disturk 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 143:14 200:4 displace 235:1	7,21 194:21 7 202:24 7 211:12		1
217:13,17 176:1 224:21 disturk 242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 134:25 169:1 143:14 200:4 234:2 235:1	7 211:12	79:13 80:7	186:24
224:21 disturb 24:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 134:25 169:1 143:14 200:4 234:2 235:1	211:12	1	190:2
242:17 32:15 243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 134:25 169:1 143:14 200:4 displace 235:1	213.2	81:18	194:23
243:10,11, 37:10 22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 134:25 169:1 143:14 200:4 displace 235:1		83:3,8	196:10,16
22 244:4 43:24 252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 134:25 169:1 143:14 200:4 displace 235:1	215:24,25		198:17
252:5 99:19 255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 134:25 169:1 143:14 200:4 displace 235:1	218:22,23	89:13,18,2	
255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 134:25 169:1 143:14 200:4 displace 235:1	226:1	4 92:20	8 200:7,23
255:4 100:3 273:8,11 126:2 discussions 127:1 84:22 144:2 134:25 169:1 143:14 200:4 displace 235:1	, ²⁰ documented	94:13 95:4	
discussions 127:1 84:22 144:2 134:25 169:1 143:14 200:4 displace 235:1	aocumenceu	96:11	203:15
84:22 144:2 134:25 169:1 143:14 200:4 displace 235:1		97:7,11,19	
134:25 169:1 143:14 200:4 displace 235:1		98:5 99:2	206:1,15
143:14 200:4 displace 235:1	5 documents	102:1,22	207:9
displace 234:2	9 23:18	104:10,21	208:4
displace 234:2 235:1	171:2	105:16	209:19
- 235:		107:10	210:9,24
154:21		116:21,23	212:5,6,24
disturb	219:11	120:18	214:2
displacement 38:16	269:17	124:2,25	215:7
127:15,22	2/4:22	125:25	216:10,24
displaying 183:1	J = = 104 15	126:3	218:17
60.21	191:15	127:2	219:6
disturb		128:4,16	220:21
disseminated 144:1	101 10 14	129:6	222:8
195:10 145:9	191:13,14		223:20
disseminatio diversi	on Domin 46:4	131:17,25	224:8
n 186:5,13 22:6,	10,11 Dominion	132:25	227:8
. 12	2:15 7:9	133:24	234:25
distance	0 0 10 10	134:17	236:20
37:11 diversi	1 - 1 0	100.17	237:8,12 240:9
39:10,13 22:9,	16:20	138:4,21 139:19	240:9
54:3 66:10 diversi	.ty 17:5,7,11		
67:14,15 160:6	18:2,19,2	11010111	250:12,15,
68:23 95.25 98.1 diverte		± 10 0 0 / ± ±	23,25
95:25 98:1 diverte	21:21 23:	110.1/10	25,25
157.05	26.20 27.	± 1 / • 5 / ± ±	252:18
150 1	29:5.8.14	100.2	253:6,23
158:1 172:16,17 215:5	,23 42:11	152:11	257:21
176:15,19, Divisi c		152:11	261:2
24 17:16		154:14,19	262:9,12
27	,21 46:4,5	155:7,18	
14.17	18.23		///////
distances 14:17	48:23 53:1 13	156:11	263:7 264:15,22

227:12 130:23 211:1 du 77:9 16,19,22 232:21 132:11 213:1,2 255:22 4 196:2, 234:20 133:13 217:4 due 173:25 ,19,22 249:22 148:15 23 20:3,4,11 264:7 269:8,17	MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 298 of 34 ⁻	7
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	266:8	267:13	151 : 25	270:20	17:10
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	267:9	Donihee 2.13	153:18	273:24,25	Dufour $4 \cdot 21$
			154:16	275:17	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				drafting	-
$ \begin{bmatrix} 270:4,12,1 \\ 6 271:3 \\ 273:12 \\ door 12:22 \\ 165:10 \\ 273:22 \\ dots 65:20 \\ 170:23 \\ 100:1 \\ 175:5 \\ 175:5 \\ 176:6 \\ 175:5 \\ 176:6 \\ 177:5 \\ 186:14 \\ 177:15,21 \\ 109:23 \\ 109:12 \\ 108:21 \\ 108:21 \\ 108:21 \\ 108:21 \\ 108:10 \\ 116:6 \\ 109:15 \\ 109:15 \\ 109:15 \\ 109:15 \\ 109:16 \\ 109:15 \\ 109:16 \\ 109:15 \\ 109:16 \\ 109:15 \\ 109:16 \\ 109:15 \\ 109:16 \\ 109:12 \\ 109:12 \\ 109:14 \\ 120:10 \\ 111 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 109:11 \\ 120:10 \\ 10$				-	48:20
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					duration
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$					159:22
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		door 12:22			263:1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		dots 65:20		110:1	dumina
$\mathbf{Dominion's}$ 135:25176:658:421:7,15 $\mathbf{Dominion's}$ 168:14177:15,21draw 109:2522:20:25108:21doubt 249:21179:24129:15,1826:5,25109:15Doug 5:84drill 25:3:2559:4 76:110:6Doug 5:84drill 25:3:2559:4 76:241:3downind183:3drilling111:8,15241:3downind183:3drilling111:8,15241:3downind183:3drilling111:8,15241:4Don 238:2Dr 13:24230:8,13driven 74:7177:11done 11:1117:2 26:21233:1118,20,22,2234:4dust 6:9,140:1827:8,9,1118,20,22,2234:4dust 6:9,174:875:547:10 51:410,11,12,1106:2529:10,278:579:1952:9 56:2410,11,12,1106:2529:10,290:258:1461:2246:7,2054:11,12123:8,911:2471:11244:1754:1116:18,212:875:2324:4,20245:2,1954:11,12123:8,912:1410:1124:1210:3,16237:720,2314:1218:12,2583:14 98:724:1316:14,2512:3118:12,2583:14 98:724:216:1410:3,16237:724:2:116:14,2511:2471:1124:1310:3,16237:712:3213:14dratt19:6:812:2:2,2 <th></th> <td>double</td> <td></td> <td>dramatically</td> <td>-</td>		double		dramatically	-
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	0,23			58:4	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Dominion's			draw 100.25	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	98:9			GIAW 109.25	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	108:21			-	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	109:15	doubt 249:21		129:15,18	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	110:6	Doug 5:8		262:7	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	147:9	-	=	drill 253:25	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	156:8				
257:15 00.123 $1011, 1, 10$ $1011, 1, 10$ $1011, 1, 10$ $001 238:2$ $0r 13:24$ $228:6$ $249:22$ $9150:4, 173:19$ $done 11:11$ $17:2 26:21$ $233:11$ $123:18$ $185:2$ $40:18$ $27:8, 9, 11$ $18, 20, 22, 2$ $233:14$ $123:18$ $185:2$ $40:18$ $27:8, 9, 11$ $18, 20, 22, 2$ $234:4$ $262:12$ $262:12$ $64:23 66:3$ $29:15$ 3 3 $236:5, 8, 9, 9$ $driver 54:11$ $28:10$ $74:8 75:5$ $47:10 51:4$ $236:5, 8, 9, 9$ $driver 54:11$ $28:10$ $76:5 79:19$ $52:9 56:24$ $4, 15$ $drivers$ $114:19$ $104:17$ $63:24 68:3$ $237:20$ $54:11, 12$ $122:8, 9$ $111:24$ $71:11$ $244:17$ $driver's$ $153:10$ $117:20$ $82:4, 20$ $246:7, 20$ $driving 54:2$ $166:18, 2$ $123:20$ $100:11$ $246:7, 20$ $driving 54:2$ $166:14$ $126:4$ $107:24$ $272:22$ $181:9$ $165:21, 2$ $144:22$ $106:18$ $107:17$ $242:2$ $183:5, 7$ $145:2$ $113:14$ $draft$ $196:8$ $182:12, 12$ $146:5, 7$ $115:10, 18$ $10:3, 16$ $237:7$ $20, 23$ $158:14$ $116:4$ $23:2, 3$ $drop 242:6$ $186:4, 5, 7$ $144:25$ $119:15$ $107:4, 17$ $242:2$ $183:5, 17$ $196:21$ $120:8, 17$ $173:12$ $drop 228:23$ $7, 10, 13, 2$ $194:25$ <th< td=""><th>241:3</th><td></td><td></td><td>-</td><td></td></th<>	241:3			-	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	257:15	86:15			
Internal $16:14,25$ $230:0,13$ driven $74:7$ $177:11$ done $11:11$ $17:2 26:21$ $233:11$ $123:18$ $185:2$ $40:18$ $27:8,9,11$ $18,20,22,2$ $234:4$ $185:2$ $64:23 66:3$ $29:15$ 3 $driver 54:11$ $28:10$ $74:8 75:5$ $47:10 51:4$ $10,11,12,1$ $106:25$ $29:1,2$ $90:2$ $58:14 61:2$ $4,15$ $drivers$ $114:19$ $90:2$ $58:14 61:2$ $4,15$ $driver's$ $153:10$ $111:24$ $71:11$ $240:8$ $54:11,12$ $123:8,9$ $111:24$ $75:23$ $245:2,19$ $54:1$ $160:18,2$ $117:20$ $82:4,20$ $246:7,20$ $driving 54:2$ $161:14$ $122:4$ $107:24$ $261:8$ $107:2$ $163:8$ $144:22$ $108:9$ $272:22$ $181:9$ $165:21,2$ $144:22$ $108:9$ $272:22$ $181:9$ $165:21,2$ $144:22$ $108:9$ $272:22$ $181:9$ $165:21,2$ $144:22$ $108:9$ $10:3,16$ $237:7$ $20,23$ $158:14$ $116:4$ $23:2,3$ $drop 242:6$ $186:4,5,7$ $169:3$ $118:12,25$ $83:14$ $98:7$ $drove 228:23$ $7,10,13,$ $196:21$ $120:8,17$ $173:12$ $drove 228:23$ $7,10,13,$ $198:4,15$ $25:124:2$ $202:23$ dry $195:4,6,$ $227:12$ $132:11$ $213:1,2$ $255:22$ 4 $198:4,15$ $25:124:2$ $202:23$ dry	Don 238.2	Dr 13:24		249:22	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	DOII 230.2	16:14,25	-	driven 74:7	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		17:2 26:21		123:18	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		27:8,9,11		182:21	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	64:23 66:3	29:15		234:4	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		46:25	÷	driver 54.11	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		47:10 51:4			
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		52:9 56:24			
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		58:14 61:2			
111.24 $71:11$ $244:17$ $driver's$ $15:10$ $117:20$ $82:4,20$ $245:2,19$ $54:1$ $160:18,2$ $123:20$ $100:11$ $246:7,20$ $driving 54:2$ $161:14$ $126:4$ $107:24$ $261:8$ $107:2$ $163:8$ $144:22$ $108:9$ $draft$ $196:8$ $182:12,1$ $146:5,7$ $115:10,18$ $10:3,16$ $237:7$ $20,23$ $158:14$ $116:4$ $23:2,3$ $drop 242:6$ $186:4,5,7$ $166:8$ $117:10$ $80:12 82:1$ $dropped$ $,15,25$ $194:25$ $119:15$ $107:4,17$ $242:2$ $187:1,5,7$ $196:21$ $120:8,17$ $173:12$ $drove 228:23$ $7,10,13,70,13,16$ $197:18$ $121:10,14,17$ $242:2$ $188:3,18$ $200:9,15$ $125:8$ $210:25$ $dry 90:11,12$ $195:4,6,720$ $232:21$ $132:11$ $213:1,2$ $255:22$ $4 196:2,720$ $234:20$ $133:13$ $217:4$ $due 173:25$ $,19,22$ $242:2$ $148:15$ 23 $20:3,4,11$ $264:7$ $269:8,17$		63:24 68:3		54:11,12	
112:8 $75:23$ $243:1,19$ $54:1$ $153:10$ $117:20$ $82:4,20$ $245:2,19$ $245:2,19$ $160:18,2$ $123:20$ $100:11$ $246:7,20$ $driving 54:2$ $161:14$ $126:4$ $107:24$ $272:22$ $181:9$ $165:21,2$ $144:22$ $108:9$ $272:22$ $181:9$ $165:21,2$ $145:2$ $113:14$ $draft$ $196:8$ $182:12,1$ $146:5,7$ $115:10,18$ $10:3,16$ $237:7$ $20,23$ $158:14$ $116:4$ $23:2,3$ $drop 242:6$ $186:4,5,$ $166:8$ $117:10$ $80:12 82:1$ $dropped$ $,15,25$ $194:25$ $119:15$ $107:4,17$ $242:2$ $187:1,5,$ $196:21$ $120:8,17$ $173:12$ $drove 228:23$ $7,10,13,$ $197:18$ $121:10,14,$ $194:21$ $229:10$ 220 $198:4,15$ $25 124:2$ $202:23$ $dry 90:11,12$ $195:4,6,$ $227:12$ $130:23$ $211:1$ $du 77:9$ $16,19,22$ $232:21$ $132:11$ $213:1,2$ $255:22$ $4 196:2,$ $234:20$ $133:13$ $217:4$ $due 173:25$ $197:5,7,$ $238:15$ $147:7$ $218:18,22,$ $176:23$ $198:6,9$ $251:23$ $149:13$ $220:3,4,11$ $264:7$ $269:8,17$		71:11		driver's	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		75:23			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				-	
144:22 $108:9$ 10111 $1011:9$ $1031.21, 2$ $145:2$ $113:14$ $draft$ $196:8$ $182:12, 1$ $146:5, 7$ $115:10, 18$ $10:3, 16$ $237:7$ $20, 23$ $158:14$ $116:4$ $23:2, 3$ $drop 242:6$ $183:5, 7$ $166:8$ $117:10$ $80:12 82:1$ $drop 242:6$ $186:4, 5, 6$ $169:3$ $118:12, 25$ $83:14 98:7$ $242:2$ $187:1, 5, 5$ $194:25$ $119:15$ $107:4, 17$ $242:2$ $187:1, 5, 7$ $196:21$ $120:8, 17$ $173:12$ $drove 228:23$ $7, 10, 13, 20$ $198:4, 15$ $25 124:2$ $202:23$ $dry 90:11, 12$ $188:3, 18$ $200:9, 15$ $125:8$ $210:25$ $du 77:9$ $16, 19, 22$ $232:21$ $132:11$ $213:1, 2$ $255:22$ $4 196:2, 197:5, 7, 7, 19, 22$ $234:20$ $133:13$ $217:4$ $due 173:25$ $,19, 22$ $249:22$ $148:15$ 23 $264:7$ $269:8, 17$ $249:22$ $149:13$ $220:3, 4, 11$ $Drofer 2:02$ $269:8, 17$					
146:5,7115:1410:3,16237:720,23158:14116:423:2,3drop 242:6183:5,7166:8117:1080:12 82:1dropped,15,25194:25119:15107:4,17242:2187:1,5,196:21120:8,17173:12drove 228:23,20198:4,1525 124:2202:23dry 90:11,12188:3,18200:9,15125:8210:25du 77:916,19,22232:21132:11213:1,2255:224 196:2,238:15147:7218:18,22,176:23198:6,9249:22148:152320:3,4,1120:3,4,11255:23149:13220:3,4,1120:3,4,1120:3,17					
158:14 $116:10,10$ $120:2,10$ $drop 242:6$ $183:5,7$ $166:8$ $117:10$ $80:12 82:1$ $dropped$ $,15,25$ $194:25$ $118:12,25$ $83:14 98:7$ $242:2$ $187:1,5,$ $194:25$ $119:15$ $107:4,17$ $242:2$ $187:1,5,$ $196:21$ $120:8,17$ $173:12$ $drove 228:23$ $,20$ $198:4,15$ $25 124:2$ $202:23$ $dry 90:11,12$ $188:3,18$ $200:9,15$ $125:8$ $210:25$ $du 77:9$ $16,19,22$ $232:21$ $132:11$ $213:1,2$ $255:22$ $4 196:2,$ $238:15$ $147:7$ $218:18,22,$ $176:23$ $198:6,9$ $251:23$ $149:13$ $220:3,4,11$ $202:3,4,11$ $269:8,17$					
166:8117:10133:121470 242:6186:4,5,169:3118:12,2580:12 82:1drop 242:6186:4,5,194:25119:15107:4,17242:2187:1,5,196:21120:8,17173:12drove 228:237,10,13,197:18121:10,14,194:21229:10188:3,18200:9,15125:8210:25dry 90:11,12195:4,6,227:12130:23211:1du 77:916,19,22232:21132:11213:1,2255:224 196:2,234:20133:13217:4due 173:25197:5,7,249:22148:1523264:7269:8,17255:23149:13220:3,4,11Duffer 2:20269:8,17269:8,17				231:1	
169:3117.1000.11 02.11dropped,15,25194:25119:15107:4,17242:2187:1,5,196:21120:8,17173:12drove 228:237,10,13,197:18121:10,14,194:21229:10188:3,18200:9,15125:8210:25dry 90:11,12195:4,6,227:12130:23211:1du 77:916,19,22232:21132:11213:1,2255:224 196:2,234:20133:13217:4due 173:25,19,22249:22148:1523264:7269:8,17255:23149:13220:3,4,11Duffer 2:2020				drop 242:6	
103.3118:12,2503:14 98:7242:2187:1,5,194:25119:15107:4,17242:2187:1,5,196:21120:8,17173:12drove 228:237,10,13,197:18121:10,14,194:21229:10188:3,18200:9,15125:8210:25dry 90:11,12195:4,6,227:12130:23211:1213:1,2255:224 196:2,232:21132:11213:1,2255:224 196:2,234:20133:13217:4due 173:25,19,22249:22148:1523264:7269:8,17255:23149:13220:3,4,11Duffer 2:20				dropped	
119:13 107:4,17 196:21 120:8,17 197:18 121:10,14, 198:4,15 25 124:2 200:9,15 125:8 227:12 130:23 232:21 132:11 234:20 133:13 249:22 148:15 251:23 149:13 256 25 149:13					
197:18120:0,17199:12100:0 220:23198:4,1525 124:2202:23dry 90:11,12188:3,18200:9,15125:8210:25dry 90:11,12195:4,6,227:12130:23211:1du 77:916,19,22232:21132:11213:1,2255:224 196:2,234:20133:13217:4due 173:25,19,22249:22148:1523264:7269:8,17255:23149:13220:3,4,11Drefer 2:20202					
198:4,15 25 124:2 202:23 dry 90:11,12 188:3,18 200:9,15 125:8 210:25 dry 90:11,12 195:4,6, 227:12 130:23 211:1 du 77:9 16,19,22 232:21 132:11 213:1,2 255:22 4 196:2, 238:15 147:7 218:18,22, 176:23 198:6,9 251:23 149:13 220:3,4,11 Drefer 2:22 269:8,17					
200:9,15 125:8 210:25 dry 90:11,12 195:4,6, 227:12 130:23 211:1 du 77:9 16,19,22 232:21 132:11 213:1,2 255:22 4 196:2, 238:15 147:7 218:18,22, 176:23 198:6,9 251:23 149:13 220:3,4,11 Drefer 2:22				229:10	
200.9,13 125:8 210:25 100:10,07 227:12 130:23 211:1 du 77:9 16,19,22 232:21 132:11 213:1,2 255:22 4 196:2, 234:20 133:13 217:4 due 173:25 197:5,7, 249:22 148:15 23 264:7 269:8,17 255:23 149:13 220:3,4,11 Duffer 2:22				dry 90:11,12	195:4,6,9,
232:21 132:11 213:1,2 255:22 4 196:2, 234:20 133:13 217:4 due 173:25 197:5,7, 238:15 147:7 218:18,22, 176:23 198:6,9 251:23 149:13 220:3,4,11 Duffer 2:22 269:8,17				du 77.0	
234:20 133:13 217:4 due 173:25 197:5,7, 238:15 147:7 218:18,22, 176:23 198:6,9 251:23 149:13 220:3,4,11 Duffer 2:23 269:8,17					4 196:2,9
238:15 147:7 218:18,22, 146:23 198:6,9 249:22 148:15 220:3,4,11 220:3,4,11 Duffer 2:22 251:23 149:13 220:3,4,11 Duffer 2:22				200:22	197:5,7,16
249:22 148:15 23 176:23 198:6,9 251:23 149:13 220:3,4,11 264:7 269:8,17				due 173:25	
251:23 149:13 220:3,4,11 264:7 269:8,17				176:23	
				264:7	
	256:25	149:13	225:6	Duffy 2:22	
256:25 150:7 225:6 Durry 2:22 dusted		± J U • /	220.0	• -··	austea

VEIRB re JAY	PROJECT 04-2	21-2015 Pa	age 299 of 347	
152:18	28:2	118:14	s 23:16	251:9
dynamics	30:4,24	119:7	44:3 71:16	252:4,14
113:6	31:17	120:1,3	effects 9:5	0 255:8,
233:24	43:16	122:2	10:4 19:1	261:9
233.24	118:17	161:23		263:11
	257:20	162:4	23:5,15,20 28:4,11	269:25
E	261:16	222:20		270:13
e.g 10:17		227:10,18	30:6	effects-wi
EA 10:20	ecologically	228:8,25	31:6,12,19	
45:16	30:13,16,2	229:9	,23 32:24	240:17
	1 31:8	230:5,16,1	33:5,16	efficacy
196:20	32:3 43:6	9 231:8,9	34:8,18	64:15
209:3	116:15	232:7,24	35:18	efficiency
218:16	117:6	234:8,14	41:25	53:3 54:
EA1314-01	118:16,19	235:25	42:25	
1:6	119:5,11,1	238:14	43:1,17,18	132:16
	6,17,25	240:22,23	,22 44:4	efficient
eading 21:11	120:2	240:22,23	45:23 51:6	53:6 54:
earlier	244:14,21	256:2	58:21	
50:19	245:17	257:2	64:10	efficientl
51:13	257:22	259:24	76:21 78:4	100:2
60:13 75:9	261:4,11		92:12	effort 96:
80:23	economic	261:14,23	99:20	198:4
93:8,9		262:1,2,3	113:12,17	263:21
101:19	30:9	effective	114:1,20	
107:13	249:24	30:14,21	123:11	efforts
	250:3	31:8 32:3	124:13	270:16
114:11	ecosystem	63:13	149:15,22	274:7
144:4	119:19	64:20	150:16	eight 55:6
177:6	120:7	67:14 73:8	153:21	56:10 76
195:23		76:19 78:1	154:23,24	133:24
215:14,16,	Ed 5:19	116:15	162:2	133:24
21,24	EDenholm	117:6		eighty 55:
216:16	3:13 17:9		167:10,17	either
217:22		118:16,19	170:2	39:4,11
237:23	edge 61:23	119:5,11,1	175:8	
238:19	176:21	7,18,25	179:6	43:21
240:4	256:1	120:2	182:7	63:10
244:8,23	257:2	128:7	211:6,7	102:13
253:24	edits 275:11	130:13	212:16	112:13
269:18		132:18	213:4	128:8
aamle: 100-10	Edjericon	160:14	225:20,23	161:2
early 190:12	5:20	186:13	227:13	169:14
198:22	ef 239:16	187:7,20	228:12	170:11
easier 76:8		244:15,21	229:7,10	173:3
114:22	effect 23:19	245:17	232:24	194:24
	27:23	257:22	233:7	204:9
easily	31:16 32:9	261:4,11	234:17	Ejackam 4:
137:25	34:6 37:10	effectively	239:10,16,	-
164:21,22	51:10,15,1	-	25 240:2	Ekati
east 172:21	6 64:7	96:13	242:11	22:10,17
	67:19	117:4	243:23	0
eat 256:15	94:24	181:16	244:1,4	23:12,19
EC 167:7	99:15	231:22	247:13	0 24:1
	100:7	effectivenes	247:13	38:24
ecological	± 0 0 • 7		240.1U	

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 300 of 347	
39:16	175:8	70:24	62:1	232:16
43:22 44:9	emerged	100:25	energetics	237:8,13
46:6 51:12	203:9	180:5	32:17	ENR/GNWT
54:21 56:1		231:4	169:23	15:24
57:1 58:13	Emery 5:7	encourage	171:11	
74:24 75:4	Emily 3:11	58:18	234:19	ENR-GNWT
157 : 7	15:11	112:5	235:10,14	60:11
169:24		113:5	238:18	ensure
170:8,9	emission	256:24		196:25
171:24	87:25 143:2		energy 37:7	240:22
172:1,9	145:2	encouraging	61:13	enter 100:14
177:19,23	100:2	105:15	235:4	enter 100:14
178:12	emissions	endpoint	engaged	entered
182:13	86:13	30:13	243:16	101:4
195:11	87:21	31:11,15	engagement	244:25
199:15	88:4,8,11	32:2 115:8	42:6 125:2	entering
200:2,9,14	143:4	118:5	135:1	101:6
,16,18	emphasis	257:19,21,	168:17	244:24
201:6,14	74:25	24 258:16		
204:13,18		260:7,14,2	engagements	entertain
211:2,5 217:6	empirical	3 261:3	132:7	24:14
217:6	239:7	endpoints	engin 251:5	174:22
247:16	empirically	28:12	engineered	entire
	184:5	45:24	42:2	177:11
Ekati's	EN 72:4	114:13,21	129:18	223:18
57 : 17		115:3		entirely
elaborate	encoun 61:4	122:11	engineering	59:14
199:23	231:5	123:13	129:15	91:13
	encounter	255:9,17	249:10	
elderly 86:8	36:16	257:9,15	250:3	entry 36:19
Elders	37:3,6	258:5,7,21	251:4,5	envelop
86:5,7	39:3,8	259 : 15	254:2	140:20
elements	60:21	energetic	English 13:2	environment
31:6	61:5,10	35:10,11,2	84:5 , 17	4:18
	179:14,22,	2 38:15,18	192:3	31:7,12,13
eleven 53:14	25 180:14	60:15	enhance	
184:16	181:5,10,1	61:5,6	257:20	environmenta
elicit 61:20	1,14,16	64:5		1 1:2
Elkin 3:16	182:4	100:13	enhanced	12:10
	encountered	101:6	76:17	14:10
Elliot 2:16	38:23	110:15,22	240:21	21:23
elongation	61:24	111:16,25	enjoy 188:21	30:19 31:25 32:7
22:5	encountering	113:6	enjoyed	106:24
else	39:1 60:14	230:24	216:24	121:3
19:15,20	180:13	231:3,4,5		197:13
93:10		235:5	ENR	198:22
153:6	encounters	237:25	25:7,10,12	199:4
198:4	36:3,21,25	238:1,6,21	26:3 97:21	202:20
243:18	37:21	239:11,17,	110:14	208:2,6
262:15	38:3,8,11,	19,22,23	187:22	218:15
	16 40:25	energeticall	212:11	223:9
elsewhere	41:8,9 61:19	y 61:20	214:13 223:6	234:11
	ντιτα		223:0	

MVEIRB re JAY PROJECT 04-21-	-21	0	1.	5
------------------------------	-----	---	----	---

Page 301 of 347

249:11	established	243:18	100:20	existing 8:5
	204:6,13		194:19	10:17
equate 40:4	230:17	everybody's		23:10
equation	estimate	193:21 194:1	example 32:25	33:7,8
40:18		194:1	35:20	43:22
60:17 61:4	78:17 173:19	everyone	108:24	113:18
111:5		12:4,12	108:24	172:9
187:23	184:8 231:2	84:20	121:13,15	261:23
Eric 3:13	246:4	204:24	126:2	269:5
17:8	257:3	212:2	220:7	272:24
148:9,25	263:10	everyone's	234:24	exists
149:14	267:1	110:2	235:2	249:12
166:14				
EDV	estimated	everything	examples	exit 36:19
ERM- RESCAN-214	39:19	192:1,6	73:3	exits 12:13
	41:14	193:3,6 257:5	199:14,16	
(a 262:22	55:19		200:8,14	expand 96:19
error 176:22	144:25	everything's	241:24	159:10 172:22
errors	242:1	187:17	exceeds	1/2:22
234:20	estimates	everywhere	72 : 18	expanded
	238:21	73:14	except 21:4	23:13
erstwhile	257:4	190:14	42:9 103:3	96:13,23
203:20	267:10			expans 174:8
Esford 3:6	272:12	evidence	exchange	-
16:17	estimations	76:21 78:3	211:22	expansion
53:23	194:20	132:16,17 177:18	252 : 17	169:15
54:14		237:14	excited	174:3,8
72:17	et 164:9	237:14 241:2,3	37:12	expect 18:9
73:10	193:21		99 : 21	92:1,11
esker 33:25	195:14	evident	exclude	108:20
42:4,5,7,1	223:25	105:19	128:9	113:4
3,23 81:12	ev 73:3	ex 89:23		161:6
123:4	evaluated	event (2,1)	excuse 22:3	205:9,20
125:19,21	50:10	exact 62:16	82:18	206:24
126:7,10,1	51:25	99:3 153:7 209:10	211:19	expectation
9 127:4		265:20	exercise	58:10
129:20	evaluation		260:6	174:19,24
130:3	20:22,23	exactly 25:2	exercised	expected
131:9,10	144:10,11 232:23	48:8 49:23	259:23	23:18 33:1
especially	232:23	74:24 95:8		35:12
41:19	evening	103:17	exercises	173:25
92:12	165:9	134:21	112:19	
111:18	event 92:7	136:14	exercising	expects
	100:5	141:1	259:19	169:13
essential	108:3	158:1	exhibit	212:5
260:22	159:20	202:12	61:12 62:1	expenditure
essentially		272:20	99:20	239:19
54:13 59:1	eventually 206:22	273:9 274:15		experience
63:17			exist 31:18	73:24
68:18 81:5	everybody	examined	211:8	110:2
103:11	216:19	35:24	existence	111:4
128:10	226:6	52:14	241:20	203:8
			241.20	203:8

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re	JAY	PROJECT	04-21-2015
-----------	-----	---------	------------

Page 302 of 347

MVEIRD IE UAI	PROJECT 04	21-2013 Fa	age 302 OI 34	/
experiences	89:22	44:14,23	184:23	100:16
200:16		45:20	185:13,16,	126:13
	extend 170:8	46:17,23	22	181:9
experimental	171:25	47:4 48:15	188:10,13,	183:22
183:18	extended	50:3 52:17	20	188:3
expert 8:11	172:21		189:7,13	
162:25	211:4	59:13,23 60:6		<pre>factors 33:8</pre>
			193:12	120:23
expertise	extending	69:14,21,2	199:2	121:3
78:7	135:5	5 70:12	201:15,25	129:8
109:24	extension	75:20	209:22	183:15,19
explain	183:16	79:11 80:4	211:19,21	228:13
214:5		81:16	213:12	fair 69:12
264:25	extensive	82:9,21	218:3	
	113:21	84:12	221:15	118:20 121:9
explained	197:6	88:6,14,18	222:15	133:19
212:11	extent 43:24	,25	225:17	
explanation	56:1 77:2	89:4,6,10	232:12	139:25
33:21	114:4	90:13,21	233:10	148:21
59:21	143:1	93:14	241:9	179:3
171:19	154:19	94:9,12	242:16	198:10
177:16	169:20	95:11	243:14	fairly 28:15
178:25	170:6	101:11	247:1	47:17,20
	171:23	104:15	252:10	91 : 23
explicit	177:13	105:5	253:9	92:12
94:4	237:3	107:7	254:25	103:10
106:22	240:12	108:5	255:14	113:21
107:3	240:12	110:9	257:7	130:2,3
explicitly	243:20	113:9	258:19	195:1
96:6	250:18	114:3,9,17	259:6	197:6
	250:18	115:6,23	260:16,24	227:4,6,14
exploration		122:4,18	261:17	,21
193:2,7	extra 198:13	125:17	262 : 5	faith 106:23
249:8	extreme	130:16	265:5	Iaith 106:23
explore	232:6	133:14	266:13	Faithful 3:9
127:20		135:11	273:16	falcons
201:11	extremely	136:5,12	275:10,24	
	236:17	137:4,10,1	facilities	25:15
exposed	eyes 65:3	4 138:14	89:8	fall 174:3
27:21		139:2		182:12,14,
33:22		140:1	fact 26:4,5	20,23
37:12	F	142:5	74:8 93:11	187:11
76:9,24	facilitate	143:8,21	105:11,21	222:5
149:16	12:10	145:4,22	132:19	familiar
154:8	facilitator	146:3,15	147:21	241:25
exposure	1:12 12:3	147:4	188:1	
77:8	13:18	152:2,8	214:2	farther
124:16	17:12,24	153:8,14	241:14	110:24
147:10,20	19:10,14,1	158:6	245:7	fast 54:11
149:17	9 20:9	159:1,24	250:12	
150:8,14	24:10 25:1	163:5,14	254:19	faster
	26:12,17	164:25	259:21	217:15,16,
expressed	27:2 28:6	165:10,17,	270:6	19
34:7	29:11	23 169 : 9	factor	fat 191:5,6
ex-regional	27.11	175:2		
_				

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB 1	re	JAY	PROJECT	04-21-2015
----------	----	-----	---------	------------

Page 303 of 347

	FRODECI 04		Ige 505 01 547	
father	field 66:24	40:6 80:12	41:21,22	185:20
190:12	91:21	82:1	44:16,19	266:14
feasibility	95:21	104:13	48:23 50:6	five-four
249:9	229:20	118:2	51:20	133:21
	234:7,8,14	160:12,13,	52:20 56:7	
feasible	fields 33:22	15 195:3,4	62:10	fix 268:24
68:17	233:15	226:17	72:13	fixed
73:12 96:19	fifteen	255:22	74:22	181:15 , 17
127:6	102:16	270:17 274:8	79:1,19 86:11 88:2	Flagler 5:5
	109:5		91:1,9	19:8,9
features	184:2	finalized	101:15	
32:5,7	185:20	218:21	105:19	flatter 34:11
February		finally	110:21	
54:23	fifty 106:12	42:22	111:10	fleet 54:17
55:18	116:8,14 117:5	190:22	142:13,16	flesh 103:15
58:19 59:1	117:5	192:14	148:17	flexibility
226:2	119:1	fine 21:18	153:19,21	77:11
fecundity	120:13	91:9 107:1	165:8	108:21
229:4	121:8,17,2	143:20	166:4	110:6
feed 80:25	1 242:4	188:15	167:14	139:19
191:16,18,	244:25	275 : 20	168:24	140:7
21 249:25	figure	finer 34:11	171:14	154:19
254:22	36:14,16	131:8	172:2	155:7,10,1
	38:23 40:9	136:25	196:16,17 202:10	5,18,22
feeding	57:5 86:16	137:6,23	202:10	156:13,18
111:14	87:10 90:2	finish	207:12	flexible
feel 52:13	109:5	123:21	211:24	154:25
90:8 101:7	175:10	259:9	214:24	
196:20	188:5		224:9	flow 108:25 192:10
243:9	213:17	finished	237:23	
feels 25:13	224:1	139:5	246:8,11	flying 50:23
263:7	246:2,10	221:2	252:9	flyrock
feet 137:20	figured	Finland	258:22	1 54:1
	217:21	166:18	264:3	157 : 13
felt 268:9	figures	Fiona 3:6	270:5	163:25
female	267:18	16:17	271:24	focus 18:1
116:11		53 : 23	274:6	112:20
191:15,16	file 198:25	54:14	fish	161:3
245:6	216:17	72:17	22:7,8,14	167 : 19
females	filed 144:6	73:10	87:23	183:5
116:12	filing 33:12	fires	Fisheries	205:3
fence	fill 72:18	34:4,6,17	22:14,16,2	247:22
128:8,13	73:12	35:9	2	253:18
	214:15	192:23	fit 107:12	focussed
fonding	211.10	193:2		28:25
fencing			five 41:3	
128:22	filling	firm 271:11	EE.00	focussing
128:22 fetuses	filling 214:9		55:22	focussing 152:10
128:22		first 20:25	60:19,20	152:10
128:22 fetuses	214:9	first 20:25 21:4 26:19	60:19,20 63:15 86:6	152:10 folks 136:19
128:22 fetuses 191:9	214:9 filter 21:18	first 20:25	60:19,20	152:10

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

	PROJECT 04-2	21-2015 Pa		
203:22	2 249:2	20:22 21:1	195:6	gained 235
followup	250:9	foundations	fulfill	gap
147:8	269:24	64:19	261:15	214:9,15
fallen	forgot 19:4	fountson	515-11-d	6
follow-up	272:11	fourteen	fulfilled	0.0010
23:1 47:3	form 96:18	32:5	118:19	gas 86:13
58:3 72:25		180:11	215:21	87:20,25
105:8 136:9	173:13	195:10	fulfills	88:4,8
154:18	218:18,21	fourth	119:24	143:2
	220:4 239:3	144:22	215:25	gathered
158:17 175:4	239:3	145:9	full 11:9	18:5
	format 214:3	146:5	145:15,17	Gatineau
181:2	216:12	fox 4:19	146:23	19:9
182:16 186:18	formats	44:6	207:18,19	
	216:20	187:12	251:24	general 12
261:6				47:6 58:
272:24	Forrest	foxes 158:14	fully 22:21	122:23
food 43:9	192:22	fragmentatio	50:9	164:1,11
191:7	Fort 15:5,7	n 32:13	full-year	199:19
192:22	189:24	33:3 43:10	194:18	213:18
261:22	191:1			254:7
footing		frame 252:1	fulsome	274:8
132:19	forth 90:16	framework	200:25	generalize
	122:5	215:9	function	158:24
footprint	186:16	216:12	119:20	204:8
32:13	forthcoming		176:10	
39:16	44:11	freeze	177:6	generally
61:23	183:11	142:22	215:18	54:22
112:13,18		frequency	259:25	114:5
113:1,16	forty 55:17	144:25	260:3	247:16
172:20,24	111:16	150:21	C	generated
176:20,22,	forty-four	151:15	fundamental	239:14
25 177 : 23	40:3,25	154:3,9,20	179:5	
195:12	111:7	,23	fundamentall	generation
232:2	forum 74:15	157:1,14	y 230:24	86:9
footprints	207:17	179:12	232:16	generation
33:1	207:17	255:25	future	241:16
	209:5	fromont		gont1 omon
foraging	forums	frequent	33:7,8,10	gentleman
37:15	173:12	34:13	38:4	91:3 108
forced 72:25	204:14	223:5	58:11,16	110:11
6	forward	frequently	100:23	189:17
foresee	32:11	30:16	112:14 113:25	geotechnic
219:17	38:14	Friday		21:3
247:20	99:11	145:21	120:24 226:23	gets 150:2
foreseeable	111:9,25	146:13		253:2
33:14,18	112:1	199:11	227:20 233:6	254:9
38:2 40:23	161:19,20	275:8	200:0	
113:19	214:3			getting 66
161:16	214.3	front 113:20	G	91:25
247:8,14,2	224:14	160:5	Gahcho	110:24
2,24	274:14	171:2	202:23	128:6
248:6,11,2		fugitive		174:19
	foundation	20920200		185:23

MVEIRB re	JAY	PROJECT	04-21-2015
-----------	-----	---------	------------

Page 305 of 347

			190 000 01 01	
194:25	4:2 15:25	51:5 52:9	grade 104:2	233:16
205:1	16:2,4	53:23	grandparents	grounds
210:3	22:25 23:6	56:24		229:21
256:20	25:13 26:7	58:14 61:2	86:4	229:21
	46:16	63:24 68:3	granted	group 42:21
Gillian 4:14	98:22	71:11	112:9	83:4,17,18
15:19	101:10	72:17	195:18	,25 98:1
girl 86:3	169:12	73:10		, 115 : 15
_	171:6	100:11	graph 41:3	136:1
gist 129:16	172:14	113:15	Gras 255:22	173:8,9
given 20:10	173:2	115:10		188:17
27:13	174:14	116:5	gravel	193:19,20
28:14 30:2	175:1	117:10	136:23	223:25
33:5 40:3	211:1,25	118:12,25	gray 44:6	
49:25	212:5,10	119:15		grouped
54:4,12	212:3,10	120:8,17	great 28:15	28:17
55:23		-	46:7 65:19	groups 98:12
58:17,20	216:25 232:15	121:10,14,	132:15	117:13
71:4,6,12,		25 161:10	159:13	178:2,3
20 72:6	257:17	170:23	214:4	223:18
77:10 78:3	259:15	172:6 175:15	greater	
83:8 98:25	GNWT-CIMP		41:14 43:2	growing
107:14	16:7	176:6	56 : 1	86:3,4
126:2	GNWT-DAAIR	177:21	77:9,11	guess 24:10
130:9	15:20	179:24	158:23	47:22 48:6
140:15	13.20	180:20	180:12	49:1,20
150:12	GNWT-ENR	181:13 183:4	greatest	50:22
179:4,18,1	17:19,20,2	228:6	39:22	56:10
9,20	3 47:9	230:8,13		64:22
211:25	49:20	230:8,13	greatly	91:14 92:5
215:6	91 : 12	244:17	190:13	99:3
227:9	93:17	244:17 245:2,19	206:25	102:5,8
228:1	95 : 16	245:2,19	green 3:24	125:9
240:12	97:3,13	261:8	38:22	127:4
241:6	99 : 11		40:13 88:4	136:3
246:21	169 : 12	gone 87:14		137:17
249:21	226:1	122:5	greenhouse	146:16
254:18,21	229:14	162:9	88:8 143:2	151:22
264:22	241:11	207:9	grid 96:18	160:1
gives 104:5	GNWT's 23:3	232:19	grizzlies	192:20
-	213:2	goodness	-	197:3
195:2	acal 000-10	88:20	19:25	213:19
giving	goal 233:18		grizzly	214:4,9
227:12	259:5	Gordon 26:7	18:25 19:1	215:3
243:6	Golder 2:23	government	20:6 26:21	216:8,10
glad 110:21	3:2	6:10 14:24	27:13,15,2	217:22
-	15:10,12,1	17:16	4 44:5	224:22
glasses	4,16	74:14	243:3,12	226:15
213:1	16:13,14,1	240:20	244:2	227:8,16,2
273:22	6,18,22,24	259:7	255:18,23	3 229:23
Glen 4:5	,25 17:2	Grace 5:25	256:10,15	230:2
	20:17	6:11	ground 31:9	241:12
GN 241:5	27:7,10		71:15	245:25
GNWT 3:15	29:9,16	grad 111:11	168:21	248:7
			T 0 0 • C T	

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 306 of 347	7
250:22	184:7	224:22	harder 65:25	245:18
253:3	190:8	235:7	hardly 191:7	haul 53:12
254:22	233:10,11	hall 12:13	234:18	141:24
258:10,16	235:17,20,	hand 111:10	TTo marks 0 • 01	187:8,11
261:2	23,24	159:2	Harry 2:21	hauled 78:15
262:21	236:8,10,1	165:19	16:19 66:7	
266:3	2,15 240:8 241:12		67:10,11,2 1 96:10	hauling
guessing	241:12	handle	98:4,5	42:15
203:5	272:22	193:4,5	99:1,2	193:8
guidance		196:2	159:7,8,10	hauls 55:3
173:13	Gunn's 11:10	223:13	,11,12	haven't
	27:11	handled	174:13	26:19
guided 173:7	144:5	215:6	197:14	184:14
guideline	guy 168:14	handwriting	198:22	215:15
173:10	- -	145:25	210:23	234:21
quidelines	guys 62:16 64:15 71:7		211:10,15	253:13
23:4 211:1	72:2 88:23	hang 167:8	256:12	
213:3	89:14	268:12	harvest	having 49:5
	90:2,4,10	hanging	115:12	51:23
gulf 122:8	256:12	253:11	116:8,10	111:10
Gunn 2:8	200.12	hannan	117:21,24	114:20
13:24		happen 136 : 15	118:6	118:14
26:21 27:8	<u> </u>	252:25	119:2	119:7
46:25	ha 103:18	271:16	120:19,25	128:15,20
75:21,23	habit 161:12		191:2	141:19
79:18,20		happened	233:20	145:5
82:5,20	habitat 10:5	211:25	234:3	176:10 204:25
91:14	22:7,13	happens	244:11,24	235:15
107:24	23:4 24:2	31:11	245:6,10,1	236:13
108:9	25:16,17	205:12	1,21,22	
123:2	27:16,17 30:7	214:9	246:14	head 144:17
124:2	31:1,2	215:4	258:2,22	163:19
125:8	32:13	220:1	260:6,14	heading
130:23	33:2,7,19,	happy 65:16	harvested	20:25
132:11	24 34:1,2	243:17,24	115:14,17	21:11
133:13	35:9 43:8	246:12	117:5	122:23
142:12	44:7	273:11	245:14	headings
147:6,7	144:21			20:22
148:15 149:13	145:8	harassment	harvesters	
149:13	161:11,13,	39:20,23	118:6	headlights
150:7	15,17	40:4,25	121:20	199:21
151:25	169:22	41:10,11	258:1	health 80:19
154:16	171:11	61:9	harvesting	93:3
155:12	212:15	228:18	44:22	119:22
156:1,23	213:3	231:6	115:9	133:4,5
157:9	214:17	237:6	117:14,16	healthy
158:16	244:11	239:9 244:11	118:20	30:18,24
175:3,5	270:14		119:12	
177:15	hair 256:20	hard 149:15	233:20	hear 45:9
178:24		190:2	234:13	83:25 93:5
180:9,24	half	204:8	harvests	105:15
181:24	62:15,16	214:14	244:24	109:23
101:24			244:24	

112:25	77:19	223:16	78:12	267:13
156:3	103:21	229:17,22	81:11	hoof 131:
heard 30:12	104:8	232:20	101:1	
70:25	148:24	241:14	historically	hope 172:
107:10,19,	200:5	242:6	109:9	217:2
25 110:25	212:2	herd's	117:20	223:23
111:7	Helpfully	240:12		253:5
112:12	257:17		history	275:7
134:5	helmine 00.1	Herrell 3:8	27:20 33:6	hopefully
145:7	helping 90:1	Hey 134:12	190:5	23:7 24
146:11,12	helps 173:2	160:14	hit 256:4	56:8 82
202:10	Hence 109:1	275:18	hitting	105:1
204:23		Hi 16:12	256:19	145:6
222:22	herd 27:14	25:11 50:5		201:4
haaning	30:1,3	62:7 93:16	Hoefer 6:15	222:11
hearing	34:19	142:15	Hoeff 40:19	224:2
19:19	35:13	142:15	41:5	271:15
49:21 74:3	42:16 43:2	hide		275:7
106:3	49:22 50:1	85:20,21	hold 24:19	hoping 51
108:19	58:5 76:16	hierarchy	143:22	199:22
216:18	80:20 92:5	41:21,22	190:2	238:6
hearings	93:3		271:13	238:0
23:8	117:18	high 41:6	holder	horse 105
112:19	122:3	43:20	189:25	hosted
146:8,11	133:5	78:18		237:25
209:4	150:15	91 : 23	holders	
217:12,21,	177:12	109:12	45:15	hot 101:1
22 274:2	179:20	124:17	74:13	hour 37:1
	183:24	125:10	Holland 2:16	116:1
heavily	184:4	143:4		122:21
70:16,18,2	193:6	147:21	home	155:15,
2	223:16,18	148:4	256:4,16	
heavy 79:2,5	226:8,17	150:14	homework 7:3	hours 123
height 71:24	227:3	228:17	8:1 9:1	198:3
-	228:1,15,2	235:25	20:5,19	housed 85
72:9,22	1	241:22	21:25	
126:12	229:19,25	272:13	22:23 24:5	H's 21:12
129:20	231:11	higher	25:2 26:23	Hubert 2:
130:3,4,12	232:19	77:6,10	69:15,19	13:14 2
heights	233:13,14,	95:24	70:1	82:23
71:21	17,23,25	112:16	101:18	83:22
held 1:17	234:2		102:9,19	125:24
	240:7,18	245:5,18	139:16	127:11,
22:16	241:14,22,	246:4,18 256:17,18	262:12	128:12,
197:13	25	200:17,18	267:16	129:17
269:18	242:7,14	highest	269:2,7,11	146:2
Hello 19:12	243:2	129:21	,16	156:6
help 45:2	260:4,14,1	147 : 17	271:20,23,	189:16
89:19	5	hired	25 272:11	193:13
	261:15,20,		273:18	199:5,8
120:22	21 262:4	89:18,21,2	274:20,24	200:12
171:3		4	274:20,24	200:12
214:5,24	herds 43:4	historic		2 247:2
helpful	58:6,9	37:25	homework's	2 241.2

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 308 of 347	
248:20	193:3	258:7	255:21	25:1,2
250 : 10	hunting	273:7	257:17,23	34:4 44:23
251 : 7	86:15	idea 50:21	258 : 6	47:13,22
257:10,11,	119:1	51:24	259:4,16	52:2 60:11
12 261:1	190:1,11	83:24	261:18	62 : 11
265:14		93:20	262:7	64:14
266:19,20	Hutchinson	103:10	269:16,17,	65:16 66:5
267:14	2:12	109:22	18	70:9 72:25
269:1,21	hypothetical	110:2,6	IEMA-27	74:15 78:8
270:11	141:10	128:14,15	130:25	82:4 85:7
273:15		140:19	IEMA's	90:8,9
Hubert's	I	148:16	257:18	93:10,22
258 : 20	IBA 75:1	155:14		94:2 95:25
huge 198:10		163:22	Ignacio 5:3	97:22
241:8	ice 87:22	213:18	48:20	102:15,23
	ICRP	223:15	I'll 12:7	103:8,16
human	206:22,23	identificati	24:18 25:3	104:15 105:9
86:12,25	207:9,13,2	on 30:3	44:19	105:9
153:25	0 208:9		46:11,23	114:16
183:12	209:1	identified	56:8 62:12	119:13,17
193:9		30:10	63:10	127:8
257:25	I'd 27:7	31:24	64:22	130:2
258:6,21	35:20	32:11	65:17 69:7	131:6
259:4	71:24	38:21 42:5	73:7,25	133:18
humans	73:19 76:1	71:21	74:3,20	136:19,20,
193:11	83:9,23,25	144:18	75:18,21	21 137:24
hundus d	84:20	256:21	83:18	140:16
hundred	85:12 89:12	identify	90:25	142:16
35:23 40:15 41:6	90:22	22:17	101:14	143:15
53:2,18	92:21	24:11 75:3	115:1	145:24
54:15,17	102:8	95:12	121:4	149:8
55:9,11,14	109:19	identifying	125:15	156:11,19
,16,17	110:19	36:18	129:24	159:13
62:3 63:15	111:3		153:6	160:4
65:1,2,21	123:7	IEMA 5:7,14	159 : 7	162:13
77:23	130:8	8:18,20	160:12	164:12,21
79:5,7	140:24	52:19 54:8	162:14	170:24
131:2,4	153:3	58:3 77:17	185 : 25	171:1,18
147:21	185:1	95:18	186:3,9,19	172:3
150:10	188:8	105:7,8	188:19	180:16
223:14	199:6	163:16	205:6	184:15,18
242:1	201:19	164:7	206:7	186:18
	202:1,16	185:18	233:8	188:2,17
hung 215:16	224:16	193:15	244:6	189:13,22,
hunt 190:25	225:19	197:12,13	255:21	24
258:14	231:10	198:21,24	257:18	190:4,10
hunted 86:5	233:12	199:3	259:8,9	192:9
	246:12	209:23	267:23	194:12
hunter	247:22	210:16	illustrates	197:7
189:24	248:8	211:9	36:14	200:7
258:22	249:19	222:18	I'm 14:3,4	203:5
hunters	251:23	223:2 243:9	24:12,14	204:13
	252 : 6	243:9	24:12,14	207:24

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 309 of 347	
210:1,3	117:2	270:17	250 : 12	245:9
212:20	127:14,21	274:7	includes	263:20
213:16	174:8	improving	29:17 42:2	increased
216:14	199:15	76:25	207:20	32:18
217:18	200:4		234:6	79:2,3
219:23	208:1	inch		102:2,6,7
223:10	244:10	133:22,24	including	172:20
225:18	245:15	inches 137:6	31:11	
226:1,15	251:9	incident	33:15 34:6	increases
227:23,24	252:23	179:19	42:3	33:2 40:22
235:23	256:9	1/9:19	43:17,24	227:6
238:6	269:8,18	incidental	56:18 58:2	increasing
243:6,15,1	imperial	179:13	75:5 79:22	43:21
7,18,24	135:20	incidents	80:23 94:4	116:9
253:14	implication	25:21,22	107:23	228:20
255:6	237:10	26:21,22	135:1 161:14	229:23
257:1			161:14 187:1,12	245:5
262:8	implications	include 9:4	198:24	incredibly
266:3 268:22	160:22	10:11 11:6	207:12	240:3
	226:7	23:13	211:5	
272:18,20 273:7,11	237:16	29:22,25	252:19	incremental
274:14	implies	42:14	253:1	35:8 56:12
	241:20	66:12 75:15 77:5		227:10
imagine		108:12	incorporate	228:25
108:24	implying	148:22	10:13,14	230:4
109:9	175:10	140:22	176:3	232:7
immediately	importance	155:14	179:2,7	233:6
44:25	42:4 93:7	162:10	217:8	242:11
	119:22	183:7	incorporated	incumbent
impact 1:3	important	206:24	38:20	127:19
12:10	30:8 34:25	207:15	85:15	indeed 99:17
27:12 35:17 43:6	46:4 47:20	213:19	139:13	100:6
121:6,24	67:18	218:8	166:18	
161:20	76:10	248:3	183:13	independent
169:2	77:5,25	250:8	202:14,25	14:10
187:25	80:18	253:7	incorporates	259:25
188:7,18	84:21,22,2	269:23	10:6	index 39:20
199:4	3	included	273:25	indicate
213:25	85:1,2,19	27:16	incomonatin	242:14
258:12	120:21	33:25	incorporatin	253:25
	213:23,25	34:4,16	g 203:18	
impacted	224:20	88:12	217:8	indicated
74:12 99:8	225:11	94:18,25	incorrect	101:13
113:8	238:24	110:5	234:24	184:24
160:11	241:2	126:11	increase	189:18
impacts	249:7	159:19	35:13 88:1	213:21
8:9,20	252:25	174:9	170:5	indicating
25:14	259:5	206:23	171:22	60:8
62:10 72:8	<pre>improve 77:3</pre>	239:13	226:21	133:15
73:6 87:13	78:10	240:2	227:15,22	indication
94:23	196:24	247:13	229:20	104:6
98:19	225:5	248:5	233:18	117:24
105:24				

5 Page 310 of 347

		I		
255:15	153:10	47:2,16,19	258:12	in-stream
indications	161 : 12	,24 48:7	inheritors	22:7,13
227:2	165:22	59:16	162:8	intact 43:7
236:25	166:1	63:19,25		
:	169:14,21	79:15	initial	intake 235:6
indicators	170:7	91:20 98:3	22:20 173:18	intend 62:17
27:15,24 31:1,14,19	171:9,24	100:13	233:17	97 : 8
32:25	172:10,12,	101:1,21,2		intensify
242:8	15,22	3	initially	108:13
	173:7,8,11 ,14,19	102:14,19 109:10	36:8,12	
indirectly	174:7,16,2	115:24	40:19	intensive
27:4	2,23	124:4	226:9	263:6
indivi 229:5	175:7,13,1	125:13	innovative	intent
individual	7 177:14	126:1	124:3	128:25
35:24 36:7	178:8,12,2	130:1,19	input	131:7
38:12	0	135:12	10:10,13	214:14
116:8	179:5,15,2	138:17	77:13 98:8	intention
194:13	2	139:21	133:10	68:10
	180:6,10,1	142:9,20	134:24	103:1
individuals	5	147:8		267:4
28:20	181:2,3,11	149:6	inputted	
180:3	,15,20,21,	152:11	244:12	interact
indulgence	22	158:20	inquiring	245:15
122:24	182:5,9,11	159:3	238:10	interaction
industrial	,24	178:22	insect	44:1 58:1
11:17	183:6,7,8,	182:18	39:19,22	224:12
199:17	14,16,21	183:23	40:4,25	interactive
200:17	184:3	184:4	41:10,11	119:18
201:13	186:6	186 : 8	61:9	
	187:25	187:5 , 10	111:6,7,12	interest
industry	189:1,16	202:4	,15	28:15
190:14	193:17,18	221:6,24	228:17,18	180:3
237:5	194:5	222:4,6	231:6	184:24
inevitably	195:15	234:21	237:6	189:18 259:18
215:8	196:1,4,8	242:19	239:9	209:10
inferred	influencing	249:10,12,	244:10	interested
31:20	176 : 16	14 250:4,16	inside 155:8	83:15,23,2
÷	inform 18:5	253:15		5 126:15
influence	221:20	254:19	insofar	130:2
36:5,6,9,1	222:4	257:13	258:21	258:3,7
3,17,18,21 ,24	information	267:2	inspection	interesting
,24 37:2,5,23		269:8,13	42:11	82:22
38:3,9,24	8:8,14 11:15	271:9	153:24	185:1
39:3,16	18:2,4,6,1	272:2	instance	194:9
60:14	9 20:1,11	273:3,10	69:2	interests
61:11,22,2	24:14,15,1	informed		275:19
4 75:14	8 26:13	25:1	instances	
100:14,21	30:4 41:18		158:18	interim
101:1,4	42:18	infrequently	instead	206:15
123:10	44:16,18	148:4	53 : 15	interpret
152:10,14	45:3	infringement	123:14	12:25
,		, .		13:3,6
	1			±0.070

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY PROJECT 04-21-2015	MVEIRB	re JAY	PROJECT	04-21-2015
----------------------------------	--------	--------	---------	------------

Page 311 of 347

			-	
84:14	63:8 67:5	265:1,18	272:11	109:14
	78:12	270:5	items 18:18	110:4,9,14
interpretati	102:24			,16 111:21
on 13:4	128:5,6	isn't 74:16	28:11 57:2	, 112:12,14,
84:10 85:4	129:5,11	78:2 94:18	69 : 15	22
interpreted	144:17,24	133:21	82 : 17	113:2,3,9,
84:5,17		157:3	275 : 12	
	147:15	219:20	it'll 225:10	20,21
263:8	153:3	240:22	IC II 223:10	114:4,22
interpreter	169:12		it's 13:3	115:23
12:24 15:2	172:14	isolate	26:13,24	116:13
84:13	199:9	183:18	27:2 33:23	117:25
	201:2,3	isolated	34:25	120:18,21
interrupt	205:3	91:24	44:20,24	122:4
44:24	253:4	157:23	45:4 46:18	127:6,19
intersection	263:13	107.20	48:15 50:3	128:17
	272:24	isolation		129:24
s 36:5	273:9	158:3	52:14	130:16
interval		· · · · · · · · · · · · · · · · · · ·	53:24	132:7
66:19	IR-16 167:9	issue 26:18	54 : 10	133:15
	IR-17 62:10	51:20	57 : 15	
intervals		59:10,22	58:7,21,22	135:11,23
135:7	IR-20 209:9	65:10 73:1	59:2,3,13,	136:25
177:9	IR-24 263:3	81:23	14,23	137:2,4,16
185:19	265:18	85:13	60:19,20	,23
intervention	270:3	89:25 90:1	62 : 7 63 : 2	138:6,7,14
s 216:18	270:3	93:10,13	64:12 66:7	140:1,13,1
5 210.10	IR-25 209:8	134:19,20,	67 : 18	9 142:22
introduce	223:2	24 156 : 19	68:6,12,16	143:8,21
19:5,7	TR 07 0.05 1.0	168:25	,17,20	144:2,8,23
introduction	IR-27 265:19	169:1	70:12	145:4,6,22
	266:1	198:10,11	72:19,20	,24 146:17
s 13:12	IR-4 160:5	210:19	75:18,20	148:21,25
Inuit 6:13		252:22	77:5,14	149:14
16:9	IR-66 171:6	254:11	79:11,24	151:22
262:20	172:14			152:2,15,1
	173:5	issued	80:3,12,17	6 153:8,24
invented	IR-7 264:4	237:23	81:16 82:9	154:5
185:4	266:2	257:13	84:23	158:6
investigate		issues 18:4	85 : 14	159:1
174:8	IR-79 248:8	71:22	86 : 19	162:5,13
	irreversible		87:6,17,18	163:5,14
investigatio	43:14	80:19	,20,22,23	164:25
n 21:3		81:10,14	88:5,14	
invitation	IRs 9:9	130:12	90:11,12	165:11
107:18	20:19	134:18	91 : 24	166:14
TO / . TO	29:24 34:9	135:18	93:19	167:1
invite 189:8	41:17 50:7	141:24	94 : 17	169:9
involved	77:18	217:2	95:4 , 12	172:20,23
128:22	126:6	it'd 200:5	96:23 97:6	173:3
	144:12		98:19	175:2,9
173:17	152:16	item 21:4	101:11	176:19,21
192:23	153:20	25:2 57:8	103:3	183:12
involves	205:2	70:1	104:13,24	184:4
21:5	247:8	101:18	105:15,16,	190:20
	253:14	102:19	17 106:23	192:12,13
IR 9:8 26:8		139:16	±/ ±00.20	193:1
			L I	

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB	re	JAY	PROJECT	04-21-2015
--------	----	-----	---------	------------

Page 312 of 347

	FROJECI 04-	21 2010 10	age 512 01 54	
105.10	7 01	27.10	220.20	222.10
195:18	7,21	37:19	239:20	232:16
197:21	275:10,16,	38:19	246:15,17,	235:13,18,
198:10,11,	18	41:18,19,2	18,22	22
14 199:2	I've 12:9	3 42:3,6	247:13,23	236:5,9,11
201:5,15,2	19:4 34:3	43:12	248:3,4,10	,14 237:20
5 202:2,19		44:11	,17	244:17
203:9	59:5 60:11	49:17	249:3,14,1	245:2,19
204:7,8,15	62:8 64:3	51:6,11	9,23	246:7,9,20
205:2,22	69 : 25	56:12,17	250:1,12,1	261:8
207:15,23	80:23	57:1	7,20	
	87:14	68:10,11,1	251:10	Jim's 184:18
211:15	89:16			185:11
213:13,16	90:15	6,18 70:10	252:19	- ob 00.00
214:23	113:20	77:6,8,20	253 : 18	job 88:23
215:19,25	120:5	78:10,14	254:1,13,1	98:18
216:15,19	136:24	80:21	5 261:24	186:14
217:1,2,24	171:2	81:4,9	267:24	jobs 271:12
218:3	172:5	91:18 97:9	268:4,5	_
219:5	190:6	100:22	269:4,23	John 2:13,23
220:2,3	195:19	101:21	274:1	3:5,9 14:3
221:5,6	192:19	102:4,11,1	Jay-Cardinal	16:12,14
222:2,15		8 103:1	-	110:23
225:17	J	124:8,14,2	112:21	175:21,22
227:11,13,	J.F 4:21	0 125:7	Jim 3:2 17:2	176:6,14,1
19		128:21	29:8,15	8
228:10,11	Jamie 4:16	131:20	51:4 52:9	177:1,6,10
229:6,11	Jan 4:6	132:10	56:22,24	,21 182:2
230:16	17:15	135:6	58:14 61:2	184:10
233:23,25	47:7,8	138:22,23	63:24 68:3	185:21
233:23,25	49:19 58:5	140:9	71:11	186:11
234:5,10	76:15	151:21	77:1,22	194:4,25
	90:15		100:11	213:14,15,
236:21,25	91:2,9,11,	157:23	110:17	16
237:4,5,6	12	158:4		214:13,22,
238:4		167:21,22	111:4	23 216:7
240:15	225:24,25	169:25	113:14	239:3
241:2,16	229:13,14	170:3,5	115:10,18	259:5 257:1
242:14,15,	232:12,14,	171:17,22	116:4	237:1
17	15 233:13	172:9,11	117:10	John's 184:8
243:9,14	241:9,10	174:9	118:12,25	Tohnoon
245:20	Jan's 93:2	197:2	119:15	Johnson
246:1	238:19	201:18,23	120:8,17	177:7
249:7		203:18	121:10,14,	joined 48:17
252:10,16	January	206:22,23	25 161 : 10	
253:3,10,1	198:19	207:15,21	170:23	joining
4 254:25	237:25	211:4,6	172:5,6	19:6,15
256:3	jar 140:15	217:8	179:24	joint 26:6
257:7	-	219:15	180:20	63:3
258:15,17,	Jay 1:6 8:4	221:22	181:13	1
19 259:25	9:4 10:6	224:14	183:3	joints
260:5,24	11:4,18	226:20	186:4,11	42:10,13
262:6	20:16 22:5	227:10	187:23	joke 217:23
264:22	23:13,17	228:16	226:10	-
265:2,6	24:3	230:5	228:6	Jorneaux
269:1	32:1,19,24	230:5	229:15	4:15
	34:12,15		230:8,13	Journeaux
273:3,12,1	, -	238:14	230.0,13	

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY PROJECT 04-21-2015 Page 313 of 347

	FRODECI 04-	21 2010 10	aye 515 01 54	1
4:15	Kevin's	101:14	104:15	45:15
jump 25:19	145:8	105:6,7	105:6	47:17
	key 31:6	144:3	110:9	85:9,10,15
jumped 44:25	33:9 76:24	159:2,4	113:9	119:21
June 36:2	77:25	163:15,16	114:4	189:25
136:21	120:11	164:7	115:24	190:23
Justice 16:1	121:7	165:13	122:4,19	192:17,18,
	155:22	184:25	130:17	19
justificatio	226:6	185:16,18	133:15	known 31:20
n 9:10	260:23	193:13,14,	135:11	160:19
266:5	KIA 9:8	15 197:12	137:4	203:20
	262:17	198:21	138:14	241:16
K	263:3	199:3	139:3	Kristine
Karin 4:9	266:1	209:22,23	140:1	2:24 16:15
17:20	270:4	210:15	142:5	
60:9,10		211:9,17,1 9,20	143:9,22 145:5,23	Kue 202:23
	kilograms	9,20 222:17,18	145:5,23	Kyoto 88:5
Kate 2:6	38:17	242:22	146:17	· · · · ·
3:20 13:22	39:11,18	242:22 243:5,7,8	147:5	
Kathy 2:11	40:5	243:3,7,8	153:9	L
K'e 50:6	kilometre	257:8	158:6	labelled
51:20	154:22	261:17,18	159:2	57:6
142:16	156:25	262:5	163:5,15	Lac 77:9
166:4	157:5	269:20	164:25	255:22
167:14	175:7,15		165:11	lack 179:22
168:24	181:1,22	kinds	169:10	180:13,15
	187:16	49:15,17	175:3	181:5,9
Keelaghan	195:6,7	57:22	199:2	254:18
276:15	198:11	103:18	201:15,25	
Kel 136:6	223:22	125:5	213:13	lacking
To one of the	kilometres	168:21	216:8	158:21
Kennady 247:17	61:22	200:11	218:3	lady 86:8
248:18	67:16 71:2	Kitikmeot	221:15	- laid 129:10
	154:4,8,15	6:13 16:9	222:16	1a10 129:10
Kevin 5:9	158:13	262:20	225:18	lake 21:6,9
14:13	172:12,23	Klassen 1:12	242:17	22:2 26:7
90:16 91:2	175:9,18	12:9 24:12	253 : 10	39:21
101:13,14,	176:1	26:13 28:6	255 : 1	176:15
16 102:23	180:11	44:15,24	257 : 7	178:12
103:20	184:1,9	45:20	258:19	247:18
136:6,16,1	193:25	46:18	260:25	248:18
7 127-2 F 0	195:11	48:15 50:4	262:6	lakes
137:2,5,8,	kilos 40:8	52:18	265:6	22:17,18,1
14,15,16		59:14,24	273:17	9,21
139:5 143:24 25	Kim 5:12	60:7 69:14	275:10	lambda
143:24,25 144:16	14:11	70:13	Klengenberg	231:14,19
144:18,19	52:18,19	75:21	2:20	
243:4	54:8,18	79:11	15:17,18	land 84:24
252:13,15,	56:8	81:16 82:9	knew 210:18	85:2 87:2
16 254:8	58:2,17	88:14		119:22
268:8	59:8 76:2	95 : 12	knowledge	206:17
200.0	91:14,16	101:11	38:21	208:10
	92:22			

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 314 of 347	
218:11,19,	121:5	leaders	107:5	33:5 84:23
24	134:23	86:11,12	128:17	89:16 90:5
220:8,25	135:1	89:23	141:6	170:9
248:2	136:21	leading	180:7	171:25
lands 16:3,5	159:18	143:15	lessens	light 11:16
195:21	168:17		87:13	123:9
landscape	179:12	leaks 87:22	let's 20:11	152:9,14
33:8 37:18	190:1	least 27:3	62:15	153:10
113:1	192:16	90:14 92:9	64:16 94:9	165:21,25
178:18	199:11	103:25	107:1	166:6
232:2	210:1	104:5	142:13	168:25
	211:11	109:19	162:9	169:1
Langhorne	217:10,13 224:22	113:11	193:14	183:12
3:3 16:21	231:12,25	114:22	245:17	195:25
language	232:12,23	128:17	256:14	199:11,12,
12:25 84:3	252:15	143:10		15
85:9,18		196:19	level 41:14	200:4,15
191:24,25	lastly 13:20	204:1	78:24,25	201:11
192:1,2	late	224:11	92:11 95:5	lighting
241:6	190:7,22	239:2	107:14	199:20
large 49:9	235:8	243:19	108:19,23	
56:19	later 24:19	252 : 13	117:25	lights 29:12
57:16	34:25	leave 46:11	149:18 150:8	125:18 139:3
106:4,17	40:22 45:9	75 : 18	230:15	
113:18	40:22 43:9 71:20 84:1	125:15	230:15	likelihood
114:20	87:24	130:17	234:9,13	43:3
119:19	110:17	143:17	250:16	likely 22:7
149:15	133:12	188 : 19	255:25	77:9 91:18
236:18	143:6	216:19	261:21	104:7
241:15	186:10	Lee 2:17	263:20	150:4
261:21	271:17	17:6		176:16
263:20,23	272:5	154:13	levels 78:13	178:11
264:9		155:6 , 17	80:2	226:8
largely	latest 67:13	158:8,9	91:15,22	263:23
158:21	latitude	164:2	97:8	264:8
	272:4	186:23	115:13 174:17	Lim 5:10
larger 28:7	latter	210:8	178:19	14:15
32:25	200:23	legal 17:11	228:17,18	
49:10		26:1	262:25	limit 33:9
58:12 93:2	laws 259:25		264:7	47:25
187:9	260:3	legislation		71:23
223:7 233:2	lay 49:2	212:4,14	lichen 8:9	120:19 159:21
233:2	208:12	213:5,17 214:3	160:14	252:22
256:22	lays 10:10	214:3 215:2,10	163:8	
	124:6		195:8 269:9	limited 72:7
largest		<pre>length 11:6</pre>		120:12
33:16,17	leaching	103:11	lichens	121:8,21
233:15	142:24	134:11	160:23	201:5
last 67:11	lead 125:14	less 71:24	lies 71:15	limiting
73:8 75:5	149:17	73:2 74:10	240:19,21	43:8
95 : 15	245:16	91:24		126:13
113:10		106:1	life 22:8,13	

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY	PROJECT 04-2	21-2015 Pa	age 315 of 34	7
limits 96:16	192:9	167 : 9	39 : 15	loved 51:25
120:25	literature	244:7	long-haul	low 43:20
184:8	37:9 41:16	245:13	52:25	79:1 116:7
line 32:19	112:7	LKDFN 's	53:7,16	154:3,9,23
40:13	1:++1- 22.02	260:20		157:1,14
58:8,9	little 33:23		long-term	161:18
87:5 92:13	47:9,23	load 176:22	30:15	227:4
104:16	48:6,11	loads 54:22	43:13	228:2,18
166:20	50:9,18	55:2,5	241:20	234:3
199:24	51:2,13 73:22	56:9 87:11	Lorraine	236:17
201:16	91:25	88:1	3:22	237:3,15
274:6	102:9	local 119:21	lose 243:25	240:22
linear	102:9			241:4
40:8,14	110:24	localized	losing	242:2,3,6
67:16 71:2	113:7	160:21	231:20	261:20
	133:20	located 11:6	loss	lower 47:25
lines 38:22	135:20	102:12	22:15,21	88:3 246:5
42:24	146:16	locating	32:12 35:8	
140:18	180:4	-	37:14	Lubaki 4:11
166:5,9,25	184:1	265:19	38:17	16:6
167:10,16,	186:4	location	39:17	lunch 18:14
21	188:17	11:4 39:22	40:5,7,10,	54:2 69:11
168:3,22	190:2,5	127:18	16,20,21,2	92:21
202:9	191:22	128:14	2 41:1,13	115:25
link 31:10	192:7	locations	61 : 7	122:9,12,2
32:1 77:14	194:9,13	97:1	230:24	1 267:10
270:20	197:19	128:21	231:7	
	199:22,23	187:18	234:6	lunchtime
linkage 10:11	204:15		235:15	88:21
	210:3	long 57:10	244:11	Lutsel 50:6
linked 198:9	213:21	63:15 86:5	losses	51:20
list 7:3,4,5	217:1,3	121:7	239:24	142:16
8:1 9:1	224:23,24	150:17		166:4
10:1 11:1	225:8	152:18	lost	167:14
24:6 28:9	227:24	161:1 162:8	22:18,19	168:24
90:23 91:2	230:7		111:20	Lynda 3:18
113:20	241:11	163:7 185:3	138:11	17:22
139:17	243:9	187:11	210:4	212:10
166:2	246:2	213:23	231:22	214:12
203:25	254:2	269:9	lot 48:4	215:14
204:19	268:19	270:2	65:3 77:13	260:2
209:24	271:8		86:5 89:25	Lynx 21:15
262:11,15	272:3	long-	111:17	69:1
266:17	live 215:24	distance	190:8	134:6,22
274:21		99:25	191 : 13	134:0,22
275:12	lived 87:7	long-distant	192:5,17	141:4
listed 32:12	living	100:1	198:11	220:7
40:10	211:12		216:19	220:7
113:21	219:11	longer 187:8	220:23	~~ + +
273:1	LKDFN 5:24	196:23	237:8	
	14:20	245:16	256:16,25	М
listen 88:24	52:15	261:21	love 214:13	MacKay 4:5
190:23	JZ.IJ	longest		

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

1:2 6:11 12:9 199:4 9 manipulation 43:11 mater 21: 53: 131 maggical 193:25 251:3,4 manner 62:18 63:2 203:4 131 magnitude 96:13 96:13 260:21 132 43:18 manageably 96:13 63:2 203:4 131 150:11 96:13 2:6 13:22 132 169:14,18 management 171:8 management 12:9 44:1 map 11:3 135 181:3 10:8,17 102:10,15, 137:10 23:11,19,2 23 mater 12:22 228:11 1 2:4:7 103:17,25 20: 22 22 22 232:9 47:15,23 123:25 math magnitudes 79:23,24 266:8,20 239 27:23 80:3,11,22 mapped 36:12 mattrian 102:3 109:20 maps 47:16 149 103:23 109:20 maps 47:16 199 255:21 10:4,5 55:18 max 3 43:10 15:12,23 55:18 max 3 43:10 155:23 55:18 max 3 102:15 199:19 192:16 192:13 <th>31:9 59:8 63:</th>	31:9 59:8 63:
12:9 199:4 manageable 43:11 21: magical 251:3,4 manner 62:18 53: 193:25 manageably 63:2 203:4 131 magnitude 96:13 260:21 132 43:18 managely Mansfield ,19 150:11 96:13 2:6 13:22 134 171:8 management map 11:3 135 181:3 10:8,17 102:10,15, 136 197:10 23:11,19,2 23 mater 232:9 47:15,23 123:25 20: 231:1 1 24:7 103:17,25 20: 232:9 47:15,23 123:25 123:25 246:21 48:18 124:15 math 34:12:49:7 94:15.98:9 131:1 124:15 102:3 107:11 mapped 36:12 matte 102:3 108:11 124:19 matte 101:4,5 Marc 5:22 230 180:25 108:11 124:18	78.20 21
magical 251:3,4 manageably 63:11 21: 193:25 manageably 63:2 203:4 20 43:18 managely Mansfield 132 150:11 96:13 2:6 13:22 134 169:14,18 management map 11:3 135 181:3 10:8,17 102:10,15, 136 197:10 23:11,19,2 23 mater 228:11 1 24:7 103:17,25 20: 230:19 42:19 44:2 104:5,12 221 232:9 47:15,23 123:25 math magnitudes 79:23,24 266:8,20 239 27:23 80:3,11,22 mapped 36:12 matter 34:12 49:7 94:15 98:9 47:18 161 102:3 107:11 mapp 47:16 189 257:6 125:13 Marc 5:22 230 143:10 155:23 58:20 59:1 223 108:25 196:25 58:20 19:3 32	107.13
193:25 manageably 96:13 63:2 203:4 260:21 131 20 43:18 managely 150:11 Mansfield 96:13 131 2:6 13:22 131 2:6 13:22 134 132 169:14,18 management 12:3 map 11:3 135 135 181:3 10:8,17 102:10,15, 136 mater 12:23 223:11 1 2:4:7 103:17,25 20: 230:19 42:19:44:2 104:5,12 21: 231:25 mater 12: 232:29 12: 47:13,78:6 mater 19:10 mater 19:123 mater 12: 23:29 mater 12: 23:29 mater 14:19 mater 14:10 mater 14:10 mater 14:10 mater 14:11 mater 14:11 mater 14:11 mater 14:11 mater 14:12 mater 14:12 mater 14:12 mater 14:12 <thmater 14:12 mater 14:12 mater 1</thmater 	123.25
manageably 0312 20334 20 43:18 managely 260:21 132 150:11 96:13 260:21 132 169:14,18 management map 11:3 135 181:3 10:8,17 102:10,15, 136 197:10 23:11,19,2 23 mater 228:11 1 24:7 103:17,25 20: 230:19 42:19 44:2 104:5,12 221 232:9 47:15,23 123:25 math magnitudes 77:13 78:6 194:10 matri 27:23 80:3,11,22 mapped 36:12 matte 102:3 107:11 mapping 208 125:21 101:4,5 124:19 matte 143:10 151:2,23 55:18 max 3 180:25 108:11 124:19 matte 143:11 150:23 55:18 max 3 43:10 155:23 55:18 max 3 108:25 196:25 196:25 196:25 </td <td>24 54:5 129.25</td>	24 54:5 129.25
magnitude 96:13 200:21 132 43:18 managely Mansfield ,19 150:11 96:13 2:6 13:22 134 171:8 management map 11:3 135 181:3 10:8,17 102:10,15, 136 197:10 23:11,19,2 23 mater 228:11 1.24:7 103:17,25 20: 232:9 47:15,23 122:15 math magnitudes 77:13 78:6 194:10 matri 27:23 80:3,11,22 mapped 36:12 matter 34:12 49:7 94:15 98:9 47:18 161 180:25 108:11 124:19 matter 191:23 109:20 maps 47:16 49: 141:19 143:16 258:9 19: 143:11 150:23 55:18 38:20 59:1 108:25 196:25 196:25 19: 223 108:25 196:25 19: 12: 10: 119:19 197:16 mark 2:3 maxim 19:19 19:	:10,12, 134:17
$43:16$ managelyMansfield,19 $150:11$ $96:13$ $2:6 \ 13:22$ 134 $169:14,18$ managementmap $11:3$ 135 $171:8$ managementmap $11:3$ 135 $181:3$ $10:8,17$ $102:10,15$, 136 $197:10$ $23:11,19,2$ 23 mater $228:11$ $124:7$ $103:17,25$ $20:$ $230:19$ $42:19 \ 44:2$ $104:5,12$ 221 $232:9$ $47:15,23$ $123:25$ mathmagnitudes $79:23,24$ $268:8,20$ 239 $27:23$ $80:3,11,22$ mapped $36:12$ matte $34:12 \ 49:7$ $94:15 \ 98:9$ $47:18$ 161 $102:3$ $107:11$ mapping 208 $180:25$ $108:11$ $124:19$ matte $191:23$ $109:20$ maps $47:16$ $49:$ $255:21$ $10:4,5$ $258:9$ $19:$ $143:11$ $150:23$ $March \ 54:23$ $19:$ $143:11$ $150:23$ $51:18$ $64:$ $191:19$ $197:16$ $mark \ 2:3$ $19:$ $108:25$ $196:25$ $196:25$ $196:25$ $191:19$ $197:16$ $mark \ 2:3$ $182:11:11$ $181tained$ $203:18,20$ $mark \ 2:3$ $30:21$ $,182:11:11$ $182:14$ $32:$ $103:7$ $214:10,17$ $16:15$ $39:$ $148:5$ $21:12,17$ $182:14$ $32:$ $103:7$ $219:8,14$ $92:7$ $10:5,7,10,$ $148:5$ $21:12$	135.17 3
160:11 96:13 2:6 13:22 134 169:14,18 management map 11:3 135 181:3 10:8,17 102:10,15, 136 197:10 23:11,19,2 23 mater 228:11 1 24:7 103:17,25 20: 230:19 42:19 44:2 104:5,12 221 232:9 47:15,23 123:25 math magnitudes 77:13 78:6 194:10 matri 27:23 80:3,11,22 mapped 36:12 matter 34:12 49:7 94:15 98:9 47:18 161 102:3 107:11 mapping 208 180:25 108:11 124:19 matter 191:23 109:20 maps 47:16 189 257:6 125:13 Marc 5:22 230 Mainly 141:19 14:16 189 108:25 196:25 55:18 max 3 108:25 196:25 196:25 192:19 197:16 mark 2:3	138.4 10
169:14,18 management map 11:3 135 171:8 10:8,17 102:10,15, 136 197:10 23:11,19,2 23 mater 228:11 1 24:7 103:17,25 20: 230:19 42:19 44:2 104:5,12 221 232:9 47:15,23 123:25 math magnitudes 77:13 78:6 194:10 matri 27:23 80:3,11,22 mapped 36:12 matter 34:12 49:7 94:15 98:9 47:18 161 102:3 107:11 mapping 208 180:25 108:11 124:19 matter 191:23 109:20 maps 47:16 189 257:6 125:13 Marc 5:22 230 Mainly 141:19 14:16 Maure 143:11 150:12,23 55:18 max 3 30:25 196:25 182:14 64: 30:25 196:25 186:6 182:14 30:25 209:24 221:16,17 51: maintaining 201:2,4,17 186:6 <t< td=""><td>,23 1 1 20.4</td></t<>	,23 1 1 20.4
111:8 10:8,17 102:10,15, 136 181:3 10:8,17 103:17,25 20: 228:11 124:7 103:17,25 20: 230:19 42:19 44:2 104:5,12 221 232:9 47:15,23 123:25 math magnitudes 79:23,24 268:8,20 239 27:23 80:3,11,22 mapped 36:12 matte main 27:5 81:25 83:1 47:18 161 102:3 107:11 mapping 208 180:25 108:11 124:19 matte 191:23 109:20 maps 47:16 189 257:6 125:13 Marc 5:22 230 Mainly 141:19 14:16 189 193:25 196:25 196:25 182:0 59:1 191:19 197:16 Mark 2:3 maxim 32:1 191:19 197:16 Marke 6:18 64: maintained 203:18,20 221:16,17 51: 30:21 ,18 211:11 182:14 32: 193:17 213:9,24<	1/5.9 10
181:3 100.977 $100.1377, 25$ $23:11, 19, 2$ $102.137, 107$ $23:11, 19, 2$ $197:10$ $23:11, 19, 2$ $103:17, 25$ $20:$ $230:19$ $42:19, 44:2$ $104:5, 12$ 221 $232:9$ $47:15, 23$ $123:25$ $math$ $246:21$ $48:18$ $124:15$ $math$ $magnitudes$ $79:23, 24$ $268:8, 20$ 239 $27:23$ $80:3, 11, 22$ $mapped 36:12$ $matte$ $102:3$ $107:11$ $mapping$ 208 $102:3$ $107:11$ $124:19$ $matte$ $191:23$ $109:20$ $maps 47:16$ $49:$ $257:6$ $125:13$ $Marc 5:22$ 230 $Mainly$ $141:19$ $14:16$ $Maure$ $143:11$ $150:23$ $Marc 54:23$ $maintain$ $151:12, 23$ $55:18$ max $30:25$ $209:24$ $221:16, 17$ $maxim$ $30:25$ $209:24$ $221:16, 17$ $51:$ $maintainig$ $210:2, 4, 17$ $mark 2:3$ $maxim$ $30:25$ $209:24$ $221:16, 17$ $51:$ $30:25$ $210:2, 4, 17$ $mark 2:3$ $32:$ $148:5$ $215:4$ $mas 38:17$ $41:$ $maintaining$ $210:2, 4, 17$ $16:15$ $39:17$ $31:42:17$ $214:100, 17$ $16:15$ $39:17$ $148:5$ $210:4, 17$ $213:1, 10, 17$ $16:15$ $maintainig$ $210:2, 4, 17$ $16:15$ $39:17$ $31:42:5$ $213:9, 24$ $mas 38:17$ $41:$ </td <td>146.8 14</td>	146.8 14
228:111 24:7103:17,2520:230:19 $42:19$ 44:2 $104:5,12$ 221232:9 $47:15,23$ $123:25$ math246:2148:18 $124:15$ mathmagnitudes $79:23,24$ $268:8,20$ 23927:23 $80:3,11,22$ mapped $36:12$ matte34:12 49:7 $94:15$ 98:9 $47:18$ 161102:3 $107:11$ mapping208102:3 $107:11$ mapping208102:3 $109:20$ maps $47:16$ 49:255:21 $108:11$ $124:19$ matte143:11 $150:23$ Marc $5:22$ 230maintain $151:12,23$ $55:18$ max 343:10 $155:23$ $58:20$ 59:1223108:25 $196:25$ $196:25$ $8a:20$ 59:1119:19 $197:16$ Mare $6:18$ maxim $30:25$ $209:24$ $221:16,17$ $51:$ $203:18,20$ $203:18,20$ $203:18,20$ $32:$ $30:21$ $,18$ 211:11 $186:6$ $32:$ $148:5$ $215:4$ mass $38:17$ $41:$ $30:7$ $214:10,17$ $16:15$ $39:$ $148:5$ $215:4$ $224:1$ $40:5,7,10,$ $174:4$ $233:18,22$ $16:17$ $16:7$ $232:19$ $234:11,15$ $41:161:7$ $23:17$ $231:7$ $24:274:11$ $42:24:1$ $40:5,7,10,$ $16:5$ $270:18,21,$ $239:24$ $239:24$:2,4 147:13,2
230:19 42:19 44:2 104:5,12 221 232:9 47:15,23 123:25 math magnitudes 79:23,24 268:8,20 239 27:23 80:3,11,22 mapped 36:12 matte 34:12 49:7 94:15 98:9 47:18 161 102:3 107:11 mapping 208 180:25 108:11 124:19 matte 191:23 109:20 maps 47:16 189 255:21 100:4,5 258:9 19: 141:19 14:16 14:16 189 257:6 125:13 Marc 5:22 230 Mainly 141:19 14:16 189 108:25 196:25 196:25 196:25 119:19 197:16 Mare 6:18 64: maintained 203:18,20 mark 2:3 maxim 30:25 209:24 221:16,17 51: Maintaining 210:2,4,17 186:6 51: 30:21 ,18 211:11 marked 180:3 32: maintenance 212:12,17 182:14	
1232:9 47:15,23 123:25 math 232:9 48:18 124:15 math magnitudes 77:13,78:6 194:10 matri 27:23 80:3,11,22 mapped 36:12 matte main 27:5 81:25 83:1 47:18 161 34:12 49:7 94:15 98:9 mapped 36:12 matte 102:3 107:11 124:19 matte 191:23 109:20 maps 47:16 189 255:21 108:11 124:19 matte 143:11 150:23 Marc 5:22 230 maintain 151:12,23 55:18 max 3 108:25 196:25 196:25 197:16 maintain 151:12,23 58:20 59:1 223 30:25 204:1,17 186:6 3 30:25 196:25 196:25 182:14 103:7 212:12,17 marked 180:3 maxim 30:21 ,18 211:11 182:14 37: 103:7 214:10,17 186:6 3 3 148:5 215:4 <td< td=""><td></td></td<>	
232:9 $246:21$ $47:15, 23$ $48:18$ $123:25$ $124:15$ mathmagnitudes $27:23$ $77:13 78:6$ $99:23, 24$ $268:8, 20$ 239 main $27:5$ $34:12 49:7$ $102:3$ $102:3$ $105:25$ $81:25 83:1$ $107:11$ mapped $36:12$ $124:19$ mattee $47:18$ $161:25$ $102:3$ $105:25$ $108:11$ $102:3$ $107:11$ $124:19$ $102:20$ $109:20$ $255:21$ $109:20$ $101:4, 5$ $257:6$ $maps 47:16$ $141:19$ $Marc 5:22$ 230 Mainly $143:10$ $155:23$ $141:16$ $258:9$ $Marc 54:23$ $196:25$ $max 3$ $36:20 59:1$ maintain $101:25$ $151:12,23$ $196:25$ $58:20 59:1$ $221:16,17$ $maxim182:1430:21182:14maxim30:21186:5209:24212:12,17maxim182:1430:21186:5maxim182:1430:21maxim182:1430:17148:5maxim215:23198:1439:17148:5maxim16:1539:17148:5maxim16:1539:17174:4232:19maxim23:17,7231:7,7$:18 181:18
246:21 48:18 124:15 math magnitudes 77:13 78:6 194:10 matri 27:23 80:3,11,22 mapped 36:12 matte main 27:5 81:25 83:1 47:18 161 102:3 107:11 mapping 208 180:25 108:11 124:19 matte 191:23 109:20 maps 47:16 189 255:21 106:11 125:13 14:16 143:11 150:23 Marc 5:22 230 maintain 151:12,23 55:18 max 3 43:10 155:23 58:20 59:1 223 108:25 196:25 196:25 mark 2:3 108:25 196:25 196:25 186:6 119:19 197:16 mark 2:3 maxim 30:25 204:1,17 186:6 51: 203:18,20 186:6 51: 32: 103:7 214:10,17 16:15 39: 148:5 219:8,14 39:17 51: maintaining 210:2,4,17 mass 38:17 31: <td>100-0</td>	100-0
magnitudes $77:13\ 78:6$ $194:10$ matri $27:23$ $80:3,11,22$ $268:8,20$ 239 main $27:5$ $81:25\ 83:1$ $94:15\ 98:9$ mapped $36:12$ matter $34:12\ 49:7$ $94:15\ 98:9$ $47:18$ 161 $102:3$ $107:11$ $124:19$ matter $191:23$ $109:20$ maps $47:16$ 189 $255:21$ $110:4,5$ $258:9$ $141:16$ $257:6$ $125:13$ $14:16$ 189 $143:11$ $150:23$ $55:18$ $max\ 3$ $43:10$ $155:23$ $58:20\ 59:1$ 223 $108:25$ $196:25$ $196:25$ $mark\ 2:3$ $108:25$ $196:25$ $196:25$ $mark\ 2:3$ $108:25$ $196:25$ $196:25$ $mark\ 2:3$ $108:25$ $120:2,4,17$ $mark\ 2:3$ $30:25$ $209:24$ $221:16,17$ $211:11$ $182:14$ $32:$ $30:21$ $,18\ 211:11$ $182:14$ $30:21$ $,18\ 211:11$ $182:14$ $30:21$ $,18\ 211:11$ $182:14$ $30:21$ $,18\ 211:11$ $182:14$ $30:7$ $214:10,17$ $16:15$ $148:5$ $219:8,14$ $39:17$ $148:5$ $219:8,14$ $39:17$ $148:5$ $224:1$ $40:5,7,10,$ $71:4:4$ $233:18,22$ $16,21,22$ $16:5$ $270:18,21,$ $239:24$ $18:13$ $24\ 274:11$ $16:17$ $16:5$ $270:18,21,$ $239:24$ $10:$ $10:$	133:20
$27:23$ $79:23,24$ $268:8,20$ 239 main 27:5 $80:3,11,22$ mapped $36:12$ matter $34:12 \ 49:7$ $94:15 \ 98:9$ $47:18$ 161 $102:3$ $107:11$ $124:19$ matter $191:23$ $109:20$ maps $47:16$ $49:$ $255:21$ $110:4,5$ $258:9$ $19:20$ $255:21$ $110:4,5$ $141:19$ $14:16$ $143:11$ $150:23$ $165:23$ $55:18$ maintain $155:23$ $55:18$ 223 $108:25$ $196:25$ $196:25$ $196:25$ $119:19$ $197:16$ $186:6$ 213 maintaining $203:18,20$ $mark 2:3$ $30:25$ $209:24$ $221:16,17$ $30:21$ $,18 \ 211:11$ $182:14$ $30:25$ $215:4$ $mass \ 38:17$ $448:5$ $215:4$ $mass \ 38:17$ $148:5$ $215:4$ $39:17$ $148:5$ $223:18,22$ $16,21,22$ $103:7$ $215:4$ $39:17$ $148:5$ $215:4$ $39:17$ $148:5$ $219:8,14$ $39:17$ $174:4$ $233:18,22$ $16,21,22$ $174:4$ $233:18,22$ $16,21,22$ $16:5$ $270:18,21,$ $239:24$ $16:5$ $270:18,21,$ $239:24$ $16:5$ $270:18,21,$ $239:24$	
27:23 $80:3,11,22$ $mapped 36:12$ $matte$ main 27:5 $81:25 83:1$ $47:18$ 161 $34:12 49:7$ $94:15 98:9$ $47:16$ 161 $102:3$ $107:11$ $124:19$ $matte$ $180:25$ $108:11$ $124:19$ $matte$ $191:23$ $109:20$ $maps 47:16$ $49:$ $255:21$ $110:4,5$ $Marc 5:22$ 230 $Mainly$ $141:19$ $14:16$ $Maure$ $143:11$ $150:23$ $Marc 54:23$ $max 3$ $43:10$ $155:23$ $58:20 59:1$ 223 $108:25$ $196:25$ $58:20 59:1$ 223 $108:25$ $196:25$ $mark 2:3$ $maxim$ $119:19$ $197:16$ $mark 2:3$ $maxim$ $30:25$ $209:24$ $221:16,17$ $51:$ $maintained$ $203:18,20$ $mark 2:3$ $maxim$ $30:25$ $209:24$ $221:16,17$ $51:$ $209:24$ $221:16,17$ $51:$ $39:$ $30:21$ $,18 211:11$ $182:14$ $32:$ $maintenance$ $212:12,17$ $mass 38:17$ $41:$ $148:5$ $215:4$ $mass 38:17$ $41:$ $major 173:25$ $224:1$ $40:5,7,10,$ $71:$ $174:4$ $233:18,22$ $16,21,22$ 156 $232:19$ $234:11,15$ $41:1$ $61:7$ $majority$ $253:1,7$ $231:7$ $231:7$ $116:5$ $270:18,21,$ $239:24$ $may 9$ $187:13$ $24 274:11$ $massive$ $10:$ <td>:1,14 211:18</td>	:1,14 211:18
main 27:581:25 83:1mapped 36:12mattee34:12 49:794:15 98:947:18161102:3107:11124:19mattee191:23109:20maps 47:16189255:21110:4,5Marc 5:22230257:6125:13Marc 5:22230Mainly143:16258:919:143:11150:23March 54:23maxim43:10155:2355:18223108:25196:25196:2519:119:19197:16Marie 6:1864:maintaind203:18,20221:16,17186:630:25204:1,17186:651:254:1,7212:12,17186:632:103:7214:10,1716:1539:148:5215:4mass 38:1741:148:5215:416:1539:148:5215:423:18,2216:22,22174:423:18,2216:21,22156174:423:18,2216:21,22156174:423:18,2216:21,2215616:5270:18,21,23:17231:716:5270:18,21,239:24may 916:524:274:11massive10:	
$34:12 \ 49:7$ $94:15 \ 98:9$ $47:18$ 161 $102:3$ $107:11$ $mapping$ 208 $180:25$ $108:11$ $124:19$ $matte$ $191:23$ $109:20$ $maps \ 47:16$ $49:$ $255:21$ $110:4,5$ $maps \ 47:16$ 189 $257:6$ $125:13$ $Marc \ 5:22$ 230 $Mainly$ $141:19$ $14:16$ $max \ 3$ $143:11$ $150:23$ $March \ 54:23$ $max \ 3$ $maintain$ $151:12,23$ $55:18$ $max \ 3$ $43:10$ $155:23$ $58:20 \ 59:1$ 223 $108:25$ $196:25$ $196:25$ $mark \ 2:3$ $119:19$ $197:16$ $mark \ 2:3$ $maxim$ $maintained$ $203:18,20$ $mark \ 2:3$ $30:25$ $209:24$ $mark \ 2:3$ $Maintaining$ $210:2,4,17$ $markel \ 180:3$ $30:21$ $,18 \ 211:11$ $markel \ 180:3$ $maintenance$ $212:12,17$ $mars \ 38:17$ $54:1,7$ $213:9,24$ $mass \ 38:17$ $148:5$ $215:4$ $mass \ 38:17$ $major \ 173:25$ $224:1$ $40:5,7,10,$ $174:4$ $233:18,22$ $16,21,22$ $232:19$ $234:11,15$ $41:1 \ 61:7$ $232:19$ $234:11,15$ $41:1 \ 61:7$ $232:19$ $234:11,15$ $41:1 \ 61:7$ $231:7$ $231:7$ $231:7$ $16:5$ $270:18,21,$ $239:24$ $may 9$ $10:$	
102:3107:11mapping208180:25108:11124:19matte191:23109:20maps 47:1649:255:21110:4,5Marc 5:22230Mainly141:1914:16189143:11150:23March 54:23max 343:10155:2355:18223108:25196:25196:25196:25119:19197:16Marie 6:18maximasintaind203:18,20mark 2:330:2530:25209:24221:16,1751:Maintaining210:2,4,17186:651:30:21,18 211:11182:1432:maintainad210:2,4,17marked 180:332:103:7214:10,1716:1539:148:5215:4mass 38:1741:major 173:25224:140:5,7,10,71:174:4233:18,2216,21,22156232:19234:11,1541:1 61:7231:716:5270:18,21,239:24may 9187:1324 274:11massive10:	• • • • • • • • • • • • • • • • • • • •
180:25 $108:11$ $124:19$ matter $191:23$ $109:20$ maps $47:16$ $49:$ $255:21$ $110:4,5$ Marc $5:22$ 230 Mainly $141:19$ $14:16$ Maure $143:11$ $150:23$ March $54:23$ $19:$ maintain $151:12,23$ $55:18$ 223 $43:10$ $155:23$ $58:20$ $59:1$ $108:25$ $196:25$ $196:25$ $mark$ $2:3$ $108:25$ $196:25$ $mark$ $2:3$ $108:25$ $196:25$ $mark$ $6:18$ $30:25$ $209:24$ $221:16,17$ $maxim$ $30:25$ $209:24$ $221:16,17$ $32:$ $maintaining$ $210:2,4,17$ $marked$ $180:3$ $30:21$ $,18$ $211:11$ $182:14$ $32:$ $maintaining$ $210:2,4,17$ $marked$ $180:3$ $30:21$ $,18$ $211:11$ $182:14$ $32:$ $maintenance$ $212:12,17$ $mark d$ $38:17$ $148:5$ $219:8,14$ $39:17$ $51:$ $174:4$ $233:18,22$ $16,21,22$ 156 $23:19$ $234:11,15$ $41:1$ $61:7$ $23:19$ $253:1,7$ $231:7$ $231:7$ $16:5$ 24 $274:11$ $massive$ $10:$ 24 $274:11$ $massive$:1 223:16
191:23 $109:20$ maps $47:16$ $49:$ $255:21$ $110:4,5$ $Marc 5:22$ 230 Mainly $141:19$ $14:16$ $Mare$ $143:11$ $150:23$ $March 54:23$ $next 3$ maintain $151:12,23$ $55:18$ 223 $43:10$ $155:23$ $58:20 59:1$ 223 $108:25$ $196:25$ $196:25$ $mark 2:3$ $maxim$ $119:19$ $197:16$ $mark 2:3$ $maxim$ $30:25$ $204:1,17$ $186:6$ $51:$ $maintained$ $203:18,20$ $mark 2:3$ $maxim$ $30:25$ $204:24,17$ $186:6$ $51:$ $maintained$ $210:2,4,17$ $186:6$ $32:$ $30:21$ $,18 211:11$ $182:14$ $32:$ $maintained$ $212:12,17$ $marked 180:3$ $32:$ $148:5$ $214:10,17$ $16:15$ $39:$ $148:5$ $215:4$ $mass 38:17$ $41:$ $major 173:25$ $224:1$ $40:5,7,10,$ $71:$ $174:4$ $233:18,22$ $16,21,22$ 156 $232:19$ $23:1,7$ $231:7$ $231:7$ $16:5$ $270:18,21,$ $239:24$ $may 9$ $187:13$ $24 274:11$ $massive$ $10:$	ers 251:4,23
255:21 $110:4,5$ $110:4,5$ $110:4,5$ $257:6$ $125:13$ $140:5,22$ 230 $Mainly$ $143:16$ $14:16$ $258:9$ $143:11$ $150:23$ $March 54:23$ $19:$ $maintain$ $151:12,23$ $55:18$ $max 3$ $43:10$ $155:23$ $55:18$ 223 $108:25$ $196:25$ $196:25$ $mark 2:3$ $108:25$ $196:25$ $196:25$ $mark 2:3$ $108:25$ $209:24$ $221:16,17$ $maintained$ $203:18,20$ $mark 2:3$ $30:25$ $209:24$ $221:16,17$ $Maintaining$ $210:2,4,17$ $marked 180:3$ $30:21$ $,18 211:11$ $182:14$ $maintenance$ $212:12,17$ $16:15$ $54:1,7$ $213:9,24$ $Mason 2:24$ $103:7$ $214:10,17$ $16:15$ $148:5$ $215:4$ $mass 38:17$ $major 173:25$ $224:1$ $40:5,7,10,$ $174:4$ $233:18,22$ $16,21,22$ $232:19$ $234:11,15$ $41:1 61:7$ $majority$ $253:1,7$ $231:7$ $116:5$ $270:18,21,$ $239:24$ $187:13$ $24 274:11$ $massive$	25 252:5
257:6125:13Marc 5:22230Mainly141:1914:16Maure143:11150:23March 54:2319:maintain151:12,2355:18max 343:10155:2358:20 59:1223108:25196:2558:20 59:1223108:25196:25Marie 6:1864:maintained203:18,20mark 2:3maxim30:25209:24221:16,1751:Maintaining210:2,4,17186:651:30:21,18 211:11182:1432:maintenance212:12,17182:1432:54:1,7213:9,24Mason 2:2438:103:7214:10,1716:1539:148:5219:8,1439:1751:major 173:25224:140:5,7,10,15:174:4233:18,2216,21,22156majority253:1,7231:7231:7116:5270:18,21,239:24may 9187:1324 274:11massive10:	
Mainly141:1914:16Maure143:11143:16258:919:maintain151:12,2355:1819:43:10155:2358:20 59:1223108:25196:2558:20 59:1223119:19197:16Mark 2:3maximao:25209:24221:16,1764:maintaining210:2,4,17186:651:30:21,18 211:11182:1432:maintenance212:12,17Mason 2:2438:103:7214:10,1716:1539:148:5215:4mass 38:1741:major 173:25224:140:5,7,10,15:232:1923:18,2216,21,22162majority253:1,7231:7231:7116:5270:18,21,239:24may 9187:1324 274:11massive10:	:2 269:23
Mainly143:16258:9Mainly143:11150:23March 54:2319:maintain151:12,2355:18223108:25196:2558:20 59:1223119:19197:16Marie 6:18maximmaintained203:18,20mark 2:3maxim30:25204:1,17186:651:Maintaining210:2,4,17marked 180:332:30:21,18 211:11182:1432:maintenance212:12,17183:022454:1,7213:9,2438:1732:103:7214:10,1716:1539:148:5215:4mass 38:1741:major 173:25224:140:5,7,10,71:232:19234:11,1541:1 61:7162majority253:1,7231:7231:7116:5270:18,21,239:24may 9187:1324 274:11massive10:	209:24
143:11150:23March 54:23max 3maintain151:12,2355:1822343:10155:2358:20 59:1223108:25196:25Marie 6:18maxim119:19197:16Marie 6:18maximmaintained203:18,20mark 2:3maxim30:25209:24221:16,17maximMaintaining210:2,4,17marked 180:332:30:21,18 211:11marked 180:332:maintenance212:12,17Mason 2:2438:54:1,7213:9,24Mason 2:2438:103:7214:10,1716:1539:148:5215:4mass 38:1741:major 173:25224:140:5,7,10,71:232:19234:11,1541:1 61:716:2majority253:1,7231:7231:7116:5270:18,21,239:24may 910:16:5270:18,21,239:2410:10:10:	
maintain151:12,2351:1243:10155:2355:18223108:25196:2558:20 59:1223119:19197:16Marie 6:18maxim30:25204:1,17186:651:209:24221:16,1751:Maintaining210:2,4,17186:651:30:21,18 211:11182:1432:maintenance212:12,17182:1432:54:1,7213:9,24Mason 2:2438:103:7214:10,1716:1539:148:5219:8,1439:1751:major 173:25224:140:5,7,10,71:232:19234:11,1541:1 61:7162majority253:1,7231:7231:7116:5270:18,21,239:24may 9187:1324 274:11massive10:	8,9 272:5
43:10155:23108:25223108:25196:2558:20 59:1maxim119:19197:16Marie 6:1864:maintained203:18,20mark 2:3maxim30:25209:24221:16,1751:Maintaining210:2,4,17186:651:maintenance212:12,17marked 180:332:54:1,7213:9,24Mason 2:2438:103:7214:10,1716:1539:148:5215:4mass 38:1741:major 173:25224:140:5,7,10,51:174:4233:18,2216,21,22162232:19234:11,1541:1 61:7162majority253:1,7231:7231:7116:5270:18,21,239:24may 9187:1324 274:11massive10:	7:20 maybe 17:2
108:25 119:19196:25 197:16Marie 6:18 mark 2:3maxim 64:maintained 30:25203:18,20 204:1,17Mark 2:3 186:6 221:16,17maxim 64:Maintaining 30:21210:2,4,17 ,18 211:11marked 180:3 182:14maxim 32:maintenance 54:1,7 103:7 148:5212:12,17 214:10,17mass 38:17 39:17mass 38:17 51:major 173:25 224:1 174:4 232:19219:8,14 233:18,22 24:11,15mass 38:17 215:4mass 38:17 16:1551: 39:majority 187:13253:1,7 24 274:11massive 10:10:	:15 48:1 50:
119:19197:16Marie 6:18Makinmaintained203:18,20mark 2:364:30:25204:1,17186:651:Maintaining210:2,4,17186:632:30:21,18 211:11182:1432:maintenance212:12,17182:1432:54:1,7213:9,24Mason 2:2438:103:7214:10,1716:1539:148:5215:4mass 38:1741:major 173:25224:140:5,7,10,71:174:4233:18,2216,21,22162232:19234:11,1541:1 61:723116:5270:18,21,239:24may 9187:1324 274:11massive10:	51:1,23
maintained 30:25203:18,20 204:1,17 209:24mark 2:3 186:6 221:16,17maxim 51:Maintaining 30:21210:2,4,17 ,18 211:11marked 180:3 182:14maxim 32:maintenance 54:1,7 103:7 148:5212:12,17 214:10,17marked 180:3 182:14maxim 32:major 173:25 224:1215:4 219:8,14 232:19mass 38:17 214:10,17mass 38:17 215:4major 173:25 224:1 174:4 232:19233:18,22 234:11,15 24:11,15mass 38:17 231:7 231:7filemajority 187:1324 274:11massive 10:	- 69.19.95
Maintained204:1,17186:6maxim30:25209:24221:16,1751:Maintaining210:2,4,17marked 180:332:30:21,18 211:11182:1432:maintenance212:12,17182:1437:54:1,7213:9,24Mason 2:2438:103:7214:10,1716:1539:148:5215:4mass 38:1741:major 173:25224:140:5,7,10,71:174:4233:18,2216,21,22156232:19234:11,1541:1 61:7162majority253:1,7231:7231:7116:5270:18,21,239:24may 9187:1324 274:11massive10:	99:23
30:23209:24221:16,1751:Maintaining 30:21210:2,4,17 ,18 211:11marked 180:3 182:1432:maintenance 54:1,7212:12,17Mason 2:24 103:738:103:7 148:5214:10,17 219:8,1416:15 39:1739:major 173:25 232:19219:8,14 233:18,22 234:11,15mass 38:17 41: 16,21,2241:majority 187:13253:1,7 24 274:11239:24 239:24may 9 10:	ized 102:9
Maintaining 30:21210:2,4,17 ,18 211:11marked 180:3 182:14maxim 32:maintenance 54:1,7 103:7 148:5212:12,17 214:10,17marked 180:3 182:1432: 37:major 173:25 224:1213:9,24 215:4Mason 2:24 16:1538: 39:major 173:25 232:19219:8,14 233:18,22 234:11,15mass 38:17 40:5,7,10, 16,21,22mass 38:17 51: 16,21,22majority 187:13253:1,7 24 274:1139:24 10:may 9 10:	15 105:2
30:21,18 211:11marked 180:332:maintenance212:12,17182:1437:54:1,7213:9,24Mason 2:2438:103:7214:10,1716:1539:148:5215:4mass 38:1741:major 173:25224:140:5,7,10,51:174:4233:18,2216,21,22166232:19234:11,1541:1 61:7162majority253:1,7231:7231:7116:5270:18,21,239:24may 910:10:massive10:	159:10
maintenance212:12,17182:1437:54:1,7213:9,24Mason 2:2438:103:7214:10,1716:1539:148:5215:4mass 38:1741:major 173:25224:139:1751:174:4233:18,2216,21,22156232:19234:11,1541:1 61:7162majority253:1,7231:7231:7116:5270:18,21,239:24may 9187:1324 274:11massive10:	16/.23
54:1,7213:9,24Mason 2:2438:103:7214:10,1716:1539:148:5215:4mass 38:1741:major 173:25224:139:1751:174:4233:18,2216,21,22156232:19234:11,1541:1 61:7162majority253:1,7231:7231:7116:5270:18,21,239:24may 9187:1324 274:11massive10:	185.10
34:1,7 214:10,17 16:15 39: 103:7 214:10,17 16:15 39: 148:5 215:4 mass 38:17 41: major 173:25 224:1 39:17 51: 174:4 233:18,22 16,21,22 156 232:19 234:11,15 41:1 61:7 162 majority 253:1,7 231:7 231 116:5 270:18,21, 239:24 may 9 187:13 24 274:11 massive 10:	186.9
103.7215.4mass 38:1741:148:5215:439:1751:major 173:25224:139:1751:174:4233:18,2216,21,22156232:19234:11,1541:1 61:7162majority253:1,7231:7231:7116:5270:18,21,239:24may 9187:1324 274:11massive10:	2,10,13 246:2
major 173:25 219:8,14 39:17 51: 174:4 233:18,22 16,21,22 156 232:19 253:1,7 231:7 162 majority 253:1,7 231:7 231:7 116:5 270:18,21, 239:24 may 9 187:13 24 274:11 massive 10:	247.0
major 173:25224:139:17174:4233:18,2240:5,7,10,232:19234:11,1516,21,22majority253:1,7231:7116:5270:18,21,239:24187:1324 274:11massive	^{8,10} 253.10
174:4233:18,2240:5,7,10,71:232:19234:11,1516,21,22156majority253:1,7231:7231116:5270:18,21,239:24may 9187:1324 274:11massive10:	9 64:6
232:19 234:11,15 16,21,22 majority 253:1,7 41:1 61:7 162 116:5 270:18,21, 239:24 may 9 187:13 24 274:11 massive 10:	2 132:1 273.5 8
majority 2534:11,15 41:1 61:7 162 253:1,7 231:7 231 116:5 270:18,21, 239:24 may 9 187:13 24 274:11 massive 10:	:4
116:5 270:18,21, 239:24 may 9 187:13 24 274:11 massive 10:	
187:13 24 274:11 239:24 may 9 10: massive 10:	:2 16:4
187:13 24 2/4:11 massive 10:	. 5 McKay 6:4
mabbive	-
man 106:7 managers 195:22 25:	18
30:17	22 MCMIIIIan
	4:18 20 48:3

	100 0	010 11	00.15	
Meagan 4:20	meant 102:6	210:11	23:15	migratory
mean 31:14	108:14	212:21	181:19	42:17
37:21	195:5	217:5	194:3	241:14
38:4,8,14	measurable	meeting	Metis	Mike 4:13
41:7,9,11	80:3	18:11 91:5	6:2,4,7	15:25
47:24	00.5	214:21	14:25	
48:3,8	measure	-	15:3,6,8	militation
•	176:4	meetings	189:24	77:20
50:17	179:7	110:1	109:24	mill 249:2
51:18	208:18	Melissa 3:23	metre 187:16	254:22
57:14	262:1	16:2	metres	234:22
74:22		10.2		milligrams
80:18	measured	members 6:20	50:12,19	187:15
95:16,17	36:4 76:21	132:3	63:13,15,1	
99:19	78:22	258:12	9 66:18	millimetre
100:1	175:15		67 : 15	131:1,8
113:20	197 : 19	memory 70:4	71:24	millimetre
128:10	259:20	140:15	72:19	131:2,4
129:4,24	measurement	184:11	73:3,13	133:18
131:9,25		ment 25:3	96:14	135:18
141:2,5,10	27:14,24		104:1	100.10
143:6	30:25	mention	106:13,14	mind 61:21
145:12	31:13,19	173:5,6	127:4	110:19
	32:25	mentioned	128:17	111:23
149:1,2,4	135:14		164:10,14	139:14
150:2,14	176:22	60:12 61:4	187:14	184:6
151:17	179:8	64:3 76:15		243:11
155:15	182:2	85:18	223:14	
157:20	258:17	89:13	263:17	mindful
168:24,25		102:24	metric	133:6
171:19	measures	111:4	135:19	243:15,1
179:3	64:15,17,2	154:2		mine
180:11	0 127:13	187:24	metrics	22:10,17
182:4	151:20	188:2	209:12	0 23:12
183:17	166:9	211:14	M-hm 88:17	
198:5	168:2	238:19	220:10	25:16
213:17	176:24	240:4		42:22
219:10	186:12	243:4	Michael 3:8	43:22
220:21	194:8	256:13	microphone	45:12
220:21	222:19	258:14	260:17	46:8,11
229:16	270:17,21	230:14	262:18	49:6,9
	274:7	Menzies 2:9	202:10	55 : 12
231:14		16:10	mics 17:13	57 : 11
236:16	mechanism	Mercredi 4:7	mid 36:1	61:14,17
240:15	43:13	Mercreal 4:/	mid 36:1	74:12
243:15	195:16	message 99:3	migrating	86:16
259:16	234:5	107:25	39:7 81:2	122:3
275:16	236:22		86:10	138:7
meaningful	238:16	met 206:19		
127:9	240:5	267:12	migration	141:19,2
		method 92:25	32:21	153:23,2
249:17	median 39:12	95:23	34:24	160:17
meaningless	meet 44:8		38:20,25	169:23
-	53:8 95:9	methodology	41:25	170:8,9
254:5				171.10 0
		92:25		1/1:12,2
254:5 means 55:16 252:7	190:3 207:1	92:25 methods	migrations 43:10 74:7	171:12,2 172:1,9,

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 318 of 34	7
176:24	90:14	200:3	240:21	112:1
177:25	151:2	mitigation	270:17,18,	113:6
178:4,9,11	188:24	10:9,12	20,25	115:11
,13 182:22	minutes	11:16	273:4	161:11
183:11	55:20,22	22:24	274:7	171:16
200:10,11			mitigations	195:8
mineral	58:20,23,2	23:10,16,2	-	225:21,23
	4 87:18	1 24:2	25:13	226:3
250:5	91:18	28:10 29:2	56:17	227:11,12
253:25	263:22	32:4,7	57:21	230:21
mine-related	Miser 55:8	41:20,23 42:1,14	62:19 78:7 80:20 92:6	233:4
43:25	Misery 8:6	43:12	93:6,7	238:3,6,18
mines 6:15	32:19	44:2,10	98:25	244:5
58:13	38:19	48:24 56:2	151:13	252:14
72:20 75:9	41:18,23	48.24 50.2 64:15,17	159:16	255:8,16
113:18	43:12			models
164:5	49:5,18	73:8	202:13	
182:21	55:8 56:20	76:17,18,2	203:3	37:7,8
182:21	68:13 76:4	2,25	224:15,18	38:10
	77:7,21	77:11,15	mixed 21:13	115:13
200:17 229:18		78:1,2,10	model 38:18	116:6,9,12
232:18	78:11,13,1 5 81:7	80:2 81:9		117:23
		83:2 105:9	40:13	120:22
233:6	91:18 97:9	108:11,13,	41:1,4	122:1
240:10	102:7,17	16,19,23	52:1 77:23	238:25
mini 42:1	135:8	114:19	110:15	239:15
minimal	136:22	123:10	120:21	261:13
	141:4,15,1	127:13	121:5,17,1	moderate
179:16	8,23,25	132:21	8,23 227:9	124:17
Minimization	166:19	133:3,11	230:23	125:10
42:1	167:22	135:4	234:19,22	143:3
minimino	187:12	148:2	235:4,7,9	
minimize	195:19	149:7,18	236:6	modering
72:8 73:12	263:1,6,11	150:20,23	237:25	167:20
105:24	269:5	151:9,19,2	238:1	modest 119:2
169:2	272:13	0 154:23	239:2	
186:14	misleading	166:9	240:15	modification
minimizes	182:6	167:19	243:23	42:19
124:16		174:4	244:9	167:24
	missed	182:20	modelled	modified
minimizing 25:14	211:10	186:12,25	46:9	96:9 106:8
23:14	222:14	189:2	161:15	123:20
mining 11:17	246:9	195:20	162:1	158:19
85:25	misspoke	196:3	245:4,5	222:24
190:14,17	201:23	197:1,5,6,	245:4,5	
193:2		7		modify
197 : 17	mitigate	199:7,14,1	modelling	139:19
201:13	127:14	6 201:12	28:12 30:1	140:7
208:23	148:18,20	202:2,4	34:19	moment 34:5
249:4,10	195:18	203:19	35 : 15	78:19
	200:15	211:18	45:23	115:19
minor 32:8	216:5	213:25	46:10	170:18
40:20	mitigating	222:17,19	99 : 15	243:13
minute 46:15	187:7	225:1,2	110:22	210.10
	TO 1 • 1	220.1/2	111:6	

MVEIRB re JAY PROJECT 04-21-2015 Page 319 of 347

mon 149:2	209:20	120:12	43:4 55:3	275:17
moni 106:7	211:6,7	121:7,22	multiplier	necessary
Monica 3:19	212:13,16,	mostly 234:4	60:19	18:7,16
15:23	18 213:4	mount 233:7	mute 12:16	108:12
	223:4,9,12 224:25			110:1
monitor 63:8	256:7	move 97:4	MVEIRB 2:2	199:21
97:8	270:13,20	126:9,17,1	57 : 6	222:25
106:24	270:13,20	8 130:21	MVEIRB-15	negative
148:3,18,1	monitors	139:6	226:2	242:8,11
9 188:6	44:5 98:22	152:8		
monitored	month 49:2	158:10	myself 87:15	neglable
71:3	107:5	185:12	89:16	32:8
100:18	194:22	189:1	136:12	negligible
106:4	203:21	199:7	177:7	32:8
	270:25	205:20		neighbourh
monitoring	274:13	215:9	N	-
10:4,12		219:1	<pre>nailed 186:7</pre>	d 184:16
14:10	months 54:23	225:20		Neil 2:12
22:24	55:18	255:8,17	name's	
23:5,20	56:15 59:4	moved 34:23	189:23	nesting
30:6	107:13	139:4	napkin	25:7,9,1
42:16,19	269:19	184:1	140:21	44:2
43:23 44:3	morning	192:21		Newfoundla
62:19 63:8	8:7,15		narrative	er 21:12
64:1 71:16	12:3	movement	158:24	100 1
77:15	29:15,16	32:16,21	narrows	news 190:1
78:10,19	73:20	35:11	81:13	nice 144:2
79:24	75:10,12	39:17 42:5	205:4,10,2	Nichol 3:1
93:23	90:21	88:3	1 207:6	15:11
94:2,4,5,1	91:4,11	100:19	Nation 6:2	
8,19,21,25	122:20	111:14		night 48:2
95:5,6	123:13	167:17	15:4 50:6 51:20	92:9
96:6	133:1	178:20		217:10,1
98:10,15,1	134:20	222:21	142:16 166:4	nine 55:20
7 101:17	135:13	movements		
103:21	138:16	34:8 42:17	167:14	nineteen
105:13	165:7,12	99:25	168:24	37:25
106:16,18	203:15,24	256:17	207:12	nineties
108:12,13,	210:24		258:22	41:6
16 110 : 5	212:25	moving 35:1	natural	
125:14	212:23	39:2,14	112:3	ninety 55:
132:13,21	231:1	45:9	237:9	nod 66:6
133:3,11	252:9	47:5,12	naturally	
144:1	254:11	49:8,16	158:3	nodding
148:12,14	255:2,4	100:1	T 70:2	145:18
149:3,6,10	264:25	111:8,24	nature 22:10	Noel 4:15
,17 151:9		112:1	49:24	Neelise
167:20	269:14 271:10 15	214:3	191:10,20	Noeline 6:
170:2	271:10,15	223:8	necessarily	82:11
173:4,7,11	mortalities	Mulders 3:10	98:23	84:2,7,8
,15,23	44:1	4:10 15:9	98:23 105:18	9,20 85:
174:7,9,15	mortality			88:15,17
,22,23	33:9	multiple	241:21	2
	53:9		266:3	89:2,5,9

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY PROJECT 04-21-2015 Page 320 of 347

	11000101 01	21 2015 18	uge 520 01 54	
1 90:9	35:9 36:16		178:9	93:17 , 19
noise 123:9	135:3	0	207:13	94:2,11
	147:11	objective	224:3	95:19 97:3
152:9,14	160:6	76:11		99:11,12
153:10		94:5,22	occurred	101:9
154:3	notes 88:24	187:15	101:3	105:5
165:21	nothing	206:19	182:13	114:3,9
166:1	169:6	207:7	o'clock	120:5
183:12	191:6	208:9	122:13	125:23
195:25	231:23		225:19	133:19,25
199:11	241:15	objectives	266:14	136:19
None 249:12	242:13	206:17,25 207:1	October 36:2	137:7
non-	notice 77:6	208:12,14	odd 73:23	139:2,5,13
impactful	192:11		buu 75:25	142:10
224:17	243:6	obligation 26:1	offer 83:6	143:17,22 145:22
non-natural	noticed		offered	146:14
112:3	126:5	obscured	77:18	152:1
normal 55:12	192:5,7,15	233:22	office	153:5
normal 55:12	noting 64:24	observation	26:9,10	159:1
north 6:7	noting 64:24	89:12		163:10
14:25 22:6	notwithstand	262:6	officer 26:3	165:10
26:10	ing 66:17		official	169:12
34:23	November	observations	270:19	171:5,15
39:4,5	197:14	85:7 101:2		173:4
89:16		183:13	of-way 49:15	174:25
110:14	Novy 162:25	259:10	oh 55:15	175:2
141:20	np 2:11,12	observer	67:11	184:13
187:22	3:8,9,17,2	65:25	81:20	185:13,15,
233:15	4,25	obtained	95:14	16,22
northbound	4:2,21,23,	21:13	106:25	188:14,20
55:2	24,25 5:7	21:13	159:12	193:14
		obvi 80:18	184:18	197:21
northeast	NPMO 15:22	obviously	211:20	199:5
39:2	NSMA 259:3,5	56:9 58:2	235:23	204:22
northern	NT 1:19	78:4 80:18	238:9	210:17
62:15,16	NT 1:19	104:13	267:22	213:12
241:17	num 65:12	128:15	oil 91:21	215:14
	numbels	140:17	229:20	219:24
northward	120:20	150:3	233:15	220:14,20,
35:2	120.20	164:12	233:15	21 225:17
Northwest	numerous	265:11		236:8
17:16	134:25		okay 19:19	255:14
30:10	nursery	occasionally	20:13	258:8
31:18	178:2	54:1	29:11 45:9	265:5
240:20		147:13	46:17	266:13
259:8	nutrients	occasions	54:18	269:21
note 34:25	111:20	61:25	59:23 63:6	273:5
	nutshell	216:13	66:5 67:21	275:19
	naconerr		70 10	
133:12 157:23	113:8	20.1	70:12	OlVeofe 0.01
157 : 23	113:8	occur 38:4	82:21	
157:23 204:16	113:8 NWT 6:2 15:3	53 : 17	82:21 83:23	16:19 66:7
157 : 23	113:8		82:21	O'Keefe 2:21 16:19 66:7 67:10,11 96:10

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY	PROJECT 04-	21-2015 Ра	age 321 of 347	
98:4,5	149:10	141:19	22:15	overestimati
99:1,2	155:20	157:5	45:16 74:3	ng 238:22
159:8,11,1	169:15	168:13,19	83:21	overestimati
2 174:13	173:20	254:7	originally	on 43:17
210:23	186:24	274:24	186:3	
211:15	204:16	275:16	248:1	overlap
old-	211:8	option	oscillates	28:24 29:2
fashioned	219:12	127:16	232:4	36:24
90 : 24	224:10	128:22,23	232:4	52:22
omit 222:11	operational	141:21	others 153:9	overly
	57 : 17	options	176:21	234:23
ones 26:10	62:20 98:9	198:6	186:11	overpass
62:2 69:1	108:22		188:21	123:5
166:2	109:15	Ora-naya	197:25	125:22
227:7	156:19,21	2:19	198:24	126:2,3,9,
one-third	157:6,21	order 124:13	218:11	13,16,18
139:22	159:16,17	132:13	223:3 258:23	127:3,7,15
140:10	174:15	150:11	258:23	,18,25
ongoing	operationall	197:10	275:25	128:7,22
157:12	y 96:16	207:2		129:10,15,
219:12	operations	242:4	otherwise	22 130:5
	21:16	267:2	76:19	overriding
online	55:12	270:20	106:22	108:25
184:15	136:1	ordinary	208:23	
onto 27:5	156:19	239:2	ourselves	Overvold
218:18	158:20	ore 42:14,15	85:20	2:18
221:23	178:18	54:10	112:23	overweight
239:25	197:17	80:25	outcomes	191:17
oops 37:20	219:13		198:18	over-
-	271:8	O'Reilly 5:9	208:25	wintering
open 123:23	operator	14:13	222:5	57:11
249:4	62:14	101:16,17	230:23	
Opening 7:7		103:20,21	outlined	owned 74:24
operate	opportunitie	136:16,17, 18	211:1	owners 46:6
62:17 63:2	S	137:2,8,15		
156:13	117:12,15	,16 143:25	outs 141:15	P
274:9	118:20	144:1,16	outside	p.m 122:16
operated	119:2,12 221:13	146:19,20	50:19	189:4,5
63:3		203:25	156:16	276:7
151:19	opportunity	219:7	161:18	
202:17,21	19:22	243:4	outstanding	page 7:2
224:11	24:19	252:13,15,	18:4	101:24
	25:18	16		242:10
operating	94:13	organized	overall	paid 88:23
57:18	108:3	20:21	161:22	185:1
148:14	120:19	190:25	162:3	Pain 3:25
170:8	136:10,13		172:10,21	
171:25	207:19 243:25	orientation	178:14	palatability
operation	243:25	139:20,24	231:11	160:23
42:11 63:4		140:8,12	overestimate	pales 232:9
75:4	opposed 53:9	original	d 239:22	Pamela 4:12
148:20	69:19			

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 322 of 34	7
Panayai 3:12	221:4	101:3	19 : 17	205:15
Panayi 15:15	257:18	134:2,9	24:24	206:12
Panayi 15:15	275:3	148:11	45:18	209:16
Panda 22:10	particularly	151:19	46:1,13,21	210:13,21
paper 184:14	42:3 71:6	158:14	48:13 52:7	212:8
193:21	76:19	202:17,21	53:21 56:4	215:12
194:7,15	177:17	218:7	62 : 5,23	218:1
195:14	201:4	243:17	63:22 65:7	219:3
202:24	214:7	Patenaude	67:1,8	220:18
Demain 5.7	252:3	3:15	68 : 1	224:5
Paquin 5:7		17:18,19	69:4,23	228:4
paragraph	parties	22:25	71:9 72:15	230:11
160:13,15	28:18	25:11,12	79:9 82:7	236:3
171:21	44:17 47:6	90:15	92:17 95:1	237:18
paragraphs	60:7 83.4 14 15	93:16,17	97:16	247:4
160:14	83:4,14,15 98:8	94:11,20	100:9	248:13
	98:8 159:14	95:14,15	114:7	251:12,18
paramount	207:11	97:2,3,12,	115:21	255:12
156:16	216:17	13,20,21	116:18	259:1,12
paraphrasing	219:19	98:21,22	117:8	264:12,19 268:15
140:17	220:25	99:10,11	118:10,23 120:15	270:9
pardon	220:23	101:9,10	120:13	270:9
203:17	222:1	169:11,12	124.22	272:13
	225:22	171:4	128:1	
Park 126:4	237:13	173:1,2	129:1	paying
participants	241:1,5	174:25	131:14,22	185:21
13:9 19:21	257:14	175:1	137:12	Peace 1:20
manticipated	258:4	259:14,15	144:14	Pearse 5:11
<pre>participated 12:20</pre>	259:18	path 36:5	148:7	Pearse 5:11
	partly	paths	149:24	peculiar
participatin	240:19	36:15,16	150:25	229:4
g 276:3			151:5	pending 24:4
particular	parturition	pathway	152:6,23	
59:9,22	60:18	36:22	153:12,16	people 12:18
60:5	111:21	pathways	154:11	13:3,20
75:16,17	pas 148:11	31:24	155:4	19:5 24:20 30:9 65:13
93:10,12,1	pass 92:3,10	32:1,5,10	157:17	72:11 76:8
3 104:22	106:5	35:24 36:6	161:8	82:10
108:1		37:18	162:20	88:19
115:15	passage	100:17,20	165:15	89:15,21
138:6,16	58:19	Patrick 2:22	166:12	90:1,23
160:20	passages	17:10	167:5	93:6 96:3
162:24	53:17,19		168:9	101:12
169:7	55:10,15,1	patterns	170:15,21	104:23
171:18	8	28:1 30:5	174:11	106:9,19,2
178:9	passes 36:23	42:20	180:18	2
179:6	Publics 50.25	167:24 222:24	183:1 184:21	107:15,20
			エロオ・乙二	
200:5	<pre>passing 54:3</pre>			108:3,20
201:2	126:20	256:16	186:21	108:3,20 109:17
201:2 204:8		256:16 Paul 3:21,24	186:21 189:11	
201:2	126:20	256:16	186:21	109:17

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 323 of 347	,
119:23	Perfect	permanent	149:10	22:11
137:20	246:24	22:12	150:5	pile 140:12
145:5,18	perform	37:14	173:20	141:3,12
163:23,24	215:17	permanently	174:2	141:3,12
184:24	213:17		208:2,21	
189:14	perha 107:11	22:4	229:5,25	147:10,11,
190:9		permeable		13,18
192:8,15	perhaps 39:2	105:23	phases	148:5,20
198:12	69:11 78:4		229:23	150:9
214:6	79:19	permitting	phone 2:10	piles 109:2
223:1	82:25 95:7	150:5,17	5:2,3	
241:16,25	99:21,25	perplexed	19:8,11	Pink 3:23
	102:7	194:17	48:20	16:2
255:2	106:1		238:2	pinned 112:4
260:5,13	107:11	person 47:7	230.2	_
275:4,19	113:10	48:16	phones 12:16	pipe 128:18
per 23:23	129:19	88:16 91:1	nhonotic	247:16
34:3 53:19	130:1	238:2	phonetic	249:4
54:22	132:12,21		4:25 74:11	pipeline
55:5,10,11	140:14	perspective	75:1 143:2	
,15,18	170:25	75:11	148:1	30:5 34:8
	185:22	127:5	238:2	42:24
129:19		157:21	photo	92:13
187:15,16	199:24	196:19	136:20,24	103:24
193:23	202:4	200:5	239:4	pipelines
213:5	204:3	201:20	239.4	42:8,12
236:16	209:9	206:3	photographic	103:7
244:25	210:5	224:11,21	65 : 20	103:7
268:21	223:21	225:12		pipes
percent	252:4	232:25	photographs	103:6,18
33:20	perilous	242:24	64:24	
	76:16	243:5,25	263:21	pit 21:14,15
34:1,2,3	10:10	248:9,25	photos	25:10
35:8	period 7:10		65:2,3,12,	29:23
40:15,16	36:1 37:13	Pete 166:3	14 263:16	33:15
41:6,13	38:5,8	Peter 5:24		141:15,18,
53:2,6	44:13 46:8	14:20 50:5	phrase	23,25
54:2,9,15,	49:11 60:2		116:15	157:23
17 55:2	100:18	51:18,19	physical	158:4
60:20,25	104:19	52:15		164:13
61:1,3,15,	104:15	142:13,15	58:21	246:15,17,
18,25 62:3		143:8,19	128:11	22 249:4
70:23	145:15,20	165:19,20	picture	
77:23 96:2	201:8	166:3	63:15	pits 25:8,16
105:14	218:20,23	167:13	86:18,19,2	pit-wall
116:10	220:1	168:23	0 137:6	44:1
226:16,19,	221:3	169:8		
21,25	268:22,23	244:5,6,7,	pictures	placed
	periods	22	65:19,24	74:23,25
227:19	43:20	245:13,25	piece 166:21	120:21
231:16	231:13	246:13,24	_	213:22
232:4	231.13	247:1	pieces 35:16	placement
233:20	peripheral	260:16,19	192:7	-
235:25	160:1		piecewise	141:13
236:16	norinharr	phase 35:13	176:13	158:3
245:6	<pre>periphery 37:5</pre>	116:7	1/0:13	places 39:7

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 324 of 347	7
241:17	186:3	184:19	167:11,15	268:4
plain 233:24	planning	189:21	185:20	poles
_	108:22	210:7	195:3,4	168:13,14,
plan		225:24	198:8	19,20
10:4,6,8,9	plans	251:16	201:18	
,10,14	10:16,17	253:20	202:16,20	policies
23:5,19,21	22:24	262:18	205:6	98:14
24:2 30:7	23:22 24:7 94:3 97:7	265:14	208:22	policy 98:9
41:24 44:8,10	133:11	plenty	209:1	pollution
47:15	149:3,12	229:16	221:10	11:16
48:24	202:12	plotted	224:21	199:15
62:20	203:19	36:6,8,21	225:11	200:15
77:13 78:6	204:1,6,9,	37:18	226:19	
79:23	12 209:24		227:17,25 230:4,6	Poole 5:12
80:11,22	211:13	plume 195:22	230:4,8	14:11
81:25	212:13	plus	232:15	52:18,19
83:2,5,12,	213:18,22	226:20,24	232:15	54:8,18
16 92:7	214:6,9,18		237:22	58:2,3,17
93:18,24	215:5,16	point 37:24	240:9,24	91:14,16
94:3,15	216:15,21	39:6	242:7,13	105:6,7
97:14,23,2	218:7,13,1	41:3,22	245:8	163:15,16 164:7
4	4,17	44:21 45:7 46:4 57:14	249:8,19	185:18
98:6,7,23	, 219:8,14,2	40:4 57:14 60:19 63:3	250:6	193:15
107:12,17	2	66:21	254:1	197:12
108:11,14	220:3,4,23	68:9,21	255:22	198:21
109:20	221:11,19	70:20	257:6	209:22,23
126:6	222:2,9	74:17,22	273:13	210:15
142:21	270:17,20,	75:10		211:9,17,2
148:12,14	22	79:20,22	pointed 58:5	0 213:21
149:10,11	274:8,23	83:8,21	128:6	222:17,18
150:2,23	275:15,17	85:7 90:10	159:12,14 188:4	242:22
151:9,18,2	plant 49:7	91:12	193:18	243:8
3 174:9	81:1 109:1	92:15	228:9	255:18,20
203:19,20		93:2,3	220:9	261:17,18
206:16,20	plausible	95:10	pointers	269:20
208:4	236:13	102:23	77:19	pooling
210:2,4,17	play 96:16	103:16	points 36:7	110:2
,18	118:16	107:11	41:20	
211:6,11	236:18	111:3	45:1,6	poor 128:14
212:13,16,	please 12:19	113:2,11	71:19	191:6
18 213:4,9	17:13	114:10	77 : 17	poorly 50:8
214:17	18:12 19:7	116:25	79:13,17	
215:15,21,	27:4 53:13	117:3	91 : 14	popping
24 216:3 220:8,12	84:15	119:8	107:19,24	110:19
220:8,12	108:7	123:24	110:3	112:25
270:13,14,	121:13	125:6	117 : 16	population
18,19,21,2	122:12	130:7,15,2	137 : 17	27:19
4,25	123:25	4 133:21	195 : 2	28:12
274:11	140:4	134:23	196 : 18	30:1,15,23
	151 : 3	141:13	224:9	32:22
plane 195:21	160:2 , 9	154:5	238:23	33:10
planned	170:13	159:6	252 : 11	34:18
-		161:24		

MVEIRB re JAY	PROJECT 04-2	21-2015 Pa	ge 325 of 347	
35:12,14,1	population's	34:21	87:13	27:12 43:6
5 43:20	119:4	234:6	203:10	45:15
45:23	portion 42:6	post-closure	258:13,15,	120:24
115:11	56:23	206:7	17	178:15
116:5,6,7,	211:5	207:25	practices	209:2
9	211:5		23:10 24:2	227:1
117:6,15,1	portions	post-Diavik	43:5	228:10
7,22,25	223:16	170:3	49:13,17	Pre-
118:15	256:19	posted 8:21	57:20	feasibilit
119:3,18,1	posing 136:3	10:22	151:11	y 20:16
9,24	position	11:14	156:21	_
120:2,22,2	45:7	267:6,21	157:12	preferential
4 121:3	236:24	posting 8:17	174:5	ly 71:1
174:17			197:16	preferred
180:2,3	positioning	potential	200:16	34:2 35:9
225:21,23	168:4	20:23	pre 21:15	nregnangy
226:3	positions	31:23 32:1	152:19	pregnancy 235:10,14
227:11	89:17	51:16	208:18	237:3
228:19,23, 24		76:12		
229:2,3,5,	possibility	126:8	precautionar	preparation
10 230:23	182:3,8 205:24	136:9	y 241:7	83:5,6
231:21	205:24	150:13	precise	prepare
232:4,11,2	247:23	197:15	140:22	202:22
5 233:7	possible	227:6		219:7
234:8	8:7 , 16	244:1,10	pre-	nnonanad
235:9	18:3 28:25	potentially	constructi	prepared 20:17
236:19,23	39:7 , 15	56:18 75:2	on 150:3	127:8
238:11,15,	50 : 18	80:24	predators	196:23
17,24	68:11 73:3	111:8	43:9	198:17
239:5,6,7,	92:6	160:23	119:23	
8,15	105:24,25	200:9	193:2	presence
240:1,6	124:15	218:11	predicated	21:7,9
241:4	126:23	245:4	105:11	28:1
243:23	127:21	249:20,23		present
244:1,2,5,	128:17	power 32:19	predict 28:3	12:23 13:7
9,14,20	129:25 135:6	42:24	32:24	18:23
245:5,7,8,	143:5	166:5,9,20	55:25	24:21
9,12,16,23	205:23	,25	121:6,23	36:10
252:14	216:15	167:10,16,	122:2 169:21	44:18 47:6
255:8,16,2	242:5	21	171:10	57:8 84:13
4 257:3	251:23	168:3,22		91:7
261:10,12		powerline	predicted	100:21
populations	possibly	30:5	27:24 33:6	147:13
19:1 20:6	92:13	prac 26:3	predicting	198:23
27:13,20	196:1 198:9	-	64:6	201:6
30:14,18,1	232:5	practicable	prediction	202:3
9,22 31:9		26:3	121:19	presentation
32:3 43:11	post 145:20	practical	170:13	7:9
117:19,21	171:16	53:3	173:3	29:5,14,17
				1 7 1 1
230:17	267:21			47:11
230:17 256:7 261:4	267:21 268:25	practice 49:15	predictions 23:15	4/:11 51:13 197:14

MVEIRB r	e JAY	PROJECT	04-21-2015
----------	-------	---------	------------

Page 326 of 347

MVEIND IE UAI			aye 520 01 54	,
198:23,25	241:7	procedures	40:18	51:6 , 10
269:17	prior 99:13	23:10 24:3	production	62 : 11,14
presentation	153:22	49:3 97:25	33:9	63:9,12
/documents	231:17	151:11		64:2,4,7,1
8:19	231.17	157:21	productive	0,18 66:3
0:19	priorities	241:1	161:6	68 : 22
presented	108:25	proceed	productivity	70:10,16,2
35:19 74:2	pro 63:9	20:12	40:9,12,15	2
110:18	191:18	24:16,22	,20 41:14	71:13,14,2
204:23	238:14	27:4 108:8	163:8	3 72:2
263:9	246:5		230:1,25	73:22 74:5
presenting	273:9	proceeds	231:8	75:4 , 5
210:25		206:23	234:4,5	78:14 90:5
	probability	207:16	235:15	94:24
preserve	41:2	process	236:1,17	100:23
72:11	probable	10:20	239:25	118:3,4,14
president	58:5	21:2,24	240:17,22	119:4,6
15:8 74:11	probably	23:11 31:1		120:1
		81:1 85:24	professional	122:3
pressing	47:21 49:20	108:2	ly 191:12	139:1
188:25	49:20 58:22	127:10	program 21:3	140:9
pressure	77:10	129:14	23:20 30:6	151 : 21
237:3	111:19	134:6	43:23	152 : 20
presumably	122:5	150:6	66:9,11,25	160:6
110:12	148:21	151:12	67:13,19	162:14
153:25	164:14	183:18	94:4,21,25	168:17
	173:21	185:4	95:16	169:15,25
pretty 63:15	185:12	188:5	96:6,8,12,	170:4 , 5
78:9 97:22	186:18	202:15,21,	19,23	171:17,22
131:3	188:6,16,2	23 204:3	105:13	172:9,11,1
258:15	1 234:1,23	207:10	187:7,20	9
prevent	240:25	208:6,11	211:7	173:20,24
166:9	240:25	209:2	programs	174:1,8
	275:24	211:16	209:20	197:2
preventing		217:9		203:18
25:14	problem	218:15	progress	206:6,19,2
142:23	21:12	219:10,18,	207:14	1,22,24
previous	192:3	19 220:2	217:6	207:5
23:24	236:13,19,	221:11,13	prohibit	208:2
71:20	20 256:6	222:2,3,5	142:2	211:4
113:18	problematic	225:13	nnoicat 1.6	228:16
158:21	253:23	262:13	project 1:6	232:9
previously	problems	processes	10:7 11:18 20:16	238:14 239:20
37:8 91:15	176:11	30:20	20:16 23:13,17	239:20 244:19
159:14	190:15,16	204:7,9,10	24:4 29:22	244:19 245:15
258:15	192:5	220:24	31:10,12	246:5,18
	216:5		32:2,13,24	248:1
primary		processing	34:15	249:3,4,5
32:10	proc 219:22	49:7 109:1	35:1,3	250:13
principal	proce 24:3	produce	37:19	254:20
205:3	_	21:18	39:10	259:24
principle	procedure	173:18	43:3,18,23	261:10,14,
71:22	157 : 6	produced	44:11	25 262:8
1 ± • ∠∠		produced		23 202:0

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY PROJECT 04-21-2015 Page 327 of 347

			-	
267:25	233:6	35:20 43:5	Prudhoe	265:7
projected	propose 56:2	47:23	91:21	
38:14	proposed	48:6,11,24	229:20	Q
226:18	11:10,11	63:16,19	public 6:20	quadratic
240:23	25:13,15	65:1,16	8:17,21	176:10
projecting	56:17	66:21 70:5	10:22	177:6,18
227:14,21	127:14	80:13 92:8	11:14 23:8	
230:5	128:16	101:20	112:19	qualitativel
	131:19	102:10 121:1	144:6	y 31:20 230:18
projection	135:5	121:1 128:23	217:12,20,	230:18
162:13	197:16	138:15,17,	22 267:6	quality
226:25	216:4	21 156:4	274:2	27:17 31:3
projections	223:4	160:9	publish	33:2 34:2
227:9	257:21	164:22	178:7	161:13,15
233:4,5	258:5	185:10		169:22
	259:15	203:19,25	published	171:11
projects	260:8	203:13,23	37:8 75:14	187:4
39:3,9 51:12 57:1		213:1	91:20	249:16
75:5 161:4	proposes	217:15	pups 191:15	quantitative
163:2	102:1	230:14	purple	230:14
181:17	proposing	257:14	124:15	
221:22	68 : 16	265:9,20		quantity
238:17	138:23	267:9,17	purpose 18:1	27:16 31:2
247:21	210:25	268:11	67 : 19	33:2
	protect 87:2	269:8,12,1	111:12	quarters
project's	222:25	7 273:9	219:21	72:22
		1 213.9		
70:18		274:21	247:12	
70:18 Projects	protected	274:21		question
		274:21 provided	247:12 purposes 34:5 36:20	question 7:10 18:25
Projects 173:14	protected	274:21 provided 18:3 21:21	purposes	question 7:10 18:25 19:25
Projects 173:14 Project's	protected 31:7	274:21 provided 18:3 21:21 24:15,18	purposes 34:5 36:20	question 7:10 18:25 19:25 20:15
Projects 173:14 Project's 136:9	protected 31:7 protection	274:21 provided 18:3 21:21 24:15,18 34:10,11	purposes 34:5 36:20 51:5,9	question 7:10 18:25 19:25 20:15 22:2,3
Projects 173:14 Project's 136:9 prolong	<pre>protected 31:7 protection 10:5 23:5</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8	purposes 34:5 36:20 51:5,9 52:13	question 7:10 18:25 19:25 20:15
Projects 173:14 Project's 136:9	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12</pre>	question 7:10 18:25 19:25 20:15 22:2,3 25:6,12
Projects 173:14 Project's 136:9 prolong	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21</pre>
Projects 173:14 Project's 136:9 prolong 142:6 promoting	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11</pre>
Projects 173:14 Project's 136:9 prolong 142:6	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21 properly</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6 238:5</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4 270:14</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18 247:10,19	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4 56:7,11,23 62:12</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21 properly 90:2 155:9</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4 270:14 protective 98:12</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18 247:10,19 255:23 268:4	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6 238:5 pursue 188:16</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4 56:7,11,23 62:12 64:22</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21 properly 90:2 155:9 Propo 203:8</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4 270:14 protective 98:12 protocol</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18 247:10,19 255:23 268:4 providing	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6 238:5 pursue 188:16 pursuit</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4 56:7,11,23 62:12 64:22 65:15</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21 properly 90:2 155:9 Propo 203:8 proportion</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4 270:14 protective 98:12 protocol 87:16 88:5</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18 247:10,19 255:23 268:4 providing 59:15	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6 238:5 pursue 188:16 pursuit 101:18</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4 56:7,11,23 62:12 64:22 65:15 66:19</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21 properly 90:2 155:9 Propo 203:8 proportion 11:7 52:11</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4 270:14 protective 98:12 protocol</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18 247:10,19 255:23 268:4 providing 59:15 199:3	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6 238:5 pursue 188:16 pursuit</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4 56:7,11,23 62:12 64:22 65:15 66:19 70:13</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21 properly 90:2 155:9 Propo 203:8 proportion 11:7 52:11 61:18,19</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4 270:14 protective 98:12 protocol 87:16 88:5</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18 247:10,19 255:23 268:4 providing 59:15 199:3 provision	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6 238:5 pursue 188:16 pursuit 101:18 puts 245:23</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4 56:7,11,23 62:12 64:22 65:15 66:19 70:13 73:20,25</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21 properly 90:2 155:9 Propo 203:8 proportion 11:7 52:11 61:18,19 68:5,24</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4 270:14 protective 98:12 protocol 87:16 88:5 prove 249:24 provide</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18 247:10,19 255:23 268:4 providing 59:15 199:3 provision 201:16	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6 238:5 pursue 188:16 pursuit 101:18 puts 245:23 putting 93:7</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4 56:7,11,23 62:12 64:22 65:15 66:19 70:13 73:20,25 74:20</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21 properly 90:2 155:9 Propo 203:8 proportion 11:7 52:11 61:18,19</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4 270:14 protective 98:12 protocol 87:16 88:5 prove 249:24 provide 8:8,13,18</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18 247:10,19 255:23 268:4 providing 59:15 199:3 provision	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6 238:5 pursue 188:16 pursuit 101:18 puts 245:23 putting 93:7 135:21</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4 56:7,11,23 62:12 64:22 65:15 66:19 70:13 73:20,25 74:20 75:9,11</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21 properly 90:2 155:9 Propo 203:8 proportion 11:7 52:11 61:18,19 68:5,24</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4 270:14 protective 98:12 protocol 87:16 88:5 prove 249:24 provide 8:8,13,18 11:3,15</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18 247:10,19 255:23 268:4 providing 59:15 199:3 provision 201:16	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6 238:5 pursue 188:16 pursuit 101:18 puts 245:23 putting 93:7 135:21 141:14</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4 56:7,11,23 62:12 64:22 65:15 66:19 70:13 73:20,25 74:20 75:9,11 94:6</pre>
<pre>Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21 properly 90:2 155:9 Propo 203:8 proportion 11:7 52:11 61:18,19 68:5,24 267:25</pre>	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4 270:14 protective 98:12 protocol 87:16 88:5 prove 249:24 provide 8:8,13,18 11:3,15 18:21</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18 247:10,19 255:23 268:4 providing 59:15 199:3 provision 201:16 214:15	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6 238:5 pursue 188:16 pursuit 101:18 puts 245:23 putting 93:7 135:21 141:14 168:20</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4 56:7,11,23 62:12 64:22 65:15 66:19 70:13 73:20,25 74:20 75:9,11 94:6 96:5,24</pre>
Projects 173:14 Project's 136:9 prolong 142:6 promoting 112:6 245:9 pronounced 40:21 properly 90:2 155:9 Propo 203:8 proportion 11:7 52:11 61:18,19 68:5,24 267:25 proportional	<pre>protected 31:7 protection 10:5 23:5 24:2 30:7 44:8 155:24 156:4,15 157:13 158:12 212:15 213:4 270:14 protective 98:12 protocol 87:16 88:5 prove 249:24 provide 8:8,13,18 11:3,15</pre>	274:21 provided 18:3 21:21 24:15,18 34:10,11 41:20 44:8 57:3 70:3 129:4 214:19 215:17 221:21 222:19 242:18 247:10,19 255:23 268:4 providing 59:15 199:3 provision 201:16 214:15 proximity	<pre>purposes 34:5 36:20 51:5,9 52:13 66:12 67:10,12 96:22 196:20 197:2 211:3 212:14 221:6 238:5 pursue 188:16 pursuit 101:18 puts 245:23 putting 93:7 135:21 141:14</pre>	<pre>question 7:10 18:25 19:25 20:15 22:2,3 25:6,12 26:19,21 27:8,11 44:13,25 45:3,13 47:14 48:17 50:4,6,17 54:19 55:4 56:7,11,23 62:12 64:22 65:15 66:19 70:13 73:20,25 74:20 75:9,11 94:6</pre>

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

Page 328 of 347

102:6	206:6	93:22	149:14,15	ran 116:6,9
105:8,22	209:7	95:18	150:14	122:1
106:1,16	211:17,22	101:10	175:25	
107:6	213:14	110:12	182:6	random 30:20
108:6	214:22,25	114:5,12	192:9	range
110:16,18	215:4	123:3	199:19	34:3,18,20
111:25	216:7,9	125:21	202:10	,23 55:15
112:10	218:4	139:8	204:16	58:8 63:13
113:16	219:23	142:11	222:12	66:14,17
114:25	221:16	143:16,23	233:24	155:14
115:2,7	223:3	147:5	243:17,24	164:18
118:21	226:6	152:3,12		185:19
123:2	227:8,16,2	153:9,20	quizzical	223:22
124:11,18	3 230:2	165:18	140:2,15	232:18
126:8	232:13	175:1	quote	256:4,16
130:21	233:12	186:18	53:1,10	-
133:16,20	237:12	189:15	184:12	ranged 178:1
134:1	238:9,19	190:4	222:23	ranges 33:24
136:6	241:5	193:16	quoting	34:21,25
139:18	244:8,23	202:3		35:3
140:6,9	245:14	211:24	194:1	43:1,7
142:19,21,	246:1,8,19	214:13		57:4 , 9
24 143:12	247:2	216:21,22,	R	66:5 234:6
145:7	252:8	25 222:16	Racher 2:11	256:18
147:25	254:23	225:21	madia 26.7	range-wide
148:2	260:25	247:11	radio 36:7	39:25
152:17,21	262:21	252:12	180:6	
153:2,4,14	265:23	255:15	radio-collar	rapid 40:8
,19 159:4	268:8	257:8	42:18	raptors
160:5,25	272:11	271:23	radio-	44:2,6
162:7,9,11	274:19		collared	-
,16,24		quick 25:20	180:1	rare 33:23
163:7,12,1	questioner	56:13 78:9		rate 60:19
5 166:4	26:1	89:12	radius	77:6,10,24
168:2,7	questioning	127:2	154:15	79:6
169:4,10	163:17	145:11	155:9	105:14,17
170:25	questions	244:7	rain 34:16	147:17
171:14	19:22 23:1	252:5	35:7	162:17
172:7	24:14,17	quicker		179:8,14,2
175:6,14	28:16,18,1	105:1	raised 81:15	3 180:14
176:2	9,20,21	quickly	93:2	181:10,11,
180:22,23,	31:10	71:25	125:19	14 187:22
25 181:2	44:15,17	81:22	140:9	226:18
182:18	45:2	104:25	153:20	231:14,15
183:4	46:18,24	195:1	191:12	234:3
185:24	47:1,5	252:6	198:7	235:11,14
186:6,10	52:20 60:7		224:23	239:1,14
189:19	62:9 63:10	quite 59:3	242:25	245:6
195:5	70:15	79:1 91:19	raising	rates 43:14
196:17	71:17	94:22	114:15	76:12,20
199:6	75:21	111:22	ramp 81:8	77:24
200:24	82:11,15	113:18	_	78:18,22
203:5	88:15	143:5	ramps 128:16	79:21 94:5
205:2,4,8	00.10	147:23		19.21 94:0
	•	•		

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

95:19,24	264:9	249:2	recognition	265:21
96:7	<pre>reading 41:3</pre>	265:16	81:9	recorded
179:25		reasonably	recognize	50:13,20
181:5,16	reads 101:25	33:14,18	51:8 53:25	147:22
182:4	ready 29:10	38:1 40:23	64:9 73:21	159:15
228:19,23	122:12	113:19	75:7 80:19	
229:3,4,12	216:16	161:16	91:6	recording
237:4	realistic	247:8,14,2	162:10	159:20
245:8	235:1	0,21,24	227:1	recover
267:3	255:1	248:6,11,2	238:24	160:17
rath 70:18	realisticall	2 250:8	243:14	238:12
	y 223:21	269:24	265:3	241:21
rather 34:5	realize			245:12
38:13	77:22	reasons	recognized	recovering
39:12,13,2	134:1	103:5,14	66:8 74:3	242:8,15
5 41:8	243:6	127:5	119:21	242:0,10
69:8		260:10	recognizing	recovery
70:16,18,2	realized	reassessment	71:5 133:4	43:8 160
2 96:5	240:23	33:13	recolonizati	162:1,17
100:2	really 25:20	reassurance		237:11,1
114:10	50:21	158:23	on 160:10	Reddy 4:13
123:8	60:12	150:25	recommend	15:25
131:11,12	65:15	recalc 92:23	208:18	
150:17	71:25	recalculatio	recommendati	reduce 32:
158:24	77:25	ns 92:23	on 21:5	42:12
177:5	104:7	115 92.23		55:19 73
185:11	111:1	recall 61:6	194:23	108:13
196:7	124:3,5	221:3	recommendati	127:21
213:23	132:18	225:16	ons	168:14
216:17	156:2	receive	20:15,21	199:15
243:12	162:7	26:11	21:1 173:8	222:20
268:10	187:24		manage i lad	reduced
rationale	188:3	receiving	reconciled	33:19
78:20	192:12	174:19	60:24	141:3
247:19	195:24	recent 74:5	reconnaissan	160:6
270:6	226:4	176:12	ce 231:24	
DD 054 10		183:23	reconstructi	reducing
RD 254:12	realm 92:1	199:10	on 123:4	200:3
re 9:8 160:6	re-ask 64:22	239:2	125:21	201:12
183:3	73:19,25			reduction
205:23		recently	record 12:20	139:23
reach 67:20	reason 76:10	75:14	18:13	140:10
160:2	205:8	137:19	20:12	159:21
100:2	240:25	232:6,10	25:25	
reached	242:7	recess 69:19	57:25	refer 131:
29:19	247:25		59:25	176:13
245:8	250:17	recessing	69 : 15	reference
reaction	reasonable	90:18	95:12	10:19
106:14	58:10 59:3	122:15	140:17	30:11
253:20	174:19,24	189:4	159:15	33:17
	226:12,23	reclamation	184:19	153:2,7
263:25	227:12,20	42:22,23	208:14,16	166:17,2
reactions	229:16	206:16	220:5,6,13	187:18
	222.10	= -	,16 221:25	

NVEIRB re JAY	PROJECT 04-2	21-2015 Pa	ige 330 of 347	
209:11	163:7	220:12	244:7	130:8
216:13	169:13	221:11	relating	remain 43:7
221:22	202:4	222:3	45:2 152:3	206:3
237:8	267:18	reindeer		
250:14	269:8,12,1	166:17	relation	remained
referenced	7 270:3,12		238:24	101:5
202:17	regardless	reinforces	274:22	161:18
218:13	37:4,11	91:13	relationship	remaining
220:3,23	177:17	reit 107:16	179:21	101:7
221:19	180:1	reiterate	181:4	remains 54:
248:16	215:22	107:16	183:5	162:9
275:17	228:21	141:11	239:23	229:24
references	245:21	150:15	243:1	230:3
170:19	259:23		relationship	
221:8	regards 94:1	relate 54:9	s 30:24	re-measure
264:16,17	-	212:1	274:23	196:3
	regional	271:19		remember
referencing	26:9 44:3	273:3	relative	67:18 70:4
193:22	255 : 22	related 8:14	43:3	84:24 90:3
referred	registry	20:25	100:20	108:7
175:9	8:17,22	25:22 61:4	109:17	129:7
209:2,3	10:22	74:5	120:22	140:25
	11:14	82:15,16	121:1	141:1,2,6,
referring	144:7,8	94:22	129:20	8 142:4
23:22	218:18,21	105:9	130:3,4	163:19
145:23	221:9,23	110:12	155:1	193:19
refine 102:9	222:10	114:14	227:2	201:2
reflect	267:7,21	115:3	228:11	272:19
42:20		138:17	230:18,19	remembering
	regression	139:9	237:4	159:13
reflected	176:13	142:11	relatively	109.10
85:10	239:2	143:23	40:20	remind
re-flooding	regular	147:5,6	81:22	222:14
25:10	66 : 18	152:11	104:24	267:15
	207:13	165:18	227:11	reminded
refreshing	271:12	169:23	244:12	19:4
232:22	regularly	171:12	252:6	
Reg 4:23	147:12	189:1	released	reminder
manand		197 : 17	210:2	165:24
regard	regulation	202:4		removal
252:18	72:20	205:2	relevant	42:24
258:11	regulations	222:16	30:16 43:6	160:18
regarding	87:17	243:2	64:21 74:4	remove
8:8,19	153:24	252:14	218:14,16	154:14
11:15		253:14	relied	157:12
19:25	regulatory	257 : 9	70:16,18	
20:15 25:7	21:24	269:13		removed 32:
27:12 34:7	150:5	relates 45:3	relies 70:22	153:22
82:25	204:10	54:19	relinquished	154:7
114:12	207:10	62:10 78:5	206:18	render 254:
115:2	208:21	209:8	207:2	
123:4	214:16	223:3	reluctant	renders
153:10	219:10		reruccant	245:22

Renewable	176:7	requests	112:6,7	respond 9:6
14:22	207:14	18:6 29:24	163:1	19:24 27:
	ronoso	47:2,16	166:8	62:11
repeat	repose 263:13	130:1	researchers	79:14
121:15	263:13	132:5		81:19,21
140:3	represent	152:11	86:22	88:7 94:1
173:23	223:17	182:19	196:24	136:14
180:22		202:5	residency	159:5,8
190:10	representati		36:4	160:1
246:11	ve 40:17	require 22:7		203:24
repeated	85:12	32:5 42:10	residual	205:24
74:15	178:8	183:17	32:8 35:17	252:2,5
	262:17	249:15	149:15,21	
repeatedly	representati	251:3,5,22	resilience	262:9
74:14	ves 225:22	263:19	26:21	263:4
209:2,3	259:7		27:13,25	265:10
repetition	259:7	required	31:21	270:1
-	representing	25:17	35:12	responded
108:15	256:22	30:23 53:8	55:12	59:25
rephrase		72:19,21	resilient	81:22
258:16	represents	77:14	234:1	199:9
-	40:13 55:6	82:2,3	D1	202:5
replace	117:6	96 : 17	Resolution	253:12
23:18	119:11	98:25	6:4 15:6,8	
211:6	reproduction	106:8	189:24	257:17
replaced	27:18 31:3	126:12	191:1	responding
210:5	32:18	164:5	resolve 18:3	76:24
211:13,16	43:14	196:21		134:15
214:11	43:14	197:8	resource	
214:11 215:25	request	212:18	30:9,17	responds
213:23	9:3,6 18:2	214:20	250:5	223:2
replenish	35:6	215:18	254:1	response
111:20	101:24	249:8,11	Resources	20:14,18
	126:1	250:20		25:10,12,
report 20:17	130:20		14:22	1 26:8,22
26:2 29:18	142:10,20	251:25	respect 22:1	41:20
52:25	144:7	requirement	49:13,14	
54:20 55:1	145:8,24	212:12	52:25	57:1,7,8
72:5 74:9	147:8	214:16	68:10	60:21
85:16 88:2	159:3		83:17 94:2	61:20 76
95:20		requirements	96:11	77:18
159:9	199:13	44:9	99:14	83:25
187:3,4,6	234:21	109:15	116:21	95:18
255:23	250:18,22	210:11	133:10,16	97:25
262:22	253:6,10,1	212:3,6,20	134:23	101:23
264:6	3,15	,22 214:21		102:20
D	257:13	215:2,22	141:12	106:2
Reported	258:20	216:1	154:3	107:8
97:19	268:8	217:5	156:22	113:13,15
reporting	269:23		173:4	126:1,5,
25:21	270:1	requires	225:1	11
159:6,20	274:4	30:24	254:13,16,	129:4,11
107.0720		104:2	21	3 130:25
reports	requested	214:4	respective	133:9
26:11	12:19	res 61:19		
105:19	41:18	100 01.17	202:12	134:6,12
		research		136:10

MVEIRB re JAY	PROJECT 04-2	21-2015 Pa	age 332 of 347	7
142:20,21	restate	180:20	267:6,20	81:20 83:7
143:9	121:12	181:13	reviewed	88:10
144:12,23	159:4	183:3	204:11,14	92:19
147:15	result 40:11	226:10	204.11,14	94:14 95:3
158:7		228:6	reviewer	97:10,18
160:12,13	51:17	230:8,13	220:16	102:21
162:6,10	169:25	235:13,18,	reviews	104:9,16,2
163:6	250:4	22	220:25	0 107:9
164:24	resulted	236:5,9,11	220:25	113:12
165:1,8,11	70:24	,14 237:20	revise 83:15	116:20
167:3,15		244:17	267 : 1	124:24
169:12	results	245:2,19	revised	127:1
171:5,14	174:20	246:7,9,20		128:3
172:14,15,	187:12,14	261:8	171:16	129:3,5
18 183:4	199:3	201.0	267:9	130:6
	249:23	Rettie's	revising	
185:5	253:25	47:10	170:2	131:16,24
199:10,18,	263:5	return 56:9		132:24
23 201:16	resuming		revision	133:23
205:11,19	-	87:12	77:4 79:21	134:16
209:12	90:19	152:19	81:21	135:12,16
233:17	122:16	160:10	revisions	138:3,15,2
234:20	189:5	163:8	79:22	0 140:23
238:19	resumption	207:5		145:10
248:8	174:22	269:10	RFD 9:4	146:9
253:17		returning	226:24	147:2
255:2	retained	55:7 205:5	249:15	150:1
257:19	161:21	206:8	251:1,2,8	151:1,7
258:20	retroactivel		254:4,13	152:25
263:3	y 78:17	review 1:3	RFK 254:12	156:10
264:4,8	_	8:16,21	KEK 204:12	157:2,19
265:12	retrospectiv	10:18,19,2	Rich 89:13	159:5,7
266:4	e 194:6	0,21 11:13	135:16	162:22
274:4,10	Rettie 3:2	12:10	221:18	164:19
	17:2	13:15,17,2	267:14	165:1,5
responses	29:8,15,16	3,25	- : • • • • • •	167:2,7
9:9 18:2	47:10	14:6,8	Richard 2:15	168:11
47:2		16:11 25:6	5:20 17:4	169:5
132:14,22	51:4,5	29:17,23	18:24	170:17
152:12	52:9 56:24	34:15	19:3,25	
247:10	58:14 61:2	57:2,8	20:2,3,13	185:6,7,14
258:23	63:24 68:3	83:10	24:13	196:15
263:16	71:11	104:23	26:15,18,2	198:16
265:1,25	100:11	125:25	0 27:6	200:6,22
270:5,19	113:14		29:7 46:3	201:17
	115:10,18	128:5	48:22 56:6	203:14
responsibili	116:4	199:5,9	57 : 12	205:17,25
ty	117:10	218:11,23	59:6,18	206:1,14
87:2,4,5	118:12,25	219:18	60:3 62:25	207:8
responsible	119:15	220:1,2	65:9 67:3	208:3
141:17	120:8,17	221:1,11,2	68:8,20	209:18
183:15	121:10,14,	0 247:7	69:6,18	212:23,24
240:10	25 161:10	250:11	70:6,7,8	216:23
	170:23	253:4	74:18	219:5
rest 24:11		257:12		
IESU 24:11	172:5,6	201.12	80:5,6	220:10,14,

MVEIRB re	JAY	PROJECT	04-21-2015
-----------	-----	---------	------------

Page 333 of 347

MVEIRB LE JAI	FRODECI 04	ZI ZUIJ F	aye 555 01 54	/
004 7		1 4 4 4		
224:7	62:10,15,2	144:4	6:17 15:21	55:21
248:15,24	1 63:5,7	159:22	robust 30:18	123:21
250:24	64:1,9	167:22,25	177:5	round 18:6
251:14,20	66:22	187:1		55:6,11
253:11,21,	67:16,20	198:2	rock 22:6	76:6
22	68:7,10,11	203:19	33:18,21	129:25
264:14,21	,13,18	220:8	34:12	129.23
265:17	70:23	221:1	109:2	route 39:15
266:7	71:2,6	222:24	123:6	125:6,7
267:8	72:4,8,18,	223:8,9,12	130:22	128:16
268:2,3,17	23 73:12	,15 224:18	131:1	144:11
,18	76:4,14,21	225:1	139:6,9,18	145:1,13,1
	,24	263:1,7,12	,20,23	7 146:5
271:2,21,2			140:6,8	
4 272:17	77:1,7,20,	267:25		routes 32:21
273:5,20,2	21 78:11	269:4,5	141:3,12,1	38:20 , 25
1 274:25	80:21,24	272:13	4,18,25	123:3
275:14,22	81:4,9	273:4	142:12,22	144:4
Rick 4:2	82:15	roads	143:6,13,2	146:6
146:22	87:22	11:6,12	4 144:2	
140.22	88:15,16	28:9	147:6,10,1	routing
rightly	89:10		1,12,18	125:3
204:16	91:18,19,2	29:1,2	148:5,20	routings
225:16	3,24	32:19,20	150:9,19	144:20
	94:6,24	38:19	151:10,15	145:1
right-of-way	95:21	41:18,21,2	152:4	143:1
57:22 99:7	96:1,3,7,1	3 43:12	165:18	run 48:1,2
106:6	4,21	47:5,12	168:18	261:13
222:21	97:1,25	49:18		running
rights		51:7,9	Rodriguez	-
258:13,18	98:1,19	53:15	4:3	216:16
259:19	99:15,19,2	56:17	role	Russell
	1,23 100:4	57:25 58:1	118:17,19	238:2
risk 35:13	101:5,22	68:23	119:24	_ ·
236:21	102:4,7,12	69:17	120:11,18	Russia
240:18	,17,18	70:10		190:16
241:6	103:2,11,1	81:2,7	236:18	
245:24	2 104:1	97:9	261:16	S
	105:9,13,1	114:5,14,1	rolled	Sable 29:22
road 8:5,6	8,23	9 115:4	166:20	33:15
11:4,10	106:3,5,13	167:17,22		
23:21 26:5	,15,16		room 12:14	38:19
30:5 33:15	109:3,13	187:8,11	13:11,20	43:12
34:12	110:12	193:8	28:16,18,2	249:1,20,2
41:19,24	123:1,3,24	267:18,24	0 60:8	3
42:3,6,9,1	124:8,14,2	268:5	86:1 106:9	Sachi 2:4
8,20 44:10	0	road's	212:3	13:16
48:9,19,24	125:1,7,20	105:11,22	226:7	139:15
50:10,12,1	126:6		258:4	140:2,5
3,15,18,21		Roads 10:9	275:25	140:2,5
51:22,23	127:15,22	83:1		211:21,23
52:3,11,12	128:9,21,2	270:18,25	Rose 2:7	
54:12,20	4 130:21	Robert 4:10	14:7	213:12
55:8 56:20	132:10	276:15	rough 11:3	218:4,5
58:25	135:6,8	2/0.10	104:12	219:24
60:15	136:22	Robertson		220:11,15
	138:22,23		roughly	222:12

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

0.65 0.5	0.00.10			
265:24	273:19	scientific	sec 268:13	94:22
266:15,19	satisfy	37:8 185:2	second 18:5	seen 69:1
267:22	215:1	192:5,19	21:11	72:4 89:
268:24	Sauvage 77:9	scientists	45:22 46:5	232:10
271:19,22	Sauvaye 77:9	86:21	67:4 79:21	seepage
272:9	save 192:20	scope 72:7	81:23 88:3	143:16
274:19	saving	-	129:25	
275:18	114:11	252:17,22 253:6	154:2	selected
sacrificing	-	200:0	171:5	21:17
96:20	saw 165:19	scoping	195:3	selecting
safe 42:11	188:5	31:25	200:23	67:23,24
257:24	scale 106:17	scratchy	213:13	
237:24	223:7,11	60:12	246:3,8,12	selection
safety	232:25		251:16	125:5
72:19,21	233:3,7	screen 28:9	276:1	self 32:2
103:5	237:5	52:21	aa aa ad 1	118:14
153:25	263:23	122:25	secondly	245:16,2
257:24	264:8	123:25	144:9	
saltier		136:25	162:16	self-
253:2	scaling	262:14	seconds	sustain:
253:2	176:10	265:8	58:23,24	30:13,18
	scan 65:21	266:15,16	section	3 31:8
salvage		273:18	20:16	119:5
131:10	scenario	scroll		244:14,2
sample	99:18	271:5,17	34:12 42:9	257:22
173:16	100:7		97:7,23	261:3,12
181:7	143:2,4	se 193:23	102:4	send 83:13
	227:14,21	Seale 3:22	sections	
samples	248:9		69 : 17	Senility
21:13,15,1	250:19	searched	167:11	165:24
9	scenarios	115:24	seeing 77:4	sense 50:2
sampling	115:17	season 26:5	126:16	81:25
23:14	120:13	33:20	134:11	87:6,7
185:3	170:3	54:22,25	159:25	109:11
195:8,9	171:16	76:4 98:2	255:14	113:2
	228:22			122:7
Sangris 5:19	236:9	seasonal	seek 70:1	191:11
91:7	247:12,15	33:24	97:14	195:17
Santoko 4:11	schedule	34:3,16,20	seem	212:19
Sarah 6:17	107:12	,25 35:3,7	102:13,17	216:11
15:21	107:12	43:1,10	107:1	268:10
IJ.ZI		55:23	168:1	
Sarah-Lacey	217:3	95:25	178:3	sensory
4:18	219:13,15	256:17,18	197:23	32:15
sat 190:7	scheduled	seasons 35:4	223:12	161:14
242:3	155:8	55 : 5	259:16	163:21
	schematic	223:24		183:10
satellite	129:19	seated	seemed 177:3	sent 222:
42:17			195:16	269:20
106:17	school 90:24	260:17	seems 18:15	
223:6	science	<pre>seating 47:7</pre>	45:11	sentence
satisfactory	74:17	seats 12:4	47:17 63:4	72:13
_			76:18	167:18
142:10	196:24	189:8	/0.10	171 : 14

MVEIRB re JAY PROJECT 04-21-2015 Page 335 of 347

NUBIRD IE OAI	1100101 01	21 2015 10	age JJJ OI JF	,
172:2	seventeen	259:3	side-railed	166:6
separate	31:23	short 70:4	243:12	176:14
37:3 63:10	57:19	75:22	sig 117:12	200:10
108:14	100:18	154:7	-	Simon 2:5
123:9	184:17	188:13	sightings	14:5
168:17	seventy-	255:21	147:15,16,	
195:24	eight		17 148:1	simple 130:3
	147:22	shorter	179:13,20	186:10
series 31:10	150:10	186:3	sights	211:10
62:9 77:19		shorthand	147:24	simply 100:4
serious	several	70:2	sign 12:19	244:9
91:23	65:21	shovel	sign 12:19	250:3
92:2,12	79:22	129:21	significance	simultaneous
196:2	216:13		27:22	13:4
197:6	236:7	showed 40:14	28:5,13	
227:6	247:7	95:24	30:2 31:22	single
seriously	sex 223:25	126:6	71:14	39:21,22
230:7	Shannon 3:7	176:16	114:13	40:2
242:12	15:13	177:24	115:3	168:13
	10:12	178:3	122:11	175:10
serve 69:17	shape	194:8	123:14	176:3
212:17	139:20,24	showing	228:7,8	singled 90:8
session 12:5	140:7,11	102:10	229:9	-
18:20 27:1	share 110:19	103:17	252:12	sir 189:20
114:21	111:3	129:20	255 : 10	sit 112:24
146:13	188:8	144:6	257:10	site 42:22
192:6		195:9	261:7	44:1 45:12
262:11	shared 186:9	- h 40 0	significant	44:1 45:12
267:5	sharp-edged	shown 40:9	31:15	98:15,17
275:5,9	131:3,12	166:7	35:18	99:25
sessions 1:7	Shawn 6:4	194:21	49:24	135:1
8:12	15:5	shows	51 : 17	136:21
8:12 12:11,21		40:10,19	117:2,12	150:21
18:5,20	sheer 96:17	41:1 45:22	118:14	161:5
31:25	sheet 12:21	102:15	119:7	178:9
60:1,5		144:24	120:3	187:1
123:18	she's 265:23	177:10	121:6,24	197:5,7
276:2	Shield	179:16	122:2	199:14,20
	233:25	shut 49:9	161:23	220:9
sets 37:17	shielding	56:19 81:1	162:4	
194:18	168:5	109:13	188:7	sites 11:17
setting	100:0		227:18	25:7,9
165:24	shift 174:1	shutdowns	228:1	57:11
	213:20	49:24	230:16	150:12
settle 187:13	shifts 34:16	shutting	249:8	169:24 171:12
10/:13	35:7 55:23	80:24	261:14,23	171:12
seven	58:8	196:7	262:2,3	199:17
53:9,15		sic 39:11	sign-in	200:10,11,
54:6 55:20	Shiga 6:7	70:7 87:13	12:21	17
226:19	14:24,25	170:10		201:5,13
231:19	259:3		similar 12:7	
266:23	Shin 6:7	sideboard	35:3 68:25	sitting
	14:24,25	12:15	151 : 18	160:4

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB :	re	JAY	PROJECT	04-21-2015
----------	----	-----	---------	------------

Page 336 of 347

	1100101 04		age 550 01 54	
situation	67:21	227:5,6,11	123:20	273:21,22
57 : 15	68 : 19	228:14	157:24	sort 62:8
195:19	69:12	229:25	259:24	
227:4	70:14,17	231:9		66:10
259:22	71:18	232:7	somewhere	68:14 81:6
	72:24	240:11,12	41:6 79:3	83:9 92:22
situations	73:17	242:10	87:5 168:4	101:17
208:24	101:19	261:25	184:16	102:5
six 41:3	102:20	smaller	sorry 21:12	104:5,12
193:24	115:5,16	65:25 81:6	26:15,16,2	109:1
231:19	116:13,24	98:12	0 39:4	124:14 129:13,14
266:22	118:2,18	134:5,11	41:10	132:4
sixteen	119:9	134:5,11	44:23 45:5	132:4
57:18	120:5,10,1	167:16	51:12,19	138:22
195:11	1	178:11	55:15,16	141:9
	121:4,12,1		59:13	146:24
sixty 54:24	6	smell	60:11	157:12,25
55:14	133:17,25	86:14,16	70:17 73:7	158:2
67 : 13	136:8	smells 86:14	95 : 15	183:17
sixty-nine	139:11		108:7	202:9
35:23	140:13	Snap 39:21	118:4	203:25
	152:15	178:12	128:6	203:23
size 8:3	153:5	snow 195:9	129:5	219:8,21
54:16	160:3	societal	131:24	224:18
78:16 98:2	162:5		136:13	225:4
132:1,8	163:12	259:17	140:15	274:13
135:19	202:8	<pre>society 86:1</pre>	142:16	
136:3	204:22	sole 62:14	144:1,16	sought 10:10
141:5,13	205:22		146:13,15	sound 140:24
164:4 169:14,19	206:5	solicit	151:3,7	157:1,15
171:8	207:3,22	224:25	158:8	sounds
173:16	208:17	274:10	160:13	154:9,23
179:20	209:21	soliciting	165:19	104:9,23
180:1	Slave 6:7	133:10	172:6	source
181:7	14:25	solution	176:20	234:25
183:22	26:10	73:2	181:15	sources 40:7
269:3	110:14		189:23 198:20	160:8,18
272:1	141:20	Solutions	204:23	
	187:22	4:16	204:23	south 39:5
sizes 27:23	sleep 255:3	somebody	211:10,20	55 : 7
Sjoerd 6:10		98:15	213:1	southbound
14:23	slide 32:12		217:23	55:2
skinny	40:9 45:22	somehow	229:14	southern
192:25	144:5	198:13	235:22	39:6
	slightly	223:24	238:8	
Slack 5:18	181:17	someone	246:7	southward
14:18 22:1	slopes 34:11	153:6	248:15	35:2
44:19,20	STOPES 34:11	222:13	264:15	Souza 2:4
45:4 46:15	slow 20:7	sometime	265:24	13:16
62:7 63:6	229:19	48:25	266:3	139:15
64:12	small 49:22	273:2	268:18	140:5
65:16	191:10		271:2,21	143:11
66:15	226:21	somewhat		211:23

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY	PROJECT 04-	21-2015 Ра	age 337 of 347	
218:5	139:18	142:8	261:12	157 : 11
219:24,25	200:8	189:16	263:14	step 40:6
220:11,15	208:8	242:19	stated 20:15	198:13
265:24	209:20	265:10,21	72:2 73:11	231:2
267:22	specifically	stage 21:23	75:8 93:8	
268:24	24:21	150:17	95:7	stepped
271:19,22	96:11	186:10	169:16	174:14
272:9	168:3		210:24	240:25
274:19	199:11	staged 42:15		steps 10:11
275:18	212:5	97:24	statement	208:19
spa 171:9	217:11	stages	53:10 101:25	Steve 16:23
space 43:9	258:13	22:8,13	101:25	
_	specifics	stand 255:1		Steven 3:4
span 35:1	96:24		171:6,18,2 0 254:8,10	16:23
spanned 36:1	148:22	standpoint	262:22	stick 83:20
-	200:2,14	213:24	262:22	90:9,10
spare 109:2	200:2,14	214:1,8		
spatial	speed 47:25	start 13:12	statements	stockpile
169:20	159:21	86:10	9:11 74:19	49:5,6
170:6	spend 100:15	146:7	264:3	stockpiling
171:23	_	189:20	265:18	42:15
177:13	spent 111:10	193:10,14	266:5	80:25
	spoke 79:18	202:7	states 54:21	stomach
speak 18:12 25:3 46:7	SPOKEN 84:3	204:18	63:12	191:7
60:9 82:22	SPOREN 04:5	209:6	70:23	
88:19	spooking	233:7,12	173:13	stone 208:21
101:13,15	52:4	234:18		stop 198:6
134:3	spot 54:4	254:8	stating	233:8
191:24	246:3	started	199:19	
		110:23	station	stopping
<pre>speaker 13:5</pre>	spread	190:23	26:6,7	192:8
137:1	186:15	190:11	40:2	<pre>storage 22:6</pre>
speakers	squared	starting	stations	123:6
13:1	187:16	45:7 74:17	41:12	130:22
		100:19	11.12	139:7,9,20
speaking	squares	123:12	statistical	,23 140:8
13:2	239:2	159:8	175:21	142:12,22
148:10	stability	190:23	176:9,23	143:13,24
149:1	232:5	192:14,16	177:3,5	144:2
166:15	stable	202:18	statistics	147:6
species	242:15	203:7	185:2	151:10,15
22:8,13		204:16	atata 102.02	152:4
30:25	Stacey 2:9	234:8	stats 193:23	165:18
119:18	16:10	starts 241:7	status 49:21	stories
160:15	staff 12:18	state 76:16	50:1 92:5	188:8,13,2
166:6	13:19	77:1	117:22	1
specific	18:10,23	99:22 , 24	204:2	
29:24	28:21	150:15	219:9	Strand 4:12
83:18	46:23	152:20	stay 28:25	strategicall
93:22 94:8	59:24	170:4	123:22	y 42:12
97:1 99:8	73:24	228:2	242:6	_
111:12	98 : 16	260:4		strategies 11:16
	122:21	200.1	staying	TT:TQ

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 338 of 347	7
42:14	19 192:23	successive	226:3	164:21
strategor	stumbling	231:21	summer 21:8	188:2
42:2	137:22	sufficient	75:6	197:7
		25:15	111:8,15,1	199:1
strategy	<pre>subject 28:7</pre>	140:11	7	202:24
42:2	48:11	249:24		204:13
straw 124:15	202:1		Summerfield	217:18
Strawson 3:4	subjected	sufficiently	4:22	219:23
16:23	239:9,10	98:12	summers	221:7
10:25	submission	suggest	111:11	222:9
Stream	29:21	91 : 22	summertime	250:6
22:3,7,11	44:22	116:1	186:16	254:5
streams	250:14	122:5,9		255:21
22:15		132:20	super 255:24	257:1
	submissions	150:13,19	supplemental	259:19
stress 100:4	166:19	153 : 6	248:25	262:18
stressors	submit 10:16	181:20		265:21 266:17
112:3	218:22	188:24	supply	266:17
113:8	275:15	240:16	108:22	267:11 268:22
stretching	submitted	241:19	support	272:20
184:11	8:16 10:21	257 : 19	21:21	272:20
	11:12	suggested	110:7	
strictly	20:18 69:1	114:11	180:14	surface
116:12	102:14	153:21	249:10	21:6,9
striking	134:7	257:23	260:20	130:24
267:16	202:5	259 : 16	261:22	131:1
stripping	218:10,18	suggesting	supported	164:15,17
21:16	267:6,20	91:16	35:6	surprise
	-	149:8	supporting	115:7
strive 271:9	submitting	219:25	113:7	surprising
strong 43:13	218:20,25		245:9	180:8
109:23	subsequent	suggestion		
238:16	194:14	82:25	suppose	surrogate
240:5	213:8	suggestions	205:18,25	182:10
strongest	268:7	10:15	supposed	surrounding
92:6	subsequently	80:10,15	87:17	263:19
	147:14	81:23	213:19	survey 50:23
structure	au batan aa	83:6,10,18	252:24	124:9
130:11	substance 130:19	133:2	suppression	231:18,25
structured	130:19	224:25	187:1,7,20	
98:23	substantial	225:5	196:10	surveying
197:18	227:14,22	suggests	197:16	21:8
struggle	substantiall	55:1		surveys
260:11	y 147:23	147:19	sure 25:2	42:18
	_	167 : 16	70:7 90:7	50:11,16,2
student	successful	suitable	92:24	0 78:21,23
111:11	57:18,23	21:21	93:10,22 103:9,16	79:25
studies	63:4		103:9,16	160:21
263:6	199:16	summarize	139:1	194:16
	successfully	77:22	140:5	196:4
etuff 127.00				
<pre>stuff 137:22 190:10,18,</pre>	57:18 99:23	<pre>summary 34:5</pre>	140:5 156:11,20	survival

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 339 of 34	7
43:14	273:18	target 30:16	131:11	227 : 10
229:4	tables 13:21	task 173:8,9	temporary	228:7
236:17			41:24	229:8
	79 : 15	193:19	41:24	231:3
survive 85:1	taking 18:1	taught 86:3	ten 49:1	238:8,20
191:21	185:23	t	53:18 54:6	241:12
suspect	236:21	team 21:20	55:11,14	244:23
65:23	talk 13:1	73:25	106:11	250:13
sustain		251:24	188:24	268:12
	47:9 59:10	teams 271:8	191:15	
117:16,21	84:21 85:8	tease 187:24	213:11	terrain
261:15	86:13		225:7	73:15
sustainable	87:10,22	196:6	249:4	Territories
260:20	167 : 9	technical	263:22	30:10
	189:15	1:7 8:12		31:18
sustainably	204:3	14:17 18:4	tepees 85:22	240:20
258:2	219:8	83:4,17,18	term 83:3	259:8
sustained	224:24	,24 112:19	109:21	
85:19	225:3,12	173:8	120:12	Territories
	251:24	192:6	196:23	ENR 17:17
sustaining	252:7	193:19	212:13	territory
32:3	255:18	234:19	268:23	90:4 91:5
118:15	271:7	267:5	270:19	90:4 91:5
245:17,24	talked	276:2		test 23:15
sweet 255:21	222:12		termed 156:9	testing
	222:12	technically	223:8	21:13,16,
system 96:18	talking 48:9	68 : 17	terms 30:11	9
266:23	49:4	technicians	40:12	9
	86:7,22	223:9	44:20 48:9	thank 12:6
Т	91 : 17		51:14,19	13:7 17:2
ta 80:8	95:17,20	technique	52:1 56:14	19:10,14
	106:11,12	79:25		24:10,13
table 7:1	146:23	techniques	57:16,25	26:12 28:
8:13 11:13	157:4	80:1	63:4	44:11,14
12:21	163:19	199:16	64:4,6	46:17 47:
17:14	164:10,18	201:12	100:12	48:20
54:25	208:8	201.12	104:11	51:3,4
55:21 76:1	235:14	Ted 4:25	115:8	52:5,16,1
77:4 78:8	251:2	Tee 5:10	119:12	54:18
79:21 80:8	252:24	14:15	130:11	58:15 60:
81:21,22			133:3	69 : 13
144:18,23,	talks 160:5	teleconferen	141:5	73:18
24 145:24	tallest	ce 19:5	144:20	75:20,25
146:21,22,	72:23	telemetry	149:21	80:4 84:2
24,25	130:4	36:7	157:14	85:12
147:15		50.7	158:2	90:12,13
148:1	Tamika 3:10	telephone	161:19	91:8 93:1
150:12	15:9	19:7,15,21	162:15	97:3
159:19	Tannis 6:13	temperature	168:25	101:12
164:5,22	16:8	=	169:1	
219:8	262:19	39:24	172:16	105:5
226:4,16	264:24	Temporal	177:2	108:4,5
267:1,9	265:22	35:5	197:4	110:7,10,
269:12	266:2	temporarily	221:10,18	3 113:10
209.12	200:2	cemporarity	224:11	114:3
				122:13

MVEIRB re JAY PROJECT 04-21-2015 Page 340 of 347

			-	
124:2	265:5,13	64:11 65:2	209:19,21	there's
125:8,16,1	267:14	72:1 78:9	210:9,10,1	18:22 25:1
7	276:2	82:4 83:2	6,17	28:23 29:2
130:16,23	thanks 25:5	87:4,7,12	212:13	43:10,11,1
131:12	63:6 64:13	90:2 91:9	213:6	3 45:22
132:23	66:15,16	94:6,16,18	214:24	50:4 55:3
133:14	67:21	96:15	215:9,18	60 : 17
136:5,15	68:20	99:15	216:16	65:12 71:5
137:10	71:18 84:1	100:4	219:15	72:19
139:2	101:16	102:14	220:12	73:15
143:7,20,2	102:20	103:21	224:13	77:6,10,13
1 147:4	103:20	113:25	225:11,13	78:4 88:3
149:14		114:4,23	226:6	101:24
152:1	104:8	116:21,22	231:13	106:17
153:8	115:5	117:2	232:20	108:3
154:17	125:25	119:19,20,	234:15	109:24
155:1	127:11	25 121:11	235:2,18	110:18
156:2,5	128:12	122:8	245:1	111:3
158:25	136:17	125:12,18	246:10,24	122:7,22
159:24	137:9,15	128:24	248:21	136:23
162:6	138:2	129:6	249:18	137:20
163:6,13,1	139:11	131:18	251:3,8	138:1,10
4 165:23	143:25	135:24	252:9	142:9
166:2,10	145:3	136:1,23	253:23	144:18,24
167:13	146:19	137:21	259:22	146:23
168:7,23	147:1	138:1	260:10,11,	173:16
169:8,9	156:7	140:20	19 262:6	175:12,25
173:2	160:3	142:3	265:2,13,2	176:22
177:16	175:1	143:17,20	2 266:8	177:1
178:25	200:18	144:7	267:11,22	180:6,12
185:25	201:9,23,2	146:22	268:11,23	182:14
186:20	4 202:8	150:11	269:14	189:17
187:21	204:22	157:5,6,7	272:6,25	191:6,21
188:20	209:21	158:13	274:1	192:19,24
193:11,12	221:17	160:4	275:1	196:9,25
196:11	250 : 11	164:4,13		198:1
199:5	252:15	167:8,12	thaw 143:6	204:12
207:22	253:8	168:6	themes 29:25	204:12
213:15	257:11	173:9		205.8
216:8	269:21	180:15,16	themselves	220:1,7
222:15	273:15	183:25	19:6 73:22	229:18
229:13,14	that's 18:5	184:3	177:9	231:25
232:16	20:19 26:6	185:14,15	193:9	232:3
242:15,16	29:6,8	188:15	theoreticall	235:7
242:13,10	34:6	190:1,11	y 203:2	236:7
244:22	40:9,10	190:1,11	-	237:7,9,21
245:25	51:20 52:1	191:21,23	therefore	240:5
248:25	53:24	192:24	53:4	
253:9	54:7,10,16	193:10	132:10	241:8
255:9	55:21	204:16	167:19	252:13
	56:21		236:20	261:13
258:20	57:6,7	206:16	237:10	266:5
259:6	60:15	207:9,16	there'll	269:11
260:16,24	61:22	208:6,7,11	76:2	271:1
262:5	UI.ZZ	,14,15		

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY	PROJECT 04-	21-2015 Pa	age 341 of 34	7
they're	90:6	36:2	70:7,9,13,	273:2
32:12	tho 156:7	Tim 5:14	14,17	276:4,5
39:23			71:18	tonight
64:16	thou 65:1	timeframe	72:24	251:24
76:5,14	thousand	80:15	73 : 17	
77:2,25	54:22	tire 72:23	74:21	Tony 5:11
86:11	55:5,6		75:10	12:24
87:15	56:8,10	TK	101:18	13:3,6
89:22,23	65:2 76:3	74:2,7,13,	114:25	15:1 84:12
111:2	87:11	16	115:5,16	Toogood 2:5
135:18	242:2	75:3,6,8,1	116:13,24	14:5
154:8		5	118:2,18	
173:18	thousands	Tlicho 6:10	119:9	tools 214:10
186:13	65:21	14:24	120:5,10	top 36:21,22
190:13,21,	206:9	-	121:4,12,1	50:15
22 211:1	threshold	Tobin 4:20	6	137:23
213:24	230:15	today 12:23	133:15,17,	144:17
214:14	261:6	13:2,8,9	25 135 : 3	163:19
215:17		18:18	136:5,8,18	
220:5,25	thresholds	24:21	138:24	topic 13:8
223:13,14	28:13 30:4	25:10	139:4,9,11	18:9,22
229:11	31:17	26:14 28:8	,16 140:13	24:21
234:7	97:24	49:14	141:14	25:23
247:9	98:11	57:15,21,2	152:14,15	27:3,5
256:21	114:13,21	3 71:20	153:5	28:15,22
270:6	115:3	86:9	159:2	44:16,25
	122:11	107:15,20	160:2,3	46:19,24
they've 57:4	123:14	111:1	162:5	47:6 84:21
111:20	252:11	114:18	163:10,12	86:17
thickness	255:9	122:23	202:7,8	101:10,13
72:18	257:9	157:7,8,22	204:13,22	114:23
73:13	threw 241:1	162:25	205:22	123:9
thin 191:20		197:11	206:2,5	125:18
CHIH 191:20	throat 60:12	200:9	207:3,22,2	130:21
third 61:13	throughout	202:10	3 208:17	138:17
141:6	49:21	207:20	209:21	142:7
171:21	ti 26:24	218:13	+ ~]] 111.15	152:13
184:25	LI 20:24	243:20	toll 111:15	189:15
205:7	Tibbitt	252:24	Tom 6:2,15	199:6
224:20	54:19		15:3	202:2
231:20	91:19	today's 12:5	tomorrow	222:17
247:17	Tibbitt-to	25:23	8:6,15 9:7	225:23
thirds 72:22	62:20	139:17	135:13	242:18,24
		Todd 5:18	136:11	244:4
thirteen	tie 114:22	14:18	138:16	255:4
22:17	tied 80:2	44:19,20	143:17	258:21
226:18	108:16	45:4,21	242:24	276:4
thirty 55:9	151:22	46:15 62:7	255:4	topics 12:8
231:12		63:6 64:12	265:11,13	- 28:9,17
	tier 248:5	65 : 16	269:14	29:1 52:21
thirty-four	tight 199:24	66:8,15	270:14	114:18
38:4 40:24	till	67:21,22	270:1 271:6,10,1	122:22
191:2,3		68:19	5 272:2,5	123:15,22
thirty-three	21:13,14	69:12	J Z/Z•Z, J	188:23

MVEIRB 1	re	JAY	PROJECT	04-21-2015
		0111	11000001	01 01 0010

Page 342 of 347

MVEIKB IE OAI	PROJECT 04-	21-2013 F8	age 342 OI 34	1
243:20	109:16	168:1	53:25 54:5	106:21
	110:6	187:9		223:23
topography		203:20	trapper	
178:19	traditional	210:5	189:25	tripods
TOR 31:24	38:21	213:9	travel 154:4	256:5
total 11:6	45:15	218:8	tre 222:9	trips 53:1
40:7	47:17	222:24		55:6,11
40:7 61:6,7	85:9,10,15	224:1,12	treated	56:9 , 10
70:10	91:5 119:21	262:25	74:16	76:3,6,7
99:14	189:25	263:11,18	treaty	trivial
147:22	190:23	264:7	258:17	49:25
172:13,22	191:24	267:1		230:1
231:7	192:17,18	270:17,21,	tree 1:20	233:1
267:18,24	258:13	24 272 : 12	58:8,9	
	260:13	274:11	79:16 106:21	truck 52:25
totally		trails 47:18	100:21	53:12,16
190:13	traffic 10:8	125:4	trees 77:16	54:3,14
touch 243:19	23:21 30:4	145:16	79:22	58:22,24,2
touched	32:18		148:23	5 91:17
186:4	41:25	train 243:11	tree-type	106:25 195:21
	42:19	traits 33:6	197:20	195:21
tough 198:1	43:11	trajectory		truck/driver
towards	47:14,23	228:15,24	trend 43:21	53:5
81:12,13	48:18		117:22	trucked
91:3	52:24	transcribed	121:2	150:20
106:15	53:12 54:20,21	18:11	179:16,22	
127:25	55:1,8	Transcript	180:13 181:5,8,10	trucks
132:20	56:12	7:12	226:8	48:1,9
241:7	77:5,6,8,1	+	227:5	53:7,9,14,
track 42:16	0,13	transferred	228:2,20	25 54:6,10
57:24	78:6,13,17	221:23	229:11	55:7 72:23 78:16 79:5
78:21,23	,24	transition	230:1	87:9,15,18
124:8	79:1,3,21,	215:8	236:19	,19,20,21
158:18	23	transitionin		126:10,17,
159:9	80:10,22	g 216:11	trends 30:1	20 128:24
256:8	81:25	-	35:5	150:21
tracked	82:25	translate	177:19,24	193:8
	91:15,22,2	133:18	179:8	197:19
36:11 38:7	5 92:7,11	192:2	182:3 194:9	
tracking	93:18	translation'	229:8	true 43:19
18:10	94:3,14	s 20:7		trust 82:16
tracks 50:14	97:7,8,21,	transmission	tried	145:7
124:4,12	23 98:18	92:13	80:20,23	try 19:21
	99:8	154:22	81:8 99:22	28:16
Tracz 5:16	106:7,20	156:25	trigger	72:11
14:21	107:11	157:14	66:17	74:20
trade 141:15	108:10		67:14 , 15	80:14
tradeoff	109:6,20	transparent	108:12	122:6
109:15	110:5	203:4	triggered	161:4
233:19	141:24	Transport	48:10	171:1
234:12	150:22	5:2 19:12	263:16	221:7
	151:20,23	transported		244:6
tradeoffs	167:18,24		triggers	

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

Page 343 of 347

			age 313 01 317	
264:23	83:3	251 : 10	266:9	unexpected
b	94:21,25	252:19	267:3	58:7 150:9
trying 20:7	95:6	253:1,19	273:7	
64:14 75:1	127:23	254:1,14,1		unfair 246:2
85:7 99:3	129:22	6 269:23	understandin	Unger 5:24
102:23	130:10		g 50:11	14:20 50:5
105:9	131:19,20	underlying	76:23	51:18,19
114:16	250:19	229:3,12	77:24	52:15
123:14		234:5	93:19	142:15
145:24	types 26:2	236:22	98:4,6	143:19
146:15	80:22 87:6	underneath	100:2	165:20
153:3	103:14	126:21	119:13,20	166:3
170:24	178:6		127:2	167:13,14
180:16	186:25	underscore	139:21	
188:5	223:24	92:4,15	161:5	168:23,24
190:3	typing	understand	174:16	169:8
213:16		45:2	238:4	244:5,6,7,
236:15	272:10	43.2 50:9,13	241:13	22
240:24		58:15	250:15	245:13,25
264:15	U	64:14	266:9	246:13,24
272:18	ultimately	65:15 66:4		260:19
	136:4		understood	UNIDENTIFIED
tune 275:20	226:5	70:19	101:20	137:1
turn 58:25		71:17	137:18	
229:1	ultraconserv	73:1,14	203:2	unintended
238:12	ative	74:16	undertake	208:24
	240:16	75:11	201:1	unintentiona
turned	ultraviolet	76:11 86:9		lly 146:16
136:12	166:6	93:1,3	undertaken	_
176:10	169:1	103:22	74:6	unique
177:4		108:21	undertaking	148:13
Turning 63:7	unavoidably	118:8	59:24	units 144:19
	22:18	120:21,22	63:14	145:8
twelve 37:13	uncertainty	130:20	105:1	
53:7,14	28:4	132:15	145:15	Unka 6:2
185:20	71:5,13,15	138:18	146:4	15:3
195:10	,20 72:6	145:23	201:7,10,2	unless 50:23
twenty	179:2,4,7,	146:4	1	188:25
38:5,9	21 180:15	150:16	268:21,22	217:20
46:8 87:18	181:1	157:10	273:13	243:15
190:22	181:1	160:20	274:24	
191:3,4,8	193:16	163:6	2/4:24	unlikely
250:1		197:8	undertakings	154:3
254:21	241:8	202:12	7:5 11:1	unmeasurable
	undergone	209:12	20:4,10	195:7
twenty-five	100:4	212:3	undertook	
73:23	underground	213:17	75:13 93:9	unprecedente
twenty-one	9:4 178:13	214:25		d 241:4
37:24	9:4 178:13 182:21	218:9	underwater	unpredicted
		223:5	21:6	208:25
twice 34:6	247:13,23	227:4	underway	
twofold	248:3,5,10	235:10	12:5,8	unsustainabl
256:7	,17,22	246:3	116:2	e 245:23
	249:5,9,15	251:25		unusual
type 25:8	250:1,13,1	252:21	189:9	237:15
	7,20			201.10

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

MVEIRB re JAY PROJECT 04-21-2015 Page 344 of 347

241:3	utilizing	variation	<pre>venture 63:3</pre>	221:12
update 74:4	141:18	73 : 15	Ver 40:19	246:23
210:3,10		178:16	41:4	254:5,20
219:13	V	179:16		vision 160:
	valid 134:1	variations	verse 67:24	
updated		234:4	version	visits 135:
204:2	validates		210:1	visual 21:6
206:23	250 : 18	varied 180:4		42:10
207:15	Valley 1:2	varies	versus	195:24
219:14	12:9 199:4	117:21	135:20	visually
updates		164:8	viability	21:8
207:13	value 31:17		30:15	21:0
221:21	38:13,14	variety	vicinity	vital
223:5,6	126:14	125:2	58:13	228:19,22
upland 44:6	161:17,18	127:5	247:16	229:3,12
upiand 44:6	183:25	130:13	247:10	238:25
upon 12:1	231:19	141:15	view 66:24	239:14
23:17	236:13	142:2	74:15	245:8
90:18,19	244:24	204:12	95 : 21	volume 53:2
98:24	valued 30:10	various 83:4	120:6	54:5
122:15,16		94:5 96:7	126:6	
189:4,5	values 121:1	107:20	198:9	139:19,23
276:7	182:10	113:8	202:20	140:6,11
	244:12	133:11	223:7	volumes 59:
urge 107:3	259 : 17	204:14	249:13,18	vulnerabili
useful	valves	241:17	254:4	
107:13	42:10,13	244:12	258:5	y 240:12
108:21	103:6,24			vulnerable
109:3,7	128:18	vary	viewing	240:19
124:3		181:8,23	224:18	
156:3	Van 6:10	varying	views	W
158:18	14:23	175:13	208:13,15	Wah-Shee
194:12	VanGulck	181:11,12	257:14	
199:1	4:16		Villebrun	2:19
202:11		VCs 30:12	6:20	wait 24:13
250:22	variability	vegetation		110:17
273:1	98:13	43:25	82:12,18	112:24
	175:25	160:7,16	84:2,7,8,1	139:13
usefulness	176:3		4,19,20	150:18
243:21	181:6	vegetive	85:6	155:15
usually	182:1,4,11	33:23	88:6,17,22	158:13
90:11	193:17	vehi 129:21	89:2,5,9,1	185:11
	194:9	vehicle	1	186:9,19
utilities	variable		Virgil 2:23	259:8
28:10 29:1	182:8	25:21	16:14	
47:5 82:15		129:21	110:23	waiting
114:5,14,1	variables	130:4	175:22	150:16
9 115:4	111:5	vehicles	176:6	Walbourne
utility	121:19,20	55 : 19	177:21	4:2
249:16	244:10	199:22	184:10	
254:6,23	variance	263:24	257:1	walk 92:22
	175:10	264:9		137:25
utilize 168:18	181:4,18	vein 261:19	virtually	walking
168.18		vein /nl·ly	74:24	51:22,23

DIGI-TRAN INC. 1-800-663-4915 or 1-403-276-7611

VEIRB re JAY	PROJECT 04-2	21-2015 Pa	age 345 of 347	1
52:3	44:6	224:2	185:8,10,2	73:13 82:2
wandering	watering	weigh 258:8	4	83:13
192:8	187:2	weight 37:14	188:15,16,	86:14
washrooms	198:2	weight 57:14	25	91:16
12:14	Watts 2:10	Wek'eezhìi	189:1,20	95:20
	Walls 2.10	14:22	198:17	96:15
wasn't 26:23	Watts's	welcome	202:7	99:17
74:8	20:15	124:5	204:19 211:24	100:5
189:23	ways 73:2		217:15	103:2,4,1 [°] 106:2
210:1	196:6	we'll	222:8	110:24
240:9	200:2	13:18,19	225:3,9,12	127:5,7,8
272:23	206:2	17:25	251:21	133:8,9,1
waste 22:5		18:14	255:1,2	135:20,23
44:2 123:6	weaknesses	19:20	264:24	136:2
130:22	66:9	20:12	265:12,19	138:22,23
139:6,9,18	wearing	24:8,9,13,	266:11,12	139:1
,20,23	180:6	19 27:5	268:24	141:18
140:6,8	weather 35:5	28:8,17	271:1	143:14,16
141:3,12,1	39:20	29:3,11 44:15	273:10	144:4,21
4,17,25			275:10	151:23
142:12,22	Webster 4:14	45:24 59:20	276:5	163:2
143:6,13,2	15:19			168:12,22
4 144:2	we'd 41:1	69:10,15 71:19	WEMP 10:4,10	25 174:6
147:6,11,1	91:16	75:22	23:13 44:4	178:14
8 150:9,19	132:1	80:7,9,11,	93:21,24	185:8
151:9,15	146:24	14 81:13	94:19	187:15
152:3	151:13	83:20	97:19	190:21
165:18	162:23	87:23 89:6	108:15	195:15
wasted	163:1	90:13,14	159:19	196:23
204:25	200:25	91:8 94:12	203:16	198:17
	224:19	97:3,4	210:6,25	210:9,10
watch 190:13	252:7,8	99:11	212:4,17	216:5,11
225:18	260:12	103:15	215:1,19 216:3	217:1
255:6	268:9,11	104:22		219:25
watched	week 18:21	107:21	217:5 218:9	222:1
87:15	24:19 60:2	113:11	273:25	225:18
water 12:15	104:18,19	116:1	273:23	233:2
87:3	105:1,2,4	122:10,24	WEMPs	236:13,21
141:19,22	107:23	123:1,15	158:21,22	242:9,10
143:17	133:12	130:17	212:21	250:6
197:23	145:14,20	133:6,12	Wendt 3:19	251:2
206:17	163:4,9	134:18,19,	15:23	252:23
208:10	165:3	20 136:2		254:5
218:12,19,	190:1	137:5	we're 24:7	259:19,21
24	201:7	143:22	26:23	260:9
220:9,25	204:21	145:15,23	29:9,10	262:13
248:2	225:15	146:10	45:7,8	264:1,15
253:1,2,7	268:21	149:5,8,9	49:4	265:7,19
254:9,16	275:3	156:21	55:13,16	266:13
276:4		162:25	57:10	271:9,13
	weeks 23:7	163:2	58:25 67:5	272:10,18
waterbirds	48:25 146:7,10	165:10,11	70:20 72:3,21	274:12

west 39:5155:16266:14,12,15,16,western162:14whichever1774:17193:2098:24213:3,4,24we've 29:19195:25209:10whim 106:23215:2,2046:5 51:15209:10whim 106:23217:556:17215:19whoever222:2157:6,17,20240:13106:25225:164:7 68:25250:19209:10222:1	WLWB 10:18 wolf 44:6 wolverine
Western163:25whichever213:3,4,2474:17193:2098:24214:16we've 29:19195:25215:2,2046:5 51:15209:10whim 106:23217:556:17215:19whoever222:2157:6,17,20240:13106:25225:1	
74:17163:25 193:2098:24 228:21213:3,4,24 214:16 215:2,20we've 29:19195:25 195:25whim 106:23 215:2,20215:2,20 	
we've 29:19193:20228:21214:1646:5 51:15209:10whim 106:23215:2,2056:17215:19whoever222:2157:6,17,20240:13106:25225:1	wolverine
46:551:15209:10whim106:23217:556:17215:19whoever222:2157:6,17,20240:13106:25225:1	
56:17 215:19 whoever 222:21 57:6,17,20 240:13 106:25 225:1	44:5
57:6,17,20 240:13 106:25 225:1	woman 90:3
100:25	wonder 84:13
	88:7,25
	114:9
whatnot 252.24	132:12
89.19	142:6
160.23	179:1,6,9
willing	184:23,25
174.21	265:7,8
207.4 5	265:7,8
whereas	200.14
176:21	wondered
117:23 whose 66:13 wind 39:24	125:12
100:19 windows 92:8	wondering
189:18	26:24 66:3
whether 20.0 wide 34:13	96:1 99:17
122 2 40.24 131:5 Winnipeg	100:5
47:23 54:5	104:16
04.10	144:5
150.10 Wielen 6:10	170:24
170 00 95.25,24 14:23,24 winter 26:5	174:6
101 14 16 34:18 35:9	194:12
54:20	216:14
188.22 Wildlife 55:8,25	
102.10 55.17 10:3,5,8 57:4,9	wonky 133:20
106.21	wording 70:1
202.10 114.10 22:23 1 76:4	99:8 156:8
205.7 117.14,15 23:4,5,19, 77:5,7	265:15,20
217.17 20,21 24:1 78:21,23	274:15
220.22 130.12,10 26:2 192:24	275:21
222.22 132.10 30:6,7,12 249:22	work 35:17
220.20 21 142.075 31:17 wintering	40:18
232.10 43:22,25 57.1	63:14
238.15 44:7,9,10 58.8.12	64:23 66:4
240.2	71:7,21
249·21 49:14 Wipe 184:19	72:1 75:1
261.13 102.13 57:22,25 wires 168:15	82:3
	107:12
22 275.16	111:24
98:17 wish 13:1	113:16
	123:19
	127:10,24
	129:23
203.15	130:5,9
	166:19,21
	176:14,19
	177:2,10,1
146:7 259:9 212:1,2,11	1,12,22

MVEIRB re JAY PROJECT 04-21-2015 Page 347 of 347

MVEIRB LE JAI	INCOLCI 04	21-2015 Pa	age 347 OI 34	/
178:7	wrong 70:9	18:9,19,22	192:11	156 : 25
183:25	-	20:10		157:5,13
	184:18		young 86:3	
192:14	205:13,24	23:22	younger 86:9	163:20,21,
196:24	207:24	25:13,19	younger 86:9	23,25
197:23	WRRB 5:16	26:22	yourself	164:3
217:14		30:12	95:13	165:21
226:5,11	WWHPP 10:6	47:14 91:4	260:17	166:1
239:3	93 : 25	123:7		169:14,20
249:1,16	108:15	139:8,12,1	yourselves	170:6
251:5,22	202:22	6,22 140:6	19:7 24:12	171:9 , 23
252:18,22	203:16	141:11	you've 28:10	172:10,12,
254:2,6,23	210:5,25	142:4,17	44:25	15,22
266:20	212:3,16	143:13	59:16 69:1	173:6,7,11
275:6	215:1,19	189:23	70:20	,14,19
	216:2	209:25		174:7,15,2
worked	217:4	212:11	76:25	2,23
117:23	218:8	217:4,7	83:23	175:7,13,1
184:2	273:25	217:4,7 219:7	166:8	5,17 176:5
Workers 73:1			179:3	
	WWHPPs	224:23	186:14	177:13
working 24:7	212:21	242:23,25	204:13	178:8,11
78:2		262:10	226:24	179:5,15,2
193:20		266:22	227:12	1
210:10	<u> </u>	274:4,21	229:16	180:10,15
214:7	Yellowknife	yet 24:6	260:17	181:1,3,10
217:4	1:19 48:16	103:8,19	266:15	,15,20,22
226:1	Yellowknives	110:25	270:23	182:5,9,11
271:13	14:19 26:8	112:4		,23
275:4,5	44:20 45:5	149:20		183:6,14,1
	62:8 64:13		Z	6,21 184:2
works 29:3		186:7	Zantoko 16:6	186:6
workshop	67:22	234:21	zero 40:15	187:25
8:20	68:20	YK 85:13	185:20	189:1,15
197:13	70:17	116:22	202:18	193:17,18
	71:22			194:5
198:18,20,	72:25	YKDFN 5:18	227:13,20	195:15
22 199:4	73:18,21	22:1 26:7	ZO 194:20	196:1,4,8
238:1	91:6,7	44:21 75:6		269:14
269:18	116:14,16,	115:9	ZOI 60:22	209:14
worry 107:1	25 119 : 10	205:2	193:25	zones
_	120:11	207:18	194:20,21	36:4,6,9,1
worst 40:2	133:18	Yonge 3:18	ZOIs 178:17	3,21,23
236:24	134:4	17:22		38:3
worst-case	140:14		zone	100:14,21,
99:18	152:16	212:10	36:16,18	25 161:12
100:7	160:4	214:12	37:2,5,23	180:5
226:14	162:6,7	215:14	38:9,23	181:19
	202:9	260:2	39:16	183:7,8
write 265:15	205:23	you'll 59:15	60 : 14	
writes 53:1	207:4,12,2	- 65:1	61:11,22,2	zone's
	3	104:18	4 75:13	164:14
written		135:13	101:4	zoom 137:19
149:4	208:17,22	138:15	123:9	2001 137.19
202:13	yesterday	146:6	152:10,13	ZY 188:17
211:12	12:7,18		153:10	
250:14	13:10,11	163:9	154:22	
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