



“When You Talk - We Listen!”



NORTHWEST TERRITORIES

WATER BOARD

INUVIK TO TUKTOYAKTUK HIGHWAY

PUBLIC HEARING

Panel Members:

Chairperson	Roger Connelly
Member	Emery Paquin
Member	Mark Cleveland
Member	Lou Covello

HELD AT:

Tuktoyaktuk, NWT

October 8, 2013

Day 2 of 2

	APPEARANCES	
1		
2	Board Counsel	)Board Counsel
3		
4	Ron Wallace	)NWTWB Acting
5		)Executive Director
6	Jamie VanGulck	)Technical
7		)Consultant
8		
9	Jim Stevens	)Department of
10	Gurdev Jagpal	)Transportation
11	Russell Neudorf (np))
12	Jayleen Robertson (np))
13	Rhonda Batchelor (np))
14	Larry Purcka (np))
15	Doug Saunders	)EGT NW/DOT
16	Erica Bonhomme	)Kavik-Stantec
17	Doug Chiperzak)
18	Walter Orr)
19	Michael Fabijan)
20	Tara Schmidt)
21	Robyn McGregor	)Kiggiak EBA
22		
23	Tara Shoemaker	)GNWT Justice
24		
25		

1 APPEARANCES (Con't)

2 Kristin Hynes) Fisheries Joint

3) Management

4) Committee

5

6 James Malone (np)) Wildlife Advisory

7) Management Council

8

9 Billy Storr (np)) Inuvialuit Game

10) Council

11

12 Dougie Joe (np)) Inuvik Hunters'

13) and Trappers'

14) Committee

15

16 Chucky Grubens) Tuktoyaktuk

17) Hunters' and

18) Trappers'

19) Committee

20

21 Conrad Baetz (np)) AANDC

22 Paul Green (np))

23 Nathen Richea (np))

24 Jan Davies (np))

25

	TABLE OF CONTENTS	
		Page No.
1		
2		
3	List of Undertakings	5
4		
5	Opening Comments	6
6		
7	Presentation by Department of Transportation	17
8	Question Period	33
9	Presentation by Tuktoyaktuk Hunters' and	
10	Trappers' Committee	71
11	Question Period	73
12	Comments from the Public	74
13	Closing Remarks by Department of Transportation	91
14		
15	Certificate of Transcript	97
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

1	LIST OF UNDERTAKINGS		
2	No.	Description	Page No.
3	1 WITHDRAWN	Department of Transportation to address water usage in pits under its ILA (Inuvialuit Land Administration) permit	15
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

1 --- Upon commencing at 10:18 a.m.

2

3 THE CHAIRPERSON: Ladies and
4 gentleman, good morning and welcome. Before I call
5 the hearing back to order, I would like to call upon
6 Lillian Elias to give us an opening prayer, please.

7

8 (OPENING PRAYER)

9

10 THE CHAIRPERSON: Quyanainni,
11 Lillian.

12 My name is Roger Connelly and I'm the
13 Vice Chair of the Northwest Territories Water Board.
14 As this is a continuation of a public hearing
15 commenced in Inuvik yesterday, I now bring this
16 hearing back to order. And we'll begin by outlining
17 who we are, why we are here, and the agenda for
18 today.

19 First of all: Who are we? This
20 public hearing is being held at the direction of the
21 Northwest Territories Water Board. The Water Board
22 was established under the Federal NWT Waters Act, and
23 holds the authority under that act to receive,
24 consider, and approve or reject application for the
25 use of water and the disposal of waste as it relates

1 to water on all lands within the Inuvialuit
2 Settlement Region that are within the Northwest
3 Territories.

4 Personal domestic uses of water, in-
5 stream uses that do not diminish the quality or the
6 flow of water, and water used for fire or emergency
7 purposes are exempt from the requirements to obtain
8 authorization from the Board. Water use connected
9 with shipping activities is governed through the
10 Canada Shipping Act and administered by the Federal
11 Department of Transportation.

12 The Board currently consists of six
13 (6) members. All appointments are made the Federal
14 Minister of Aboriginal Affairs and Northern
15 Development, and nominations are made by the
16 Government of the Northwest Territories and those
17 Federal Government departments directly concerned
18 with the management of water. This hearing is being
19 undertaken by the four (4) Board members you see
20 today.

21 Secondly: Why are we here? On June
22 17th this summer, the Board received an application
23 from the Government of the Northwest Territories for
24 any and all water and water waste to be used,
25 impacted, or disposed of during the construction of

1 the Inuvik-to-Tuktoyaktuk all-weather highway.
2 Following a review of the application to determine if
3 it included the required documentation, the Board
4 declared the application complete on July the 3rd.
5 Since that time, a sequence of
6 activities, including those required under the Act,
7 under the regulations under the Act, and the Board's
8 rules and procedures have been undertaken by the
9 Board. Some of the more pertinent of these
10 activities are as follows: a public posting of the
11 application and the public hearing; the provision of
12 the application and subsequent documentation to
13 interested parties; a detailed review of the
14 application by the Board; a detailed review of the
15 fifty-one (51) recommendations of the Environmental
16 Impact Review Board, and the two hundred and thirty-
17 four (234) commitments made by the Applicant during
18 their -- their process; a detailed review of the
19 Federal Government's response to the EIRB report and
20 recommendations; extensive consultation with Federal
21 and Territorial Government departments and agencies
22 holding an interest in water resources in the
23 Northwest Territories; additional Information
24 Requests were sent to -- from -- by the Board to the
25 Applicant; a pre-hearing conference was held in

1 Inuvik to review technical issues and prepare for
2 these public hearings; and the receipt and granting
3 of Intervenor status.

4 A copy of the application and all
5 related correspondence and documentation received
6 throughout this period has been posted on the Board's
7 website, and hard copies have been made available to
8 interested parties upon request. In addition, a
9 complete copy is available for viewing today at the
10 rear of the room.

11 These and other associated activities
12 has brought us to the point -- to this point in our
13 proceedings, the public hearing, a hearing where the
14 Applicant will outline their project as it relates to
15 water use, where we will gain a fuller understanding
16 of the traditional Inuvialuit uses of water along the
17 highway route, and how the project may impact those
18 uses. We'll also hear comments and opinions from the
19 general public on the use of water or the dis --
20 disposal of wastewater during the construction of the
21 highway.

22 I should mention, there were two (2)
23 Intervenor in these proceedings, the Inuvialuit Game
24 Council and the Fisheries Joint Management Committee.
25 Both of these Intervenor made presentations

1 yesterday in Inuvik on day 1. Their written
2 submissions are available for viewing on the Board's
3 website or through our offices in Inuvik and -- and
4 Yellowknife. Although the Board has only received an
5 application for the construction of the highway
6 within a five (5) year period, it is fully aware of
7 the need to consider the implications of construction
8 on the ongoing operation and maintenance of the
9 highway, particularly as it relates to mitigation and
10 monitoring procedures.

11 I would now like to briefly walk
12 through the agenda for today's hearing. For those
13 would like to follow along, copies are available at
14 the back of the room.

15 We will begin by introducing the Board
16 members present today, Board staff members, legal
17 counsel, and supporting technical experts. Followed
18 by those persons representing the Applicant, the
19 other pre -- presenter today, which is the
20 Tuktoyaktuk Hunters' and Trappers' Committee, and
21 other individuals critical to our proceedings.

22 I will then outline a few preliminary
23 and procedural matters. We will then move to the
24 presentation by the Applicant followed by a
25 presentation on traditional knowledge from a

1 representative of the Tuktoyaktuk Hunters' and
2 Trappers' Committee. Following both of these
3 presentations, the other party, legal -- Board legal
4 counsel and staff, and Board members, and the general
5 public may question the presenter on any matter
6 outlined in their presentation.

7 Then follows what the Board considers
8 a very important segment of these proceedings. The
9 Board would like to hear from any member of the
10 general public who would like to provide us with
11 their thoughts, their comments, or their concerns as
12 they relate to water use and water dis -- disposal
13 throughout the construction period. We will then
14 move towards the end of today's proceeding by giving
15 the Applicant the opportunity to provide us with
16 their closing statements and arguments. Closing
17 statements by the two (2) Intervenors were made in
18 Inuvik yesterday. Even though the opportunity was
19 there, there was no further closing statements from
20 either party.

21 Following a closing prayer I will now
22 thank all participants and adjourn the hearing.

23 Before commencing with the
24 introductions, I would like to recognize and welcome
25 some leaders who have joined us today. I'd like to

1 recognize Mayor Mervin Gruben. I would like to
2 recognize the Vice President of the Tuktoyaktuk
3 Hunters' and Trappers' Committee Chucky Gruben. And
4 I'd also like to recognize, with respect, the Chair
5 of the Northwest Territories Water Board, Mr. Eddie
6 Dillon.

7 Following, now I would like to
8 introduce the Board members who will be hearing this
9 application today. On my immediately right is Emery
10 Paquin.

11 MR. EMERY PAQUIN: I'm on your left.

12 THE CHAIRPERSON: On my left, yeah.
13 Wrong side of the bed again today.

14 Follow -- followed -- followed by Mark
15 Cleveland and Lou Covello. On my right, we have
16 Gerald Phillips, the Board legal counsel, Jamie
17 VanGulck, our technical advisor with ARKTIS and our
18 acting executive director for Ron Wallace.

19 Other people critical to this process,
20 we have Freda Wilson, the office administrator for
21 the -- the -- the Board working out of Inuvik. We
22 have Liz Castenada, the administrative coordinator
23 working out of the Board office in Yellowknife. We
24 have -- very pleased to recognize Marie-Anick Alie of
25 the National Energy Board, the Chairman of which very

1 graciously offered Marie-Anick services in planning
2 for these two (2) public hearings. We graciously
3 accepted, and thank you NEB.

4 Next we have our two (2) interpreters.
5 We have Agnes White and Lillian Elias. On the audio,
6 we have Corey Francis; and taking it all down as our
7 court reporter, Bob Keelaghan.

8 So that's our team. Now I would like
9 to ask Mr. Jim Stevens to introduce his team. Thank
10 you, Jim.

11 MR. JIM STEVENS: It's Jim Stevens.
12 Thank you, Mr. Chair. I think I have my directions
13 nailed down. On my left is Robyn McGregor, from
14 Kiggi -- Kiggiak-EBA; Walter Orr, from Kavik-Stantec.
15 On my right is Erica Bonhomme from Kavik-Stantec; and
16 right at the end of the table is Doug Chiperzak from
17 Kavik-Stantec.

18 And we came in strong numbers. Behind
19 me is Doug Saunders representing EGT Northwind; back
20 there further is Larry Purcka, Department of
21 Transportation; Tara Schmidt from Kavik-Stantec; our
22 solicitor, Jana Schumacher; and Michael Fabian from
23 Kavik-Stantec. Thank you, Mr. Chair.

24 THE CHAIRPERSON: Thank you, Jim.

25 Finally, in the -- in the

1 introductions I'd like to introduce Mr. Chucky
2 Gruben, who'll be representing the Tuktoyaktuk
3 Hunters' and Trappers' Committee.

4 With that, I would like to go through
5 a few preliminary matters. Please turn off your cell
6 phones, put them on vibrate only. We have
7 simultaneous interpreting at these proceedings.
8 Everything said will be placed on the public record,
9 so please speak slowly and into the microphone.

10 We will have a short lunch break
11 around noon and another short break this afternoon
12 for coffee. Washrooms, I believe, the lady's still
13 works, the gents is got the handicapped one on your
14 right, one (1) at a time. Emergency exits: all over
15 the place.

16 There will be a roving microphone for
17 any member of the general public who prefer not to
18 sit up at the table. Marie-Anick, please put up your
19 hand. Marie-Anick will bring the microphone to you.

20 These proceedings are being recorded
21 and a written transcript will be posted on the
22 Board's website within the next few days.

23 To all presenters and speakers at this
24 -- as this hearing is being recorded, before you
25 speak please identify yourself, indicate who you

1 represent and, again, speak into the microphone. As
2 this is a formal proceeding all questions and
3 comments should be directed through the Chair. Thank
4 you for that.

5 And, finally, the Board would
6 appreciate your cooperation in being courteous and
7 focussed in your questioning of any other party.

8 With those preliminary matters out of
9 the way, I would first of all like to call upon our
10 legal counsel, Mr. Gerry Phillips to provide the
11 position of the Board regarding the undertakings that
12 were discussed at our hearing yesterday. Thank you,
13 Gerry.

14 MR. GERRY PHILLIPS: Yeah, I -- thank
15 you, Mr. Chair. Yeah, I've been asked to just put it
16 on the record that since the proponent provided the
17 undertaking yesterday to create a pit development
18 plan for Quarry Source number 177 and to submit that
19 to the Board by October 15th, 2013, that it's no
20 longer necessary for the Proponent to follow through
21 on the first undertaking that I gave yesterday
22 morning regarding the -- the ILA permit.

23 So bottom line is there's just the one
24 (1) undertaking that the Proponent has to follow
25 through on now, and that is the one to create and

1 submit the -- the Pit Development Plan for 177.

2 And as far as any preliminary issues
3 are concerned, we didn't have any yesterday; I'm
4 assuming that there are no preliminary issues that
5 any -- anyone wants to raise before the presentations
6 get started. All right.

7 The other one is the written
8 submissions. We don't have any -- any additional
9 written submissions. The ones that were provided
10 yesterday of course were the Proponent's PowerPoint
11 presentation, the PowerPoint presentation from
12 Fisheries Joint Management Committee, the PowerPoint
13 presentation from the Inuvialuit Game Council, and
14 the written submission of the Inuvik Hunters' and
15 Trappers' Committee, which was provided pursuant to
16 Rule 85(a). And other than that, those were all the
17 submissions that we had yesterday. And I don't think
18 we have any -- anymore today. And that's all I have
19 to say, Mr. Chair.

20 THE CHAIRPERSON: Thank you, Gerry.
21 Very good. Ladies and gentlemen, so I'd like to
22 proceed as per the agenda. And, Jim, if I could ask
23 you to come forward and outline your presentation as
24 it relates to your Application and the use of water
25 and the disposal of waste on the project. Thank you,

1 Jim.

2

3 PRESENTATION BY DEPARTMENT OF TRANSPORTATION:

4 MR. JIM STEVENS: Jim Stevens. Thank

5 you, Mr. Chair. It's a pleasure to be here in

6 Tuktoyaktuk today to provide the NWT Water Board with

7 a detailed presentation on our water licence

8 application. The presentation this morning will

9 provide the Board and members of the public in

10 attendance with details on the Department of

11 Transportation's responsibilities as a developer and

12 public government; a summary of construction

13 activities; a description of various plans that are

14 included in the project Environmental Management

15 Plan; the scope of the Application before the Board;

16 a description of the project's water use, watercourse

17 crossings, and procedures for waste management; a

18 summary of the project's effects to water quality and

19 quantity, and a description of the monitoring and

20 adaptive management to be undertaken. It also

21 includes a summary of consultation undertaking --

22 undertaken leading up to the development of the water

23 licence application and related plans. And finally,

24 the presentation concludes with the Department of

25 Transportation views on how it has met the

1 requirements for licencing under the North West
2 Territories Waters Act.

3 The Department of Transportation is
4 responsible -- responsible for planning, building,
5 and maintaining public transportation infrastructure
6 in the Northwest Territories. The proposed
7 construction of the Inuvik-to-Tuktoyaktuk Highway
8 falls within this mandate.

9 The Department of Transportation has
10 the budget and operational experience to maintain
11 2,200 kilometres of all-weather highway and other
12 public transportation infrastructure. The opening of
13 the Inuvik-to-Tuktoyaktuk Highway will not impact
14 operations on other Northwest Territories highways or
15 public transportation infrastructure.

16 Our water licence application is based
17 on the Inuvik-to-Tuktoyaktuk Highway project, which
18 will see approximately a 140 kilometre all-weather
19 highway constructed between the communities of
20 Tuktoyaktuk and Inuvik over the time period 2013
21 through 2017.

22 The scope of the development being
23 applied for comprises construction activities from
24 2013 to 2017, and includes winter development and
25 operation of borrow sources; summer maintenance and

1 stockpiling at borrow sources; winter construction of
2 new embankment; construction of permanent watercourse
3 crossing and drainage structures; summer embankment
4 compaction, surfacing, and grading; construction and
5 operation of winter roads and access trails; and
6 winter and summer operation of temporary camps,
7 maintenance, and storage areas.

8 This is the slide that shows the type
9 of activities that occurred last winter at Source 177
10 and could be expected to occur at other borrow
11 sources.

12 The scope of development being applied
13 for also includes transportation of fuel, waste,
14 equipment, and personnel, and the storage of fuel. I
15 should note a contractor is expected to be announced
16 in November of this year.

17 The construction of the Inuvik-to-
18 Tuktoyaktuk Highway project underwent a substituted
19 panel review to meet the requirements of the Canadian
20 Environment Assessment Act and Inuvialuit Final
21 Agreement.

22 In January of this year, the
23 Environmental Impact Review Board released its report
24 of the review and concluded that although the project
25 will have sig -- significant effects on the

1 environment, these effects can be mitigated through
2 the implementation of fifty-one (51) recommendations
3 and the Department of Transportation's two hundred
4 and thirty-four (234) commitments.

5 In April of this year, the Government
6 of Canada accepted, or accepted the intent, of most
7 of the recommendations with a decision that the
8 development should proceed. The Department of
9 Transportation has adopted all of Canada's
10 recommendations related to water and waste in its
11 construction methods, monitoring, and management
12 plans.

13 The Environmental Management Plan for
14 the Inuvik-to-Tuktoyaktuk Highway includes all
15 environmental-related monitoring and mitigation sub-
16 plans intended to mitigate, monitor, and manage
17 impacts to the environment from construction
18 activities. All of these plans will be updated
19 annually or as required as part of an adaptive
20 management process.

21 I should also note that the Inuvik-to-
22 Tuktoyaktuk Highway Corridor Working Group has been
23 established to facilitate multi-agency and
24 stakeholder input in the review of the various plans.
25 At this time, we are working towards scheduling the

1 first meeting of the Corridor Working Group for late
2 October or early November.

3 The project's Environmental Management
4 Plan includes a Sedimentation and Erosion Control
5 Plan, a Waste Management Plan, an Explosives
6 Management Plan, a Spill Response Procedure, a Spill
7 Contingency Management Plan, a Safe Work
8 Practice/Fuelling Equipment and a Safe Work
9 Practice/Handling Petroleum documents, an Emergency
10 Response Plan, a Fish and Fish Habitat Protection
11 Plan, a Wildlife and Wildlife Habitat Protection
12 Plan, and, finally, an Aquatic Effects Monitoring
13 Plan.

14 I should note several plans have also
15 been updated during the Board's process based on
16 ongoing review by regulators and other parties.

17 The Inuvik-to-Tuktoyaktuk Highway
18 construction activities will begin in late 2013 and
19 continue to fall 2017. The Department of
20 Transportation is requesting a five (5) year licence
21 to cover construction activities, specifically: to
22 obtain water, to cross watercourses, to modify the
23 bed or banks or watercourses, and to deposit waste.

24 The project's constructions variables,
25 location, and timing is summarized in the

1 construction plan atlas. The most recent version was
2 provided to the Board September 30th, 2013. The
3 atlas shows winter and summer camp locations, borrow
4 source and water access trails, and the area of
5 alignment construction for specific years, and
6 north/south construction spreads.

7 The majority of construction will be
8 completed in winter along two (2) separate spreads or
9 sections: 20 kilometres in the north and 20
10 kilometres in the south. Construction activities in
11 summer will consist of embankment grading and
12 surfacing.

13 There are sixty-six (66) watercourse
14 crossings requiring bridges or culverts to be
15 constructed. All structures are designed to meet
16 Department of Fisheries and Oceans requirements.
17 Designs have been supported by hydrotechnical studies
18 and fisheries assessments.

19 All crossings have had drawings issued
20 for 100 percent design review. These have been
21 submitted to the Board. We are able to provide the
22 Board with stamped and signed drawings by October
23 15th.

24 Site-specific requirements at each
25 crossing are included in the crossing designs.

1 Generally though, crossings will be constructed in
2 winter. Construction will include the placement of
3 geotextile fabric and bedding gravel below the
4 culvert, and backfilling with thin lifts, or thin
5 layers of compacted gravel.

6 This slide shows the culvert being
7 installed on top of the geotextile fabric and bedding
8 gravel. This is an example of a large-diameter
9 culvert on a stream crossing on the Source 177 access
10 road.

11 All culvert construction will have
12 sedimentation and erosion control parameters.
13 The Sedimentation and Erosion Control Plan for the
14 Inuvik-to-Tuktoyaktuk Highway describes methods that
15 will be used to prevent sedimentation and erosion
16 during watercourse crossing construction.

17 Embankment construction will also be
18 conducted in winter using frozen material from borrow
19 sources. The frozen material which will be placed on
20 a geotextile fabric, which has been laid over a
21 right-of-way cleared of snow. Compaction and other
22 highway finishing activities will be conducted in the
23 summer.

24 This slide shows clearing of snow and
25 placing of geotextile on the Source 177 access road.

1 This technique will be used for the new alignment
2 construction.

3 In the summer, embankment grading and
4 shaping will occur. Surfacing gravel will be placed
5 when compaction and settlement have been achieved.

6 There will be up to eleven (11) borrow
7 sources developed during the three (3) to four (4)
8 year construction period. Three (3) sources will be
9 open this winter pending approval of quarrying permit
10 and quarry licence applications, including pit
11 development plans, by the Inuvialuit Land
12 Administration, and Aboriginal Affairs and Northern
13 Development Canada.

14 Application for pits to be open in
15 years 2 and 3 will be submitted to regulators for
16 approval prior to winter construction. All borrow
17 sources used for construction will be operated in the
18 same manner as the borrow sources applied for this
19 year. The construction plan atlas shows potential
20 locations for winter roads, access trails, and camps
21 associated with these borrow sources. Each borrow
22 source will be used up to two (2) years during
23 construction.

24 Comprehensive pit development plans
25 have been submitted to the Inuvialuit Land

1 Administration and Aboriginal Affairs and Northern
2 Development Canada for three (3) borrow sources being
3 applied for in 2013. These are I-401A, PW-10 and 11,
4 and Source 170. These pit development plans follow
5 guidance provided in the Inuvialuit Settlement
6 Regional Granular Resource Management Plan and
7 includes objectives and opt -- options for closure
8 and reclamation.

9 All construction camps required for
10 the project will be located on borrow sources and on
11 the embankment. No summer over-land access to borrow
12 sources will be required.

13 The project will require early-season
14 access trails. Winter haul roads routing over lakes
15 will be maximized. Winter roads and access trails
16 are constructed using best management practices.

17 The project's use of water will be
18 primarily for the construction and maintenance of
19 winter roads and dust control and compaction in the
20 summer. It will also be used for camp operations.

21 This -- this table shows the projected
22 water use for the north and south spreads or sections
23 each year. As you can see, the water requirements
24 are highest during the early winter for the project's
25 winter roads. Water use is considerably lower from

1 January to the end of the winter, and minimal during
2 summer.

3 The Department of Transportation has
4 identified, through bathymetric surveys, thirty-seven
5 (37) lakes potentially suitable for water withdrawal,
6 and has identified the Mackenzie River as an optional
7 resource. The bathymetric surveys map water depth
8 throughout each lake.

9 In most lakes, the proposed water
10 withdrawal will be typically 2 to 3 percent of the
11 unfrozen volume, which is considerably less than the
12 10 percent allowable under the Department of
13 Fisheries and Oceans protocol in winter.

14 Lakes to be used for winter road
15 construction will only be used one (1) to two (2)
16 years. However, certain lakes will be used during
17 all four (4) years to support camps and summer
18 construction.

19 Three (3) project plans have been
20 submitted that address procedures to prevent deposit
21 of waste. The plans include the Waste Management
22 Plan, the Spill Contingency Management Plan, and the
23 Explosives Management Plan.

24 All sewage and grey water will be
25 transported to Inuvik or Tuktoyaktuk facilities for

1 disposal. Non-hazardous solid waste will be
2 incinerated or will be transported to Inuvik or
3 Tuktoyaktuk facilities for disposal. The project
4 does not have any planned discharges of waste to the
5 environment. All hazardous waste will be disposed of
6 at approved, licensed facilities.

7 The project's Environmental Management
8 Plan describes methods to prevent entry of waste into
9 water bodies or watercourses. Any entry of waste
10 into water would be accidental and will be responded
11 to in accordance with the Environmental Management
12 Plan.

13 The Department of Transportation's
14 objective is to maintain existing water quality. The
15 Department of Transportation recognizes that there is
16 potential for accidental discharge of waste. The
17 greatest potential is sedimentation during
18 watercourse crossing construction. Other accidental
19 discharge of waste could occur during borrow source
20 development, blasting, camp operation, and embankment
21 construction.

22 There are four (4) key plans in place
23 to prevent waste from entering water during project
24 construction. The plans include a Sedimentation and
25 Erosion Control Plan, a Fish and Fish Habitat

1 Protection Plan, a Spill Contingency Management Plan,
2 and Pit Development Plans. All of these plans have
3 been provided to regulators for review.

4 An Aquatic Effects Monitoring Plan was
5 submitted to the Water Board on September 20th, 2013.
6 The Aquatic Effects Monitoring Plan contributes to
7 the Department's commitment to ensuring the project
8 is constructed in a way that maintains the
9 availability of clean and plentiful water today and
10 into the future. The plan, as submitted to the
11 Board, is consistent with the Aboriginal Affairs and
12 Northern Development Canada guidelines for developing
13 an aquatic effects monitoring plan.

14 The Aquatic Effects Monitoring Plan
15 describes methods to monitor inadvertent changes to
16 the amount or quality of water that may occur due to
17 project construction and operation.

18

19 (BRIEF PAUSE)

20

21 MR. JIM STEVENS: The Department of
22 Transportation, through the Aquatic Effects
23 Monitoring Plan, will monitor and report on the
24 effectiveness of mitigations that are designed to
25 prevent discharge of waste to the environment. The

1 plan will also measure and report on the effects of
2 water withdrawal on lake water quantity. And the
3 plan will also identify improvements in mitigation
4 techniques that will make them more effective.

5 Monitoring results of various
6 indicators will be provided to regulators during
7 construction. A full report can be provided annually
8 during the term of the five (5) year licence. The
9 Department of Transportation will continue to meet
10 with regulators and co-management organizations to
11 develop the Aquatic Effects Monitoring Plan, which we
12 expect will meet the Board's requirements for a
13 monitoring program. The Department of Transportation
14 expects the details of the Aquatic Effects Monitoring
15 Plan to continue to be developed after licence
16 issuance.

17 In developing its construction plan
18 and various environmental management plans, to
19 mitigate effects to the environment including water,
20 wildlife, and fisheries, the Department of
21 Transportation has held over twenty (20) meetings
22 with regulators, co-management groups, and other
23 Inuvialuit organizations.

24 A consultation log and meeting records
25 were provided to the Northwest Territories Water

1 Board September 20th, 2013. This slide is a summary
2 of the organizations that provided input on various
3 project components and activities.

4

5 (BRIEF PAUSE)

6

7 MR. JIM STEVENS: The Northwest
8 Territories Waters Act requires consideration of the
9 project's effects to licensed and unlicensed users.
10 The Department of Transportation has determined that:
11 A) There are no existing licensees who will be
12 adversely affected in a significant way by the
13 project's use of water or deposit of waste; B) there
14 are no unlicensed users who would be adversely
15 affected by the use of waters or deposit of waste
16 proposed by the Department of Transportation in its
17 Application. As a result, the Department of
18 Transportation has not entered into any compensation
19 agreements pursuant to sections of the Northwest
20 Territories Waters Act.

21 The Department of Transportation has
22 letters of agreement with the Hamlet of Tuktoyaktuk
23 and Town of Inuvik to accept non-hazardous solid
24 waste, and sewage and grey water generated by the
25 project in their licensed solid waste and wastewater

1 facilities.

2 The mitigation measures in place, as
3 described in the project's Environmental Management
4 Plan, are intended to prevent other deposit of waste
5 to water. And although there are other existing
6 license holders with approval to withdraw water from
7 the Mackenzie River, the Department of
8 Transportation's use of water is not expected to
9 impact their licence use.

10 The project does not have any planned
11 deposits of waste other than at licensed facilities.
12 Mitigations in the project's Environmental Management
13 Plan are intended to minimize waste and to prevent
14 this waste from entering water. Despite the
15 Department's best efforts, it is possible that an
16 accidental discharge of waste to the environment may
17 occur during project construction. The project's
18 Environmental Management Plan provides response
19 actions to address accidental discharges.

20 Some concerns have been raised about
21 the project's potential impacts to muskrats from
22 water withdrawal. However, there is no substantial
23 evidence to support this concern. The expected --
24 not all lakes proposed for water withdrawal will
25 contain muskrat push-ups. And the expected lake

1 level drop in most cases will typically be only a few
2 centimetres.

3 To mitigate potential effects from
4 project construction activities, the Department of
5 Transportation will conduct pre-construction muskrat
6 push-up surveys after freeze-up with Hunters' and
7 Trappers' Committee representation to identify areas
8 of muskrat push-ups and will review these against
9 planned winter road routes and lake water withdrawal
10 locations.

11 With the application of the
12 Department's management plans, including ongoing
13 monitoring and review, the Department of
14 Transportation is confident that impacts to the
15 environment and other users will be minimal.

16 Regulators and the Inuvik to
17 Tuktoyaktuk Highway Corridor Working Group will have
18 a key role in the review of the various plans and
19 lessons learned as part of the Department's
20 commitment to adaptive management.

21 In summary, the Department of
22 Transportation is confident that the construction of
23 the Inuvik-to-Tuktoyaktuk Highway will maintain water
24 quality and water quantity in the Inuvialuit
25 Settlement Region. The Department is seeking a five

1 (5) year licence term, and believes it has met the
2 conditions of the Waters Act.

3 Quyanainni giwanimuch (phonetic).

4 Thank you.

5

6 QUESTION PERIOD:

7 THE CHAIRPERSON: Thank you, Jim.

8 There are -- the -- the Intervenors that I said
9 appeared yesterday, so there'll be no Intervenors
10 asking further questions of the Applicant today.

11 I would like to open the floor now to
12 the general public, please. If there are any
13 questions at all on any aspect of the presentation
14 you've just heard, we'd be very pleased to hear your
15 comments now. Thank you.

16

17 (BRIEF PAUSE)

18

19 THE CHAIRPERSON: We have the
20 microphone available. Thank you, Chucky. The
21 floor's yours.

22 MR. CHUCKY GRUBEN: Hello, hello.
23 Good morning. I'd like to welcome all you to our
24 beautiful little town of Tuktoyaktuk. My name's
25 Chuck Gruben. I'm the vice chair of the Hunters' and

1 Trappers' Committee, and just on our last HTC regular
2 board meeting, I just got appointed to the Tuk-Inuvik
3 Working Group. So I'm pretty familiar with what's
4 going on in regards to Tuk-Inuvik Highway. Sorry to
5 say, our HTC chair could not make it this morning, so
6 here I am.

7 There's a couple of comments I'd like
8 to make on a couple of species of animals in -- in
9 regards to the -- one (1) of them is on the water
10 volume that's being taken out of the -- that's going
11 to be taken out of the lakes in regards to muskrats.

12 You know, everybody -- you know, when
13 you see a muskrat pushup in -- coming out of a lake,
14 people don't think very much of it, you know. They
15 think it's just a piece of mud and moss sticking out
16 of a lake, but actually, if you take this muskrat --
17 we call them push-ups, muskrat houses -- if you take
18 it apart, you know, it's a very, you know,
19 sophisticated piece of work for a little animal like
20 that.

21 And, you know, if you take out -- you
22 know, we know that no more than 10 percent of the
23 water's going to be taken out of each lake. But if
24 you look at, you know, discipline, you know, life-
25 long observations, you know, when you're a hunter and

1 trapper living off the land -- I -- I lived my whole
2 -- whole life in Tuk, born and raised here, and, you
3 know, every month, you know, we get a full moon and,
4 you know, that causes the water to rise or to lower.

5 And when you look at a muskrat push-
6 up, you know, there's a place where they have a bed,
7 there's a place where they have a sleeping platform.
8 You know, I don't know how many of you know this,
9 but, you know, water fluctuates. It goes up and
10 down. You know, it has an impact on the -- on the
11 little muskrat.

12 I don't know how you can get away --
13 get around those kind of things, but, you know,
14 that's -- that's one of the issues that, you know,
15 has come up a few times in the Hunters' and Trappers'
16 Committee meetings.

17 Also, the other one is the beavers.
18 It's been a few years now since they started the
19 access road up through Source 177. And one (1) of
20 the things that we've seen here is wherever they put
21 a culvert in, you know, it -- it affects the flow of
22 the creek, you know, whether it slows the water down
23 or whether it speeds the water up.

24 But beavers are very curious animals,
25 and what we've seen in the creek in Gungi Creek,

1 which is not far out of here, there's a pretty good-
2 sized culvert there, and it's kind of fast water.
3 And what we've seen, as soon as the beavers -- you
4 know, they hear this water running fast and they get
5 curious, they go check it out. And next thing you
6 know they're damming up the -- the culverts.

7 And the Gungi Creek and also other, a
8 lot of the creeks are very important for, you know,
9 the migration of fish, whether they're coming
10 upstream or going downstream. So when the beavers
11 start plugging up these culverts, then, you know,
12 that's -- that's not only gonna impact the water,
13 it's going to impact the fish.

14 So you know, we have to keep in mind,
15 you know, how -- how these cu -- culverts are
16 construction -- constructed. Right now I see them,
17 you know, they're just open culverts, no screens in
18 place. You know, that's something to think about.

19 But again, there's a -- the beaver,
20 you know, they say it's -- this is not their natural
21 habitat. But a lot of, in the last, you know, ten
22 (10) years, we've seen a lot of these little animals,
23 you know, coming out of that delta and -- and moving
24 into new territory.

25 And, you know, these are just some of

1 the, you know, a few of the little issues that, you
2 know, we have with the Tuk-Inuvik Highway. Other
3 than that, you know, that's -- that's all I have to
4 say. Thank you.

5 THE CHAIRPERSON: Thank you very
6 much, Chucky. Thank you.

7 Any other questions from the general
8 public? Any other comments on the presentation that
9 was just made? As I say, there -- there will be an
10 opportunity later on today for members of the general
11 public to say anything they would wish to make on the
12 project. So if we could just now please limit our
13 questions to what was presented by the Applicant.

14 MR. JAMES POKIAK: Okay, thank you,
15 Mr. Chair. My name is James Pokiak, and I'm a
16 resident of Tuktoyaktuk.

17 I got a couple of questions here
18 regarding the Developer's presentation here. And
19 this goes back to one (1) of Chucky's questions
20 regarding the -- the Gungi Creek. That's a very
21 special area there. And when Source 177 was being
22 constructed, they were supposed to have a bridge in
23 there. I'm just wondering if it's at all possible to
24 put a bridge in after all the incidences that have
25 been happening in that creek.

1 And according to your plan there's lot
2 of culverts that are going to be put in -- in -- in
3 places throughout the -- there -- the -- the total
4 highway. We all know that there -- there have been -
5 - already been quite a bit of work being done
6 replacing culverts that have not worked from the
7 Source 177 project. Has there been an improvement in
8 the type of cul -- culvert that -- that can be put
9 into place and not have to go there and repair them
10 or -- or fix them later on?

11 And my biggest question is: Will the
12 -- the construction on the road be done in the time
13 period predicted? As we all know, again, this falls
14 back on -- on the predictable time of the Source 177
15 being constructed for the community. And we haven't
16 seen any benefits out of it yet except for wor -- two
17 (2) jobs here and there.

18 The -- the creeks are -- once they get
19 plugged up, it's -- pretty -- pretty bad. And lot of
20 people make use of the fish in the community here.
21 And -- and Gungi Creek is one (1) of the very main
22 ones where we get good broad whitefish coming down.

23 The next one is, I'm very -- very
24 interested to find out what type of a -- what
25 bathymetry was done in the lakes that you are talking

1 about. Who did it? What's the vol -- volume of
2 water that can be withdrawn from those lakes without
3 harming them?

4 And the other one here is DFO
5 presence. How much presence has DFO had in -- in the
6 project to date?

7 And my final one would be in your
8 presentation to the Water Board here regarding your -
9 - your water licensing. Why wasn't this put into
10 place before -- or any sooner than -- than -- what
11 you are doing with it now? Thank you.

12 THE CHAIRPERSON: Thank you very
13 much, James. Jim, perhaps I could call upon you to
14 respond. I counted one (1), two (2), three (3), four
15 (4), five (5) specific questions. If you were able
16 to mark them down, we could walk through them,
17 please, one (1) by one (1).

18 Thank you, Jim.

19 MR. JIM STEVENS: Jim Stevens. Thank
20 you, Mr. Chair. I will just provide kind of a high-
21 level comment back on some of the questions and I
22 will defer to others for specific details.

23 What I'd like to respond to is one (1)
24 of the questions pertained to the construction time
25 frames. At this time we are still predicting that

1 construction will occur between 2013 to 2017.

2 With regard to the question and
3 comments on water-crossing designs and some of the
4 Source 177 experiences, I just want to say that we
5 have learnt a lot of lessons on the access road
6 project and those lessons learned will be applied to
7 the proposed new construction.

8 With regard to the two (2) questions
9 on Gungi and the question of culverts, I'm going to
10 ask for Walter Orr to provide some details on that.
11 Thank you.

12 MR. WALTER ORR: Mr. Chair, thank
13 you. Walter Orr from Kavik-Stantec for the
14 Developer.

15 I will speak to the first two (2)
16 questions, and the first question, as I understand
17 relates to the type of crossing at Gungi Creek and
18 the -- specifically about the evaluation of a bridge
19 at Gungi Creek. I -- the -- there was a bridge
20 initially considered for Gungi Creek in the early
21 parts of the design process for the initial Source
22 177 road access/construction, and that design took --
23 was taking place in the year 2008, the fall of 2008.

24 The -- the decision to move ahead with
25 a -- a round, closed-bottom CSP culvert was taken

1 upon evaluation of the alignment of the road that
2 would be required to have a bridge versus a culvert.
3 And I will speak a little bit more clearly on that.

4 The Gungi Creek sits at the base of a
5 hill and with a quite tight, winding part of the
6 creek where the road crosses. And, in fact, there's
7 a number of other locations to cross, and this was
8 determined to be the most appropriate.

9 Because a bridge cannot be put on a
10 substantial slope, on a 5 or 6 percent slope, the --
11 the choice of a bridge would require the road grade
12 to be raised much higher in the air to flatten the
13 bridge at that location, which would require the road
14 embankment to be much wider and then the embankment,
15 in fact, would be wide enough to be impacting the
16 stream directly itself, so...

17 And what we -- we found was that the -
18 - any bridge that would be required would be quite
19 lengthy and very, very expensive and would have a
20 greater impact on the environment because of the
21 greater fill required because of the height of the
22 embankment.

23 So the determination was made, upon
24 evaluation of the options that we had available, that
25 the least impact to the environment and the most

1 appropriate item safety-wise was a closed-bottom,
2 round culvert which was subsequently designed and
3 installed at Gungi Creek.

4 Okay. Ques -- the second question
5 is: Have there been any improvement to the type of
6 culverts as designed for the new Inuvik-to-
7 Tuktoyaktuk Highway project over those utilized in
8 the Source 177 road construction.

9 The short answer is yes. The -- as
10 Jim has mentioned, there -- there have been a
11 detailed evaluation of the Source 177 road, things
12 that went well, things that went not so well, and
13 lessons learned have been evaluated throughout the
14 process of design of the Inuvik-to-Tuktoyaktuk
15 Highway project.

16 So there are a number of changes that
17 are, I would call them significant to the way that we
18 anticipate the culvert crossings to perform, made as
19 a re -- response to the lessons learned of the 177
20 project, access road project. And it is our belief
21 that these -- the culverts that are installed at
22 crossings on the Inuvik-to-Tuktoyaktuk Highway will
23 perform consistently well based on some of these
24 changes. Thank you.

25 THE CHAIRPERSON: Thank you, Walter.

1 And, Jim -- James, I know that's only part of the
2 questions that you asked. There were several others
3 that haven't been responded. Perhaps we could pause
4 and just ask you, are those responses adequate to
5 those first questions, James?

6 MR. JAMES POKIAK: Yeah, thank you,
7 Mr. Chair. I -- I believe they've answered the
8 question to my expectation, I guess. But my only
9 problem with that is when you talk about bridge
10 crossings and -- and the type of terrain that the
11 bridge has to be put in in, I find that hard to
12 believe because I've crossed a lot of bridges in my
13 travels and I've seen so many areas where the bridges
14 that were put in were -- were way more complicated
15 than -- than the Gungi Stream. I think you should
16 reconsider that because that is a very special creek
17 for the community here.

18 And, you know, it -- it's -- I believe
19 it's not the first time that that creek has been
20 plugged. And it doesn't seem to work with a culvert.
21 So maybe that's something -- that's an area where it
22 might have to be looked at again, because originally
23 there was supposed to be a bridge crossing there
24 anyway.

25 And I'm -- I'm thinking that the

1 bridge was not put into place because it was only
2 going to be an access road. But now that it's going
3 to become an all-weather road you have to widen it
4 anyway. So it don't make sense not to -- not to go
5 back there and -- and construct something that was
6 put into -- into place when that project was started.
7 Thank you.

8 THE CHAIRPERSON: Thank you, James.
9 Jim...?

10 MR. JIM STEVENS: Thank you, Mr.
11 Chair. Jim Stevens. Walter, did you have any other
12 additional comments you'd like to provide?

13 THE CHAIRPERSON: Thank you.
14 Walter...?

15 MR. WALTER ORR: Yes, the -- Mr.
16 Chair, Walter Orr, Kavik-Stantec. During the current
17 upgrading of the 177 project the crossings on that
18 project were re-evaluated and examined in light of
19 the criteria that we have -- we are utilizing for the
20 Inuvik-to-Tuktoyaktuk Highway Project.

21 Under -- and under those criteria, and
22 they include things like flow rates, include things
23 like geometry. They include other areas, structure,
24 vertical clearance, climatic conditions, geotechnical
25 design. The Gungi Creek crossing is -- would -- is

1 still appropriate as a closed-bottom culvert
2 crossing. Thank you.

3 THE CHAIRPERSON: Thank you, Walter.
4 James, on that question. Jim, I'm making notes when
5 James was speaking and I had a few other items I
6 don't think we covered. One (1) was bathymetry, some
7 details on the work undertaken in that -- in that
8 area, and what interaction have you had with DFO
9 short-planning process, and why come for a water
10 licence now when there was some work done last year?

11 So if you could comment on those three
12 (3), please. Thank you very much.

13 MR. JIM STEVENS: Jim Stevens. Thank
14 you, Mr. Chair. On the matter of bathymetric
15 surveys, I'd like to defer to Erica Bonhomme to
16 provide additional details on the survey work. Thank
17 you.

18 THE CHAIRPERSON: Thank you, Jim.
19 Erica...?

20 MS. ERICA BONHOMME: Thank you, Mr.
21 Chair. Erica Bonhomme. The -- there were actually
22 several bathymetric surveys undertaken in support of
23 the proposals for the proposed lakes that are going
24 to be used for water withdrawal, as you see in the
25 application.

1 There was a summer survey done in 2012
2 by IMG-Golder of a number of the lakes. That survey
3 was then supplemented by a winter survey by Kiggiak-
4 EBA. Following that, this past summer, 2013, there
5 was an additional survey done by IMG-Golder.

6 All three (3) of those reports, of
7 those surveys -- the last one came in two (2) parts,
8 have been submitted to the Board, and they support
9 the applications we have for water withdrawals.

10 There's a second part to that
11 question, as I understood, which was how much water
12 could be taken out without harming them. And the
13 proposed amounts of water to be taken out of those
14 lakes where they do not freeze to the bottom is
15 somewhere around 2 to 3 percent of the volume of the
16 lake. That, you know, if you have a water bottle,
17 represents about a tablespoon.

18 In the lakes where they do freeze to
19 the bottom, there is no consideration of course of --
20 of fish because they won't overwinter in lakes that
21 freeze to the bottom. The amounts are -- are a
22 little bit more in those lakes because the DFO
23 protocol that we have for ensuring no impacts to fish
24 does not apply at those lakes. Thank you.

25 THE CHAIRPERSON: Thank you, Erica.

1 And again we had two (2) more outstanding questions,
2 I believe, one (1) regarding the DFO presence and
3 your planning processes, and the 'why now' question
4 for your water licence. Thank you, Jim.

5 MR. JIM STEVENS: Jim Stevens. Thank
6 you, Mr. Chair. On the matter of our involvement and
7 interaction with the Department of Fisheries and
8 Oceans, I'm going to ask Doug Chipertzak to provide an
9 overview. Thank you.

10 THE CHAIRPERSON: Thank you, Jim.
11 Doug, please...?

12 MR. DOUG CHIPERZAK: Thank you, Mr.
13 Chair. Doug Chipertzak, Kavik-Stantec. We've had a
14 fair amount of involvement with DFO, and DFO has --
15 has reviewed and -- and provided comments on the
16 Sedimentation and Erosion Control Plan and the Fish
17 and Fish Habitat Plans. They are reviewing the
18 Aquatic Effects Monitoring Plan at this moment.

19 We've made several improvements to the
20 Sedimentation and Erosion Control Plan and the Fish
21 and Fish Habitat Protection Plan based on DFO's
22 comments.

23 The -- in the process of furthering
24 the Aquatic Effects Monitoring Program, we're
25 establishing a technical working group, of which DFO

1 will be a -- a part of, and we hope to have our first
2 meeting later this month or early November.

3 There are also -- DFO is also involved
4 with the Tuk-Inuvik Working Group in the development
5 of a -- a fisheries management plan, which the
6 Developer is also supporting. And I guess the most
7 recent meeting we've had, you know, was last week
8 with DFO, and -- and we -- we plan to continue a
9 regular dialogue and exchange of information. Thank
10 you.

11 THE CHAIRPERSON: Thank you, Doug.
12 And the final question I believe was related to why
13 is the application being made now and perhaps not
14 earlier. But I think people recognize that there was
15 some work done on some part of the highway last
16 spring. Thank you, Jim.

17 MR. JIM STEVENS: Jim Stevens. Thank
18 you, Mr. Chair. I guess I've got two (2) comments
19 relative to that question. One (1) is that the
20 initial work on Source 177 were below any thresholds
21 that would require licensing, and B) basically we had
22 to wait for the Panel Review Report and then the
23 federal response to that Panel Report which was
24 delivered on April 5th. Subsequent to the federal
25 response on April 5th, we basically worked all-out to

1 prepare our application on all the other additional
2 information that was required.

3 Thank you, Mr. Chair.

4 THE CHAIRPERSON: Thank you, Jim.

5 And perhaps James again, is that response adequate or
6 is there further questions, please? Thank you,
7 James.

8 MR. JAMES POKIAK: Yeah, that -- the
9 responses are -- are fairly ade -- adequate from --
10 from my view. But -- thank you very much for -- for
11 that. This is information that I was quite
12 interested in and if you guys can think of anything
13 else that you may have forgotten to mention, it will
14 be nice to hear that.

15 And my final one is going to be in
16 regards to the whole project as it stands right now.
17 We all know that environmental monitors and wildlife
18 monitors are a requirement of any projects that take
19 place within the region. I'm quite disappointed to -
20 - to hear from somebody environmental monitors --
21 that -- that have taken the training to become
22 environmental monitors not being -- not being used.

23 I know ILA has jurisdiction over that
24 and I'm just -- I'll pose that question to ILA later
25 in regards to their ways of -- of going out there to

1 -- to oversee the project. But it was always my view
2 that the environmental monitors were put in place to
3 ensure that the environment was -- was not being
4 harmed.

5 So I really have a strong belief that
6 throughout the whole project right from day 1 those
7 monitors should be made use of. That's what they're
8 trained for. They go out there and we have to start
9 making use of these people. Not all of them are --
10 are going to be truck drivers, so they go and they
11 take the further training in the environmental field
12 as to become these -- these eyes and ears of ILA. So
13 make use of these people. Thank you.

14 THE CHAIRPERSON: Thank you very
15 much, James. We've -- we've noted that for the --
16 for the record as I -- I won't be asking ILA to come
17 up and speak on the matter because that's a little
18 inappropriate considering we're looking at a
19 different application.

20 Thank you very much indeed, James.
21 Please.

22 MR. JAMES POKIAK: But I -- I
23 mentioned that I would pose that question again to
24 ILA but I just wanted to make sure that the
25 developers are aware right from day 1 this is one (1)

1 of the requirements that -- that was put into place
2 before the project started. Thank you.

3 THE CHAIRPERSON: Thank you very much
4 again, James.

5 Are there any other members of the
6 general public who would like to make comment or ask
7 questions on the presentation by the Applicant,
8 please?

9 Okay. Thank you very much for that.
10 Before moving on I'd like to ask the other Board
11 members here if there are any further questions
12 they'd like to have supplementary questions for.

13 We'll start off with our acting
14 executive director, Ron Wallace. Thank you, Ron.

15 MR. RON WALLACE: Thank you,
16 Chairman.

17 Mr. Stevens, the evidence that Mr.
18 Pokiak has presented here today is of great interest
19 to the Board staff and you have generously said that
20 there were lessons learned on the experience at Gungi
21 Creek. If I could, I believe that the Board can
22 profit significantly from Mr. Pokiak's evidence and
23 also from the lessons that have been learned on this.

24 If I can just summarize what I
25 understand to be the evidence, the initial design at

1 Gungi Creek called for a bridge. There were good
2 engineering and associated reasons that led to the
3 installation of a culvert. I understand from the
4 evidence that the culvert failed and that it has been
5 repaired.

6 The evidence, also from Mr. Pokiak,
7 indicates that the creek has not recovered. That --
8 I think he used the term 'plugged' which is probably
9 a good description of what is concerned. I guess I
10 have two (2) questions for you on behalf of the Board
11 from a technical perspective. The first is when that
12 culvert failed, can you explain to the Board what the
13 monitoring program was as an indicator for the Board
14 of future potential activities and future potential
15 licensing requirements?

16 What monitoring occurred of the,
17 obviously the sedimentation that must have occurred?
18 What monit -- the second question is: What
19 monitoring has occurred in advance of that failure
20 from the perspective of the fisheries resource? And
21 following that, what was the monitoring results of
22 the fisheries resource following the failure and the
23 repairs that have occurred?

24 Thank you, Chairman.

25 THE CHAIRPERSON: Thank you, Ron.

1 Jim, please. Thank you.

2 MR. JIM STEVENS: Jim Stevens. Thank
3 you, Mr. Chair. I'd like to take about two (2) to
4 three (3) minutes to discuss this.

5 THE CHAIRPERSON: Perfectly fair. I
6 thank you, Jim. We'll take a -- do we want to take a
7 ten (10) minute stretch break, please. I thank you
8 very much.

9

10 --- Upon recessing at 11:34 a.m.

11 --- Upon resuming at 11:49 a.m.

12

13 THE CHAIRPERSON: Ladies and
14 gentlemen, call the meeting back to order, please.
15 And, Jim, I believe you had an answer to Ron's
16 question. Thank you.

17 MR. JIM STEVENS: Jim Stevens. Thank
18 you, Mr. Chair. I'm going to defer to Mr. Walter Orr
19 to provide some comments back on those questions.

20 THE CHAIRPERSON: Thank you, Jim.
21 Walter, please?

22

23 (BRIEF PAUSE)

24

25 MR. WALTER ORR: Thank you, Mr.

1 Chair. Walter Orr, Kavik-Stantec. There's a couple
2 of points that were raised in the -- in the question
3 that if I get those incorrect, I -- please -- please
4 clarify. But the first comment that I would like to
5 make is the -- with respect to the initial design of
6 the crossing being a bridge.

7 I can say quite clearly there was no
8 initial design of a bridge. At the beginning of the
9 design process this crossing was evaluated for the --
10 the appropriate type of crossing. A bridge was
11 certainly considered in that design process. And
12 then the design criteria was evaluated and ultimately
13 the -- the bridge was found to be inappropriate and
14 the design moved ahead with the closed-bottom culvert
15 as we see there now.

16 So there -- just a clarification,
17 there was not a design prepared and moved away from.
18 It was always designed as a closed-bottom culvert.
19 Okay. Secondly, now that particular culvert that
20 we're speaking of in Gungi Creek is -- had a -- a
21 quite spectacular incident, I will say, in the -- in
22 2010. Now, the construction schedule of this
23 particular road, the -- the road embankment was
24 initially constructed in the winter of 2009.

25 The -- that particular culvert was not

1 installed in that winter of 2009, rather there was a
2 temporary short-span bridge put in place across the
3 creek. The creek is a narrow creek. It's in the
4 order of 4 metres wide and there's a temporary short-
5 span bridge placed just for road access, low-speed,
6 not on the alignment, adjacent to the alignment. And
7 then the culvert itself was placed and the road
8 embankment was completed in the -- in the winter of
9 2010 in the freshet.

10 And in 2010, the contractor, because
11 this was a road under construction, was engaged in a
12 monitoring of the crossings on the -- on the -- on
13 the roadway. And we di -- we discussed it offline
14 and clarified the times and things. It was in the
15 freshet 2010.

16 At 11:00 -- 11:00 a.m. the morning of
17 the incident the contractor had a evaluated the
18 crossing, recognized that there was some ice buildup
19 in the culvert. They had gone back to the shop and -
20 - and were heading to that location to steam the
21 culvert. And at 1:00 p.m. they were on site, so less
22 than two (2) hour -- two (2) hours later.

23 And the culvert -- what happened there
24 was an -- there -- a release of ice from the bottom
25 of the creek. The culvert itself, the length was

1 extended to the -- was designed as the future high-
2 speed highway section, and the embankment was
3 constructed as a lower -- as a lower embankment at
4 that point. So the culvert extended beyond the
5 embankment. The -- the ice uplifted from the bottom
6 and lifted that end section of the culvert up in the
7 air. It was sticking up at about a 30-degree angle
8 or something; quite spectacular to look at.

9 But I will emphasize a couple of
10 points. Number 1, there was never a blockage of the
11 creek at that point. The culvert pulled apart and
12 there was water flow through the culvert as soon as
13 the -- as soon as any thawing was required. That --
14 and then that elevated section of pipe was removed --
15 was -- within that same day. So there's -- the
16 particular incident that happened was less than eight
17 (8) hours in duration. And then the culvert was
18 thawed and put into full operation.

19 There was no damage to the embankment
20 itself, so there was no sedimentation released into
21 the stream. And, in fact, this is a -- an example of
22 a maintenance program which found an issue and
23 corrected it, rather than a failure. So this is an
24 example of, in fact, how things should be done,
25 rather than example of a failure.

1 THE CHAIRPERSON: Thank you, Walter.
2 Ron, any further follow-up on that response? Thank
3 you.

4 MR. RON WALLACE: Thank you. That's
5 a very complete explanation, and I thank you for it,
6 Mr. Stevens.

7 I -- I guess I had two (2) questions
8 and that was: What was the monitoring follow-up from
9 a water quality sedimentation and a fisheries habitat
10 and fisheries population? Was there any follow-up
11 that was actually done in that particular
12 circumstance?

13 Thank you, Mr. Chairman.

14 THE CHAIRPERSON: Thank you, Ron.
15 Jim...? Jim or Walter...?

16

17 (BRIEF PAUSE)

18

19 MR. JIM STEVENS: Jim Stevens. Thank
20 you, Mr. Chair.

21 I guess in recognition that the
22 maintenance that was done on that, we felt
23 comfortable that no additional monitoring was -- was
24 required or has been done subsequent to that
25 incident.

1 THE CHAIRPERSON: Thank you, Jim.

2 Ron...?

3 MR. RON WALLACE: Thank you, Mr.

4 Chair. Nothing further.

5 THE CHAIRPERSON: Thank you, Ron. I
6 believe we have one (1) follow-up question related to
7 that topic from one (1) of the Board members. Mark,
8 please?

9 MR. MARK CLEVELAND: Thank you, Mr.
10 Chairman.

11 The Applicant several times has talked
12 about lessons learned from the 177 work. I'm
13 wondering if the Applicant can share with us what
14 those lessons learned have been, as it might
15 influence our consideration here going forward.
16 Thank you.

17 THE CHAIRPERSON: Please, Jim? Thank
18 you.

19 MR. JIM STEVENS: Jim Stevens. Thank
20 you, Mr. Chair. Actually, I'm going to ask Walter.
21 I know it's on his computer screen right now.

22 Walter, if you could just provide
23 highlights of those lessons learned.

24 THE CHAIRPERSON: Thank you, Jim.
25 Walter, please?

1 MR. WALTER ORR: The -- Mr. Chair,
2 Walter Orr, Kavik-Stantec. Can I refer the -- the
3 Board member to the design report for the Inuvik-to-
4 Tuktoyaktuk Highway, 100 percent geometric design,
5 dated September 4th, 2013. Chapter 3 is entitled,
6 "Lessons Learned from Tuk to Source 177 Access Road."
7 That is page 3-1, and that is a -- a summary of the
8 lessons learned in construction of that road. Thank
9 you.

10 MR. MARK CLEVELAND: Mr. Chairman, if
11 I could -- just give the specifics again, please.

12 THE CHAIRPERSON: Yeah, yeah.

13 MR. WALTER ORR: That is the design
14 report for the Inuvik-to-Tuktoyaktuk Highway, 100
15 percent geometric and structures design. This is
16 section 3. "Lessons Learned from Tuk to Source 177
17 Access Road" is the title. And if in fact it's
18 desired, I can read some of those that are may --
19 maybe relevant to this, if it's desired.

20 THE CHAIRPERSON: Thank you, Walter.
21 Mark, would like some sections to be relayed?

22 MR. MARK CLEVELAND: Yes.

23 THE CHAIRPERSON: Please. Please,
24 Walter, if you could pick out what you consider the
25 pertinent sections of that, it might help us get a

1 bet -- better understanding of the actions. Thank
2 you.

3 MR. WALTER ORR: Okay. The -- the
4 sections that are relevant to the crossing discussion
5 which we're having, these are design adjustments to
6 the installation to the design, and then subsequent
7 installation of closed-bottom culverts. The -- they
8 are that:

9 "Camber in the culvert..."

10 And that -- shortly, that's raising
11 the middle of it to allow some room for settlement,
12 if you will.

13 "...and appropriate seating of
14 large-diameter culverts are to be
15 included in the design and
16 construction methodology."

17 And those items have been incorporated
18 into the -- the current Inuvik-to-Tuktoyaktuk Highway
19 design. And the -- that:

20 "The embankment is to be
21 constructed to full design height
22 in year 1 of the design."

23 And that -- what that addresses is the
24 -- the 177 road, as I have spoken, it was not fully
25 constructed. And so we ended up with a culvert

1 extending out further than the final design. And
2 then, in fact, the -- also, the -- the cover over the
3 pipe, when it's limited, in fact you have the
4 potential for damage to the pipe itself which can
5 cause difficulties. So the recommendation to build
6 the full section in year 1 is to address those
7 issues.

8 And the other -- the other items that
9 are -- actually, I will refer -- I referred to
10 seating of the culvert. And seating of the culvert
11 is placing the ends of the culvert below the existing
12 ground streambed to both allow proper fish passage at
13 low-flow periods and to allow some limited uplift of
14 the end, which is a concern in most culverts in -- in
15 permafrost terrain.

16 The -- the challenge, and I will say
17 that quite clearly, is that it's -- we normally
18 choose to not cut into the ground at all. We choose
19 to maintain where this embankment and for -- as much
20 as possible for crossings, we maintain the vegetation
21 cover, both as insulation and as integ -- soil
22 integrity.

23 However, we have found that there is -
24 - the seating is -- is, in our judgment, required to
25 -- to promote good long-term performance of the

1 culvert installations, and as well to guarantee the
2 acceptable fish passage. So those are the -- the two
3 (2) ones there. They're subtle basically, but they
4 are -- they are -- based on the lessons learned. The
5 177 road did not include either camber or the seating
6 of the culvert.

7 THE CHAIRPERSON: Thank you, Walter.
8 Mark, any follow up on that, please?

9 MR. MARK CLEVELAND: No. Thank you
10 very much.

11 THE CHAIRPERSON: Now, we -- I
12 believe we have one (1) further question on
13 clarification from the Board member, Emery, please.

14 MR. EMERY PAQUIN: Emery Paquin. If
15 I could have one (1) of the slides put back up on the
16 screen please, it's slide 35.

17

18 (BRIEF PAUSE)

19

20 MR. EMERY PAQUIN: Yes, thi -- this
21 slide, the second bullet. And I just want to be
22 clear exactly what -- what the Proponent is -- is
23 stating in the second bullet. The way it reads right
24 now is that hazardous wastes will be disposed of in
25 licenced facilities able to accept such waste. Can I

1 get -- receive confirmation from the Proponent. Do
2 you mean that hazardous wastes will be disposed of in
3 facilities that are licenced for the receipt of that
4 classification of waste?

5 THE CHAIRPERSON: Thank you, Emery.
6 Jim, please.

7 MR. JIM STEVENS: Jim Stevens. Thank
8 you, Mr. Chair. I'm gonna defer to Erica Bonhomme.

9 THE CHAIRPERSON: Erica, thank you.

10 MS. ERICA BONHOMME: Yes, that's
11 correct.

12 THE CHAIRPERSON: Emery...?

13 MR. EMERY PAQUIN: Thank you. That -
14 - that's my only question.

15 THE CHAIRPERSON: Thank you, Emery.

16 I believe we have no further questions
17 from the Board. However, I do believe there's a
18 gentleman in the public who would like to get up and
19 say a few words. Stanley, I believe. If we could
20 get the microphone down there, please. Thank you.

21

22 (BRIEF PAUSE)

23

24 MR. STANLEY KEEVIK: Hi everybody.

25 My name is Stanley Keevik. I'd like to speak to the

1 Water Board about, you know, climate change,
2 everybody talk about climate change. You know -- you
3 know, all my life I live in Delta, you know, and
4 current really gets slow, you know. Sun is, you
5 know, the sun make it warm now. That's what make
6 climate change, eh?

7 Them dams, you know, them dams they
8 making, they make the water too slow, eh? And water
9 get warm, evaporate. We got some lakes here, dry
10 out. We used to get the ice from them and they're
11 dried right out now. That's what happening by the
12 dams. So that got to be a little more -- the stream
13 got to be fast and, you know, open them little bit
14 more, eight (8) miles an hour, maybe.

15 Last time I went to Inuvik I ran out
16 of gas in the river there, at Reindeer Station, and
17 it will hardly move while I was filling up. Before
18 that, when you ran out of gas there, you go way down
19 before you fill up, everything was so fast. That's
20 what make climate change, right there.

21 It's not in the ocean, it's not in the
22 nothing. But dams make climate change. Everybody --
23 Water Board should know that. You know, them dams,
24 they have to be open a little more in a current and I
25 -- what they call that? Permafrost going to come back

1 after that. We got no more permafrost here. All
2 sucked out by warming climate, warming, over by the
3 dam there.

4 That's all I have to say.

5 THE CHAIRPERSON: Okay.

6 MR. STANLEY KEEVIK: Thank you very
7 much.

8 THE CHAIRPERSON: Stanley, thank you
9 very much for that, and we appreciate you taking the
10 time to bring that to our attention. Thank you
11 again.

12 Do we have any members from the
13 general public who wish to say anything at all? I'd
14 just like to recognize Kristin Hynes from FJMC spoke
15 on behalf of one (1) of the Intervenors yesterday,
16 and perhaps now I'll just give you the opportunity on
17 behalf and as an Intervenor.

18 Any further questions you would like
19 to ask the Applicant?

20 MS. KRISTIN HYNES: Yeah. Just a
21 follow-up question. Kristin Hynes from the FJMC on
22 the lessons learned. Did you incorporate anything on
23 monitoring and community involvement in -- in
24 feedback processes from -- for the Source 177?

25 THE CHAIRPERSON: Thank you, Kristin.

1 Jim, please.

2 MR. JIM STEVENS: Jim Stevens. Thank
3 you, Mr. Chair. There were no specific adjustments
4 related to monitoring and interaction with the
5 community. That was developed through our lessons
6 learned. But through other interactions on the
7 project -- meetings with the HTCs and other co-
8 management groups -- we have recognized that we have
9 to have additional monitoring and community
10 engagement kind of performance indicators. And I
11 guess that's where those lessons are being
12 incorporated.

13 THE CHAIRPERSON: Thank you, Jim.
14 Kristin, any further questions? Thank you very much.

15 Do we have any more questions from the
16 general public, please? James, thank you.

17 MR. JAMES POKIAK: Yeah. This is
18 James Pokiak. I guess what I'm trying to figure out
19 now is, on the all-weather road between Tuk and
20 Inuvik, there's a multiple bunch of bridges that are
21 going to be built once the project goes full bore.

22 Is there any way possible that you can
23 get one (1) more included and put it in Gungi Creek?
24 And that way we don't have any more problems with
25 that area.

1 The reason why I ask that is,
2 initially, there was supposed to be a bridge there,
3 but I believe it was brought down to the Sahtu
4 somewhere. There's a lot of bridges in the Sahtu
5 with no roads, so I'm just wondering what part of
6 that Sahtu area that the bridge that was supposed to
7 be put here was brought somewhere else and used.
8 Thank you.

9 THE CHAIRPERSON: Thank you, James.
10 Jim, please.

11 MR. JIM STEVENS: Jim Stevens. Thank
12 you, Mr. Chair. I -- I guess, in recognition of Mr.
13 Pokiak's comments, we've provided the details on what
14 we did relative to Gungi Creek in terms of design
15 assessments and final -- final designs that are out
16 there in the field.

17 We acknowledge that there were some
18 lessons learned. We've applied those, and at this
19 time I would suggest that the existing culvert will
20 be retained. And if there's any other assessments
21 that can be done to maybe change that, we will do it,
22 but at this time we're confident that the existing
23 culvert functions well and will function well into
24 the future. Thank you, Mr. Chair.

25 THE CHAIRPERSON: Thank you, Jim.

1 James, any further questions?

2 MR. JAMES POKIAK: No.

3 THE CHAIRPERSON: Thank you very
4 much, James. Do we have any other questions from the
5 general public, please? We have one (1) more, I
6 believe. Chuck Gruben. Thank you, Chuck.

7 MR. CHUCKY GRUBEN: Chuck Gruben.
8 Mr. Stevens, I really wish that you would have a
9 change of heart on retaining the culvert in Gungi
10 Creek. We all live here. We know, when it freezes
11 up, then during the spring when it starts melting the
12 culvert is the last to melt.

13 And, you know, the fish come out every
14 year, a certain time of the year after it starts
15 melting. And you can go check that culvert, you
16 know, even in the end of June, and you'll find ice in
17 it. So I think James has got a real good point of,
18 you know, making a issue of that culvert and putting
19 a bridge there. Thank you, Mr. Chair.

20 THE CHAIRPERSON: Thank you, Chuck.
21 Jim, would you care to respond, please?

22 MR. JIM STEVENS: Jim Stevens. Thank
23 you, Mr. Chair. I guess what I'd like to do is -- is
24 offer to the HTCs, our -- the Tuk-Inuvik Working
25 Group, an opportunity maybe during this upcoming

1 spring freshet to actually go out in the field
2 together to look at the performance, the operations,
3 and then make a final definitive statement on whether
4 that culvert is functioning well and the possibility
5 of replacing it. That's my best offer at this time,
6 Mr. Chair.

7 THE CHAIRPERSON: Thank you, Jim.
8 Mr. Gruben, any further comment on that? Thank you,
9 Chuck.

10 MR. CHUCKY GRUBEN: Chuck Gruben.
11 Yes, thank you, Mr. Stevens. We'll be looking
12 forward to going out with you next spring.

13 THE CHAIRPERSON: Thank you, Chuck.
14 Any further questions? Any further questions from
15 the floor, please?

16 I'm looking at the clock, it's time
17 for a break for lunch folks. So let's stop for an
18 hour and reconvene at 1:15. Thank you very much.

19

20 --- Upon recessing at 12:13 p.m.

21 --- Upon resuming at 1:18 p.m.

22

23 THE CHAIRPERSON: Ladies and
24 gentlemen, can we bring the meeting back to order,
25 please.

1 (BRIEF PAUSE)

2

3 THE CHAIRPERSON: Ladies and
4 gentlemen, welcome back. Before we get going, I'd
5 just like to recognize Mr. Vince Teddy, the chairman
6 of the Tuktoyaktuk Community Corporation. Welcome.

7 And secondly, I'd like to, on behalf
8 of the group, than whoever is responsible for that
9 wonderful lunch. It was really mumakatuk (phonetic).
10 Quyanainni. Thank you very much.

11 I'd now like to invite Chuck Gruben to
12 come to the front or take it yourself to provide the
13 Board with more thoughts and comments in the general
14 area of traditional knowledge of water use by the
15 Inuvialuit, along the pipeline route, and what the
16 impacts might be. Highway route, highway route.
17 Pipeline route? Well, it was just about the same,
18 I'm sure. Yeah. That one didn't go over. I beg
19 your pardon. On the highway route, and what the
20 impacts may be on the -- on -- on -- on the water use
21 and traditional use of water by the Inuvialuit.

22 So Chucky, please, you'd be extremely
23 welcome, chair, microphone there. The floor is
24 yours, Chuck.

25

1 PRESENTATION BY TUKTOYAKTUK HUNTERS' AND TRAPPERS'
2 COMMITTEE:

3 MR. CHUCKY GRUBEN: Good afternoon
4 again. Chuck Gruben from the Hunters' and Trappers'
5 Committee. And I'd just like to speak a little bit
6 on traditional mileage in regards to the Tuk-Inuvik
7 road alignment.

8 You know, ever since I was a kid, you
9 know, our parents taught us how to respect the water
10 and the land, water more so than the land because,
11 you know, all your food, your fish, your animals have
12 to drink from that water. And -- and that's one (1)
13 of the greatest reasons why we have so much respect
14 for the water.

15 Now, back in 2006 we were cut off from
16 hunting caribou along the Tuk-Inuvik Highway road
17 alignment on that area south of us. For -- I don't
18 like to say what reason, but the word 'declining'
19 always comes to my mind. But you don't see so much
20 issues about caribou on there. It's because that we
21 -- we can't hunt in that area.

22 But we look after the water there
23 because the fish live in that water, and muskrats and
24 other -- other species of animals.

25 You know, twenty-five (25) years ago,

1 when they look at a map of a lake inland, and when
2 you went to that lake and actually saw the kind of
3 damage from climate-change melting, you know, the
4 lake didn't look like what it was on a map anymore.
5 So, you know, those are the kind of things that, you
6 know, we had to adapt to.

7 So any ki -- any time there's any
8 development, you know, the first thing that comes to
9 our mind is, you know, we got to look after our
10 water. And that's -- that's been passed down from
11 generation to generation from our parents and parents
12 before them, grandfathers and grandmothers.

13 And without -- without the water,
14 clean water, nothing lives. We all know that. And
15 our people still live subsistence lifestyles. And
16 with the road being so close to Husky Lake, that's
17 one (1) of the biggest issues we had, you know,
18 against the -- the road. But now I -- you know, if
19 it's done right, you know, I don't see it as an issue
20 anymore. We just carry on our traditional knowledge
21 passed down to our kids after us then, you know, we
22 can all look after the water.

23 I really don't know what else I can
24 add to this, but, you know, thanks for giving me the
25 opportunity to speak to the Water Board. Thank you,

1 Mr. Chair.

2 THE CHAIRPERSON: Thank you very
3 much, Chucky.

4 The -- this process gathers vast
5 quantities of scientific and technical information
6 that helps us in our deliberations afterwards.
7 However, the type of information provided by Mr.
8 Gruben, and yesterday at our hearing in Inuvik from
9 the representative of the Hunters' and Trappers'
10 there is additional information, as I say, is not
11 readily obtainable through scientific or technical
12 study. But it's very important to us that we have
13 the complete picture when we consider this
14 application afterwards.

15 So from that perspective I thank you
16 for this very important contribution to that process
17 and thank you kindly.

18

19 QUESTION PERIOD:

20 THE CHAIRPERSON: We'll now move on
21 to the next section of our proceedings, and that is
22 an open floor for the -- sorry?

23 MR. MARK CLEVELAND: Any questions?

24 THE CHAIRPERSON: Questions?

25 MR. MARK CLEVELAND: Yeah.

1 THE CHAIRPERSON: I beg your pardon.

2 I take this opportunity: Were there any questions

3 from the Applicant? Jim...?

4 MR. JIM STEVENS: Jim Stevens. Thank

5 you, Mr. Chair. We have no questions.

6 THE CHAIRPERSON: Thank you, Jim.

7 And as I say we were also recently joined by one (1)

8 of the Intervenors, FJMC. Were there any questions

9 from the Intervenor?

10

11

(BRIEF PAUSE)

12

13

THE CHAIRPERSON: And no further

14 questions on the Board?

15

MS. KRISTIN HYNES: No.

16

17 COMMENTS FROM THE PUBLIC:

18

THE CHAIRPERSON: Thank you very much

19 again, Mr. Gruben.

20

I'd like to move on to that part of

21 the agenda where we ask for anyone from the general

22 public to please come forward and provide your

23 comments, your thoughts, your recommendations on

24 anything to do with water use as it relates to this

25 project.

1 We heard quite a few comments earlier
2 on today, but there may be other thoughts have come
3 forward or other people who have come into the room.
4 So, please, we would greatly appreciate you coming
5 forward and giving us your thoughts now. Thank you.

6 James, please?

7 MR. JAMES POKIAK: Yeah. Thank you,
8 Mr. Chair. James Pokiak. I'd just like to raise up
9 that question about the way the bathymetry work was
10 done on those lakes that are going to be used, I
11 understand that it was done differently in the
12 wintertime. I -- I'd like to know the comparison
13 between that method and actually going out there with
14 a motor boat and -- and getting your readings.

15 Is there much of a difference in that
16 aspect or -- or are they basically showing up that
17 they're the same water level that is going to be in
18 that lake?

19 THE CHAIRPERSON: Thank -- thank you,
20 James. Jim, please, could you respond?

21 MR. JIM STEVENS: Jim Stevens. Thank
22 you, Mr. Chair. I'm going to ask Erica Bonhomme to
23 provide comments.

24 THE CHAIRPERSON: Thank you, Jim.
25 Erica, please.

1 MS. ERICA BONHOMME: Thank you, Mr.
2 Chair. Erica Bonhomme. The difference in the
3 methodology in the winter is that -- so, of course --
4 just to back up. In the summertime the surveys are
5 done with a boat and a -- a depth-sounder that takes
6 measurements of depth throughout the lake in -- in a
7 series of transect lines perpendicular to each other
8 throughout the lake. And there is a -- a software, a
9 program, that then translate that to a 3-dimensional
10 model with contours.

11 In the winter, because you can't, of
12 course, get a boat out, the surveys were conducted
13 using ground-penetrating radar, which was also
14 conducted in transect, where two (2) machines -- two
15 (2) snow-machines pull separate ground-penetrating
16 radar units, and one (1) is calibrated to take the --
17 to detect the thickness of the ice at that time, and
18 the second unit is calibrated to detect the bottom of
19 the lake.

20 And that information is then
21 calculated to determine an ice thickness depth as
22 well as a lake depth for various places in the lake.
23 It is not translated into a 3-dimensional model, but
24 it gives maximum depths and it gives a total lake
25 volume for -- for the lakes that were surveyed.

1 I should clarify that there are
2 actually only a handful of lakes that were surveyed
3 in the winter, six (6), I believe. And one (1) of
4 those was actually surveyed twice: in the summer and
5 in the winter. And that gave us a good baseline for
6 ensuring that the -- the two (2) volumes do in fact
7 coincide using the two (2) methods, and in fact they
8 did.

9 THE CHAIRPERSON: Thank you, Erica.
10 James, does that respond to your question?

11 MR. JAMES POKIAK: Yes.

12 THE CHAIRPERSON: Okay. Thank you
13 very much, James.

14 Are there any other members of the
15 public who would like to bring forward any question
16 at all as it relates to water use by the project?

17

18 (BRIEF PAUSE)

19

20 THE CHAIRPERSON: Okay. While we
21 just -- we'll leave the floor open for the public to
22 come forward. In the meantime, we have one (1)
23 question -- additional question from a Board member.
24 Emery, please.

25 MR. EMERY PAQUIN: Emery Paquin.

1 It's just a supplementary question to -- to Erica's
2 response. The one (1) -- the one (1) lake that was -
3 - that was bathymetrically surveyed both summer and
4 winter, you indicated that the -- that the volumes
5 and the measurements were -- were very comparable.

6 Can you provide a little bit more
7 detail on just how comparable the two (2) -- the two
8 (2) methods are?

9 THE CHAIRPERSON: Thank you, Emery.
10 Erica, please?

11 MS. ERICA BONHOMME: Erica Bonhomme.
12 I would need a little bit of time to dig that up. If
13 you'll give us ten (10) -- ten (10) minutes or so.

14 THE CHAIRPERSON: Yeah. I'm just
15 wondering -- please, yeah. Do we have any other
16 questions while we wait for that response from the --
17 from the Applicant? Any questions at all. Please,
18 don't be shy, don't be bashful.

19 It's important that the Board gets to
20 hear virtually every aspect of this: the scientific,
21 the technical, the personal, the family, the
22 cultural, whatever, please. We need to consider all
23 of that, so don't feel shy or don't feel bad about
24 bringing anything forward at all.

25 Vince, please?

1 MR. VINCE TEDDY: Thank you. Vince
2 Teddy, Tuktoyaktuk. More or less a jurisdictional
3 concern or maybe a challenge to not only the Water
4 Board of today, but April in 2014, the GNWT will have
5 become the official, I guess, manager for Crown lands
6 in the Northwest Territories. And the relationship
7 between the Water Board, Canada, GNWT will also be
8 affected and changed somewhat.

9 In the IFA, as Inuvialuit, we have
10 provisions that look after our water, help us look
11 after water, and that's through the Water Board. And
12 that's one (1) -- one (1) way that we, as Inuvialuit,
13 see that there's accountability and a process to
14 manage use of water.

15 Part of our concern is the changeover
16 of jurisdiction from federal to territorial
17 management of lands and resources in NWT. How is
18 that going to affect the Water Board? And, from my
19 perspective, from my own interpretation, is that the
20 IFA provisions are the paramount agreement if there's
21 any changes to any jurisdictions or legislation after
22 the signing of the IFA in 1984.

23 So I -- I want to get a sense of what
24 the Water Board is presently doing today to -- to
25 meet the changeover in 2014 -- April of 2014? Thank

1 you.

2 THE CHAIRPERSON: Thank you very
3 much, Vince. I may be able to answer part of that
4 and I may ask our legal counsel to, or executive
5 director. The Water Board gets its authority under
6 the federal NWT Waters Act. And that Act is
7 currently being amended. The consultations have been
8 held in -- over the recent years. Meetings were held
9 a week and a half ago to -- between the parties
10 involved and the federal government who is leading
11 this initiative to discuss the changes to the
12 Mackenzie Valley Waters Act and the NWT Waters Act.

13 Those changes, I believe, are at this
14 stage tentatively planned to come into place on April
15 the 1st, or thereabouts. No? Well, what's the date
16 on that? Say -- I wasn't at that meeting. The
17 hearings, our legal counsel attended, and some
18 members, and the Chairman attended also. So the date
19 -- the tentative date for implementation of the
20 changes? Emery, please?

21 MR. EMERY PAQUIN: It's Emery Paquin.
22 Just for clarification, the effective date for
23 devolution is April 1st, 2014. At this point there
24 isn't -- there has not been a date set for
25 proclamation of planned amendments to the Northwest

1 Territories Waters Act by Indian and Northern Affairs
2 Canada.

3 THE CHAIRPERSON: Thank you, Emery.
4 At this stage of the game the authorities given to
5 the NWT Water Board by the Act, we do not anticipate
6 major changes to them at this time. If there are
7 going to be major changes we would be formally
8 notified in advance of that date.

9 And I believe -- I don't believe
10 there's any change in the -- the IFA, which does
11 state very clearly that water -- ownership of all
12 waters within the ISR belong to the -- under the
13 control of the federal government. And I don't
14 believe there's any changes in that either.

15 I think that's all I can give you at
16 the present time, Vince, unless our legal counsel can
17 provide any more. Other mem -- members? No? Good.
18 Vin -- Vince, if there's any supplementary questions
19 we'd be pleased to ask -- to -- to answer as best we
20 can at this time.

21 MR. VINCE TEDDY: I guess for the
22 time being not only the GNWT in Canada are doing
23 implementation planning for April 1, 2014, as an
24 effective date, but also the Aboriginal parties
25 involved, IRC, the Inuvialuit Regional Corporation

1 being one (1) of them. And the position of the
2 Inuvialuit is that the IFA provisions prevail.
3 They're -- they're paramount regardless of what
4 happens.

5 And our control, our interest in the
6 ongoing implementation of the IFA we feel is -- is
7 the one that we want to make sure continues. And
8 it's been a good relationship and we'd like to see
9 that. Thank you.

10 THE CHAIRPERSON: Thank you very
11 much, Vince. You're quite correct. Any
12 federal/territorial act that's inconsistent with the
13 IFA takes second place in -- to the extent that it's
14 inconsistent with what's in the IFA. No argument at
15 all. Thank you very much for that.

16 The -- the floor is still open. There
17 was a response from the GNWT, I believe. Are we
18 ready for that yet, Jim? They're mulling it over.
19 Sorry?

20 MS. ERICA BONHOMME: We're crunching
21 the numbers.

22 THE CHAIRPERSON: Crunching the
23 numbers. Okay. We'll let the guys crunch a little
24 bit more. Back to the floor again. Any issues,
25 concerns, thoughts, please, ladies and gentlemen,

1 we'd be very pleased to hear them here.

2

3 (BRIEF PAUSE)

4

5 THE CHAIRPERSON: So the GNWT on that
6 one (1) question. Perhaps again, for the audience,
7 we'd like just to repeat the question so when the
8 response comes up the audience will be able to recall
9 what the question was.

10

11 (BRIEF PAUSE)

12

13 THE CHAIRPERSON: Jim, how long do
14 you need?

15

16 (BRIEF PAUSE)

17

18 MR. JIM STEVENS: Jim Stevens. Mr.
19 Chair, it looks like we're going to need another ten
20 (10) minutes.

21 THE CHAIRPERSON: Okay. We'll -- how
22 about we take a break for ten (10) minutes, coming
23 back at a quarter to 2:00. Thank you very much.

24

25 --- Upon recessing at 1:37 p.m.

1 --- Upon resuming at 1:43 p.m.

2

3 THE CHAIRPERSON: Ladies and
4 gentlemen, bring us back to order. There's one (1)
5 response due from the Government of Northwest
6 Territories. Jim, please? Thank you.

7 MR. JIM STEVENS: Jim Stevens. Thank
8 you, Mr. Chair.

9 Yes, we've done a number of
10 mathematical computations to provide that answer, and
11 I'd ask Erica Bonhomme to provide the response,
12 please.

13 THE CHAIRPERSON: Erica, please?

14 MS. ERICA BONHOMME: Thank you, Mr.
15 Chair. Erica Bonhomme. Of course, it's the one (1)
16 series of reports I didn't bring in hard co -- hard
17 copies, so I apologize for taking a little longer.

18 To answer the question, the lake that
19 was surveyed twice as our test method was Lake 106
20 and Tuk 2 (phonetic). Lake 106 refers to the IMG-
21 Golder survey in 2012. Tuk 2 refers to the EBA --
22 Kiggiak-EBA survey in Winter 2013.

23 The difference in the calculated total
24 volume is about 22 percent. And I should note,
25 though, that for -- in a case where there are two (2)

1 surveys done for the same lake, we use the lower of
2 the two (2) volumes available, which in this case was
3 the volume obtained during the winter survey. Thank
4 you.

5 THE CHAIRPERSON: Thank you, Erica.
6 Emery, any follow-up on that question?

7 MR. EMERY PAQUIN: Emery Paquin.
8 Thank you for that clarification.

9 THE CHAIRPERSON: Thank you, Emery.
10 Just one (1) mention, the -- the
11 record of our hearing yesterday in Inuvik is now
12 available electronically on our website, for those
13 who'd like to access it to see what happened
14 yesterday. Very fast, thank you.

15 Ladies and gentlemen, we go back to
16 the floor. Any additional questions, comments,
17 thoughts at all on the use of water on the pipeline
18 project? Please. Did I say pipeline again? I beg
19 your pardon. On the highway project? Tuk-Inuvik
20 Highway project. Thank you. I stand corrected.

21 James, please?

22 MR. JAMES POKIAK: Now -- James
23 Pokiak. I -- I guess my question is going to be
24 regarding to the session you had in Inuvik. There
25 are some people who are not very familiar with

1 computerization and stuff. Well, if I may, can
2 somebody just maybe point out a few of the questions
3 that were similar to what we have? 'Cause that --
4 I'd definitely like to know what Inuvik's stand is on
5 this.

6 We -- it might be kinda hard for you
7 to do, but just highlight some of the areas where the
8 concerns were similar, if any.

9

10 (BRIEF PAUSE)

11

12 THE CHAIRPERSON: Okay, thanks,
13 James.

14 I'd hit -- I don't want to say what
15 was said or what wasn't said; I might miss the
16 appropriate stuff. I know what we can make available
17 is a written copy of the transcript. I'd have to
18 check with our court reporter and our executive
19 director to see when we could make that hard written
20 copy. But we could make that.

21 And secondly, perhaps two (2)
22 important elements would be the two (2) Intervenors'
23 presentation -- that's the Game Council and FJMC --
24 we can give you today here if you would like copies
25 of both of those.

1 And that covers, I think, pretty well
2 the major environmental, wildlife, fishery-related
3 issues from the co-management bodies and from the
4 Inuvialuit Game Council. As I say, the comments that
5 came from the Inuvik Hunters' and Trappers' Committee
6 were in many ways similar to what we've heard today.

7 And the other presenter was AANDC, the
8 Aboriginal Affairs. The Board asked further
9 questions on them on their mandate and their
10 activities in water management.

11 So as I say all of that will be on the
12 transcript from the meeting yesterday and we can
13 arrange for a hard copy. I have to get back to you
14 to tell you exactly when.

15 James, anything more?

16 MR. JAMES POKIAK: No, that's it.

17 THE CHAIRPERSON: Okay. Thank you
18 very much, James.

19 Again, back to the floor. Any
20 questions, comments, thought, please don't -- don't
21 be shy. We've got plenty of time, so any comment at
22 all relative to water use by the -- by the highway,
23 please. Now is the time.

24

25

(BRIEF PAUSE)

1

2 MS. JEAN GRUBEN: Hi.

3 THE CHAIRPERSON: Hi, Jean.

4 MS. JEAN GRUBEN: My name is Jean
5 Gruben. I'm the chair of the Elders here in Tuk.
6 I've been listening since this morning everybody
7 talking about water, water, water. And we all have
8 bottled water. And some of us got bottled water in
9 our -- beside us. But the waters are really
10 important to our people here in our community. We
11 growed (sic) up living in igloos, tents, cabins, till
12 we started having running water around here. So the
13 waters are really important. We do a lot of hunting.

14

15 I still do a lot of fishing as a
16 single mother with my chi -- children and
17 grandchildren. And to us the water is really
18 important. And we sometimes go to different
19 communities. One (1) time I went to McPherson a few
20 years back and they said, Jean, don't drink that
21 water; it's no good from the tap. And I said, What
22 happened to it. They said, Well, it was spoiled by
23 the industry.

24

25 Another time I went to Aklavik. Same
thing. So we really are protective of our water here

1 in Tuk. We are really protective. We do a lot of
2 fishing. We do a lot of camping. We like to go out
3 on the land and make tea without checking it. And we
4 have hunters and trappers here. We have other
5 organization that look after it and we thank them for
6 that.

7 But when they do have meetings now out
8 of our community we do not know what's going on.
9 Some of the things I've heard around here today I
10 don't quite understand them, but I've asked questions
11 and they explain it to me.

12 So from my elder's community and for
13 elders here in our community, we do want to make sure
14 that the industry take care of our waters. And we do
15 know that we need the industry in our community to
16 have jobs for our people, but they do have to be
17 careful and follow the rules and regulations that
18 they are given.

19 Thank you.

20 THE CHAIRPERSON: Thank you, Jean.
21 We'll make every attempt to make sure you can still
22 enjoy a cup of tea wherever you're camped somewhere
23 along the highway route. Thank you very much.

24 MS. JEAN GRUBEN: You're invited to
25 have tea anytime, Roger. You know -- you know how it

1 is. You've got a cabin out there somewhere on
2 Aklavik.

3 THE CHAIRPERSON: I like tea on the
4 trail too sometimes. Thanks very much, Jean.

5 Just to say, James, you've agreed now
6 that the Board will mail a printed copies of the FJMC
7 and IGC Intervention to you, along with the -- the
8 official transcript from yesterday. Okay, James?
9 Thank you very much.

10 Ladies and gentlemen, back to the
11 floor again. Any other thoughts, comments extremely
12 welcome. This is good. This is very, very good. We
13 really appreciate this.

14

15 (BRIEF PAUSE)

16

17 THE CHAIRPERSON: Ladies and
18 gentlemen, I'd like to thank the general public for
19 these comments. They're extremely welcomed by the
20 Board and we'll take them all into consideration as
21 we move this process forward.

22 I'd now like to call upon the
23 Applicant to come forward and make their closing
24 statements or their arguments to the -- to the Board.
25 Thank you, Jim.

1 CLOSING REMARKS BY DEPARTMENT OF TRANSPORTATION:

2 MR. JIM STEVENS: Jim Stevens. Thank
3 you, Mr. Chair. I'd like to begin my closing remarks
4 by just saying what a pleasure it is to be back in
5 Tuktoyaktuk and Kitty Hall. This hall has provided
6 the means for many productive discussions and
7 resulting decisions.

8 At this time I'd like to thank the
9 Northwest Territories Water Board members, technical
10 staff, regulators, co-management organizations,
11 Inuvialuit organizations, elders, Intervenors, and
12 the public for providing their input into the licence
13 -- water licence process, and for providing their
14 input and advice over the last few years during
15 project construction planning and the development of
16 various management plans.

17 As was stated by Deputy Minister
18 Neudorf in our opening remarks in Inuvik, the Inuvik
19 to Tuktoyaktuk Highway is a significant construction
20 project aimed at improving the quality of life for
21 community residents by providing both enhanced
22 economic and social opportunities, enabling economic
23 development, and strengthening our country's claim to
24 arctic sovereignty.

25 To do this successfully the Department

1 of Transportation has made a commitment to do things
2 right to the very best of our ability the first time
3 and every time. Part of doing things right, and
4 perhaps a core philosophy of the whole project, is
5 that the strength and stability of the highway is
6 dependent on maintaining frozen permafrost
7 conditions. Our highway design and construction
8 techniques are focussed on preserving the permafrost
9 and the safety and reliability of the highway.

10 Another part of doing things right is
11 to ensure our watercourse crossing designs meet all
12 the requirements for fish passage and water flow and
13 take into consideration the lessons learned for
14 crossings during the construction of Tuktoyaktuk to
15 Source 177 access road and the Dempster Highway.

16 Our crossings have been designed with
17 thorough scientific and engineering investigations,
18 which have been supplemented and improved with local,
19 traditional knowledge. Our commitment to doing what
20 is right is also demonstrated in the project's
21 Environmental Management Plan, which is comprised of
22 twelve (12) plans that are designed to minimize or
23 prevent adverse effects to the environment. These
24 plans have been developed with input from many of the
25 regulators, co-management organizations, and

1 Inuvialuit organizations.

2 One (1) of the many plans that we have
3 prepared are the comprehensive pit development plans.
4 These plans have been submitted for all sources to be
5 opened in year 1 of construction and follow the
6 guidance of the Inuvialuit Settlement Region Granular
7 Resource Management Plan.

8 As committed to at the Inuvik public
9 hearing, the Department will add the Pit Development
10 Plan for Source 177 to the plans previously submitted
11 to Inuvialuit Land Administration and to the NWT
12 Water Board. The Department of Transportation has
13 also submitted a draft Aquatic Effects Monitoring
14 Plan in accordance with Aboriginal Affairs and
15 Northern Development Canada's Guidelines for Aquatic
16 Effects Monitoring.

17 The Department will establish and work
18 with the technical working group to complete the
19 technical -- technical requirements of the monitoring
20 program prior to any in-water activities.

21 The Department recognizes that
22 adaptive management will provide a process to ensure
23 the project's environmental success. A regular
24 review of the results of monitoring plans to ensure
25 the appropriateness and effectiveness of mitigation

1 measures will be conducted as part of the
2 Department's commitment to adaptive management of the
3 project.

4 The Department will review management
5 plans annually to ensure that their intentions
6 address current realities. These plans will be
7 reviewed with the Inuvik-to-Tuktoyaktuk Highway
8 Corridor Working Group.

9 The Department has spoken to many
10 broad measures and commitments. Our speaking has not
11 prevented us from hearing about specific issues.
12 During the Environmental Impact Review Board hearings
13 and during the current water licence process, the
14 Department has heard of the importance of muskrats.
15 As such, the Department has and will take all of the
16 steps necessary to ensure that there will be no
17 adverse impacts to muskrats from project construction
18 activities.

19 Finally, the Department has presented
20 information that supports a five (5) year term of a
21 licence which will cover three (3) years of
22 embankment construction and one (1) year of finishing
23 activities, followed by the opening of the road to
24 the public.

25 In closing, the Department of

1 Transportation has a proven record of successfully
2 managing large, complex infrastructure projects with
3 environmental integrity. Environmental priorities
4 have and will continue to be integral to our
5 decision-making processes and operations, and the
6 Department is committed to constructing the Inuvik-
7 to-Tuktoyaktuk Highway using methods and mitigation
8 plans that will protect the integrity of water
9 quality and quantity in the Inuvialuit Settlement
10 Region.

11 We are confident that the plans and
12 information provided in our water licence application
13 package address the expectations and concerns of
14 residents and the requirements of the Northwest
15 Territories Waters Act.

16 Thank you for your kind attention.

17 THE CHAIRPERSON: Thank you, Jim.

18 This brings us towards the end of this
19 hearing. This time before, I'll ask Agnes to -- to
20 give us a closing prayer. However, prior to that, I
21 would just like, on behalf of the Board, to extend
22 our appreciation to the Applicant for taking the time
23 and giving us a full overview of their project over
24 the past two (2) days.

25 I would like to thank the Intervenors

1 for bringing their issues forward. I would also like
2 to thank all the members of the general public who
3 have come today and provided us with their thoughts
4 and their comments on this very important project for
5 this part of the world.

6 I'd like to thank our interpreters,
7 Agnes and Lillian, for the wonderful work they've
8 done for us all during the past two days. I'd also
9 like to thank the staff and the other support members
10 who've helped make these hearings possible.

11 So all of the information we've
12 received now, our next steps, we will consider all
13 the information we've received to date and all the
14 information we've received at these hearings, and we
15 will deliberate on the application and whether or not
16 we'll consider it, approved or not, and if approved,
17 what terms and conditions we would put on that
18 licence.

19 This is a disciplined and very well-
20 informed process to date, and again I'd like to thank
21 each and every person here for contributing to that.

22 So before adjourning this hearing, I
23 would ask Agnes White please to bless us with a
24 closing prayer. Thank you, Agnes.

25

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

(CLOSING PRAYER)

THE CHAIRPERSON: Thank you, Agnes.

Again, one and all, thank you very much for participating in this hearing. And this hearing is now adjourned.

--- Upon adjourning at 2:03 p.m.

Certified correct,

Bob Keelaghan, Mr.

<p><u>1</u> 1 5:3 10:1 14:14 15:24 26:15 34:9 35:19 37:19 38:21 39:14,17,2 3 45:6 47:2 48:19 50:6,25 56:10 58:6,7 60:22 61:6 62:12,15 65:15 66:23 68:5 71:12 72:17 74:7 76:16 77:3,22 78:2 79:12 81:23 82:1 83:6 84:4,15 85:10 88:19 93:2,5 94:22 1:00 55:21 1:15 69:18 1:18 69:21 1:37 83:25 1:43 84:1 10 26:12 34:22 36:22 53:7 78:13 83:20,22 10:18 6:1 100 22:20 59:4,14 106 84:19,20 11 24:6 25:3 11:00 55:16 11:34 53:10</p>	<p>11:49 53:11 12 92:22 12:13 69:20 140 18:18 15 5:6 15th 15:19 22:23 17 4:7 170 25:4 177 15:18 16:1 19:9 23:9,25 35:19 37:21 38:7,14 40:4,22 42:8,11,19 44:17 48:20 58:12 59:6,16 60:24 62:5 65:24 92:15 93:10 17th 7:22 1984 79:22 1st 80:15,23 <hr/> <u>2</u> 2 1:22 9:22 11:17 13:2,4 22:8 24:15,22 26:10,15 38:17 39:14 40:8,15 46:7,15 47:1 48:18 52:10 53:3 55:22 57:7 62:3 76:14,15 77:6,7 78:7,8 84:20,21,2</p>	<p>5 85:2 86:21,22 95:24 2,200 18:11 2:00 83:23 2:03 97:8 20 22:9 29:21 2006 71:15 2008 40:23 2009 54:24 55:1 2010 54:22 55:9,10,15 2012 46:1 84:21 2013 1:21 15:19 18:20,24 21:18 22:2 25:3 28:5 30:1 40:1 46:4 59:5 84:22 2014 79:4,25 80:23 81:23 2017 18:21,24 21:19 40:1 20th 28:5 30:1 22 84:24 234 8:17 20:4 25 71:25 <hr/> <u>3</u> 3 24:7,8,15 25:2 26:10,19 39:14 45:12 46:6,15 53:4 59:5,16</p>	<p>94:21 30-degree 56:7 30th 22:2 3-1 59:7 33 4:8 35 62:16 37 26:5 3- dimensiona 1 76:9,23 3rd 8:4 <hr/> <u>4</u> 4 7:19 24:7 26:17 27:22 39:15 55:4 4th 59:5 <hr/> <u>5</u> 5 4:3 10:6 21:20 29:8 33:1 39:15 41:10 94:20 51 8:15 20:2 5th 48:24,25 <hr/> <u>6</u> 6 4:5 7:13 41:10 77:3 66 22:13 <hr/> <u>7</u> 71 4:10 73 4:11 74 4:12 <hr/> <u>8</u> 8 1:21 56:17 64:14 85(a) 16:16</p>	<p><u>9</u> 91 4:13 97 4:15 <hr/> <u>A</u> a.m 6:1 53:10,11 55:16 AANDC 3:21 87:7 ability 92:2 able 22:21 39:15 62:25 80:3 83:8 Aboriginal 7:14 24:12 25:1 28:11 81:24 87:8 93:14 accept 30:23 62:25 acceptable 62:2 accepted 13:3 20:6 access 19:5 22:4 23:9,25 24:20 25:11,14,1 5 35:19 40:5 42:20 44:2 55:5 59:6,17 85:13 92:15 access/ constructi on 40:22 accidental 27:10,16,1 8 31:16,19 accordance 27:11 93:14</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

according 38:1	93:22 94:2	adverse 92:23 94:17	54:14	84:10,18
accountability 79:13	add 72:24 93:9	adversely 30:12,14	aimed 91:20	answered 43:7
achieved 24:5	addition 9:8	advice 91:14	air 41:12 56:7	anticipate 42:18 81:5
acknowledge 67:17	additional 8:23 16:8 44:12 45:16 46:5 49:1 57:23 66:9 73:10 77:23 85:16	advisor 12:17	Aklavik 88:24 90:2	anymore 16:18 72:4,20
across 55:2	address 5:4 26:20 31:19 61:6 94:6 95:13	Advisory 3:6	alignment 22:5 24:1 41:1 55:6 71:7,17	anyone 16:5 74:21
act 6:22,23 7:10 8:6,7 18:2 19:20 30:8,20 33:2 80:6,12 81:1,5 82:12 95:15	addresses 60:23	Affairs 7:14 24:12 25:1 28:11 81:1 87:8 93:14	allow 60:11 61:12,13	anything 37:11 49:12 65:13,22 74:24 78:24 87:15
acting 2:4 12:18 51:13	ade 49:9	affect 79:18	allowable 26:12	anytime 89:25
actions 31:19 60:1	adequate 43:4 49:5,9	affected 30:12,15 79:8	all-weather 8:1 18:11,18 44:3 66:19	anyway 43:24 44:4
activities 7:9 8:6,10 9:11 17:13 18:23 19:9 20:18 21:18,21 22:10 23:22 30:3 32:4 52:14 87:10 93:20 94:18,23	adjacent 55:6	afternoon 14:11 71:3	already 38:5	apart 34:18 56:11
actually 34:16 45:21 57:11 58:20 61:9 69:1 72:2 75:13 77:2,4	adjourn 11:22	afterwards 73:6,14	am 34:6	apologize 84:17
adapt 72:6	adjourned 97:6	against 32:8 72:18	amended 80:7	APPEARANCES 2:1 3:1
adaptive 17:20 20:19 32:20	adjourning 96:22 97:8	agencies 8:21	amendments 80:25	appeared 33:9
	adjustments 60:5 66:3	agenda 6:17 10:12 16:22 74:21	amount 28:16 47:14	Applicant 8:17,25 9:14 10:18,24 11:15 33:10 37:13 51:7 58:11,13 65:19 74:3 78:17 90:23 95:22
	administered 7:10	Agnes 13:5 95:19 96:7,23,24 97:3	amounts 46:13,21	angle 56:7
	Administrati on 5:6 24:12 25:1 93:11	ago 71:25 80:9	animal 34:19	animal 34:19
	administrati ve 12:22	agreed 90:5	animals 34:8 35:24 36:22 71:11,24	announced 19:15
	administrato r 12:20	agreement 19:21 30:22 79:20	annually 20:19 29:7 94:5	announced 19:15
	adopted 20:9	agreements 30:19	answer 42:9 53:15 80:3 81:19	application 6:24 7:22 8:2,4,11,1 2,14 9:4 10:5 12:9 16:24 17:8,15,23
	advance 52:19 81:8	ahead 40:24		

18:16	aquatic	attention	Batchelor	81:9,14
24:14	21:12	65:10	2:13	82:17
30:17	28:4,6,13,	95:16	bathymetric	believes
32:11	14,22	audience	26:4,7	33:1
45:25	29:11,14	83:6,8	45:14,22	belong 81:12
48:13 49:1	47:18,24	audio 13:5	bathymetrica	benefits
50:19	93:13,15	authorities	lly 78:3	38:16
73:14	arctic 91:24	81:4	bathymetry	beside 88:9
95:12	area 22:4	authority	38:25 45:6	best 25:16
96:15	37:21	6:23 80:5	75:9	31:15 69:5
applications	43:21 45:8	authorizatio	beautiful	81:19 92:2
24:10 46:9	66:25 67:6	n 7:8	33:24	bet 60:1
applied	70:14	availability	beaver 36:19	better 60:1
18:23	71:17,21	28:9	beavers	beyond 56:4
19:12	areas 19:7	available	35:17,24	biggest
24:18 25:3	32:7 43:13	9:7,9	36:3,10	38:11
40:6 67:18	44:23 86:7	10:2,13	become 44:3	72:17
apply 46:24	argument	33:20	49:21	Billy 3:9
appointed	82:14	41:24	50:12 79:5	bit 38:5
34:2	arguments	85:2,12	bed 12:13	41:3 46:22
appointments	11:16	86:16	21:23 35:6	64:13 71:5
7:13	ARKTIS 12:17	aware 10:6	bedding	78:6,12
appreciate	arrange	50:25	23:3,7	82:24
15:6 65:9	87:13	away 35:12	beg 70:18	blasting
75:4 90:13	aspect 33:13	54:17	74:1 85:18	27:20
appreciation	75:16	<hr/>	begin 6:16	bless 96:23
95:22	78:20	B	10:15	blockage
appropriate	Assessment	backfilling	21:18 91:3	56:10
41:8 42:1	19:20	23:4	beginning	board 1:2
45:1 54:10	assessments	bad 38:19	54:8	2:2
60:13	22:18	78:23	behalf 52:10	6:13,21
86:16	67:15,20	Baetz 3:21	65:15,17	7:8,12,19,
appropriaten	associated	banks 21:23	70:7 95:21	22
ess 93:25	9:11 24:21	base 41:4	Behind 13:18	8:3,9,14,1
approval	52:2	based 18:16	belief 42:20	6,24
24:9,16	assuming	21:15	50:5	10:4,15,16
31:6	16:4	42:23	believe	11:3,4,7,9
approve 6:24	atlas 22:1,3	47:21 62:4	14:12	12:5,8,16,
approved	24:19	baseline	43:7,12,18	21,23,25
27:6 96:16	attempt	77:5	47:2 48:12	15:5,11,19
approximatel	89:21	bashful	51:21	17:6,9,15
y 18:18	attendance	78:18	53:15 58:6	19:23
April 20:5	17:10	basically	62:12	22:2,21,22
48:24,25	attended	48:21,25	63:16,17,1	28:5,11
79:4,25	80:17,18	62:3 75:16	9 67:3	30:1 34:2
80:14,23			68:6 77:3	39:8 46:8
81:23			80:13	51:10,19,2

1 52:10,12,1 3 58:7 59:3 62:13 63:17 64:1,23 70:13 72:25 74:14 77:23 78:19 79:4,7,11, 18,24 80:5 81:5 87:8 90:6,20,24 91:9 93:12 94:12 95:21 Board's 8:7 9:6 10:2 14:22 21:15 29:12 boat 75:14 76:5,12 Bob 13:7 97:16 bodies 27:9 87:3 Bonhomme 2:16 13:15 45:15,20,2 1 63:8,10 75:22 76:1,2 78:11 82:20 84:11,14,1 5 bore 66:21 born 35:2 borrow 18:25 19:1,10 22:3 23:18 24:6,16,18 ,21 25:2,10,11 27:19 bottle 46:16	bottled 88:8 bottom 15:23 46:14,19,2 1 55:24 56:5 76:18 break 14:10,11 53:7 69:17 83:22 bridge 37:22,24 40:18,19 41:2,9,11, 13,18 43:9,11,23 44:1 52:1 54:6,8,10, 13 55:2,5 67:2,6 68:19 bridges 22:14 43:12,13 66:20 67:4 BRIEF 28:19 30:5 33:17 53:23 57:17 62:18 63:22 70:1 74:11 77:18 83:3,11,16 86:10 87:25 90:15 briefly 10:11 bring 6:15 14:19 65:10 69:24 77:15 84:4,16 bringing 78:24 96:1 brings 95:18 broad 38:22 94:10	brought 9:12 67:3,7 budget 18:10 build 61:5 building 18:4 buildup 55:18 built 66:21 bullet 62:21,23 bunch 66:20 <hr/> C <hr/> cabin 90:1 cabins 88:11 calculated 76:21 84:23 calibrated 76:16,18 camber 60:9 62:5 camp 22:3 25:20 27:20 camped 89:22 camping 89:2 camp 19:6 24:20 25:9 26:17 Canada 7:10 20:6 24:13 25:2 28:12 79:7 81:2,22 Canada's 20:9 93:15 Canadian 19:19 care 68:21 89:14 careful 89:17	caribou 71:16,20 carry 72:20 case 84:25 85:2 cases 32:1 Castenada 12:22 cause 61:5 86:3 causes 35:4 cell 14:5 centimetres 32:2 certain 26:16 68:14 certainly 54:11 Certificate 4:15 Certified 97:11 chair 6:13 12:4 13:12,23 15:3,15 16:19 17:5 33:25 34:5 37:15 39:20 40:12 43:7 44:11,16 45:14,21 47:6,13 48:18 49:3 53:3,18 54:1 57:20 58:4,20 59:1 63:8 66:3 67:12,24 68:19,23 69:6 70:23 73:1 74:5 75:8,22 76:2 83:19 84:8,15	88:5 91:3 chairman 12:25 51:16 52:24 57:13 58:10 59:10 70:5 80:18 Chairperson 1:11 6:3,10 12:12 13:24 16:20 33:7,19 37:5 39:12 42:25 44:8,13 45:3,18 46:25 47:10 48:11 49:4 50:14 51:3 52:25 53:5,13,20 57:1,14 58:1,5,17, 24 59:12,20,2 3 62:7,11 63:5,9,12, 15 65:5,8,25 66:13 67:9,25 68:3,20 69:7,13,23 70:3 73:2,20,24 74:1,6,13, 18 75:19,24 77:9,12,20 78:9,14 80:2 81:3 82:10,22 83:5,13,21 84:3,13 85:5,9 86:12 87:17 88:3 89:20
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

90:3,17 95:17 97:3	circumstance 57:12	60:7	75:1,23 85:16	73:13 93:18
challenge 61:16 79:3	claim 91:23	closing 4:13 11:16,19,2 1 90:23	87:4,20 90:11,19 96:4	completed 22:8 55:8
change 64:1,2,6,2 0,22 67:21 68:9 81:10	clarificatio n 54:16 62:13 80:22 85:8	91:1,3 94:25 95:20 96:24 97:1	commitment 28:7 32:20 92:1,19 94:2	complex 95:2
changed 79:8	clarified 55:14	closure 25:7	commitments 8:17 20:4 94:10	complicated 43:14
changeover 79:15,25	clarify 54:4 77:1	co 66:7 84:16	committed 93:8 95:6	components 30:3
changes 28:15 42:16,24 79:21 80:11,13,2 0 81:6,7,14	classificati on 63:4	coffee 14:12	Committee 3:4,14,19 4:10 9:24 10:20 11:2 12:3 14:3 16:12,15 32:7 34:1 35:16 71:2,5 87:5	comprehensiv e 24:24 93:3
Chapter 59:5	clean 28:9 72:14	coincide 77:7	co- management 29:10,22 87:3 91:10 92:25	comprised 92:21
check 36:5 68:15 86:18	clear 62:22	comes 71:19 72:8 83:8	community 38:15,20 43:17 65:23 66:5,9 70:6 88:10 89:8,12,13 ,15 91:21	comprises 18:23
checking 89:3	clearance 44:24	comfortable 57:23	commenced 6:15	computations 84:10
chi 88:16	cleared 23:21	coming 34:13 36:9,23 38:22 75:4 83:22	commencing 6:1 11:23	computer 58:21
children 88:16	clearing 23:24	comment 39:21 45:11 51:6 54:4 69:8 87:21	communities 18:19 88:19	computerizat ion 86:1
Chiperzak 2:17 13:16 47:8,12,13	clearly 41:3 54:7 61:17 81:11	comments 4:5,12 9:18 11:11 15:3 33:15 34:7 37:8 40:3 44:12 47:15,22 48:18 53:19 67:13 70:13 74:17,23	community 38:15,20 43:17 65:23 66:5,9 70:6 88:10 89:8,12,13 ,15 91:21	concern 31:23 61:14 79:3,15
choice 41:11	Cleveland 1:13 12:15 58:9 59:10,22 62:9 73:23,25	commenced 6:15	concerned 7:17 16:3 52:9	concerns 11:11 31:20 82:25 86:8 95:13
choose 61:18	climate 64:1,2,6,2 0,22 65:2	comment 39:21 45:11 51:6 54:4 69:8 87:21	compact 23:5	concluded 19:24
Chuck 33:25 68:6,7,20 69:9,10,13 70:11,24 71:4	climate- change 72:3	comment 39:21 45:11 51:6 54:4 69:8 87:21	compaction 19:4 23:21 24:5 25:19	concludes 17:24
Chucky 3:16 12:3 14:1 33:20,22 37:6 68:7 69:10 70:22 71:3 73:3	climatic 44:24	comment 39:21 45:11 51:6 54:4 69:8 87:21	comparable 78:5,7	conditions 33:2 44:24 92:7 96:17
Chuck's 37:19	clock 69:16	comment 39:21 45:11 51:6 54:4 69:8 87:21	comparison 75:12	conduct 32:5
	close 72:16	comment 39:21 45:11 51:6 54:4 69:8 87:21	compensation 30:18	conducted 23:18,22 76:12,14
	closed- bottom 40:25 42:1 45:1 54:14,18	comment 39:21 45:11 51:6 54:4 69:8 87:21	complete 8:4 9:9 57:5	

94:1 conference 8:25 confident 32:14,22 67:22 95:11 confirmation 63:1 connected 7:8 Connelly 1:11 6:12 Conrad 3:21 consider 6:24 10:7 59:24 73:13 78:22 96:12,16 considerably 25:25 26:11 consideratio n 30:8 46:19 58:15 90:20 92:13 considered 40:20 54:11 considering 50:18 considers 11:7 consist 22:11 consistent 28:11 consistently 42:23 consists 7:12 construct 44:5	constructed 18:19 22:15 23:1 25:16 28:8 36:16 37:22 38:15 54:24 56:3 60:21,25 constructing 95:6 construction 7:25 9:20 10:5,7 11:13 17:12 18:7,23 19:1,2,4,1 7 20:11,17 21:18,21 22:1,5,6,7 ,10 23:2,11,16 ,17 24:2,8,16, 17,19,23 25:9,18 26:15,18 27:18,21,2 4 28:17 29:7,17 31:17 32:4,22 36:16 38:12 39:24 40:1,7 42:8 54:22 55:11 59:8 60:16 91:15,19 92:7,14 93:5 94:17,22 construction s 21:24 Consultant 2:7 consultation 8:20 17:21 29:24	consultation s 80:7 cont 23:12 Con't 3:1 contain 31:25 CONTENTS 4:1 Contingency 21:7 26:22 28:1 continuation 6:14 continue 21:19 29:9,15 48:8 95:4 continues 82:7 contours 76:10 contractor 19:15 55:10,17 contributes 28:6 contributing 96:21 contribution 73:16 control 21:4 23:12,13 25:19 27:25 47:16,20 81:13 82:5 cooperation 15:6 coordinator 12:22 copies 9:7 10:13 84:17 86:24 90:6 copy 9:4,9 86:17,20	87:13 core 92:4 Corey 13:6 Corporation 70:6 81:25 correct 63:11 82:11 97:11 corrected 56:23 85:20 corresponden ce 9:5 Corridor 20:22 21:1 32:17 94:8 Council 3:7,10 9:24 16:13 86:23 87:4 counsel 2:2 10:17 11:4 12:16 15:10 80:4,17 81:16 counted 39:14 country's 91:23 couple 34:7,8 37:17 54:1 56:9 course 16:10 46:19 76:3,12 84:15 court 13:7 86:18 courteous 15:6 Covello 1:14 12:15 cover 21:21	61:2,21 94:21 covered 45:6 covers 87:1 create 15:17,25 creek 35:22,25 36:7 37:20,25 38:21 40:17,19,2 0 41:4,6 42:3 43:16,19 44:25 51:21 52:1,7 54:20 55:3,25 56:11 66:23 67:14 68:10 creeks 36:8 38:18 criteria 44:19,21 54:12 critical 10:21 12:19 cross 21:22 41:7 crossed 43:12 crosses 41:6 crossing 19:3 22:25 23:9,16 27:18 40:17 43:23 44:25 45:2 54:6,9,10 55:18 60:4 92:11 crossings
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

17:17	current	86:4	26:20	detail 78:7
22:14,19	44:16	definitive	30:13,15	detailed
23:1	60:18	69:3	31:4	8:13,14,18
42:18,22	64:4,24	deliberate	deposits	17:7 42:11
43:10	94:6,13	96:15	31:11	details
44:17	currently	deliberation	depth 26:7	17:10
55:12	7:12 80:7	s 73:6	76:6,21,22	29:14
61:20	cut 61:18	delivered	depths 76:24	39:22
92:14,16	71:15	48:24	depth-	40:10
Crown 79:5		delta 36:23	sounder	45:7,16
crunch 82:23	<hr/> D <hr/>	64:3	76:5	67:13
crunching	dam 65:3	demonstrated	Deputy 91:17	detect
82:20,22	damage 56:19	92:20	described	76:17,18
CSP 40:25	61:4 72:3	Dempster	31:3	determinatio
cu 36:15	damming 36:6	92:15	describes	n 41:23
cul 38:8	dams	Department	23:14 27:8	determine
cultural	64:7,12,22	2:9 4:7,13	28:15	8:2 76:21
78:22	,23	5:3 7:11	description	determined
culvert	date 39:6	13:20	5:2	30:10 41:8
23:4,6,9,1	80:15,18,1	17:3,10,24	17:13,16,1	develop
1 35:21	9,22,24	18:3,9	9 52:9	29:11
36:2 38:8	81:8,24	20:3,8	design 22:20	developed
40:25 41:2	96:13,20	21:19	40:21,22	24:7 29:15
42:2,18	dated 59:5	22:16	42:14	66:5 92:24
43:20 45:1	Davies 3:24	26:3,12	44:25	developer
52:3,4,12	day 1:22	27:13,15	51:25	17:11
54:14,18,1	10:1	28:21	54:5,8,9,1	40:14 48:6
9,25	50:6,25	29:9,13,20	1,12,14,17	developers
55:7,19,21	56:15	30:10,16,1	59:3,4,13,	50:25
,23,25	days 14:22	7,21 31:7	15	Developer's
56:4,6,11,	95:24 96:8	32:4,13,21	60:5,6,15,	37:18
12,17	decision	,25 47:7	19,21,22	developing
60:9,25	20:7 40:24	91:1,25	61:1 67:14	28:12
61:10,11	decision-	93:9,12,17	92:7	29:17
62:1,6	making	,21	designed	development
67:19,23	95:5	94:4,9,14,	22:15	7:15 15:17
68:9,12,15	decisions	15,19,25	28:24	16:1 17:22
,18 69:4	91:7	95:6	42:2,6	18:22,24
culverts	declared 8:4	departments	54:18 56:1	19:12 20:8
22:14	declining	7:17 8:21	92:16,22	24:11,13,2
36:6,11,15	71:18	Department's	designs	4 25:2,4
,17 38:2,6	defer 39:22	28:7 31:15	22:17,25	27:20
40:9	45:15	32:12,19	40:3 67:15	28:2,12
42:6,21	53:18 63:8	94:2	92:11	48:4 72:8
60:7,14	definitely	dependent	desired	91:15,23
61:14		92:6	59:18,19	93:3,9,15
cup 89:22		deposit	Despite	devolution
curious		21:23	31:14	
35:24 36:5				

80:23	34:24	19:3	effective	22:11
DFO 39:4,5	disciplined	drawings	29:4 80:22	23:17 24:3
45:8 46:22	96:19	22:19,22	81:24	25:11
47:2,14,25	discuss 53:4	dried 64:11	effectiveness	27:20
48:3,8	80:11	drink 71:12	s 28:24	41:14,22
DFO's 47:21	discussed	88:20	93:25	54:23 55:8
di 55:13	15:12	drivers	effects	56:2,3,5,1
dialogue	55:13	50:10	17:18	9 60:20
48:9	discussion	drop 32:1	19:25 20:1	61:19
difference	60:4	dry 64:9	21:12	94:22
75:15 76:2	discussions	due 28:16	28:4,6,13,	emergency
84:23	91:6	84:5	14,22	7:6 14:14
different	disposal	duration	29:1,11,14	21:9
50:19	6:25 9:20	56:17	,19 30:9	Emergy 1:12
88:18	11:12	during 7:25	32:3	12:9,11
differently	16:25	8:17 9:20	47:18,24	62:13,14,2
75:11	27:1,3	21:15	92:23	0
difficulties	disposed	23:16	93:13,16	63:5,12,13
61:5	7:25 27:5	24:7,22	efforts	,15
dig 78:12	62:24 63:2	25:24	31:15	77:24,25
Dillon 12:6	documentatio	26:1,16	EGT 2:15	78:9
diminish 7:5	n 8:3,12	27:17,19,2	13:19	80:20,21
directed	9:5	3 29:6,8	eh 64:6,8	81:3
15:3	documents	31:17	eight 56:16	85:6,7,9
direction	21:9	44:16	64:14	emphasize
6:20	domestic 7:4	68:11,25	EIRB 8:19	56:9
directions	done	85:3 91:14	either 11:20	enabling
13:12	38:5,12,25	92:14	62:5 81:14	91:22
directly	45:10	94:12,13	elders 89:13	Energy 12:25
7:17 41:16	46:1,5	96:8	91:11	engaged
director 2:5	48:15	dust 25:19	elder's	55:11
12:18	56:24	<hr/>	89:12	engagement
51:14 80:5	57:11,22,2	E	Elders 88:5	66:10
86:19	4 67:21	earlier	electrical	engineering
dis 9:19	72:19	48:14 75:1	ly 85:12	52:2 92:17
11:12	75:10,11	early 21:2	elements	enhanced
disappointed	76:5 84:9	25:24	86:22	91:21
49:19	85:1 96:8	40:20 48:2	elevated	enjoy 89:22
discharge	Doug 2:15,17	early-season	56:14	ensure 50:3
27:16,19	13:16,19	25:13	eleven 24:6	92:11
28:25	47:8,11,12	ears 50:12	Elias 6:6	93:22,24
31:16	,13 48:11	EBA 2:21	13:5	94:5,16
discharges	Dougie 3:12	46:4 84:21	else 49:13	ensuring
27:4 31:19	downstream	economic	67:7 72:23	28:7 46:23
discipline	36:10	91:22	embankment	77:6
	draft 93:13	Eddie 12:5	19:2,3	entered
	drainage			30:18
				entering

27:23 31:14	establish 93:17	67:19,22	fabric 23:3,7,20	felt 57:22
entitled 59:5	established 6:22 20:23	exits 14:14	facilitate 20:23	field 50:11 67:16 69:1
entry 27:8,9	establishing 47:25	expect 29:12	facilities 26:25	fifty-one 8:15 20:2
environment 19:20 20:1,17 27:5 28:25 29:19 31:16 32:15 41:20,25 50:3 92:23	evaluated 42:13 54:9,12 55:17	expectation 43:8	fact 41:6,15 56:21,24 59:17 61:2,3 77:6,7	figure 66:18
environmenta l 8:15 17:14 19:23 20:13 21:3 27:7,11 29:18 31:3,12,18 49:17,20,2 2 50:2,11 87:2 92:21 93:23 94:12 95:3	evaluation 40:18 41:1,24 42:11	expectations 95:13	failed 52:4,12	fill 41:21 64:19
environmenta l-related 20:15	evaporate 64:9	expected 19:10,15 31:8,23,25	fair 47:14 53:5	filling 64:17
equipment 19:14 21:8	everybody 34:12 63:24 64:2,22 88:6	expects 29:14	failure 52:19,22 56:23,25	final 19:20 39:7 48:12 49:15 61:1 67:15 69:3
Erica 2:16 13:15 45:15,19,2 0,21 46:25 63:8,9,10 75:22,25 76:1,2 77:9 78:10,11 82:20 84:11,13,1 4,15 85:5	everything 14:8 64:19	expensive 41:19	fairly 49:9	finishing 23:22 94:22
Erica's 78:1	evidence 31:23 51:17,22,2 5 52:4,6	experts 10:17	fall 21:19 40:23	fire 7:6
erosion 21:4 23:12,13,1 5 27:25 47:16,20	exactly 62:22 87:14	explain 52:12 89:11	falls 18:8 38:13	first 6:19 15:9,21 21:1 40:15,16 43:5,19 48:1 52:11 54:4 72:8 92:2
	examined 44:18	explanation 57:5	familiar 34:3 85:25	fish 21:10 27:25 36:9,13 38:20 46:20,23 47:16,17,2 0,21 61:12 62:2 68:13 71:11,23 92:12
	example 23:8 56:21,24,2 5	Explosives 21:5 26:23	family 78:21	fisheries 3:2 9:24 16:12 22:16,18 26:13 29:20 47:7 48:5
	except 38:16	extend 95:21	fast 36:2,4 64:13,19 85:14	
	exchange 48:9	extended 56:1,4	federal 6:22 7:10,13,17 8:19,20 48:23,24 79:16 80:6,10 81:13	
	executive 2:5 12:18 51:14 80:4 86:18	extending 61:1	federal/ territoria l 82:12	
	exempt 7:7	extensive 8:20	feedback 65:24	
	existing 27:14 30:11 31:5 61:11	extent 82:13	feel 78:23 82:6	
		extremely 70:22 90:11,19		
		eyes 50:12		
		F		
		Fabian 13:22		
		Fabijan 2:19		

52:20,22 57:9,10 fishery-related 87:2 fishing 88:15 89:2 five 10:6 21:20 29:8 32:25 39:15 94:20 fix 38:10 FJMC 65:14,21 74:8 86:23 90:6 flatten 41:12 floor 33:11 69:15 70:23 73:22 77:21 82:16,24 85:16 87:19 90:11 floor's 33:21 flow 7:6 35:21 44:22 56:12 92:12 fluctuates 35:9 focussed 15:7 92:8 folks 69:17 follow-up 57:2,8,10 58:6 65:21 85:6 food 71:11 forgotten 49:13	formal 15:2 formally 81:7 forward 16:23 58:15 69:12 74:22 75:3,5 77:15,22 78:24 90:21,23 96:1 frames 39:25 Francis 13:6 Freda 12:20 freeze 46:14,18,2 1 freezes 68:10 freeze-up 32:6 freshet 55:9,15 69:1 front 70:12 frozen 23:18,19 92:6 fuel 19:13,14 full 29:7 35:3 56:18 60:21 61:6 66:21 95:23 fuller 9:15 fully 10:6 60:24 function 67:23 functioning 69:4 functions	67:23 furthering 47:23 future 28:10 52:14 56:1 67:24 <hr/> G <hr/> gain 9:15 game 3:9 9:23 16:13 81:4 86:23 87:4 gas 64:16,18 gathers 73:4 general 9:19 11:4,10 14:17 33:12 37:7,10 51:6 65:13 66:16 68:5 70:13 74:21 90:18 96:2 Generally 23:1 generated 30:24 generation 72:11 generously 51:19 gentleman 6:4 63:18 gentlemen 16:21 53:14 69:24 70:4 82:25 84:4 85:15 90:10,18 gents 14:13 geometric 59:4,15 geometry	44:23 geotechnical 44:24 geotextile 23:3,7,20, 25 Gerald 12:16 Gerry 15:10,13,1 4 16:20 gets 64:4 78:19 80:5 getting 75:14 given 81:4 89:18 gives 76:24 giving 11:14 72:24 75:5 95:23 giwanimuch 33:3 GNWT 2:23 79:4,7 81:22 82:17 83:5 Golder 84:21 gone 55:19 gonna 36:12 63:8 governed 7:9 government 7:16,17,23 8:21 17:12 20:5 80:10 81:13 84:5 Government's 8:19 graciously 13:1,2 grade 41:11 grading 19:4 22:11 24:3 grandchildre	n 88:17 grandfathers 72:12 grandmothers 72:12 granting 9:2 Granular 25:6 93:6 gravel 23:3,5,8 24:4 great 51:18 greater 41:20,21 greatest 27:17 71:13 greatly 75:4 Green 3:22 grey 26:24 30:24 ground 61:12,18 ground-penetratin g 76:13,15 group 20:22 21:1 32:17 34:3 47:25 48:4 68:25 70:8 93:18 94:8 groups 29:22 66:8 growed 88:11 Gruben 12:1,3 14:2 33:22,25 68:6,7 69:8,10 70:11 71:3,4 73:8 74:19 88:2,4,5 89:24
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Grubens 3:16	55:23	96:10,14	5 94:7	I-401A 25:3
guarantee	56:16	heart 68:9	95:7	ice 55:18,24
62:1	85:13	height 41:21	highways	56:5 64:10
guess 43:8	88:22	60:21	18:14	68:16
48:6,18	happens 82:4	held 1:19	hill 41:5	76:17,21
52:9	hard 9:7	6:20 8:25	hit 86:14	I'd 11:25
57:7,21	43:11	29:21 80:8	holders 31:6	12:4 14:1
66:11,18	84:16	hello 33:22	holding 8:22	16:21
67:12	86:6,19	help 59:25	holds 6:23	33:23 34:7
68:23 79:5	87:13	79:10	hope 48:1	39:23
81:21	hardly 64:17	helped 96:10	hour 55:22	45:15
85:23	harmed 50:4	helps 73:6	64:14	51:10 53:3
guidance	harming 39:3	Hi 63:24	69:18	63:25
25:5 93:6	46:12	88:2,3	hours 55:22	65:13
guidelines	haul 25:14	high 39:20	56:17	68:23
28:12	haven't	56:1	houses 34:17	70:4,7,11
93:15	38:15 43:3	higher 41:12	HTC 34:1,5	71:5 74:20
Gungi 35:25	having 60:5	highest	HTCs 66:7	75:8,12
36:7 37:20	88:12	25:24	68:24	84:11
38:21	hazardous	highlight	hundred 8:16	86:4,14,17
40:9,17,19	27:5 62:24	86:7	20:3	90:18,22
,20 41:4	63:2	highlights	hunt 71:21	91:3,8
42:3 43:15	heading	58:23	hunter 34:25	96:6,8,20
44:25	55:20	highway 1:4	hunters	identified
51:20 52:1	hear 9:18	8:1	3:12,17	26:4,6
54:20	11:9 33:14	9:17,21	4:9 10:20	identify
66:23	36:4	10:5,9	11:1 12:3	14:25 29:3
67:14 68:9	49:14,20	18:7,11,13	14:3 16:14	32:7
Gurdev 2:10	78:20 83:1	,17,19	32:6 33:25	IFA
guys 49:12	heard 33:14	19:18	35:15	79:9,20,22
82:23	75:1 87:6	20:14,22	71:1,4	81:10
<hr/>	89:9 94:14	21:17	73:9 87:5	82:2,6,13,
H	hearing 1:5	23:14,22	89:4	14
habitat	6:5,14,16,	32:17,23	hunting	IGC 90:7
21:10,11	20 7:18	34:4 37:2	71:16	igloos 88:11
27:25	8:11 9:13	38:4	88:13	ILA 5:5
36:21	10:12	42:7,15,22	Husky 72:16	15:22
47:17,21	11:22 12:8	44:20	hydrotechnic	49:23,24
57:9	14:24	48:15 56:2	al 22:17	50:12,16,2
half 80:9	15:12 73:8	59:4,14	Hynes 3:2	4
hall 91:5	85:11 93:9	60:18	65:14,20,2	I'll 49:24
Hamlet 30:22	94:11	70:16,19	1 74:15	65:16
hand 14:19	95:19	71:16	<hr/>	95:19
handful 77:2	96:22 97:5	85:19,20	I	I'm 6:12
handicapped	hearings 9:2	87:22		12:11 16:3
14:13	13:2 80:17	89:23		33:25 34:3
happened	94:12	91:19		37:15,23
		92:5,7,9,1		38:23 40:9
				43:25 45:4

47:8	92:18	66:12	80:11	interpreting
49:19,24	improvement	incorrect	inland 72:1	14:7
53:18	38:7 42:5	54:3	input 20:24	Intervenor
58:12,20	improvements	indeed 50:20	30:2	9:3 65:17
63:8 66:18	29:3 47:19	Indian 81:1	91:12,14	74:9
67:5 69:16	improving	indicate	92:24	Intervenors
70:18	91:20	14:25	installation	9:23,25
75:22	inadvertent	indicated	52:3	11:17
78:14 88:5	28:15	78:4	60:6,7	33:8,9
IMG 84:20	inappropriate	indicates	installation	65:15 74:8
IMG-Golder	e 50:18	52:7	s 62:1	86:22
46:2,5	54:13	indicator	installed	91:11
immediately	incidences	52:13	23:7	95:25
12:9	37:24	indicators	42:3,21	Intervention
impact 8:16	incident	29:6 66:10	55:1	90:7
9:17 18:13	54:21	individuals	insulation	introduce
19:23 31:9	55:17	10:21	61:21	12:8 13:9
35:10	56:16	industry	integ 61:21	14:1
36:12,13	57:25	88:23	integral	introducing
41:20,25	incinerated	89:14,15	95:4	10:15
94:12	27:2	influence	integrity	introduction
impacted	include 23:2	58:15	61:22	s 11:24
7:25	26:21	information	95:3,8	14:1
impacting	27:24	8:23 48:9	intended	Inuvialuit
41:15	44:22,23	49:2,11	20:16	3:9 5:5
impacts	62:5	73:5,7,10	31:4,13	7:1
20:17	included 8:3	76:20	intent 20:6	9:16,23
31:21	17:14	94:20	intentions	16:13
32:14	22:25	95:12	94:5	19:20
46:23	60:15	96:11,13,14	interaction	24:11,25
70:16,20	66:23	4	45:8 47:7	25:5 29:23
94:17	includes	informed	66:4	32:24
implementati	17:21	96:20	interactions	70:15,21
on 20:2	18:24	infrastructu	66:6	79:9,12
80:19	19:13	re	interest	81:25 82:2
81:23 82:6	20:14 21:4	18:5,12,15	8:22 51:18	87:4 91:11
implications	25:7	95:2	82:5	93:1,6,11
10:7	including	initial	interested	95:9
importance	8:6 24:10	40:21	8:13 9:8	Inuvik 1:4
94:14	29:19	48:20	38:24	3:12 6:15
important	32:12	51:25	49:12	9:1 10:1,3
11:8 36:8	inconsistent	54:5,8	interpretati	11:18
73:12,16	82:12,14	initially	on 79:19	12:21
78:19	incorporate	40:20	interpreters	16:14
86:22	65:22	54:24 67:2	13:4 96:6	18:20
88:10,13,18	incorporated	initiative		26:25 27:2
8 96:4	60:17			30:23
improved				32:16
				64:15
				66:20 73:8

85:11,24 87:5 91:18 93:8 95:6 Inuvik's 86:4 Inuvik-to 19:17 20:21 42:6 59:3 Inuvik-to- Tuktoyaktu k 8:1 18:7,13,17 20:14 21:17 23:14 32:23 42:14,22 44:20 59:14 60:18 94:7 investigatio ns 92:17 invite 70:11 invited 89:24 involved 48:3 80:10 81:25 involvement 47:6,14 65:23 in-water 93:20 IRC 81:25 isn't 80:24 ISR 81:12 issuance 29:16 issue 56:22 68:18 72:19 issued 22:19 issues 9:1 16:2,4 35:14 37:1 61:7 71:20	72:17 82:24 87:3 94:11 96:1 item 42:1 items 45:5 60:17 61:8 it's 13:11 15:19 17:5 34:15,18 35:18 36:2,13,20 37:23 38:19 43:18,19 44:2 55:3 58:21 59:17,19 61:3,17 62:16 64:21 69:16 71:20 72:19 73:12 78:1,19 80:21 82:8,13 84:15 88:21 I've 15:15 43:12,13 48:18 88:6 89:9,10 <hr/> J <hr/> Jagpal 2:10 James 3:6 37:14,15 39:13 43:1,5,6 44:8 45:4,5 49:5,7,8 50:15,20,2 2 51:4 66:16,17,1 8 67:9 68:1,2,4,1 7 75:6,7,8,2 0	77:10,11,1 3 85:21,22 86:13 87:15,16,1 8 90:5,8 Jamie 2:6 12:16 Jan 3:24 Jana 13:22 January 19:22 26:1 Jayleen 2:12 Jean 88:2,3,4,2 0 89:20,24 90:4 Jim 2:9 13:9,10,11 ,24 16:22 17:1,4 28:21 30:7 33:7 39:13,18,1 9 42:10 43:1 44:9,10,11 45:4,13,18 47:4,5,10 48:16,17 49:4 53:1,2,6,1 5,17,20 57:15,19 58:1,17,19 ,24 63:6,7 66:1,2,13 67:10,11,2 5 68:21,22 69:7 74:3,4,6 75:20,21,2 4 82:18 83:13,18 84:6,7 90:25 91:2 95:17 jobs 38:17 89:16 Joe 3:12	joined 11:25 74:7 Joint 3:2 9:24 16:12 judgment 61:24 July 8:4 June 7:21 68:16 jurisdiction 49:23 79:16 jurisdiction al 79:2 jurisdiction s 79:21 Justice 2:23 <hr/> K <hr/> Kavik- Stantec 2:16 13:14,15,1 7,21,23 40:13 44:16 47:13 54:1 59:2 Keelaghan 13:7 97:16 Keevik 63:24,25 65:6 key 27:22 32:18 ki 72:7 kid 71:8 kids 72:21 Kiggi 13:14 Kiggiak 2:21 46:3 Kiggiak-EBA 13:14 84:22 kilometre	18:18 kilometres 18:11 22:9,10 kinda 86:6 kindly 73:17 Kitty 91:5 knowledge 10:25 70:14 72:20 92:19 Kristin 3:2 65:14,20,2 1,25 66:14 74:15 <hr/> L <hr/> ladies 6:3 16:21 53:13 69:23 70:3 82:25 84:3 85:15 90:10,17 lady's 14:12 laid 23:20 lake 26:8 29:2 31:25 32:9 34:13,16,2 3 46:16 72:1,2,4,1 6 75:18 76:6,8,19, 22,24 78:2 84:18,19,2 0 85:1 lakes 25:14 26:5,9,14, 16 31:24 34:11 38:25 39:2 45:23 46:2,14,18 ,20,22,24 64:9 75:10 76:25 77:2
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

<p>land 5:5 24:11,25 35:1 71:10 89:3 93:11</p> <p>lands 7:1 79:5,17</p> <p>large 95:2</p> <p>large-diameter 23:8 60:14</p> <p>Larry 2:14 13:20</p> <p>last 19:9 34:1 36:21 45:10 46:7 48:7,15 64:15 68:12 91:14</p> <p>late 21:1,18</p> <p>later 37:10 38:10 48:2 49:24 55:22</p> <p>layers 23:5</p> <p>leaders 11:25</p> <p>leading 17:22 80:10</p> <p>learned 32:19 40:6 42:13,19 51:20,23 58:12,14,2 3 59:6,8,16 62:4 65:22 66:6 67:18 92:13</p> <p>learnt 40:5</p> <p>least 41:25</p> <p>leave 77:21</p> <p>led 52:2</p> <p>legal 10:16 11:3 12:16 15:10</p>	<p>80:4,17 81:16</p> <p>legislation 79:21</p> <p>length 55:25</p> <p>lengthy 41:19</p> <p>less 26:11 55:21 56:16 79:2</p> <p>lessons 32:19 40:5,6 42:13,19 51:20,23 58:12,14,2 3 59:6,8,16 62:4 65:22 66:5,11 67:18 92:13</p> <p>let's 69:17</p> <p>letters 30:22</p> <p>level 32:1 39:21 75:17</p> <p>licence 17:7,23 18:16 21:20 24:10 29:8,15 31:9 33:1 45:10 47:4 91:12,13 94:13,21 95:12 96:18</p> <p>licenced 62:25 63:3</p> <p>licencing 18:1</p> <p>license 31:6</p> <p>licensed 27:6 30:9,25</p>	<p>31:11</p> <p>licensees 30:11</p> <p>licensing 39:9 48:21 52:15</p> <p>life 34:24 35:2 64:3 91:20</p> <p>lifestyles 72:15</p> <p>lifted 56:6</p> <p>lifts 23:4</p> <p>light 44:18</p> <p>Lillian 6:6,11 13:5 96:7</p> <p>limit 37:12</p> <p>limited 61:3,13</p> <p>line 15:23</p> <p>lines 76:7</p> <p>List 4:3 5:1</p> <p>listening 88:6</p> <p>little 33:24 34:19 35:11 36:22 37:1 41:3 46:22 50:17 64:12,13,2 4 71:5 78:6,12 82:23 84:17</p> <p>live 64:3 68:10 71:23 72:15</p> <p>lived 35:1</p> <p>lives 72:14</p> <p>living 35:1 88:11</p> <p>Liz 12:22</p>	<p>local 92:18</p> <p>located 25:10</p> <p>location 21:25 41:13 55:20</p> <p>locations 22:3 24:20 32:10 41:7</p> <p>log 29:24</p> <p>long 34:25 83:13</p> <p>longer 15:20 84:17</p> <p>long-term 61:25</p> <p>lot 36:8,21,22 38:1,19 40:5 43:12 67:4 88:13,15 89:1,2</p> <p>Lou 1:14 12:15</p> <p>lower 25:25 35:4 56:3 85:1</p> <p>low-flow 61:13</p> <p>low-speed 55:5</p> <p>lunch 14:10 69:17 70:9</p> <hr/> <p>M</p> <hr/> <p>machines 76:14</p> <p>Mackenzie 26:6 31:7 80:12</p> <p>mail 90:6</p> <p>main 38:21</p> <p>maintain 18:10</p>	<p>27:14 32:23 61:19,20</p> <p>maintaining 18:5 92:6</p> <p>maintains 28:8</p> <p>maintenance 10:8 18:25 19:7 25:18 56:22 57:22</p> <p>major 81:6,7 87:2</p> <p>majority 22:7</p> <p>Malone 3:6</p> <p>manage 20:16 79:14</p> <p>management 3:3,7 7:18 9:24 16:12 17:14,17,2 0 20:11,13,2 0 21:3,5,6,7 25:6,16 26:21,22,2 3 27:7,11 28:1 29:18 31:3,12,18 32:12,20 48:5 66:8 79:17 87:10 91:16 92:21 93:7,22 94:2,4</p> <p>manager 79:5</p> <p>managing 95:2</p> <p>mandate 18:8 87:9</p> <p>manner 24:18</p> <p>map 26:7 72:1,4</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Marie-Anick 12:24 13:1 14:18,19	measure 29:1	50:23	20:1	move 10:23 11:14
mark 1:13 12:14 39:16 58:7,9 59:10,21,2 2 62:8,9 73:23,25	measurements 76:6 78:5	Mervin 12:1	mitigation 10:9 20:15 29:3 31:2 93:25 95:7	40:24 64:17 73:20 74:20 90:21
material 23:18,19	measures 31:2 94:1,10	met 17:25 33:1	mitigations 28:24 31:12	moved 54:14,17
mathematical 84:10	meet 19:19 22:15 29:9,12 79:25 92:11	method 75:13 84:19	model 76:10,23	moving 36:23 51:10
matter 11:5 45:14 47:6 50:17	meeting 21:1 29:24 34:2 48:2,7 53:14 69:24 80:16 87:12	methodology 60:16 76:3	modify 21:22	mud 34:15
matters 10:23 14:5 15:8	meetings 29:21 35:16 66:7 80:8 89:7	methods 20:11 23:14 27:8 28:15 77:7 78:8 95:7	moment 47:18	mulling 82:18
maximized 25:15	melt 68:12	metres 55:4	monit 52:18	multi-agency 20:23
maximum 76:24	melting 68:11,15 72:3	Michael 2:19 13:22	monitor 20:16 28:15,23	multiple 66:20
may 9:17 11:5 28:16 31:16 49:13 59:18 70:20 75:2 80:3,4 86:1	mem 81:17	microphone 14:9,16,19 15:1 33:20 63:20 70:23	monitoring 10:10 17:19 20:11,15 21:12 28:4,6,13, 14,23 29:5,11,13 ,14 32:13 47:18,24 52:13,16,1 9,21 55:12 57:8,23 65:23 66:4,9 93:13,16,1 9,24	mumakatuk 70:9
maybe 43:21 59:19 64:14 67:21 68:25 79:3 86:2	member 1:12,13,14 11:9 14:17 59:3 62:13 77:23	middle 60:11	monitors 49:17,18,2 0,22 50:2,7	muskrat 31:25 32:5,8 34:13,16,1 7 35:5,11
Mayor 12:1	members 1:10 7:13,19 10:16 11:4 12:8 17:9 37:10 51:5,11 58:7 65:12 77:14 80:18 81:17 91:9 96:2,9	mileage 71:6	month 35:3 48:2	muskrats 31:21 34:11 71:23 94:14,17
McGregor 2:21 13:13	mention 9:22 49:13 85:10	miles 64:14	moon 35:3	nailed 13:13
McPherson 88:19	mentioned 42:10	mind 36:14 71:19 72:9	morning 6:4 15:22 17:8 33:23 34:5 55:16 88:6	name's 33:24
mean 63:2		minimal 26:1 32:15	moss 34:15	narrow 55:3
means 91:6		minimize 31:13 92:22	mother 88:16	Nathen 3:23
meantime 77:22		Minister 7:14 91:17	motor 75:14	National 12:25
		minute 53:7		natural 36:20
		minutes 53:4 78:13 83:20,22		NEB 13:3
		miss 86:15		necessary 15:20 94:16
		mitigate 20:16 29:19 32:3		Neudorf 2:11
		mitigated		

91:18	2:11,12,13	12:20,23	9:18	25:11
nice 49:14	,14	offices 10:3	opportunitie	oversee 50:1
nominations	3:6,9,12,2	official	s 91:22	overview
7:15	1,22,23,24	79:5 90:8	opportunity	47:9 95:23
non-	NW/DOT 2:15	offline	11:15,18	overwinter
hazardous	NWT 1:20	55:13	37:10	46:20
27:1 30:23	6:22 17:6	Okay 37:14	65:16	ownership
noon 14:11	79:17	42:4 51:9	68:25	81:11
normally	80:6,12	54:19 60:3	72:25 74:2	
61:17	81:5 93:11	65:5	opt 25:7	
north 18:1	NWTWB 2:4	77:12,20	optional	<hr/> P <hr/>
22:9 25:22	<hr/> 0 <hr/>	82:23	26:6	p.m 55:21
north/south	objective	83:21	options 25:7	69:20,21
22:6	27:14	86:12	41:24	83:25 84:1
Northern	objectives	87:17 90:8	order 6:5,16	97:8
7:14 24:12	25:7	ones 16:9	53:14 55:4	package
25:1 28:12	observations	38:22 62:3	69:24 84:4	95:13
81:1 93:15	34:25	ongoing 10:8	organization	page 4:2 5:2
Northwest	obtain 7:7	21:16	89:5	59:7
1:1	21:22	32:12 82:6	organization	panel 1:10
6:13,21	obtainable	open 24:9,14	s 29:10,23	19:19
7:2,16,23	73:11	33:11	30:2	48:22,23
8:23 12:5	obtained	36:17	91:10,11	Paquin 1:12
18:6,14	85:3	64:13,24	92:25 93:1	12:10,11
29:25	obviously	73:22	originally	62:14,20
30:7,19	52:17	77:21	43:22	63:13
79:6 80:25	occur 19:10	82:16	Orr 2:18	77:25
84:5 91:9	24:4 27:19	opened 93:5	13:14	80:21 85:7
95:14	28:16	opening 4:5	40:10,12,1	parameters
Northwind	31:17 40:1	6:6,8	3 44:15,16	23:12
13:19	occurred	18:12	53:18,25	paramount
note 19:15	19:9	91:18	54:1	79:20 82:3
20:21	52:16,17,1	94:23	59:1,2,13	pardon 70:19
21:14	9,23	operated	60:3	74:1 85:19
84:24	ocean 64:21	24:17	others 39:22	parents 71:9
noted 50:15	Oceans 22:16	operation	43:2	72:11
notes 45:4	26:13 47:8	10:8 18:25	outline 9:14	participants
nothing 58:4	October 1:21	19:5,6	10:22	11:22
64:22	15:19 21:2	27:20	16:23	participatin
72:14	22:22	28:17	outlined	g 97:5
notified	offer 68:24	56:18	11:6	particular
81:8	69:5	operational	outlining	54:19,23,2
November	offered 13:1	18:10	6:16	5 56:16
19:16 21:2	office	operations	outstanding	57:11
48:2	opinions	18:14	47:1	particularly
np		25:20 69:2	over-land	10:9
		95:5		parties 8:13

9:8 21:16 80:9 81:24	performance 61:25 66:10 69:2	philosophy 92:4	38:1 47:16,18,2 0,21 48:5,8 92:21 93:7,10,14	75:4,6,20, 25 77:24 78:10,15,1 7,22,25 80:20 82:25 84:6,12,13 85:18,21 87:20,23 96:23
party 11:3,20 15:7	perhaps 39:13 43:3 48:13 49:5 65:16 83:6 86:21 92:4	phones 14:6	planned 27:4 31:10 32:9 80:14,25	
passage 61:12 62:2 92:12	period 4:8,11 9:6 10:6 11:13 18:20 24:8 33:6 38:13 73:19	phonetic 33:3 70:9 84:20	planning 13:1 18:4 47:3 81:23 91:15	pleased 12:24 33:14 81:19 83:1
passed 72:10,21	periods 61:13	pick 59:24	plans 17:13,23 20:12,16,1 8,24 21:14 24:11,24 25:4 26:19,21 27:22,24 28:2 29:18 32:12,18 47:17 91:16 92:22,24 93:2,3,4,1 0,24 94:5,6 95:8,11	pleasure 17:5 91:4
past 46:4 95:24 96:8	permafrost 61:15 64:25 65:1 92:6,8	picture 73:13		plentiful 28:9
Paul 3:22	permanent 19:2	piece 34:15,19		plenty 87:21
pause 28:19 30:5 33:17 43:3 53:23 57:17 62:18 63:22 70:1 74:11 77:18 83:3,11,16 86:10 87:25 90:15	permit 5:6 15:22 24:9	pipe 56:14 61:3,4		plugged 38:19 43:20 52:8
pending 24:9	perpendicular 76:7	pit 15:17 16:1 24:10,24 25:4 28:2 93:3,9		plugging 36:11
people 12:19 34:14 38:20 48:14 50:9,13 72:15 75:3 85:25 88:10 89:16	person 96:21	pits 5:4 24:14		point 9:12 56:4,11 68:17 80:23 86:2
per 16:22	personal 7:4 78:21	placed 14:8 23:19 24:4 55:5,7	platform 35:7	points 54:2 56:10
percent 22:20 26:10,12 34:22 41:10 46:15 59:4,15 84:24	personnel 19:14	placement 23:2	please 6:6 14:5,9,18, 25 33:12 37:12 39:17 45:12 47:11 49:6 50:21 51:8 53:1,7,14, 21 54:3 58:8,17,25 59:11,23 62:8,13,16 63:6,20 66:1,16 67:10 68:5,21 69:15,25 70:22 74:22	Pokiak 37:14,15 43:6 49:8 50:22 51:18 52:6 66:17,18 68:2 75:7,8 77:11 85:22,23 87:16
Perfectly 53:5	persons 10:18	places 38:3 76:22		Pokiak's 51:22 67:13
perform 42:18,23	perspective 52:11,20 73:15 79:19	placing 23:25 61:11		population 57:10
	pertained 39:24	plan 15:18 16:1 17:15 20:13 21:4,5,6,7 ,10,11,12, 13 22:1 23:13 24:19 25:6 26:22,23 27:8,12,25 28:1,4,6,1 0,13,14,23 29:1,3,11, 15,17 31:4,13,18		pose 49:24 50:23
	pertinent 8:9 59:25			
	Petroleum 21:9			
	Phillips 12:16 15:10,14			

position 15:11 82:1	pre-hearing 8:25	prevail 82:2	40:21	94:3,17
possibility 69:4	preliminary 10:22 14:5	prevent 23:15	42:14 45:9	95:23 96:4
possible 31:15 37:23 61:20 66:22 96:10	15:8 16:2,4	26:20 27:8,23 28:25 31:4,13 92:23	47:23 54:9,11 73:4,16 79:13 90:21 91:13 93:22 94:13 96:20	projected 25:21
posted 9:6 14:21	prepare 9:1 49:1	prevented 94:11	processes 47:3 65:24 95:5	projects 49:18 95:2
posting 8:10	prepared 54:17 93:3	previously 93:10	proclamation 80:25	project's 17:16,18 21:3,24 25:17,24 27:7 30:9,13 31:3,12,17 ,21 92:20 93:23
potential 24:19 27:16,17 31:21 32:3 52:14 61:4	presence 39:5 47:2	primarily 25:18	productive 91:6	promote 61:25
potentially 26:5	present 10:16 81:16	printed 90:6	profit 51:22	proper 61:12
PowerPoint 16:10,11,1 2	presentation 4:7,9 10:24,25 11:6 16:11,13,2 3	prior 24:16 93:20 95:20	program 29:13 47:24 52:13 56:22 76:9 93:20	proponent 15:16,20,2 4 62:22 63:1
Practice/ Fuelling 21:8	17:3,7,8,2 4 33:13 37:8,18 39:8 51:7 71:1 86:23	priorities 95:3	problem 43:9	Proponent's 16:10
Practice/ Handling 21:9	presentation s 9:25 11:3 16:5	problems 66:24	project 9:14,17 16:25 17:14 18:17 19:18,24 25:10,13 26:19 27:3,23 28:7,17 30:3,25 31:10,17 32:4 37:12 38:7 39:6 40:6 42:7,15,20 44:6,17,18 ,20 49:16 50:1,6 51:2 66:7,21 74:25 77:16 85:18,19,2 0 91:15,20 92:4	proposals 45:23
practices 25:16	presented 37:13 51:18 94:19	procedural 10:23		proposed 18:6 26:9 30:16 31:24 40:7 45:23 46:13
prayer 6:6,8 11:21 95:20 96:24 97:1	presenter 10:19 11:5 87:7	Procedure 21:6		protect 95:8
pre 10:19	presenters 14:23	procedures 8:8 10:10 17:17 26:20		Protection 21:10,11 28:1 47:21
pre- constructi on 32:5	presently 79:24	proceed 16:22 20:8		protective 88:25 89:1
predictable 38:14	preserving 92:8	proceeding 11:14 15:2		protocol 26:13 46:23
predicted 38:13	President 12:2	proceedings 9:13,23 10:21 11:8 14:7,20 73:21		proven 95:1
predicting 39:25	pretty 34:3 36:1 38:19 87:1	process 8:18 12:19 20:20 21:15		provide 11:10,15 15:10 17:6,9 22:21
prefer 14:17				

39:20	94:24 96:2	47:3		96:12,13,14
40:10	pull 76:15	48:12,19	<u> </u> R	4
44:12	pulled 56:11	49:24	radar	recent 22:1
45:16 47:8	Purcka 2:14	50:23	76:13,16	48:7 80:8
53:19	13:20	52:18	raise 16:5	recently
58:22	purposes 7:7	53:16 54:2	75:8	74:7
70:12	pursuant	58:6 62:12	raised 31:20	recessing
74:22	16:15	63:14	35:2 41:12	53:10
75:23 78:6	30:19	65:21	54:2	69:20
81:17	push 35:5	73:19 75:9	raising	83:25
84:10,11	pushup 34:13	77:10,15,2	60:10	reclamation
93:22	push-up 32:6	3 78:1	ran 64:15,18	25:8
provided	push-ups	83:6,7,9	rates 44:22	recognition
15:16	31:25 32:8	84:18	rather 55:1	57:21
16:9,15	34:17	85:6,23	56:23,25	67:12
22:2 25:5	putting	questioning	re 42:19	recognize
28:3	68:18	15:7	readily	11:24
29:6,7,25	PW-10 25:3	questions	73:11	12:1,2,4,2
30:2 47:15		15:2	readings	4 48:14
67:13 73:7		33:10,13	75:14	65:14 70:5
91:5 95:12		37:7,13,17	reads 62:23	recognized
96:3		,19	ready 82:18	55:18 66:8
provides	<u> </u> Q	39:15,21,2	real 68:17	recognizes
31:18	quality 7:5	4 40:8,16	realities	27:15
providing	17:18	43:2,5	94:6	93:21
91:12,13,2	27:14	47:1 49:6	really 50:5	recommenda
1	28:16	51:7,11,12	64:4 68:8	on 61:5
provision	32:24 57:9	52:10	70:9 72:23	recommenda
8:11	91:20 95:9	53:19 57:7	88:9,13,17	ons
provisions	quantities	63:16	,25 89:1	8:15,20
79:10,20	73:5	65:18	90:13	20:2,7,10
82:2	quantity	66:14,15	rear 9:10	74:23
public 1:5	17:19 29:2	68:1,4	reason 67:1	reconsider
4:12	32:24 95:9	69:14	71:18	43:16
6:14,20	quarry 15:18	73:23,24	reasons 52:2	reconvene
8:10,11	24:10	74:2,5,8,1	71:13	69:18
9:2,13,19	quarrying	4 78:16,17	recall 83:8	record 14:8
11:5,10	24:9	81:18	receipt 9:2	15:16
13:2	quarter	85:16 86:2	63:3	50:16
14:8,17	83:23	87:9,20	receive 6:23	85:11 95:1
17:9,12	Ques 42:4	89:10	63:1	recorded
18:5,12,15	question	quite 38:5	received	14:20,24
33:12	4:8,11	41:5,18	7:22 9:5	records
37:8,11	11:5 33:6	49:11,19	10:4	29:24
51:6 63:18	38:11	54:7,21		recovered
65:13	40:2,9,16	56:8 61:17		52:7
66:16 68:5	42:4 43:8	75:1 82:11		
74:17,22	45:4 46:11	89:10		
77:15,21		Quyainanni		
90:18		6:10 33:3		
91:12 93:8		70:10		

re-evaluated 44:18	66:4	84:16	37:16	retaining 68:9
refer 59:2 61:9	relates 6:25 9:14 10:9 16:24	represent 15:1	residents 91:21 95:14	review 8:2,13,14, 16,18 9:1 19:19,23,2 4 20:24 21:16 22:20 28:3 32:8,13,18 48:22 93:24 94:4,12
referred 61:9	40:17 74:24 77:16	representati on 32:7	resource 25:6 26:7 52:20,22 93:7	reviewed 47:15 94:7
refers 84:20,21	relationship 79:6 82:8	representati ve 11:1 73:9	resources 8:22 79:17	reviewing 47:17
regard 40:2,8	relative 48:19 67:14 87:22	representing 10:18 13:19 14:2	respect 12:4 54:5 71:9,13	Rhonda 2:13
regarding 15:11,22 37:18,20 39:8 47:2 85:24	relayed 59:21	represents 46:17	respond 39:14,23 68:21 75:20 77:10	Richea 3:23
regardless 82:3	release 55:24	request 9:8	responded 27:10 43:3	right-of-way 23:21
regards 34:4,9,11 49:16,25 71:6	released 19:23 56:20	requesting 21:20	response 8:19 21:6,10 31:18 42:19 48:23,25 49:5 57:2 78:2,16 82:17 83:8 84:5,11	rise 35:4
region 7:2 32:25 49:19 93:6 95:10	relevant 59:19 60:4	Requests 8:24	required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	river 26:6 31:7 64:16
Regional 25:6 81:25	reliability 92:9	require 25:13 41:11,13 48:21	required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	road 23:10,25 26:14 32:9 35:19 38:12 40:5,22 41:1,6,11, 13 42:8,11,20 44:2,3 54:23 55:5,7,11 59:6,8,17 60:24 62:5 66:19 71:7,16 72:16,18 92:15 94:23
regular 34:1 48:9 93:23	remarks 4:13 91:1,3,18	require 25:13 41:11,13 48:21	required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	road 23:10,25 26:14 32:9 35:19 38:12 40:5,22 41:1,6,11, 13 42:8,11,20 44:2,3 54:23 55:5,7,11 59:6,8,17 60:24 62:5 66:19 71:7,16 72:16,18 92:15 94:23
regulations 8:7 89:17	removed 56:14	requesting 21:20	required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	road 23:10,25 26:14 32:9 35:19 38:12 40:5,22 41:1,6,11, 13 42:8,11,20 44:2,3 54:23 55:5,7,11 59:6,8,17 60:24 62:5 66:19 71:7,16 72:16,18 92:15 94:23
regulators 21:16 24:15 28:3 29:6,10,22 32:16 91:10 92:25	repair 38:9	Requests 8:24	required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	road 23:10,25 26:14 32:9 35:19 38:12 40:5,22 41:1,6,11, 13 42:8,11,20 44:2,3 54:23 55:5,7,11 59:6,8,17 60:24 62:5 66:19 71:7,16 72:16,18 92:15 94:23
Reindeer 64:16	repaired 52:5	requirement 49:18	required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	road 23:10,25 26:14 32:9 35:19 38:12 40:5,22 41:1,6,11, 13 42:8,11,20 44:2,3 54:23 55:5,7,11 59:6,8,17 60:24 62:5 66:19 71:7,16 72:16,18 92:15 94:23
reject 6:24	repairs 52:23	requirements 7:7 18:1 19:19 22:16,24 25:23 29:12 51:1 52:15 92:12 93:19 95:14	required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	road 23:10,25 26:14 32:9 35:19 38:12 40:5,22 41:1,6,11, 13 42:8,11,20 44:2,3 54:23 55:5,7,11 59:6,8,17 60:24 62:5 66:19 71:7,16 72:16,18 92:15 94:23
relate 11:12	repeat 83:7	requires 30:8	required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	road 23:10,25 26:14 32:9 35:19 38:12 40:5,22 41:1,6,11, 13 42:8,11,20 44:2,3 54:23 55:5,7,11 59:6,8,17 60:24 62:5 66:19 71:7,16 72:16,18 92:15 94:23
related 9:5 17:23 20:10 48:12 58:6	replacing 38:6 69:5	requiring 22:14	required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	road 23:10,25 26:14 32:9 35:19 38:12 40:5,22 41:1,6,11, 13 42:8,11,20 44:2,3 54:23 55:5,7,11 59:6,8,17 60:24 62:5 66:19 71:7,16 72:16,18 92:15 94:23
	report 8:19 19:23 28:23 29:1,7 48:22,23 59:3,14	resident	required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	road 23:10,25 26:14 32:9 35:19 38:12 40:5,22 41:1,6,11, 13 42:8,11,20 44:2,3 54:23 55:5,7,11 59:6,8,17 60:24 62:5 66:19 71:7,16 72:16,18 92:15 94:23
	reporter 13:7 86:18		required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	road 23:10,25 26:14 32:9 35:19 38:12 40:5,22 41:1,6,11, 13 42:8,11,20 44:2,3 54:23 55:5,7,11 59:6,8,17 60:24 62:5 66:19 71:7,16 72:16,18 92:15 94:23
	reports 46:6		required 8:3,6 20:19 25:9,12 41:2,18,21 49:2 56:13 57:24 61:24	road 23:10,25 26:14 32:9 35:19 38:12 40:5,22 41:1,6,11, 13 42:8,11,20 44:2,3 54:23 55:5,7,11 59:6,8,17 60:24 62:5 66:19 71:7,16 72:16,18 92:15 94:23

55:13	schedule	seeking	42:9 55:4	22:13
Robertson	54:22	32:25	shortly	sized 36:2
2:12	scheduling	seem 43:20	60:10	sleeping
Robyn 2:21	20:25	seen	short-	35:7
13:13	Schmidt 2:20	35:20,25	planning	slide 19:8
Roger 1:11	13:21	36:3,22	45:9	23:6,24
6:12 89:25	Schumacher	38:16	short-span	30:1
role 32:18	13:22	43:13	55:2	62:16,21
Ron 2:4	scientific	segment 11:8	showing	slides 62:15
12:18	73:5,11	sense 44:4	75:16	slope 41:10
51:14,15	78:20	79:23	shows 19:8	slow 64:4,8
52:25	92:17	sent 8:24	22:3	slowly 14:9
57:2,4,14	scope 17:15	separate	23:6,24	slows 35:22
58:2,3,5	18:22	22:8 76:15	24:19	snow
Ron's 53:15	19:12	September	25:21	23:21,24
room 9:10	screen 58:21	22:2 28:5	shy 78:18,23	snow-
10:14	62:16	30:1 59:5	87:21	machines
60:11 75:3	screens	sequence 8:5	sic 88:11	76:15
round 40:25	36:17	series 76:7	sig 19:25	social 91:22
42:2	seating	84:16	signed 22:22	software
route 9:17	60:13	services	significant	76:8
70:15,16,1	61:10,24	13:1	19:25	soil 61:21
7,19 89:23	62:5	session	30:12	solicitor
routes 32:9	second 42:4	85:24	42:17	13:22
routing	46:10	settlement	91:19	solid 27:1
25:14	52:18	7:2 24:5	significantl	30:23,25
roving 14:16	62:21,23	25:5 32:25	y 51:22	somebody
Rule 16:16	76:18	60:11 93:6	signing	49:20 86:2
rules 8:8	82:13	95:9	79:22	somewhat
89:17	secondly	several	similar	79:8
running 36:4	7:21 54:19	21:14 43:2	86:3,8	somewhere
88:12	70:7 86:21	45:22	87:6	46:15
Russell 2:11	section	47:19	simultaneous	67:4,7
	56:2,6,14	58:11	14:7	89:22 90:1
	59:16 61:6	sewage 26:24	single 88:16	sooner 39:10
	73:21	30:24	sit 14:18	sophisticate
	sections	shaping 24:4	site 55:21	d 34:19
<u>S</u>	22:9 25:22	share 58:13	Site-	sorry 34:4
Safe 21:7,8	30:19	shipping	specific	73:22
safety 92:9	59:21,25	7:9,10	22:24	82:19
safety-wise	60:4	Shoemaker	sits 41:4	source 15:18
42:1	sedimentatio	2:23	six 7:12	19:9 22:4
Sahtu	n 21:4	shop 55:19	77:3	23:9,25
67:3,4,6	23:12,13,1	short	sixty-six	24:22 25:4
Saunders	5 27:17,24	14:10,11		
2:15 13:19	47:16,20			
saw 72:2	52:17			
	56:20 57:9			

27:19	specifics	stated 91:17	92:5	successfully
35:19	59:11	statement	strengthenin	91:25 95:1
37:21	spectacular	69:3	g 91:23	sucked 65:2
38:7,14	54:21 56:8	statements	stretch 53:7	suggest
40:4,21	speed 56:2	11:16,17,1	strong 13:18	67:19
42:8,11	speeds 35:23	9 90:24	50:5	suitable
48:20	Spill 21:6	stating	structure	26:5
59:6,16	26:22 28:1	62:23	44:23	summarize
65:24	spoiled	Station	structures	51:24
92:15	88:22	64:16	19:3 22:15	summarized
93:10	spoke 65:14	status 9:3	59:15	21:25
sources	spoken 60:24	steam 55:20	studies	summary
18:25	94:9	steps 94:16	22:17	17:12,18,2
19:1,11	spreads	96:12	stuff	1 30:1
23:19	22:6,8	Stevens 2:9	86:1,16	32:21 59:7
24:7,8,17,	25:22	13:9,11	sub 20:15	summer 7:22
18,21	spring 48:16	17:4 28:21	submission	18:25
25:2,10,12	68:11	30:7 39:19	16:14	19:3,6
93:4	69:1,12	44:10,11	submissions	22:3,11
south 22:10	stability	45:13 47:5	10:2	23:23 24:3
25:22	92:5	48:17	16:8,9,17	25:11,20
71:17	staff 10:16	51:17	submit 15:18	26:2,17
sovereignty	11:4 51:19	53:2,17	16:1	46:1,4
91:24	91:10 96:9	57:6,19	submitted	77:4 78:3
span 55:5	stage 80:14	58:19 63:7	22:21	summertime
speak	81:4	66:2 67:11	24:15,25	76:4
14:9,25	stakeholder	68:8,22	26:20	sun 64:4,5
15:1 40:15	20:24	69:11 74:4	28:5,10	supplementar
41:3 50:17	stamped	75:21	46:8	y 51:12
63:25 71:5	22:22	83:18 84:7	93:4,10,13	78:1 81:18
72:25	stand 85:20	91:2	subsequent	supplemented
speakers	86:4	sticking	8:12 48:24	46:3 92:18
14:23	stands 49:16	34:15 56:7	57:24 60:6	support
speaking	Stanley	stockpiling	subsequently	26:17
45:5 54:20	63:19,24,2	19:1	42:2	31:23
94:10	5 65:6,8	stop 69:17	48:2	45:22 46:8
special	start 36:11	storage	28:5,10	96:9
37:21	50:8 51:13	19:7,14	46:8	supported
43:16	started 16:6	Storr 3:9	93:4,10,13	22:17
species 34:8	35:18 44:6	stream 7:5	subsequent	supporting
71:24	51:2 88:12	23:9 41:16	8:12 48:24	10:17 48:6
specific	starts	43:15	57:24 60:6	support
22:5	68:11,14	56:21	subsequently	26:17
39:15,22	state 81:11	64:12	42:2	31:23
66:3 94:11		streambed	48:2	45:22 46:8
specifically		61:12	28:5,10	96:9
21:21		strength	46:8	supported
40:18			93:4,10,13	22:17
			substantial	supporting
			31:22	10:17 48:6
			41:10	supports
			substituted	94:20
			19:18	supposed
			subtle 62:3	37:22
			success	43:23
			93:23	

67:2,6	team 13:8,9	95:15	24,25	thawing
sure 50:24	technical	territory	68:3,6,19,	56:13
70:18 82:7	2:6 9:1	36:24	20,22	thereabouts
89:13,21	10:17	test 84:19	69:7,8,11,	80:15
surfacing	12:17	thank 11:22	13,18	there'll
19:4 22:12	47:25	13:3,9,12,	70:10	33:9
24:4	52:11	23,24	72:25	there's
survey 45:16	73:5,11	15:3,12,14	73:2,15,17	15:23 34:7
46:1,2,3,5	78:21 91:9	16:20,25	74:4,6,18	35:6,7
84:21,22	93:18,19	17:4	75:5,7,19,	36:1,19
85:3	technique	33:4,7,15,	21,24 76:1	38:1 41:6
surveyed	24:1	20	77:9,12	46:10 54:1
76:25	techniques	37:4,5,6,1	78:9	55:4 56:15
77:2,4	29:4 92:8	4	79:1,25	63:17
78:3 84:19	Teddy 70:5	39:11,12,1	80:2 81:3	66:20
surveys	79:1,2	8,19	82:9,10,15	67:4,20
26:4,7	81:21	40:11,12	83:23	72:7
32:6	temporary	42:24,25	84:6,7,14	79:13,20
45:15,22	19:6	43:6	85:3,5,8,9	81:10,14,1
46:7	55:2,4	44:7,8,10,	,14,20	8 84:4
76:4,12	ten 36:21	13	87:17	they'd 51:12
85:1	53:7 78:13	45:2,3,12,	89:5,19,20	they're
	83:19,22	13,16,18,2	,23	36:6,9,17
<hr/>	tentative	0 46:24,25	90:9,18,25	50:7 62:3
T	80:19	47:4,5,9,1	91:2,8	64:10
table 4:1	tentatively	0,12	95:16,17,2	75:17
13:16	80:14	48:9,11,16	5	82:3,18
14:18	tents 88:11	,17	96:2,6,9,2	90:19
25:21	term 29:8	49:3,4,6,1	0,24	they've 43:7
tablespoon	33:1 52:8	0	97:3,4	96:7
46:17	94:20	50:13,14,2	thanks 72:24	thi 62:20
taking 13:6	terms 67:14	0	86:12 90:4	thickness
40:23 65:9	96:17	51:2,3,9,1	that's 13:8	76:17,21
84:17	terrain	4,15	16:18	thin 23:4
95:22	43:10	52:24,25	34:10	thirty 8:16
talk 43:9	61:15	53:1,2,6,7	35:14	thirty-four
64:2	territorial	,16,17,20,	36:12,18	20:4
talked 58:11	8:21 79:16	25	37:3,20	thirty-seven
talking	Territories	57:1,2,4,5	43:1,21	26:4
38:25 88:7	1:1	,13,14,19	50:7,17	thorough
tap 88:21	6:13,21	58:1,3,5,9	57:4 60:10	92:17
Tara 2:20,23	7:3,16,23	,16,17,19,	63:10,14	thoughts
13:21	8:23 12:5	24 59:8,20	64:5,11,19	11:11
taught 71:9	18:2,6,14	60:1	65:4 66:11	70:13
tea	29:25	62:7,9	69:5 71:12	74:23
89:3,22,25	30:8,20	63:5,7,9,1	72:10,16	75:2,5
90:3	79:6 81:1	3,15,20	79:11,12	82:25
	84:6 91:9	65:6,8,10,	81:15	85:17
		25	82:12	
		66:2,13,14	86:23	
		,16	87:16	
		67:8,9,11,	thawed 56:18	

90:11 96:3	22:4 24:20	89:4	<hr/>	41:1,23
thresholds	25:14,15	travels	<hr/> U <hr/>	53:10,11
48:20	trained 50:8	43:13	ultimately	69:20,21
throughout	training	truck 50:10	54:12	83:25 84:1
9:6 11:13	49:21	trying 66:18	understand	90:22 97:8
26:8 38:3	50:11	Tuk 35:2	40:16	upstream
42:13 50:6	transcript	59:6,16	51:25 52:3	36:10
76:6,8	4:15 14:21	66:19	75:11	usage 5:4
tight 41:5	86:17	84:20,21	89:10	users
till 88:11	87:12 90:8	88:5 89:1	understandin	30:9,14
title 59:17	transect	Tuk-Inuvik	g 9:15	32:15
today 6:18	76:7,14	34:2,4	60:1	utilized
7:20 9:9	translate	37:2 48:4	understood	42:7
10:16,19	76:9	68:24	46:11	utilizing
11:25	translated	71:6,16	undertaken	44:19
12:9,13	76:23	85:19	7:19 8:8	<hr/>
16:18 17:6	transportati	Tuktoyaktuk	17:20,22	V <hr/>
28:9 33:10	on 2:10	1:4,20	45:7,22	Valley 80:12
37:10	4:7,13 5:3	3:16 4:9	undertaking	VanGulck 2:6
51:18 75:2	7:11 13:21	10:20 11:1	15:17,21,2	12:17
79:4,24	17:3,25	12:2 14:2	4 17:21	variables
86:24 87:6	18:3,5,9,1	17:6 18:20	undertakings	21:24
89:9 96:3	2,15 19:13	19:18	4:3 5:1	various
today's	20:9 21:20	20:22	15:11	17:13
10:12	26:3 27:15	26:25 27:3	underwent	20:24
11:14	28:22	30:22	19:18	29:5,18
top 23:7	29:9,13,21	32:17	unfrozen	30:2 32:18
topic 58:7	30:10,16,1	33:24	26:11	76:22
total 38:3	8,21	37:16 42:7	unit 76:18	91:16
76:24	32:5,14,22	59:4 70:6	units 76:16	vast 73:4
84:23	91:1 92:1	71:1 79:2	unless 81:16	vegetation
to-	93:12 95:1	92:14	unlicensed	61:20
Tuktoyaktu	Transportati	turn 14:5	30:9,14	version 22:1
k 95:7	on's 17:11	twelve 92:22	upcoming	versus 41:2
towards	20:3 27:13	twenty 29:21	68:25	vertical
11:14	31:8	twenty-five	updated	44:24
20:25	transported	71:25	20:18	vibrate 14:6
95:18	26:25 27:2	twice 77:4	21:15	vice 6:13
town 30:23	trapper 35:1	84:19	upgrading	12:2 33:25
33:24	trappers	type 19:8	44:17	view 49:10
traditional	3:13,18	38:8,24	uplift 61:13	50:1
9:16 10:25	4:10 10:20	40:17 42:5	uplifted	viewing 9:9
70:14,21	11:2 12:3	43:10	56:5	10:2
71:6 72:20	14:3 16:15	54:10 73:7	upon 6:1,5	views 17:25
92:19	32:7 34:1	typically	9:8 15:9	
trail 90:4	35:15	26:10 32:1	39:13	
trails 19:5	71:1,4			
	73:9 87:5			

<p>31:22,24 32:9 45:24 withdrawals 46:9 withdrawn 5:3 39:2 wonderful 70:9 96:7 wondering 37:23 58:13 67:5 78:15 wor 38:16 work 21:7,8 34:19 38:5 43:20 45:7,10,16 48:15,20 58:12 75:9 93:17 96:7 worked 38:6 48:25 working 12:21,23 20:22,25 21:1 32:17 34:3 47:25 48:4 68:24 93:18 94:8 works 14:13 world 96:5 written 10:1 14:21 16:7,9,14 86:17,19 Wrong 12:13</p> <hr/> <p style="text-align: center;">Y</p> <hr/> <p>Yellowknife 10:4 12:23 yesterday 6:15 10:1 11:18 15:12,17,2 1 16:3,10,17 33:9 65:15</p>	<p>73:8 85:11,14 87:12 90:8 yet 38:16 82:18 you'll 68:16 78:13 yours 33:21 70:24 yourself 14:25 70:12 you've 33:14 90:1,5</p>			
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--	--