

**NATIONAL ENERGY BOARD
OFFICE NATIONAL DE L'ÉNERGIE**



**Public Review of the TGS NOPEC Geophysical ASA (TGS),
Petroleum Geo-Services (PGS) and Multi Klient Invest (MKI)
Northeastern Canada 2D Seismic Survey Application**

**Examen public de la demande d'autorisation de levés sismiques
bidimensionnels dans le nord-est du Canada présentée par
TGS NOPEC Geophysical ASA (TGS),
Petroleum Geo-Services (PGS) et
Multi Klient Invest MKI)**

VOLUME 1

**Meeting held at
Réunion tenue à**

**Atakaalik Community Hall
Pond Inlet, Nunavut**

**April 29, 2013
Le 29 avril 2013**

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**PUBLIC MEETINGS
RÉUNIONS PUBLIQUES**

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MEETING LOCATION/LIEU DE LA RÉUNION

Meeting held in Pond Inlet (Nunavut), Monday, April 29, 2013
Réunion tenue à Pond Inlet (Nunavut), lundi, le 29 avril 2013

BOARD PANEL/COMITÉ D'AUDIENCE DE L'OFFICE

D. Hamilton Member/Membre

APPEARANCES/COMPARUTIONS

(i)

APPLICANTS/DEMANDEURS

NEXUS Coastal

- Mr. Chris Milley

Petroleum Geo-Services (PGS)

- Mr. Garry Morrow

- Mr. Magnus Christiansen

TGS NOPEC Geophysical Company ASA (TGS)

- Mr. Troy Nelson

TABLE OF CONTENTS/TABLE DES MATIÈRES

(i)

Description	Paragraph No./No. de paragraphe
<u>AFTERNOON SESSION:</u>	
Opening remarks by Member Hamilton	1
Presentation by Mr. Garry Morrow	32
Question and answer session	80
- Mr. Jaykolasie Killiktee	
- Mr. Abraham Kublu	
- Mr. Elijah Panipakoocho	
- Mr. Joe Enook	
- Mr. Joshua Arreak	
- Mr. James Atahootak	
- Mr. C. Sanhoya	
- Mr. Ezekiel Moktar	
- Mr. Enookie Inuarak	
<u>EVENING SESSION:</u>	
Opening remarks by Member Hamilton	444
Presentation by Mr. Garry Morrow	481
Question and answer session	509
- Mr. Cornelius Kadloo Nutanik	
- Mr. Elijah Panipakoocho	
- Mr. Sam Omik	
- Ms. Jennifer Inuarak	
- Mr. Caleb Ootova	
- Mr. Ronnie Qiyucipik	
- Mr. Paniluk Sanhoya	
- Mr. J. Nashook	
- Ms. Mary Amagoalik	
- Mr. Nigel Qaumariaq	
- Mr. Purh	
- Mr. Moses Koonpaz	
- Mr. Timothy Aksarjuk	
- Mr. Caleb Sangyg	
- Mr. Jonah Koonark	
- Mr. Niko Inuarak	

--- Upon commencing at 2:24 p.m./L'audience débute à 14h24

1. **MEMBER HAMILTON:** Good afternoon. I'd like to thank the Hamlet Council and the Hunters and Trappers for taking the time to meet with us this afternoon since I know you've got meetings tonight that prevent you from coming to our public meeting.

2. And perhaps before we start, I'd like to ask Joshua to give us a prayer.

--- (Opening prayer/Prière d'ouverture)

3. **MEMBER HAMILTON:** My name is David Hamilton. I am the Member for the National Energy Board, the NEB. The National Energy Board or the NEB regulates oil and gas offshore activities in the Canadian Arctic.

4. Companies can ask the NEB for permission to undertake these types of activities. One of the NEB's role is to review proposed projects and approves or denies them.

5. The NEB has been asked to consider the application by MKI and its partners who would like to undertake, as you know, a 2D seismic work in Baffin Bay and Davis Strait. I was assigned by the Board to consider and undertake the review of that Application.

6. Some of you may recall that I was here along with the Chair of the National Energy Board in November last year, and we committed to come back to listen to your comments on the Application by MKI.

7. And before I ask the representatives of MKI to make a brief presentation, I would just like to quickly introduce the people that are with us from the Board today and I'd like them to stand.

8. We have Galina Doubrovina, who is our Project Manager. We have Christy Wickenheiser as our Environmental Specialist. Marie-Anick Elie is our Northern Coordinator, and she's at the back of the room. We have Julie Fisk who is our legal council and keeps me out of trouble. You always have to have a lawyer to keep you out of trouble. And Bharat Dixit is our Technical Leader for Exploration and Production.

9. And we'd also like to have Mali Curley with us and we understand that

Morgan is also helping her this afternoon; our Interpreters.

10. You will see that we are using the microphones and that is to help the interpreters. But also, the fact is that we are recording all the comments that people make here this afternoon -- and again this evening -- because it's important that we capture the comments that are being made on behalf of people on this Application and because those comments will help me consider whether I should approve -- recommend to approve or to deny the Application that is front of us.
11. So if you are speaking, which we hope you are and ask questions, that perhaps if you could indicate your name and then make your comments that would be very helpful so that we can ensure -- and we can give you copies of the transcript when we're finished, if you want to get copies to make sure that we have reflected everything correctly in your presentation.
12. As I said, the purpose of the meeting is to hear from you on the proposal by MKI for the Seismic Application.
13. And just a little bit of a background of what the National Energy Board's responsibility is, we are not part of the company. We're here to make the decision whether they should be allowed to undertake this work.
14. We're governed by the *Canadian Oil and Gas Operations Act*, and it requires us to regulate activities associated with oil and gas operations in the Canadian Arctic. That's everything outside the 12-mile limit because anything inside it, as you know, would be the responsibility of the Nunavut -- under the Nunavut Land Claim and the Nunavut organizations.
15. The main purpose of the Act is to promote the safety of communities, the public, workers and the protection of the environment and also the conservation of oil and gas resources.
16. So the Company, MKI and its partners, need to apply to us so they can obtain what we've called the "Geophysical Operations Authorization", which is a GOA, and they must also obtain an Operating Licence from the National Energy Board.
17. They also must file a Benefit Plan with Aboriginal Affairs and Northern Development and they must obtain a Certificate of Fitness by a recognized certifying authority. So they need all of those authorizations before

- they can begin the work.
18. The NEB takes a lifecycle approach to all its regulations -- regulating offshore seismic programs. Perhaps a better way to explain it was explained to us as our responsibility during the Arctic Review for offshore drilling was that we are the watchdog; that's the Board's job. The National Energy Board's job is a watch job -- watchdog and that communities will hold us accountable and we will hold companies accountable for their projects.
19. What that means is that we're not just here today -- the National Energy Board is not just here today and you won't see us ever again. How we approach assessing, we assess the application, which we are concluding with these community meetings, and if approved, the NEB undertakes monitoring and inspection during operations and we also review -- we review of the data and the reports.
20. Also, when Applicants, like MKI when they have to apply to us, they have also to assure us that they have a safety plan, a contingency plan, et cetera, and which we are -- technical which we review. They also have to have undertaken an environmental assessment that outlines the risks of the project and the mitigation measures that they will use.
21. MKI have filed a tremendous amount of information with the National Energy Board and that material has been reviewed and we are continuing to review it. And the last part of that is to hear from you.
22. We have received Letters of Comment from the Qikiqtani Inuit Association, Environment Canada, the Arctic Fisheries Alliance, the Baffin Fisheries Coalition, Fisheries and Oceans Canada, the Government of Nunavut and we have received letters from Shari Gearheard who is -- who has given us letters on behalf of the residents of Clyde River.
23. So in part of what we have done in assessing the environmental assessment, we have prepared a Discussion Paper which is available here, which I think has been circulated, and this outlines with the comments that we've heard on -- from communities and organizations and it also contains information of what the company have said what measures they will take to mitigate any potential risks with this project. And this is the document that we're looking for comment on from various people.

24. So that's what brought us to where we are now. We're here to get comments from the residents of Pond Inlet. We're also going to Clyde River, Qikiqtarjuaq and also Iqaluit to hold similar meetings in each of these communities to get comments.
25. So this is probably -- a funny thing to say this, this is your last chance to try and give us -- give me comments so that I can consider your comments and whether I should approve the application by MKI. And if it's approved, it could be approved with a number of conditions that they have to follow or, if I'm not satisfied that they're able to do all of these things, then I can deny the application.
26. So that is where we are today and I'd like if -- I know that MKI have had a lot of community meetings and they've been doing that in the last year and a half, two years nearly probably. And so I know some of you have heard from them before but they are the Applicant; they are the ones that want to be given this certificate. So I'm going to ask them, if that's okay with the Council and with hunters and trappers and people here, make a short presentation on where they are on what they're looking for, if that would be acceptable.
27. Yeah, go ahead then, please. And if you could probably, just for the record, introduce yourselves. I should have asked you to do that.
28. **MR. CHRIS MILLEY:** My name is Chris Milley. I'm a consultant with NEXUS Coastal Resource Management and I'm an Adjunct Professor at Dalhousie. So I've been involved with the community meetings up till now.
29. **MR. TROY NELSON:** My name is Troy Nelson. I'm with TGS, one of the partners in the MKI Program, Regulatory and Compliant Specialist, and I'm based out of Calgary, Alberta.
30. **MR. GARRY MORROW:** My name is Garry Morrow. I'm with PGS or MKI, as has been said here. I'm a Senior Project Manager for the company for the America's region and my specialty is geophysical operations.
31. **MR. MAGNUS CHRISTIANSEN:** My name is Magnus Christiansen. I'm the Global Environment Manager for PGS, based in Oslo, Norway.
32. **MR. GARRY MORROW:** Is it okay if I stand during this? I

- probably don't need it -- I probably don't need the microphone. I speak too loud most of the time.
33. Yeah, okay.
34. So as you guys know, there's been a lot of presentations made up here and I think most of them go over what we're trying to do geophysically. So this time up here what I thought I would do is put together a short presentation on actually our operations and how our operations work.
35. And in this case this is the actual vessel that would be doing the survey work if the application is approved. This is the Sanco Spirit. It is a Norwegian flag vessel, or I should say Gibraltar flag vessel now. Recently it was also flagged under the Canadian government.
36. So this vessel has been working off Labrador and Newfoundland for the last two years on other projects for ---
37. **MEMBER HAMILTON:** One second, please.
38. **MR. GARRY MORROW:** Yeah.
39. **MEMBER HAMILTON:** Maybe a little bit too fast as well, just slow down a little bit ---
40. **MR. GARRY MORROW:** Okay.
41. **MEMBER HAMILTON:** --- for the interpreters. Thanks.
42. Yes. There's a microphone here if you just want to -- thank you.
43. **MR. ABRAHAM KUBLU:** I'm terrible with acronym; I could make up any kind of acronym. Can you specify PGS and TGS, the actual name of the company, please?
44. **MR. GARRY MORROW:** Yes, I could.
45. For PGS, it stands for Petroleum Geo-Services. And for TGS, it's Tomlinson Geophysical Services, which goes back to the founder of TGS, his name was Tomlinson.

46. And I'll stop using the acronyms, because like you, I don't like them. And if you see any in my presentation, point them out and I'll make sure that we expand on it.
47. But that's the vessel that would be doing the work. And to give you -- to give you an idea because a lot of times pictures don't do very well, this vessel here is right at 88 to 89 metres in length, and it's 16 metres in width, so it's a fairly sizeable ship. And as we'll see going on it's fairly well equipped.
48. We can go on to the next one, Christy.
49. So I know everybody has kind of seen this and this has been reviewed up here in the past, but I just wanted to go over a few things. So for this year the survey lines for 2013 are shown on the map, okay. You've seen other maps that contain more lines and that's, you know, optimistic of the program perhaps going over multiple years.
50. In this case here what I've put up here on this map is what we think that we realistically could acquire in 2013. And so that comprises of just over 5,000 saline kilometres. So in 2D sense we sail each one of these black lines and that's where we actually record the survey data, is along those lines.
51. The survey is expected to take place between September and October, so obviously later in the season, ice permitting and numerous other factors. That is the timing that we hope for.
52. When surveying the ship travels at roughly 4.2 to 4.9 -- 4.5 knots, so just at 8 kilometres per hour. So it's not really progressing very fast. So it's slow and its restricted manoeuvrability because of the equipment that is off the back end of the boat. So that's where all the equipment is towed from is from the stern of the boat.
53. The survey area this year and in forthcoming years is located well off shore and so there's no lines within 12 miles of the coast. Likewise, all the survey lines are outside the land fast area so -- land fast ice area.
54. When going in between survey lines, one thing to take a note and none of these maps really depict it very well, but that's quite a large area as we know from -- where the southern end of the survey is up to the northern end of the

survey.

55. And so in between those lines, some of the distances can be quite lengthy and it's good to note that during those distances, that we generally -- we don't record anything. We don't have the source array running unless we're required for the mitigation gun that we normally keep going.
56. So that means that the power output of the sound is ramped down very low and so there will be extended periods that we won't be surveying anything while we're transiting through these areas.
57. So next one, please.
58. I thought I'd give you a little picture of where everything is controlled from on board the vessel. So you can kind of imagine that there's a lot of things to monitor while we do this work, and you can see that's a good picture of the control room; you can see all the monitors that they have.
59. So each one of those has different and various information on it, you know, that's vital to monitoring everything that's in the water. And so -- you know, that includes not only the equipment that we tow but also the marine mammal observers report down to the control room any sightings that they have, if it's necessary to do any stoppage of work. Then that is done and that's all initiated here in this control room.
60. The control room always has people in it, as you can imagine, with all the equipment and everything going on. It's a 24-hour a day operation, seven days a week. So even if we're not in a mode where we're recording, even if the equipment's recovered, generally somebody is always monitoring what's going on ship work wise. Much less than what I didn't depict in here is up on the bridge where the captain and all those crew are at too. They have a lot of these monitors up there too to also monitor all the activities.
61. This is the survey cable. So this is the cable that we actually tow when we're doing the survey work. This is the cable actually on a reel, and I'm sorry, I didn't have a really good picture; it's at a strange angle here for it. But on this particular project, we're looking at towing a cable that's 8,100 metres in length.
62. And I might add, and I didn't show it on here, but the cable has -- every 300 metres it's had what's called a "depth steering device" and that steering

- device takes this cable down to 25 metres where we'll be towing it at. The -- also with those depth steering devices, they have highly sensitive compasses in it and so combined with the ship board navigation equipment, all of that is monitored inside the boat. So we know exactly where that cable's at, we know its exact position.
63. And even if the currents affect it, and say push it to the side, which is common occurrences you know, we know exactly where that cable is at and we have all that depicted in animation, in real-time. So, like I say, we monitor everything and it's all done in real-time and a lot of involvement in it.
64. Of course, you guys have heard before the cable contained sensors which record the different sounds coming from the earth. So that's the whole objective here, is to record the sounds that come back. This cable -- this particular cable that we use up here is filled with an environmentally safe gel. So you can basically ascertain that it's solid in composition and it prevents anything from -- if you had a catastrophic accident from going into the sea.
65. I would say, to give an analogy of what it's like, what would you think Troy? Something more like solid Jell-O almost. So kind of soft, kind of pliable but it's not in a liquid form.
66. This is the stern of the vessel and basically the picture on the left-hand side where you kind of see the ramp coming down the back, that is where the sound source would be deployed from.
67. And from that slight, upper deck that's covered up there is where the seismic cable would come from -- or the cable would come from up there on that deck, out into the water.
68. I've -- on the right-hand side here, this shows the sound source and you can see the silver elements down here below and this gray, round thing up here on the top is actually the flotation device. So that floats on top of the surface and then the sound source is down, just below the surface and that's how that's towed.
69. Likewise, that whole setup is equipped with global positioning so we always know where it's at. It's also equipped with transducers so we know the exact depth.

70. Next one, this is a little animation here and it kind of shows -- you can see on the top the sea surface and then you can see where the little sign says, "Detectors" there. And so that would basically depict the cable and of course it's 8,100 metres back, and then of course you have the sound source there that is basically near the stern of the vessel.
71. And actually, if you hit that little arrow down there, it should animate. And this animation here to the left is a little bit of a diagram showing the sound source.
72. And you can see what it does is it uses compressed air, and it's almost like a piston in a motorized type of vehicle, in that once it gets an impulse from the room on board the ship, it actually opens up and it lets the compressed air out and that's depicted on the right-hand side animation there.
73. And you can click it one more time. Oops. Anyway, we'll get back to that.
74. Anyway, you can see that the sound impulses would go down and then the objective is to record what's below the sea surface. And hopefully that was a little bit informative.
75. You can go to the next one. That's really all I have, you know. Thank you very much and if there's any questions, we'll all try to answer them for you.
76. **MEMBER HAMILTON:** Thanks, Garry.
77. So the floor is open for anybody that would like to ask questions. Our job here today -- my job is to hear your questions and comments and anything that we can -- I can add, sir, on behalf of the Board of what our responsibility is but the questions would normally be directed to the company with some other stuff.
78. So I will go to -- and if you could just indicate who you are for the record and then we'll go with your comments or questions.
79. Thank you.
80. **MR. JAYKOLASIE KILLIKTEE (through interpreter):** Thank you, Mr. Chair. I am Jaykolasie Killiktee, the Mayor of Pond Inlet.

81. First of all, I'd like to welcome you guys to the community. It's glad -- we're glad that you were able to make it to the community.
82. Last year, you had stated that you would be coming back to the community and we've been expecting your visit. And so we're glad you're here and we hope -- we extend our hospitality to you and your employees to the community. We apologize that the Hamlet Council won't be able to make tonight's meeting. We're glad we are able to make this meeting.
83. First, I'll explain the person on my right. It's our SAO at Hamlet, Mike Rudkin. And please let the Hamlet Council stand up so we will know who they are. These are the councillors for the Hamlet.
84. This evening we'll be holding other meetings and we do want to join perhaps anyone who have same as -- that you need to hear.
85. Welcome every time you come to the community. Pond Inlet is very desirable to go to so I bid you a warm welcome to the community. Pond Inlet people are always welcoming; while you're here, welcome; enjoy your stay.
86. If I can't make it this evening, I won't be able to make it this evening. When you return, on your way home, have a safe flight and -- have a safe flight. We're glad that you were able to make it to the community. We're happy that we have been given an opportunity to state their cases at this hearing. We're very glad that this process is taking place and we're very glad that it is taking place as community members do want to take part in processes regarding environmental projects.
87. I want to state this: The area near the community of Pond Inlet is being looked at very eagerly. I had not wanted to discuss Baffin Land, but we need to state Mary River. Mary River's up -- starting to get up and running and the areas around -- the waters around Pond Inlet are being looked at. And in Pond Inlet or the area around Pond Inlet, I think we have no contingency plans for ship accidents and we want you guys who are here to know that we have no emergency equipment in the community of Pond Inlet.
88. Let's say, for example, a ship had an accident, the community of Pond Inlet wouldn't be ready to deal with an emergency situation.

89. And we, the community members of Pond Inlet, we know that our community is under very close scrutiny and we too want this to be well realized by the company requesting that -- as you're starting your company, we, the community of Pond Inlet people, do know your project needs approval. And please note that, if our environment is affected, then the community of Pond Inlet is immediately also affected.
90. And we always want you to include that, if there are projects around the community of Pond Inlet that the community members do benefit from the project. If the area around Pond Inlet is affected, Pond Inlet is immediately affected.
91. I thank you very much for giving me the opportunity to state my statement. I believe my fellow community members do have questions and I urge you to feel welcome here in the community during your stay. Thank you.
92. **MR. ABRAHAM KUBLU:** One, two. Abraham Kublu, Hamlet Councillor. First of all, I'd like to welcome everyone.
93. **(Through interpreter):** I would like to identify what I have seen around Pond Inlet area.
94. Around 2008, towards the Greenland, there was some oil exploration and there were more animals near Pond Inlet and more seals, more walrus or ringed seals. And also in that summer -- in summer of 2008, there was some -- quite a bit of activity going on near Godthab in Greenland near Pond Inlet. And there was some strange things happening near Pond Inlet. There were cod fish streams.
95. In Pond Inlet, there was -- we were able to catch narwhal trapped in the ice not too far from Pond Inlet. So we were able to get -- harvest some beluga. Nanortalik, Labrador and Northern Quebec, we were able to send them some muktuk from these harvest and we were able to send some muktuk to those who are requesting.
96. The wildlife in our area, if there was any damages or if they're dying off, where can we turn to ask people of Pond Inlet if there's any damages, if we were to see another strange things happening? And that's a question I have.
97. And during the winter, we were told when there was a whaling study

- going on and using the -- they said that they would use Inuit traditional knowledge and we also would like to hear from the Hamlet Council about traditional knowledge.
98. **MEMBER HAMILTON:** And perhaps Andy from MKI Partners wanted to address perhaps something the -- anything the deputy mayor said or anything the councillor said.
99. **MR. CHRIS MILLEY:** The -- with respect to the concern about shipping, this is not only a concern of people of Pond Inlet but of a lot of people because the increased shipping is an issue that if -- it's one of these issues of cumulative impacts that -- with the exploration work is for one time, it's done but the shipping is an ongoing -- sorry -- the shipping is ongoing so that's something that people have to separate what the issues are and try to figure out what's the best way of protecting your community at the same time of benefiting from development.
100. The development of the port is something that is of interest as well because, if you have the capacity to provide emergency response, it's something that the others would benefit including the exploration.
101. With respect to the marine mammals and the change in marine mammals, that's a -- I think not just in Pond Inlet but, globally, the companies are starting to be more and more concerned about and they've changed the way they do things from the past.
102. And the commitment to use Inuit observers on the boats so that the knowledge is there on the boat and people are keeping an eye so that they don't create a problem, they don't create an impact. But also the use of, you were saying your traditional knowledge and IQ, that's being discussed as one of the future interactions of how can they -- how can we work together instead of do a project and then leave.
103. Okay?
104. **MR. ABRAHAM KUBLU (through interpreter):** Thank you. I'm Abraham Kublu from -- one the Hamlet Council. I have some questions that I'd like to get some clarification on.
105. Looking at the map on the screen, because I know three places near

- Pond Inlet that there's some ukpuks, seabirds, and around that area and there's a sanctuary around there and they nest in these area, ukpuks and different types of the seabirds.
106. Do you have any precaution that would least affect these areas where seabird nests? And I would like to get some clarification.
107. **MR. CHRIS MILLEY:** To me again.
108. The -- with respect to the shoreline birds, the -- one of the -- besides having marine mammal observers, the marine mammal observers are trained to look for seabirds as well so that they can avoid anything. But all of the work is offshore.
109. So it's quite a large distance away from any of the shoreline bird colonies.
110. And in addition to that, the nature of the IQ research is going to inform the company of where things are from your perspective and your knowledge, not just -- but is available in the literature. It's getting the most recent and up-to-date information from the communities.
111. Ah, yes, and there is also each community will have a community liaison officer who will be able to interact with the vessel operations so that they know what's going on and where and when.
- (A short pause/Courte pause)
112. **MR. ABRAHAM KUBLU (through interpreter):** When you're talking seismic testing, the food of the birds like cod and others, if they had been polluted, the birds will be affected.
113. What contingency plans do you have to further protect the food -- the food? Thank you.
114. **MR. GARY MORROW:** ... with PGS.
115. Yeah, the ship before it can go above certain latitudes has to comply with all the Canadian Coast Guard regulations, plus the ship goes through its yearly inspections from Det Norske Veritas, one of the major inspection agencies.

- So it has to be fully compliant with all the regulatory requirements, not only for international shipping, but also for ships working in Canada.
116. And we do also submit a pollution plan, too, and -- plus the insurances and everything else that go along with that.
117. **MR. ABRAHAM KUBLU (through interpreter):** Thank you.
Abraham Kublu.
118. My last question is: It was stated that the long cable is 8,100 metres long. I have a question regarding that.
119. Our waters have very strong currents, and it does have ice flows. If you get too close to ice flows or the 8,100 metre-long cable snaps, your project would be delayed.
120. What other things could you do if that were -- if the cable were to snap? Thank you.
121. **MR. GARY MORROW:** Gary Morrow, again, with PGS.
122. The cable is equipped with some other electronics on it that are called "retrievers". So if the cable actually snapped, number one, it is set to come up to the surface. So it has flotation devices spaced on it and they have a triggering mechanism, and that would bring the cable up to the surface so we could recover it.
123. For your first question pertaining to the ice, we also use a support vessel with our operation, and it is generally our practice to run that support operation well in advance of the actual survey ship itself to spot and look for any ice.
124. Of course, we also use satellite imagery and stuff to track ice flow movement, and so those are a couple of things that we do.
125. As far as the impact on losing it, we would hope that we would retrieve it. We do have spare seismic cable or cable on board the vessel but, in most instances, with our experience in working in other Arctic regions and everything, we're highly sensitive to that and we're very, very careful in what we do and we don't like to get near the ice at all.

126. **MEMBER HAMILTON:** I see another question over by the -- thank you. Go ahead.
127. **MR. ELIJAH PANIPAKOOCHO (through interpreter):** Thank you, Mr. Chair. My name is Elijah Panipakoocho. I represent the Hamlet -- the Hunters' and Trappers' Association. I will go to the map also.
128. I'll give a short story for you guys to consider how it operates.
129. I've lived everywhere in this area. I know -- I'm very intimate with the ice flow movements in the area. In Greenland, I've lived up there and I've lived higher up there.
130. This area has a current that flows upwards and the current flows downwards through here. The current's always going, and we have a current that's always moving that direction. And the current goes through the channel here and it goes back and forth. It comes on that side sometimes. And that's how the currents are set up.
131. Ice along here is always flowing downhill, always continually flowing down. That's the state of the currents according to our knowledge.
132. Icebergs from this area always are blown by the wind into here, and this area becomes littered with icebergs from that area.
133. It's possible to imagine there's that. That was my short report regarding currents and weather.
134. Last year, during the spring and July -- I remember it was July 19 -- they travelled through here. Animals, narwhal and assorted marine mammals that were together, whales, killer whales, walrus, seals all travel through here at the same time and I had asked about that, what had caused that strange event.
135. And we had marine mammals we had never seen before come through here also.
136. There's that. It turns out apparently that was the first time the seismic activity was starting and we caught all those narwhal nearby the island. And there were 630 of them and they were trapped in the ice and we had no choice but to

- harvest them.
137. We didn't want to kill that many narwhal. There were too many. But it's still good food, so we harvested all them and it turns out this was at the time the seismic exploration was occurring.
138. We still haven't heard why those different assorted animals all travelled through here at the same time. That's the situation.
139. Two years ago, perhaps three years ago now, people from Cambridge Bay started saying there were lots of narwhals in that area. We know that narwhal only hang around in the deep waters, and this area is too shallow for narwhal, along with this area. We know this.
140. And today, all the hunters -- those who go hunting looking for food daily, they travel from here to down there to hunt seals for food. That's still happening today. They still haven't stopped hunting.
141. When they -- when they're short on cash, they go down there to get free food. And last Saturday, we caught three seals from that area.
142. This area is our seal hunting area, and we want people to know that. And we want you to know that if you affect this area, you'll know this.
143. It's uncertain how, if there were an oil spill in this area -- people have requested to do exploration in this area. If there were to be an oil spill, we humans unfortunately can't eat oil and when animals have been coated with oil, you can't eat them anymore immediately, and that's a concern that you'll be aware of.
144. But to my life, we would be affected if seals and assorted animals do hang around in this area during the summer, narwhal whales and assorted marine mammals, assorted marine breeding mammals, including polar bear during the summer. The males stay in the ocean hunting seals during the summer and they get fatter during the summer, as they have more food during the summer and ice is not a problem to them anymore.
145. So I wanted to relate these, polar bear are fatter during the spring than -- spring and winter, they're usually thinner when they haven't fed for a long time. Some of them don't eat all winter, some polar bears while in their dens.

146. My question is: The seismic is not very good for the whales because they run away from the testing area. We have different types of whales. When we can't find a whale, we tap on our boat to find where they are, and that's how knowledgeable we are how we can find our animals. And there were whales harvested pretty well all summer and during the winter. Even if it's darkness, people are still hunting by Skidoos.
147. I'm bringing this up so that you'll know what type of activities we do. These are the areas where -- what I know and what I've experienced.
148. Around here, there was a study done in a place called "Tuqqayaq" -- Cape Hatt -- Seapak -- Cape Hatt -- they did a study, the place called "Cape Hatt", an inlet, and they poured some type of oil to see how it would be difficult to clean it up. I have worked with these people, the Cape Hatt. There used to be fish separately, a really good char, a really good fish that doesn't come here too often.
149. After the testing, we can't find anymore fish in that area. In a little inlet, there used to be thousands of fish but people have not been able to see any fish in that area where there was some testing.
150. So if there was to be an oil spill, my question would be: How long about would it take to get it cleaned up in the bottom of the sea because we still can see the bottom of the sea, from that testing, it's still there and they pretended to clean it up with different types of chemicals and they're poisonous. This is the main concern that I have that I wanted to bring up.
151. I just welcome you if you want to do some testing, but it could be a good project if nobody says anything from us. It's good for us and for everyone but I will always be concerned about that area. I have been living in that area more than 50 years and I only live on country food. And when I have money, I sometimes go to the store, buy some, and that's how I live.
152. And the wind comes from -- around, from up there, then, the iceberg comes in or the ice and from the other side too.
153. I want to keep -- continue to eat seal. Seals are the best food that we have in that area. Thank you. I don't have too much to say.
154. **MEMBER HAMILTON:** I don't know if MKI want to offer any

- commentary?
155. **MR. GARRY MORROW:** (Off microphone).
156. **MEMBER HAMILTON:** Could you hold your mic a little bit closer? Thanks, Garry.
157. **MR. GARRY MORROW:** Yes, I think there's a couple of different comments that we would have across us all here.
158. I think I'll address the first one, which was the -- which was his explanation of the currents up there.
159. That's great information. That's good local knowledge. That's what we're looking for in the Operations end. I mean, that's invaluable to us. So that type of local knowledge is just great. That's fantastic.
160. I'll skip down to one of the last comments there -- and we share his concern also on all the points that he made. One thing to bear in mind is what we're doing with the survey and the survey ship itself is one of the new modern vessels. So everything that we do carry onboard is very light oil that evaporates. And so that goes into the type of hydraulic fluid we use and also the type of fuel that we actually use to fuel this vessel.
161. And so that's very light oil so it's not in a sense like, say, drilling or anything like that or some of the big ships.
162. And I think I'll pass it over to Chris.
163. **MR. CHRIS MILLEY:** First of all, I just want to say, once again, I'm in awe of the knowledge that some people have, and I have a lot of respect for the experience.
164. The issue of the lines coming in close proximity to areas of important resources was addressed at one of the earlier meetings when we were here and the companies have agreed to modify the -- how close they were coming to the shore. And that was very early on when we met with people from the community and from Qikiqtani Inuit Association when there was the Oil and Gas Conference.
165. So that has been addressed, hopefully, to your satisfaction.

166. The other is: The issue of oil spills comes up a lot and there is a lot of work that's been done on that. But this project is not about drilling, this project is about the seismic survey. So the results of the survey could be used to show that there isn't the opportunity for oil as well as there is the opportunity for oil. So it's too early to determine what kind of risks there are related to that.
167. The other thing is the issue around the change in migration of the narwhal in 2008. When we were here in December, we heard the stories and went back and researched the information on this. It was provided through one of your council members, and we sent some information up. I don't know if that's been shared.
168. What I will do this evening is get a copy of that and bring it to the Hamlet office tomorrow, so you will have that information as well.
169. **MEMBER HAMILTON:** Pardon me, Chris.
170. We have one, two, three recognized speakers in the back. So whoever wants to go first, you can fight over it, but I think I recognize the MLA.
171. **MR. JOE ENOOK (through interpreter):** Thank you. Can you hear me?
172. I am Joe Enook, MLA for Pond Inlet. First of all let me say I have no idea what your project is about because I have never been involved and never worked and I could get the information from what you have written down. So that's why I have some questions on your proposed project.
173. First of all, the question I'd like to pose is that project that you want to do is in Arctic obviously, where the ice -- where there's ice. Have you ever experienced and worked on the same scenario in different world or other countries?
174. **MR. GARRY MORROW:** Yes. To answer your question, yes, we've worked extensively throughout Greenland. Our partners here with TGS have also conducted work in Greenland. They have also conducted work in the Russian Arctic and likewise we have up off of Norway. And so we have a fair amount of recent work experience and long-term work experience in the Arctic.

175. **MR. JOE ENOOK (through interpreter):** Joe Enook, MLA for Pond Inlet. Thank you.
176. If I could continue. Since you are experienced with different activities in Greenland, Russia, they probably have ice too. And I have some concerns that are written down.
177. When there's any -- when there's any project proposed and there were some question raised too. Maybe I shouldn't be asking you because you won't be -- you won't say what you don't want to hear.
178. If you can tell me relatively true, while you're doing this project which animal would have the most effect -- which negative effect have you noticed most on animals during your projects?
179. **MR. CHRIS MILLEY:** Hello. That's a very difficult question to answer because we're not the core experts. I actually have my colleagues who are the marine biologists that were here with me last time and most of you have met.
180. But I can ask the question and -- by email and respond either through the NEB or directly to you or both, and get the answers back about the level of effects on different classes of animals.
181. **MEMBER HAMILTON:** Just to make sure, yes, if you do respond, then it should be to us and to them as well, so that we have it for the record, yeah.
182. **MR. JOE ENOOK (through interpreter):** Thank you. Joe Enook, MLA for Pond.
183. Be that as it may, your answer is okay but I want to ask another question. In the years that you did projects in the Arctic and Greenland and Russian waters along with Russian waters and other places, you -- it seems like you could have brought the information you used from those projects that you could plan ahead that people might ask you these questions.
184. Our hearing will be ending; I don't want this to happen. That while we're waiting for answers the decision makers had gotten -- made a decision already while we're waiting for an answer. I notice that suddenly that you don't know too much about this stuff.

185. If you had actually done these things you would know what to expect, like what effects you've had on animals, perhaps like any small marine organisms. There must be something written down. We have lots of questions.
186. I think we all know that the ocean is very important to Inuit and if something happens very far away, we will be affected. So it would have been nice to hear about all the many things -- projects you had done, what you had noticed affecting the animals. There must be some information. I understand I will be getting an answer in the future, but when? It doesn't help me today.
187. And the question I want to ask, once you do your survey, you stated I had concerns about or perhaps I was misunderstood and perhaps somebody will speak better on it, I do try and read both different things.
188. I had heard a little bit that it may be written somewhere that there's lots of natural gas down there. And you stated it's unknown whether there are any reserves, so I didn't understand this. It seems there are documents stating there are reserves, many, many reserves. And not too long ago I had asked within the Legislative Assembly about the sea near Clyde River in the ocean, the ocean sea, and you stated you didn't know whether there were any reserves and further clarification after you're done dealing with this, then what?
189. Thank you.
190. **MR. CHRIS MILLEY:** First of all, the -- my comment about the getting back to you with information isn't that we don't know, it's in previous meetings we were asked the questions, we collected the information but I don't have it with me right now because of the -- our understanding of the process here is somewhat cloudy.
191. We do know that different marine mammals have different ranges of sounds that they generate and as a result they are impacted by different ranges of sound in different frequencies at different ranges of distance. That's been documented, that's -- there's a lot of research around the world that has been done on that, not just for seismic surveys but for other reasons as well. And that information has been compiled by my colleagues and had been provided to the communities after we had been around for previous meetings. I will try to get that information to you as soon as possible, as in days, it's not weeks.
192. And then the other question ---

193. **MEMBER HAMILTON:** It was pertaining to the oil and gas seeps. I think Troy wanted to answer.
194. **MR. TROY NELSON:** Yeah, that's one thing -- Troy Nelson with TGS -- I'd like to clarify.
195. I mean we go out and do these seismic surveys to kind of help map the subsurface, the geology beneath the water. And basically that information is used by the oil and gas companies which do the drilling, which we don't do, we just do the seismic surveys, and they will use this information to assess whether this area has potential for them to come and drill for the oil or the gas.
196. They use this information and do their analysis and do -- you know, it's kind of beyond us, they kind of use this information and then they kind of -- "Should we come up here to drill or shouldn't we". So it just gives them more educated and analysis that makes them have better decisions on where to drill and where not to drill.
197. **MR. JOE ENOOK (through interpreter):** Perhaps my last question -- Joe Enook.
198. After you're done with this project, you had stated that perhaps after four or five years -- I think it was five years -- the information you collect, who do you then sell -- who do you then sell this information -- who will you sell this information to, to oil companies?
199. Thank you.
200. **MR. TROY NELSON:** Sorry; Troy with DGS again.
201. That's a very good question. It's potential companies that are interested in coming up to the area. They'll use the seismic information to determine whether they want to -- if -- you know, if they release oil and gas lease blocks offshore here, and they'll use that to assess the potential for coming up here.
202. So right now, I'm not exactly 100 percent sure because that's still in development on who may potentially want to use this information, but that will be forthcoming.

203. Hopefully that answers your question; sorry.
204. **MR. JOE ENOOK (through interpreter):** Last statement, for sure.
205. Your study -- after your study, research to oil companies to those who want to hear about it, you'll probably sell them to, of course. Before that survey, you had stated -- you had done surveys and you stated you did surveys in Baffin -- no, Greenland waters. Also in Russian waters, you stated. Yet be that as it may, that you will send the information.
206. What -- from your study surveys did you find that you were not expecting? Thank you.
207. **MR. GARRY MORROW:** On our surveys we conducted in Greenland, I think that the preparation that we did before going up there proved very valuable, and also getting as much knowledge as we could before we conducted those surveys.
208. I think as far as marine mammals go, we had a fair amount of sightings. We collected a fair amount of data that was passed on to the regulatory agencies that were involved in that. And I think the biggest thing that we noted was weather change, you know, difference in weather, difference in the season. A couple of seasons in Greenland, we were able to continue surveying late into the season, well past what we expected.
209. I know that's probably not the answer that you wanted to hear, but that's what we learned from it, so basically weather change.
210. **MEMBER HAMILTON:** Troy?
211. **MR. TROY NELSON:** I'd just like to add, that's why these meetings are so important. I mean, what we do over in somewhere like Russia versus Norway versus here, I mean, it is different.
212. I mean, it's the Arctic, but it's important to come to the communities to hear how it's impacted. Your traditional knowledge is huge, I mean, in terms of you talked about the ice forecasting and stuff like that.
213. I mean, we can only use satellite imagery and technology as much as

- we can, but it's the people in these communities that have lived with, you know, the different ice and they know how it works and how the -- you know, the different oceans and the seas work. And that kind of interaction using community liaison officers and having these meetings at the hamlets and the different communities is invaluable into how we operate or program effectively, environmentally friendly, and have the least amount of impacts on the communities that we have involved.
214. **MEMBER HAMILTON:** I just want to make sure that we close the loop on the information so that -- now, you indicated -- I agree with you. I wouldn't want to miss something that may be important to making the decision. So I'll take Chris up on his offer and give him a -- like on our discussion paper, we've given until May the 3rd to get comments. So I'll give you to May the 3rd to file it with us and to get it back to the community. Then we know the record is complete then. I didn't want to miss that point.
215. Number 2 in the middle and then 3 and 4 and 5.
216. **MR. JOSHUA ARREAK (through interpreter):** Okay. Joshua Arreak, from the Hamlet.
217. First of all, my question is especially for the sea mammals or for whales. When you do -- when you do the seismic, how -- have you done studies to find out how much your seismic numbers affect the marine wildlife, like narwhal? Thank you.
218. **MR. CHRIS MILLEY:** The question is, is the information that I'm getting sent back to me here, it will address the same thing because a lot of work has been done in other areas because of the same kind of concerns, for example, in the Gulf of St. Lawrence off of Newfoundland in the -- and the Gulf of Mexico.
219. The same questions are -- and the same concerns are there of people who live and depend on the sea, so the work has been done in various places. That's the kind of information that we've compiled and I will get sent up.
220. **MR. JOSHUA ARREAK (through interpreter):** Thank you.
221. Perhaps it would be okay if we all heard about Arctic studies.
222. We Inuit are not also ignorant. We have learned about the weather and

- the environment, so the reason I ask that question, what we hear on the -- from the outside is -- what we hear through there is said to be not as loud as what we hear in the water and can't travel as far. And the reason they stated was that we do have knowledge.
223. We do know that even without a report, it was stated that in 2008 we had narwhal frozen in, and apparently there have been seismic activity in Baffin Bay at that time. We understand that narwhal flee activity. Well, marine wildlife flee, especially narwhal, flee activity. And we understood that they were frozen and due to seismic activity. And we understand this kind of effect seismic activity can have, even though they say the popper's not that loud. That was my statement.
224. And the other thing, universities -- University of Manitoba people and from Trent University came up here to give us reports that they stated there are reserves in Baffin Bay, approximately 10 billion barrels worth, or perhaps even more or less, but it's in that area.
225. When they know this information already, why do you need to do further studies in this area? That's my first question. Thank you.
226. **MR. GARRY MORROW:** Garry Morrow, with PGS.
227. As far as the studies go, and there's a few more geophysicists, I think, sitting next to me and they could really answer that one in detail.
228. But even though people estimate the reserves in a potential area, you would not know where to go drill without the seismic information. So what we try to do here with the technology is pin-point exactly where those reserves are.
229. So that prevents a lot of activity these days by doing the seismic and as high definition as it is, so it gives the oil companies a good look and good potential where they would need to go to drill instead of the oil companies coming out with a bunch of rigs just to drill exploratory wells without knowing where to go.
230. **MEMBER HAMILTON:** Okay. Going to meet the gentleman next to you, and then I have another gentlemen over here and then gentleman with the brown t-shirt after that.

231. **UNIDENTIFIED SPEAKER (through interpreter):** I will pass the mic over. Thank you.
232. **MR. JAMES ATAHOOTAK (through interpreter):** Thank you. I have many questions, but -- my name is James Atahootak. I represent the Hamlet of Pond Inlet. Well, it was stated that I was a Hamlet Councillor.
233. Mr. Speaker, I want to ask, the seismic testing, do they bring their poppers like seismic equipment? I want to know this. I want to hear this.
234. Without having seen how strong or loud it is, I won't believe your statements. I do see that there's a picture of a ship trailing equipment with pointy arrows but I don't see a popper on here and that's regrettable.
235. I want to use this as an example. On the map with the grids, approximately directly across from Pangnirtung, Broughton Island area with that little grid, Scott Inlet -- it's called Scott Inlet. Thank you for his spell.
236. From there, for example, I will use as an example on asking about it, that this ship from there starts popping seismic activity, firing its seismometer, how long -- how far would the sound carry?
237. Water -- sound travels differently through water than sound. How far away would the sound reach; would it reach Greenland? How many kilometres can the sound reach in water? I want an answer first, please and thank you.
238. **MR. CHRIS MILLEY:** When we were here in December, one of the other gentleman from the same company as Troy gave a presentation to the community and it had all of that information in it. I think that was forwarded to the NEB that -- the materials for that, so that information is on file about how far the sound travels.
239. But he demonstrated at that -- in the presentation was the -- there's basically a 10-kilometre radius where the sound is the most intense but not harmful, not lethal to animals, and that's why they keep the -- that radius is where they keep the marine mammal observers to make sure that there is no animals within the area where it could create the discomfort.
240. The other thing that he noted -- this is a man who was -- he's retired now but he's still working and he has a lot of experience in doing this kind of

work all around the world, he had -- she said at times they found that the whales were attracted to the seismic vessel because of curiosity.

241. So it -- there's some animals run and some animals who are attracted. So it's not the kind of thing that all animals behave the same way. It's like humans, some people run away, some people go and look. It's the same with marine mammals.

242. **MR. JAMES ATAHOOTAK (through interpreter):** My second question was not answered. In regards to the airguns, I just wanted to see a sample or if you brought anything. I'm not believing that it reaches only 10 kilometres. If it goes beyond that I would like to find out because we have very -- we have animals that hears -- their hearings are very sensitive. So that's why I wanted to see the sample of an airgun that you use to make the sound.

243. Marine mammals are part of our life, and near Igloolik Lake and near Cambridge Bay the narwhal never used to go to those areas and apparently they are reaching that far for those reasons. They are running away from this area because of this testing. I think it's very dangerous if you were a mammal under the water with this sound. If I was a mammal I would be scared and run away with that type of sound.

244. So I would like to see the actual gun that you guys use to make that sound and since you say that you have done some study in different Arctic areas. It would be good to show the people these airguns or any samples that they can see or -- when somebody is proposing something, all they bring out is the benefits, no problem whatsoever.

245. Perhaps maybe there is unforeseen bad affects that happen -- which happens, and there was some questions that you didn't answer and to see what you noticed about these testing under water. All you say is things are well and nothing's going to go wrong.

246. I do have a number of questions but I know that there's other people that wants to speak. I think you done studies -- those lines maybe you know that area or you want to do the study and you wanted to start sometime in the fall. There's heavy waves in that area around that time and I think you're going to have problems with the wires pulling the streamer. And with the changes of the weather there's -- you have to be careful. And I would like some answers.

247. Thank you.
248. **MR. GARRY MORROW:** Garry Morrow with PGS. I'll answer the question concerning the cable and the weather and the currents.
249. The design, which I didn't go into in the previous question where I answered it sort of similar, and I didn't show in the PowerPoint presentation, is that the streamer that we tow and the technology that we use is built to withstand pretty harsh environmental conditions. And one of the things that we're doing up here is we're towing the cable down at 25 metres of depth.
250. The cable also has a bunch of tension meters built into it so we actually know when to reduce the speed, reduce the tension that is produced by the vessel itself. This equipment is designed, unlike like some of the other equipment that's out there, to work in pretty harsh environmental conditions and so, so far, it's been very reliable.
251. **MEMBER HAMILTON:** Anything else you wanted to add, Troy?
252. **MR. TROY NELSON:** Sorry. I would just like to mention, in terms if you want a sample of what the sound -- it actually sounds like; correct?
253. So that is something that we've worked on in other projects -- I know TGS has -- and that's something we want -- we've put together. I don't have it with me. That's something we can provide to the community though.
254. We do have recordings of what the seismic sound does sound like and we can come up with the specific distances of how far the sound does travel. At certain decibel levels, I mean, the sound is quite intense right at the source but it dissipates quite quickly over distance in terms of how -- I guess how loud it is.
255. So we do have, you know, distances modelled in terms of how -- you know, in terms of the loudness of the sound, how far it does reach and how it does lessen and weaken as it gets over distance. So if you'd like that information we can provide that to you.
256. **MEMBER HAMILTON:** Thanks.
257. Gentleman here next to Bharat. Thank you.

258. **MR. C. SANHOYA** (through interpreter): Thank you. C. Sanhoya, a hunter.
259. Thank you for having this hearing. The Bylot Island that you saw across from -- click it up through -- all the way up to Cambridge Bay. It seems like they're going to go through the animals' migration.
260. I'm not very good with numbers, especially metres and 95 kilometres. I might have it as two inches.
261. The hunters are -- we don't usually like to see any boats with motors when we're trying to harvest any type of whale and we have -- we would -- I do not want to see any boat with motors when I'm whale hunting.
262. And I don't know how loud these air guns or the seismic testing will be and the shipping -- ships are starting to bother me and they're going in different places. And also, they are going towards Ellesmere Island because of the shipping route.
263. The people who used to hunt whale through Urqaya (ph), they would not even -- their -- they were not supposed to be pointed. You were -- if you have -- if the sound -- is the sound like the .22 gun sound? And if it's beyond that, the whales that go towards Arctic Bay and Arctic will be affected. And also (in Inuktitut) whales because they do migrate through that area.
264. If they're going to be affected, it's going to -- I'm just wondering if it's going to change the route of the migration. If they can be very quiet, like less than .22 gun, then we wouldn't have so much to worry. And if it's beyond that, it's going to change the migration of the whales.
265. Who has the authority to stop this? Maybe the NBA (sic), who holds the -- the authority to say 'yes' or 'no'?
266. Even if I'm told this type of number is this small, I don't know the sound if you tell me, I have to hear it.
267. It's going to be -- if you tell me it's going to be louder than the gun .22, then I have an idea. So I would like to get all this information.
268. I think the seismic itself will not be too damaging, but it will be the --

- if the -- what they find is what is going to cause some problem.
269. Thank you.
270. **MEMBER HAMILTON:** There are a number of questions in there, and so I make -- if you got them all and could take a chance, you know, to go.
271. Whichever way works to answer the number of questions in there.
272. **MR. TROY NELSON:** One thing I'd like to mention on is when you're harvesting the narwhal and you're doing -- you're during your hunting activities, that's one of the things that will -- during our operations, we'll be in contact with the Hunters/Trappers Association and work hand-in-hand in terms of if you're out there hunting, we can go to different areas in the program area there and acquire a seismic that's very far away that, you know, will help limit as much as possible any impacts of our operations.
273. Is it going to -- you know, so lessen the impacts as much as possible. We can go back and forth and work with the community to try and, you know, make sure we're not interfering with your subsistence activities.
274. So -- and in terms of a sample of the sound, I mean, I can, you know, hit off the table or something like that, but I want to give you a true example of how the sound actually sounds like without trying to mimic myself.
275. So that's something that I mentioned to the gentleman before, that we can try and provide it to the community and try and provide soon.
276. **MR. CHRIS MILLEY:** And with respect to the sound and the -- one of the things that we -- the information that was in the previous presentation in the community and the information that was -- that I'm going to be getting sent up is part of that.
277. The sound that is emitted by the whales as compared to the sound that is emitted by the source and the -- some whales actually, if they were in the room and emit sound, it would deafen us. So it's in comparison because of the way they communicate is over great distances because -- and they've tracked that kind of sound and modelled it and looked at it in comparison to the sound of the seismic equipment.

278. So it gives you an idea of what whales hear but also what whales -- what is harmful to whales because of how they emit sound themselves. So it's a good source of information for you.
279. **MR. C. SANHOYA** (through interpreter): Okay. Thank you.
280. Twenty-two (.22) short -- long rifles -- that air gun?
- (A short pause/Courte pause)
281. **MR. TROY NELSON:** So Troy with TGS again.
282. When we do our comparison table and we do provide some information, we can give what a .22 sounds like and compare it to what our actual seismic sonar sounds like so you'll have a visual and some numerical comparisons of what they -- the similarities are.
283. I mean, I'm not an acoustician. I'm not a -- you know, a sound expert per se, so we can have our experts come up with that information that will show the comparison for you.
284. **MEMBER HAMILTON:** Again, Troy, how long would that take to happen as well?
285. Is that a long project or something you could do within a fairly short time frame?
286. **MR. TROY NELSON:** (Off mic) I mean, something like that, the big thing is we want to make sure we get the correct representation.
287. **MEMBER HAMILTON:** Okay.
288. **MR. TROY NELSON:** So I'm not going to say -- it wouldn't be a couple of days' turnaround.
289. **MEMBER HAMILTON:** Okay.
290. **MR. TROY NELSON:** I would say a week to two weeks to make sure we have the proper information to turn around to the community and give it, you know, properly.

291. We don't want to make mistakes, you know, and not represent the sounds properly, so ---
292. **MEMBER HAMILTON:** That's fine. That's probably in a time frame that we can manage before I have to make my final report to the Board.
293. We can do the same as we're -- as Chris is doing with his.
294. Thank you for that. So make sure that we get that information.
295. I don't know, Bharat -- and then also there's the gentleman with the brown t-shirt as well.
296. **MR. EZEKIEL MOKTAR** (through interpreter): Thank you. Ezekiel Moktar, resident of Pond Inlet.
297. I'm glad that you're doing your hearings, that you came to the community first.
298. Drilling in ocean, I don't want that to take place at all and I want to be heard about that.
299. I didn't really grow up on the land in outpost camps. I did grow in outpost camps, and when I did move to the community, the projects you want to do if you moved to a different area, it would be great. In Norway, Greenland and other countries, you have projects to do already. You should stay in those countries.
300. This area is only for hunting. It is only -- it is our only hunting ground and we are very protective of this area and it would be great if you could move off to your other projects.
301. This area, the ocean is our only hunting area and the land, the animals will be affected. So, somehow, your projects, papers, letters, take them and go home and don't come back into this area. It's no good -- this project is no good for me.
302. That's all. Thank you.

303. **MEMBER HAMILTON:** No, the gentleman behind you and then you're after him.
304. **MR. ENOOKIE INUARAK (through interpreter):** Thank you. Mr. Chair.
305. Enookie Inuarak, QIA representative for the community.
306. Can you show the map, please? I will have a question on that map -- regarding that map.
307. Thank you. My first question perhaps: Baffin Bay, if you went into all the survey in Baffin Bay, where would you start?
308. From the north or from the south and work your way up? What's the plan? Where would you start?
309. Thank you.
310. **MR. GARRY MORROW:** Garry Morrow from PGS.
311. We're still undecided. What we're waiting to do is hear all the feedback from everybody here in the communities. We're also looking at the planning from the local knowledge that we receive and then we'll lay out the actual route that we decide to survey, based on all the information that we get back.
312. **MR. ENOOKIE INUARAK (through interpreter):** And I have another question: Why do you want to do your survey during the fall?
313. **MR. GARRY MORROW:** Basically, because it will be unimpeded from ice and, actually, the weather and so those two factors there.
314. **MR. ENOOKIE INUARAK (through interpreter):** As a Northerner, I am knowledgeable about conditions during fall.
315. The all multi-year ice moves down into our area at that time and narwhal during the summer go into the fjords and, in the fall, they return to Baffin Bay. They start their way back to Baffin Bay between Baffin Island and Greenland during the fall.

316. If you're going to do your project during the fall, you'll force the narwhal back into the fjords and the fjords too freeze over quicker than their other surrounding area. For that reason, I am terrified for that the narwhal, if you will be during your project during the spring. And this project, where you wanted to do your project is very large.
317. If you would follow the exact routes, you'd have a very long distance to travel. I don't understand this 8 kilometre. When you do a project this big, you will travel 8 kilometres a day, however, would you finish your project in five years, at 8 kilometres per day?
318. I need clarification on that. Thank you.
319. **MR. GARRY MORROW:** Yes, the 8 kilometres is actually the length of the cable that the vessel tows.
320. The vessel actually moves at eight kilometres per hour so it moves some distance in a 24 hour period. So it's constantly moving but it is -- its speed is 8 kilometres per hour.
321. **MR. ENOOKIE INUARAK (through interpreter):** Thank you.
322. It would be possible to finish this project in five years at 5 kilometres per hour?
323. **MR. GARRY MORROW:** Yes. What we have modelled and everything here -- if you look at the original map that I've put up in my presentation -- that was 5,000 sail line kilometres to be surveyed and we can finish that within a 60-day period.
324. **MR. ENOOKIE INUARAK (through interpreter):** Thank you. That's it for me, for now.
325. **MEMBER HAMILTON:** The gentleman in the front first, from the Council, and then I'll come back to you.
326. So over here first and then back over here -- and I'm just -- I'm not wanting to finish but I'm just conscious of the time because I know that Hamlet have another meeting at 7:00 tonight as well.

327. So I just wanted -- I'm not trying to cut it off. I'm just saying -- just we'll stay as long as you're comfortable asking the questions. So continue.
328. **MR. ABRAHAM KUBLU (through interpreter):** Thank you.
Abraham Kublu, Hamlet Councillor.
329. **MR. ABRAHAM KUBLU:** Three maps on my two cable -- two on my table and one above me.
330. My question is: Which map are you -- will you be using the two years ago original map or this one or that one?
331. My -- that's my question.
332. **MR. GARRY MORROW:** Yes, Garry Morrow again.
333. The maps are changed because of input from the communities, number one, and the map that I showed up there is what we hope to achieve this year in 2013.
334. So that's based on this map that's up here on the wall. That's what we think we can realistically do this year, in September/October.
335. **MR. ABRAHAM KUBLU:** This year alone, you'll be doing that and I heard -- overheard five-year project?
336. **MR. GARRY MORROW:** Yes, that's what the permission would be for would be for a five-year project.
337. **MR. ABRAHAM KUBLU:** If you have the basic information with one year, first year, why more studies within the next five years once you have the basic information?
338. **MR. GARRY MORROW:** If you take a look at this original study here that we're looking at to achieve this year, you'll see that that is a -- and the maps don't do it any good -- what we would call a "very call sparse grid". And if you look at the previous maps that you have, you see that there's lines a lot closer in.

339. So the idea, generally, is to go do a course grid, if you can at first so that way, you have a good base map of the area and then you would try and get more resolution by coming in and acquiring more survey lines in between those.
340. That would give everybody looking at the data an idea of what was here.
341. **MR. ABRAHAM KUBLU:** As you mention, it would be a five-year program.
342. Can you give us more information, in more detail, with first, second, third, fourth and five year plan with your proposal?
343. **MR. GARRY MORROW:** Yes. I can model those surveys based on everything that we would hope to acquire and actually provide timing -- an estimate of timing on what it would take to acquire everything.
344. **MR. ABRAHAM KUBLU (through interpreter):** Thank you, Abraham Kublu.
345. **MR. ABRAHAM KUBLU:** You gave us, two year ago, I notice South Baffin had less line and, as of today, with the National Energy Board map, I see there's more lines than two years ago.
346. Why is that?
- (A short pause/Courte pause)
347. **MEMBER HAMILTON:** I'll bring ours up because I don't know if -- I know that MKI did update their maps recently. I'm not sure if that's the same one and I'll leave that to Garry or Troy to answer.
348. **MR. ABRAHAM KUBLU:** Two years ago, the gentleman right here proposed this map to us to Hamlet Council and the National Energy Board map is this one and there's more lines with National Energy Board and two years ago there was less lines with South Baffin. Why am I seeing more lines today?
349. **MR. TROY NELSON:** I know why the lines look like they do. That actually isn't -- those aren't supposed to be lines.

350. That's just a polygon and that's just the way their mapping had hatched it. It's just a gridding hatching that they put across so probably not the best choice for a polygon representation. But that's just an area. Those aren't actually our survey lines at all. So I would use the information that you actually have from us previously.
351. **MEMBER HAMILTON:** Yeah. And this is -- the information that's in the discussion paper, that's the other one he's talking about. This is the more -- the reliable one that you should -- this is just a representation, as he said, that we have been using, but this is the actual one for the -- the one you have in front of you in this discussion paper.
352. **MR. GARRY MORROW:** I would use and reference that map there and then, of course, what I have projected up there on the screen for 2013. Those two are accurate so ---
353. **MR. ABRAHAM KUBLU:** Mr. Chairman, as a community member, there's a lack of information provided up to date and during our discussion right now, they are finally up to dating the community. It's not appropriate that way.
354. Thank you, Mr. Chairman.
355. **MEMBER HAMILTON:** Just -- again, regarding commitment on that you will do the modelling and get the modelling back to us as well, that's another -- on the so many years, the lines over each year. Just a timeframe for that, would that be -- sorry, did you want to put that -- just confirm that that -- when that is and that's fine.
356. **MR. GARRY MORROW:** Yes, that will take at least two to three weeks.
357. **MEMBER HAMILTON:** Okay. And we'll ensure that we make sure that we will receive that as well. Thank you.
358. I think -- was there another question?
359. Two. Yes, there's two back here. Okay.
360. **MR. JOE ENOOK (through interpreter):** Thank you. Joe Enook, MLA for Pond Inlet. I have two questions or more clarification, maybe to the

- Chairman, you will have to decide on this and in the future, the future of this project.
361. My question is, first question is once we finish this consultation, after you finish the community consultation, when would you have to decide on this project or proposed project? Thank you.
362. **MEMBER HAMILTON:** The process will be once I've -- we've had all the community consultations, you're correct. I'll go back and consider it, wait for all the information that they've committed to provide to us. And then all the other record that we have, all the information we will review and make a recommendation. I make a recommendation to the full Board on whether to approve it or to approve it with conditions or to deny it.
363. And our timing for that is to get that report probably to the Board, my report to the Board by mid to late May. So -- because my understanding is then the Board will make a decision. And my understanding is the company wish to be able to have everything in place, if it's authorized, to ready to go by the beginning of July. Am I correct? And maybe they can confirm that, they would like to have everything in place because of the ship and all the other requirements by the middle of July.
364. So depending on what the outcome of my review and my report, then that's the timing that we're looking at. And my report will be made public and released once -- once I've decided to give it to the Board for its recommendation.
365. **MR. JOE ENOOK (through interpreter):** Thank you. Joe Enook from MLA for Pond Inlet. ... Hamilton for that.
366. I also acknowledge the fact that you have spent most of your life in the north and are fully aware of the desires and the needs of Nunavut in Northern Territories in the Arctic. I also appreciate that you can appreciate why we say these things when we do because they mean -- everything we say means something to us, and you can appreciate that.
367. One of the things that I wish, and you just said that you're in a position to make recommendations or conditions attached if this will go ahead, is that you strongly take my friend's advice, Mr. Enook's advice, and that is, why not do this earlier in the summer when the narwhals are in the fjords and not out in the open because everybody knows that fall, October -- September, October, they --

- everything congregates out to Baffin Bay.
368. I mean, that's Inuit knowledge, that's Inuit qaujimajatuqangit. And if you would be kind enough to take that seriously and study it, I would strongly recommend that you make that recommendation, if you have that capacity. Otherwise, I don't envy what you have to do and -- but I also appreciate that you understand your role for Nunavut and for Canada actually. And I'll leave it at that. Qujannamiik.
369. **MEMBER HAMILTON:** I appreciate -- qujannamiik for that -- for those comments and the trust that you're placing in me and I take that trust very seriously. And I probably have -- do if -- enough comments and with comments from MKI, I do -- can make conditional that certain things be done. And I know in other cases MKI have stayed away from other areas so if you wish to make a comment on the MLA's comment, I'm happy to receive it and be guided by that.
370. **MR. GARRY MORROW:** Garry Morrow, with PGS.
371. Yes, the survey that we've depicted for this year is what we thought was realistic to achieve as I mentioned before.
372. Also in the design, which we were going to run the design which I commented on before, was going to be based on knowledge and feedback that we got locally. And so we can vary those lines, sort of as Todd indicated earlier -- or Troy, excuse me, Troy indicated earlier.
373. So we have some leeway in that and we have some leeway in the survey design. You know, we were looking for somewhat optimal conditions for the timeframe we had and we know that the ice varies from year to year and stuff like that, so we know that we might have some impedance on how we want to try and acquire it.
374. **MEMBER HAMILTON:** Troy, want to add something?
375. **MR. TROY NELSON:** Yeah, I just want to add to what Garry had mentioned. Like, you know, it was kind of information that was given to us that it's -- you know, as much as possible open water during those times. But if you're telling us that it's open water earlier and that it's going to affect the migration routes less, more than willing to come in and do it earlier and get it done and try and -- you know -- make the impacts to the narwhal migrations and

- your hunting and stuff as little as possible, so definitely.
376. **MR. JOE ENOOK (through interpreter):** Thank you. Joe Enook, MLA for Pond Inlet.
377. We face, what you just said, that you are more than willing to do the sudden earlier stage in the summer.
378. Please understand I have never endorsed the project. I just want that for the record. But nor have I -- either way I haven't said either way. So I just wanted to put that in the record.
379. Qujannamiik.
380. **MEMBER HAMILTON:** Clarification on the record is always good.
381. Go ahead.
382. **MR. JOSHUA ARREAK:** Joshua Arreak from the Hamlet -- from the Hamlet.
383. Eclipse Sound and Baffin Bay is -- we are very protective of that area because that is our field, just like a farmer has its field. And the harvest for us is year round and that's how we can have food from there year round. And the mammals migrate from Baffin Bay and they go through that route to Pond and elsewhere.
384. We are so protective of it because we get our food from there. Just like a farmer would protect his field, we are protecting ours. And I want that to be considered too. I mean at this time we're not talking about any compensation for any loss of food, country food or whatnot. We are very concerned.
385. We will protect this area for the benefit of our people and for our people too. That's -- that is our main concern that we are protecting our area and our food as well.
386. Thank you.
387. **MEMBER HAMILTON:** Anybody -- I know the deputy mayor -- did anybody else want to speak before -- oh, do you want to go last or do you

want to go first?

388. A gentleman at the back here, so I'm just cautious of our time here. So who would like -- the gentleman directly there in the middle. Right here, no, no, in the front row.

389. **MR. JAYKOLASIE KILLIKTEE (through interpreter):** Thank you, Mr. Chairman.

390. I have two questions; the people who are going to do a seismic study, have you included any person to go on your ship, traditional Inuit?

391. **MR. CHRIS MILLEY:** Yes, as I've referred to earlier of having people who would be coming from the communities from Pond Inlet, from Clyde River, from Qikiqtarjuaq who would be on the vessels as observers and as people who will be liaison with each of the communities so that the people on the boats are able to continually be in contact with the communities and vice versa. So you could contact the vessel and know what's going on.

392. **MR. JOSHUA ARREAK (through interpreter):** Thank you for the answer.

393. I want to add to what was stated. We -- who are Aboriginals, we're not animal rights activists but we do act like we are. We can't have farms up here. We don't have trees. Winter always comes. Our marine wildlife and terrestrial wildlife are our only farms. And for that reason we keep making the same statement that our waters and lands are animal farms. The food that we collect from the terrestrial marine environments, we don't want spoiled. We don't want them polluted.

394. If I lived down south and somebody polluted my farm, that would be terrible. It's the same situation for us and for that reason we tend to speak of animals to help push people who come in our communities to base their decisions on and the Applicant applying for the licence. It would be great if they could do more consultation with traditional Inuit.

395. As it has been stated, the Inuit have lived in the area for over 4,000 years in the Pond Inlet area. This is known that the marine waters and land, our Elders know even more about what we're talking about. They know the currents, the winds and the animals -- habits of the animals.

396. I offer these to you, I give our statements to you, to your Board for you on whether -- when making your decision.
397. I thank you all very much for giving us the opportunity and we're glad the Applicant has been able to answer our questions.
398. I thank you all very much for coming to the community and I'm glad the company is here to talk with us today. It is much easier to talk face-to-face and get to know each other easier. We don't have too much time. We will -- you and we will have to go home for supper and I think you'll be resuming your meeting tonight and we would wish to be here this evening.
399. That's my statement for now. Thank you for giving us the opportunity. Thank you.
400. **MR. ABRAHAM KUBLU (through interpreter):** Abraham Kublu.
401. Thank you. I need further clarification regarding this. As community members of Pond Inlet, we do know the water currents, where the currents are going to, flowing to. If studies could be made on the ocean currents, I need clarification on the currents in Baffin Bay. Thank you.
402. **MR. CHRIS MILLEY:** Yes. And just in response to the Mayor's comments as well, one of the things that is being considered by the company right now is a study -- a specific study on traditional knowledge, an IQ in regard to the offshore as well the movement of, you know, weather patterns, ice, mammal migrations, the whole thing.
403. So that it provides them with information, but also becomes a nice contribution to the work that the QIA is doing of compiling Inuit knowledge and having it documented so that it's not lost, and a lot of the knowledge that is not scientific but is more valuable than science knowledge.
404. And in addition to that I have a graduate student who is coming, we hope, to Pond Inlet this summer to look at traditional knowledge and the use for shipping and the selection of shipping routes. Which is a similar kind of research so that it starts to build a base of knowledge, not just for this project but for all projects that you would have, that you could then let others use to better plan their work.

405. **MR. ABRAHAM KUBLU (through interpreter):** I still have two questions.
406. Divided to a statements here, community liaison officer and marine mammal observer, community member of Pond Inlet, whether they will be getting an employee or will you get an employee from outside the community. I want clarification, thank you.
407. **MR. GARRY MORROW:** Garry Morrow.
408. We would wish to have an employee from inside the community. And I think as you're aware that we have done some training here with the university to give people the background on the marine mammals observations and the weather reporting goes. And so to answer your question is yes.
409. **MR. ABRAHAM KUBLU:** Is the marine mammal observer or the liaison officer notice a big attack, what kind of authority does that person will have? Will he able to stop the project?
410. **MR. GARRY MORROW:** That's correct. On the mitigation zones that are set up, if any marine mammals are within that mitigation zone or that zone, then the marine mammal observers have the right to stop the survey.
411. **MR. ABRAHAM KUBLU (through interpreter):** Here in Nunavut, they don't have a ship like Coast Guard ships. If you guys had an accident or the ship had hit a piece of ice, what mitigation emergency plans do you have for the nearest community?
412. Would you wait for the Coast Guard at the nearest community or would the Coast Guard ship go with the St. John's oceans?
413. Would you be dragged in to St. John's oceans? What would be the set-up?
414. **MR. GARRY MORROW:** Garry Morrow again with PGS.
415. First off, one of -- part of one of our mitigation measures is -- internally inside PGS is, of course, to adhere and comply with everything that we need to regulatory, but we also keep a support vessel with us. And so that support

vessel is also key in our mitigation measures and any emergencies that we need to do.

416. And then, of course, we have a plan that we put in place. I don't know if you've seen it yet, but it will be in long before the survey starts. And we do an emergency response plan throughout our company and that contains all the local contacts that we need, all the Coast Guard contacts and everybody that needs to be notified in case of an emergency, whether it's a medical emergency for a crew member on board the boat or whether it's having to do with a mechanical issue.

417. **MR. ABRAHAM KUBLU:** Up to date, I haven't seen the emergency plan or any other plans.

418. If you had an incident in Baffin Bay, do I just ignore your help call while I have my 60-foot boat?

419. Do I just ignore your big ship if there was an incident?

420. **MR. GARRY MORROW:** Well, that's a good question.

421. And I guess it would depend on a lot of things -- what the conditions were like at the moment -- but we hope you would help out.

422. Just like we would help you out if you were out there and something happened, we would, of course, come to assist.

423. **MR. ABRAHAM KUBLU:** In order to help you with your help signal, I would need appropriate information how I would approach your ship and I don't know if Coast Guard would be able to reimburse my gas to fill my boat to come and rescue.

424. My other question would be: As we all know, Arctic is a unique place in Canada and there's a lot of information, data within scientific area. How could these scientific datas be more accurate to us as a community member?

425. Qujannamiik.

426. **MR. GARRY MORROW:** Chris, answer that because we collect a lot of variance of data.

427. **MR. CHRIS MILLEY:** Yeah, I got the point.
428. The -- one of the things that we started at the very beginning, the first time I came here, we had some more questions and we've followed up.
429. Anything that's not proprietary data, in other words, the data about the -- you know, their marketable commodity, so information about marine mammals migrations, about fish, you know, information, sea birds, sea state, vessels from other countries, fishing, you know, that kind of thing, all that information is to be -- will be shared and can be shared.
430. And a big part of that is the -- is worked out with the community liaisons so that the -- you have a way of getting that information on a regular basis.
431. The marine mammal data is an important one because sometimes the gaps could be filled in with what they observe. And things are changing.
432. As you know, we were doing the work in Grace Fjord on marine mammals with the traditional knowledge study there and a lot of the things that they're finding are things are changing because of climate as well.
433. So that gives you more up-to-date information.
434. **MR. ABRAHAM KUBLU:** My last comment will be -- Abraham Kublu.
435. I notice National Energy Board has different Board members within different province and there's nobody in Nunavut to represent on behalf of Nunavut.
436. How can Nunavut be part of National Energy Board Member?
437. **MEMBER HAMILTON:** You are correct, there is no, currently, any resident Members of Nunavut on the Board but there are positions available on the Board and they're positions like I have. It's called a "Temporary Board Member" and you're put on the Board to do various projects. Like, I've been assigned this project and I've been assigned other projects across Canada.
438. And so there are opportunities and we can give you the information

- where you can apply. We're always open to receiving applications for full-time Board Members and also temporary Board Members, and there's always competition open for that.
439. And so I'd be happy to leave you that information of what's required for that and we'd welcome any applications for part-time Board Members from Nunavut. There's no question about that.
440. And also, in response to your question, and MKI and Chris answered it, and I think Garry answered it, too, that they -- the company is required to file all those plans, their emergency, their safety plan, their contingency plan. And a lot of it -- some of it is protected information, but it's all filed with us and we review all of those plans. And we'll hold them accountable for them if they get an application and we'll monitor as things go along.
441. So we do see them all and we review them all so to give you the insurance that if it does get approved, we see all of that and we'll hold them accountable.
442. Qujannamiik, everybody. I think everybody wants to go home for supper now because they've got another meeting tonight. So for those that have left already, I'd like to thank the Mayor, the Council and everybody today, and I can assure you that we will -- we'll take all your comments into concern before making a determination on whether to approve this application.
443. So, qujannamiik, and enjoy the rest of your evening. Thank you.
- Upon adjourning at 5:35 p.m./L'audience est ajournée à 17h35

--- Upon commencing at 7:21 p.m./L'audience débute à 19h21

444. **MEMBER HAMILTON:** I think we'll get started. Can everybody hear me? There we go. Thank you.

445. I think we'll get started. Good evening and welcome. My name is David Hamilton and I am a Board Member with the National Energy Board of Canada.

446. And before we start I'd like to ask Moses if he would say a prayer please. Thank you.

--- (Opening prayer/Prière d'ouverture)

447. **MEMBER HAMILTON:** Qujannamiik, Moses.

448. The National Energy Board regulates oil and gas offshore activities in the Canadian Arctic. Companies can ask the National Energy Board the permission to undertake these types of activities.

449. One of the NEB's roles is to review the proposed projects and approves or denies them. The NEB has been asked to consider the application by MKI and its partners who would like to undertake 2D seismic work in Baffin Bay and Davis Strait.

450. I was assigned to lead the review process. Some of you may recall that I was here, along with the Chair of the National Energy Board, in November last year, and we committed to come back to listen to your comments on the application by MKI.

451. Before I ask the representatives of MKI to make a brief presentation, I'd like to introduce the people from the Board that we have with us this evening, and I'd like them to stand when I recognize them.

452. We have Galina Doubrovina, who is our Project Manager; Christy Wickenheiser is our Environmental Specialist.

453. Okay, we need to wait a minute because we're not quite getting the recording properly. Sorry.

--- (A short pause/Courte pause)

454. **MEMBER HAMILTON:** It's good now? Okay, thank you.
455. Marie-Anick Elie is our Northern Coordinator. Marie is over there. And Julie Fisk is our legal counsel; she is a lawyer on this project. Bharat Dixit is our Technical Leader for Exploration and Production. We also have the assistance of our two interpreters, Mali Curley and Loseosie Paneak.
456. You will see that we are using microphones, which will assist the interpreters with the recording. We will be recording all the comments, as I want to ensure that we accurately hear what you are saying, as it will assist me in making a recommendation to the Board, whether to approve or deny the application.
457. So when you're speaking, it would be helpful if you could identify yourself and if you want to receive copies of the transcripts, we will be posting all the transcripts on our website, and if you would like a copy of all the transcripts of all the community meetings, just mention -- give your name to one of the staff here, and we'll make sure that you get copies of all the transcripts.
458. We will also be holding meetings in Clyde River, Qikiqtarjuaq, and Iqaluit as part of the process to get the community concerns expressed.
459. The purpose of the meeting is to hear from you on the proposal by MKI to conduct the offshore marine seismic in Baffin Bay and Davis Strait. Your comments will help the National Energy Board to shape its decision.
460. Just to help you give a little bit of a background on the National Energy Board, the National Energy Board is an independent federal agency. We operate as a quasi-judicial federal board. That means we're independent and we review things independent of the Government of Canada. And we can approve or deny the proposed seismic or drilling activities.
461. The *Canada Oil and Gas Operations Act* requires the Board to regulate activities associated with oil and gas operations in the Canadian Arctic. So we operate under -- for geophysical operations, such as seismic, we also regulate drilling and well operations and production facility operations.
462. The main purpose of the Act is to promote the safety of communities,

- the public and workers, the protection of the environment and conservation of oil and gas resources.
463. Just to confirm, before a company like MKI can carry out activities in the Canadian offshore, they need to obtain Geophysical Operations Authorization -- it's a long word but we'll call it a GOA -- from the National Energy Board. They must also obtain an Operating Licence from the National Energy Board. They must also file a benefits plan with Aboriginal Affairs and Northern Development Canada. And they must also obtain a Certificate of Fitness by a recognized certifying authority.
464. The NEB takes a lifecycle approach to regulating offshore seismic programs. Perhaps a better way to explain that we are -- as we were told during the Arctic review of offshore drilling in Inuvik, we are the watchdog, the National Energy Board is the watchdog, and that communities will hold us accountable, as we hold all companies accountable.
465. What that means is that we are not just here today and you'll never see us again. The National Energy Board approach includes assessing the application, which we are concluding today with these community meetings, and if approved, the NEB undertakes monitoring and inspection during operations and the review of the data and the reports.
466. Applications for projects are assessed to ensure that they meet strict safety, environmental and geological standards and requirements. A company making an application must provide to us a safety plan, a contingency plan, emergency plans, and they are all provided to us for technical review. They must also provide an environmental assessment that outlines the risks of the project and the mitigation measures and proof that other requirements have been fulfilled.
467. Since MKI applied for the GOA, there have been a lot of material provided to the Board and to the communities. We also require MKI to have consulted with affected communities and we have received the reports from these community meetings.
468. Okay, Mali, I'll slow down.
469. We have received letters of comment from the following organizations: the Qikiqtani Inuit Association, Environment Canada, the Arctic Fisheries Alliance, the Baffin Fisheries Coalition, Fisheries and Oceans Canada

and the Government of Nunavut. Letters were also received from Shari Gearheard on behalf of the residents of Clyde River.

470. The NEB has been conducting an environmental assessment as part of our consideration for the project. To assist organizations and residents in the communities, we prepared a Discussion Paper that outlines the potential environmental effects that have already been identified by organizations and residents of the communities.

471. The paper outlines the potential effects the proposed project may have and the various measures and actions that MKI are proposing to take to mitigate those potential impacts. Copies of the Discussion Papers are available on the table at the back as well as the overheads.

472. That brings us to why we are here this evening in Pond Inlet. It is to allow you the opportunity to make comments on the proposed project. All the comments we receive will assist me in making a recommendation to either approve the application with conditions that should be required to be followed or to deny it. The MKI representatives are here to explain this project and help us understand how they intend to mitigate activities that might concern you.

473. With that, I would like to ask MKI to make their presentation on the project and then the floor will be open for you to ask your questions or to make any comments.

474. So, first, I'd like to hand it over to MKI, the company and their partners who made the application, to introduce themselves and to make a short presentation.

475. **MR. CHRIS MILLEY:** Yes, my name is Chris Milley. I'm with NEXUS Coastal Resource Management.

476. I have been to the community several times so some of you may have seen me here before. And I am an Adjunct Professor at Dalhousie University.

477. **MR. TROY NELSON:** My name is Troy Nelson. I'm with TGS. I'm Regulatory and Compliance. This is my first time up here, however, my colleague Zig Doborzynski, has been up here on the last trip of meetings and we're partnering with PGS on the project.

478. **MR. GARRY MORROW:** Hello. I'm Garry Morrow. I'm with PGS or MKI. I am Senior Project Manager for the company for North and South America.
479. **MR. MAGNUS CHRISTIANSEN:** My name is Magnus Christiansen. I'm with PGS, Petroleum Geo-Services. I'm the Environment Manager based in Norway.
480. **MEMBER HAMILTON:** ... please? Thanks.
481. **MR. GARRY MORROW:** We have a very small presentation to present to everybody here today. And as I said in the previous meeting that we had, we've been through with the community consultations previously. So I'm not really going to go over some of the information that had been previously provided but, this time, we thought we would show the vessel that's going to be doing the operations and talk a little bit how we conduct those operations.
482. And the first picture at the beginning of the slide here is what you see. This is the actual survey vessel that will conduct the survey up here if our authorizations are provided. And to give you a little bit of perspective here, that vessel is just about 88 to 89 metres in length and it's width across the stern is right at 16 metres.
483. So it's a fairly sizable, fairly modern ship. It was built in Norway and so commissioned out of there so ...
484. And previously, it's been working here in Canadian waters off of Newfoundland and off of Labrador prior to this.
485. You go ahead.
486. So just to give you an idea of the project area, I'm sure people have seen a lot of maps previously, and what I've shown on this one here is the survey lines that we would hope to be able to acquire in 2013 here.
487. And so this is a very abbreviated part of the program that you've probably seen on some of the other maps. But for this year, the project we're looking at acquiring at least 5,000 line kilometres of 2D seismic data. So generally our production rate would be somewhere in the neighbourhood of about

- 2,500 cell line kilometres per month to 3,000 cell line kilometres per month.
488. The survey at this time we expect and what we were looking at was to conduct this between September and October of this year. And to give you an idea when surveying, the ship travels at 4.2 to 4.5 knots or 8 kilometres per hour -- so not very fast but also not very slow -- and the survey area that we've proposed up here right now is -- there's no lines within 12 miles of the coastline, and also the survey lines are also outside the land fast ice area.
489. So one thing to note, there's a large distance in between all of these lines and so there's a lot of time that it takes to go in between survey lines. So I think we had calculated some earlier that were -- we would be going for at least 15 hours in between some of these lines without surveying. And one of the notes I made here is that, when going in between survey lines, the sound source that we use is either reduced down to one single element of sound source array or it's not in use at all.
490. So we don't even -- in longer "line changes", as we call them, we won't even be using the source. So nothing is going on as the vessel goes in between these individual lines that you see. So it's basically just transiting like a very slow vessel.
491. This picture here, on the right, is the survey control room, and so this is where everything's monitored from on board. So, obviously, you have the bridge with its captain and everything like this, but this is a couple of decks below and this is where everything's monitored. So all of the recording that is done for the seismic information and all the equipment that is in the water is all extensively monitored from this location and everything, of course, is recorded.
492. That includes marine mammal observers who are located up on the upper deck of the boat, on the bridge of the boat, and where they have visibility. They report any of their sightings down here to the control room where it is logged, and also they keep their logs on the bridge, and in case a stoppage is required then they notify the control room and everything is stopped and shut down.
493. So one thing to note is that there's always people in this room. Anytime the vessel is out on a project area, there's always people monitoring what is going on. Even if the equipment is back on board the boat, there's always people monitoring various aspects of what's going on around on the ship.

494. So this here is a picture of the actual cable that we would use during the survey and this is it on its reel and that reel, of course, just like say a fishing reel, would spool this out into the water. Okay. So on this particular project, the length of the cable will be 8,100 metres so -- and that will be out behind the boat.
495. Then the cable itself contains sensors which record the different sounds. That's how the information comes back and then it's transmitted up that cable back into the control room where it's recorded onto tape. So it's very hard to see the sensors that are in here in this cable but if you look at the little white and yellow pieces that you see in there, the sensors are located in between that.
496. So one thing, the cable is filled with an environmentally safe gel which prevents any escape into the sea. So it's almost like a solid component; you know?
497. So on these two pictures here, this shows the -- on the left-hand side, shows the stern of the vessel and where you see that ramp coming down, that is where the sound source array from the vessel comes out and is trailed back behind the boat.
498. That goes back behind the boat, probably about 100 metres, okay, itself and, of course, you have the cable that goes out 8,100 metres.
499. Now, all of this -- all of the equipment that I showed you, the cable, and on the right-hand side here is the actual sound source and you can see the two little elements down here that are next to each other and those are actually the sound source so -- and you can see the various one's going up there.
500. In grey -- the pieces in grey are actually flotation and that's what keeps everything from sinking. So we have a predetermined depth with the source array and of course with the cable. So everything that goes into the water is really monitored very closely obviously. So there's positioning on not only the source but on the cable and the cable has what we call "birds" in our industry and those actually control how the cable goes down and how it comes back up.
501. And so all of those pieces of equipment have tracking devices inside of them. We basically use those tracking devices along with surface GPS satellite to let us know where everything's at in the water. So it's fairly precise in what we do and how we monitor everything. So our positional capabilities are generally

within two to three metres. So we can track everything within two to three.

502. And here's a little depiction that kind of shows what we would think would be the boat upfront there and you can see where it says, "Detection", that would be the cable. And then of course, when we do the sound, it goes down through the air substructure, and as you can see, this is the type of mapping that we would be getting and receiving from it.

503. On the right-hand side here, this just shows you a picture of those sound source arrays and basically how they work. And I guess, the easiest thing to say, it has a chamber that holds compressed air. And sort of like a piston in any type of motorized vehicle, on a command signal, that piston comes down and that lets the air out and as you can see in the right-hand picture where it says, "Discharge" on it. So that piston moves up, the air comes out and then the piston closes again.

504. So -- and it seems like the second one doesn't work.

505. So that's the basic operation there and we appreciate your time and everything and I'm sure you have a lot of questions so...

506. **MEMBER HAMILTON:** Thanks, Garry.

507. Yes, the floor is now open for any questions you have on the application, any concerns you have, anything you'd like to add.

508. There's a gentleman, first of all, over in the back, followed by another one here. So the microphone is coming over to you first, sir, and if you could just clearly say your name and it would help us for making sure we hear your words.

509. **MR. CORNELIUS KADLOO NUTANIK (through interpreter):**
Thank you.

510. I have a question. There's a fishing area around that area where you have marks on to exactly where we go fishing. Towards the Pangnirtung, there's a mark. My question is the fisheries -- haven't you got any documentation from Fisheries Coalition? That's my first question. You got any comments from them?

511. **MR. CHRIS MILLEY:** We've met with the Baffin Fisheries

- Coalition quite a bit, both in Iqaluit, as well as in Halifax, as well as in St. John's. We've maintained contact with Baffin Fisheries Coalition at all stages of the community engagements and we've been exchanging information with them about where they're fishing and the timing of fishing. And then that's been passed on to the company.
512. **MR. CORNELIUS KADLOO NUTANIK (through interpreter):**
Thank you for clarifying that.
513. As you know, I have talked to you before and my second question is, there are -- is it okay if you guys do this type of study where there's lots of wildlife?
514. **MR. CHRIS MILLEY:** Okay. This is a question we had a lot of this afternoon from the Hamlet Council. One of the things that -- the timing of the survey is done so that it has the least potential impact on wildlife migration and actually on fishing activity as well.
515. And there are observers on the vessel so that if there are any marine mammals observed, than they can shut down the operation and wait for the mammals to pass and then wait for the proper procedures to recommence the operation.
516. **MR. CORNELIUS KADLOO NUTANIK (through interpreter):**
Thank you.
517. I know that -- I know about seismic, I've worked with an oil company before. That -- you know that there's lots of oil and you'll send the company.
518. There's lots of oil and they will -- the oil companies will want the oil that you said you'll just do site testings, and you said you have to look for oil through seismic testing. Are you going to explain it properly and define it about -- define the seismic testing that we can understand, now, right now?
519. And also we've heard from the people from the community, and I believe them, that we talked about it a bit before, that this area is a place for our animals that -- we don't want it disturbed or destroyed. And we'll keep saying that as long as we can.
520. Maybe in 30 years from now maybe we won't mind anymore. That

- starting from today, that -- starting from 30 years, you can do whatever you want in the north.
521. Right now, I don't want to give approval because of this reason. There are no equipment to clean things up that -- when there's a ship that can clean up a mess, a big mess, then we can start giving approval. That there's nothing -- no equipment like that right now and nothing to clean up oils if -- and in Pond Inlet, there's no -- nothing to clean up -- clean things up. What -- we want to see these things first before you do any testings. As long as there's stuff to clean things up, this is very important to us.
522. How can you understand this, that we need food too? We need to eat. And nowadays, there's -- there's so many people who are unemployed and they get hungry. You have to plan these things first.
523. How are you going to supply us with food if it had such a negative impact in our waters? How can you help us if you -- if there was a big impact to our wildlife?
524. Using these facts, we are worried about things that are being done in our waters. Baffin Bay is very close to us, and it's -- some of it is a national park, and it belongs to Parks Canada.
525. Using these reasons that we -- we want something to protect our animals.
526. This seems like what you're looking for is not very useful up here, but I mean though we use oil a lot, everywhere. That -- we have so many things to worry about. That maybe if we -- if there are more plans and more plans to help the Inuit, then we can work together.
527. Thank you.
528. **MEMBER HAMILTON:** Do you want to respond to that at all or are you taking the comments?
529. Thank you for your -- qujannamiik.
530. Gentleman over here, and then in front of that, Moses in front of him.

531. **MR. ELIJAH PANIPAKOOCHO (through interpreter):** As I was making some comments about this area, yeah, we understand that this would operate for five years and it's -- that's in part of the Greenland area and there's a study that already have been done.
532. We seem to understand that after that seismic testing that they did near Greenland, we seem to understand that the narwhal have moved from their location. They've ran away from the sound of the testing.
533. And this is great concern because all the animals have moved now to other locations. And the -- now we have now narwhal, we now have more belugas than narwhals, which never happened before.
534. The reason why I say that is during spring times a lot of hunter now come here as a tourist to look at -- take pictures of these flippers of belugas and walrus, it seems to be.
535. I just wanted to bring that up.
536. I just wanted to tell you what I've experienced. Animals are here differently, individually. And the narwhals, when the ships were starting to come up, maybe after two days after -- they used to run away two days before the ship come in. And that's how we knew that the ship was going to be arriving because the narwhals used to run away from their area.
537. They're just -- they're not making -- they're just moving through the water. And that's how sensitive their hearings are when they hear motorized vessel or any kind of motorized thing.
538. When I was helping out with these hunter now and we have these microphones that goes under water to hear their sounds or their -- not too long ago in the spring, and we were hearing something like exploding. And all the beluga would submerge all at the same time because usually they make lots of noise. And they were totally silence and I found that really weird, or different.
539. We have very good reasons of this, as for a hunter in our land, especially from the American side, they're trying to regulate the polar bears and they're blaming us that we're not managing our wildlife properly. And they're saying that the narwhals are decreasing -- declining.

540. But today, we understand -- we're not the only people that will decrease -- decline the animals. There are other things like other studies that helps with these.
541. In springtime, there was a large number of whales that were stuck in the ice in -- not too far from here, and they couldn't get out. And a lot of them were killed by polar bear and they pulled them out of the water. There were several of them, narwhals.
542. And I see that this is a problem because the fjords form ice faster than the open water. Around October, they already had ice. And the reason why the -- we feel that the whales were stuck in the ice because they ran away from the north from outside and they were stuck in the fjords. They couldn't get out and this will be -- have to considered very carefully. And you have to watch what month you are doing these testing.
543. I know it's going to affect everything all the time but I think it will be okay in the spring when the ice is still on if you did the study because we don't like it in the fall when you -- when you want to start because we're going to keep seeing these whales stuck in the ice, and these are the concerns that we have. And we will need to get some benefit for the future of our animals. It will -- you will affect other people.
544. Thank you.
545. **MEMBER HAMILTON:** Qujannamiik.
546. Proceed.
547. **MR. SAM OMIK (through interpreter):** Thank you. Welcome to Nunavut for the National Energy Board.
548. And you ask questions about what you want us to do and what you want us to do in the future and also you want to do seismic testing and look for oil. Welcome to Clyde, welcome to Pond Inlet and get to get some information. Our land is very beautiful and it's starting to get warm.
549. When there was research in Beaufort Sea -- I'd say it was around Tuktoyaktuk and politic waters -- I used to be the observer. It was in the waters, in the waters of Baffin Island but the people of Pond Inlet, most of them don't

- know about that.
550. But I've noticed that over there the narwhals, I mean I didn't find everything out like a scientist, but I found some things out and I want to tell a short story.
551. What is written, we've been talking about it for quite a long time, that -- the National Energy Board has come to Pond Inlet before to get information. I thank them for that.
552. My question is -- after my question is answered, I will ask another question. That what I've heard before that in our waters -- between Clyde River and Pond Inlet, in our waters, in the low land areas, that there's a oil gushing all the time. You know about that; right? Or ...?
553. Do you know about that or are you going to look for more oil even though you know about that oil gushing out all the time?
554. I will have a question -- I forgot to introduce myself; I'm Sam Omik. I'm a hunter, a fulltime hunter. Twelve (12) miles, I go to -- down there very -- I can go down there very easily. I go through ice that's floating and go through that. I can go down there and I go hunting every year.
555. After you answer my question, I have another comment, a very short comment and that's it for now.
556. **MR. GARRY MORROW:** Garry Morrow with PGS.
557. Yes, we're aware of the oil seeps and what's behind them. In surveying as such, this helps to identify potentially where those seeps obviously are at, but also where the formations might be that lead to those seeps. Even though you have seeps on the seafloor and everything like that, the area where it comes from in the substructure can be quite some distance away.
558. So, basically, part of the survey is to take a look at the geology up and down throughout the whole area to see where the potential of where other what we call "oil traps" and everything would be.
559. I hope that answers your questions. If not, let me know and we'll try a little bit -- for a little bit more clarification on that.

560. **MR. SAM OMIK (through interpreter):** Yes, thank you.
561. But what has been known for a long time, what we've been through and what (in Inuktitut) is Inuit knowledge: The wildlife around here have now gone towards Cambridge and Talurjuaq area and to Igloolik area. There's not much -- as much seals or square flippers this past winter that we have noticed.
562. My question is: When you first started from your first seismic testing and when we object to it you guys stopped. So you haven't done anything else or any testing with the vessel at all since the last time when we object to the testing?
563. Are you going to go on or are you here to clarify everything, whether you're going to do the testing or not?
564. **MEMBER HAMILTON:** Yeah, if I can help, I think, Sam's question is: Yes, they haven't -- they're seeking approval to do the testing. They haven't done any testing on this in the particular waters that they're requesting. So they are requesting to do it, but they have to be able to justify what effect that would have and then any mitigation measures they would have in case they -- you know, if they did get approval.
565. So it hasn't been approved yet and that's part of the process here, is to allow everybody to get all the questions out before the Board makes a decision if we will allow them to do the testing.
566. I think that was -- was that your question, Sam? It is: "Have they done any yet?" or ...?
567. **MR. SAM OMIK (through interpreter):** I didn't ask you, I ask these guys, we didn't have very many seals this year.
568. I just want to know whether you'd done any more seismic testing from the last time.
569. Did you do any seismic testing last year?
570. **MR. CHRIS MILLEY:** There may be some confusion. This company has never done any testing in Baffin Bay. The -- and, sometimes, people are confused about the proposed survey in Lancaster Sound which is --

- was with Natural Resources Canada, and that's not the same project at all. So this is something that would be new and hasn't been done. So there would not be effect on seal.
571. Now, coming from Atlantic Canada, I can tell you I know where the seals are, they're all down in Nova Scotia right now.
572. **MR. SAM OMIK (through interpreter):** Pardon me, I'm sorry. You were supposed to tell me, Mr. Chairman, as you know that -- I'm just going to make a very brief comment.
573. According to your comment and that they'll be an observer on the ship, how many miles are you going to do the air gun or shoot to the bottom of the sea?
574. How many minutes or how often?
575. And as you said that you weren't -- you're not going to go very slowly because this proposed testing is near our area. According to the month that we're talking about, this is the time when the hunters go to that area.
576. If you're going to get approval from either the National Energy Board or from the other communities that you will be going to, the people of (in Inuktitut), I would want them to be involved, not just for seismic testing, they have to be involved by the companies.
577. And if you're not going to get your approval or if you don't get your approval, we also want to hear about that. If there's going to be someone from this area to be an observer, we have to be involved. So this will have to be clear, so that there will be someone we can talk to about our concerns.
578. I don't know HTO Board at all and I'm not too worried about the Hamlet Council, and I don't know what QIA is thinking but, for us, we are concerned that the testing will be done in the fall. October is a bit too late, I think. That's all, thank you.
579. I don't have other major concerns because I have been involved with the oil and gas explorations. I'm going to support my colleagues in the community. Thank you.

580. **MEMBER HAMILTON:** I think MKI could respond to some of those.
581. **MR. GARRY MORROW:** Yes, part of this process is for us to learn on the scheduling.
582. The map that I showed earlier was based on us -- you're going to flip back to it? Okay.
583. The map that I produced up there is basically to show what we thought we could achieve, of course, this year within a two-month period. And we do take into consideration any of the local comments and the way that we should acquire that survey and, in one of the previous meetings, we agreed to do some -- is my mic going out -- we agreed to do some modelling and provide that to NEB that could be passed along.
584. So we do take that into consideration. And hearing the local knowledge here for a preference of a springtime acquisition time has been interesting and duly noted amongst all of us up here.
585. On how often there's a seismic shot, so to say, that generally goes along with the vessel speed that I put up there and there's generally a pop done about every 15 to 20 seconds.
586. **MEMBER HAMILTON:** I think maybe you could clarify for Moses the issue of the local marine mammal, where they will be, how many there will be, where they'll come from, how you report back; all the things you've committed to do already just to clarify for the record.
587. **MR. GARRY MORROW:** Yes, to clarify that both TGS and PGS have run classes up here to train people in being marine mammal observers and how the process works and the reporting requirements.
588. That was done here -- I forgot, what's -- last year, up here. And, yes, we will have local observers onboard the boat. That's something that we do and we have that. The accompaniment on the boat here would be at least three marine mammal observers; so, generally, one locally and two others here from Canada or various areas of Canada. And in some instances, we have up to four people onboard the boat.

589. So there is -- yeah, because it goes both -- we have a scout vessel that goes along with us, so we generally like to have an observer, especially a local observer on that scout vessel.
590. **MS. JENNIFER INUARAK:** My name is Jenny Inuarak.
591. It would probably be better if, you know, this were to go ahead that you had more local observers than foreign observers just because people up here actually know what they're looking for. You know, someone from, you know, Newfoundland or Nova Scotia has a different eye for the sea than someone that hunts up here regularly, as a general rule.
592. Now, with respect to stuff that's already been approved, I know there is a lot of drilling off of Newfoundland and, when I was going to school at Marine Institute, one of the big classes that we took was Oil Spill Remediation. We had to drive an hour and a half inland to go see where all the stuff was that they had for the remediation for like the booms and ---
593. **MEMBER HAMILTON:** Just a little bit slower.
594. **MS. JENNIFER INUARAK:** Oh, I'm sorry. That's the Newfoundlander in me.
595. **MEMBER HAMILTON:** The Newfoundlander in you, yeah.
596. **MS. JENNIFER INUARAK:** Okay, slower, I'm sorry.
597. So we had to drive an hour and a half inland, away from the ocean, to see where all of the equipment was kept to clean up oil spills. So if anything was to happen on any of the rigs or from any ship transporting, all of the stuff would have to be packed up and driven an hour and a half to the Coast before anything was done, and this is something that has been approved years ago and it's still that way as far as -- since, well, 2008 when I finished.
598. On one of the previous slides that had the more detailed lines, are those the actual routes that you're planning on testing?
599. The other slide, not this one.

--- (A short pause/Courte pause)

600. **MEMBER HAMILTON:** I can clarify.
601. We've discovered that some of the maps that we put up had -- was a -- what did you call it, Troy? I can't remember -- a polygon cut, which is not the actual lines, it was just to illustrate where they'll be.
602. If you go to the Discussion Paper and the map in there -- this one here -- that's in the Discussion Paper, is the lines that they're proposing to follow; this one here.
603. **MS. JENNIFER INUARAK:** That would be the actual route that you're planning on taking?
604. **MEMBER HAMILTON:** Over the five-year period.
605. **MS. JENNIFER INUARAK:** Right.
606. Okay, so that can be provided directly to us.
607. **MEMBER HAMILTON:** It's in the Discussion Paper, yeah.
608. **MS. JENNIFER INUARAK:** Okay.
609. And the boat that you're planning on using, that's not a boat you own; correct? That's a boat you rent?
610. **MR. GARRY MORROW:** This particular vessel is under a long-term charter agreement to Petroleum Geo-Services and MKI and it's run by Sanco Shipping out of Norway.
611. But to go on, it is all Petroleum Geo-Services crew onboard the boat.
612. **MS. JENNIFER INUARAK:** I'm wondering what year you rented the boat specific for this test?
613. **MR. GARRY MORROW:** It's not rented specifically for this test.
614. This boat was rigged specifically to do geophysical exploration and, like I said, it's on a long-term charter. It's worked two years in a row off of

- Newfoundland and Labrador. It is -- currently, it transited from Brazil to West Africa where we just finished up a survey in Brazil.
615. It's now in West Africa and goes over to Mozambique and comes from Mozambique over here to -- back to Newfoundland again. So it goes to a lot of places.
616. **MS. JENNIFER INUARAK:** Okay. I'm sorry; I have a lot of little questions.
617. What is the planned approval date for this project?
618. **MEMBER HAMILTON:** The plan would be that I would take all the comments. I have to prepare a report of all the information that was filed, all the comments we'll hear until the end of the week.
619. And then, I'll prepare a report with the recommendations to the Board, which will probably go towards the end -- middle towards the end of May and, whatever the decision, it will be announced whether the Board will approve with conditions or deny it.
620. And depending on when that happens from that, the plan in front of us is MKI would like to start doing -- being authorized in July, if it's approved.
621. **MS. JENNIFER INUARAK:** Okay. These are touchy.
622. Just wondering from the environmental aspect, what studies have you investigated and what things have you taken into consideration from previous studies done?
623. And amongst that, what changes have you made to your proposed testing as a result of those studies, any studies that you may have read or done.
624. **MR. CHRIS MILLEY:** You're right. They are touchy. In the environmental assessment document, the environmental consultants that were hired had referenced other work that had been done in other places, as well as work that had been applicable to that -- to this area.
625. Subsequent to that and in our meetings that we've had in the communities, the questions that have come up are questions that are not normally

- addressed in a standard environmental assessment. Because when they started this process, you remember the CEA Act was in place and things have changed a lot in Canada. And the NEB have picked up the slack and have maintained the same standard for environmental assessments even though the Act is -- well, you had to be honest -- diminished.
626. Two of my colleagues who aren't here with us on this trip, I called them just before we came here because the questions that came out from this afternoon made it apparent that some of the information that we have collected and passed on hasn't made it out the communities.
627. So I've committed to getting that to the communities -- studies on the level of sound that comes out, the impact sound has on marine mammals and other places, as well as studies that have done in closed containment systems, sound that's generated by whales themselves, so that gives you an idea of the comparison, how far sound travels, all of this information has been -- we've gleaned from past research in other areas.
628. And we have that information. I will get it to the community. We'll probably make it available through the Hamlet office as well as to the NEB.
629. And in the summary you have some of the answers that came after we were here the last time.
630. **MS. JENNIFER INUARAK:** Okay. Thanks. I think I might have two more questions.
631. If this testing does go ahead and for some strange reason we happen to see whale beachings, what are your plans with that?
632. **MR. CHRIS MILLEY:** That's, I think, probably -- one of the rationales behind mitigation is to avoid those kind of circumstances. And in the event that there is an unforeseen circumstance, that's where the relationship between the community and the company is very important. So that people can report in to try to find out what caused it because it's very easy to point to the root cause of something and find out that it's not the case.
633. Case in point, whales that were recently recorded as having been frozen in the ice, everybody assumed was from seismic surveying. And it turns out there was a seaquake which we've -- that's one of the things that was sent to

- the community here. And we've actually had responses from the Hamlet office thanking us for getting the information to them. But the seaquake was the cause.
634. So it's really important that you have a relationship that's positive and not adversarial to find out what caused things. The obligations, obviously, are there of -- you know, coming up with a reasonable resolution to any event. I'll give you an example of what I mean.
635. If you ask people where fish have gone in Newfoundland, some will tell you it's seals and some will tell you it's overfishing and some will tell you it's environmental change and some will tell you -- there's always a reason. I teach fisheries management. I can tell you it's a little bit of everything; there's no one thing you can put your finger on that is the root cause.
636. **MS. JENNIFER INUARAK:** Okay. Thank you.
637. And I'm just wondering like, what most people are saying is a lot of reluctance when it comes to this going ahead. I'm wondering if it's the same kind of feeling, same vibe you're getting from the members of all the other communities that you've been in?
638. **MR. CHRIS MILLEY:** I've had the pleasure of going to all of the communities. I've actually been asked that question in all of the other communities and I've always made it a commitment to each of the communities to respect their position and not to pit community against community.
639. But I can say that each community has people who are in favour of it and then each community has people who are concerned about it. But I would not say that a community is for or against, that's an individual -- usually you'll get a mix of people -- people's opinions.
640. **MS. JENNIFER INUARAK:** All right. Thank you.
641. **MEMBER HAMILTON:** Gentleman over here with the -- yeah, Bharat's there. Thank you, Bharat.
642. **MR. CALEB OOTOVA (through interpreter):** As it was mentioned, there's not much seals around here and someone said that he knows where the seals are. I don't think there are seals. We -- our seals are not -- we have different seals. First behind Bylot Island, I was one of the observers or I was

- in part of the study when they were doing the seismic testing through ship.
643. There were no seals for two weeks, maybe an occasional sighting every few days. When the seismic started test -- when the seismic testing started, I woke up at 3 o'clock, the whole beach was full of seals -- seals, ringed seals, school flipper, and I asked how long the ship was, it says that the ship was 200 miles away. And the seals already had heard it.
644. If there is any activities on top, even if they're sea -- even the seal's ears are very sensitive because the sound goes faster under the sea. I think it's very loud as -- if you can hear it. When I also heard that as soon as the -- the sighting -- some of the animals came out dead. And you have to be -- and I think you guys have to know that. And I think you have to be concerned too. And I just wanted to bring that up.
645. Thank you.
646. **MEMBER HAMILTON:** Just a comment. Who's next? We'd like -- Bharat, the microphone if you could. Thank you.
647. **MR. RONNIE QIYUCIPIK (through interpreter):** Thank you very much for coming before you do any studying to come and ask the people. As you were talking, when that you would stop the ship if there were any marine mammals coming up, what kind of a gun -- airgun do you have or dynamite would you use?
648. **MR. GARRY MORROW:** The source ray that we use, as I described earlier, is compressed air and it is made up -- back in the picture, I don't know if we can go to that -- second-last line. That one or the next one above it.
649. That diagram there on the right-hand side kind of shows how it works. So it basically has a chamber on the end of it that fills up with air, compressed air, and then the piston inside of it moves back and releases that.
650. And if we go back another picture -- step back another slide -- if -- let me point that out. That's actually one right there.
651. So those are each -- each one of the elements that have the compressed air in it.

652. So that's what they look like and they are probably just shy of less than about a metre and a half in length.
653. **MR. RONNIE QIYUCIPIK (through interpreter):** Are they going to affect the crustacean on the seabed because they are the food for the other marine mammals?
654. And you had a -- when the Whaling Committee was here, the study area that you want to do is calving ground for bowhead whales and other whales; are they going to be affected?
655. **MR. CHRIS MILLEY:** Now you have a question that I'm quite familiar with because that was an issue in Nova Scotia and New Brunswick and Prince Edward Island area where the crustaceans are -- that's where most of our money comes from -- the crab fishery -- and there's been a lot of research on the effects of sound on crustaceans.
656. That research is in the environmental assessment document. That's something that people are obviously concerned about -- the effects on other species -- so that you're not affecting the long-term relationships between the marine mammals and their environment. That's what an environmental assessment is for.
657. The other thing that we've noted in talking with the fishermen is one thing to be careful of is, as I was saying earlier about understanding relationships, as DFO allocates more and more quota in the turbot fishery that will have an effect on the marine mammal population as well.
658. So it's -- all of these things are going on at the same time. So it's very difficult to pick. That's the problem, and that's why it's important to keep sharing information.
659. One of the people that will be working with each of the -- with the vessel is a Fisheries observer or Fisheries liaison so there's that information going back and forth as well.
660. **MR. RONNIE QIYUCIPIK (through interpreter):** Because I remember -- I think it was last year or year before -- that they saw a lot of dead animals and, after that, I noticed that mammals were starting to get sick.

661. I know that they don't get affected right away and when the other animals start eating the affected -- another animal would get affected like from the food chain, from the seabed.
662. **MR. CHRIS MILLEY:** I don't know quite how to answer that.
663. I think that's something that you'd have to talk to somebody with medical background or knowledge of that.
664. **MR. RONNIE QIYUCIPIK (through interpreter):** Thank you.
665. Once you have a good understanding then come back. Thank you.
666. **MR. PANILUK SANHOYA (ph) (through interpreter):** I am from here, Paniluk Sanhoya (ph).
667. The first person who was talking, a person from Pond Inlet, I totally agree with because, when there is no study done, they cannot answer these questions. The only time they can answer questions is after they do the study when they can answer some questions.
668. We don't want our waters to be bothered. This is the reason why we're here because it's a concern to us.
669. First of all, the ship that was coming here, they were doing some seismic testing, and later on, after that testing, the whales were gone and later on they sighted some whales but in (in Inuktitut) area. There was some study then.
670. And that's why, from these studies, we are losing our mammals -- marine mammals. Cumberland Sound had lots of square flippers but they're gone, they're no longer where they were. These are the concerns that we have. And we know our animals. For us people in this area, we know where our animals are and these are the concerns that we have because it's like our farm, our mountains and our waters. These are the concerns that we have about these areas.
671. I know that I cannot get an answer at this time because they're just starting to do -- or wanting to do the study. Thank you.
672. **MR. J. NASHOOK:** My name is J. Nashook. I would have liked to, first, if I read the report, I really do. I would love to see it before I came up to

- you. I'd like to understand about this.
673. In deeper waters, does the sound wave travel -- does it spread, the sound wave when you're doing testing?
674. **MR. CHRIS MILLEY:** As I said earlier, we're getting the information sent from my colleagues. That was one of the questions that was asked this afternoon.
675. Yes, the sound travels in all directions but it dissipates. It gets fainter and fainter as you go away. It does travel a long distance but sound in the air and sound in the water are not the same. So it travels further in the water but more intense in the air. So it's -- and it dissipates faster in the air. So the same level of decibels is not the same. And we have that's -- that's the information that I had assumed was passed on but we'll make sure that it is.
676. **MR. J. NASHOOK:** Thank you.
677. And who is going to monitor the ship activities?
678. **MR. GARRY MORROW:** Yes, the ship and its progress and its track and how it acquires the survey lines is monitored by us on shore and so we have instantaneous data. I can track them via satellite anytime. So we know their location. Their location is always transmitted 24/7.
679. And, of course, community liaison. And we also have shore representatives that we bring in when we do this type of operation.
680. **MR. J. NASHOOK:** Okay, thank you for answering.
681. I want to talk about a little bit of the ship: Where would the ship start discharging the -- discharge water going up to the site?
682. **MR. GARRY MORROW:** Yes, all the ballast water, you know, per the regulations, and stuff like that, is all contained on board so nothing is discharged.
683. And it's all in accordance with, you know, Canadian Coast Guard, Det Norske Veritas inspection and everything like that. Dirty oil, everything like that is maintained in different tanks on board the boat and then discharged later on at a

port that can handle that type of liquids and everything.

684. **MR. J. NASHOOK:** Okay, thank you.

685. Maybe one last question: Like there's always packs of ice, and even the little ices, can they bounce back the sound waves, like, bounce them back down?

--- (A short pause/Courte pause)

686. **MR. GARRY MORROW:** I was trying to ask my colleagues up here to see if one of them was an expert for your answer there.

687. But one of the things that we mentioned in the earlier talks that we had here is that we try operationally to avoid the ice. The ice is not good for us; you know? So it impedes our operation, you know, you can have damage to some equipment and stuff like that.

688. So we do everything that we can by using a support vessel that goes out in front. We try and get all the latest satellite data, you know, and you guys know with local knowledge satellite data isn't perfect and the way the ice moves. But we try and use every tool that we can at our hands to turn around and avoid the ice.

689. So we try not to get near it.

690. **MR. J. NASHOOK:** Thank you.

691. And can I -- I'd like to know more about passive acoustic monitoring or did we talk about that too?

692. **MR. CHRIS MILLEY:** There's two kinds of observing: one is the visual observation with the trained observers and the other is what they call "passive acoustic monitoring".

693. So even when the ship is not running the seismic source, it's monitoring for whales and that's so that they know if they do see a whale and if they stop operation they can listen to find out when it's out of range. So it's really a backup but it's also as well as getting that level of certainty that it's not going to start up.

694. And just one other thing, as we've been talking, one of the issues about ice and where ice is and whales are, one of the things that we're in discussions on now is an IQ study, an Inuit knowledge study that would ensure that everybody is given the opportunity to provide information. And the advantage of this is that this provides information back to the communities as well, as well as the -- the QIA is working to accumulate and acquire Inuit knowledge so that it's not lost and this can contribute to that as well.
695. **MR. J. NASHOOK:** Okay, thank you. J. Nashook again.
696. How about employment and training of -- I don't know, maybe I need a job. Those kind of reason why I don't like to have offshore drilling. Like there's quite a few that I have here is that -- I don't know, maybe just need stronger independent scrutiny, the best practice that are followed. I don't know, strengthen the procedures and practices and more participation in the regulatory process governing offshore drilling. What if commercial quantities are not found, what then, what good the drilling would be if they even find the commercial quantities of oil and gas?
697. That is all I have to say. Thank you.
698. **MS. MARY AMAGOALIK (through interpreter):** I'm Mary Amagoalik. I'm originally from Clyde River. I think I moved to Pond Inlet when I was 25 years old.
699. I grew up eating country food ever since -- well, my father was a hunter and I grew up eating country food. I'm very scared that if all -- I'm scared that all the mammals might go away from this area when there's explosions happening from the ship; that there is something put in the seabed. That was a research -- used for research purposes and hunters found out about it but the community was never notified about it.
700. But if you're going to look for oil -- that if you are willing to help us we can give our approval. If you're not going to help us we cannot give our approval. I cannot give my approval right now because I want country food available, readily available, and know someday they're going to disappear -- they're going to disappear in the future if they're going to keep looking for oil.
701. **MR. NIGEL QAUMARIAQ:** My name is Nigel Qaumariaq and I'm

speaking just as myself; I'm not authorized to speak for QIA.

702. But my first question -- Chris talks about environmental assessments, and it was brought up that -- this is a question to the NEB. With the change in CEAA, what opportunity will the communities have to express any kind of concerns with this project if it goes ahead beyond this hearing?
703. What is the process moving forward in the future? I believe we'll be one of -- I think we'll be one of the few developed countries that will not require an environmental assessment for seismic programs.
704. **MS. CHRISTY WICKENHEISER:** So just to clarify, our process is -- now that CEAA has been repealed or the aspect of seismic being under the CEAA Act, since the time that CEAA 2012 came into place the NEB -- especially with this project, that we're going to continue a similar process where we actually asked MKI to waive their confidentiality for the environmental matter so that we could continue the process like it was under CEAA.
705. So going forward, all the questions and concerns regarding environmental matters go on our public registry, as they would have if it was a CEAA project. So in a way we're still committed to conducting an EA whether or not there's CEAA in place or not. We've got a mandate under the *Canada Oil and Gas Operations Act* to ensure there's environmental protection for all projects that we would authorize under that Act. So we're still obligated to do an EA under that Act. And for this particular project it's the same processes that would have been under CEAA.
706. I hope that answers your question.
707. **MR. NIGEL QAUMARIAQ:** Yes, that did.
708. My next question is to -- when you have an environmental assessment, you look at what the communities or whatever, the affected people what do they value the most. And I'd like to know from the environmental assessment what Pond Inlet values from -- you've mentioned that you've been to this community I think three or four times now.
709. So I'd like to know what you've learned from Pond Inlet and how you've incorporated it into your environmental assessment because that's what they want to know. They want to know did you listen to us, did you incorporate it

- because from when I read the environmental assessment, I found it very cookie cutter. I found it taken from scientific sources, there's no analysis to how this information was used, how the mitigation measures were changed because of that. So that's my first question.
710. **MR. CHRIS MILLEY:** First, I was not involved in the environmental assessment. There was another consulting company that was doing that and our engagement meetings were provided over to the same people.
711. And the -- okay, the first part of the question is what -- what do people value? And I think we've heard it here tonight as we've heard in most communities, it's two -- well, actually there's three things that people value.
712. One is the traditional food sources and the protection of those traditional food sources. The other is -- and I would say having -- you know -- a foot in each side of the equation here, the companies have also expressed the same concerns; they're not looking to say "Well let's ignore the food and, you know, run the ships and ignore everything", there's sincere concerns on both sides when it comes to marine mammals.
713. The other is the general environment and the fact that -- as Christy has said that, you know, the companies have agreed to follow the same process, they could have easily have turned around and said "No, we don't need to", and they'd be, you know, off doing something right now. They've expressed the commitment to both the environmental process as well as to the environment. And I think that's good business nowadays. I think the world has changed and companies that want to do business in one country and then go to another country, their reputation gets ahead of them, so there's that part of it.
714. But there's another thing and I think you touched on it here and that is in all of the communities and working with Aboriginal people in Canada and the south, which is what I do, and who I've worked for for 17 years, is the ability to have a say. And I think that's been expressed here by the fact that this is an offshore project and people are sitting in Pond Inlet and coming back to Pond Inlet and coming because they want to make sure that empowerment is there. And those are the three things that I think that have been expressed in all of the communities.
715. **MR. NIGEL QAUMARIAQ:** Okay. When I think about -- we can't just say "marine mammals", that's a fact. You can't just say that because

- individual animals here, they have different sensitivities and it just seems like one of the biggest vex for Inuit is narwhal, bowhead whale.
716. And the information that was included in the environmental assessment is very scant. It's -- there's a lot more science that has come into play and QIA will be submitting that along with their information. So I think that with what's going on now and the information that is presented to the community isn't a very good representation of the information that's out there.
717. And my last point will be that TGS NOPEC did work in Baffin Bay and Davis Strait in 2008, so that's not true. One of the companies has done work in Baffin Bay and Davis Strait in 2008, so that's my last question or last comment.
718. Thank you.
719. **MR. CHRIS MILLEY:** Your comment about the various resources -- the various food resources, I agree with you and in fact the information that Alana and Maria and others in NEXUS have gone back and compiled, that was the information that we provided that I'm -- as soon as our meeting was over, the last meeting, I went back and I phoned them and said "Look, you know, that's not here, so can you get that", and that's what's being sent now.
720. So we do have more information which is on top of the EA that has been provided to inform the NEB in their decision, as well as to make sure it comes to the communities to augment what was there before.
721. **MR. PURH (through interpreter):** My turn? I'm originally from Pond Inlet. Before Qallunaat started arriving or before too many ships started coming here, when they first started coming and I know all our animals and I know that the animals are decreasing because of ships.
722. I know what you said, but as Inuit we are unique, we are different from Qallunaat because we eat country food. That's where we live in the Arctic and we have been eating the country food for many, many years. And we know that they're moving from the original locations to another location, the sea mammals. This was never the case before any activities around and it's hard to tell what's going to happen in the future.
723. If all the wildlife moved away from this area, how are we going to

- have food? Because of the seismic testing, because they're not good for animals and we have the best nutrition food in the north.
724. And my question is, from the seismic testing that all our animals disappear, or whatever the food chain that they had, they will die off. According to the communities that have signed, Pangnirtung, Clyde River, Pangnirtung, Iqaluit, Kimmirut and Cape Dorset. I saw -- I've seen these communities just listed in the map.
725. Once you start seismic testing, the -- not even one community has received any fund to help out with food. If you're not going to help out with food, then there shouldn't be no approval at all because the seismic testing is not good for our animals. They are relocating already from Pond Inlet that we know here, not through a study because through Inuit tradition or knowledge. The only way Qallunaat find out about things is when they do studies. I do not want any testing done at all if you are not going to replace them with any other source.
726. Thank you very much for trying to get information from the Inuit and I appreciate that very much that we can talk together and that's all.
727. **MR. SAM OMIK (through interpreter):** My name is Omik and I'm not originally here.
728. I just want to share something with you that I experienced. I'm in a kind of a -- in between life, I'm not sure what's going to happen in the future or -- I only know that the federal government, the MKI and the QIA, I have no idea what their position is on this.
729. As somebody mentioned earlier who used to work for the oil companies, most of us have worked for oil companies. We do have lot of oil in high Arctic which has not been -- which has not been worked on, so you could probably buy them, there's lots.
730. There was a quake -- earthquake not too far -- I think -- volcano -- through a volcano and these things are occurring. We have to try to work on things that we know and as we've been saying, because we are concerned, because of our food.
731. My question is going to be -- the first people that did testing, we put them into court and the testing was stopped.

732. I'm sorry, I made a mistake earlier. I thought you were the same guys.
733. In June -- and you said that you could change or you're going to start doing the testing in June?
734. I'm going to tell you this, before you do any testing with the ship, according from what you heard from the people, you have to go do some survey through the airplane with the people of Pond Inlet because you have no idea what it looks like and where everything is.
735. From -- according to what you have stated, if there was going to be wildlife from -- so many miles from your ship, then you're going to stop the testing at that point. Maybe it's going to be a long, long time before you have to start again. So I think it would be very good to have a study or survey through airplane.
736. I am not going to support any of this at all, especially if you're going to do some seismic testing with a ship. Or let me say this first. Just before we had our land claims, there were a lot of oil and gas exploration. The Cumberland Sound -- Lancaster Sound -- pardon me -- when I was just a young lad, when these were Elder, I was appointed by the people to try to stop these seismic testing.
737. I'm very pleased that you're able to come here. Inuit do not want to just halt everything, any activities or stop any activities. We are talking to you with the things that we have knowledge of and that we have experienced. As he said, they have gone to -- we always hunt in Devon Island through the boat. We know how much animals are in between those. And if you go towards the Clyde River or through the boat, we also know the wildlife -- different wildlife there.
738. There's probably two questions that I have: Are you not going to have any study done beside a boat or a vessel?
739. Number two: The sea mammals -- polar bears, walrus, whales, seals, square flippers -- are you going to stop this testing just for these animals? And now, think about the sea ducks, sea birds who eat from the underwater, the different type of seabirds?
740. These are the two questions that I have. I don't think I'm going to

- have -- make any more comments. Thank you.
741. **MEMBER HAMILTON:** Thank you.
742. **MR. CHRIS MILLEY:** Okay, first the question of the aerial survey using a plane. But I just ask if -- I don't actually work directly for the company, but it's something that they said they would put under consideration, and I think it's something that would have to be looked at of -- you know, if you're out at sea it's one thing if the weather gets bad but we know what it's like to travel by plane in Nunavut, sometimes you can't get off the ground because of the weather but yet the vessel's out and it can still do its work.
743. So those are the kinds of things that have to be looked at.
744. The other is with respect to the marine mammals that are there. It's not just for whales that it would stop. If there was a polar bear swimming or if there were dolphins coming by or if there were, you know, any -- it's a marine mammal observer not just a whale observer so, yes, it would have the same effect: regardless of what species is there, it would halt the operation.
745. Especially, I think, a polar bear would be good to stop for.
746. **MEMBER HAMILTON:** Qujannamiik.
747. **MR. MOSES KOONPAZ (through interpreter):** My name is Moses Koonpaz. I want to ask a question. I think it was asked before but I want an answer.
748. The animals at the seabed I don't want them harmed, and also the fish in the seabed that doesn't come up for air, that stays in the water. Maybe have they made us understand or have they make you understand that turbot -- where turbot -- where they go at certain months, especially in the fall, through the deep water on the seabed?
749. That they know where they migrate at which month maybe if you know about that, can you answer this question?
750. **MR. CHRIS MILLEY:** Yes, they -- two ways: one is the science surveys that are done to assess the resource of it, they actually have that information.

751. But, if you recall, we said about having a Fishery liaison. The Fishery is -- it's well understood that the exploration activities and the fishing industry have to work together and there's been a lot of interaction with the Arctic Alliance and the Fisheries Coalition -- Baffin Fisheries Coalition to make sure that that information goes back and forth so that they know where the fishing is.
752. And if you want to know where fish are that's where the fishermen are. So it's a good way of making sure that there's no interaction to avoid the fish and the fishing industry at all costs.
753. **MR. MOSES KOONPAZ (through interpreter):** Thank you.
754. Another one: I heard that there will be an Inuit observer on the ship looking for animals. There will be more than one Inuk on the ship?
755. Back in the past, the federal government had a research and they were researching on the oil that's seeping all the time. I remember that. They had two Inuit observers and they used to take helicopters to the sea and they used to go look for seals. Way down -- on the water, there's lots of animals down there.
756. That what you're -- what with your research proposal on the map, the animals, they are right there; that the seals down there in the open water, they're not exactly the same as the coast seals, and we know that there's lots of animals down there. If the animals if they didn't disappear, they're still down there. We know for sure that they're still down -- there's still seals down there and you'll definitely see seals down there. That's one of them.
757. And also, near Greenland, that there's been companies looking for oil and, in the last year or two, they've been looking. What you can do is get advice from the agreement between the Greenland government and the Inuit if they have anything like that; that we would like to hear it if you can answer that.
758. Can you answer it? If not, you cannot. If they have a federal government and Greenland had agreement?
- (A short pause/Courte pause)
759. **MR. GARRY MORROW:** The best comment I can make is that we have done some work in Greenland in the past, and I am not sure and I would

- have to go back and check to see if some of the information that we had that were agreements with the Greenland government and the authorities over there could be released.
760. There's a lot of things that go as confidential information or that are confidential in those documents and, to tell you the truth, I have to go back and find out if that would be releasable.
761. **MR. MOSES KOONPAZ (through interpreter):** Thank you.
762. I know some places are very deep. If we were to look at the map, there's different levels of depth. My question is: If you do testing in the lower water or near the sea bed, are they going to have the same sound or the strength? If you can answer that, thank you.
763. **MR. CHRIS MILLEY:** As Magnus says, the source makes the same sound no matter how deep the water is and how shallow the water is. So it's -- as -- and you're getting into deep water, the dissipation is -- the sound that hits the bottom as opposed to in shallow waters, it's going to be slightly different. But they don't change it, they don't ramp it higher to make it louder in deep water. It makes the same sound everywhere.
764. In fact, what makes the sound is when the piston opens up fast, no air comes out; the water collapses back. The water goes out -- the air goes out and pushes the water and when the water closes back in on the bubble it makes the clap. That's the sound. So it's the same everywhere.
765. **MR. TIMOTHY AKSARJUK (through interpreter):** My name is Timothy Aksarjuk from Pond Inlet. Thank you for inquiring or asking people of Pond Inlet.
766. The seismic testing that is proposed, I'm also against the Lancaster Sound. Now, a lot of people will be going there back and forth every day now that we have 24-hour light -- sunlight. I would be very happy if you would get people to raise their hand whether they support the project or they against it, so that everyone will know here.
767. Thank you.
768. **MR. RONNIE QIYUCIPIK (through interpreter):** I have another

- question. And I don't understand seismic testing too much. I've seen a little bit on TV. We've seen oil spills.
769. **THE INTERPRETER:** I'm not sure what he's saying.
770. **MR. RONNIE QIYUCIPIK (through interpreter):** Do you know the percentage of how much spill there is?
771. **MR. CHRIS MILLEY:** Two things; one is this project isn't about the -- drilling for oil, it's about the seismic survey.
772. But recently there was a conference in Iqaluit and some of the people that were from -- like from NEB as well as from the companies, as well as other government departments within Nunavut were at the conference. And there's a lot of information in there about global oil. And one of the documents is prepared by a Dr. Lee who is a world expert. And I think it would be very interesting to get that information to the community.
773. Natural oil seepage into the ocean is incredible the amount, not from drilling but the natural seepage of oil. If it did not degrade and naturally be handled by the environment, it would be -- every beach would be covered in oil. But nature has a way of dealing with that.
774. For example in Scott's Inlet, there's a seep and that seep has been there hundreds and hundreds of years, it's natural. But it disappears because nature has a way of -- oil is natural as well.
775. And that's the thing that people have to understand, that the oil spills, like in the Gulf of Mexico or from ships break up, those are accidents. But there's still natural oil going into the environment. And this project is not about that. So this project is about a seismic survey.
776. But I think I can -- I will try to find that information and get it to the Hamlet office and if you could let people know then they can get it for you because that's good information for you.
777. **MR. RONNIE QIYUCIPIK (through interpreter):** So what you're saying is it's 50/50 percent chance?
778. So if it would spill, do you have a proper -- proper safety plan?

779. **MR. GARRY MORROW:** We addressed that in the earlier meeting. But yes, the ship has to have a safety plan and everything in place which is submitted in the documents to NEB and to the authorities.
780. The ship is not per se the only oil that could spill would be the oil that would be in the tanks and the boat doesn't carry oil, it uses light fuel oil to run on. So the equivalent of very, very light diesel fuel is what the ship runs on and so that is basically the only thing that's on board and that's to operate the boat.
781. So we're doing nothing that's going down to the bottom that would release oil or anything like that into the environment.
782. **MR. RONNIE QIYUCIPIK (through interpreter):** What I said earlier is that I don't know anything about drilling.
783. My question is due to the high current and all that, it would spread, maybe rapidly. Would the ship be able to keep up with a spill?
784. **MR. GARRY MORROW:** There would be a lot of speculation of what type of spill it would have. The only type of spill that it could have is if there was a catastrophic event on board the vessel. And of course, you know, we have all types of safety mechanisms just like any other ship would have.
785. And so could it keep up with it; it would depend on the amount that was spilled and everything like that and we'd have to know what kind of failure it is. There's a lot of different scenarios. But to tell you the truth, we have a support vessel that goes along with it, you know, that can have some containment on board and stuff like that.
786. So it's nowhere near, you know, the amount that we hold would be -- would probably be in the neighbourhood of about 500,000 litres.
787. **MR. RONNIE QIYUCIPIK (through interpreter):** And would you still drill if it's -- even if it's a small rate of oil?
788. **MR. GARRY MORROW:** We don't drill, so there's no drilling involved in this. So we don't do anything of that sort. All we actually do is the testing and that's not drilling and that's nothing that goes into the ocean floor. Ours is self-contained and what we do is we just look for the formations below

- the earth through sound waves.
789. **MR. RONNIE QIYUCIPIK (through interpreter):** So my last question is, since you're testing, does that mean you're planning to drill some day?
790. **MR. GARRY MORROW:** No, we don't drill. So we have nothing to do with that end of it. And I don't know if we want to expand on that or -- really we don't, that's up to the oil companies.
791. So the information that we acquire here in this testing would go to all companies and go to the government and then they would have to make a determination after looking at that data -- and I'll use the word "interpret" that data -- whether it was viable to drill for oil or not.
792. So there's -- it goes both ways. It could either determine that the geology is correct to drill for oil or they can look at this data and decide that it's not viable to drill for oil.
793. **MR. RONNIE QIYUCIPIK:** Thank you very much.
794. **MEMBER HAMILTON:** Yeah and just, if I may help, if the potential for drilling is a long time away in this area, it could be a gap of 25 years before a company will come in and, first of all, seek a licence to allow for drilling to take part.
795. And to get a licence to even to give the rights to have an area for licence is -- falls under Aboriginal Affairs and Northern Development. They would need to grant the rights to issue a licence and then, once they grant that issue to licence, then a company has to apply to drill and there's a whole lot of other processes that have to be followed before that.
796. So I'm speculating, but it may be 20 years before there could be any drilling even thought about in this area.
797. **MR. GARRY MORROW:** I'll just add to some of the timeline in there that, you know, you see the program up there that we have for 2013 and, say we acquired that and finished that like we said in October, you're probably looking at a minimum of October 2014 before that data would be even ready for anybody to look at.

798. So there's a long time period process. I hope I answered your questions.
799. **MEMBER HAMILTON:** Thank you.
800. The gentleman right in front of me here.
801. **MR. CALEB SANGYG (through interpreter):** Qujannamiik. Thank you.
802. It is written down here that the National Energy Board will review an assessment done -- it's written under that as an assessment -- what I understand is that we are asking for permission or not? We'll find out in the future here in our land in Pond Inlet on Baffin -- on Pond Inlet and all of Baffin Island.
803. Just everything is very expensive, you probably know that, that you say that the federal government has that -- the Canadian dollar is only 25 cents in the North. That's how expensive the North is. And according to our life and how we lived before and up to nowadays, it's our -- just living our life is very expensive.
804. And what you have proposed to do, hold explosions, that you'll pass through a lot of animals that you want to make a research in the certain area that maybe you can research some more in the future, make sure it's not disturbing the animals.
805. What I want to ask the National Energy Board is that -- I mean, so we can work with each other and be friends and just keep asking us those kinds of things and we can talk to each other and understand each other.
806. And can you make agreement if there is approval that you can compensate the North for a trillion dollars for loss of animals? And those oil companies -- oil companies, they're not going to help the North, the Inuit, they're helping themselves. They want to use -- want to make money -- that if they sell oil, they'll make lots of money.
807. And up here, us Inuit in the North, we live on animals and it will affect us. It's that if -- the in the South, if whatever you live on, if it affected you, you would be very worried about it. We're the same thing.

808. Between Pond and Aboriginal people and Energy Board to make a MOU regarding the assessment compensation. (In Inuktitut). Understandable?
809. **MEMBER HAMILTON:** Part of approval of a seismic, if it is approved, there needs to be a benefit plan and that's not something that we approve, that's something that the government, your government, has to work out with the company.
810. And the company has to have approval of a benefit plan by the Government of Canada, by the Department of Aboriginal Affairs and Northern Development, AANDC, have to approve that benefit agreement. We have no say in that. That's an agreement between your government and the company.
811. So that's one agreement that's separate that has to be in place before they can -- we can give their agreement to the seismic but they also have to get a benefit plan before we can give the final approval for them to proceed. That's one thing that we can do and that's beyond -- about all that -- we can't enter into agreement, a tri-party agreement with MKI or the community of Pond Inlet, but we can't do that.
812. But if it is -- if your concern is about liability if something happens, then the company have responsibility for that particular aspect as well. They have to be covered for any liability and be able to compensate people for things if there's an incident happen. The company needs to be insured for that and they have to prove to us that they have that coverage to cover anything that possibly could be claimed against something that could happen on the project.
813. **MR. CALEB SANGYG (through interpreter):** Qujannamiik. Thank you.
814. In Greenland, they -- before they start drilling for oil, they did research and it affected their animals, especially the narwhals and the walrus and the seals.
815. But if there's going to be such a big environment impact -- animal impact like in Greenland, I think we have to have an agreement first about those kind of things because if that happens without an agreement, we will become very poor.
816. And I hope it's understandable.

817. **MEMBER HAMILTON:** This is not on drilling, but just generally. Financial liability, you know.
818. **MR. CHRIS MILLEY:** Yeah. No, I'm not talking about the liability, but talking about benefits.
819. One of the things that we were going to be doing was coming up around this time or actually a little earlier, to begin discussions about the benefits. And not all the benefits are usually -- you know, I work -- most of the time, I work for the Chiefs in Nova Scotia. I've been representing the Nova Scotia First Nations in various agreements with companies and what we've started to do is to look past it being just financial.
820. Sometimes it's about the relationship of working together on other things: planning, using the expertise that's sitting around the table to be mutually beneficial. For example, Inuit knowledge is helpful to the company and the company has knowledge about other things that can be useful to the community and sharing that is a benefit. And some of our best successes in Mi'kmagi have been through those relationships with companies.
821. So that's one thing but the other is that the reason that we weren't coming and having the discussions about benefits is because it was too close to this process. So it was decided to postpone the discussions until after. We would have been here in either February or March and people said: "Well, you can't go now because it would be just too many meetings in the community."
822. That was the advice we were given.
823. **MR. CALEB SANGYG (through interpreter):** Qujannamiik.
824. Thank you and my last question is that what -- the area you're going to use in the Baffin Bay, the narwhals did go through that route and area and down to the southern side that you're going to do research, exactly where this goes through. And these scientists who come up here to do research for government departments and companies, sometimes they lie to us and they keep telling us the polar bears are disappearing.
825. But for us, the local knowledge is, the polar bear population is increasing, yeah. That -- what strange animals stop arriving to communities; Cambridge Bay they never used to get narwhals; now they do. We used to see

- narwhals that use to pass by Pond Inlet and they just continued, continued three days non-stop and nowadays we're -- it's less than one day that they disappear.
826. And those oil companies who want to look oils if they were given approval, even after you've done your research oil drilling is even more dangerous than what you're doing right now.
827. **MS. MARY AMAGOALIK (through interpreter):** I want to make a quick comment. When you make an explosion, whatever dies, will you be counting the dead animals; for example, walrus? And I want it reported on paper and delivered to the communities. Some people, they can't see shrimp anymore or copepods.
828. **MR. CHRIS MILLEY:** I guess the source of sound is not an explosion, so there would not be explosions. The technology has changed a lot over the years.
829. But one of the things actually in meetings here in December, the company representative made it quite clear that any observations, if there's any observations about animals, dead or alive, any observations about seabirds, those would be reported to the community.
830. If there was -- the vessel was going along and came across animals that were floating, not because of the vessel's operation. He would also report those as well, so that you would have more information coming in. It's just one of the advantages of having the observers on the vessels, so that they can report directly back to the community.
831. **MEMBER HAMILTON:** And if I may follow-up as well, not only reporting back to the community, the company would report it -- it would be reported to the National Energy Board. It can be reported to DFO as well, Department of Fisheries.
832. So all the MMOs and the fishery licence officers would have a responsibility to report it and report it to everybody, so that all can be advised and be looped into, if necessary, that's right.
833. **MR. JONAH KOONARK (through interpreter):** Do you own the vessel?

834. **MR. GARRY MORROW:** The vessel is on a long-term lease agreement charter agreement to our company and it's crewed by people from our company.
835. **MR. JONAH KOONARK (through interpreter):** (Off microphone) ...figure what seismic survey.
836. **MR. JONAH KOONARK:** Is that that thing that's underneath the water, the -- piece at the end?
837. **MEMBER HAMILTON:** Could you repeat the question, it wasn't quite clear.
838. **UNIDENTIFIED SPEAKER:** Jonah is making reference to page 3, Figure 1 of the package.
839. **MR. JONAH KOONARK:** Is that the one? How long is that thing that is dragging by the ship?
840. **MR. GARRY MORROW:** It is -- yes, it is 8,100 metres in length.
841. **MR. JONAH KOONARK:** Okay. And how deep is that thing underneath the water?
842. **MR. GARRY MORROW:** Let me clarify; what is 8,100 metres is the cable that records all the information. The source itself is 14 metres in length, and it is towed right at 9 metres, and the cable with all the sensors in it will be at 25 metres.
843. **MR. JONAH KOONARK:** And from the top of the water, how deep is that thing underneath the water? You're dragging that large piece.
844. **MR. GARRY MORROW:** Yeah.
845. **MR. JONAH KOONARK:** How deep ---
846. **MR. GARRY MORROW:** The streamer is at 25 metres.
847. **MR. JONAH KOONARK:** Okay.

848. **MR. GARRY MORROW:** Yes.
849. **MR. JONAH KOONARK:** That's safe enough for the ice to go by?
850. **MR. GARRY MORROW:** That is correct. It's enough for the ice to go by but as we stated earlier, we don't like to be anywhere near the ice. So we try to avoid that. You know, we have a scout vessel that goes ahead, well ahead of this operation to take a look for that. Of course, we have satellite information. And so we use every means possible to figure out how the ice is flowing and we try to avoid that.
851. **MR. JONAH KOONARK (through interpreter):** The streamer, like with the icebergs, would you have to stop for a while if there was to be an iceberg on your way, a huge iceberg?
852. **MR. GARRY MORROW:** Yes, with the ice, we wouldn't actually stop the vessel. What we would do is we would move to make sure that we didn't have any type of collision or anything like that. So we would move.
853. **MR. JONAH KOONARK (through interpreter):** The testing area, if there was -- even if there's too much ice build-up, do you just continue doing seismic testing?
854. **MR. GARRY MORROW:** We don't. So if there's too much ice in an area, what we do is turn around and head for an area where there's no ice whatsoever. And that's whether we can do any surveying or not. So that's what we do.
855. **MR. JONAH KOONARK (through interpreter):** The testing area that you did, do you go back to do anymore study to see if you've missed anything or when you have to go to another location?
856. **MR. GARRY MORROW:** As we do the surveying process, we know exactly what we recorded. So it's instantaneous or I should say in real-time, if there was any type of problems, we know if we missed any type of the area or not. So we know that right away.
857. So there's not ever a need that we've finished some area and then discovered that we didn't get the information in a certain area. We know in real-time, I will use that wording "in real-time" if something happens and that we

didn't get that data.

858. **MR. JONAH KOONARK (through interpreter):** Your airgun, does it go straight down? And once it touched -- so it takes back the information from the seabed to your cable?
859. **MR. GARRY MORROW:** Yes. If you kind of look at the diagram here, everything is in a straight line. The one up above would represent the cable or you see the sea surface there on the very top, and then the next line down represents the cable. And then if you move forward there, that little dot up there behind the boat, that's sticking down, would represent the sound source and so all of that is even through the water.
860. And as I mentioned earlier, all along that cable, every 300 metres is what we call a depth control device or for lack of better terms, we call it a "bird" because it somewhat looks like a bird. And it has wings that automatically move back and forth and that takes that cable straight to a 25 metre depth so it stays even.
861. Likewise with the source array, it stays at an even depth and while that is every 300 metres where those birds are, they have a compass built into them and so we know exactly where that cable is in position to the boat. And if you had an iceberg that was coming down nearby, say 4 or 500 metres off to the side of the boat, we would know exactly how far that cable, and that source would pass from that and the ship would be able to take any correction in course that it needed to, to move away from that obstruction.
862. And so all of that remains at that depth throughout the survey period so nothing goes down to the ocean floor, and really, we don't bring it up to the surface until we want to pick everything up.
863. **MR. JONAH KOONARK (through interpreter):** The airgun, is it very loud under water, say every half hour?
864. **MR. GARY MORROW:** We have mentioned before there is a -- the sound goes at about every 15 to 20 seconds into the water.
865. If I understood you right, you wanted to know how often there was a pop. Yeah, and so that pop is every 15 to 20 seconds.

866. **MR. JONAH KOONARK (through interpreter):** Say you have eight hours a day and all that time for the eight hours, you do this testing or do you take a break at all if there's any -- or if there's too much ice in the area where you want to do the study?
867. **MR. GARRY MORROW:** The break is when we finish a survey line. So the lines that you saw that were in the previous slide that were black -- in black, we would survey along that whole line.
868. If the second part of your question was, if we encountered ice, we would stop and turn around and go away from that. And chances are, unless we had another survey line adjacent to that, when we turn around to go away from that, we don't do any survey work.
869. **MR. JONAH KOONARK (through interpreter):** The square lines, how large are they each, is it one mile, two miles?
870. **MR. GARRY MORROW:** As you can see from that map, they vary in length but if you want to -- let me point at something here. It might help put it in perspective.
871. In between those two lines, there's probably well in excess of over 100 kilometres. So that kind of gives you the scale of it. So for us, if we surveyed this line here and we wanted to go to this one next, at 100 kilometres, it would take us roughly 15 hours to go that distance.
872. We wouldn't be surveying during that point in time while we were going that distance but that -- it's -- the maps don't -- you know -- show the scale of things very well.
873. **MR. JONAH KOONARK (through interpreter):** My last comment. You're going to get pretty close to Lancaster Sound. Have you done anything there, Button Point?
874. Since you're going to go near Lancaster Sound, when you're doing the testing, do you go near the land or can you see the land?
875. **MR. GARRY MORROW:** No we can't. We're so far offshore that we can't see the land. And does anybody remember the distance to Lancaster? It's pretty far. You know, we would have to scale that off but we're pretty far

- from Lancaster Sound.
876. **MR. JONAH KOONARK:** Okay. That was my last question.
Thank you.
877. **MEMBER HAMILTON:** Thank you. Qujannamiik
878. I don't -- we have nobody else on our list but we're open to -- yeah?
Oh, now three more.
879. **MR. NIKO INUARAK:** Hello? Hello? Hello? Hello?
880. **MEMBER HAMILTON:** Yes, you're good.
881. **MR. NIKO INUARAK:** Oh. I can't hear myself for some reason.
882. Hi. My name is Niko. I will be speaking English and I'll --
sometimes I'll speak Inuktitut.
883. Thank you for coming to Pond Inlet. We appreciate it and we've been
here for over thousands and thousands of years. So this is our land and thank you
for coming to our land.
884. My first question is do you guys know what the maximum decibel that
a marine mammal can take?
885. **MR. GARRY MORROW:** That was one of the questions that was
somewhat asked this morning and we have -- last time we were here, it was one of
the questions asked as well. And if you -- I don't know if you recall my
colleagues Alanna and Maria that were here, they were up to the Nunavut
Research Institute, up to Arctic College for meetings as well. They've -- they
went back and they picked up the information.
886. They looked and they found the information about the -- what they
considered to be harmful effects and things. It was research done from other
places, as well as specific research studies to look at the changing behaviour.
That information was forwarded on to the community but it wasn't obviously
distributed so I've asked them to send it again and have it available to the
community.

887. **MR. NIKO INUARAK:** I would like to know because you guys -- since you guys sent the information out already, you guys must have it with you guys because what I saw earlier is that we're only able to give feedbacks until next week, May 3rd and that's really close. And you guys are here a week before the feedback is due and that's not acceptable at all.
888. **MEMBER HAMILTON:** The material has been out for a month -- the discussion paper, and it's been out for a month and it was forwarded to the communities and has been available. And this was sort of the -- the part of it was to come and get those comments in that period and this is the last part of it and so that -- it has been out for over a month.
889. **MR. NIKO INUARAK:** All right. So even if it's been out for over a month, everybody has life. It's everyday life that -- and so I didn't see anything about National Energy Board. Maybe I've been too busy, I don't know.
890. But I still want to know because it -- our decision is based on what is harmful to animals and it's for me to decide and for them to not be -- not give me information about the decibel that is harmful to animals and for me to have a week to reply to you guys. That's like the only way for you -- for anybody to do that is for them to try to patch this.
891. So I'm not happy about that. And so I'm sure that I'm not the only one here. And so even if the material was out for over a month I'm sure there's people like me that haven't received anything like this. So I'm not happy at all. And I feel like that it's -- it was not properly planned.
892. And for you guys to know that people would want to know what the maximum decibel of mammal marine can take and for you guys not to be able to give me that information is not acceptable either.
893. **MR. CHRIS MILLEY:** I understand what you're saying. The information we sent on through, I think it's Shelly at the Arctic College and on council was last December -- the information, and we actually had feedback from the Hamlet explaining how pleased they were that we got the information so quickly.
894. I don't know what happens inside -- but it's not for any other -- not for lack of trying. I apologize.

895. **MR. NIKO INUARAK:** Yeah. I'm still not happy with the maximum decibel that the animals can take. And from my own research that there -- if I remember correctly, that they're able to take up to 130 decibel and then after that they're eardrums ruptures.
896. And when that happens -- I'm a certified scuba diver, and if you go up too fast and then you can die. So there's -- and this part of the region in the Arctic is considered Serengeti of the Arctic because there's a lot of marine mammals -- not just marine, there's a lot of bird that's in this area so there's a lot of like -- everything that you can think of in the Arctic is here, it's in this area.
897. And last thing; I see all the lines here that you guys have, and for it to be running 24 hours a day till the line is finished and the sound wave -- or what is it -- the -- I like to call it a bomb because it really is a bomb for the mammals that's in the water.
898. But the airgun, for that to be running 24 hours, and for all the animals for this area with a lot of sea -- different kind of sea mammals, including dolphins -- dolphins come here too, so there's a lot of things here. So it -- I see this as a very disruptive, very damaging study.
899. And you guys already know that there's a lot of oil and gas and this is what it's all about, oil and gas. They just gave a report recently -- Emera report for this area. There's 2.5 billion barrels of oil and 13 trillion cubic feet of gas, so that's a lot. It's all in this area from Bylot Island. And so there's a lot of oil. And we know what it's about; it's all money, money talks. You guys are here for money, everybody.
900. So what I'm trying to say is that that area that you guys want to do studies 24 hours a day, seven days a week, till you guys are finished, and during fall time, and everybody knows that -- here everybody knows that that's when the narwhals and different mammals starts to migrate from this area, and they go to -- between here and Greenland. And first they go -- they hug the shores going down, and when they get to Pangnirtung area, then they go between Baffin Island and Greenland, and some go further down, some go further up, and it would be exactly where you guys want to be doing studies. And it's -- and that's when there's going to be a lot of traffic. This is their highway.
901. And I just want to say last thing that we are -- the people in Pond Inlet are against it. We were against it in the first place and we've been against it since

1970s. So we are going to write a petition for this so just so you guys know.

902. And thank you for coming here. Hopefully we won't see you guys again and you'll stop coming here to do seismic test.

903. Thank you.

904. **MR. MOSES KOONPAZ (through interpreter):** Thank you. Thank you my friends for coming here.

905. I want to tell a story, what I've seen before and where I've worked before. It's not because I don't like it but I'm going to tell a story.

906. I've worked before starting in the seventies and I've seen seismic testings being done and they were using explosives. They were exploding them on land. And near our land they had to do seismic testing with dynamite and they had to stop it. That -- we wanted to clarify everything what was happening.

907. And when there's seismic study and you are going to explode dynamite in the water they will be looking for oil and how big the oil is and how small it is. In between you'll find out how much oil there is when you start exploding dynamite in the water.

908. I know there's lots of oil down there. I know there's lots of oil down there even though I've never used dynamite to find them. There's lots of oil in between the land and we can see it through the land sometimes and it's part of the land.

909. In part of the land I know there's lots of oil under the ground. I think there's a lot of oil under the ground. And there's different kinds of gas and oil under the ground and under the water. I've seen that even before they ever used dynamite to do seismic testing. That if you pay me a million dollars I can tell you exactly where there's oil, but I haven't talked about it for a long time because I don't want anything to happen to the animals.

910. And what I said earlier I used to work for an oil company looking for oil and also I've seen people use airguns. I don't understand what looktoot (ph) is. And I can find out how close the oil is and also can find out how far the oil is. There's -- and they've done that before and they've found that out before.

911. I just wanted to tell you a story about that; that even if you don't explode things in the water I would appreciate that, because there's already oil down there, we already know that.
912. **MEMBER HAMILTON:** Our last speaker I think.
913. **MR. ELIJAH PANIPAKOOCHO (through interpreter):** Elijah Panipakoocho.
914. I'm the doctor of the animals of the world, a true scientist of mammals or animals. You get to start thinking different things when you hear these -- if we run out of gas, we would want to heat our house because we would have no light, no heat.
915. Here, everybody know it's in between Clyde River there is natural oil that's coming out, maybe we should plan about that area instead. I am sure you can get lots of good gas coming out of there.
916. We also know that maybe there's 50,000 litres. I've seen on TV the people looking for gold through drilling. Can we not try to get the gas that are already seeping out to see if there's any other oil and make fitted tunnels? It's very deep. There's already natural gas coming out and there hasn't been a negative effect.
917. Although you said that you're going to finish the seismic testing in five years and if you were to get approval or if you insist on doing seismic testing, there should be an agreement.
918. We would want to be involved in the starting of the testing and starting in the fall is not a very good idea because of the migration of the whales. So maybe we could plan together to change it to summer. If you -- it seems like you want to start pretty soon, maybe we should start planning that. It's not that we don't want you to do any testing, we just don't want our mammals to be destroyed because when they were doing some seismic testing near Greenland, we are already affected from that and through our wildlife and for that reason.
919. We don't want to lose our narwhals and belugas because they get stuck in the ice and we end up killing them. They're not like seals, can't stretch out and make a hole -- sea hole. But the whales -- if the ice is too thick, the whales are going to die.

920. And I've also seen with my own eyes, we had dragged some seals. They have no -- they're deaf. Even if you hear -- even if you're trying to shoot right near the seal, they can't hear it. But usually, if you shoot anything they go right down. And we've seen some seals that can't hear anything that some of us observe that are deaf.
921. And we also know with the polar bears how they can go deaf and when they use guns to scare them away, they lose their hearing. And we know what can destroy their hearing. Even if the dogs are barking right to the polar bear, they can destroy the hearing of the polar bear, that's how sensitive they are that we know of, just by dogs barking.
922. Because we know, we use to go by dog team when we're doing a polar bear hunting and this is how much we know how sensitive some ears are, starting from dog barking. And I'm sure -- and the guns, any type of gun is a lot louder than the dog sound.
923. We also hear that the -- when the helicopters were being -- collared through helicopter, then they -- they go deaf from the propeller of the helicopter and that's what we can tell you the effects that it could have from the sound.
924. And polar bears are real hunters under water, in the ocean, anywhere. They try to catch the seals when they're sleeping and whatever they're smelling and they know what -- when the seals are sleeping so that's how they go hunting in summertime. So that you'll know that too. I'm just making it clear for you.
925. We don't mind any testing and you guys have very good plan to make profits. How can we lower the sound of the air gun or decimal sound? Maybe you can find out through the satellite where the oils are? Maybe there's a technology?
926. We have to think of something. We don't want to be saying 'no' all the time. We're just very concerned about our animals -- because it's our food -- before they are destroyed by any type of oil and gas.
927. Thank you very much for listening. I'm not against of what you want to do. I just want to work together to have the least effect and that would be very good for everyone, especially for the animals. And it would also help us.

928. How can you do type of any activity without doing a huge effect, negative effect?
929. Thank you for coming. I'm very pleased that you guys came in. And the only way we can work together is by understanding each other and this is the only way we can get there so that we'll know each other and work together so we could have a good -- better plan for the future.
930. Thank you.
931. **MR. TROY NELSON:** Very good to hear him, thank you.
932. **MEMBER HAMILTON:** That's the last speaker that we have on the list and I'll just look around if anybody else wants to finish off for the evening.
933. Go ahead, one over. Let Nigel have one more comment.
934. **MR. NIGEL QAUMARIAQ:** Just one last question, not a comment.
935. MKI, I think it's important for Inuit to know who is coming here to work, what companies are paying for this work.
936. So that's my question. Thank you.
937. **MR. TROY NELSON:** The program, actually, it's a joint venture between PGS and TGS, so -- and MKI is a division of PGS. So the permit is going under MKI but the program is shared as a joint venture, which is two companies.
938. So PGS and TGS will be funding and operating this program.
939. **MEMBER HAMILTON:** Thanks.
940. I -- one more from our gentleman here.
941. **MR. J. NASHOOK (through interpreter):** My question is: What is the -- what are you -- what is the rush of this meeting?
942. Because we didn't hear anything about this meeting coming and you just came in just like that without notifying the community and I'd like to get

some information on that.

943. **MEMBER HAMILTON:** We -- the meeting is being sponsored by the National Energy Board because we are responsible for reviewing all the application and making a decision on whether we should approve or deny the application.
944. Material has been filed on this particular application since 2011, and so the project has been going along since 2011. MKI and its partners have been having community consultations for two to three years on this project and so our responsibility -- we have now got to the stage of providing the -- our environmental assessment and looking for comments to try and decide whether we're going to grant the application.
945. So we did -- this meeting has been sponsored by the National Energy Board and we invited the company to come to be available to answer questions in the communities to try and bring it all together to ensure that we have all the information that we require to make a decision.
946. We did advertise it. It has been advertised in the newspapers and on the radio, and we had posters here in the community. So we did what we thought was the best to advertise the meeting well in advance of us coming here today.
947. So I apologize if it appears to be too fast for some, but we thought we had done our best job to advertise the meeting ahead as well.
948. So I apologize if some people were not aware of all the -- of the information.
949. With that, then, I would like to -- I appreciate you for allowing us to come to Pond Inlet. I'd like to thank those that attended tonight and took the time to give us some comments and ask questions.
950. I also would like to thank MKI and its partners for attending and being open to answering all the questions. And I'm very appreciative of the work of our interpreters, Mali and Loseosie, and Lynn Fedak is our court reporter who's been typing and recording everything that has been said in the meeting we had this afternoon and the meeting that we've had tonight and all the other meetings.
951. I'd also like to thank Frank, Jimmy and Joseph, our tech guys, for

helping us out to make sure we all worked. And I'd like to give a special recognition to Jorgan, who is your rec director here who's been very helpful to us while we've been here.

952. What happens now? Once we have visited the other communities this week, I will take into consideration all the material that has been filed, the comments from the community meetings and the responses from MKI and its partners, and I will prepare a report with recommendations for consideration by the National Energy Board whether this application should be approved with conditions or could be denied.

953. Once the report has been prepared and the Board makes a decision, it will be posted on the Board's website, and I commit to having copies of the report sent back to the communities so you know whether we've granted this Application or whether it's been denied.

954. With that, qujannamiik. Thank you for allowing us to be here and good night.

--- Upon adjourning at 10:15 p.m./L'audience est ajournée à 22h15