

**Beaufort Sea Oil and Gas Development
Northstar EIS Project**

Nuiqsut Whaling Captains' Meeting

Nuiqsut

1996

NUIQSUT WHALING CAPTAINS MEETING

INFORMATION FROM TAPE BOX LABELS:

Tape Number 96NUIQ001 (of set of 2)

Nuiqsut Whaling Captain's Meeting

7:00 p.m. 8/14/96

Kuukpik Office

Traditional Environmental Knowledge for BP Northstar EIS

Whaling Captains present:

Thomas Napageak (also translated)

Archie Ahkiviana

Jonah Nukapigak

Patsy Tukle

Frank Long

Thomas Ahtuanguaruak, Sr.

Leonard Tukle

Interviewers:

Jon Isaacs, Dames & Moore, Inc.

Karen Shemet, Stephen R. Braund & Associates.

(Also, Langston Chinn entered the meeting toward the end and made a comment.)

START SIDE ONE, TAPE 96 NUIQ001 (of 2)

TRANSCRIPTION:

Introduction:

Karen Shemet: This is tape number 96NUIQ001 (of 2 tapes). This is of the Nuiqsut whaling Captain's meeting, 7 p.m. August 14th, 1996 at the Kuukpik Office in Nuiqsut, Alaska. Whaling Captain's p

Thomas Napageak, Archie Ahkiviana, Jonah Nukapigak, Patsy Tukle, Frank Long, Thomas Ahtuanguaruk, Sr. and Leonard Tukle. Interviewers are Karen Shemet of Stephen Braund & Associates and Jon Isaacs of Dames & Moore, Incorporated. Thomas Napageak also interpreted for the group.

This meeting was conducted as part of the environmental impact statement project for the proposed Beaufort Sea Oil and Gas Development by British Petroleum, Northstar project. Traditional environmental knowledge was collected on the following topics: natural forces, including ice currents, and storm tides, organisms including sea bottom resources such as worms, clams, also fish, marine mammals, waterfowl, and land animals, and also info collected on subsistence land and water use areas.

USGS quad maps of Harrison Bay, Beechey Point and Flaxman Island were used during the meeting for identifying areas used for subsistence activities.

There's about 5 minutes of lead time between this introduction and the taping of the meeting, so fast forward.

Meeting:

Thomas Napageak: Inupiaq So, remember that it calms you (laughter).

Karen Shemet: A lot of the quotes in there have been used in the draft EIS that we put together before. So that's still being refined because we're still at the early stages. We're still gathering the information to refine that and get it into the final EIS document. So that is sort of where we are and I brought these two maps. This one's scale is pretty small, so I thought just for general reference we could look up here. This one is more detailed and I put the project area on there. I thought we could and I thought we could refer to that as we talk if we need to get into specifics about areas. I've got markers and we can mark things on there as we go. Let's see. The questions in this packet that I put together here were from various specialists. For instance, I don't know if you are familiar with these names but, Sam Stoker is a marine mammal expert; John Morsell, a fish expert; Kinetic labs put together the questions on ice currents and storms and there's some additional questions from Dave Erikson from Dames and Moore. So I broke the questions into topics. And I saw it as three general big topic areas. The first one being natural forces and that includes ice currents and storm tides. The second one is organisms, different types of animals including sea bottom resources or the little animals in the bottom of the sea, fish, marine mammals, waterfowl and land animals as well. The last

category is subsistence land and water use areas. And if you will turn to the first page of the questions, at the top of the page it says traditional environmental knowledge questions and then you will see natural forces. And I thought we could just start in with the questions on ice and see how that goes. Unless anyone has any suggestions or questions we could start there first.

Thomas Napageak: Inupiaq (natural forces, ice, storm). Number One: In and around the project area, set out the best examples of extreme ice events or movement involving wind, currents and storms that you know about. Do you remember any of these types of stories told by older people? When do these events occur and how often? On the testimonies last night, I'm pretty sure that you had some pretty good notes. I have been whaling this area since 1973. I have been going out there. I've been frozen out there a couple of times. I know Frank has been out with me on one of the occasions. We know the ice conditions. The industry was concerned about the arctic ice pack on the development area. Inupiaq I'm not concerned about that because it doesn't get to that area it's too heavy and grounds before it get there. What we are concerned about is the young forming ice with the ice floes, smaller ice floes. Inupiaq Anything after one foot, up to about two feet at least. Inupiaq That's what they should be more concerned about is **the young ice not the arctic ice pack**. All my 64 years of life and out of that I would say about 50 years I have been in the Arctic area. I've lived at Barrow, Wainwright using the subsistence resources of the sea. I've never in those years see the polar ice pack tearing up. It is the force that crushes the young ice. Inupiaq That's one of the things that I wanted to speak on that behalf but I know that it was pretty hopeless to get across to those people yesterday and I know I had a chance to speak with you two. The most dangerous of the ice and ice conditions, and we are talking about ice conditions, if the ice that is formed here from the mainland out to the Arctic ice pack, the polar ice pack is the force that tears up this ice and piles it up.

Jon Isaacs: So the polar ice actually pushes and forces the young ice and presses it and makes it move.

Thomas Napageak: Right. Yes, yes. When it's moving, it's moving. I mean the force is very that's that's...

Archie Ahkiviana: And it can gain speed, like 5 knot or something like that

Karen Shemet: Really? 5 knots?

Archie Ahkiviana: Maybe 3, 4

Thomas Napageak: The testimony I was given by a lady yesterday is true. Back in the early, late, about 1940s.

Inupiaq (1950, **Patsy Tukle:** 1947)

Thomas Napageak:...either late 40s a family of four traveling in this ice, five Inupiaq. They were 6 in this trip. Inupiaq: **Patsy Tukle:**

Thomas Napageak: The family going to, this is December, now I'm talking about this ice that has formed itself this side of the Arctic polar ice pack. The wind hit as they were traveling by dog team now we he (Patsy Tukle) remembers the people telling it there were six in that group, a man with wife and two kids they were holding, it was stormy, blowing and it was south wind like the wind that I've been talking about when the tide comes up, that polar ice pack moves swiftly, that's when right in their path it **cracked opened up and closed again**. Two kids and a wife, a guy was holding onto them Inupiaq (**Patsy Tukle:**) ... pushed right back, this is the movement of the ice we are talking about. The guy, the father of those two kids, those two kids went down under, but the wife was caught.

Inupiaq: **Archie Ahkiviana:**

Thomas Napageak: Ya, O.K., the ice being pushed by this polar ice pack, instead of cracking, went up like this (hand gestures up). The two kids, it opened up, got under and flatten out again. In the meantime, part of it cracked open. The wife fell down and close on her, caught her. Her husband grab his knife and tried to chop the ice out but she went down anyway.

Inupiaq

Thomas Napageak: Now that's the ice condition we are talking about. It's not the polar ice pack that I'm worried about. It's this ice **in between the mainland and the polar ice pack that is dangerous**.

Archie Ahkiviana: That's that west wind, not the south wind.

Thomas Napageak: Well, yeah, south, **southwest wind** Inupiaq southwest.

Karen Shemet: I heard about another incident, just trying to see if it is the same one or a different one, where a family was camping and the ice crept up the island and then crushed them while they were sleeping. Is that a different story?

Thomas Napageak: Yes, that's a different story. Ya.

Karen Shemet: Another story. OK.

Thomas Napageak: Talking about multi, a hundred year storm. I mean I think these guys have been in the library too long (laughter). They've been reading books too much. That's what they were telling us yesterday Frank. Ya. Said it don't happen in a **hundred years. This can happen any year, any year.**

Frank Long: ... any year, any time it decides to.

Thomas Napageak: We never know where, United States with their technology, we never know where the next earthquake is going to be, or where, whether the volcanoes will erupt, when and where. Although they know it's going to happen, they never know where it's going to happen and when it's going to happen. I watch TV, I read, and I listen to the news. They know it's going to happen, but they don't know when. Now you're talking about it'll happen in a hundred years. That's flat out trying to pull my leg under the ice.

Jon Isaacs: I think you're right that the way they think about this is they think about what's the worst thing that can happen in a hundred years and build so it will withstand that. But they're not out here and seeing the things like you see and can see it happen frequently. And even for us we've been reading about this some of the things you told us when we were last here. You know just hearing you tonight and getting a better understanding of how the forces move, how the polar ice pushes it. Again you have I think an understanding and a knowledge that definitely the engineers don't have and we don't have and this is certainly becoming a lot more clear to us listening now.

Karen Shemet: So that incident with the family, so many people getting killed, do you know where that happened?

Thomas Napageak: Pole Island area, out a, see the family was moving from I think it was either Brownville or Flaxman on their way to Tiragroak (?) to meet with families there for Christmas week holidays. That's when it happened.

Karen Shemet: But that kind of thing could happen anywhere? or is it...

Thomas Napageak: It could happen anywhere. Like the story I was telling you about the barges that were drifted right out. It can happen anywhere, from west dock.

Inupiaq Patsy Tukle:

Thomas Napageak: He's telling about the story when the ice went out broke off the edge and **just float the people out**. But they were out there drifting around for about a week. Evidently when it freezes over again or the lead closes they managed to get back to their homes.

Inupiaq Patsy Tukle:

Thomas Napageak: A lot of good stories about the ice breaking up on people. And while trying to get help by foot, froze to death, these people did. Very interesting stories I mean. That's the situation this has, in Barrow, Barrow area there have been people that have been floated out, but they've always come back. However a boat during...

Inupiaq Patsy Tukle:..

Thomas Napageak: that dog never left them...

Inupiaq Patsy Tukle:

Karen Shemet: Did he say when and where that happened?

Archie Ahkiviana: On the east side of Cross Island...?

Inupiaq Patsy Tukle:

Thomas Napageak: On the next question I would say that the **floating ice** is usually located about **three-quarters of a mile from the sand spit** ...Inupiaq... about three-quarters of a mile where it's deep, where it's deep, it hits bottom there, that's how far the Arctic ice pack gets to be. But over at **Seal Island it's much further out**, much further out.

Jon Isaacs: So, three-quarters of a mile is from Cross Island mainly.

Thomas Napageak: Cross Island and eastward.

Jon Isaacs: O.K.

Thomas Napageak: But anything in between is something that has, is formed yearly. And it crushes by this Arctic ice pack. I hope that answers number two.

Jon Isaacs: It does, the question, I think the important point here is to try to think of all the different types of things the ice can do particularly near Seal Island and the pipeline and how they should think ahead.

END SIDE ONE, TAPE 96NUIQ001(of 2).

START SIDE TWO, TAPE 96NUIQ 001 (of 2)

Jon Isaacs: ... that shear zone moves in closer to Seal Island or not.

Thomas Napageak: The third question, how does ice behave around Seal Island. From northeast from northeast...Inupiaq...but that the east, northeast wind and current is not a fierce... Inupiaq... southwest ... Inupiaq... that was **south southwest wind**. That's the wind that Cross Island going to have I mean Seal Island is going to be in danger in that wind direction **not so much from northeast. We've seen the ice pile on the sand spit on the a northeast side, but you don't get no high tides on northeast wind.**

Archie Ahkiavana: No you don't.

Thomas Napageak: No high tide. But when we've got the southwesterly wind, that's when the tide comes up. The current is very strong, and put the wind on it. See southeast **southwesterly wind come to with a current following** ... Inupiaq... they both work together, the current and the wind. So that is the danger. I was

trying to get across to them on that yesterday. Matter of fact I even drew and hoped that they would take the advice on building the top berm the way on the "C" type structure, since they were talking about steel. Steel can be manufactured with additional probably few additional dollars. ...Inupiaq... They estimated from this level to the top is 27 foot 27.5 I think. ...Inupiaq... that's what they were saying they kept coming back to 15 year life of that island. (Laughter). **Backwards "C"**, not right way "C". (Laughter).

Karen Shemet: So with that design when the ice comes up and then falls back...

Thomas Napageak: Ya, it has no other option but to fall back.

Frank Long: ...And it moves and falls and the bottom will still be moving.

Karen Shemet: And it'll move it back?

Frank Long: Ya, and when it gets full it'll start on this side.

Jon Isaacs: It'll keep coming back like that like a wave keeps coming back.

Karen Shemet: Will it build up there, is my question?

Thomas Napageak: If it gets heavy enough, if this gets heavy enough, that ice is not going to do nothing else but just pile up. Instead of trying to get on top. Whereas here, (in the proposed design) it's ready to go on top. There's snow drifting that could build up in here. Cause the **snow drifts start in October**.

Inupiaq Patsy Tukle:

Thomas Napageak: Those are the most serious months he's talking about now.

Inupiaq Thomas Ahtuanguaruk:

Thomas Napageak: That's very important that they should know that **the critical months are October, November, and December**. After the first of the year, the ice is solid enough that you'll start moving further north from the shore flat ice. It moves out. Inupiaq:

Archie Ahkiviana: The only place it will form special form ice is down where the current is, down farther down, on those where you could see it from Cross Island when you're over there in the winter time.

Jon Isaacs: And did I hear a figure mentioned to six to seven feet? I'm wondering what happens to the water level when the tide comes up? What happens to the water level and actually how high can the water and the ice go up with those southwest winds?

Frank Long: If there's enough water that comes in, it'll bring the ice up, plus water will be flowing over up over the edge

Jon Isaacs: K.

Archie Ahkiviana: Ya, and then when it a flooded Christ all the way up to, a from here it's about 12 miles up river.

Thomas Napageak: Ya Ocean Point.

Archie Ahkiviana: 18 miles up from the shore, around the river drainage. I don't know how it is on the other side around Sagavanirktok maybe it go farther up. I know it goes through here and then it goes through Howuerenokto (?) Ocean point, that's about 18 miles from the shore.

Jon Isaacs: That's sort of the same time period where the ice is actually also maybe help pushing the water up making the water go up over the top of the ice and pushing it.

Frank Long: major.

Inupiaq? (dike?)

Karen Shemet: Powerful.

Thomas Napageak: Ya I tried to use the example of the ice overflowing, I mean the water overflowing on top of the ice. That's it's very simply. It doesn't you know, it uses these ice bergs, chunks of ice. A chunk of ice may be big as this and twice the height and the wind blows it to where it's shallow and it freezes it there. I mean it's frozen solid. But when the tide comes, these chunks of ice that are out there are already frozen, the ice breaks around them and the tide comes up and that's where the water comes out. Floods the whole area. That's one of the dangers out there, when you're on a dog team or snow machining or ...

Jon Isaacs: So it's almost like they were sort of stones in place and when the water is forced it kind of gets forced up among the ice that's kind of grounded and frozen there.

Inupiaq **Patsy Tukle:** laughter

Inupiaq **Archie Ahkiviana:** (laughter)

Karen Shemet: He also saw that garage?, the garage?...

Archie Ahkiviana: Yes we were over there, him and I

Thomas Napageak: They went up there through the ice and they were coming back following their trail pretty soon they run into open water. What ever happened to their tracks? (laughter). The ice was already that thick when it broke off and that's when it went into that garage.

Frank Long: That garage was 30 (?) feet away from the shore.

Jon Isaacs: This is the one in Fullum Point?

Archie Ahkiviana: Ya.

Thomas Napageak: I wished, you know, I had hoped that the strength of ice would be understood yesterday.

Frank Long: With the current.

Thomas Napageak: Now the column of this garage is an H beam. You know what H beams are? They're the strongest type of steel that they make and there's a plate underneath the very bottom, there's cement of course and this had four bolts, bolted down to the cement.

Frank Long: One inch bolts.

Thomas Napageak: Now that one foot of ice, one foot of ice that came up get into that, bended this H beam at the height where it supposed to be. The solid steel H beam went like that, (gesturing folding) these popped out of the cement. That's the force of the ice and the current. I don't know just how much more I can explain it to tell them how strong it really is. I mean it would take hundreds, hundreds and thousands of man power to bend that steel.

Frank Long: You could shorten it up like this and you estimate 8 knots to 12 knots. And that polar ice pack move at 5 to 6 knots, that's pretty fast. By the time it comes in, and turns, swings around and goes to 8-12 knots that's pretty good speed. So the current that's moving the ice, it's so many knots all that force. Can really do some damage.

Archie Ahkiviana: Now that garage they're talking about is on the coast, on the mainland it's about 50 to 75 feet from the waterline, it's on the mainland. It might even be more, at least a 100 feet from the waterline.

Thomas Napageak: And that thing is about 25 foot above sea level.

Jon Isaacs: Which you asked the question is 27 feet high enough and you gotta wonder.

Frank Long: If a tanker can not go through 50 feet swell, imagine what ice and current can do to a standing still facility in 50 feet of water once it starts coming up.

Jon Isaacs: ya with that sort of weight behind it and that force and that mass. Just to help me understand when...

Frank Long: I don't think 27 feet even a little more is safe enough for ice to a, or not to roll over and start again and go over.

Karen Shemet: How high do you think it should be? What would be a safe height?

Frank Long: Well maybe 30 to 50.

Thomas Napageak: Ya that would be pretty much more adequate.

Karen Shemet: O.K.

Thomas Napageak: If industry can afford to have a drilling rig just sitting out in the ocean, that big rig out there?, why can't they build a production island equivalent to that rig out there? That's high enough.

Jon Isaacs: Is that thing sitting in the inside or the outside of the barrier island? Do you know?

Thomas Napageak: It's way outside

Jon Isaacs: Way outside. Has it held up pretty well?

Thomas Napageak: Yes.

Karen Shemet: Which island is that?

Jon Isaacs: The artificial one that sits

Thomas Napageak: Way out about, what about 8 miles from a, maybe more but I think it's about 8 miles from west dock north, due north.

Jon Isaacs: Help me understand the dynamics when the wind comes from the southwest, it seems like you got the tide and the current, do you also have the, is the polar ice also part of the effect too, is it quick sweeping down the coast maybe?

Thomas Napageak: Yes, yes.

Frank Long: How I always picture the polar ice pack is that it you know **every time the wind shifts the ice pack will start to shift around when the wind changes back then it goes back again.** Cause we're not the only ones it's affecting. It's affecting Siberia.

Jon Isaacs: O.K.

Thomas Napageak: That multi year,... I think I would more or less respond to item number 6. The polar ice pack is visible most of the years. I would say that within all the time I've been whaling out there, there were three seasons that the polar ice pack was too far out for me to even see.

Inupiaq Archie Ahkiviana:

Thomas Napageak: I would say that **only three seasons the polar ice pack was invisible in all the years that I've been whaling off Cross Island.**

Karen Shemet: What about that multi-year ice?

Thomas Napageak: Pardon me?

Karen Shemet: The multi-year ice?

Jon Isaacs: That's sort of what they were saying before

Thomas Napageak: Ya, that's what I'm talking about.

Karen Shemet: Same thing? O.K. just wanted to be clear on that one.

Jon Isaacs: After the dangerous months October, November, December, it sounds like what you are saying is things freeze a bit more solid and the activity moves farther off shore where the rest of the current is in the shear zone.

Thomas Napageak: Yes, the thing I want to say is that **when the older polar ice pack is not visible, when you go back out next year, like next summer, you will notice that the pressure ridges are always higher. Because you know when it's coming back it's coming back with force and piling up all the ice that has formed.**

Jon Isaacs: Cause it has maybe a longer stretch to come in and build up

Thomas Napageak: Yes, yes ... Inupiaq... Ya that multi shear that get close up to shore. We got long bikini weather type.

Karen Shemet: I don't believe that.

Inupiaq Archie Ahkiviana:

Jon Isaacs: Do you think there'd be any sides of the island which would have more exposure to ice forces and maybe ?ice over ride ? others or it sounds like it can just lift up and come in almost any direction

Thomas Napageak: How's that again?

Jon Isaacs: Thinking about, would there be any sides of the island like the north or southwest or east that would be more dangerous than any other side or the ice force could really come in from almost any direction?

Thomas Napageak: No, I would you know, the thing that I would, I was concerned, like I said the movement of ice are two ways. The third way is for the wind to push the arctic ice pack towards shore, that's no current, there's no current. It's the wind that's doing it. It'll stop when it gets into shallow water. There's hardly any force on it. That movement from the, movement with the southwesterly wind that goes with the current. But movement from the north, northeast that, it moves with the current, but you don't have no high tide on that northeasterly wind. Inupiaq... There's no, does have current, but no tide. Does that answer your question? You have to focus on those two current movements. Ya it does. But it piles up quite a bit. It doesn't have the current, but it piles up a lot of ice.

Jon Isaacs: That helps.

Karen Shemet: Just moving down to currents here a little bit. So with what you're saying, would you say that's mostly in the winter time, the fall time? Is there any way to predict by season the movements?

Frank Long: No I don't think so.

Karen Shemet: Is it all year round?

Frank Long: The contour lines that we have in our ocean I don't you know and a water goes like this and there's several contour lines like this.

Thomas Napageak: Ya a contour call it.

Frank Long: and then there one where it starts off and gets deep and another one further out where it gets deeper and doing the same thing you know.

Jon Isaacs: Is that more like a bottom contour or like an eddy where two sections of water come together?

Karen Shemet: On the surface?

Frank Long: Well it's, no, it's deep.

Thomas Napageak: We do have...

Frank Long: You see them lines here even on the map.

Jon Isaacs: OK so yeah... there's like...

Archie Ahkivana: joined together, currents joined together.

Thomas Napageak: This area alone has it's own, the one toward land. But from Cross Island it moves in and out. You can get to it in about, sometimes in half an hour, sometimes hour and a half by outboard. You will get to that. **It moves around.** This movement that he is talking about ties in with Point Barrow current.

Inupiaq. Frank Long; This line here I'm talking about, every one of these lines goes this way or this way.

Inupiaq: Archie Akiviana; This current always move around sometime in the early fall when we are out down there. **It's not always close by it's always farther out** and then when meet this sometime, I think ...Inupiaq...

Thomas Napageak: About 40 miles that big one...

Inupiaq Archie Ahkiviana:

Thomas Napageak: Now you know he's telling you the right thing about this, those lines are the current movements. If this current movement, see the **bowheads migrate pattern feeding, this is filled with their food. If it goes through Cross Island, they'll be at Cross Island. If there's no seismic or ship traffic.**

Inupiaq...

Jon Isaacs: So it sounds like the currents are carrying the plankton, the krill, the things the whales eat, so the whales are following those currents. It seems like it's probably, the further off shore you get sort of like a river of current that comes around from Barrow, but perhaps it's different from what's coming close to shore.

Thomas Napageak: These are small compared to the one that we're talking about that thing that he got about 40 miles out.

Frank Long: About 42 miles out.

Jon Isaacs: Out from Cross?

Frank Long: Ya, out from Cross.

Jon Isaacs: Wow!

Frank Long: We weren't on the map ? In 71 and 72.

Thomas Napageak: He landed a whale outside of the map.

Karen Shemet: Wow!

Thomas Napageak: That's the one we had to throw away when his boat swamped. The wind got so fierce, south, southwest wind. Night.

Inupiaq.

Jon Isaacs: Does it ever like move in, I guess you've said when you have gotten whales close to Cross Island, it's moved in that close.

Frank Long: It does move every year. This contour like that, just like everything else, it sways.

Thomas Napageak: It sways quite a bit.

Jon Isaacs: Do you think it moves in as close as Seal Island?

END SIDE TWO, TAPE 96NUIQ001 (of 2)

START SIDE ONE, TAPE 96NUIQ002 (of 2)

TRANSCRIPTION

Introduction:

Karen Shemet: Tape Number 96 NUIQ002 of 2 tapes. This tape is of the Nuiqsut whaling captains meeting held 7 p.m. August 14, 1996 at the Kuukpik office in Nuiqsut, Alaska. Whaling captains present are Thomas Napageak, Archie Ahkiviana, Jonah Nukapigak, Patsy Tukle, Frank Long, Thomas Ahtuanguaruak, Sr., Leonard Tukle. Interviewers are Karen Shemet of Stephen Braund & Associates and Jon Isaacs of Dames & Moore, Incorporated. Thomas Napageak also interpreted for the group. This meeting was conducted as part of the environmental impact statement project for the proposed Beaufort Sea oil and gas development by British Petroleum, their Northstar project. Traditional environmental knowledge was collected on the

following topics: natural forces, including ice currents, and storm tides, organisms including sea bottom organisms, worms, clams, also fish, marine mammals, waterfowl, and land animals, and on subsistence land and water use areas. USGS quad maps of Harrison Bay, Beechey Point and Flaxman Island were used during the meeting for identifying areas used for subsistence activities.

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Meeting:

Frank Long: We see whales inside the barrier islands before we even go out, outside the islands.

Karen Shemet: Every year you see that?

Frank Long: Practically every year.

Karen Shemet: Practically every year.

Frank Long: We will see a bowhead, we will see a whale inside the islands before we even go out to the other side. And that, in between, **all the way from Seal Island to west dock going in.**

Thomas Napageak: Do you want to have some good information on this?

Karen Shemet: Ya let's do that, grab some markers.

Thomas Napageak: Karen? First Time?

Frank Long:...pretty deep...

Jon Isaacs: By Seal Island ...

Thomas Napageak: First time?

Karen Shemet: That would be great.

Thomas Napageak: First time information?

Karen Shemet: Yes.

Thomas Napageak: Raise your right hand. (laughter) Say these words after me...

Karen Shemet: ut oh I was afraid of that. O.K. If I was going to mark on here the places where you get the bowheads around the project area?

Thomas Napageak: We don't get any over that area.

Karen Shemet: Are they over here more?

Frank Long: We have to as much as we can't go near the project area. We avoid it at all times. Unless we have to.

Karen Shemet: How close do you come? What's the closest you come to this square.

Thomas Napageak: We move eastward from Cross. Always, the practice that we learn from our fathers and our fore fathers is that we don't go chasing women from the back.

Karen Shemet: O.K. Or whales, right?

Thomas Napageak: So the whales are migrating this way, so what we do is go toward them.

Karen Shemet: So the whales are going this way? Right?

Thomas Napageak: We've landed whales out here.

Frank Long: We go this far past Midway Island.

Thomas Napageak: Landed whales out here, a majority are in this area

Karen Shemet: Most of them are out here, OK, so anywhere from here over. You said over here too?

Thomas Napageak: Ya we haven't landed nothing over there. But there've been spotted whales where west dock is.

Karen Shemet: So if I made a big area, this side too or no?

Thomas Napageak: Ya we go up that way too. Course we haven't landed nothing.

Karen Shemet: And then up just to here? Or all the way? OK, so I'll just make it open.

Frank Long: One time we ended up at Kaktovik because...

Thomas Napageak: ...the Polar ice pack..

Frank Long: Ya too much ice.

Karen Shemet: And you've been way out like here, (off the map) on the table?

Frank Long: We've been way out like 45 miles, pretty close to 50.

Karen Shemet: O.K. so that's bowheads.

Archie Ahkiviana: This activity around this area is we have to go out, we go straight north, Cross Island.

Thomas Napageak: No whales when they had that big seismic operation going on here on at Kuvlum, no whales were spotted in this area, so we had to go 40 miles or so out there to get to those whales who were migrating.

Karen Shemet: Wow, that's far.

Frank Long: And that's when we run into super heavy fast current that don't need no wind force to help it. It helps itself, break it's waves.

Karen Shemet: Wow. What's the earliest month that you go out for bowheads, and then the latest month?.

Thomas Napageak: Ah the earliest is August, last week of August is the earliest we I go out there. We don't, once I think we're operating in that area we stayed out there till October till the ice starts forming, yes.

Karen Shemet: Never after October?

Frank Long: October, beginning of November.

Karen Shemet: Beginning of November.

Inupiaq Thomas Napageak:

Inupiaq Archie Ahkiaviana: October 6, 10.

Inupiaq Thomas Napageak:

Frank Long: We're talking about this side right here. There's something wrong with it.

Leonard Tukle: Now I remember one time when there was heavy ice all the way along the coast. We had to come along onto this side at one time.

Karen Shemet: Oh you did?

Leonard Tukle: Ya, we went pretty close to the rig. We went around one time, then we headed back, back to our base camp.

Karen Shemet: Right near Seal Island?

Leonard Tukle: Ya actually we went around to the camp.

Karen Shemet: Around this side?

Leonard Tukle: When we were looking out to go around ? for driving out for open water, the only open lead that we had was around that rig at one time. I think this was in 91 or 92. Only one time we went this way. But most of the time like this we were always out in this area most of the time.

Karen Shemet: Do you ever see calves out there with the whales?

Leonard Tukle: Yes, they're close.

Karen Shemet: They wanted us to ask how many calves you see relative to the amount of adults?

Leonard Tukle: I wouldn't be able to answer that, but these guys, you have to ask the more elder people.

Inupiaq Archie Ahkiviana:

Thomas Napageak: I think that pretty much takes care of ice, current and storms, doesn't it?

Karen Shemet: Yes, I'd like to turn to fish because you mentioned how important fish are. They're 33 percent (of the subsistence harvest) and all.

Thomas Napageak: Yes. Inupiaq

Karen Shemet: I'd like to mark on the map like we did with the bowheads where you get fish.

Inupiaq

Thomas Napageak: I think uh if we could confirm it up to really test out if the causeways are effecting the migration, what we should try to do is go back to the traditional fishing areas during the month of August. Inupiaq.

Thomas Napageak: Oliktok, that's number one that's where they used to fish, month of August.

Karen Shemet: Right here?

Thomas Napageak: yes, ya ya that point there.

Karen Shemet: What type of fish?

Archie Ahkiviana: Arctic cisco.

Karen Shemet: Char too?

Thomas Napageak: All these points, all the way to Beechey Point. Those are the points they used to do a lot of fishing.

Karen Shemet: So around each point?

Thomas Napageak: Yes, around the point, yeah.

Karen Shemet: And this point too?

Thomas Napageak: Ya Beechey Point

Jon Isaacs: Do you sort of drift fish by boats or set it off from the shore with a set net?

Thomas Napageak: Pardon me?

Jon Isaacs: Do you set net from shore going out or sort of drifting..

Thomas Napageak: Yes, because there's no ice in August. Set net. I've done fishing there.

Karen: Around?

Thomas Napageak: Just on the ocean side.

Karen Shemet: Am I cutting it short?

Thomas Napageak: Ya in the shore, in the shore.

Karen Shemet: Like that?

Thomas Napageak: Ya but in the shore

Karen Shemet: Closer?

Thomas Napageak: Ya.

Karen Shemet: And that's the same kind of fish?

Inupiaq

Karen Shemet: August also?

Inupiaq

Karen Shemet: So this was in August?

Thomas Napageak: I fished at Cross Island during the month of July, Arctic Char, all around it.

Karen Shemet: And what was this one?

Thomas Napageak: Pardon?

Karen Shemet: What month was this one?

Thomas Napageak: Ah that was July.

Karen Shemet: And the same thing, char?

Thomas Napageak: Ya, that was the same trip I had when I was in Bullen Point. Back in those areas. But we need to check those three locations to be definitely sure that the causeways are causing, see, Kuukpik used to be one of the most prime areas including Migaluk (?). Migaluk (?) is completely out. Now we, a lot of the fishermen claim because of the ice conditions, that formed in the fall might be the cause.

Jon Isaacs: What would the ice have done? This is in the Colville?

Thomas Napageak: Yes.

Jon Isaacs: Maybe the over wintering or some freezing on the bottom.

Thomas Napageak: We have northeasterly wind during the very early forming of ice. That thing breaks up and clogs the channel a lot of times. That could be one of the problems, but it shouldn't happen every year.

Archie Ahkiviana: They're getting less and less though every year.

Thomas Napageak: They're getting less and less and that's the reason why we're blaming the causeway.

Inupiaq **Patsy Tukle:**

Thomas Napageak: got a good support that the ikoktuk (?) (qaaktaq?) that he gets are tagged in McKenzie delta, they're caught over here.

Inupiaq **Patsy Tukle:**

Thomas Napageak: Yeah, including the ones that were tagged at Oliktok they get them over at the Colville River.

Inupiaq **Patsy Tukle:**(Laughter)

Thomas Napageak: Maybe we should go out and get some tagged fish.

Jon Isaacs: Sounds like the halibut derby.

Karen Shemet: What kind of fish is that?

Frank Long: Arctic cisco, whitefish.

Inupiaq

Archie Ahkiviana: Those least cisco got those tags too and arctic cisco.

Jon Isaacs: It sounds like you haven't fished those areas regularly enough to see what the effect of the causeways been on those areas out along the ocean. More recently you've been sort of fishing more in the Colville and the channels.

Inupiaq **Archie Ahkiviana, Patsy Tukle, Thomas Napageak**

Thomas Napageak: Because of the fact that our catch is getting smaller, we put the blame on the causeways. Although we're not really definite because these fishing areas, mainly those three locations, need to be tested out in order to prove that the causeways is the cause for the fish.

Inupiaq **Archie Ahkiviana:** west dock, **Thomas Napageak:** west dock, west dock

Jon Isaacs: When you've seen your catches down is it both summer and winter, year round or is it worse any particular time?

Thomas Napageak: Pardon me?

Jon Isaacs: Your catch, because you fish both under the ice and you fish during the summer, during open water. When you fish the Colville do you fish both under the ice with nets and also fish open water?

Thomas Napageak: These areas are in August, there's no ice forming, but in Colville, it's under ice. Month of October and November.

Inupiaq

Jon Isaacs: That's when you are seeing that your catch is down in the under ice fishing?

Thomas Napageak: But they used to be up, before these causeways, used to be plentiful. And then people just quit fishing when they have enough. Now you can have your net out there until you can't get anymore, and you still don't get enough supply for winter.

Jon Isaacs: Do people ever go out and fish in the near shore water for cod and things like that. I know like in Kotzebue area they go out on the ocean ice.

Thomas Napageak: No we don't go out for cod or anything. No we **don't go out in the open**. But I was thinking of taking my 5 1/2 inch net to Cross Island to test it out because he was saying that **salmons were**

being caught in Fish Creek now. Used to be no salmon around here that much, but he's getting them. So, I'm kind of...

Jon Isaacs: Ya I've heard too that, 10 years ago we were working on the coastal management plan for the Borough and the salmon were kind of colonizing the streams and populations were moving east.

Archie Ahkiviana: I got dog salmon too, chum, the big one. I never got those before in Fish Creek and then those silvers started to come in now. All those years since I started fishing down there.

Jon Isaacs: Just for my knowledge...

Inupiaq Thomas Napageak:

Jon Isaacs: When you guys are out in the ocean do you ever see any large schools of fish on the surface areas where there's lots of fish concentrated in the near shore or the off shore area?

Thomas Napageak: The wife and I at one time, yes, we witnessed a lot of that over this area.

Inupiaq

Thomas Napageak: We saw a lot of fish.

Inupiaq

Thomas Napageak: But you know we just saw them, they were visible.

Karen Shemet: Do you know what they were?

Thomas Napageak: I don't know, looked like cod, they were flashing. But we weren't there very long. We just got up and walked the beach for a while and then went on to Cross Island.

Karen Shemet: Do you remember what month that was?

Thomas Napageak: July.

Inupiaq Patsy Tukle:

Thomas Napageak: We were talking about fish, there's no bottom fishes that we go for here. There's a lot of shells, seashells. But we have never really concentrated on any of that stuff. But we're done with fish.

Jon Isaacs: Ya I think we pretty much know what sort of fish are concerned and, sort of their habitat, figure out the oil spill stuff. Yeah, 'cause part of these questions are if there's an oil spill if there are areas where fish tend to concentrate, that are sort of key habitat areas those are things you may want to protect or worry about where the spills going to go. The only one thing here is when you guys catch seal or Beluga do you see much in the way of fish in the stomachs?

Thomas Napageak: Lot of seals; Belugas, we know that they are out there but we never run into them. I've seen one at west dock, but I never get one yet.

Inupiaq Archie Ahkiviana:

Thomas Napageak: We know they are out there, because they come through too early. Like at Barter Island, they come through Barter Island about August, that's too early for us to be out there.

Jon Isaacs: When you get the seal, are they eating fish, do you see common types of fish in their stomachs?

Thomas Napageak: Pardon me?

Jon Isaacs: Do the seals have a lot of fish in their stomachs when you get them?

Thomas Napageak: Oh ya, when I put my net out at Cross Island and Tigamaruk? (Tiragroak?), the fish, I mean the seals, just come work on my net and steal my fish.

Jon Isaacs: So they'll probably eat almost anything. There's not any particular fish that the seals really like to feed on?

Thomas Napageak: Pardon me?

Jon Isaacs: Seals will eat any fish, there's not like any one or two types of fish that the feed seals eat on a lot?

Thomas Napageak: They eat any kind of fish I'm pretty sure. Because out on **Cross Island I get only Arctic Chars** and they were after them out there too, including oogruks. Bearded seals were after them also.

Inupiaq

Jon Isaacs: That should probably do fish.

Karen Shemet: O.K. We've covered a lot about bowheads already, but I wanted to ask about the calves. How many do you see compared to the adults?

Thomas Napageak: We were talking about that earlier, the only thing, the one that we saw was mother and calf traveling, but the calf was almost as big as his mother. We thought that was the cow, because we were seeing her all the time. That was the only one that we witnessed. One was killed, struck and landed, it had a baby whale in it was still carrying it, it was pretty big yeah? Inupiaq But we have been very fortunate these last few years because **we landed whales from the middle pack. The mother and calves travel in the last bunch. So we are always back home before they come through.**

Inupiaq

Jon Isaacs: What are the first whales through? If you harvest the middle pack and you got the mothers and calves in the last pack, what are the first ones that come through.

Thomas Napageak: My boys landed the one...

END SIDE ONE. TAPE 96NUIQ002 (of 2)

START SIDE TWO, TAPE 96NUIQ002 (OF 2)

TRANSCRIPTION

Meeting:

Thomas Napageak:...two weeks, a week and a half, two weeks before the middle pack. When the middle pack comes, I mean there're hundreds of them, in schools like fish. They come out, you don't know which one to go after.

Archie Ahkiviana: We counted 11 of 'em last year, just coming up to breathe, all over.

Karen Shemet: Amazing. So should we ask more questions about belugas or not.

Thomas Napageak: I'm pretty sure they are out there, but we are not out there because I remember when I was living in Kaktovik, well they usually go by **Kaktovik in the month of August. We're not out there. We're concentrating on moose, moose season, here.**

Jon Isaacs: Do we have a good feeling for when the whale migration might begin and when it might end, kind of what window, time there out there? You have that first pack come through when do you think the earliest some of the whales are coming?

Thomas Napageak: The thing we have to watch out for is the **weather for us.** See we're so far inland that our ice cellars don't freeze over night a lot of times the muktuk will kind of ruin on us. If we catch a whale too early, then we're liable to lose some of that muktuk to warm weather and can't freeze in the ice cellar. So we kind of wait till about first of September, first or second week of September ...Inupiaq... but I like to be out there the last week of August myself, because you know I will do a few odd things here or there in the camp.

Jon Isaacs: So if you're out there sort of in August, you're already seeing maybe the first pack that's coming through, the whales are already starting to return.

Thomas Napageak: Ya, ya. Because even before we get out there, the pack that goes through are caught at Barrow, even before we're out there. Inupiaq. **The time travel that we would estimate it would be about five days for the bowhead whale from Cross Island to be in Point Barrow. It's two days from Kaktovik to Cross Island. If we hear that whales are migrating through Barter Island, we wait at least the second day...Inupiaq...ya after two days, on the third day they would come by Cross Island.**

Jon Isaacs: Do you have a feel for when sort of the last pack comes through with the mothers and calves. How late can they be out there?

Thomas Napageak: We've never been out that late.

Jon Isaacs: They sort of come through this forming ice, can they be out there when this ice is moving around and forming?

Thomas Napageak: Ya even when it's forming yes there's a lot of open water still, out but a you know, it's not that solid really for bowhead whales to travel through.

Inupiaq Archie Ahkiviana:

Thomas Napageak: They get 'em in November in Barrow.

Karen Shemet: Wow.

Thomas Napageak: As late as November.

Frank Long: They already saw a whale over there, right now.

Karen Shemet: Really?

Inupiaq Patsy Tukle:

Karen Shemet: How about gray whales? Do you ever see gray whales?

Thomas Napageak: Oh yes, not that many though. The **last gray whale** I think it was, we saw, was about four years ago. Inupiaq

Karen Shemet: When was it? Three years ago?

Archie Ahkiviana: 1993.

Karen Shemet: 1993. And where did you see them?

Archie Ahkiviana: North, Narwhal

Thomas Napageak: Ya **Narwhal Island, north, northeast. We've seen killer whales** out there too. We've seen killer whales out there.

Karen Shemet: Wow. When was that? Is that very rare that you see them?

Thomas Napageak: Ya we were surprised you know. I killed **two walrus** out there.

Jon Isaacs: When you saw the gray whales were they the same places you'd been seeing bowhead or...

Thomas Napageak: Pardon me?

Jon Isaacs: When you saw the **gray whale**, where do you see them, the same places you'd be hunting bowhead?

Thomas Napageak: No they were **near shore**

Karen Shemet: Did they look like they were feeding, those gray whales?

Thomas Napageak: You know I thought they were **just being lost, I don't know.**

Inupiaq Patsy Tukle, Archie Ahkiviana:

Thomas Napageak: Polar bears, they're always visible. You have to shoe them out, get out of here, get. When we're pursuing whales.

Jon Isaacs: You see them on the islands or out on the ice?

Thomas Napageak: The island.

Jon Isaacs: Cross Island?

Thomas Napageak: Ya, ya.

Frank Long: It would be chewing at the house.

Archie Ahkiviana: ...the houses.

Thomas Napageak: They're the ones that tear up our cabins.

Archie Ahkiviana: Yep. They're always around our cabins too in the middle of the night. Hear them walking. Playing with the bouys.

Inupiaq Patsy Tukle:

Jon Isaacs: So it sounds like you pretty much see the polar bears when you're out whaling, but not during the summer otherwise?

Thomas Napageak: Pardon me?

Jon Isaacs: When you see the polar bears, is it mostly when you are whaling or do you see them, do you guys go sealing in June or July or August in the open water?

Inupiaq

Thomas Napageak: No we don't. We can't do too much month of July. August we start moving around, that's when the ice freeze, freeze up, stops hindering us. But, yes we see them when we're out there. Winter they looking for denning areas up here. We don't see them, but we always run into their tracks, looking for a good denning area for (cough)?

Inupiaq Archie Ahkiviana:

Thomas Napageak: When we have any left over meat at Oliktok Point, they're there tearing up our boxes and everything. They're a nuisance. I wish federal government would open this doorway with the sea mammal bill where we could sell the hide. We would like to get rid of them and make money at the same time.

Archie Ahkiviana: They're getting too many. Just like the brown bear they're getting too many.

Karen Shemet: Is there one place where there are so many polar bears? One place or all over?

Archie Ahkiviana: What did they say? One time they counted over 100 polar bears right down below Endicott In that area.

Jon Isaacs: Near Endicott?

Archie Ahkiviana: Ya below Endicott, down below those islands.

Thomas Napageak: Lot a polar bears out there, too many.

Jon Isaacs: How about cubs? Do you see cubs often?

Thomas Napageak: Pardon me?

Jon Isaacs: The polar bear cubs?

Thomas Napageak: Oh yeah.

Jon Isaacs: See them around there.

Leonard Tukle: We had a couple of young ones last year out on the ice.

Jon Isaacs: On Cross?

Leonard Tukle: Ya

Inupiaq Patsy Tukle:

Thomas Napageak: Ah Karen, IÕm almost forgetting what my wife looks like, why don't you let me go now? (laughter).

Jon Issacs: Is starting to get pretty late for you guys?

Karen Shemet: Could we re-schedule to finish some more, some other time?

Thomas Napageak: I think weÕre pretty much of what we wanted to know from the captains I think we are ...waterfowls... thereÕs a lot of eider ducks. ThatÕs where they nest, all those sand spits from **Thetis Island** to ? Inupiaq... all those. One island, I think itÕs, itÕs **Pole Island** where thereÕs a little bit of moss growing in the sand spit. Ducks, they pull their downs off when they fly they molt down fur ducks. When they are floating before they fly they are plenty ducklings, plenty ducklings. Lot of seagulls trying to eat them up too. Inupiaq. Including Jaegers.

Jon Isaacs: Sort of like the fish with the causeway, have you seen any changes in numbers of waterfowl over time?

Thomas Napageak: Not waterfowl, I donÕt think the causeways are affecting the waterfowls because the ducks never change out there.

Karen Shemet: So thereÕs still the same number of ducks as there always has been? TheyÕre doing well?

Thomas Napageak: Ya, theyÕre doing well.

Karen Shemet: Good.

Inupiaq

Thomas Napageak: I wish all the white people in Prudhoe Bay would be gone and take their seagulls with them. (Laughter)

Karen Shemet: Did they bring them?

Thomas Napageak: They bring them. There's too many of them.

Karen Shemet: So I forgot to ask you before when we were on bowheads, you mentioned you have your camp on Cross Island, is there any other place where anybody has camps, other than Cross Island for Bowheads?

Thomas Napageak: Used to be at Narwhal but we abandoned that due to the fact that the harbor's not there. I mean you got no protection from fierce winds or winds from any direction. You are out in the open. But at Cross, you are in a cove where you have shelter from both the south and northeast wind and north wind. Even it's offshore wind you can get into one of the smaller coves and have protection. That's the reason why. You know we could do our whaling at **Pingok Island**, we'd go much further out, but there's no protection there and we find the protection that we want at Cross Island. Regardless of the weather conditions. **On top of that we are moving eastward from all the activity that disturbs the migration.**

Jon Isaacs: So you are hunting more to the east now because of the activity off of Kuparuk and everything else.

Thomas Napageak: Yes. **Of all the animals that I've known, the wolves are, when you are hunting them, they're very noise sensitive, but more so are the bowhead whales. Any noise that they hear, they respond to that by going, moving away from it. A lot of times polar bears are different. Their curiosity can kill them very easy. They go toward the noise or anything that moves, they go for that.**

Karen Shemet: And the whales go away from the noise.

Thomas Napageak: They'll just come over and...

Inupiaq

Thomas Napageak: One of the things that you guys when you get to the legislators try to open the sea mammal bill.

Karen Shemet: Have you written some letters?

Thomas Napageak: No, one person was already mauled at the, inside of the Dew line station.

Karen Shemet: Inside?

Jon Isaacs: Ya came through the window.

Thomas Napageak: Ya came in through the window and mauled the guy.

Jon Isaacs: That guy was killed in Point Lay too, killed and partly eaten.

Archie Ahkiviana: Ya, part eaten?

Jon Isaacs: Is that who that was?

Archie Ahkiviana: Ya

Langston Chinn: Ya, I remember reading about that.

Karen Shemet: You mentioned you got some walrus? Where did you get those?

Jon Isaacs: Cross.

Thomas Napageak: Cross.

Karen Shemet: And what about this area? Do you use that area?

Thomas Napageak: There's a lot of open water. But when it's real windy and I just run the boat around, I go up there. She tells me a lot of times when I'm boating up there, I'm looking for those **devil fish**.
(laughter) Inupiaq,

Karen Shemet: What are those devil fish? What do they call them?, oh ya the ugly ones, sculpins.

Jon Isaacs: Sculpins with the horns.

Thomas Napageak: Ya, these big things.

Karen Shemet: What do you do with those?

Thomas Napageak: I don't go up there anymore. I don't migrate through there but if he's going to be calling me over the CB and tell me I'm going to go looking for those again, oh shit, I better go down the other way.

Karen Shemet: I'm just hoping we didn't miss anything else important for subsistence and the sea here. Anything else? Because we didn't really talk about the land at all yet, but I thought we'd get the sea completed and maybe we can talk about land some other time.

Inupiaq Patsy Tukle:

Thomas Napageak: Ya I think we got a person that grew up in that area. He's an elder. I'm pretty sure he can tell a good story on tape. But he's a guy that hides out a lot of times. I do my, I catch wolves in this area, but as far as further than **Franklin Bluff, Franklin Bluff area lot of wolverines. That's the best place for arctic white fox is in that area.**

Leonard Tukle: All along the coast.

Karen Shemet: They like to stay by the coast?

Leonard Tukle: Ya. Even to Prudhoe Bay ? They're like seagulls.

Thomas Napageak: Very, very seldom the Porcupine [caribou] herd gets to our area, very seldom.

Jon Isaacs: Now the caribou that were around here this year was that Porcupine herd?

Thomas Napageak: No that was central. **Central.**

Archie Ahkiviana: They say they are about over 400,000 strong now. Some of them are dying off in the west though.

Karen Shemet: From what?

Archie Ahkiviana: Not enough feed. Too many.

Inupiaq Patsy Tukle (laughter)

Thomas Napageak: You want to know about animals just go up and drive the haul road. There's a lot of squirrels, rabbit, and pretty porcupines that haven't been run over by trucks.

Inupiaq Patsy Tukle:

Jon Isaacs: I flew in today with Sarah and her daughter, she was saying there's also lots of white bow hunters along the haul road too.

Inupiaq

Thomas Napageak: Lot of caribous, but very seldom we get the Porcupine [caribou]. If they do come in they'll get all the way up here if we have southwesterly wind blowing steadily for a week and hot. Lot of mosquitos. They'll come, otherwise they will stop up there by Canning, not Canning but Sagvanirktok, and then move back east.

Inupiaq Patsy Tukle

Thomas Napageak: Ya that happens when they get together. The west, this central herd, Porcupine they meet together and they move inland. They don't go back this way. They get together and move inland.

Karen Shemet: Interesting.

Archie Ahkiviana: Yeah, they did that right in here and then moved.

Inupiaq

Thomas Napageak: The musk oxen. When they wanted to transplant the musk ox, I told them to outlaw them automatically, shoot them on sight. They are, caribous and musk ox don't get along

peaceful. They don't fight, but they don't get along. If a caribou see a musk ox a mile away, they'll head the other direction. I mean they're not...

Archie Ahkiviana: Pretty much territorial.

Inupiaq Patsy Tukle:

Leonard Tukle: Last year there was a musk ox right over here. See here's the camp, right on this side. It was a real big giant, large musk ox.

Karen Shemet: Right there?

Jon Isaacs: Along the western side there, the delta?

Leonard Tukle: Ya it was on this side of the river, we took a few minutes, slowed down and took a look at it, watched it.

Karen Shemet: Right here?

Leonard Tukle: Yeah, that was only one though. But most of them are out in the Itkillik River.

Inupiaq Patsy Tukle:

Thomas Ahtuangarvak: Saw about 15 of them last week over there.

Inupiaq

Archie Ahkiviana: I see some down on Fish Creek too.

Jon Isaacs: Where's Fish Creek?

Archie Ahkiviana: Around this area here.

Karen Shemet: Here?

Archie Ahkiviana: Ya.

Inupiaq Patsy Tukle:

Karen Shemet: I missed the caribou. Can we mark the caribou on here too? Where would I circle for caribou.

Many Together: The whole thing.

Karen Shemet: OK, Caribou is big.

Inupiaq Patsy Tukle: (laughter)

Karen Shemet: This was the white fox area here?

Jon Isaacs: Along the whole coast there too to the east.

Archie Ahkiviana: During my 10 years in Prudhoe Bay up in ? up there ? all over from Endicott all the way to Kuparuk....

Thomas Napageak: I'm pretty sure that if you concentrate on the things that we didn't get to tomorrow at your public meeting, this should pretty well cover it. I think we did a pretty good job.

Karen Shemet: Very good job.

Jon Isaacs: Thank you very much for your time. What we'll do is get you copies of these tapes so that you have copies of these. We'll write up the notes, get you copies of the notes, so you have them for your records. You'll get to see what we do to write them up and I think we can probably get the borough to let you have a sort of draft copy before we do this final DEIS so you can see what we said is an accurate write up of what you've told us. And we have some stuff we can leave with you before we go. We have some copies of the testimony from the past. I've just about finished. Karen did a first write up of our notes from our last conversation two weeks ago and I want to leave you a copy of that. We want to make sure that you start getting some of the stuff, not that we are waiting to the last minute for you guys to see it.

Thomas Napageak: Ya it would be good if we start getting some information about a lot of this testimony that verbally were given, but never supplies back to us. It would help us out a lot.

Jon Isaacs: Actually this one is a clean copy I brought in which is just a different type of summary, we have this in different forms. But that's kind of a quick summary of some of the past testimony just by person and lease sale and you can keep that one as an example and we may have some other stuff we can leave you this trip and definitely send you next week.

Karen Shemet: Leonard and I worked on this form today and this is in case you think of things later and you'd like to add them. Take one and pass them around. Basically what we covered tonight, but maybe you'll think of something later.

Inupiaq

Karen Shemet: And I had this list in the packet of subsistence resources. If you see anything that I should add, let me know, it's like the 3rd page in on the first hand-out we had. Too many papers, I know.

Thomas Napageak: Well I'll tell you what Karen, I testified and you should have that on tape and your notes, why don't you just put them on there for us?

Karen Shemet: It's up to me? If you think of something later that you wanted to add, rephrase, or make a stronger point. That's all that's for. Leonard thought it would be a really good idea, so...

Jon Isaacs: But we will record and pass on the notes that you want copies of the notes and tapes ...

Thomas Napageak: The only reason I'm saying that I got so far behind in my paperwork that I don't think I'll have the time to do anything. Especially with whaling coming up now.

Karen Shemet: I understand. You're busy, very busy.

Thomas Napageak: Course this ARCO thing has been taking up all my time in fact.

Karen Shemet: It's a busy time. Well I think we got lots of good information.

Thomas Napageak: Inupiaq Quyanapqak. I appreciate you guys coming in and....

END SIDE TWO, TAPE 96NUIQ002 (of 2). END OF MEETING.