

# **Oil and Gas Development on Alaska's North Slope Local Perspective**

**Richard Glenn  
North Slope Borough**

Good Morning. In this morning of quotes I'd like to introduce one, perhaps the final quote from our Plenary Session, from an authority slightly higher than Marcus Aurelius, which goes, "Blessed are the peacemakers, for they shall be called the children of God". And after this morning's point and counterpoint presentations, I hope that some of the comments I provide can perform in that capacity.

I'm going to discuss for you, having been invited to represent the North Slope, a native's viewpoint on oil and gas practices and development. I'll probably represent kind of a centrist position. As you know, just like in any society, within our community there is a whole spectrum of opinions. So please accept my comments as something that is probably around the middle as far as the people who live in the North Slope are concerned. I'll try to move in either direction where I think it is appropriate. But I am here at the direction of our North Slope Borough mayor George Ahmaogak who agreed that it was okay for me to come and represent our municipality, our people.

In addition to myself, though, there are two people who are more qualified than me to speak this morning. Three, in fact. The first one is the director of our Planning Department, Rex Okakok. The second one is Kenneth Toovak, who you will hearing from tomorrow morning regarding utilization of traditional knowledge. The third guy is Tom Lohman if he is still here. Tom has been working for the Borough in the trenches for many years on the exact same issues that I will be discussing this morning.

The North Slope Borough is a municipality that some people compare to the size of Minnesota or Montana, that geographically covers the area we're talking about today. It is a home rule government comprised mostly of Inupiat Eskimos, so the positions of native peoples I'll be talking about this morning will be the positions of the native Inupiat Eskimos. As you know Alaska is like a quilt of native cultures, and this is one culture that just happens to geographically coincide with the area of active exploration and development. The Borough and its people have a long history in the areas of oil and gas exploration and development. They have become gray haired with oil and gas exploration and development.

Its almost symbolic that the first contact that our culture had with the outside world were with three separate groups of people: there were commercial whalers, there were missionaries, and there were oil and gas people – at first scientists, geologists, and people that were part of the exploration of what soon was called the National Petroleum Reserve Number 4 that began in the 1920s. These were people like Ernest Leffingwell, and Lt. Colonel Ray. These were the people that first walked around on the North Slope and wrote notes to send back to the people in the Lower 48. But there are people still living in our community who assisted those folks, or their parents assisted those people. These are the elders of our region. So they bring to the table not only an immense traditional knowledge which we'll talk about tomorrow, but a long working history with people who are interested in resource development.

One image that I would like to dispel, I hope, about our region, the North Slope of Alaska, is that it is not isolated, is not desolate, is not frigid, and is not lifeless. Instead, if you look through the eyes of an Inupiat along the geographic footprint of the North Slope, you'll see a place that is alive with the history of our people, birth places and burial sites of our friends, relatives, and ancestors, traditional hunting areas, traditional gathering and trading areas.

If you look at a map that describes the North Slope today, you'll see eight villages. But this is not an accurate characterization of the way we view the North Slope. In the days when my grandfather was a young person like myself, he told me that there were settlements scattered a day's walk all along the coast, just stippling the whole coastline and up every major river drainage. Truly the people gathered in the major village centers, but when the time for gathering was over, we moved and spread ourselves out over the entire countryside. That's why when exploration, or scientists, or environmentalists, or anyone else comes to our region, and they want to learn about us, they come and talk with the local people. These local people, the elders especially, appear to possess knowledge of the land that far exceeds the footprint of their community. This is not just an appearance, but is accurate

Some of the things that we are talking about this morning are the shrinking footprint of exploration and development. We applaud the shrinking footprint. We've seen it; we know its true. We've watched the evolution of this industry from the 1940s to today, and in one breath we're proud, as a lot of the changes we in part helped to create, working with industry, working with government agencies. But beyond that, more important than a shrinking footprint, is the absence of a footprint where you would normally expect to find one. And this is double-edged sword.

I think that if you look at oil production facilities on the North Slope, you will see a growing network that looks from a map perspective like growing tentacles of something that didn't used to be there before. But if you can put yourself on the ground, you can see that this perception is probably one that is based by people who are more familiar with looking at maps than they are with walking around on the landscape. If you cross a pipeline that is traversing the North Slope, you won't find it noisy, you won't find that it has disturbed the environment of its immediate surroundings, except for the pole that supports the VSM, the Vertical Support Members. If you were to look four feet in any direction you would be hard pressed find anything. In fact most folks I think would probably be looking for musk ox tracks or mastodon tusks, or something like that. This is the reason for the perception of the Arctic as a remote place – it is almost as if the ice age ended yesterday and development started this morning. But in between there has been a covering of our people across the landscape.

We're in concert now with development in our region – onshore development. We've seen it, we've observed it, and are confident that with our input we know that it is going to be done right. There is a big difference, though, between onshore and offshore development. If there is any forceful message to be made regarding development, our people would like to exert their strong opposition to any offshore development

I've been involved with development projects, research projects, and science projects things that take me out into the environment for about 15 years now – a youngster by many people's standards. Our people have a way of evaluating projects in a way that says three things: First "what the heck are you doing?" The second thing is "well, if

you're doing it, don't you think there is a better way of doing it than the way you are doing it right now?" And third thing is, "why don't you let me help you show you how to do it a little bit better?"

This evaluation has been of a great benefit for me personally as I conduct, for example, remote ice experiments offshore Barrow, or when I've been looking for minerals in the foothills of the Brooks Range, and I know it has also been of great benefit to oil industry. This kind of informed consent works both ways – informed consent means that development occurs in our region in part on our terms. But it also means that information moves from us to the developers. Both sides benefit – both sides learn something. You'd be amazed at all of the assumptions that people from outside bring when they begin a development project. Some have never been in an Arctic setting before, they've never even been in a remote location before. There is a whole basketful of mistaken assumptions that they bring.

These mistaken assumptions can happen to the best of us! One time I was working offshore Barrow and a guy from Oregon State came to core the ice. He had developed a laser that was able to look from one core hole to an adjacent one, and by judging the amount of refraction and absorption of the laser he was going to determine the properties of the ice. The ice has a fabric, just like wood does, and if you're looking down the grain it is strong in one direction and if you're looking across the grain it has strength in another direction. He attempted to describe this experiment to me and he was going to core through the ice, and then he was going to drop his transmitter and receiver down these two adjacent holes. He forgot though that once he cored through the ice, that the water would rise to its level of buoyancy, just a few inches below the surface. None of his laser equipment was waterproof, and he would have had his laser and receiver stuck at the bottom of the ice sheet. He saved himself maybe tens of thousands of dollars of laser equipment by listening to my advice.

But he learned from my mistake, because a few years before he was there, I was there. I was coring the ice 15 miles from Barrow, with an electric chain saw auger, coring blocks out of the ice. I got down about three blocks down, each block about a foot thick. My generator froze. The oil was so cold it shut the engine off so my electric chainsaw quit working. Here I am, this close to data. I've got to get that data, and I need a complete cross section of the properties of the ice. So I'm standing there on the bottom of my quarry, and the top of the ice surface is right about waist level, and my tools are strewn about my feet. I wanted to take a core to take me through to the bottom of the ice, through the last cross section. So I was standing there in my quarry, in the dark, in January. And right when I reached the bottom of the ice I discovered just what the true level of the water was in the ice. My tongs didn't float, my wedge didn't float, the heavy equipment I was using to pull out the ice blocks didn't float. None of that stuff floated - it all had to be retrieved from the hole. It's pretty hard work stopping the power of the ocean coming in through a six-inch hole.

So none of us are immune from mistaken assumptions. But the longer you live in an area, the more of these mistaken assumptions that you lose. In fact people marvel at the commonsense attitudes, or the good suggestions that exist when development occurs with informed consent with people who are more familiar with that environment. So I'd like to stress the benefits of that.

Cumulative impacts, as mentioned by our last speaker, is a growing, growing concern. We only need to look to Nuiqsut where Ryan mentioned that development is occurring at the Alpine field. The Alpine field is only the latest development. A few years ago Nuiqsut was an isolated village. You couldn't see any development at all when you looked out over the horizon on a clear night. But in the 70s the Kuparuk field was developed, in the 80s exploration occurred around the Colville delta, in the 90s Alpine was discovered and is now going to be developed. Pretty soon when you look from your bedroom window or your living room window in the village of Nuiqsut you'll see in a semi-circle around you: the lights of development.

This has a plus and a minus for our people. The oil development - safe, responsible, onshore oil development is a benefit to our residents because it provides a tax base by which we can improve the living conditions of our villages. That is the purpose for the foundation of the Borough. We only need to look back to the incorporation of the Borough in the early 70s when we were sued by the oil industry and others to prevent this wacky idea of folks creating a home rule government to know how far we've come today where instead of suing each other we are working together, and we have developed a working relationship

But the cumulative impact downside for the people of Nuiqsut is the surrendering of what was once unfettered landscape. It doesn't mean that the caribou don't live there any more, it does not mean the fish don't live there anymore, it does not mean that there is seeping pollution from every development unit. But it does mean a surrendering of something – something that has value. Just because the caribou are there, does that mean that a person can visit a site where his Grandfather used to hunt? Or a traditional fishing site where a certain type of fish has always been caught – will that site always be available? Will people still be able to catch their fish there? Those are the kinds of questions the people of Nuiqsut are asking themselves.

They have answers. In Prudhoe Bay, of course, where development is of another era and there is a huge logistics base there anyway, this idea of wilderness abutting right up against developed sites probably is not accurate. But as you move further west toward Kuparuk you start to realize it is possible - that all I have to do is walk a hundred yards from this pipeline and as long as I don't look behind me I feel like I'm all alone. This place around me is untrampled. Here, industry has made agreements with our folks – if you want to go hunting through here you can. But if you talk with the people of Nuiqsut they will probably tell you that they avoid the areas of infrastructure when they go hunting.

The North Slope is not a stranger to it's own oil and gas development, and this is responsible for part of the mindset that we have. Our largest community is Barrow, and Barrow sits upon a gift from God, which is shallow natural gas. The Borough itself has been involved with seismic exploration, drilling, and development for its people to supply local energy for local needs. This is something, if I can inject a few personal messages into our discussion this morning, that I hope we can continue to consider for our other communities that are also being affected by development.

Again I applaud ARCO's efforts to work with Nuiqsut. Here is a little town that sees the lights of development all around it, is still importing diesel fuel just like it always has ever since they settled the village in the early 70s. With the one most massive infrastructure of America is right by them, they are still kind of stand-alone, isolated utilities, isolated

energy. This has begun to change. With ARCO's commitment to provide natural gas to the community, this is a huge step. There is a large capital commitment that follows that offering of natural gas. What is needed now is millions of dollars of infrastructure to keep a town of 500 people warm and well lit through the winter.

The Borough has agreed to be a part of the solution here, so has the Federal Government and the State of Alaska thanks to this NPRA impact funds - I think this is a totally accurate use of these funds. We're looking for more help here. We'd like to look to industry for more help in processing the gas when it comes to the town. We'd like to look for help from federal agencies in converting the town from a diesel-fuel-based economy to natural gas-based facilities. Diesel fuel as we all know carries risks and environmental liabilities.

But there is a great assurance that comes from that blue flame burning in the house. It burns in houses around Anchorage and you don't even think about it, but if you come to my town, Barrow, you can see us burning local energy for local use with pride and knowledge. This is what we would like to consider for our communities.

Think of the up side for the environmental community if we can sequester the carbon that is coming out of the methane seeps that dot the North Slope lakes. Put a funnel on them and shut them off with a valve just like they did with the oil seeps in southern California. There is one less than 5 miles from Atqasuk a village 60 miles south of my town. If we could save all that harmful carbon from going into the atmosphere, and burning it for heat and electricity, I think there would be an upside on both sides. Look at the potential for common ground here between development and the environmental community.

Another personal thought is as we talk about the absence of impact to species, caribou species, fish species, I think that onshore development on the North Slope is a success. But here at the end of my presentation it is time for another quote, but it is only a paraphrase, one of our people who is kind of like our Thomas Jefferson. His name is Charlie Edwardsen Jr. Most people know him as Etok, and if any of you folks have gray hair within your government agencies or industry, you've met Etok. He is guaranteed to come up with something that will make you think. Etok was speaking at the U.S. capitol regarding native land selection and oil exploration. The big concern was about the survival of species on the North Slope, and he said "if you are going to think about the survival species of the animals on the North Slope, then think about survival of the Inupiat people AS A SPECIES!" That is something we should all keep in mind. So the caribou enjoying themselves on the gravel strip, the fish enjoying themselves in the deep-water environments created from gravel extraction sources are lucky. I hope that industry and agencies can also work to preserve, enhance and nourish the human species on the North Slope as well.

The people of the North Slope - are we content with the development as it is occurring in our area? No, we're not. We have a long abiding distrust of offshore development. But we know that if it is going to happen, we're going to try to make sure it happens in a way that we work together to make it as good as possible. We do not believe that there is any way to mitigate or to take care of oil spills in broken ice conditions, for example. What happens now, though? Should production timing be scheduled to remove the potential for oil spills in broken ice conditions? Industry has to work with us to answer that question.

We also do not believe that the assembled commitment to say that we will use best available technology for oil spill prevention for oil spill in broken ice conditions is enough. We're asking for an insurance policy of some kind - details beyond that we don't know. But what kind of assurance is there to take care of offshore oil development if it goes wrong? That question needs to be answered.

So we are not content, but we are vigilant. We will remain vigilant as long as this development continues, because when it is done, when the infrastructure is abandoned, shut down, remediated, and industry walks away, we'll still be there. Our fish will still be there and our caribou will still be there thanks to the practices that are going on today. And the people will still be there too. The land, the sea, and the resources they provide for our future. Only by working together, observing nature together, will we be able to do this successfully. Observing nature is part of our lives – its what we've been doing for thousands of years. It's part of Inupiat living. Let's do it together – let's do it right.