Granular Resource Requirements for Proposed Mackenzie Valley Pipelines:

Technical Papers and Workshop Proceedings

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Northern Oil and Gas Action Program (NOGAP) Project A4:
Granular Resources Inventory and Management

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DISCUSSION PANEL "A"

INDUSTRIAL BORROW DEMAND ISSUES
The Inuvialuit Petroleum Corporation (IPC) is currently investigating ways to use oil and gas technology to benefit the communities in our regional area. The two main communities are Inuvik and Tuktoyaktuk in that they're close to potential oil and gas supplies. We started this back in 1986 with the first Tuk gas project. The object was to take initial wells and turn them into supply gas for the townsites, either for co-generation or direct heating requirements. At that time, industry was still quite active.

We've revisited this project several times but still the goal is to take an exploratory well and use the shallow gas from the exploratory well and turn it into a fuel source. In this case the community we've done the most work on is Tuktoyaktuk. This would apply to a similar project at Inuvik if and when a well is drilled proximate the town. We believe that anything within about 10 km of the site could be economic.

The gravel and borrow we used has changed greatly since we started in 1985-86, mainly influenced by new technology that we've seen coming out from Alaska on downsizing of pads, thermal syphons, and piles, modular construction and remote operations. We would take two wells--two are needed so you have a guarantee of supply for the townsites--or two zones and one well. We need about a 40-year supply to make it worth while. IPC would put in a processing facility to take the water out and refrigerate the gas.

We've looked at only seasonal access to the sites and putting a small housing facility on the site so we could have it manned. In the summer months we would complete crew changes by helicopter similar to an offshore operation. The projects are uneconomical by commercial standards but the Inuvialuit believe the significant local benefits could make it viable.

We looked at some of the older wells that were drilled on the Tuk Peninsula and found that the surface casing and casing requirements for exploratory wells were considerably different than what we found we should have for a producing well. So when Esso drilled the last well on the Tuk Peninsula two years ago, we increased the casing requirements on the upper section so it would withstand what we believe to be the strengths required to make it a producing well. We had the misfortune of finding the shallow zones coming up oil and the deep gas zone coming up wet so after quite a bit of work, we found the well was uneconomical for the project. There's another well coming up from Exxon in the 1993-94 or 1994-95 drilling season and we'll reevaluate at that time.

We've been doing some work with the Deh Cho Regional Council on a project we are seriously considering for the Cameron Hills, a project which would require significant volumes of granular for an access road. The numbers there were a total fill requirement not just an aggregate or gravel requirement, that was total volume. We're waiting currently on the testing in the Hills this winter to determine whether its a viable project. There's another small project we are looking at for the Cameron Hills--a topping plant and refinery on the Norman Wells crude oil pipeline at Jean Marie River. That summarizes IPC's activities in the north.

For those who don't realize our current production capability, I might add that IPC started in 1989 and currently we're producing just under 4,000 barrels a day of oil and gas equivalent in Alberta. We employ 27 people of which we're 18% Inuvialuit staff. I'd like to see that being 50% and we have some very aggressive training programs on in that regard. Maybe in two to three years, we will reach our goal of 50% Inuvialuit staff. I'd like to see our projects go sooner rather than later, but as we know with Arctic development, it was always "We're going to have the pipeline in 5 years" and it seems it's the same now as in 1969.

Note: The text of this presentation has been transcribed from an audio-tape recording of the workshop presentations. If necessary, we would suggest that the reader verify the accuracy of these comments with the presenter.