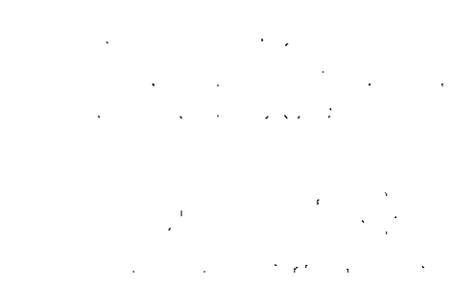
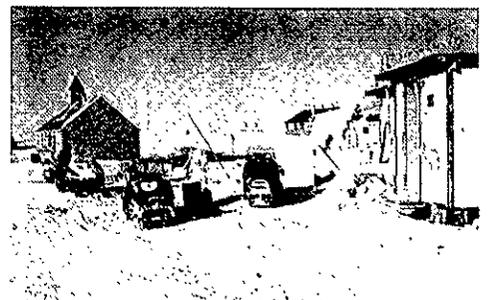
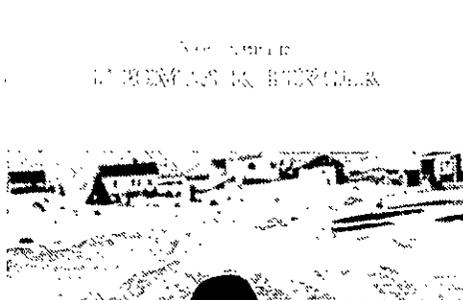


This document has been reproduced with the permission of the Minister of Public Works and Government Services, 2002, and courtesy of the Privy Council Office.

All rights reserved. Permission is granted to copy electronically and to print in hard copy for internal use only. No part of this information may be reproduced, modified or redistributed in any form or by any means, for any purposes other than those noted above (including sales), without the prior written permission of the Minister of Public Works and Government Services, Ottawa, Ontario, Canada K1A 0S5 or at copyright.droitauteur@communication.gc.ca



THE OLD MAN AND THE BOY, KENT LANE, ENGLAND, IN THE WINTER OF 1957



THE WINTER OF 1957



NORTHERN FRONTIER, NORTHERN HOMELAND

NORTHERN
FRONTIER
NORTHERN
HOMELAND



THE REPORT OF THE MACKENZIE VALLEY PIPELINE INQUIRY VOLUME ONE



Design and Photocomposition:
Alphatext Ltd.

© Minister of Supply and Services Canada
1977

Available by mail from
Printing and Publishing
Supply and Services Canada
Ottawa, Canada K1A 0S9
or through your bookseller

Catalogue number:
English edition CP32-25/1977-1
French edition CP32-25/1977-1F

ISBN:
English edition 0-660-00775-4
French edition 0-660-00776-2

Price: Canada \$5.00; other countries \$6.00
Price subject to change without notice

Table of Contents

This is Volume One of a two-volume report. It deals with the broad social, economic and environmental impacts that a gas pipeline and an energy corridor would have in the Mackenzie Valley and the Western Arctic. In it certain basic recommendations are made. Volume Two will set out the terms and conditions that should be imposed if a pipeline is built.

LETTER TO THE MINISTER vii

1 THE NORTH 1

- 1 Northern Frontier, Northern Homeland
- 2 The Northern Biome
- 5 Northern Peoples

2 THE CORRIDOR CONCEPT 9

- 9 The Corridor Concept and Cumulative Impact
- 10 The Northern Yukon Corridor and the Mackenzie Valley Corridor
- 10 The United States' Interest in the Corridor

3 ENGINEERING AND CONSTRUCTION 13

- 15 The Project: Its Scope and Scale
- 18 Buried Refrigerated Pipeline: Frost Heave
- 22 The Construction Plan and Schedule

4 THE NORTHERN ENVIRONMENT 29

- 29 Environmental Attitudes and Environmental Values
- 30 Wilderness
- 31 Wilderness and Northern Land Use

5 THE NORTHERN YUKON 33

- 33 A Unique Heritage
- 35 The Pipeline and the Corridor
- 36 Man and the Land: Old Crow
- 38 Porcupine Caribou Herd
- 43 Other Environmental Concerns
- 46 A National Wilderness Park for the Northern Yukon
- 49 An Alternative Route Across the Yukon

6 THE MACKENZIE DELTA—BEAUFORT SEA REGION 51

- 51 Man and the Land
- 54 Region and Environment
- 58 Industry's Plans
- 61 Delta Region Impacts
- 64 Whales and a Whale Sanctuary
- 66 Offshore Concerns
- 70 Spill Clean-up
- 75 Summary

7 THE MACKENZIE VALLEY 77

- 77 The Region
- 77 The People and the Land
- 78 Environmental Concerns
- 81 Corridor Development
- 82 Balancing Development with the Environment

8 CULTURAL IMPACT 85

- 85 Cultural Impact: A Retrospect
- 90 Schools and Native Culture
- 93 The Persistence of Native Values
- 100 The Native Economy
- 109 Native Preferences and Aspirations

9 ECONOMIC IMPACT 115

- 116 The Development of the Northern Economy
- 119 Objectives of Economic Development
- 121 The Mixed Economy
- 123 The Local Experience of Economic Development
- 125 Impacts and Returns
- 134 Employment on the Pipeline
- 139 If the Pipeline is Not Built Now

10 SOCIAL IMPACT 143

- 143 The Northern Population
- 148 Social Impact and Industrial Development
- 150 Specific Impacts
- 160 The Limits to Planning

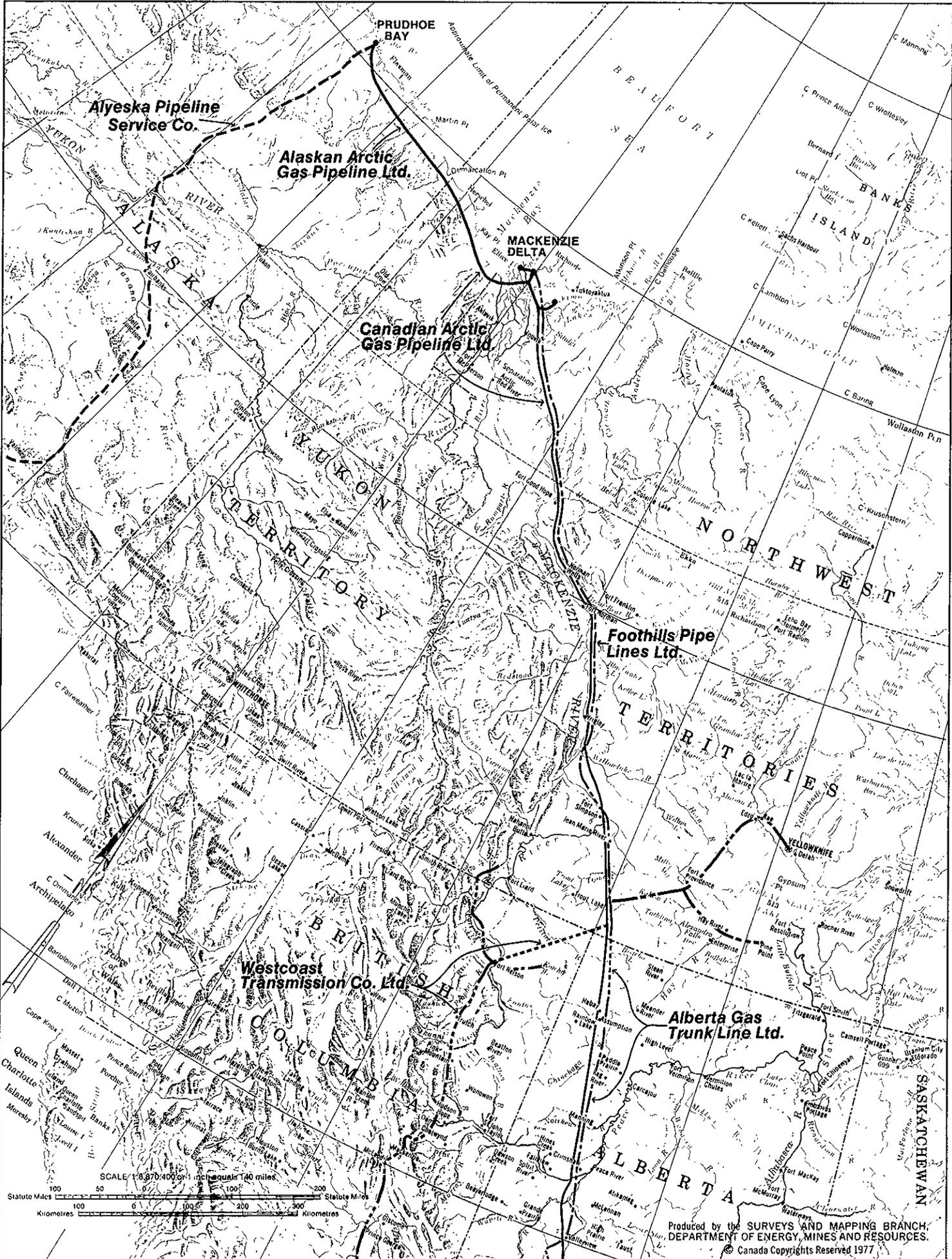
11 NATIVE CLAIMS 163

- 163 History of Native Claims
- 172 Self-Determination and Confederation
- 176 Native Claims: Their Nature and Extent
- 180 Native Claims: A Closer Examination
- 181 The Claim to Native Control of Education
- 185 The Claim to Renewable Resources
- 191 Native Claims and the Pipeline

12 EPILOGUE: THEMES FOR THE NATIONAL INTEREST 197

APPENDICES 201

- 203 The Inquiry and Participants
- 209 Bibliographic Note and Terminology
- 211 Photographs and Diagrams
- 213 Acknowledgements



Produced by the SURVEYS AND MAPPING BRANCH,
 DEPARTMENT OF ENERGY, MINES AND RESOURCES.
 © Canada Copyrights Reserved 1977

MACKENZIE VALLEY PIPELINE INQUIRY

COMMISSIONER

Mr. Justice Thomas R. Berger

10th Floor
One Nicholas Street
Ottawa, Ontario K1N 7B7

April 15, 1977

*The Honourable Warren Allmand
Minister of Indian Affairs and Northern Development
House of Commons
Ottawa, Ontario*

Dear Mr. Allmand:

We are now at our last frontier. It is a frontier that all of us have read about, but few of us have seen. Profound issues, touching our deepest concerns as a nation, await us there.

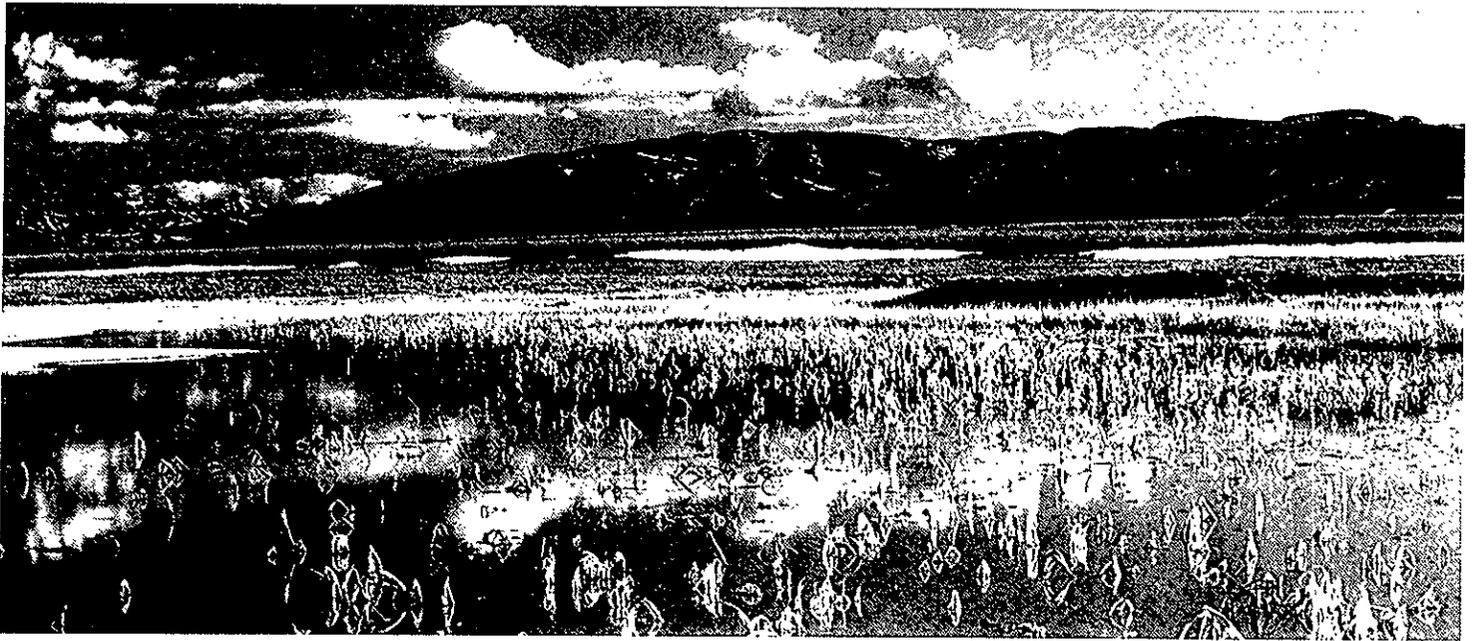
The North is a frontier, but it is a homeland too, the homeland of the Dene, Inuit and Metis, as it is also the home of the white people who live there. And it is a heritage, a unique environment that we are called upon to preserve for all Canadians.

The decisions we have to make are not, therefore, simply about northern pipelines. They are decisions about the protection of the northern environment and the future of northern peoples.

At the formal hearings of the Inquiry in Yellowknife, I heard the evidence of 300 experts on northern conditions, northern environment and northern peoples. But, sitting in a hearing room in Yellowknife, it is easy to forget the real extent of the North. The Mackenzie Valley and the Western Arctic is a vast land where people of four races live, speaking seven different languages. To hear what they had to say, I took the Inquiry to 35 communities – from Sachs Harbour to Fort Smith, from Old Crow to Fort Franklin – to every city and town, village and settlement in the Mackenzie Valley and the Western Arctic. I listened to the evidence of almost one thousand northerners.

I discovered that people in the North have strong feelings about the pipeline and large-scale frontier development. I listened to a brief by northern businessmen in Yellowknife who favour a pipeline through the North. Later, in a native village far away, I heard virtually the whole community express vehement opposition to such a pipeline. Both were talking about the same pipeline; both were talking about the same region – but for one group it is a frontier, for the other a homeland.

All those who had something to say – white or native – were given an opportunity to speak. The native organizations claim to speak for the native people. They oppose the pipeline without a settlement of native claims. The Territorial Council claims to speak for all



northerners. It supports the pipeline. Wally Firth, Member of Parliament for the Northwest Territories, opposes the pipeline. I decided that I should give northerners an opportunity to speak for themselves. That is why I held hearings in all northern communities, where the people could speak directly to the Inquiry. I held hearings in the white centres of population, and in the native villages. I heard from municipal councillors, from band chiefs and band councils and from the people themselves. This report reflects what they told me.

The North is a region of conflicting goals, preferences and aspirations. The conflict focuses on the pipeline. The pipeline represents the advance of the industrial system to the Arctic. The impact of the industrial system upon the native people has been the special concern of the Inquiry, for one thing is certain: the impact of a pipeline will bear especially upon the native people. That is why I have been concerned that the native people should have an opportunity to speak to the Inquiry in their own villages, in their own languages, and in their own way.

I have proceeded on the assumption that, in due course, the industrial system will require the gas and oil of the Western Arctic, and that they will have to be transported along the Mackenzie Valley to markets in the South. I have also proceeded on the assumption that we intend to protect and preserve Canada's northern environment, and that, above all else, we intend to honour the legitimate claims and aspirations of the native people. All of these assumptions are embedded in the federal government's expressed northern policy for the 1970s.

*The Corridor Concept
and Cumulative Impact*

The proposed natural gas pipeline is not to be considered in isolation. The Expanded Guidelines for Northern Pipelines, tabled in the House of Commons on June 28, 1972, assume that, if a gas pipeline is built, an oil pipeline will follow, and they call for examination of the proposed gas pipeline from the point of view of cumulative impact. We must

Spring on the Yukon Coastal Plain. (ISL-G. Calef)

Pingos near Tuktoyaktuk. (GNWT)

Old Crow River. (ISL-G. Calef)

Autumn on Mackenzie River. (R. Fumoleau)



consider, then, the impact of a transportation corridor for two energy systems, a corridor that may eventually include roads and other transportation systems.

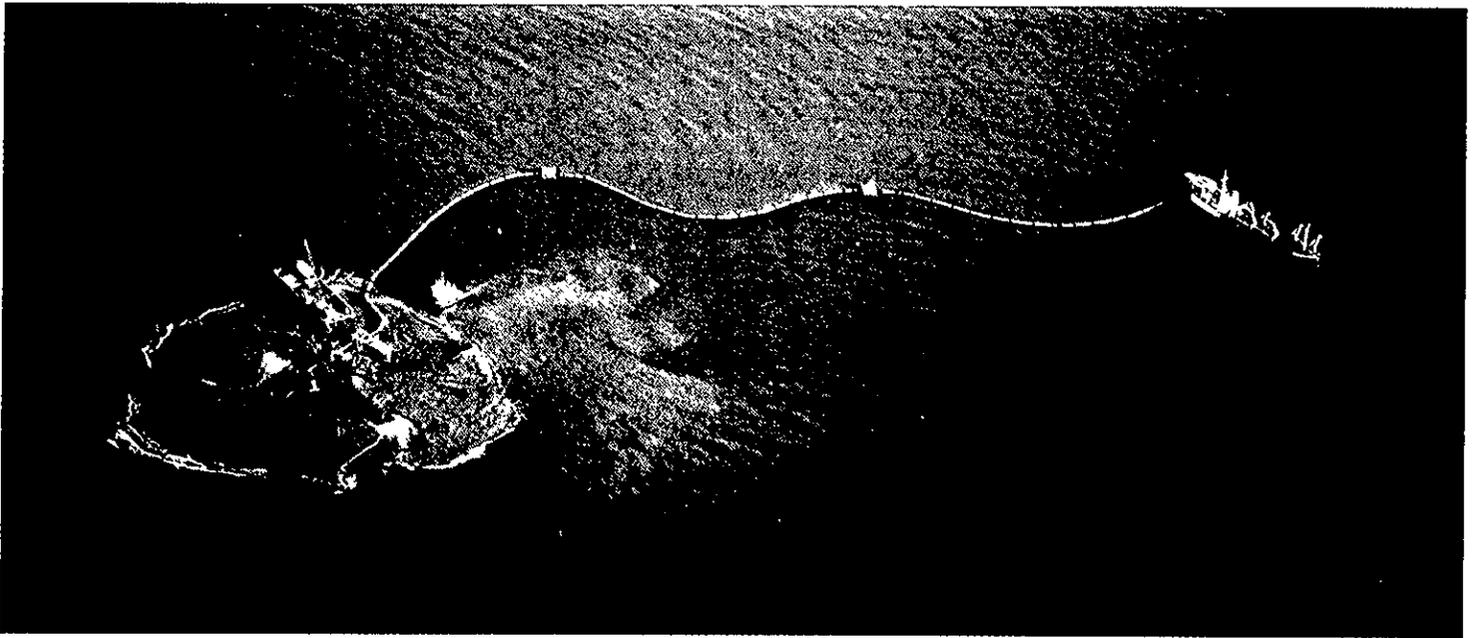
The construction of a gas pipeline and the establishment of an energy corridor will intensify oil and gas exploration activity all along the corridor. The cumulative impact of all these developments will bring immense and irreversible changes to the Mackenzie Valley and the Western Arctic. And we must bear in mind that we have two corridors under consideration: a corridor from Alaska across the Northern Yukon to the Mackenzie Delta, and a corridor along the Mackenzie Valley from the Delta to the Alberta border.

The Project: Its Scope and Scale

A gas pipeline will entail much more than a right-of-way. It will be a major construction project across our northern territories, across a land that is cold and dark in winter, a land largely inaccessible by rail or road, where it will be necessary to construct wharves, warehouses, storage sites, airstrips — a huge infrastructure — just to build the pipeline. There will be a network of hundreds of miles of roads built over the snow and ice. Take the Arctic Gas project: the capacity of the fleet of tugs and barges on the Mackenzie River will have to be doubled. There will be 6,000 construction workers required North of 60 to build the pipeline, and 1,200 more to build gas plants and gathering systems in the Mackenzie Delta. There will be about 130 gravel mining operations. There will be 600 river and stream crossings. There will be innumerable aircraft, tractors, earth-movers, trucks and trailers. Indeed, the Arctic Gas project has been described as the greatest construction project, in terms of capital expenditure, ever contemplated by private enterprise.

Engineering and Construction

The gas pipeline across the North from Prudhoe Bay and from the Mackenzie Delta will confront designers and builders with major challenges of engineering and logistics. These relate not only to the



x NORTHERN FRONTIER, NORTHERN HOMELAND

size and complexity of the project but also to its remote setting, the arctic climate and terrain, and those components of the project and its design that are innovative or lack precedent.

The question of frost heave is basic to the engineering design of the gas pipeline. Both Arctic Gas and Foothills propose to bury their pipe throughout its length, and to refrigerate the gas to avoid the engineering and environmental problems resulting from thawing permafrost. But where unfrozen ground is encountered, in the zone of discontinuous permafrost or at river crossings, the chilled gas will freeze the ground around the pipe, and may produce frost heave and potential damage to the pipe.

The pipeline companies are obviously having trouble in designing their proposal to deal with frost heave. They are making fundamental changes in the methods proposed for heave control; the methods seem to be getting more complex, and the conditions for success more restrictive. It is likely that the companies will make yet further changes in their proposals, changes that are likely to increase costs and to alter substantially the environmental impact of the project.

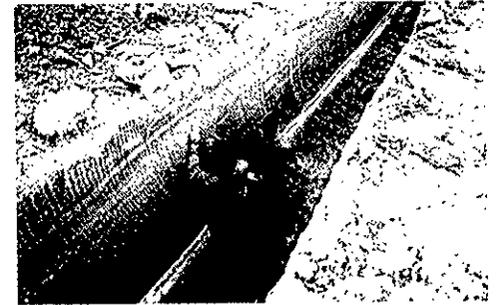
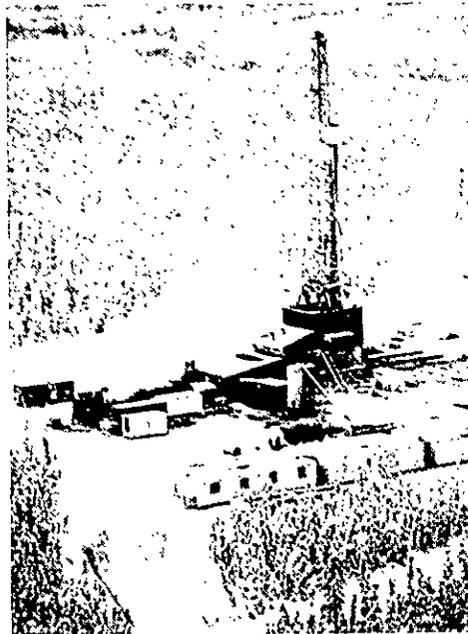
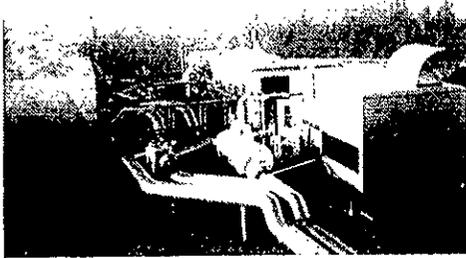
Another issue is construction scheduling. The pipeline companies propose to construct the pipeline in winter. But we have limited experience of pipelining in far northern latitudes and in permafrost. There are uncertainties about scheduling, so far as logistics, the construction of snow roads, and productivity are concerned. In this respect, the greatest challenges will be encountered in the Northern Yukon, which is also the most environmentally sensitive area along the route. I am not persuaded that Arctic Gas can meet its construction schedule across the Northern Yukon. Should this occur, there is a likelihood of cost overruns, of construction being extended into the summer, or even of a permanent road being built to permit summer construction. The environmental impact of a change to summer construction would be very severe. The project would then have to be completely reassessed.

*Construction of artificial island in the Beaufort Sea.
(J. Inglis)*

Compressor unit, Sans Sault Test Site. (Arctic Gas)

*Drill site on the Eagle Plain, southeast of Old Crow.
(ISL—C. Calef)*

Permafrost test at Sans Sault Test Site. (Arctic Gas)



I recognize, of course, that the proposals of the pipeline companies are in a preliminary, conceptual stage, not in their final design stage. I recognize, too, that improvements will appear in the final design. But my responsibility is to assess the project proposals as they now stand.

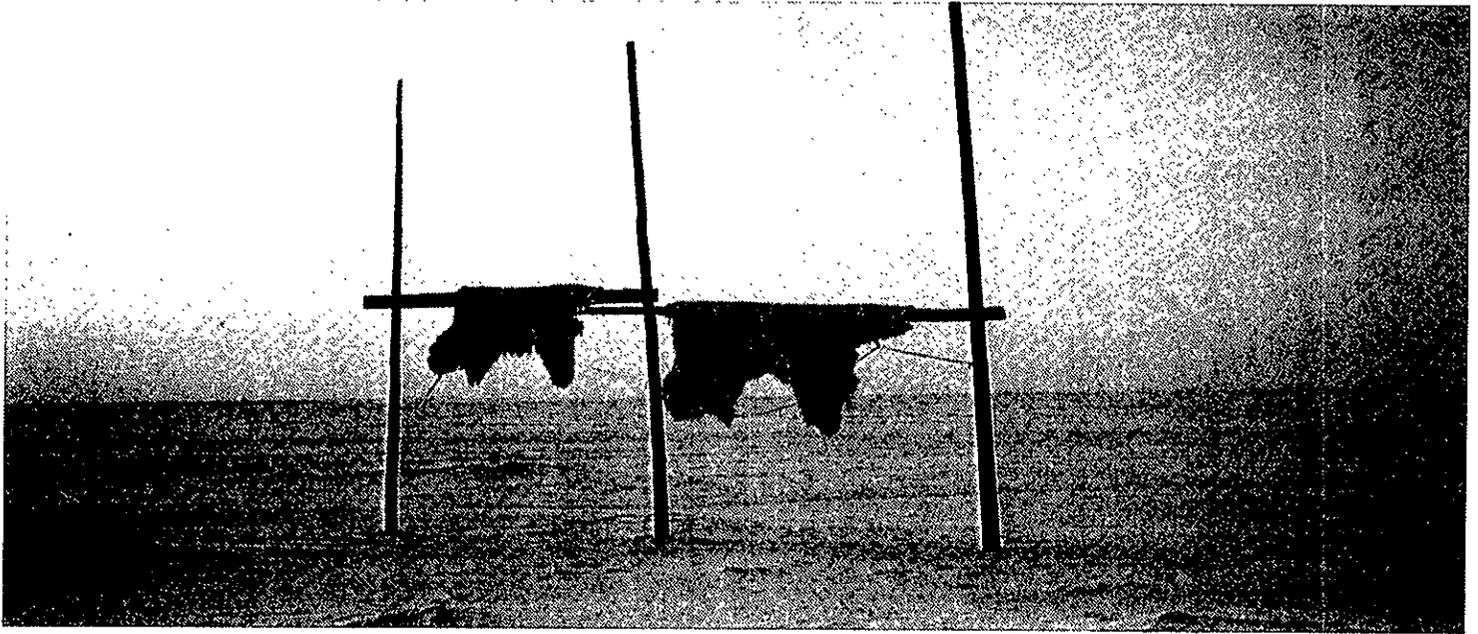
Given the uncertainties relating to design and construction, illustrated by the foregoing comments on frost heave and scheduling, and given the bearing they have on environmental impact and the enforcement of environmental standards, it seems to me unreasonable that the Government of Canada should give unqualified approval to a right-of-way or provide financial guarantees to the project without a convincing resolution of these concerns.

The Northern Environment

There is a myth that terms and conditions that will protect the environment can be imposed, no matter how large a project is proposed. There is a feeling that, with enough studies and reports, and once enough evidence is accumulated, somehow all will be well. It is an assumption that implies the choice we intend to make. It is an assumption that does not hold in the North.

It is often thought that, because of the immense geographic area of the North, construction of a gas pipeline or establishment of a corridor could not cause major damage to the land, the water or the wildlife. But within this vast area are tracts of land and water of limited size that are vital to the survival of whole populations of certain species of mammals, birds and fish at certain times of the year. Disturbance of such areas by industrial activities can have adverse biological effects that go far beyond the areas of impact. This concern with critical habitat and with critical life stages lies at the heart of my consideration of environmental issues.

We should recognize that in the North, land use regulations, based on the concept of multiple use, will not always protect environmental



values, and they will never fully protect wilderness values. Withdrawal of land from any industrial use will be necessary in some instances to preserve wilderness, wildlife species and critical habitat.

The Northern Yukon

The Northern Yukon is an arctic and sub-arctic wilderness of incredible beauty, a rich and varied ecosystem inhabited by thriving populations of wildlife. The Porcupine caribou herd, comprising 110,000 animals or more, ranges throughout the Northern Yukon and into Alaska. It is one of the last great caribou herds in North America. The Yukon Coastal Plain and the Old Crow Flats provide essential habitat for hundreds of thousands of migratory waterfowl each summer and fall. This unique ecosystem – the caribou, the birds, other wildlife, and the wilderness itself – has survived until now because of the inaccessibility of the area. But it is vulnerable to the kind of disturbance that industrial development would bring.

The Arctic Gas pipeline, to carry gas from Prudhoe Bay, Alaska, to markets in the Lower 48, would cross this region, either along the Coastal Route or, as a second choice, along the Interior Route. Once a gas pipeline is approved along either route, exploration and development in the promising oil and gas areas of Northern Alaska will accelerate, and it is inevitable that the gas pipeline will be looped and that an oil pipeline, a road and other developments will follow.

Gas pipeline and corridor development along the Coastal Route, passing through the restricted calving range of the Porcupine caribou herd, would have highly adverse effects on the animals during the critical calving and post-calving phases of their life cycle. The preservation of the herd is incompatible with the building of a gas pipeline and the establishment of an energy corridor through its calving grounds. If a pipeline is built along the Coastal Plain, there will be serious losses to the herd. With the establishment of the corridor I foresee that, within our lifetime, this herd will be reduced to a remnant. Similarly, some of the large populations of migratory

Polar bear skins, Sachs Harbour. (M. Jackson)

Inuit women cutting up whale, Tuktoyaktuk. (D. Campbell)

Scraping a caribou hide. (A. Steen)

Arctic fox pelts, Sachs Harbour. (M. Jackson)



waterfowl and sea birds along the Coastal Route, particularly the fall staging snow geese, would likely decline in the face of pipeline and corridor development.

Gas pipeline and corridor development along the Interior Route would open up the winter range of the caribou herd. The impact of this development combined with that of the Dempster Highway could substantially reduce the herd's numbers and undermine the caribou-based economy of the Old Crow people.

Thus, I have concluded that there are sound environmental reasons for not building a pipeline or establishing an energy corridor along the Coastal Route. There are also sound environmental reasons for not building a pipeline or establishing an energy corridor along the Interior Route, although they are not as compelling as for the Coastal Route. A pipeline and corridor along the Interior Route would have a devastating impact on Old Crow, the only community in the Northern Yukon. All the people in the village told me they are opposed to the pipeline. They fear it will destroy their village, their way of life, and their land.

I recommend that no pipeline be built and no energy corridor be established across the Northern Yukon, along either route. Moreover, if we are to protect the wilderness, the caribou, birds and other wildlife, we must designate the Northern Yukon, north of the Porcupine River, as a National Wilderness Park. Oil and gas exploration, pipeline construction and industrial activity must be prohibited within the Park. The native people must continue to have the right to hunt, fish and trap within the Park. The Park must indeed be the means for protecting their renewable resource base.

You and your colleagues will have to consider whether Canada ought to provide a corridor across the Yukon for the delivery of Alaskan gas and oil to the Lower 48. I recommend that no such route be approved across the Northern Yukon. An alternate route has been proposed across the Southern Yukon, along the Alaska Highway.



Some of the concerns about wildlife, wilderness, and engineering and construction that led me to reject the corridor across the Northern Yukon do not appear to apply in the case of the Alaska Highway Route. It is a route with an established infrastructure. In my view, the construction of a pipeline along this route would not threaten any substantial populations of any species in the Yukon or in Alaska. But I am in no position to endorse such a route: an assessment of social and economic impact must still be made, and native claims have not been settled.

*The Mackenzie Delta
and the Beaufort Sea*

The Mackenzie Delta and Beaufort Sea region supports a unique and vulnerable arctic ecosystem. Its wildlife has been a mainstay of the native people of the region for a long time, and still is today.

In my opinion, unlike the Northern Yukon, oil and gas development in the Mackenzie Delta-Beaufort Sea region is inevitable. Notwithstanding the disappointing level of discoveries so far, the Delta-Beaufort region has been rated by the Department of Energy, Mines and Resources as one of three frontier areas in Canada that potentially contain major undeveloped reserves of oil and gas.

A decision to build the pipeline now would act as a spur to oil and gas exploration and development in the Mackenzie Delta and the Beaufort Sea. Future discoveries will probably lead to offshore production. It is the impact of this whole range of oil and gas exploration and development activity that must concern us.

In order to protect the Delta ecosystem, the birds and the whales, I recommend that no corridor should cross the outer Delta. This means that the Arctic Gas Cross-Delta Route must not be permitted. Also, strict limitations will have to be placed on other oil and gas facilities on the Delta, particularly the outer Delta. Special measures will be needed to avoid disturbance to fish populations within the Delta. I also propose that a bird sanctuary should extend across the outer part of the Delta to protect migratory waterfowl, giving the Canadian

Caribou fording Porcupine River. (ISL-G. Calef)

Caribou with newborn calves migrating. (ISL-G. Calef)

Foraging caribou in the Northern Yukon. (ISL-G. Calef)

Bull caribou. (C. Dauphiné Jr.)



Wildlife Service jurisdiction to regulate industrial activity in the sanctuary.

The white whales of the Beaufort Sea — 5,000 in number — come to the warm waters bordering the Mackenzie Delta each summer to have their young. To preserve this population from declining in the face of pipeline construction and the cumulative stresses imposed by ongoing oil and gas exploration, production and transportation, I recommend that a whale sanctuary be established in west Mackenzie Bay covering the principal calving area. If the herd is driven from its calving area, it will die out. Unlike the bird sanctuary, the whale sanctuary will be an area in which oil and gas exploration and development would be forbidden at any time of the year.

Much of the oil and gas potential of the region is believed to lie offshore beneath the Beaufort Sea. You and your colleagues have decided that the risk entailed in the Dome exploratory drilling program in the Beaufort Sea is acceptable, on the ground that it is in the national interest to begin delineating the extent of these reserves. I am not offering any opinion on that decision. I am, however, urging that, once the Dome program is completed, careful consideration be given to the timing and extent of the drilling and development that may take place thereafter. A proliferation of oil and gas exploration and development wells in the Beaufort Sea will pose an environmental risk of a different order of magnitude than the risk entailed in drilling 16 exploration wells to see if oil and gas are to be found there.

The matter is not, however, simply one of Canadian drilling activity in arctic waters. We have preceded all of the other circumpolar countries — the United States, the Soviet Union, Denmark and Norway — across this geographic and technological frontier. We are pioneering on this frontier and establishing the standards that may well guide other circumpolar countries in future arctic drilling and production programs.

The greatest concern in the Beaufort Sea is the threat of oil spills. In



my opinion, the techniques presently available will not be successful in controlling or cleaning up a major spill in this remote area, particularly under conditions involving floating ice or rough water. Therefore, I urge the Government of Canada to ensure that improvements in technology for prevention of spills and development of effective technology for containment and clean-up of spills precede further advance of industry in the Beaufort Sea. I further urge that advances in knowledge of the environmental consequences of oil spills should likewise keep ahead of offshore development. Here I am referring not only to impacts on mammals, birds and fish in the Beaufort Sea area but also to the possibility that accumulation of oil in the Arctic Ocean could affect climate. In this I am referring to the possibility that oil spills from offshore petroleum development by all the circumpolar powers could diminish the albedo (the reflective capacity of ice), causing a decrease in the sea ice cover and hence changes in climate. Canada should propose that research be undertaken jointly by the circumpolar powers into the risks and consequences of oil and gas exploration, development and transportation activities around the Arctic Ocean.

The Mackenzie Valley

The Mackenzie Valley is a natural transportation route that has already seen several decades of industrial development. It is the longest river system in Canada, one of the ten longest rivers in the world, and one of the last great rivers that is not polluted.

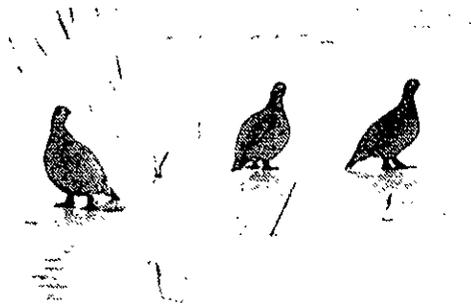
I have concluded that it is feasible, from an environmental point of view, to build a pipeline and to establish an energy corridor along the Mackenzie Valley, running south from the Mackenzie Delta to the Alberta border. Unlike the Northern Yukon, no major wildlife populations would be threatened and no wilderness areas would be violated. I believe that we can devise terms and conditions that will allow a pipeline to be built and an energy corridor established along the Mackenzie Valley without significant losses to the populations of

Snow geese feeding. (Arctic Gas)

Willow ptarmigan. (A. Steen)

Peregrine falcon. (R. Fyfe)

Gyr falcon. (R. Fyfe)



birds, furbearers, large mammals and fish. A pipeline along the Mackenzie Valley would impinge on the outer limits of the winter ranges of the Bluenose and the Bathurst caribou herds, but would not cross their calving grounds or disturb their main migration routes. These herds are not threatened.

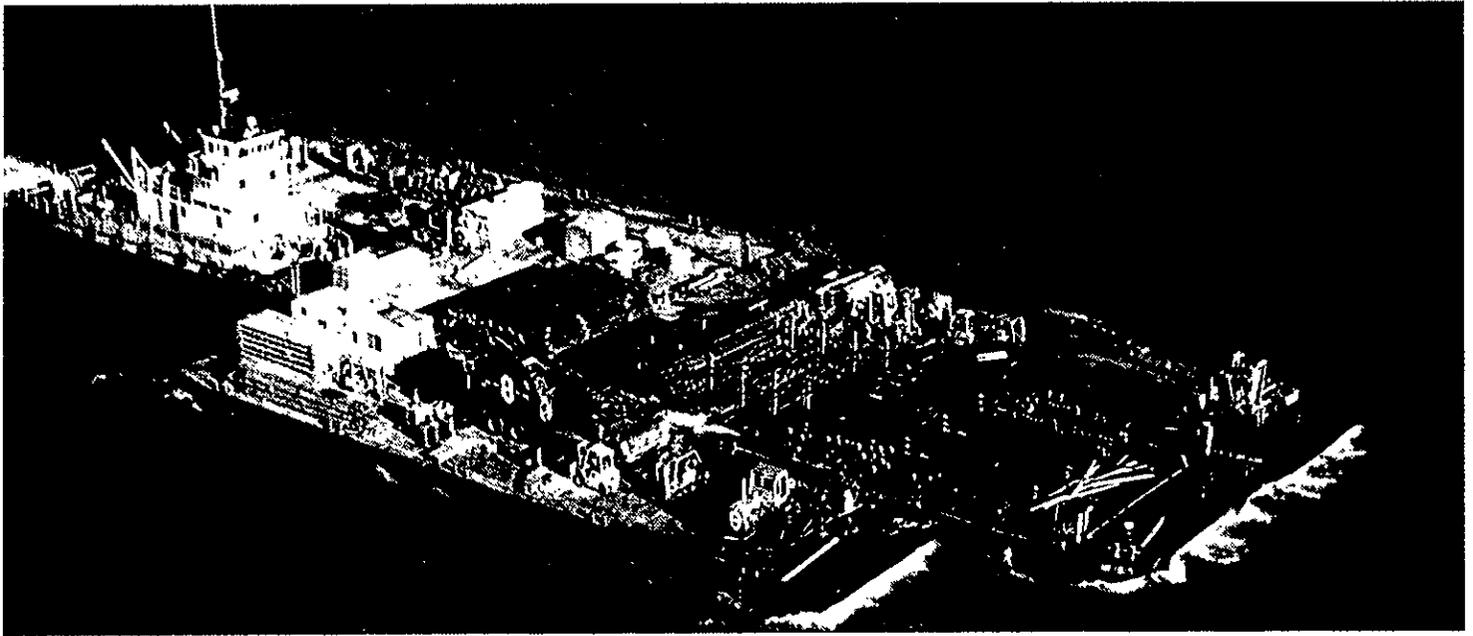
However, to keep the environmental impacts of a pipeline to an acceptable level, its construction and operation should proceed only under careful planning and strict regulation. The corridor should be based on a comprehensive plan that takes into account the many land use conflicts apparent in the region even today.

Comprehensive land use planning in the Mackenzie Valley can emerge only from a settlement of native claims, but, on purely environmental grounds, there are several areas of land that warrant immediate protection. I recommend sanctuaries to protect migratory waterfowl and the already endangered falcons. These sites have been identified under the International Biological Programme, namely: the Campbell Hills-Dolomite Lake site, which is important to nesting falcons, and the Willow Lake and Mills Lake sites, which are of importance to migratory waterfowl.

Northern Science and Research

Throughout the Inquiry, we found that there are critical gaps in the information available about the northern environment, about environmental impact, and about engineering design and construction on permafrost terrain and under arctic conditions. I have already referred to the inadequate state of knowledge about frost heave. This is a very practical question. Others, such as the albedo question, that seem to be less definite or to lie far in the future also demand our attention now. There is a whole range of issues that fall between, many of which are discussed in this report.

We are entering an era in the North when the government, its departments and agencies, will have to be in a position to assess — and to judge — the feasibility, desirability and impact of a whole series of



proposals for northern oil and gas exploration and development. Industry proposes: government disposes. But for government to make an intelligent disposition of industry's proposals – whether they be for pipelining in permafrost, for drilling in the Beaufort Sea, for under the sea transportation systems, or for tankering in arctic waters – it must have an independent body of knowledge. A continuing and comprehensive program of northern science and research is called for.

Cultural Impact

It is, however, the people who live in the North that we ought to be most concerned about, especially the native people. Euro-Canadian society has refused to take native culture seriously. European institutions, values and use of land were seen as the basis of culture. Native institutions, values and language were rejected, ignored or misunderstood and – given the native people's use of land – the Europeans had no difficulty in supposing that native people possessed no real culture at all. Education was perceived as the most effective instrument of cultural change: so, educational systems were introduced that were intended to provide the native people with a useful and meaningful cultural inheritance, since their own ancestors had left them none.

The culture, values and traditions of the native people amount to a great deal more than crafts and carvings. Their respect for the wisdom of the elders, their concept of family responsibilities, their willingness to share, their special relationship with the land – all of these values persist today, although native people have been under almost unremitting pressure to abandon them.

Native society is not static. The things the native people have said to this Inquiry should not be regarded as a lament for a lost way of life, but as a plea for an opportunity to shape their own future, out of their own past. They are not seeking to entrench the past, but to build on it.

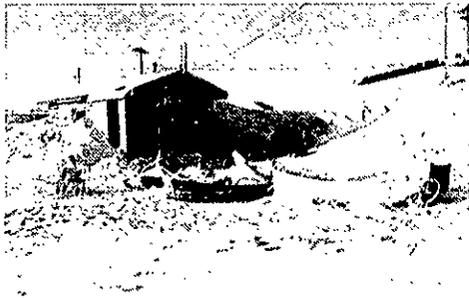
Today white and native populations in the Mackenzie Valley and Western Arctic are about equal in number. But it is the native people

Barge on Mackenzie River. (Arctic Gas)

Snowmobiles and sleigh, Tuktoyaktuk. (H. Lloyd)

Northern bush aircraft. (DIAND Yellowknife)

Boats used to hunt whale, Kugmallit Bay. (W. Hoek)



who constitute the permanent population of the North. There they were born, and there they will die. A large part of the white population consists of public servants, employees of the mining industry and of the oil and gas industry and their families. Most of them do not regard the North as their permanent home, and usually return to the South. There are, of course, white people in the North who have lived there all their lives, and some others who intend to make the North their permanent home, but their numbers are small in comparison to the native population.

So the future of the North ought not to be determined only by our own southern ideas of frontier development. It should also reflect the ideas of the people who call it their homeland.

Economic Impact

The pipeline companies see the pipeline as an unqualified gain to the North; northern businessmen perceive it as the impetus for growth and expansion. But all along, the construction of the pipeline has been justified mainly on the ground that it would provide jobs for thousands of native people.

We have been committed to the view that the economic future of the North lay in large-scale industrial development. We have generated, especially in northern business, an atmosphere of expectancy about industrial development. Although there has always been a native economy in the North, based on the bush and the barrens, we have for a decade or more followed policies by which it could only be weakened and depreciated. We have assumed that the native economy is moribund and that the native people should therefore be induced to enter industrial wage employment. But I have found that income in kind from hunting, fishing and trapping is a far more important element in the northern economy than we had thought.

The fact is that large-scale projects based on non-renewable resources have rarely provided permanent employment for any significant number of native people. There is abundant reason to



xx NORTHERN FRONTIER, NORTHERN HOMELAND

doubt that a pipeline would provide meaningful and ongoing employment to many native people. The pipeline contractors and unions have made it plain that native northerners are not qualified to hold down skilled positions in pipeline construction, and that they will be employed largely in unskilled and semi-skilled jobs. Once the pipeline is built, only about 250 people will be needed to operate it. Most of these jobs are of a technical nature and will have to be filled by qualified personnel from the South.

I have no doubt that terms and conditions could be imposed that would enable northern businesses to expand during the construction of the pipeline. But there are hazards for northern businessmen. Construction of the Mackenzie Valley pipeline could produce a serious distortion of the small business sector of the Northwest Territories. This would raise problems for the orderly development of regional economic and commercial activity in the long run.

If communities in the Mackenzie Valley and Western Arctic are made to depend exclusively on industrial wage employment and if the production of country food for local consumption ceases to be an important component in the economy, then the self-employed will certainly become the unemployed. The point is simple enough: the extension of the industrial system creates unemployment as well as employment. In an industrial economy there is virtually no alternative to a livelihood based on wage employment. Those who are unable or unprepared to work for wages become unemployed and then dependent on welfare. To the extent that the development of the northern frontier undermines the possibilities of self-employment provided by hunting, fishing and trapping, employment and unemployment will go hand-in-hand.

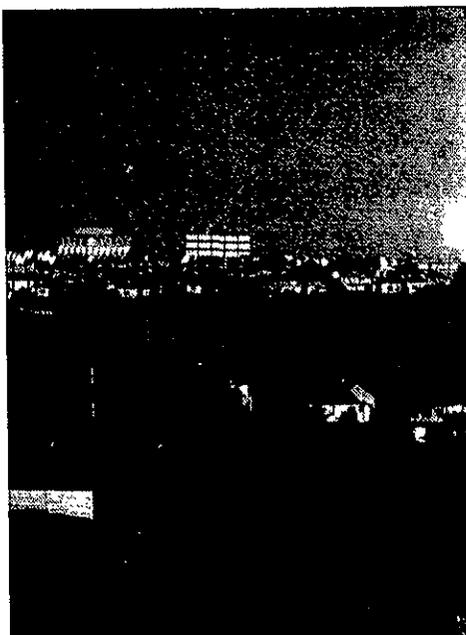
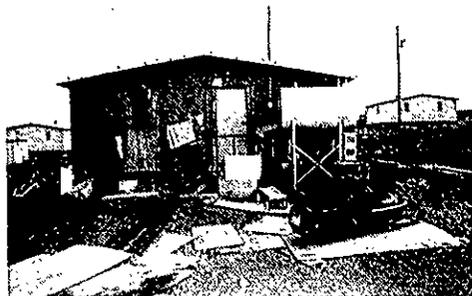
I do not mean to suggest that native people will not want to participate in the opportunities for employment that industrial development will create. Some native people already work alongside workers from the South. Many native people have taken advantage of

Detah Indian village. (R. Fumoleau)

Inuit housing. (GNWT)

Yellowknife. (A. Steen)

Fort Franklin. (R. Fumoleau)



opportunities for wage employment – particularly in the Delta – on a seasonal basis to obtain the cash they need to equip or re-equip themselves for traditional pursuits. But when the native people are made to feel they have no choice other than the industrial system, when they have no control over entering it or leaving it, when wage labour becomes the strongest, the most compelling and finally the only option, then the disruptive effects of large-scale, rapid development can only proliferate.

It is an illusion to believe that the pipeline will solve the economic problems of the North. Its whole purpose is to deliver northern gas to homes and industries in the South. Indeed, rather than solving the North's economic problems, it may accentuate them.

The native people, both young and old, see clearly the short-term character of pipeline construction. They see the need to build an economic future for themselves on a surer foundation. The real economic problems in the North will be solved only when we accept the view the native people themselves expressed so often to the Inquiry: that is, the strengthening of the native economy. We must look at forms of economic development that really do accord with native values and preferences. If the kinds of things that native people now want are taken seriously, we must cease to regard large-scale industrial development as a panacea for the economic ills of the North.

Social Impact

I am convinced that the native people of the North told the Inquiry of their innermost concerns and their deepest fears. Although they had been told – and some indeed had agreed – that the proposed pipeline would offer them unprecedented opportunities for wage employment, the great majority of them expressed their fears of what a pipeline would bring: an influx of construction workers, more alcoholism, tearing of the social fabric, injury to the land, and the loss of their identity as a people. They said that wage employment on the pipeline



would count for little or nothing when set against the social costs. I am persuaded that these fears are well-founded.

The alarming rise in the incidence of alcoholism, crime, violence and welfare dependence in the North in the last decade is closely bound up with the rapid expansion of the industrial system and with its intrusion into every part of the native people's lives. The process affects the close link between native people and their past, their own economy, their values and self-respect. The evidence is clear: the more the industrial frontier displaces the homeland in the North, the greater the incidence of social pathology will be. Superimposed on problems that already exist in the Mackenzie Valley and the Western Arctic, the social consequences of the pipeline will not only be serious — they will be devastating.

The social costs of building a pipeline now will be enormous, and no remedial programs are likely to ameliorate them. The expenditure of money, the hiring of social workers, doctors, nurses, even police — these things will not begin to solve the problem. This will mean an advance of the industrial system to the frontier that will not be orderly and beneficial, but sudden, massive and overwhelming.

Native Claims

Native people desire a settlement of native claims before a pipeline is built. They do not want a settlement — in the tradition of the treaties — that will extinguish their rights to the land. They want a settlement that will entrench their rights to the land and that will lay the foundations of native self-determination under the Constitution of Canada.

The native people of the North now insist that the settlement of native claims must be seen as a fundamental re-ordering of their relationship with the rest of us. Their claims must be seen as the means to establishing a social contract based on a clear understanding that they are distinct peoples in history. They insist upon the right to

Inuit at Northern Games, Coppermine, 1976.
(GNWT—R. Wilson)

Reindeer round-up, Atkinson Point. (J. Inglis)

Holman youngster. (P. Scott)

Children playing in Holman, 1959. (J. Fyles)



determine their own future, to ensure their place, but not their assimilation, in Canadian life.

The federal government is now prepared to negotiate with the native people on a comprehensive basis, and the native people of the North are prepared to articulate their interests over a broad range of concerns. These concerns begin with the land, but are not limited to it: they include land and land use, renewable and non-renewable resources, schools, health and social services, public order and, overarching all of these, the future shape and composition of political institutions in the North.

The concept of native self-determination must be understood in the context of native claims. When the Dene refer to themselves as a nation, as many of them have, they are not renouncing Canada or Confederation. Rather, they are proclaiming that they are a distinct people, who share a common historical experience, a common set of values, and a common world view. They want their children and their children's children to be secure in that same knowledge of who they are and where they came from. They want their own experience, traditions and values to occupy an honourable place in the contemporary life of our country. Seen in this light, they say their claims will lead to the enhancement of Confederation — not to its renunciation.

It will be for you and your colleagues, in negotiations with the native people, to determine the extent to which native claims can be acceded to, and to work out the way in which self-determination might be effected in the North, whether by the establishment of native institutions on a geographical basis or by the transfer of certain functions of the Government of Canada and the Government of the Northwest Territories to native institutions.

The idea of new institutions that give meaning to native self-determination should not frighten us. Special status for native people is an element of our constitutional tradition, one that is recognized by the British North America Act, by the treaties, by the Indian Act, and



by the statement of policy approved by Cabinet in July 1976. It is an ethnic thread in our constitutional fabric. In the past, special status has meant Indian reserves. Now the native people wish to substitute self-determination for enforced dependency.

The attainment of native goals implies one thing: the native people must be allowed a choice about their own future. If the pipeline is approved before a settlement of claims takes place, the future of the North — and the place of the native people in the North — will, in effect, have been decided for them.

The construction of the pipeline now will entail a commitment by the Government of Canada and the Government of the Northwest Territories to a program of large-scale frontier development, which, once begun, cannot be diverted from its course. Once construction begins, the concentration on the non-renewable resource sector and the movement away from the renewable resource sector will become inexorable. The goal of strengthening the native economy will be frustrated.

An increase in the white population in the wake of pipeline construction will entrench southern patterns of political, social and industrial development, will reduce the native people to a minority position, and will undermine their claim to self-determination.

The settlement of native claims is not a mere transaction. Intrinsic to settlement is the establishment of new institutions and programs that will form the basis for native self-determination. It would be wrong, therefore, to think that signing a piece of paper would put the whole question behind us, as if all that were involved was the removal of a legal impediment to industrial development. The native people insist that the settlement of native claims should be a beginning rather than an end of the recognition of native rights and native aspirations. In my opinion, a period of ten years will be required in the Mackenzie Valley and Western Arctic to settle native claims, and to establish the

Snowdrift children. (R. Fumoleau)

Johnny Crapeau of Detah. (R. Fumoleau)

Maggie Fisher of Fort Good Hope. (R. Fumoleau)

François Paulette of Fort Smith. (M. Jackson)



new institutions and new programs that a settlement will entail. No pipeline should be built until these things have been achieved.

It would therefore be dishonest to try to impose an immediate settlement that we know now – and that the native people will know before the ink is dry – will not achieve their goals. They will soon realize – just as the native people on the prairies realized a century ago as the settlers poured in – that the actual course of events on the ground will deny the promises that appear on paper. The advance of the industrial system would determine the course of events, no matter what Parliament, the courts, this Inquiry or anyone else may say.

In recent years in the North we have witnessed a growing sense of native awareness and native identity. The same phenomenon can be observed throughout the country. It is not going to go away. To establish political institutions in the North that ignore this fact of life would be unwise and unjust. Special status can be – and ought to be – a constructive and creative means by which native people, through the development of institutions of their own, can thrive in a new partnership of interests.

If There is no Pipeline Now

If the native people are to achieve their goals, no pipeline can be built now. Some will say this decision must mean that there will be no economic development in the North. If a pipeline is not built now, so the argument goes, the northern economy will come to a halt. But this view misconstrues the nature of the northern economy and northern development.

If there is no pipeline, the native economy based on hunting, fishing and trapping will scarcely be affected. The mining industry, which is the largest component of the private sector of the economy of both the Yukon Territory and the Northwest Territories, will not be greatly affected. Government, the largest employer and the main source of income for white northerners, and the federal and territorial



bureaucracies are not likely to decrease in size simply because a pipeline is not built now.

A decision not to build a pipeline now would not necessarily bring an end to oil and gas exploration. There will be a setback to Inuvik and, to a lesser extent, to other Delta communities. If exploratory drilling in the Delta and the Beaufort Sea ought to continue in the national interest, the Government of Canada has the means to see that it does.

I am convinced that non-renewable resources need not necessarily be the sole basis of the northern economy in the future. We should not place absolute faith in any model of development requiring large-scale technology. The development of the whole renewable resource sector – including the strengthening of the native economy – would enable native people to enter the industrial system without becoming completely dependent on it.

An economy based on modernization of hunting, fishing and trapping, on efficient game and fisheries management, on small-scale enterprise, and on the orderly development of gas and oil resources over a period of years – this is no retreat into the past; rather, it is a rational program for northern development based on the ideals and aspirations of northern native peoples.

To develop a diversified economy will take time. It will be tedious, not glamorous, work. No quick and easy fortunes will be made. There will be failures. The economy will not necessarily attract the interest of the multinational corporations. It will be regarded by many as a step backward. But the evidence I have heard has led me to the conclusion that such a program is the only one that makes sense.

Implications

There should be no pipeline across the Northern Yukon. It would entail irreparable environmental losses of national and international importance. And a Mackenzie Valley pipeline should be postponed for ten years. If it were built now, it would bring limited economic

Northern Yukon. (E. Peterson)

Dogteams trek across sea ice. (GNWT)

Little Bell River. (ISL-G. Calef)

Winter - Yukon North Slope. (Arctic Gas)



Letter to the Minister

xxvii

benefits, its social impact would be devastating, and it would frustrate the goals of native claims. Postponement will allow sufficient time for native claims to be settled, and for new programs and new institutions to be established. This does not mean that we must renounce our northern gas and oil. But it does mean that we must allow sufficient time for an orderly, not hasty, program of exploration to determine the full extent of our oil and gas reserves in the Mackenzie Delta and the Beaufort Sea. Postponement will offer time for you and your colleagues to make a rational determination regarding the priorities to be adopted in relation to the exploitation of all our frontier oil and gas resources, at a time when the full extent of our frontier reserves has been ascertained.

I believe that, if you and your colleagues accept the recommendations I am making, we can build a Mackenzie Valley pipeline at a time of our own choosing, along a route of our own choice. With time, it may, after all, be possible to reconcile the urgent claims of northern native people with the future requirements of all Canadians for gas and oil.

Yours truly,

Thomas R. Berger

