

PIPELINE

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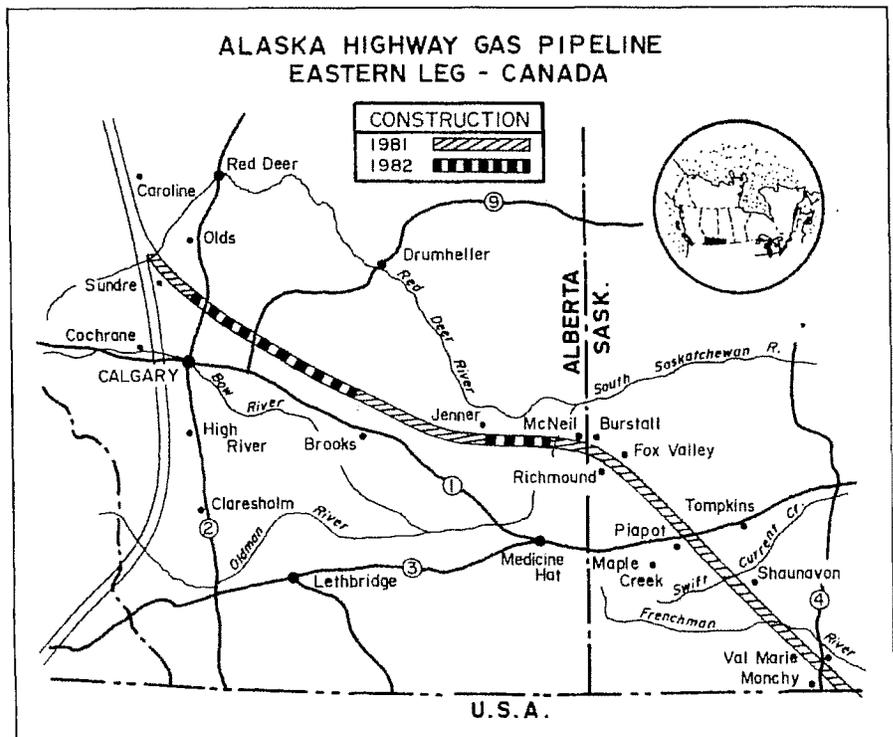
Gas Flows On Schedule Through Eastern Leg

Canadian gas began to flow to the United States on September 1 through the completed Eastern Leg of the Alaska Highway gas pipeline. The start-up delivery of gas through the system, built by the Alberta and Saskatchewan segment companies of Foothills Pipe Lines (Yukon) Ltd. in Canada and Northern Border Pipeline Company in the U.S., follows a series of Leave to Open orders granted in August for the Canadian segment by the National Energy Board (NEB).

The NEB approvals included the remaining 207 km (129 mi.) of the Eastern Leg constructed this year in Alberta, the first of two compressor units at the Jenner, Alberta compressor station, and the 880-m (2,887-ft.) temporary bypass line extending to the Canada-U.S. border at Monchy, Saskatchewan. This short section of pipeline was constructed to connect the mainline of the Eastern Leg in Saskatchewan with the U.S. system so as to bypass the partially-built compressor and meter stations at Monchy. Work on these facilities resumed in early September following a four-month shutdown due to a building trades strike. Construction of the compressor facilities at Piapot and Richmond, Saskatchewan was also affected by the strike.

A provisional licence was granted by the Alberta Energy Resources Conservation Board in late August to allow for the gas to be metered at McNeil, Alberta facilities, built this summer by NOVA, An Alberta Corporation, until the Monchy station is ready to measure the export flow. A permanent licence will be issued for the McNeil complex once the final instrumentation, roofing and landscaping are complete.

With an initial delivery of 3 Mm to 7 Mm m³ (110 to 250 Mmcf) of gas a day through the Eastern Leg, the three licensed exporters, including Pan-Alberta Gas Ltd. of Calgary, are expected to



increase the flows to over 17 Mm m³ (600 Mmcf) a day by November and to 30.4 Mm m³ (1,075 Mmcf) a day by 1988. In an application now before the NEB, Pan-Alberta is seeking an extension to its existing licence to move an additional 62.6 B m³ (2.21 Tcf) through the system between 1988 and 1995.

The gas which flowed across the border during the first few weeks of operations of the Eastern Leg was used to purge the line of moisture and other impurities and build up the pressure in preparation for actual market deliveries. These deliveries began in late September, following the final certification for the U.S. portion issued by the Office of the Federal Inspector on September 20.

The Eastern Leg stretches 636 km (395 mi.) east from James River Junc-

tion, Alberta and through the southwestern corner of Saskatchewan to the international border at Monchy. Here it joins with the U.S. Eastern Leg, which extends for 1 324 km (832 mi.) through Montana, North Dakota, South Dakota and Minnesota to Ventura, Iowa.

The September 1 shipment of gas through the Eastern Leg now makes Phase I of the Alaska Highway pipeline operative. Gas began flowing on October 1, 1981 through the Western Leg which runs from Caroline, north of Calgary, Alberta to Kingsgate, British Columbia and south to California.

At this stage, Phase I of the project in Canada has cost about \$1 billion while expenditures on the U.S. Eastern and Western Leg facilities have amounted to approximately \$1.3 billion (U.S.).

Alberta Gains from Phase I Experience

Natural gas sales to the United States could reach as high as \$2 billion annually, based on existing export permits through the Phase I facilities of the Alaska Highway gas pipeline, says the Alberta government's Pipeline Coordinator, Richard Dalon. "Alberta has accrued about \$650 million in industrial benefits as a result of construction of the project during the past two years, as well as approximately 100,000 person-years in employment benefits," he reports.

With Canadian gas now on-stream through both the Eastern and Western Legs of the system, the Pipeline Coordinator's office will reduce activities until construction begins on the mainline. Set up in 1979 within the provincial Department of Federal and Intergovernmental Affairs (FIGA), the office coordinates all Alberta government activity related to the multi-billion dollar project.

The establishment of the Pipeline Coordinator's office was prompted largely by the creation of the Northern Pipeline Agency, explains Mr. Dalon, who assumed the task of Pipeline Coordinator in addition to his regular duties as Executive Director of the Social and Cultural Affairs Division of FIGA. "We were modelled on the Agency as the single window for dealing with pipeline concerns in Alberta." This role was reinforced in a Memorandum of Agreement, signed by the Governments of Canada and Alberta in August 1980 which emphasized co-operation and consultation between the province and the Agency on all Alaska Highway pipeline matters.

The provincial government's concerns over the impact of pipeline construction, including the Alaska Highway project, focus on environmental aspects such as land reclamation, erosion control and fish and wildlife protection. As Pipeline Coordinator, Mr. Dalon sits on Alberta's Development and Reclamation Review Committee, which is made up of members from the Departments of Environment, Agriculture and Energy and Natural Resources, the latter including the divisions of Public Lands, Fish and Wildlife and Forestry. The Committee reviews the draft and final environmental protection plans that Foothills Pipe Lines (Alta.) Ltd. submits to the Agency for approval.

"The Committee members' comments are directed through me to the Agency," Mr. Dalon says, remarking that the review and consultation process between the province and the Agency has generally been smooth. "There have been some disagreements, but environmentalists are like lawyers — you get enough of them together and there are bound to be different professional approaches. One of my roles as Pipeline Coordinator is to help sort out any differences among our departments, the Agency and the company."

During the construction phase, the various groups represented on the

Committee provided staff to work with the Agency's on-site surveillance teams under the direction of the Agency's Senior Surveillance Officers. There were usually three provincial officers in the field, depending on where and under what environmental conditions construction activity was taking place.

During 1980-81, the Alberta Forestry Service participated in surveillance of Western Leg construction where the line passed through approximately 26 km (16 mi.) of forested land under provincial jurisdiction in the Porcupine Hills and the Crowsnest Pass area. For work on both the Western and Eastern Legs, the province provided surveillance officers from Fish and Wildlife and Public Lands to oversee activity on provincial Crown lands including all river and stream crossings.

Prior to the start of construction in August 1980, Mr. Dalon co-signed with the Agency a Memorandum of Understanding on environmental surveillance specifying how the provincial officers would interact with the Agency's surveillance personnel. "Each year we've learned from the previous year's experience and have made refinements to the Memorandum which have improved the day-to-day lines of communication between the province and the Agency," says Mr. Dalon. "For instance, it was



photo courtesy of Alberta Pipeline Coordinator's Office
Richard Dalon, Alberta's Pipeline Coordinator, tours Western Leg construction near Chain Lakes, Alberta.

clarified that the Senior Surveillance Officer of the Agency is responsible for issuing any formal orders to Foothills however, our people could still discuss matters of concern with the company or contractor as long as they informed the Senior Surveillance Officer." The Agency, company and provincial field staff have also held weekly meetings during construction to discuss and plan surveillance activities.

On the whole, the company and contractor have done an excellent job, com
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Editor's Note

Commencing with the January 1981 issue, *Pipeline* will be published quarterly. This decision follows the project sponsors' announcement in April to delay completion of the Alaska Highway gas pipeline until 1989, and the consequent reduction in the activities of the Northern Pipeline Agency.

Laura Lawrence

News in Brief

Government and industry officials from Canada and the United States attended a dedication ceremony given by Northern Border Pipeline Company in Bismarck, North Dakota on October 5 to mark the completion of construction of the Eastern Leg of the Alaska Highway gas pipeline and the first flow of gas through the facilities.

Speaking at the ceremony, the Hon. Mitchell Sharp, Commissioner of the Northern Pipeline Agency, stressed that although about one-third of the pipeline is now in operation, Canada's primary interest lies in completion of the entire project. Mr. Sharp noted there has been a change for the better with respect to some of the adverse factors that led to the decision last April to further setback completion of the pipeline to 1989. Interest rates and the rate of inflation have declined, he said, adding that he was encouraged by the efforts of the project

participants to explore new means of overcoming the problems related to financing second stage construction.

Changes in the federal cabinet announced in September have resulted in Sen. H. A. (Bud) Olson's move from the office of Minister of State for Economic Development to Government Leader in the Senate. In addition to his new duties, Sen. Olson will retain his position as Minister responsible for the Northern Pipeline Agency.

In a decision released on August 26, the National Energy Board (NEB) granted Foothills Pipe Lines (Yukon) Ltd. permission to include in its Phase I rate base about 60 percent of the \$204 million spent to date on the planning and design of Phase II of the Alaska Highway gas pipeline. The approval was given on the condition that the compa-

ny refund these amounts once the entire pipeline is completed and the shipment of gas begins from Prudhoe Bay, Alaska south to the lower United States.

Foothills (Yukon) requested the cost recovery on the grounds that these preliminary expenditures, which were made in pursuit of a single project, resulted in the completion of the Phase I facilities and that no part of the pipeline would have been built without expenditures on the whole. The company indicated it would require some return on this investment before Phase II construction begins in order to continue support of the project at a reasonable level.

The temporary cost recovery is among several financial issues related to the Western and Eastern Legs of the pipeline which were considered by the NEB at hearings held in late June and early July in Ottawa.

Yukon Traffic Study Completed

Traffic along the Alaska Highway in Yukon during summer has increased by as much as 30 percent since 1980, according to the results of a \$20,000 traffic study conducted by the Northern Pipeline Agency, with help from the Yukon government, Public Works Canada and 26 local high school students.

The four-month long project, which wrapped up at the end of August, was designed to obtain information on the numbers, types and directions of vehicles travelling along the Alaska Highway between the Yukon-British Columbia border and the Yukon-Alaska border. Since the highway will be one of the main routes used for the supply of pipe and materials for the Alaska Highway gas pipeline in Yukon, the study will provide a data base against which the increase in traffic and large-sized vehicles related to the project can be measured.

The data will be useful in analyzing road maintenance costs, scheduling of trucking operations and planning for long-term capital improvements. It will also help to determine what steps should be taken to minimize traffic congestion and, if necessary, ensure safety. Foothills Pipe Lines (Yukon) Ltd. expects a



The Alaska Highway east of Teslin, Yukon

daily average of 104 vehicles to travel up and down the highway, including 30 pipe trucks. During the peak of construction, traffic flow is estimated at 402 vehicles per day.

With \$15,000 provided by the Agency, \$5,000 and computer services from the Yukon government and technical advice from Public Works Canada, the Agency's Whitehorse office coordinated the traffic study and hired high school students to do the counting in their respective communities.

The results indicate relatively little truck travel takes place at night. Seventy percent of the vehicles counted had licence plates from outside Yukon, except for the Whitehorse area where local traffic was about 50 percent. When compared with the results of the Yukon government's electronic and mechanical counters placed along the highway, the Agency's manual count revealed generally lower numbers, since the automatic counters record by axle rather than by vehicle.

Eastern Leg Wrap-up



The final tie-in weld, completed on August 17 south of Beiseker, Alberta, wraps up construction on the Eastern Leg of the Alaska Highway gas pipeline in Canada.



photo courtesy of Foothills Pipe Lines (Yukon) Ltd.
Aerial view of construction of compressor station facilities at Monchy, Saskatchewan

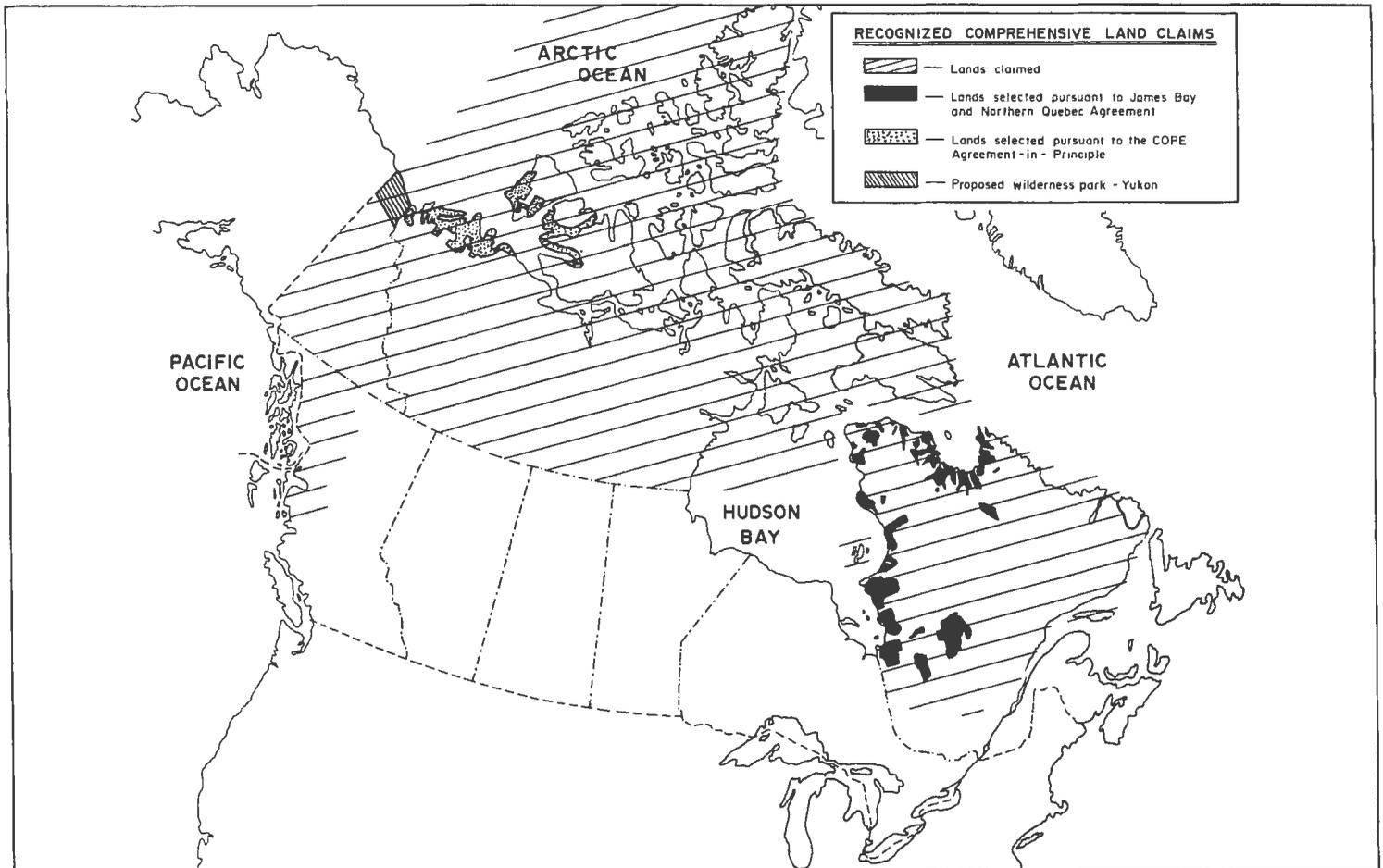


photo courtesy of Foothills Pipe Lines (Yukon) Ltd.
An orifice plate is lowered into the yard piping system to measure gas volumes and pressures at the compressor station under construction at Piapot, Saskatchewan.



A year following pipeline construction, weeds natural to the area grow along restored Eastern Leg right-of-way in Saskatchewan's Frenchman River valley. Environmental staff of the Northern Pipeline Agency continue to monitor the results of the land reclamation and revegetation work undertaken by the Foothills segment companies in areas disturbed by construction activity.

Northern Land Claim Negotiations Progress



The Council for Yukon Indians' aboriginal claim to Yukon land is close to an agreement-in-principle, says Clovis Demers, Assistant Deputy Minister for Native Claims with the federal Department of Indian Affairs and Northern Development (DIAND). "By year's end, we expect to have resolved the major issues such as subsurface land rights, the participation in resource development and forms of local government."

Negotiations with the Council, which have been under way for about ten years, have moved swiftly ahead within the last two years, Mr. Demers comments. During 1981 and 1982, the federal government renewed its commitment to deal with land claims and announced funding increases to native groups across Canada for the research, negotiation, and settlement of claims based either on treaty rights or on traditional occupancy and use.

The final agreement on the Yukon Indians' comprehensive claim will designate lands selected on a community-by-community basis. A comprehensive claim involves aboriginal title to an area

through traditional occupancy and use of the land, including rights to fishing, hunting and trapping, as well as the social and economic benefits derived from resource exploration and industrial development. The federal government considers comprehensive claims in cases where treaties were not signed and the descendants of the aboriginal inhabitants never ceded their lands to the government.

Out of a total of 26 comprehensive land claims considered to date, one is in Yukon, three are in the Northwest Territories, 16 in British Columbia, two in Quebec, two in Labrador, one in Newfoundland and one in Nova Scotia, which was rejected. Of these, six comprehensive claims are under negotiation and two have been settled: the James Bay and Northern Quebec Agreement of 1975, involving native ownership of about 14 000 km² (5,345 sq. mi.) and exclusive hunting, fishing and trapping rights to 151 500 km² (58,530 sq. mi.) of land in northern Quebec, and the Northeastern Quebec Agreement of 1978 which gave the Naskapis Inuit title to 326 km²

(126 sq. mi.) and exclusive rights to 4 100 km² (1,600 sq. mi.) of land in the northeastern part of the province. In the agreements negotiated over a two-to-five year period between the federal government, Quebec and the native groups involved, the native people were to receive over an extended period cash compensation totalling \$234 million for their losses.

Indian and Northern Affairs Minister John Munro announced in September that formal negotiations are about to resume on the comprehensive claim of the Committee for Original Peoples Entitlement (COPE) representing Western Arctic Inuit. Talks ground to a halt a year and a half ago, although an agreement-in-principle has been in place since 1978. Mr. Demers says the federal government and COPE have been unable to come to an understanding over the interpretation of certain parts of the agreement-in-principle such as the extent of a proposed wilderness park on the North Slope of Yukon. Both the Yukon and federal governments want provisions for

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Alberta Gains from Phase I Experience

ments Mr. Dalon. "I took a helicopter tour of the line several months ago and was satisfied with the results of last year's revegetation work, particularly on the steep slopes along the Eastern Leg and at the Red Deer River crossing."

Most concerns raised by Alberta's field personnel were over reclamation work done on the Western Leg during the first construction season in the Porcupine Hills area, notes Mr. Dalon. For example, the provincial officers noticed grazing cattle were stripping the grass from revegetated portions of the right-of-way, especially along slopes and in low, wet areas. After negotiations between the provincial officials and Foothills (Alta.), the company agreed to fence off the areas affected. The remedial measures taken by the company have proven successful, Mr. Dalon reports.

"We gained from the Phase I experience in terms of dealing with a mega project," Mr. Dalon observes. "What we learned in negotiating environmental and socio-economic terms and conditions

with the Agency and Foothills has already proven helpful for planning other projects," he says, referring to the province's role in negotiating the agreement on the aspects of manpower development, industrial benefits and small business opportunities for the now-postponed Alsands venture.

Although the activities of the Pipeline Coordinator's office are scaling down, Mr. Dalon plans to remain in touch with the Agency and his counterparts in the other provincial and territorial governments involved in the pipeline project. "Along with the Agency and the company, we will continue planning for the northern section."

The various provincial departments responsible for surveillance during the past three construction seasons will monitor the results of reclamation on a long-term basis, as they would with any other pipeline in Alberta, adds Mr. Dalon. "Once the project resumes, we'll be in full swing again."

Pipeline

The Northern Pipeline Agency was created by Parliament in April 1978 to oversee planning and construction of the Alaska Highway gas pipeline project in Canada. Inquiries or suggestions regarding the Agency's publication, *Pipeline*, may be directed to:

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Northern Land Claim Negotiations Progress

transportation corridors and on-shore facilities in the park for petroleum development in the Beaufort Sea. "It's encouraging they've agreed to get back to the negotiating table. We've been close to a settlement with COPE for a while now, however, at least several months more of hard-nosed negotiations are needed," Mr. Demers reports.

One of the most recent comprehensive claims filed with the federal government's Office of Native Claims (ONC) was that submitted last February by the Kaska Dena Council for 40 000 km² (15,000 sq. mi.) of land in northeastern B.C. The area in question is slated for several major development projects, including a multi-billion dollar hydroelectric project along the Liard River and the Alaska Highway gas pipeline. The historical and anthropological aspects of the Kaska Dena claim have been verified by ONC researchers and it is now up to Justice Canada to determine whether it is acceptable from a legal perspective. If the claim is recognized as valid, the government will then decide when to

begin negotiations.

The concept of native rights as expressed through land claims is as old as the Royal Proclamation of 1763, which recognized the original possession of North America by native people. Yet only in recent years has the issue received widespread public attention as a result of many factors at play, observes Mr. Demers. The federal government first developed its policy on land claims in 1973, following a landmark Supreme Court case in which the Nishga Tribal Council sought legal declaration of its aboriginal title to lands in northwestern B.C. which had never been extinguished by treaty. Although the case ended with a split decision, as the first judicial challenge on the question, it prompted the government to recognize the existence of aboriginal rights to land. In 1974 the ONC was created as a section of DIAND to coordinate the review, negotiation and settlement of the land claim process.

It took a while before the claimant groups did some research and discovered they had a case, Mr. Demers

points out. "Over the last decade, especially with increased pressure from major resource development projects, native associations from across Canada have become much more aware and politically sophisticated." In their land claim submissions, both the Council for Yukon Indians and the Kaska Dena Council have stressed the urgency of settling and implementing the claims before projects such as the Alaska Highway gas pipeline go ahead.

"I think, too, there was a realization on the government's part that you couldn't just sweep the issue under the carpet. These concerns would have to be resolved eventually, particularly in northern Canada," Mr. Demers continues. The constitutional debate over the past three years has also brought the question of native rights into the limelight, he adds. However, DIAND has emphasized that native political autonomy or constitutional development cannot be discussed within the land claims forum since all citizens affected must be involved.