FIFLD NOTES ON A BACKPACKING TRIP

CANOL ROAD - N.W.T.

AUGUST 1974

C. A. LEWIS

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aircraft can be landed to unload food caches, contact should be made with Mr. Linton or persons in the N.W.T. government who are familiar with the country.

It is hoped that these notes and our recommendations may be useful to others who are interested in the road.

It is an excellent backpacking trip that requires experience and careful planning.

C. A. Lewis Ministry of Natural Resources P. O. Box 9000 Huntsville, Ontario

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Note: The road locations noted under the photographs are approximate.

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#### INTRODUCTION

The Canol (Canadian Oil Line) pipeline and road project was a wartime venture started in 1942 by the U.S.A. and completed two years later. It was used briefly, then abandoned.

The project started at Norman Wells, N.W.T. (Mile 1) and extended to Whitehorse in the Yukon Territory. It was a considerable feat and involved many thousands of men and tremendous logistics problems in moving materials.

Clean up of debris and telegraph wire along the Yukon portion was started in 1974 but none is planned (at the time of writing) for the N.W.T. portion.

This report includes notes and representative photos taken during a backpacking trip by four men from August 16, 1974 to September 3, 1974 who were interested in seeing the attermath of man's activity.

Due to several weeks of heavy rains prior to the trip, the first portion (including the Carcajou River crossing was omitted). The party flew into Dodo Lake just west of Camp 38 in small aircraft piloted by Mr. P. Linton (Nahanni Air Services - Norman Wells).

Due to high water at the Keele River (M-50) a detour was made upstream and the portion M-50 - M-65 was also missed. It is believed that most of this portion of the road was in reasonable shape (from a hiker's point of view) as it traversed fairly high country and our experience elsewhere would lead us to assume that only where the road encountered moving water were there extensive washouts. For this reason a good portion of the eastern part of the road was in generally poor shape.

The only other portion omitted was from M-167 to M-193 when a chopper was used as the party was behind schedule.

Other reports are noted in the back. For accurate information on the country such as road locations where an

#### Camp 80 to Camp 108:

Road winds across Plains of Abraham reaching a maximum of 5,500°. Although snow covered, the road bed appeared to be satisfactory. The crossing at Andy Creek is easily waded. The only other crossing of note was the Carcajou River. There is an old shack that is set up for use at one end; on the far side of the Carcajou River.

There are three shells of shacks at M-83, M-86 and M-90 (crossing of Andy Creek).

The road is in remarkably good shape from M-80 - 108 where good accommodation at a shack is available. Evidence of old pipe is not apparent.

#### Camp 108 to M-131 (Twitya R.):

Road climbs steadily for approximately 2 miles then slowly declines as the Twitya watershed (via Trout Creek) is reached. From M-118 (where Trout Creek hits the road) the road bed practically disappears. Note: The map denotes the road on the right hand side (going downstream) but the remnants are actually on the left until it crosses again about M-120.

We noted a distinct increase in abundance and growth of vegetation both on and off the road as we entered the Trout Creek - Twitya watershed.

The Twitya crossing is dangerous and we found we had to move upstream about 1 mile before a point was observed where wading, culminating in a short swim, was made. If water levels are high, a crossing is not recommended; the best approach would be to move upstream as far as may be necessary (5-10 miles perhaps) until river volumes are reduced enough and/or the river is braided to attempt a crossing.

## M-131 (Twitya) - M-149:

The road bed is in reasonably good shape with 2-3 small washouts. Two old cabcoses (not useable) were seen

#### CANOL ROAD - ROUGH NOTES - 1974

# Section M-36 (Camp at Dodo Mtn.) to M-49½ (Little Keele River):

Road essentially washed out from M-36 up Dodo Creek to the valley below Sugar Loaf Mountain. As the road climbs out of the Dodo Creek watershed, it becomes quite walkable (approx. 80%) commencing at M-42½ through most of the distance to M-48. Bridges are all out and some sparse vegetation is on the road bed in the valleys.

There are a few rock slides, "slumped" banks, and washouts but in the main the road bed is good for walking.

# Detour up Little Keele: (Approx. 8 miles) to camp 75

This detour involves a walk over extremely hummocky, hilly country with many detours because of mud slides. Once Stony Creek is reached the river is braided enough to permit wading.

Once past this point a "false start" attempt by previous construction parallels the river. This should not be used as it is too overgrown and full of water. The river bed, although difficult walking, is the better route.

The old road bed can again be used at the point on the 1:250,000 map where "Y" of Canyon and the "C" of Mackenzie are located (approx. M-73). This portion was about 30% of the road bed in reasonable shape.

The road portion from about M-70 to M-75 reasonably good walking - mostly adjacent to the river bed.

#### Camp 75 - Camp 80:

What's left of the road climbs slowly up a river valley gradually improving until the last mile or so is good walking. About 50-60% of road bed is useable. There are small shacks at Camp 75 and Camp 80 that are comfortable and have mattress springs and a wood stove.

#### RECOMMENDATIONS

- Only experienced backpackers who take extra care in the planning and logistics of the trip should attempt it.
   Depending on rainfall, delays at river crossings may occur or detours must be made upstream.
- River water is extremely cold (36°F to 38°F) and effective exposure time in it is of very short duration.
- Telephone poles were generally down (2 strands of wire)
   but didn't appear to pose any particular problem.
- 4. Debris was apparent at the old camps but the cost of clean-up is probably prohibitive considering the small return in aesthetics for the heavy outlay of funds involved. We felt there was considerable historic argument in leaving things as they were.
- 5. If any funds do become available, it would be worthwhile improving existing shelters and building several new ones at strategic points on the road. There is some traffic by hunters, prospectors, etc., in that country.
- 6. There was evidence that there may be some interest in improving at least the western portion of the road from M-167 to M-222. Surveyors' markers and unconfirmed reports that N.W.T. government (Dept. of Highways or D.P.W.) personnel were surveying the mileage from about M-200 to M-208 and beyond were noted. In my view the portion of the road from Godlin Lake M-167 to M-222 is the most easily improved. The remainder, back to Norman Wells, would be a costly venture, requiring extensive re-routing (from those road portions originally in the river valley bottoms) to say nothing of maintenance upkeep, especially in winter.

at M-142. At M-147 the road appears to cross the Godlin River. It in fact does not, and the old road bed can be located by a stiff climb up a rock face. It would appear that the original road bed was washed out and an alternate (and higher route) was attempted.

# M-149 - M-167 (Godlin Lakes):

The road is in generally good shape as it climbs into higher country. Where incoming streams cross the road, it usually doesn't exist. The whole portion is extremely attractive country, probably the road from M-155 to M-222 (Yukon border) is the most scenic portion we encountered.

#### M-167 - M-193:

Except for river crossings, the road appears to be good for walking (see photos).

## M-193 (Caribou Pass) to M-222:

The road is in generally good shape. It should be noted that a 4-wheel drive can reach Camp 208 (where good accommodation is available. There are also a couple of cabooses at M-215 and M-218 that can be used for shelter.

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M-90: Abandoned shack - could be used for emergency shelter (north side of Andy Creek).

M-100: (Crossing of Carcajon River) - One building still standing that has been fixed up for use of travellers at one end.

M-108: Old pump station (see photos) - One quonset hut has been set up for use of travellers and is quite comfortable (sleeps 8) with a good stove. (Small plane can land at this point, if wind direction is O.K.)

 There are 12 buildings, 3-4 vehicles plus assorted pieces of machinery in evidence.

M-120 - 122: Road is in fact on east side of Trout Creek, not west side as marked on map. Old caboose shack at M-122 - west side of Trout Creek.

M-131: (South side of Twitya) - (see photos)

Total of 14 buildings (cabooses), one in
particular that has a good stove and bunks.

Several more could be easily improved for use.

One old truck, 75-100 empty fuel drums.

 A few pieces of old machinery were noticed in the dense undergrowth on the north side of the Twitya River. More than were observed probably exists.

M-131 - 135: One old wehicle on the road.

M-140: A truck graveyard exists (24 vehicles with assorted machinery and approximately 75 fuel drums).

M-142: Cabooses (2) Vehicles (6) Oil drums (200-300)

M-152: 50-100 oil drums (at location marked cabin on map). (No cabin exists.)

M-167: Godlin Lakes. There is a fairly large base camp (Geological Survey of Canada) plus mining interests as well as a cabin maintained by the N.W.T. Game Branch whose biologists are studying grizzly bear movements in the area. One outfitter (Hungry Horse Camps) has a cabin on the road but it doesn't appear to have been used in the last year or two, except by grizzly bears.

## LOCATION OF DISCARDED BUILDINGS, ETC.

#### NOTED DURING TRIP

CANOL ROAD M-38 - M-222

(Excluded is M-50 to 65 and M-167 to M-193)

## August 1974

Camp M-38: (Dodo Lake) to M-48½ (Little Keele River)

- 15-20 fuel drums on side of road

- shack (in river at M-42)

Camp M-50: (Little Keele River) north side

- buildings (4) (All in bad shape except largest that could be repaired for travellers. Appear to have been destroyed since the 1973 DINA chopper survey.)
- vehicles (4)
- assorted debris from dismantled buildings.

Note: Section M-49½ to approximately M-70 was not walked due to need to cross upstream on the Little Keele. It would appear that the road for this stretch remains in high country, cut into the edge of the mountains. One presumes it's in reasonably good shape compared to what was encountered in the river valleys.

Camp M-74: (A pumping station at the turn-off to Camp 80 from the Little Keele River)

- quonset huts (6); one useable

- shacks (2)

- storage tank (20,000 gal. capacity)

- vehicles (5-10)

M-73 - M-80: 15-20 oil drums enroute.

M-80: (oil drums (50-100)

(vehicles (2-4) snow (buildings (6), one useable, one that could be repaired)

M-83: Abandoned shack - not useable.

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M-86:

M-167 - 193½: No information in detail as this portion was covered by chopper. A number of bridge structures and cabooses were noted. Road bed "appeared" reasonably good.

M-195: Caboose (not useable) in river.

M-200: Ruined caboose and sleigh on road bed.

Old caboose (not useable) Number of vehicles (6-8)

M-200½: Fuel drums (300) Vehicles (15)

Caboose (1) - not useable

M-208: Buildings (19)

Vehicles (9-10)

A great deal of assorted junk, glass, debris (one large shack useable for cooking, sleeping)

M-212: Number (50-100) of fuel drums.

M-215: Several old shacks (one useable).

M-218: One old shack (useable).

M-222: Old buildings (one being used as a weather station by MacTung Mine during the winter of

1974/75).

Note: See enclosed map for approximate mileage locations referred to above.

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- Resource Management Officers, Dept. of Indian & Northern Affairs, Fort Smith and Norman Wells.
- .- Travel Arctic, Dept. of Economic Development, N.W.T. Govt. Yellowknife, N.W.T.

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# CANOL pipeline project an historic building job

By Tom Campbell Of The Journal

A massive and almost forgotten pipeline project, completed out of the Mackenzie Valley area 30 years ago, is again causing ripples.

The CANOL (for Canadian Oil) project was built by the United States government in ooperation with the Canadian government. Its purpose was to take fuel to Alaska by a safe overland route and help stall a possible Japanese invasion of Alaska.

This Second World War venture succeeded in building a 600-mile pipeline in slightly more than 20 months that connected the Norman Wells oilfield to a new refinery in Whitehorse, Yukon.

The U.S. government originally estimated the project would cost \$134 million. News reports during the final stages of the project estimated 25,000 persons and 10 million tons of equipment had been involved in the project.

## Above ground

The above ground four and six inch diameter pipeline was operated at a peak capacity of 4,000 barrels daily during the last months of 1944 and early 1945. But its useful life ended with the decline of the Japanese threat.

The vast majority of Albertans, who have arrived in the province since the end of the wor, have probably heard little or no reference to the project built during 1942-1944. Even many of those who lived in Edmonton during those booming war years are likely only vaguely aware of the project which was overshadowed by the wellknown Alaskan Highway project.

In fact, the U.S. Corps of Army Engineers and the U.S. government did not reveal details of the project until almost a year after construction started.

The project is back in the news today because of a group of Edmontonians, who eventually acquired the assets of the abandoned project, are using these assets to claim title to nearly one million square mies in the Yukon and Northwest Territories.

The firm, Barbarosa Enterprises of Hay River, filed its claim for acreage in the N.W.T. recently in Yellowknife. It acquired the abandoned project from a firm which purchased the project from the U.S. government for salvage value.

## Abandoned

The CANOL project has been abandoned since the U.S. government pulled out of the 577.3 mile pipeline in March, 1945, only eleven months after the first oil was delivered in Whitehorse.

Despit its short useful
life the project was enormous even in today's 1
terms of massive northern pipelines.

"In respect to area p covered, time of accome plishment, and sheer pioneering, the pipeline s and refiery project. We combined with the Alaska Highway, was destined to become the largest construction a program in the history e of the world," says a "CANOL" a documentary published at San Francisco in 1945.

The documentary was a produced for Bechtel-t Price-Callahan, the athree Americain engineering and construction companies which formed a joint venture to design and build the crude oil pipeline, refiney and related facilities.

The U.S. war department made the decision to undertake the project at the end of April, 1942, only five months after the Japanese attack on Pearl Harbor pushed the U.S. into the war.

By the end of May. 1942 the advanced guard

of the U.S. Army Corps of Engineers had arrived in Edmonton and the first construction equipment for the pipeline began rolling up the Northern Alberta Railways to Waterways and the Mackenzie River system.

The following winter the railhead at Peace River became the jumping off spot for a 1,-000-mile winter read system over which tractor trains moved 2,000 tons of freight.

# Gateway

The doumentary says that Prince Rupert, B.C. became another gateway to the CANOL pipeline and refinery. Equipment was shipped over the White Pass and Yukon Railway from Skagway. Alaska to build the refinery at Whitehore and start construction of the six-inch diameter pipeline east from Whi-

Meanwhile crews had already started clearing right-of-way and laying the pipeline from Norman Wells.

was designated to ex-

pacity of the pipeline, and most of the 630,000 The field had been dis- barrels of tankage came covered in 1920 and Im- from a refinery at Corperial had established a pus Christi, Texas. 840-barrel-a-day refinery there in 1939 to rough track of the Alas-

drilled 29 new wells in lso became a supply the Norman Wells field line for the oil project that year and was operating 67 wells when the crews laying pipe from pipeline was operating both ends the pipeline

flow through the CANOL on Feb. 16, 1944, only 20 line, the number of pro- months and four days ducing wells had dec- after the first reconlined to 12 and by the naissance flight across only six wells operating. divide.

The Standard Oil Comliate of Standard of Cali- May and the gasoline fornia, was designated and fuel oil from the to operate the pipeline Whitehorse refinery and the Whitehorse oil were piped up and down refinery and associated the Alaska Highway, as products pipelines which well as to tidewater, to would carry fuel to Fair- serve army, navy and cibanks. Skagway and vilian needs. Watson Lake, B.C.

## Dismantled

Imperial Oil Limited from dismantled refi- which were designed to nery and industrial burn the oil they pand the production of parts from all over the pumped, were turned off U.S. and Canada. The as the system appeared field to the 3.000-barrel thermal cracking units, too costly for use in the

January, 1943, the first provide fuel for northern ka Highway had been pushed through to inter-Imperial said in its sect the route of the 1944 annualreport that it CANOL line and this

With construction at a peak capacity of al- came together at Macmost 4,000 barrels daily. millan Pass in the Mac-Shortly after the war, kenzie Mountains and and the halt of the oil- the final weld was made early 1950s there were the Mackenzie-Yukon

Refining of oil prodpany of Alaska, an affi- ucts began the following

In March, 1945 the pipeline operation was discontinued and the refinery was suspended. The refinery was built The 10 pumping stations. per-day designed ca- part of the crude unit then-certain peacetime.

# Binomion Stand Guide

# half of territories

y STEWART DUCKLOW mund Buchta is either a limate billionaire, or the est dreamer of all time.

says he bought the entire on Territories and a huge ak of the Northwest itories from a retired Edton developer in 1968.

d on March 27, he and his wa lawyer presented the .T. Supreme Court with a lease full of documenmts ered over a seven-year title ch. As president of Barsa Ent erprises, Mr. Buchta d that a caveat be filed on the declaring his firm's interest. Seldom have the judicial hers been so ruffled.

The Crown has been taken by orise," intoned Judge iam Morrow, who remanded case until June 3 because no I description of the land had

fir shed with the affidavit.

that documented his a wan a series of diplomatic anges going back some years to the Americanced Canol pipeline project during World War Two as an ed defense measure. He atted several key documents

missing, but his lawyer,
Anders, hopes the court
on will force the civil
ations section of the
rtment of justice in Ottawa

ome up with them. ider agreements with the

dian government, the U.S. department poured \$134 ion into the Canol project, fing a pipeline to Whitehorse in an existing refiney at man Wells. In March 1943, Mr. Buchta, the U.S. ived exploration and drilling ts for nearly one million

square miles of land north of 60.

The pipeline, with a capacity of 3,000 barrels a day, was completed in early 1944, but by then, success against Japan in the South Pacific, had made the line obsolete. The U.S. Senate committee on war expenditures recommended the facilities be sold, giving Canada the first

option to buy.

Mr. Buchta said Canada waived its option because the project was too expensive, and allowed the U.S. to recoup its losses by selling to private interests. In 1947, the project was put up for sale, and purchased by one of its construction contractors, L.B. Foster Ltd., of Pittsburgh, for \$700,000.

The American firm salvaged the construction equipment and heavy machinery left behind when the U.S. abandoned the

project, then sold their rights to Pembina Sales and Equipment Ltd., of Westlock, Alberta, for \$200,000.

The partnership that ran the Alberta firm was dissolved, in 1956, and Thomas Rimmer, one of the two owners

acquired the project. He sold his interests to Mr. Buchta 20 years later.

Mr. Buchta formed Barbarosa Enterprises Ltd. in 1971 with himself as president and his four financial backers as major shareholders. He won't say who his backers are, except they are private citizens and the money is Canadian.

Mr. Rimmer, who has retired in Winterburn. Alberta, said he sold Mr. Buchta salvage rights to Canol for \$1,000 after stripping the pipeline and service road of most of its equipment.

"I sold him equipment on the highway from mile a to mile 160." said Mr. Rimmer.

He says he furnished Mr.
Buchta with a description of the machinery and equipment left along the site. "I told him there wasn't too much left." he said. "I didn't think it was worth going back."

When his firm bought the Canol project in 1948, all they received was a description of remaining equipment left by the American salvage operation. "There were shovels, draglines, scrapers and all kinds of power equipment," said Mr. Rimmer. He and his partner worked during the summer for seven years. floating equipment down the Mackenzie River to Hay River, trucking it out from there.

Mr. Buchta doesn't look like an opportunist who takes advantage of loopholes in government documents. He's a German-born citizen, and at 46, the president of a small construction contracting firm in Edmonton. With movements he energetic produces a battery of government documents from a brown attache case, and hammers out an overpowering monotone punctuated by the movement of his stubby right forefinger which punches the air to drive home his

"He knows those documents backwards and forwards," said his lawyer who apparently doesn't, but offered the following opinion: "if we can show a chain to title from Canada to the U.S., we would extinguish aboriginal rights. The Indians wouldn't be able to lay claim to that land."

The land Mr. Buchat is claiming surrounds the 400,000mile Indian land claim, on which a caveat was granted but is now being appealed.

Two key documents are missing from the Barbrosa claim. The company doesn't have a legal description to the land, nor has it proof the land was ever sold to the U.S.

Mr. Buchta said the land in question stretches from 60 degrees north latitude to the Arctic Ocean, and east from the Alaska-Yukon border to 112 degrees longitude, just west of Fort Smith. But somebody has added his figures wrong; on the map, the Barbarosa claim covers the whole Yukon, and about three-quarters of the District of Mackenzie. The Canada Yearbook says the total area occupied by the Yukon and the District of Mackenzie is only about 735,000 square miles.

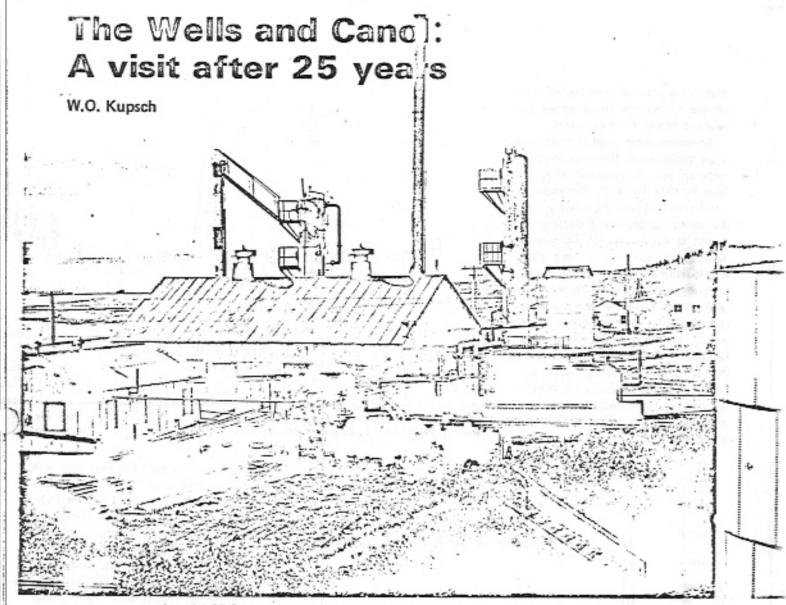
Other documents say the U.S. never got the rights to explore and drill on that land in the first place. According to an old government press release, the U.S. did get rights to a smaller area, where the eastern border was cut to a line parallel to the Mackenzie River through the centre of Great Bear Lake, going no further east than Fort Providence.

Nor is there a legal description of the land in any of the documents Mr. Buchta furnished reporters. For the registrar of lands and titles to even consider registering the property. Mr. Buchta will have to come up with the legal description from files in Ottawa, or have the land surveyed at enormous cost.

If the land is rejected by the registrar after it's surveyed Barbarosa can contest the decision in court. The second hurdle for the Barbarosa group is to prove an interest in the land, and nowhere in the documents Mr. Buchta supplied is there reference to ownership of anything but pipeline facilities. It appears from the documents, the U.S. owned the facilities, leasing the land beneath them, and getting free rights to explore and drill for oil elsewhere.

Just how much interest Barbarosa has in the land will have to
be interpreted in court from the
documents available A
spokesman for the Crown Attorney's office says Mr. Heekin
may have languit himself ratio
to act a parametrom Narama
Will be Mattered at a reTrible le activities and accompany

MEUS OF THE NORTH April 9/16.



Imperial Oil Company's producing site at Norman Weils. Beyond is the Mackenzie River.

Imperial Oil

To the residents in the settlements along the Mackenzie River "The Wells" means Norman Wells and the oil that its small refinery supplies up and down the river. Although recent estimates put reserves at a respectable 500 million barrels, this one and only producing field north of the sixtieth paralfel in Canada is not tied by pipeline, road, or railroad to a wider market. It was not always so.

A graph showing production from-"The Wells" reveals half a century of tranquil growth interrupted by an incredible peak soaring upwards during one year of frantic activity. The story behind this graph is one of discovery, exploitation, peace, and war. It is a story of geology and economics. One astute observer cited it as a clear illustration of the fact that the pace of northern development is set by the market place rather than by real or imagined physical and engineering difficulties. And that is only one lesson to be learned from the history of Norman Wells and the Canoi Project.

comment : 1 to be 32

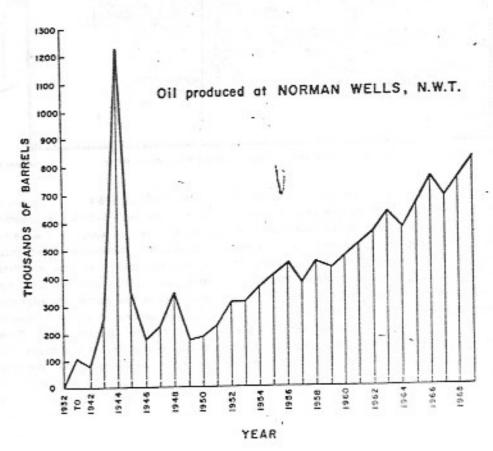
As early as 1789 "... pieces of Petrolium, which bears a resemblance to yellow wax . . ." were recorded by Alexander Mackenzie along the banks of the mightiest river in Canada and the one that now bears his name. He probably saw his petroleum at the Ramparts, close to the present Fort Good Hope. For many years these "tar springs" remained the principal supply of "pitch" to the canoemen of the Hudson's Bay Company for caulking their boats. There was only a limited need for the product.

Hence the occurences of oil springs in the Mackenzie River valley remained known to only a few.

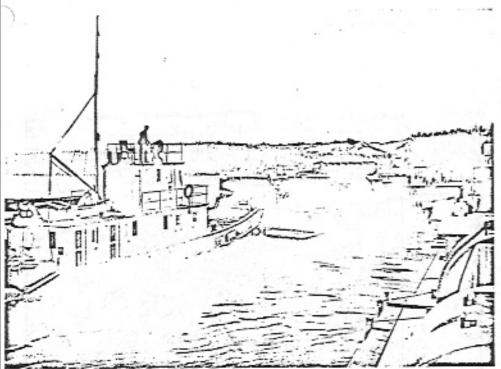
Seepages near what is now Norman Wells were first investigated with an eye on possible exploitation in 1911 by J. K. Cornwall of the Northern Trading Company, but he failed to arouse sufficient interest in his plans. Some months before the outbreak of the First World War a Calgary-based syndicate engaged Dr. T. O. Bosworth to stake three claims at the mouth of a tributary to the Mackenzie River, which later became known as Bosworth Creek. Further exploitation had to await the return of peace but in 1918 the claims were acquired by the Northwest Company, a subsidiary of the Imperial Oil Company, Ltd.



The Norman Wells oilfield as seen from the Mackenzie River in 1927. Note the "walking beam" of the cable-tool drilling rig.



The site where the first well was to be drilled on these claims was chosen by Ted W. Link. In July, 1919, a party of eight geologists and drillers, all employees of Imperial, left Edmonton by train to the end of the steel at Waterways, Alberta. Here they embarked on a river boat taking with them a winter's supply of food, a drilling rig, and "Old Nig", a black ox. They reached Fort Norman in September. From there they still had to descend the river for 53 miles before camping on its right bank. were then some 1,150 They air miles north of Edmonton but had travelled about 2,700 miles on land and on water (in 1970 Pacific Western Airlines left the Edmonton Industrial Airport on Thursdays and Fridays at 0930 direct to the paved airstrip at Norman Wells to arrive there at 1240 for a flying time of 3 hours, 10 minutes in the comfort of a Boeing 737 jet aircraft!).



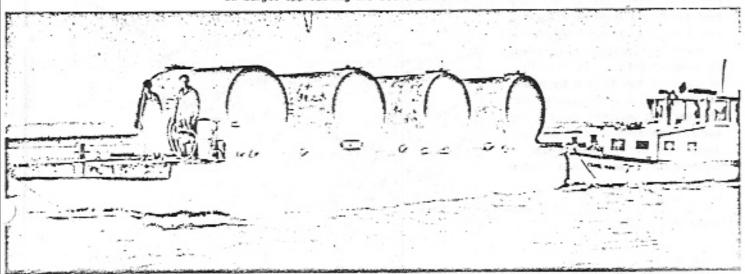
River barges laden with frames for bunk houses and trucks loaded with gasoline drums left Forth Smith for the week-long trip to Norman Wells.

It had taken the Imperial Oil men so long to travel north that not much could be accomplished before the onset of winter except to set up camp, an operation in which the ox helped by hauling logs. Three men returned to Edmonton, and the five who remained wintered in their tents keeping warm when temperatures outside dropped to as much as 60° below zero Fahrenheit by stoking their stoves with plentiful wood and feeding themselves on flour, fish, and "Old Nig" turned into steaks when his hay ran out.

It took again some two months in 1920 for a party of seven to travel from Edmonton to the chosen site but soon upon arrival (July the eighth) drilling of the well commenced. Oil showed first at a depth of 100 feet, but only at a depth of 783 feet were commercial quantities encountered. The first oil well in the Northwest Territories thus came into existence on August 20, 1920, when this depth was reached.

It was not until the autumn of the year following that the well was brought into production. And that was after freeze-up which, because some supplies were urgently needed, caused difficulties that were promptly overcome by a technical innovation. The much wanted materials were flown from Edmonton to the bush camp by two Junkers float-equipped aircraft, specially acquired by Imperial for this first air supply of a field crew in Canada. Also, still in 1921, the Northwest Company set up a small refinery with a daily capacity of 300 barrels of crude oil and capable of producing motor gasoline and diesel fuel. The first phase of oil production in the north came, however, to an inglorious end when a local market failed to develop and the refinery had to be shut down. The sternwheelers then on the Mackenzie River used wood and so did the local residents for heating their houses. In 1924 it was all over, with the six wells then drilled capped.

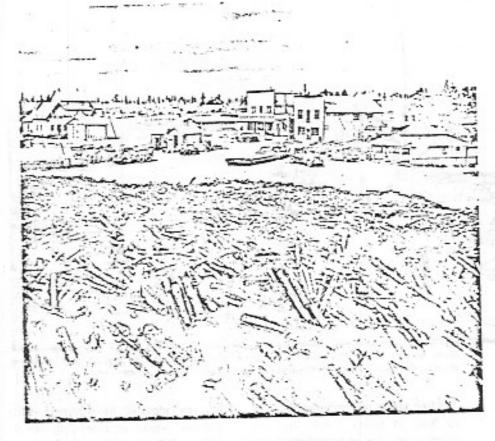
Oil barges approaching the docks at Norman Wells.



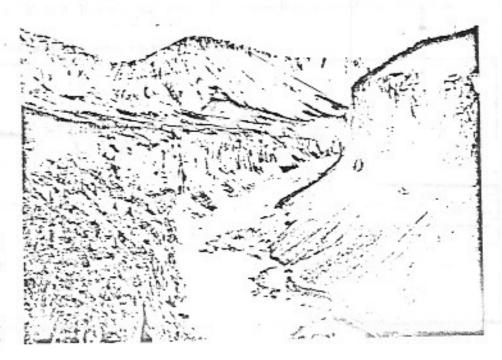
Supplies were transported overland trom Fitzgerald (right) to Fort Smith.

Production records showing any significant figures are available for Norman Wells only from 1932 onwards. The development of the pitchblende and silver deposits at Port Radium on Great Bear Lake in that year by Eldorado Gold Mines Ltd. created a demand for diesel fuel and other products which "The Wells" could supply. The primitive system of hauling barrels by wagon and dog sled to the river's edge was improved. Besides the "big" customer, Eldorado, others started to use oil products. It was a period of modest growth. From 910 barrels per year in 1932, production went up to 24,000 barrels in 1941. Aviation gasoline was produced in a new refinery which by 1940 had a capacity of about 840 barrels of crude oil per day. Because much of the product was to be shipped to Port Radium it proved necessary to build in 1939 one of the first product pipelines in the world, eight and a half miles long, to circumvent the Bear River rapids.\*

This then was the situation at Norman Wells when the Japanese attacked the U.S. fleet in Pearl Harbour, December 7, 1941: a small, almost forgotten refinery in a virtually unknown part of the Canadian bush relying on only four producing wells with another seven exploratory dry wells. What followed that attack was glorified by some at the time as "The Epic of Canol" \*\* but decried by others in hindsight as "the war's epic blunder". An unbiased study of the various interconnected military undertakings of the war years in northwestern Canada and Alaska



has yet to be written. It may prove an impossible task. Bookkeepers and auditors are not conspicuous among military personnel and therefore even the roughest estimates of actual costs are hard to obtain. The Canol Project (which is reputed to have involved the moving of 200,000 tons of equipment and materials, the building of more miles of road than the Alaska Highway, the stringing of 1,000 miles of telephone wire, as well as the laying of 1,600 miles of pipe) has been



<sup>\*</sup> Hopkins, O. B. (Canadian Geographical Journal, November, 1943).

<sup>\*\*</sup> Finnie, Richard, (Canadian Geographical Journal, March, 1947).

Today this section of the Canol Road in Dodo Canyon has been completely weshed out. Author

estimated to have cost at least 134 million dollars.

Concern of the United States Government with supply routes to Alaska, particularly after the Japanese occupied the Aleutians late in 1941, led first to the building of a series of airfields for the North-West Staging Route between Edmonton and Alaska. This was followed by construction of the Alaska Highway to support the airfields and the Canadian Oil Project (Canol for short) to supply gasoline and fuel oil. The history of Canol is most closely tied to that of Norman Wells.

The Canol Project called for an increase in production of "The Wells". Extensive geological sur-

veys were undertaken. Through these and later studies it is now known that the oil occurs in the Kee Scarp reef limestone of late Middle Devonian age. Concurrent with the field work 67 wells, 60 of which produced, all by natural flow, were drilled between the start of the project in the summer of 1942 and March 8, 1945, the termination date of the drilling contract. A tank farm was constructed at Camp Canol across the river from Norman Wells. Four-inch pipe to carry crude oil from there to a newly built refinery at Whitehorse, Yukon, was laid for a distance of 457 miles and six-inch pipe for the remaining 120 miles. The line was to climb from an elevation of 300 feet near

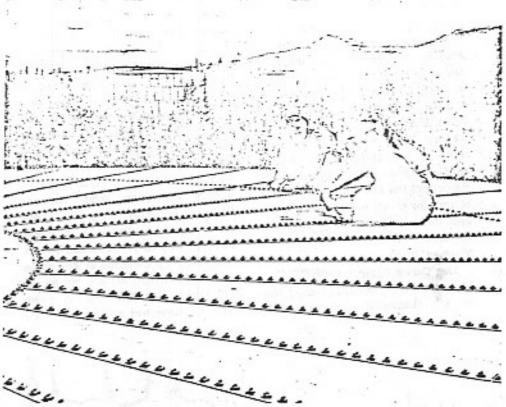
Norman Wells to 5.860 feet at mile 86, its highest point. It was to be laid in narrow canyons, traverse muskegs, pass over permanently frozen ground, and cross wide, wild streams. It was to go through the magnificently rugged scenery of the unexplored Mackenzie Mountains. Nine pumping stations were to be built to keep oil moving through the line. Now, some 25 years after they were abandoned, the buildings and equipment still remaining at these stations can not fail but impress the visitor. The engines have been removed but the pumps are still there in Canada's north as are derelict trucks and other heavy equipment.

To build, maintain, and operate the pipeline from Norman Wells to Whitehorse, a road was needed. Work started on the pipeline and the road early in 1943 after the spring of 1942 had seen the signing of an agreement between the United States and Canadian governments, being followed immediately by the moving of men and materials into the Northwest Territories. The engineering and construction feats of that summer make for quite a story in themselves. They involved building airstrips, winter roads, tractor trails, barges, docking facilities, and the shipping by any means possible (but mainly by water) of materials to Norman Wells, Whitehorse, and other points north. It took one year to get the pipe and equipment to where it was needed. It took somewhat less than one year to build the Norman Wells - Whitehorse line, Welding of the last joint took place in February 1944, and oil reached Whitehorse first on April 16, with a pumping rate of 3,500 barrels per day. The Canol road was completed by October, It led from Camp Canol to Johnson's Crossing, Yukon, a junction of the Alsaka Highway.

Seven-ton loads of pipe were carried by huge trucks over the Alaska Highway.

Supporting pipelines to carry the refined petroleum products from the Whitehorse refinery were completed in 1943: a four-inch pipe along the right-of-way of the White Pass and Yukon Railway to tidewater at Skagway in the Alaska panhandle, a three-inch pipe along the Alaska Highway to Fairbanks, and a twoinch one from Watson Lake to Carcross where it connected with the Skagway-Whitehorse line. Of these lines only the one along the railway still exists but it is now used to bring products from Skagway to Whitehorse, rather than in the reverse direction as originally intended. Why? Simply because this proved to provide a cheaper pro-

The imminent defeat of the Japanese, which became clearly apparent in the spring of 1945, brought as great a change in activities in Canada's northwest as had the threatening enemy caused four years earlier. After having operated for only 11 months the Whitehorse refinery was closed and the valves on the pipeline shut. That pre-war economic conditions returned is nowhere more apparent than in the production curve of the Norman Wells oilfield. Again, now that a connection with the "outside" was no longer economically



Tightening bolts on top of a huge storage tank along the Canol pipeline. Tanks were shipped in sections and later bolted together.

justified, local requirements governed development. The demands of the Mackenzie Valley after World War II were about the same as they had been before the start of the hostilities but they have been increasing gradually and fairly regularly ever since.

Canol clearly proved that the north could be conquered. It also showed the costs involved, although they can be perceived only through a haze. Nonetheless, lessons should now have been learned that oilmen may remember in the 1970's which can be expected to see petroleum produced from the shores of the Arctic Ocean and transportation of crude oil and gas to the markets in southern Canada and in the United States. Also, it has been said that the recognition of the significant reserves at "The Wells" adds emphasis to the promise of petroleum production from Canada's north and that the Norman Wells field should be regarded as "one of the world's best oil shows".

Canol has not lived up to earlier expectations that it would have



Tightening a valve head.



Abandoned automotive parts in the main camp are now overgrown by trees and bushes.

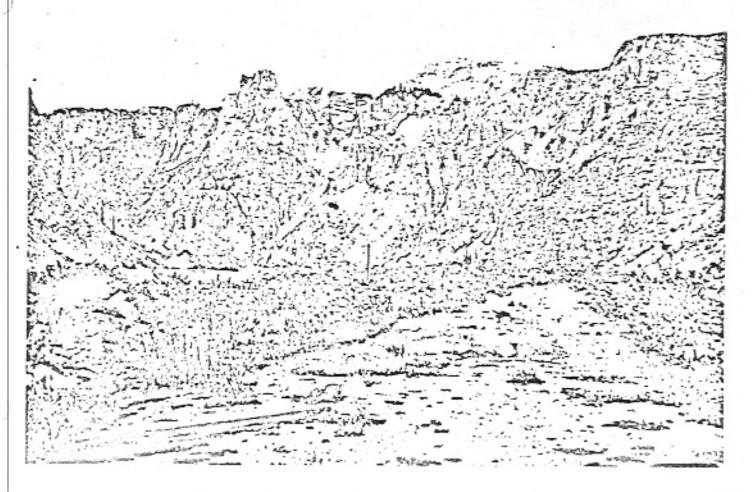
Author

A stretch of the Canol Road in Dodo Canyon, covered now by vegetation and fallen rock.

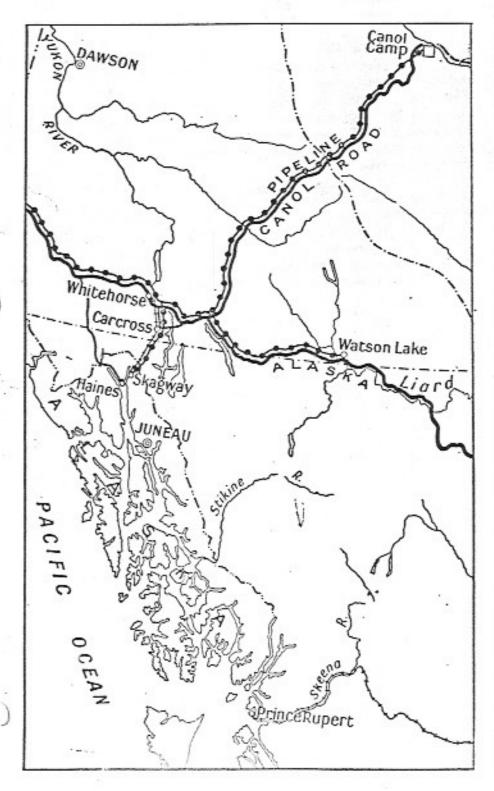
Author kets, and valves for G.M.C. and even Studebaker trucks which for some years now have followed dinosaurs into oblivion. Useful parts have been scrounged by visitors after the military left. To walk through long empty corridors on the wooden floor boards, to look at torn insulation on the walls, or through partly open doors, swinging and creaking on a windy day, gives one that eary feeling which some directors of horror movies try to evoke in us.

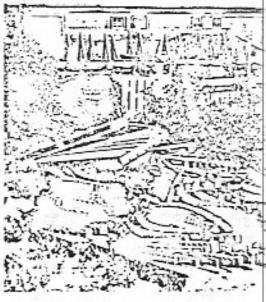
The road on the Mackenzie Plain and through the so appropriately named Dodo Canyon is now grown over with sizeable willows, washed out, or covered with fallen rocks. Here any trace of Canol may in time disappear and the environment reclaim what belongs to it. In The Wells though, the frantic activity of the war years, after temporarily subsiding with the coming of peace, laid a solid

foundation for the continuing development of the oil business in the Northwest Territories. The wells drilled for Canol once again produce crude at almost the same level as in 1944. The local market has grown since the Second World War and has kept pace with the steady increase in economical activities of all kinds in the Mackenzie District, There are no reasons to believe that the general upward curve of the graph showing oil production at Norman Wells will change its direction or slope. Moreover, for over more than 50 years this graph has proved to be a reliable thermometer of general economic health in the Northwest Territories. The huge storage tanks for petroleum products at The Wells installed in 1970 are a tangible expression of the prevailing optimistic outlook for future economic development of Canada's north.



"lasting peacetime value", be "enduringly beneficial", and that "the roads would be maintained and improved". It was estimated it would cost about one million dollars a year to do that and it turned out to be cheaper to supply petroleum products to the Yukon and Alaska from California by sea. There was no longer any need for the Canol pipeline or the road. The refinery in Whitehorse was sold, dismantled, and shipped piecemeal to Edmonton where such a plant was desperately needed after the discovery of the





Leduc oil field in 1947. That part of the Canol road leading from the main camp on the left bank of the Mackenzie River to the divide separating the Northwest Territories from the Yukon fell into disrepair. The stretch from Johnson's Crossing to Ross River and some distance beyond into the mountains of the Yukon has been improved and is in use as it leads to some mineral prospects. The steel pipe, which lay on the surface and was not buried in a trench, was also sold and removed. Only some cracked, bent, or otherwise damaged sections can still be seen to lie around in some places.

All that is visible now of Canol is Canada's longest ghost road, complete with ghost villages — the former camps and pumping stations. In the empty buildings anything of value has long since been taken away and much of what remains has been broken or shattered by men throwing rocks or discharging guns. Hundreds of bed springs and window frames are stacked in some buildings. Bins in the automotive parts department are still filled with nuts, bolts, gas-

# The Climate of the Canol Route, N.W.T., August - September

This summary is compiled largely from Environment Canada's <u>The Climate</u>
of the Mackenzie Valley, vols. I & II.

- 1) General. The meteorological records for the region go back only a few decades. There are no stations higher than 3000 ft., none nearer than Norman Wells to the Canol Route. Weather in mountainous regions is very much affected by local conditions. Consequently much of the analysis is interpretive and speculative. In general though, it gives a good indication of what we can expect.
- 2) Hours of Daylight. In mid-August there will be about sixteen hours of daylight. This will reduce to about 12.5 hours by the end of the first week of September. There will be extended twilights, as is normal in the North, although local topography like deep ravines could reduce its impact.
- 3) Temperature. The mean maximum for July in the mountainous region (say from the Dodo Canyon on) is 60°; for October it is 25°. We should be about halfway between, at 40°-45°. The mean daily temperature for July is 50°; for October it is 15°. The mid-point is 32°, or right at freezing. The mean daily minimum for July is 40°; for October is 10°; the midpoint is 25°. Temperatures on any given day could easily be 15° above or below this, or in other words, we can expect temperatures from 65° or more to 5° or more. The range could easily be more.

On the other hand, there is frequently a temperature inversion which will keep temperatures at night, at 5000' above sea level, ten to fifteen degrees higher than at sea level. We might expect to benefit from this about half the time. This inversion exists during the day in winter, but not in the summer when the sun shines.

4) <u>Precipitation</u>. The annual precipitation in the mountainous region is 25-30 or more inches per year. This is far greater than the semi-desert conditions Sandy mentioned. The reason for this is the normal increase in precipitation with rise in altitude. Precipitation will be affected by local conditions which we have no means of anticipating. Precipitation increases 25-30% in this region for each 1000 ft. of altitude. Mean July precipitation is 3-3.5", and October is 2-2.5". We can expect 15-20 days with measurable precipitation in a month, or 1/2 to 2/3 of the days we are out. This does not imply that it will rain or snow all day on these days, only that there will be some precipitation. In terms of amounts and frequency, this is like Algonquin Park.

The first snow fall of at least one inch, at 5000', occurs before September 10. At least one inch of snow is on the ground to stay before September 20.

5) Unusual weather. During the July 18-21 period of 1970 it rained more than five inches in the mountain region. On the Keele River water rose about three inches per hour on July 20, and began to overflow its banks. It peaked at 2'7" above the cabin floor on July 21 and began to drop at a rate of two inches an hour. A plane parked on a landing strip. ...shed away, as did 20' of river bank.

If we encounter a rain like that it will immobilize us for 3-5 days.

If we are beside a river, we will probably have to wait the best part of a week to cross.

The meteorologists estimate about a one in eleven chance of this sort of storm occurring in a given year. Lesser, but still severe rainstorms occur more frequently.

On June 2, 1971, a wind of 70 mph occurred, and blew for about half an hour. This was an example of wind channelling in a mountain wave configuration. We might run into some local breezes like this.

#### 5) Conclusions.

- 1. We have to be prepared for everything.
- Cold, wet days are likely. This reinforces my decision to bring gaiters, rain chaps, cagoule, and a hat. I am also going to bring shoe grease (sno-seal).
- We can easily be delayed several days at a river crossing because of high water.
- 4. At 6000' it could go below zero.
- 5. We won't run out of daylight.

CESE.

Any last words? Send c/6 5. T. Franks RR # 1 (aledon East, Onla



MINISTÈRE DE LA DÉFENSE NATIONALE

NR 1990-2 (SO MILE)

Northern Region Headquarters The Evans Block Yellowknife, N.W.T. XOE 1HO 21 March 1973

Mr. C.A. Lewis District Manager Environment Canada P.O. Box 2310 Yellowknife, N.W.T. XOE 1HO

Dear Mr. Lewis:

Thank you for your letter of 28 Feb 73 in which you request information on the history and current status of the CANCL Pipeline/ Road.

I am enclosing an extract from a report held in our library. The report is one prepared by 1 Construction Engineering Unit of the Canadian Forces on the present state of the CANOL Highway and details very well the current state of the Yukon Territory portion of the Highway. Many excellent photographs accompany the report. Should you wish you may contact the undersigned to arrange to see the entire report.

You will note from the enclosure that the "ownership" of this Pipeline/Highway is rather fuzzy. Mr. Dan Billing, EMC, Government of the N. J.T., recently advised this Headquarters that he had been instructed to gather information on this project to support a possible clean-up operation and he may by now have clarified the ownership issue.

Please feel free to contact this Headquarters if you wish further assistance and/or information.

Yours truly,

J.L. McDougall

Major

or Commander Northern Region

#### 5. DISCUSSION OF OBSERVATIONS

- a. The Canol Highway extends from the north end of Teslin Lake in Northern Yukon (latitude 60° 20° longitude 133° 20°) to Camp Canol, opposite Norman wells on the Mackenzie River, Northwest Territories (latitude 65° 15° longitude 127° 00°) a total distance of 513 miles. This road is well marked by mile markers indicating mileages from Mile 0 (Johnson's Crossing) up until the border of the Northwest Territories is reached. After this point, some of the original markers are still present but they indicate the mileages from Camp Canol located at the northern end of the road.
- b. The Canol Highway may be reached both from the Alaska Highway at Johnson's Crossing or from the Robert Campbell Highway which intersects the Canol Road just south of the Pelly River at Ross River (Mile 142 of Canol). The Campbell Highway runs from Matson Lake to Carmacks and has achieved all weather status. A map of the Canol Highway inspected is attached as Annex A.
- c. During the summers of 1969 and 1970 the Yukon territorial government has been restoring the Yukon section of the road leading from Johnson's Crossing (Mile 0) to the border of the Northwest Territories (Mile 282). Maintenance operations are conducted from three road camps located at Quiet Lake (Mile 60), Ross River (Wile 142) and Shelden Lake (Mile 212). Included in the restoration process is the replacement of many of the original bridges. The gravel road is approaching all weather status and generally was in excellent condition during the period of the study. Excessive rainfall, however, encountered during the recommendate certain sections of the road quite slippery.
- d. The topography and geology of the area are described in detail in the second edition of the Geological Survey describing the Geological Reconneissance along the Canol Road, from Teslin River to MacMillan Pass, Yukon, written by E.D. Kindle in 1946. Pumping stations were originally planned at the following mileages: 78, 127, 235, 307 (same as 214 out of Camp Canol), 174 Canol, 111 Canol, 76 Canol and 36 Canol. They are more closely spaced out of Canol because of the lift over the Mackenzie Mountains.
- e. Particular emphasis was placed on reconnoitering areas where pumping stations were originally located as these areas would naturally contain the high concentrations of debris.
- f. The reces of the Canol was carried out during the season of autumn at a time when the foliage was changing color, as is evidenced by some of the attached photographs. The pancrama of colour set against a background of lakes, fast flowing rivers and mountain peaks, some of which were snow capped, left an enduring impression of majestic scenic beauty which would be difficult to surpass. This road has been effectively reopened during the last two summers for summer travel and services both mining interests and game outfitters, in addition to private hunters. Because the potential for hunting, fishing and sightseeing appear considerable, there is every reason to believe that the road is going to get full use in the future by tourists in addition to hunting and mining interests. The general appearance of the road now may be classified as untilly in that empty oil drums, some filled or partially filled oil drums, truck hulks and accessories, grader

parts, lengths of 4-inch pipe line, building debris, etc., are scattered throughout the length of line inspected, although by far the most littered areas occur on the Upper Canol (north of Ross Hiver, Mile 142). There is no question but that most of the debris may be attributed directly to the military Canol project completed by the United States for Department in 1944. Military markings are still very much in evidence.

g. In addition to the visual and oil pollution encountered, two strands of number 1J copper jacketed steel core communication cable (see innex C) was observed running parallel to the road, although in many instances it was not visible from the road, being located a considerable distance from the road. It was seen at sporadic intervals right up to Mile 297. In some instances the poles had fallen to the ground leaving the wire or wires instances the poles had fallen to the ground leaving the wire or wires tightly suspended just above ground level. This condition, which must be expected to get worse, constitutes a real hazard to wild life in the area. Figure 9 shows the remains of a moose caught in the wire. An additional figure to wild life was the large number of exposed boards found at the old pumping stations and camps, with sharp mails protruding through waiting to stapped on.

h. Responsible people encountered in whitehorse were very concerned with the mess existing along the Canol Road, but recognized that the Canadian hilitary Forces have no responsibility to clean it up. However, personnel encountered along the Canol route, not knowing the background, questioned if "the Canadian Army were coming to clean their mess up". In addition, if "the Canadian Army were coming to clean their mess up". In addition, the Director of Game for the Government of the Yukon expressed plant at the danger to wild life caused by the above mentioned wire and stated it should be removed.

- j. Considerable research was carried out in whitehorse to determine if, upon abandoning the Canol Pipe Line in 1945, a salvage contract was let by the United States war Department to dispose of the materials attributes to the project. Because of the length of time since the project was abandoned, no records could be found which would prove that such a contract existed, although it is certain one does exist. A visit to the Crown Assets Disposal Corporation in Edmonton, Alberta, confirmed that while Crown Assets did handle the disposal of specified sections of the overall Cancl project, they did not handle the road leading from Johnson's Crossing to Lorman .ells. It is believed that the United States War Department sold the salvage rights to an American Firm after the war, who carried out extensive salvage operations. It is estimated, for example, that at least 75% of the 4-inch pipe has been removed. It appears that the contract was then handled by a lr. George Prince of Dawson City, B.C., either as a representative for the Amorican Company or in his own interests, and then finally by hr. May Hade and Nr. Tom Reimer from Weslock, Alberta. Attempts were made to fine this contract to determine if
  - (1) There was an inherent responsibility described in the selvare contract to return the "roadside terrain to its original state"; i.e. a clean up clause,

(2) There was any time limit as to how long the salvage operations could take.

because of the nature of the project it was deemed inadvisable to display the military interest any more than was necessary. Lacking a clear mandate to investigate the legal background of theproject, no effort was made to contact the United States Government or the two gentlemen from Wesloch, Alberta. All information received indicated that the desired contractural information would have to be obtained directly from the United States Government. Should information be required, two possible sources are:

- United States Foreign Liquidation Commission;
- Department of the Army Alaska District Corps P.O. Box 7002 Anchorage, Alaska

It is assumed that Mr. Hade or Mr. Reimer from Wesloch, Alberta, must have some form of contract which has been issued to them in the past from the United States Government and ratified by some Canadian official.

- k. The salvage operations are still taking place and a man residing in Johnson's Crossing, has been removing materials for the a/m Mr. Hade. It appears that legally the materials existing along the Canol are privately owned and no action could be taken for their disposal until permission is received from their owner.
- m. Although the materials were left by the United States forces, it is believed that much of the untidy mess now existing could be attributed to the salvage operations and to the cannibalization carried out after the departure of the United States Forces. It is believed that the debris existing along the Canol should be cleaned up by somebody. Should the Canadian Armed Forces take on this task, the following steps are suggested:
  - Advise the Yukon Territorial Government that the Military Forces wish to offer their services to clean up the Canol debris caused by the wartime military force.
  - (2) Effect liaison with Mr. Hade and Mr. Riemer to ensure there are no legal obstacles to the proposed "clean up".
  - (3) Utilizing a small complement of service personnel and equipment proceed to burn the oil, thoroughly compact and bury the debris utilizing sanitary landfill methods, and remove the communication cable. A suggested operation is attached as Annex B.

#### C. CONCLUSIONS

- a. Approximately 200 filled or partially filled oil and grease drums were found along the Canol Highway in addition to small areas of earth saturated with oil and greases. This, if not considered a serious pollution problem, creates an unsightly mess.
- b. Approximately 6000 empty oil drums, 200 truck hulks, miscellaneous vehicle parts, pipeline materials and building debris were found scattered along the Canol with the heaviest concentration being at pumping stations and supply depots. This debris serves to spoil what otherwise could be considered a very scenic drive.

c. Two communication cables were observed running parallel to the Canol Highway. Sections of this pole line are collapsed with the wires positioned in such a way as to provide a hazard to wild life in the area.

## 7. RACCOMMENDATIONS

n. Should it to decided that it is in service interests to clear u; the debris occurring along the Canol Highway, the following action is recommended:

- (1) Obtain the necessary clearances from the appropriate agencies.
- (2) Burn the oils and preases still existing in containers.
- (3) Consolidate debris in predesignated disposal areas, compact and bury the debris utilizing sanitary landfill principles.
- (4) demove communications cable and bury in disposal areas, or get rid of it as salvage.

"For the challenge of the trip"

# Historic Expedition

# Heads up the North Canol

By MAURICE BYBLOW

Simply "for the challenge of the trip" six Faro residents, three Ross River people, and a Whitehorse man embarked on what could be the east-central Yukon's most daring venture since construction of the Canol Road during World War II.

Ten snowmobilers, seven of them pulling fifteen foot toboggans packed with supplies and gear for at least a two week midwinter journey, left Ross River last Sunday morning to begin an eight hundred mile return trek along the abandoned Canol Pipeline route.

The party is destined for Norman Wells in the N.W.T., an Imperial Oil refinery station that serves the north Mackenzie Valley. The group intends to reach their goal this weekend, in time for the town's winter festivity, geared to coincide with the snowmobiler's arrival.

## Second try

This year's effort is a followup to last year's attempt of a similar nature involving many of the same people. That effort saw only the first one hundred miles trekked before the party returned. Melting snow conditions and overloaded sleds were the main reasons for failure.

This year the party planned well in advance. To eliminate carrying addition weight of sufficient gas for the entire journey, three gas caches along the route have been prepared. The first nineteen barrel cache, flown in last fall by plane, is at the Mac Millan Pass attrip, a mandred and thirty-tive makes from Ross River. Four - torty-five gation drains were also flown as the Godlin Lake at three low and anosher five humaned gations.

From Land stay at

were flown to a site a hundred miles from Norman Wells.

The expedition, aside from the in-advance gas preparation, plans to be self-sufficient for the trip; intending no contact at all with the "outside" until they reach Norman Wells. Tools, food, sleeping gear, and all necessary supplies are being carried with them.

# The Ten Brave Ones

Northern Canada Power Commission personnel, Gordon Walmsley with his wife Lorna of Faro and Harry Jensen of Whitehorse are part of the expedition. The Walmssieys are avid outdoorsmen and extremely well versed with the history of the area. The trip is their holiday and NCPC donated a partial sponsorship for the trip.

Anvil employees Al Goldie and Bob Giesbrecht have also taken boliday time off for the trip. Al and Bob are sporting Anvil strickers on their machines. Bob's wife Annette is one of the three women making the trip.

The other female challenger is Mabel Risbey, wife of Pete, a prospector and mineral identification instructor from Ross River. The two Risbeys are veteraxs of northern life and have been in the area for more than ten years.

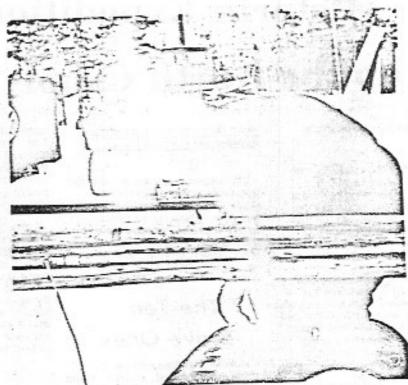
Probably the most enthused over the trip was Father Rigaud of Faro. Father, a forman Catholic priest, made the Norman Wells run back in 1951, on a salvaging expedition with the U.S. government when the pipeline was shut down permanently. The trip at the time was in a more suasonally suitable period and a studebaker "six by six" runy truck was used. Father liganal made several hundred.

mile trips by snowmobile in the Fort Nelson area several years ago and looked forward to this trip with renewed vigour. The Raven newspaper helped with Father's cost of the trip.

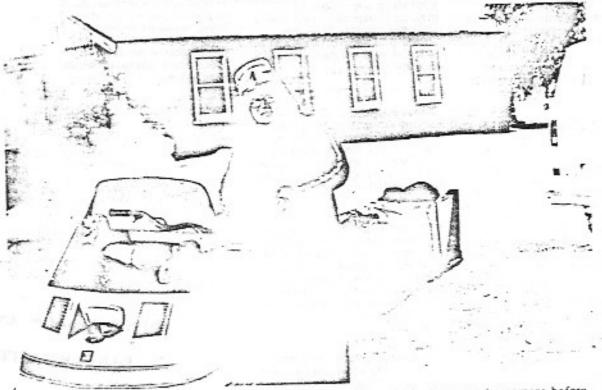
Arthur John, a Ross River veteran, was caught on his trapline pulling his traps when the expedition left Ross Sunday morning. He met them several miles up the Canol; made a flying trip back to Ross, packed his sled and proceeded to catch up. Cause of his delay was an apparent change in the group's date of leaving.

If his enthusiasm to make the trip reflects the enthusiasm of more than just ten isolated Yukon residents somewhere up the North Canol today, then we can revive our faith in the undaunted northern adventure-some spirit.

WHITEHORSE CTAR



GORDON WALMSLEY ties down twent gailons of gas on his toboggan prior to departure on the Norman Wells expedition.



RAVEN SPONSORED expeditionist. Father Rigaud had time for  $\omega_{\rm m}$  lick giance at the camera before he took up the 800 mile nm.

# Blinding Blizzards



The Whitehorse Star, Monday, April 2, 1973

# Separated the Snowmobilers

# SNOWMOBILE OVERLAND EXPEDITION MADE IT

After 13 days of blinding blizzards, plowing through five-footdeep snow that covered their snowmobiles and dropping off 15foot drifts, crossing glaciers with ropes, slogging down unfrozen and overflowing rivers and winding along narrow trails high on the edges of vast canyons – after early two weeks of all this and more, 10 Yukon adventurers completed the first snowmobile trip along the old 400 Mile Canol Pipeline Road from Ross River Norman Wells on Saturday.

"We went through country you wouldn't believe a machine would go through," expedition member Al Goldier told The Starback in Whitehorse today.

The expedition split up into two groups on the sixth day out after crossing MacMillan Pass, about halfway to Norman Wells, site of an Imperial Oil refinery station Cont'd on page 3

Cont' d from front that serves the north Mackenzie River Valley.

Six members of the team with long-tread, double-track snowmobiles went ahead to break trail Friday afternoon (March 23), after a blizzard that blocked aff vision in the morning was found to have wiped out a trail two menhad cut the night before.

These six actually arrived in Norman Wells last Thursday, 11 days after leaving Ross River on Sunday, March 18.

But the four who stayed behindtwo Northern Canada Power Commission employees, Harry Jensen of Whitehorse and Gordon Walmsley of Faro and his wife Lorna (one of three women on the trip) and Father Rigaud, a Catholic priest in Faro-were not seen again, even during airplane searches until they straggled into Norman Wells two day later.

John Mells two day later.

Wells two days later.

It turned out that they were not lost, and they reported no problems, only that they had slower going on the smaller snowmobiles.

It is not known at this point whether they followed the trail made by the first group or not. This trail included a 40-mile dead-end made when the first group tired to take a short cut and had to backtrack after they ran into an open waterfall they could not cross.

The members of the first group included Anvil employees Al Goldie and Bob Giesbrecht and his wife Annette, Ross River prospector Pete Risbey and his wife Mabel and Ross River trapper Arthur John

According to Mr. Goldie, it was Mr. Risbey who lead the way through the rugged, empty terrain. on the Northwest Territories side of the pass.

The group cancelled their planned return trip because just getting there took twice as long as expected.

Many of these people were in the group that tried the same trip last winter and truned back after covering only 100 miles because of melting snow and overloaded sleds.

This year they established three gasoline caches along the route. One was at the MacMillan Pass airstrip 135 miles from Ross River, a second was set up near Godlin Lake at mile 208 (measured from Norman ' 'ls) of the Canol Road and the last one was left about 100 miles from Norman Wells.

As it turned out, the Norma Wells snowmobile club also left gas at the end of the usable portion of the road, 34 miles outside the fown.

The trip started easily, with the snowmobilers following the path of caterpillar supply train that had left Ross River two days earlier going to an expioration camp in the northeastern Yukon.

Seven of the ten snowmobiles left towing 15-foot supply tobaggan, but three of these were dropped as the going got rougher.

The expedition madee 83 miles the first day following the cat tracks, but caught up with the train at the Sheldon Lake grader station and laid over Monday to make repairs, repack the equipment, let Mr. John catch up (he left Ross River several hours late), and let the cat train break more trail.

Tuesday, March 20, the snowmobiles caught up to and tried to go ahead of the cat train. But they bogged down and had to follow behind to the foot of Mac-Millan Pass, only 125 miles out of Ross River after three days.

But their progress slowed even more going over the pass. Wednesday was spend doubleteaming the snowmobiles to drag the toboggans up the pass.

That afternoon the expedition split up, with the group of larger machines going ahead to break trail.

But the leaders made only six miles through the deep snow in the pass Thursday at one point they only made 1 12 miles in eight hours, and the whole group camped together that night at mile 216.

Pete Risby and Al Goldie broke eight miles of trail that night for the next day, often dropped off the edges of huge snowdrifts int the night.

Friday morning a blizzard snowed the expedition in, and when they finally got going by 1 p.m. they had to break trail all over agin.

The final split came late that afternoon, with the smaller, short double track and single track snowmobiles staying at mile 208 and the bigger machines going on aster as mile 193.

and one week out of Ross



River, the leaf group made Godlin Lake and the second gaseache. Unfortunately, it was here that the front ski on Mr. Goldie's snowmobile broke, so he had to leave it behind and ride doublewith Mr. John

Sunday they hit the canyons of the upper Keele River system in the western Mackenzie District.

A one point the group was edging along a trail a thousand feet above the river, Mr. Goldie said, when a snow slide started and they had no choice but to ride it down,

"Sometimes: the snow on the trail was no wider than this desk," he said, holding his hands across a reporters desk only 20 inches wide.

At the start, he said, he never would have believed they would

> be lifting their big double-track snowmobiles over rocks more than three feet high.

Following the Keele, Ekwi and Little Keele rivers, the group was sometimes mucking through a foot of water in unfrozen or overflowing riverbeds.

Some of the glaciers they crossed were estimated to be up to 15 miles long, with the only pothes crossing them at steep angles. On one, Mr. Goldie crawled across on his knees with a rope, and the snowmobiles were dragged across swinging like pendulums while the engines roaded at full throttle trying to get traction.

On Monday, March 26, the first group was spotted by a search plane out of Norman Wells, wherer they were considered long overdue.

With the typical luck that followed the expedition, the plan broke a ski while landing on a lake.

The snowmobilers tried to improvise repairs for two hours before it occurred to them to tow the plane to an open stretch of road, remove the plane's skis and have the pilot take off with the plane on its wheels.

Mr. Goldie returned with the pilot since his machine had been left behind and the group needed parts, especially drive belts, from Norman Wells for repirs.

The five members of the lead group continued to struggle through the river canyons Tuesday. At one point a snowmobile fell into four feet of water, and everyone got wet up to the armpits dragging it out.

Fortunately, the daytime tem-

one froze.

The night-time temperatures sometimes dropped to 20 below during the trip, but the snowmobilers usually found abandoned shacks along the old road to sleep in and only used their tent on one night.

Wednesday, less than a hundred miles from their destination, the group took an expensive short-cut that led them 35 or 40 miles up a canyon that ended in an open waterfall they could nt cross.

After they had backtracked, there was not enought gas to get all the machines to Norman Wells, so Mr. Risbey volunteered to drive in along and discovered the Norman Wells snowmobile club's gas cache 34 miles out of town. He returned to the group, and after gassing up they made it into Norman Wells Thursday afternoon.

When the four snowmobilers in the second group finally arrived Saturday, the whole town put on a food-anddrink feast that went on until early Sunday morning.

The group had originally been expected in time for Norman Wells' winter carnival the previous weekend.

"We weren't worried," Mr. Goldie said afterwards. "We knew where were going and we would get there one way or another. It's hard to imagine all six machines breaking down, and we knew there were four camore coming behind us."

In fact, he said he felt most of the people who had made the trip would be enthusiastic about another future trip over other untravelled route.s



Figure 1 Road Bed - M - 40



Figure 2 Bridge - 21 - 42

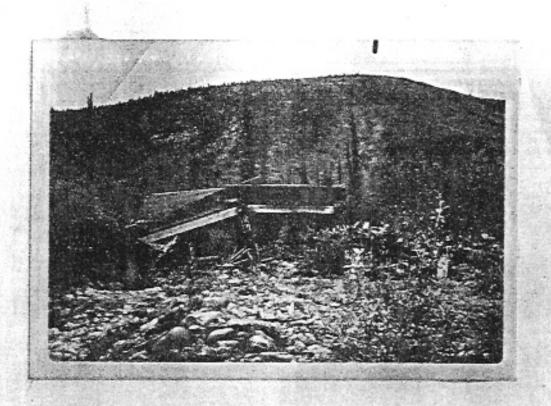


Figure 3 Bridge - M 42½



Figure 4 Bridge - " - 45

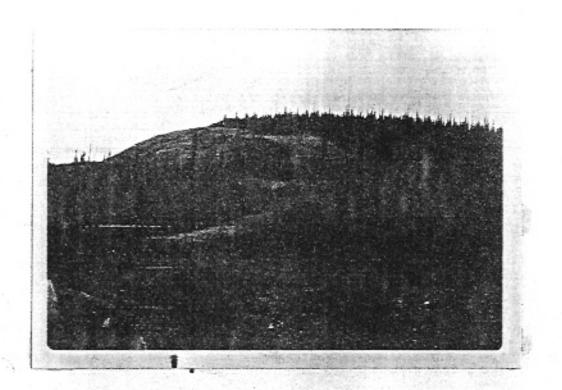


Figure 5 Road Bed M - 45

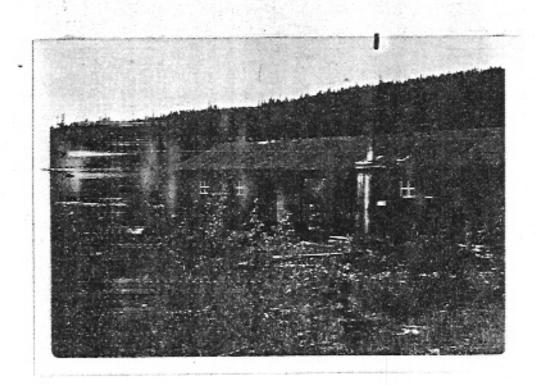


Figure 4 Bullilli - M - 50 (Maple Piver)

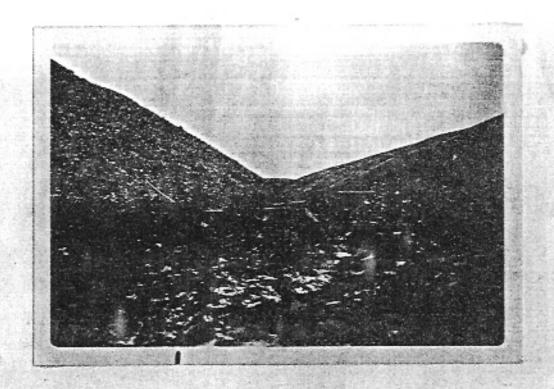


Figure 7 Remains of Road Bed - M - 78

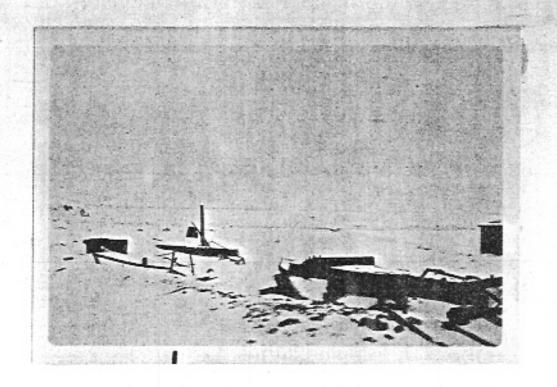


Figure 8 Debris - Camp 80 (M - 80)

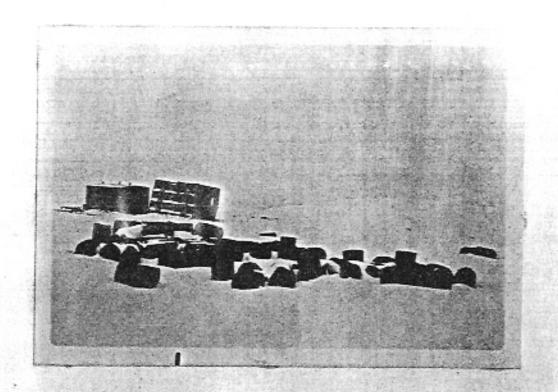


Figure 9 Debris - Camp 80

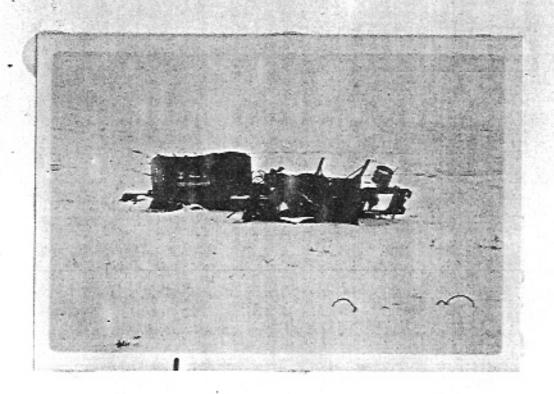


Figure 10 Debris - Camp 80

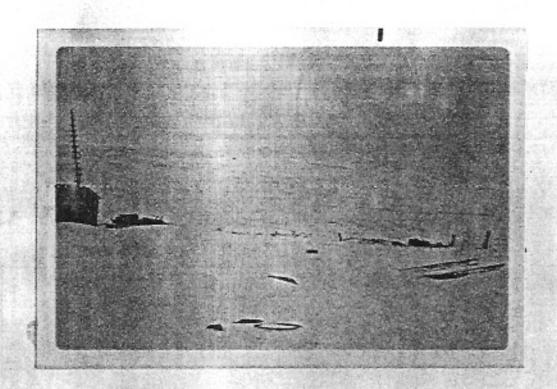


Figure 11 Debris - Camp 80

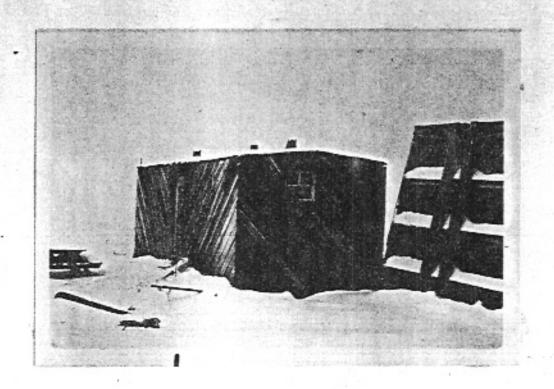


Figure 12 Shelter Camp 80

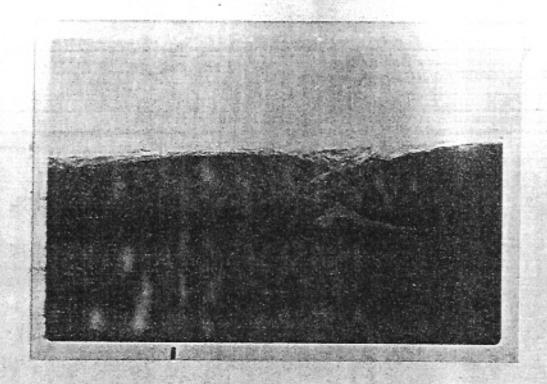


Figure 13 Natural Erosion - Looking Back Across Andy Creek at Plains of Abraham M - 91

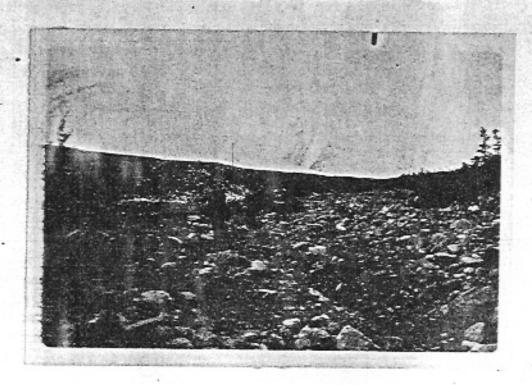


Figure 14 Stream-Eroded Road Bed M - 91



Figure 15 Campsite Looking West M - 9412



Figure 16 Wooden Protective Cover Over 4" Pipe M - 95

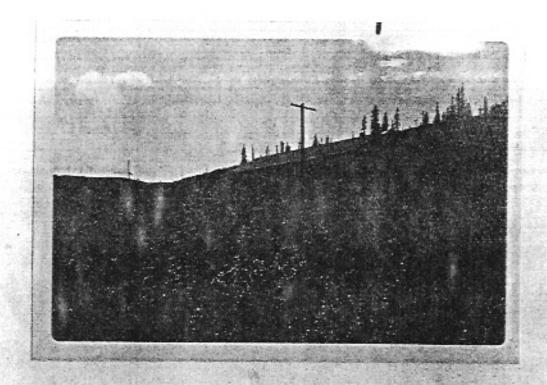


Figure 17 Shelter-South Side of Carcajon River M - 109

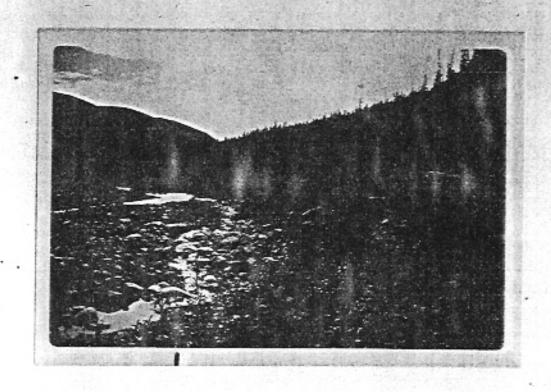


Figure 18 Road Bed Washed Out by River M - 101

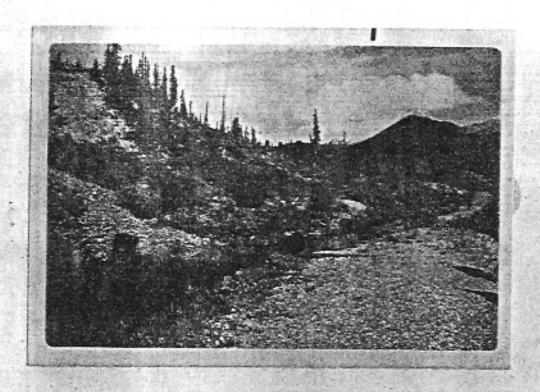


Figure 19 Road Bed and Drums - M - 102

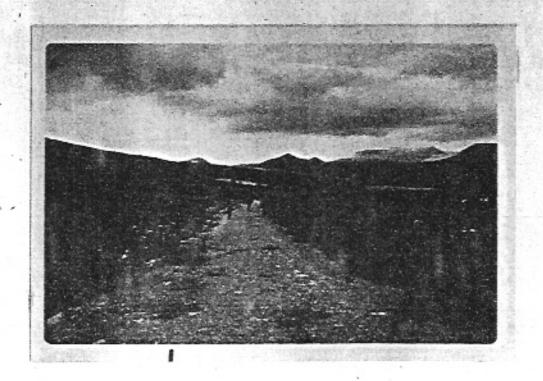


Figure 20 Road Bed and Drums - M - 106



Figure 21 Looking Back Down Road (Camp 108)

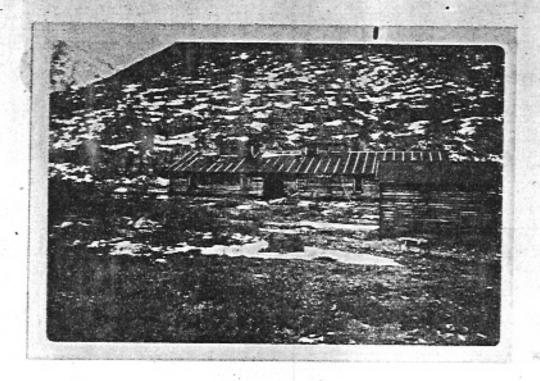


Figure 22 Buildings & Material - Camp 108



Figure 23 Buildings & Material - Camp 108

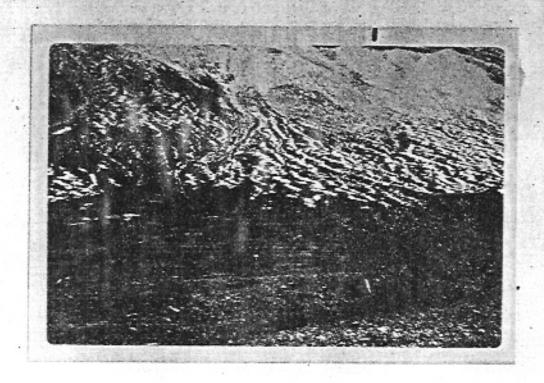


Figure 24 Buildings & Material - Camp 108

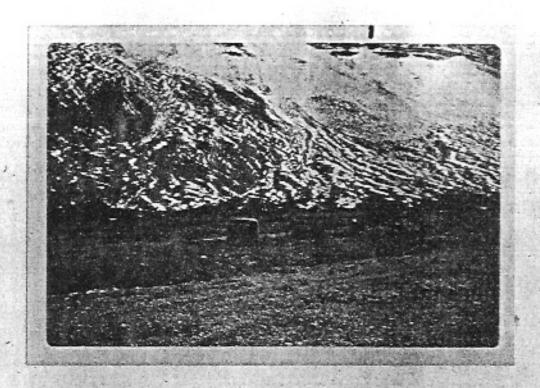


Figure 25 Buildings & Material - Camp 108



Figure 26 Remains of Road Bed in Trout Creek M - 118



Figure 27 Bridge-Decca Creek M - 130

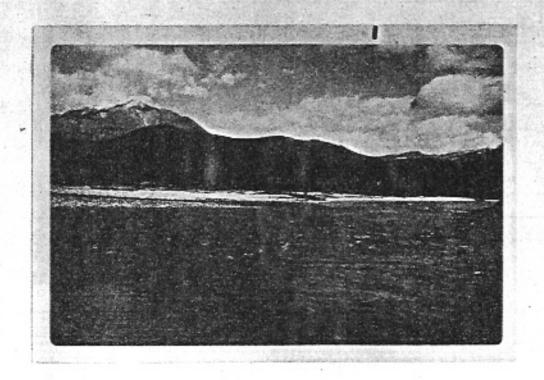


Figure 28 Looking East Across the Twitya R. M - 131



Figure 29 Cabooses-Twitya R. Camp 131

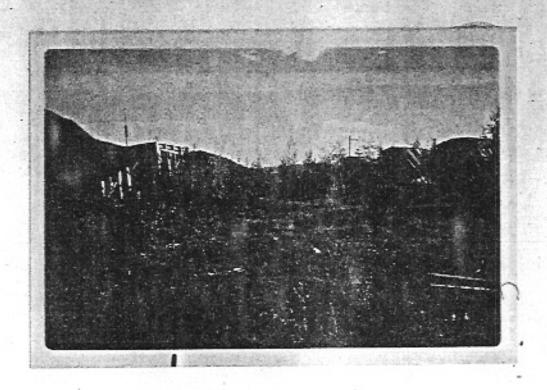


Figure 30 Cabooses-Twitya R. Camp 131



Figure 31 Cabooses-Twitya R. Camp 131

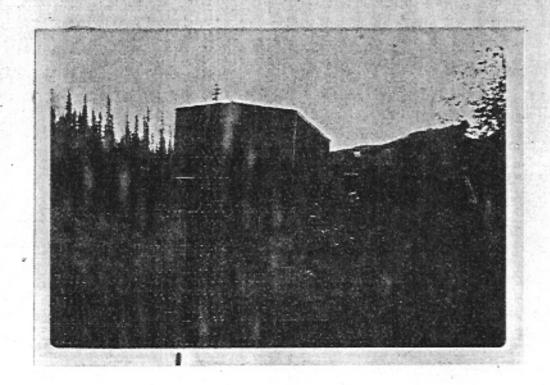


Figure 32 Caboose on Road - M - 135



Figure 33 Truck Graveyard M - 140

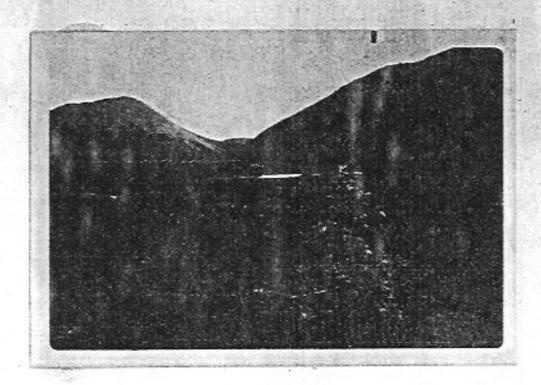


Figure 34 Cabooses M - 142

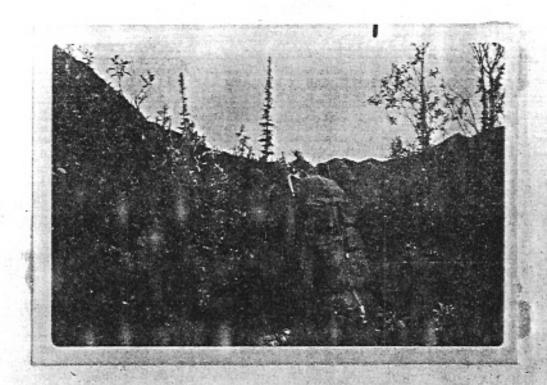


Figure 35 Old Drums M - 142

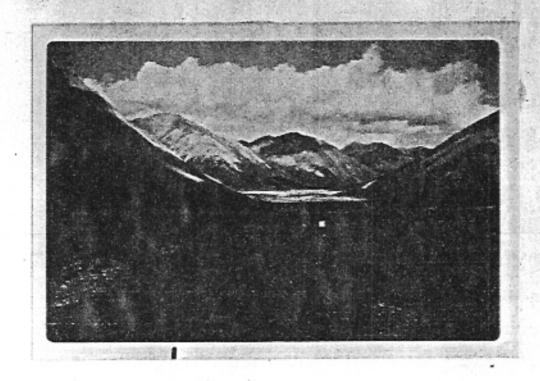


Figure 36 Looking Downstream - Godlin R. M - 158

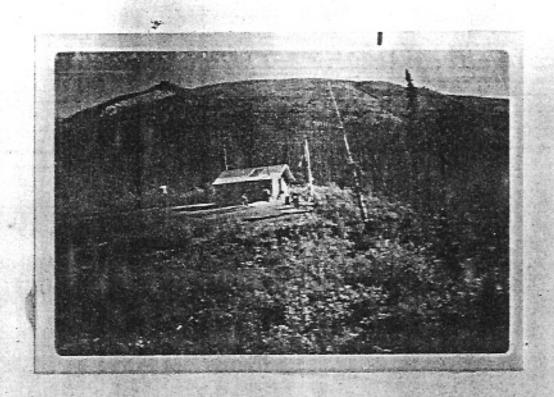


Figure 37 Game Management Cabin (N.W.T. Gov't.) M - 167



Figure 38 Buildings and Road Bed Between M-168 - M-190

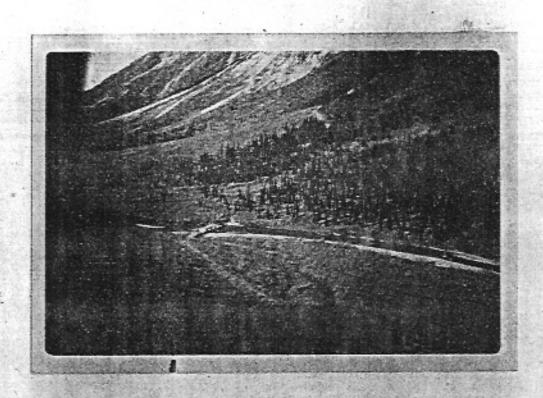


Figure 39 Buildings and Road Bed Between M-168 - M-190

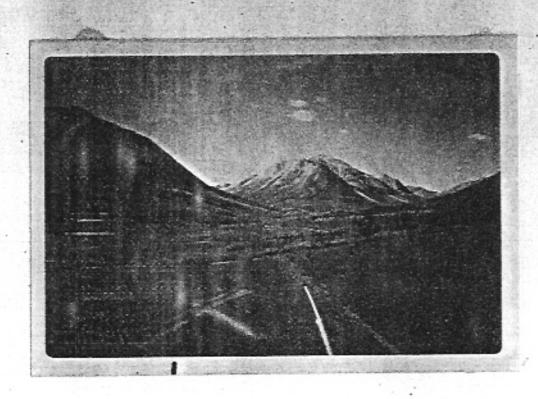


Figure 40 Buildings and Road Eed Between M-168 - M-190

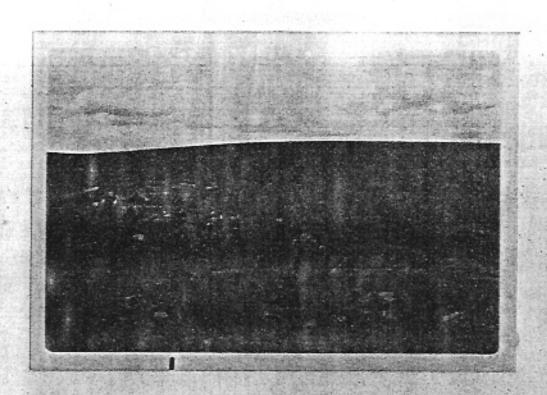


Figure 41 Road Bed - M - 216



Figure 42 Buildings Camp 208

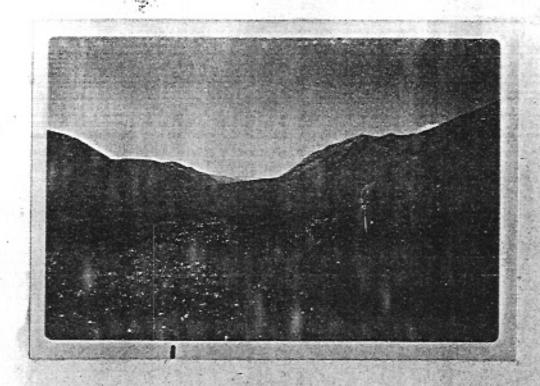


Figure 43 Road Bed - M - 216

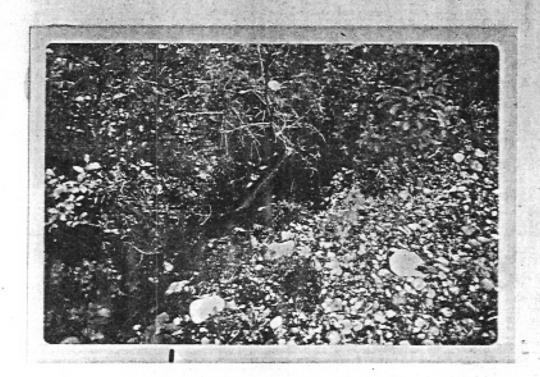


Figure 44 4" Pipe

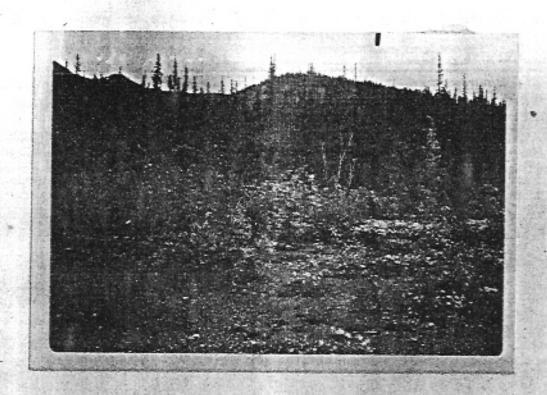


Figure 45 Borrow Pit



Figure 46 A Natural "Slump" and Effect on Road



Figure 47 Rock Build-up Due to Water Action



Figure 48 Culvert



Figure 49 Culvert and Road Bed



Figure 50 Abandoned Truck



NR 1000-1

Northern Region Heasquarters Evans Block P.O. Box 6666 Yellowknife, N.W.T. XlA 2R3

July 1985

University of Alberta Edmonton, Alberta T6G 2H4

Attention: G.P. Kershaw

Dear Mr. Kershaw:

Thank you for sending us the requested report. I am pleased to send you in return the report you requested. You will find enclosed a copy of (1974 Field Notes On A Backpacking Trip, Canol Road N.W.T.) I hope this is what you were searching for.

Yours truly,

Betty Bryant.

B. Bryant Librarian for Commander

Enclosure: 1