





# SUPPLEMENTARY REPORT

OF THE

## COMMISSIONER OF THE NORTH-WEST MOUNTED POLICE FORCE

1895

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OTTAWA

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1896

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*To His Excellency the Right Honourable the Earl of Aberdeen, &c., &c., Governor  
General of Canada, &c., &c.*

MAY IT PLEASE YOUR EXCELLENCY:—

The undersigned has the honour to present to Your Excellency a supplementary Report of the Commissioner of the North-west Mounted Police Force for the year 1895.

Respectfully submitted,

MACKENZIE BOWELL,  
*President of the Privy Council*

MARCH 20, 1896.



NORTH-WEST MOUNTED POLICE, OFFICE OF THE COMMISSIONER,  
REGINA, 16th March, 1896.

The Honourable  
The President of the Privy Council,  
Ottawa.

SIR,—I have the honour to submit a report of Inspector C. Constantine, who is in command of the Police in the Upper Yukon District, covering the period from the 1st June, 1895, to the 20th January, 1896; together with reports of Inspector D.A.E. Strickland and Assistant Surgeon A. E. Wills.

I regret that these documents did not reach me in time to be included in my last annual report.

I have the honour to be, sir,

Your obedient servant,

L. W. HERCHMER,  
*Commissioner North-west Mounted Police.*





FORT CONSTANTINE, CUDAHY P. O.  
UPPER YUKON, 20th January, 1896.

SIR,—In making my report for the time intervening between the 1st June, 1895, and the 20th January, 1896, I have the honour to date it from the most northerly military or semi-military post in the British Empire, situated in latitude  $64^{\circ} 26' N.$  and longitude  $140^{\circ} 18' W.$ , on the Yukon River at the confluence of Forty Mile Creek, a stream 150 yards wide at its mouth and about 360 miles in length—no small stream of itself, but dwarfed to insignificance by the mighty river into which it empties. "Yukon" means "Great River," which name it is called by the natives when speaking of it in English.

The Government having decided on establishing a post in this distant region, a detachment consisting of two officers, one assistant-surgeon and sixteen non-commissioned officers and constables, left Regina on Saturday 1st June, 1895, by the C.P.R. for Seattle, W.T., embarking from thence on board the Str. "Excelsior" on Wednesday, June 5th, 1895.

The passage to Onalaska, one of the Aleutian Islands, was uneventful and weather fine with the exception of two days rough sea and a day's detention by fog, on the "Davidson Bank" where the men and other passengers amused themselves by fishing for cod, which were caught in considerable numbers and made a pleasant change in the ship's bill of fare.

We arrived at Onalaska on Saturday 15th June, '95 and left on Monday, the 17th at noon. In the early morning of Tuesday, the 18th, we passed the "Seal" Islands. On Wednesday the 19th, we ran into ice, not getting clear of it for 13 days, although several attempts were made, at one time the situation was critical. For some days we lay off St. Lawrence Island, shifting our position as forced to by the ice. On Tuesday, 2nd July, '95, we made Cape Nome, and St. Michaels on Wednesday, 3rd, 9.45 a.m.

We left there at 3 p.m. on Friday, the 5th, having transferred passengers and cargo to the River Str. "P. B. Weare." Just after starting, a squall came up forcing us to anchor until it passed over. We made a final start at 6 p.m. The distance from St. Michael's to the northerly mouth of the Yukon (the one used) is, by sea, 80 miles. This has to be made in a flat-bottomed stern wheel river boat in calm weather. We crossed the bar at the mouth of the river at 4.30 a.m. on Saturday the 6th July and tied up for 8 hours to clean boilers and get rid of the salt water.

The passage up the river to our destination was very tedious, the flies being bad and the heat great. We arrived at Fort Cudahy on Wednesday, July 24th, at 6 a.m. Discharging cargo at once began, and was finished on the evening of Thursday, 25th.

BUILDINGS.

On Friday, 26th July, Inspector Strickland and a party of non-commissioned officers and men started up the Yukon on the steamer "P. B. Weare" for the purpose of getting out logs with which to build the post. The distance they would have to go was uncertain. The first camp was made on an island about 30 miles from here, where a few logs were got. The camp was afterwards moved a short distance higher up the river to a small creek where good timber was found. Some of the logs would go 28 or 30 inches in diameter. The labour of getting them out was great, everything having to be done by main strength, not having any appliances other than blocks and tackle. The underbrush was very thick, the ground a swamp and the flies beyond description. The party, at the end of three weeks brought down 400 logs of various sizes, but all useful. This number however

was not sufficient, and owing to the lateness of the season I found that it was imperative I should buy logs to complete the post. Two hundred and fifty were required. The utmost economy was used, not a log nor part of a log being wasted.

The work of laying out the site of the post was done on Monday, 29th of July. Then the ground was cleared of trees and brush and the moss stripped off. Ditches were dug on the west, north and east sides, and a large one down the centre of the square. Small side ditches connecting with the main ones were also dug. All this entailed much hard work, and was gone on with regardless of the state of the weather. If it was not 90° in the shade, it was pouring rain. At any time the men were working up to their ankles, and sometimes up to their knees in water. The labour of stripping the moss was particularly severe. It was done in this manner: A strip about three feet in width and the length of the site was cut and then divided into squares which were then pulled up by the combined strength of three men. This process was continued until a space 150 feet long and 125 feet wide was done. The moss was then wheeled or carried off and dumped over the river bank where it now lies, waiting for the high water in the spring to sweep it away. Moss is the bane of this part of the country. It varies in thickness from 1 to 3 feet and immediately under it lies clear white ice.

The ditches were made by clearing off the moss so that the sun could get at the frozen earth and ice underneath. About four or five inches would thaw during the twenty-four hours, and night and morning the ditches were shovelled out.

Thus the work went on till the logging party returned, when it in a measure changed. The logs had to be got out of the water, hewed or sawn square, then carried by the men a distance of about  $\frac{1}{3}$  of a mile to the building site. In order to save time I hired the saw mill from the company, our men doing the work. This was the most economical way, it took less time. We got a certain amount of boards (about 3,000 feet) out of our logs as well as the slabs which were used for roofing, and for flooring and partitions in some of the buildings and which otherwise would have had to be purchased at 50 cents each.

The first timbers sawn were the mud-sills from 22 to 35 feet in length, 10 to 14 inches in width and 8 inches in thickness. The N. A. T. & T. Company kindly extended their tramway about 500 feet, which brought it opposite the site. On this tramway was used a small trolley on which we moved the timbers. It was propelled by man-power, but even this was a great saving of labour. The timber had then to be carried from 50 to 200 feet, the men wading through mud. After the sills were placed and other timbers sawn, a tramway was built down both sides of the square, a few feet from the line of the buildings.

One by one the buildings went up, first the guard-room 30 x 22, next the barracks, 70 x 22, then the storehouse, including offices 48 x 22, then the officers' quarters, one 35 x 22, the other 33 x 22, next the hospital, 33 x 22, and lastly, quarters for the staff-sergeants and the assistant surgeon, each 16 x 16, eight buildings in all. The roof timbers were put on, also the slabs, which were afterwards mossed and earthed, floors laid, and finally on Monday, 7th October, 1895, the men moved into quarters, the officers about a week later.

Considering that the ground was cleared of trees and brush, stripped of moss and ditched, the logs cut about 30 miles up the river, rafted and floated down, sawn square, carried fully one-third of a mile by the unaided exertions of the men, buildings completed, and all comfortably housed within three months of arrival, it speaks well for the energy and aptitude of the men of the North-west Mounted Police sent to this extreme corner of the Dominion.

It may not be out of place to describe in a minute manner the buildings. They are placed forming a square, the guard-room at the east end, the barracks and staff-sergeants' quarters on the south side, two officers' quarters on the west side, assistant-surgeon's, hospital and a building, 48 feet long, containing office, stores, carpenter's shop, wash and bath-room, on the north side. The square inside of buildings is 101 x 80 feet. The foundation of the first building was laid 21st of August. The logs are 7 inches in thickness, halved at the corners, pinned and spiked. The roofs of all the buildings are self-supporting, being trussed

roofs formed of tie beams, principal rafters, king-posts and struts. The barrack building is divided into three compartments, viz.: barrack room, 35 x 22, mess room, 25 x 22, and kitchen, 10 x 22. The guard room is 30 x 22, built in the same manner. On the 30th August, a building 48 by 22 was commenced. This building is divided into four compartments, viz.: office, storeroom, carpenter's shop and wash-room. On the 10th September, the officers' quarters were begun and are divided into three, viz.: kitchen, living and sleeping rooms. The hospital was next in order. and will accomodate 8 patients. The sergeants' quarters were started on the 4th. and the assistant surgeon's on the 7th October. These latter buildings are each 16 x 16 with 7 ft. 6 in. walls. The officers' quarters have 9 ft. 6 in. walls.

All the buildings are roofed with slabs with moss in the interstices, and covered with earth, or the best part of the moss stripped off the site. The timber used in the construction of the buildings was spruce. It checks and twists very badly, owing to the cross grain. The logs in the mens' quarters, guard-room and storehouse, are 7 inches in thickness, in the other buildings they are 6 inches. The posts were morticed into the sills at equal distances, so as to utilize the logs to the best advantage. The logs are tenoned into the posts, halved at the corners, pinned and spiked. Moss was laid between each log for filling.

The dimensions of the roof-timbers are as follows:—

	in. in.
Purloins .....	8 x 8
Tie-beams .....	8 x 8
Rafters.....	4 x 8
Struts.....	4 x 8

These may appear large, but the weight of green slabs and earth is great, and extra strength is essential for safety.

This table will give in a condensed form the quantities of material used.

	No. of logs.	Lumber for floors, etc.	No. of Windows.	Doors.	Partitions.
Barrack building.....	170	2,100	7	2	2
Guard room.....	130	700	2	1	.....
Sergeants quarters.....	60	260	2	1	.....
Inspector Constantine's quarters.....	114	1,300	4	2	2
Inspector Strickland's quarters.....	130	1,176	3	2	2
Asst. Surgeons' quarters.....	60	260	2	1	.....
Store house.....	170	1,144	3	3	3
Hospital.....	130	1,200	2	1	2
Total .....	964	8,140	25	13	11

There are no windows in the rear walls of any of the buildings. Slabs were used for the floors and partitions in the building containing the store room, carpenter shop, wash room and office, the latter part having a floor made of the culls of boards. The windows are all double. For the officer's quarters and hospital, windows (glazed) had to be purchased. Porches of slabs were built over the doors of all the buildings except the 48 foot building and the guard room. It is intended in the spring to put one over the latter as well as a platform in front, and also to build a sidewalk of slabs around the square, as the ground will be very wet for a couple of seasons. All the quarters will require a second floor for warmth on account of the cold and damp from the ground, also from the shrinkage in the present one.

A stockade of small logs (which were got out later) has been built along the front and for the 22 feet between the men's quarters and the bastion. There are two bastions, each 10 x 10. At the south-east one is a flag staff 50 feet high. The intervals between the buildings are filled with heavy slabs, one end sunk in a trench

the other spiked to strong posts with stringers. It is proposed in the spring, if approved, to build a stockade around the west end and north side at a distance from the rear of the buildings of about 40 feet, which will give ample room for the erection of any small building which may be necessary.

The buildings are provided with ventilators and excepting the cold coming through the floors, which is mostly felt on windy days or nights, are warm and comfortable. All the buildings will require, in the spring, recalking with moss as well as four or five inches more earth on the roofs, to keep out the spring rains. The lateness of our arrival here along with early freezing, prevented more than a very small depth of earth being put on, and in consequence when a fall of snow came, with a week or ten days warm weather following, considerable discomfort was caused by the roofs leaking. The buildings being of green logs "sweated" considerably. Over 2,000 slabs were used in the construction of the post.

#### FUEL.

Fuel cannot be obtained except at very high prices, \$8 per cord in 8 ft. lengths. This is owing to the fact that all wood has to be hauled on sleds by men. Every man in this country is his own horse and pack mule. Our wood is cut and hauled by ourselves from a distance of about one-quarter of a mile in rear of the post. Some of it is dry, but the major part green. Spruce and black poplar, very heavy to handle and worse to burn.

It was hoped that there would be sufficient time to send a party up the river 15 or 20 miles to cut and raft sufficient dry wood for the winter's burning, but we were unable to. A small quantity of dry wood (20 cords) was borrowed from the N. A. T. & T. Co., with the understanding that it is to be returned in the spring. This wood is used exclusively for cooking.

At present we are burning at the rate of two cords a day. Two days a week there is a general wood fatigue, every man except mess cook, carpenter and hospital orderly, who is also cook for the sergeants, turns out. Officers with their servants cut and haul for their own quarters. The men for the barracks and general offices. We shall require wood for at least seven months, averaging 1½ cords per day for that period, being a total of 315 cords, all of which has to be cut and hauled by main strength in severe weather. The miners have a simple method of determining when it is too cold to work, by hanging a bottle containing mercury outside the house, when it freezes it is time to remain inside.

Sleds had also to be made. They are 8 feet long, and from 20 to 24 inches wide. It keeps men busy to provide sufficient fuel, when 4 hours daylight is the limit, (from 8th December to the 12th January,) the sun is not visible. Next season, however, it is to be hoped we shall be better prepared, and be able to get our fuel down the river, cut and piled during the summer months.

#### RATIONS.

Rations for a year were purchased from the Hudson's Bay Company at Winnipeg and brought in with us. The flour supplied was "strong bakers." The flour brought in by the trading companies is all the "patent process," put up in 50 lb. sacks for convenience of packing. The "strong bakers" requires more working, but I believe contains more nourishment.

The bacon was of two kinds, smoked side, and breakfast bacon, canvassed. The side bacon is very good, and much preferred by the men to the breakfast, which cooks hard, probably because too much saltpetre was used in the curing. All bacon should be put up in crates not exceeding 200 lbs. in weight each. It saves it from the pressure consequent on being packed in the hold of a vessel, it keeps it cooler on the long trip up the river in hot weather, and reduces shrinkage in weights. The breakfast bacon was crated.

The dried fruits are excellent. Evaporated apples go much further than the other fruits supplied. It appears to me that supplies can be purchased cheaper by

contract from the companies trading here. The rates of freight by rail to the coast, with addition of water freight rates, add 7 cents to each lb. brought in by the government. It should however, be imperative that 6 months' supplies be handed over in bulk to the officer commanding the post, as a reserve, the daily ration being drawn weekly, or at such periods as agreed upon.

The rations this fall have been varied by moose and cariboo meat which has been plentiful, but cannot be depended on each year. Fish was very scarce, the run being poor.

Authority should be given for an increase in the daily ration when the men are doing unusually heavy work. An extra one-half ration should be allowed. On my own responsibility I increased the bean ration one-half, I trust this will be approved as it was necessary.

Coal oil costs \$1 per gallon. Matches are very expensive. A quantity of hardware was brought in, consisting of stoves, heating and cooking, stove-pipes, nails, etc. Had we not brought these in, we would have been without them.

#### MINING.

Mining up to the present has been done with the pick, shovel, rocker and water. No capital invested in machinery at present. A quartz ledge has been opened up near Fort Cudahy, on the 40 Mile Creek. A couple of tons of the quartz were sent out this summer for a final assay, and if the result sustains the trial test made here by a local assayer, it is stated that a small stamp-mill will be put up next season. This will in a measure determine the future of the country. The test here was good. The quantity of this quartz in sight is large, larger than the "Treadwell Mine" near Juneau. The country is full of quartz ledges, more or less valuable, and only requires a short way of getting in from the south with the assurance of a certainty of supplies, in order to develop them. This is the reason that the south-east part of the country and upper river and lakes have not been worked. In a country where a man has to pole up a rapid river for some hundreds of miles in summer, then pack his food, clothing, camping and working tools on his back, or in winter, either haul them himself or with dog; consideration as to where he can get his food and clothing is of vital importance to him, and he is governed accordingly. This accounts for the number of men working on the 40 Mile and creeks emptying into it. Even here food has to be packed on men's backs in the summer at a charge of 30 cents per pound, and in winter by dogs at 10 cents per lb. This is for about 85 miles. The outlook for the coming year is more promising than that of last year.

A conservative estimate of the amount of gold taken out last summer and winter is about \$250,000, and from the present outlook it should be increased by 50 per cent. A great deal will depend on Glacier Creek which was worked for the first time last summer. Very little was done on account of the claims not being in proper shape for working. Many of the claims are quite deep, and will pay better to work by drifting during the winter, which has been hindered up to the present by the mild weather. The work done so far has shown up a large yield of gold. There is still a little "snipping" *i. e.*, working old bars, on 40 Mile Creek but it does not pay much. There are a great number of creeks which have never been prospected, which undoubtedly would pay good wages if properly worked, and which will be before long. In fact there is hardly a creek within 300 miles south-east or north-west of here in which more or less gold is not found. The true value of the mineral wealth of this part of the country will not be known for many years to come, as new discoveries are being made each season.

There will be a great deal of drifting done on Miller Creek this winter. This creek has been worked for the past 4 years, and up to the present time has been the richest one here, and is good for some time to come. On claim 3 below "Discovery," there has been taken out in the last 3 years \$55,000 in 500 feet of ground, this has been the best paying claim. Davis and Poker gulches are each good for a limited number of men. There has not been taken from these gulches any large

fortune, but they have yielded good steady profit to the owners. Franklin gulch, one of the first discovered, is still paying well, and has been worked for the past 9 years.

About 200 men are working on Glacier Creek, of which number two-thirds are working for wages. On Miller Creek, about 150, of which 100 are working for wages. The lower ends of these two creeks are supposed to be in the North-west Territories. Brown Creek has been worked this winter. Bear Creek and Clinton Creek on the west side of the Yukon are gold bearing and in the Dominion. Gold has also been found on Indian Creek, Squaw Creek and other small streams flowing into Yukon from the eastward.

The following is a list of creeks with their assay from the United States Assay Office, Helena, Montana :

In.	Creek.	Value per oz.	Fineness per oz.
United States	Davis	\$17 33	18-21
do	Napoleon	17 10	17-78
do	Poker	17 11	18-07
U. S. & Canada	40 Mile Creek	15 41	17-36
Doubt	Miller	16 26	17-58
United States	Franklin	15 60	17-35
Canada	Stewart River	15 65	17-35
do	Lewis River (upper)	14 46	17-69

No return of assay of Glacier Creek yet.

#### ROUTES INTO COUNTRY.

The St. Michael's route as a commercial one is long and uncertain, as a rule it is not safe to enter Norton Sound on account of the ice until about the 1st July. The voyage up the river occupies from 18 to 20 days. A round trip one month. Two trips in the season are all that can be relied upon; more than this, any accident happening to either an ocean or river boat means a shortage of food.

The present ocean and river service brings supplies only as far as this point, leaving the upper, and quite as rich a part of the country as this, without supplies. This is the reason it is not worked. All the miners are agreed as to the richness in gold, silver and other metals of the upper country. It is also fitted for a limited number of settlers who could produce, on small farms, sufficient vegetables, fresh meat and other necessaries to supply at a moderate cost, the posts on the lower part of the river.

A route should be opened from the S. E. end, which would benefit the whole country. Small steamers of about 150 tons could ply between the head of Teslin lake and Circle City a distance of about 800 miles, 600 of which would be in the Dominion, as against 1,600 in the U. S. and 200 in the Dominion by the St. Michael's route. This would enable three trips to be made, to one at present. The great advantage would be boats going up the river light. The only impediment to navigation so far as known would be the "Five Finger" rapids, about three hundred miles above this point. These could be overcome by small steamers of good power.

#### CRIME.

No crime of any seriousness has been committed. Last September a man was ordered out of the country. He went to Circle City. He was a gambler and had run away with another man's wife. The original owner of the woman followed him in and as trouble was feared he was sent out. He was not in anyway a desirable acquisition to the population.

On the 27th December an information was laid against one Gus. Clements for selling liquor to an Indian. He was convicted and sentenced to a fine of \$100 and costs or 3 months imprisonment with hard labour.

An information was laid for an assault which took place up the river, but the party had left for lower down the river before the information was laid.

There was a report that two or three Indians had been killed up the river some 300 miles. The Pelly Indians having had a blood feud with some of the Stick Indians. On investigation, so far as information could be obtained, it appears that an Indian named Eno, of a quarrelsome disposition, began beating and threatening to kill a young man of the tribe, who in self defence killed him. A squaw went crazy and killed a child. It is my intention, so soon as travelling can be done, to go up and inquire into these cases. By last accounts all was quiet and the trouble seems to have passed over.

#### ARMS.

The arms are in good condition. The Lee-Metford carbines have been issued, but not the ammunition for fear of accidents, until the men are accustomed to the arm. I had the cordite taken out of six rounds and cap exploded and bullet replaced in the shell for drill purposes.

The ammunition is kept in a convenient place for issue.

#### STEAM LAUNCH.

A steam launch, or patrol boat, is much needed for the work to be done. The rivers are the highways of this country. The boat must have very good power to make headway against the strong currents of the various streams. These streams are all navigable for some miles. From the boundary to the head of Teslin Lake, by way of the Teslin or Hootalinka, the river is 600 miles. The Stewart River, coming in from the East, is navigable from its mouth, up to the falls, a distance of nearly two hundred miles, and above them for a greater distance. The Pelly river, is also navigable for many miles. All these rivers are gold-bearing, and a few miners are working on them, who require looking after. We have no canoes or other means of getting about. To attempt to pole up these rivers is out of the question, not only for want of time, but on account of the quantity of provisions necessary for such a trip. It would be impossible to carry more provisions than would suffice to get there, if that.

#### SAW MILL.

A portable saw mill would have lessened our work greatly during the past summer. It would have cut all our house logs, sawn the lumber needed, and would have saved much heavy work. The cutting of wood for this post is no small duty. The days are very short, four hours of daylight being all that can be counted on, for about six weeks. A saw mill, even if small, would make up for the want of daylight. I hope that one will be sent next season. Seven thousand feet of lumber, beside other material, will be required to finish and double floor the buildings of the post.

#### CUTTING OF TIMBER.

A large number of logs are continually being cut by miners going down the river. Some of them are used here. Between this place and the boundary line quite a number have been cut and floated down to Circle City and other points on the American side of the line. About twenty miles below here three rafts were built of timber to be used in Alaska. These would each contain from 3,000 to 4,000 feet according to information received.

#### SMUGGLING.

I have reason to believe that smuggling will be attempted during the coming season. From Juneau by way of Teslin Lake and the Hootalinka, or by the Chilkat

Pass and down the Tahkheena river, or by both. The class of goods likely to be smuggled, will be, principally, those used in the Indian trade. Of these whisky will probably be a staple article. This part of the country is rich in minerals, and a large number of prospectors may be looked for.

In my opinion, a post should be established if only for the summer months, not for the protection of the revenue alone, but also for the protection of the Indians on the upper portion of the river and its tributaries. Mining claims would also have to be looked after. I would, therefore, recommend that a post consisting of a non-commissioned officer and four men be established at or near the junction of the Teslin or Hootalinka, with the Lewis river, a distance of 400 miles from this place. A steam launch of strong power is requisite for this service in order that the duty may be done in an effective manner. A small steamer is now plying on the upper river. It is more than probable that an attempt will be made to supply miners by this boat. The traders at this point have paid large sums in duties. They naturally expect that they will be protected against smuggling.

#### CIVIL COURTS AND OFFICES.

Civil courts are much required and should be established without delay. Many take advantage of the fact of there being no machinery for the collection of small debts. It is necessary in the interests of traders and capitalists, that an office for the registration of transfers, mortgages, deeds and other papers of title be established. It is also necessary that the boundary line should be extended from its present intersection with Forty Mile Creek as far as Sixty Mile Creek, that the country within the supposed British zone be mapped, and some system of surveys arranged whereby mining and other claims may be accurately described. This office would be the basis on which all dues would be collected. All parties should be obliged to register, otherwise they would have no title to any mining claim. Three months should be allowed for registration, from the receipt of regulations here, in order to give miners and others interested, living at a distance, sufficient time. This length of time would be necessary on account of the hard travelling.

#### MISCELLANEOUS.

It was necessary to purchase several articles of barrack furniture, such as lamps, cooking utensils, etc. I had also to purchase dog feed. These things seem expensive when compared with eastern prices, but in reality they are nearly as cheap as they would have been if they had been brought in with us.

Parkas, or winter coats, boots and mitts of the country have also been purchased. The parka or winter coat which is worn by natives and whites alike may be described as a shirt without an opening in front, made of the skin of the "Siberian" reindeer. It has a hood similar to the "capote" of the Hudson Bay voyageurs. These are trimmed according to the fancy of the owner and as far as his purse will allow. The inside of the hood around the face is trimmed with arctic hare fur and with an outside edging of wolf or badger, the long hair of which blows over the face of the wearer, and protects it from the intense cold while travelling. The winter mitts are usually lined with fur. The legs of the winter boots are made of the fur of the hair seal or of reindeer skin, and the soles of native tanned seal hide. These boots are very warm, too much so for moderate cold weather as they cause the feet to perspire.

The conduct of the men has been good. They all worked hard during the erection of the post, and are still hard at work with shorter hours keeping up the supply of fuel.



Up to the 13th December the weather was moderate. From that date up to the present it has increased from 23 to 65 inside the stockade; outside where the wind was felt it went as low as 73 below zero.

24th December it was 53 below.  
 1 January 1896, do 47 do  
 2 do 1896, do 55 do  
 3 do 1896, do 53 do  
 4 do 1896, do 63 do  
 5 do 1896, do 65 do  
 6 do 1896, do 50 do  
 10 p.m., 4th January, it was 59 below.  
 10 a.m., 5th do do 58 do  
 3 p.m., 5th do do 57 do  
 10 p.m., 5th do do 49 do  
 10 a.m., 6th do do 48 do

I have the honour to be sir,  
 Your obedient servant,

C. CONSTANTINE,

*Inspector.*

Comdg. Yukon Detachment.

The Commissioner  
 N. W. M. Police,  
 Regina, N. W. T.

FORT CONSTANTINE, August 20th, 1895.

To the Officer Commanding  
Yukon Detachment  
N. W. M. Police.

SIR,—I have the honour to state that in accordance with your instructions, I left Fort Cudahy on Friday, the 26th day of July, with the undermentioned non-commissioned officers and men:—

Staff Sergeant Hayne,	Corporal Newbrook,
Constable H. Jenkins,	Constable Ward,
Constable Webster,	Constable Brothers,
Constable E. Jenkins,	Constable Pinkerton.

for the purpose of cutting, rafting and floating down the river, enough timber to build the Barracks at Fort Cudahy. The North America Trading and Transportation Companies steamer "P. B. Weare" with the above detail on board, left Fort Cudahy at 6 a.m. Little or no timber was seen, until we arrived within ten miles of Fort Reliance when we reached a couple of islands that seemed to be well covered with spruce, of a fair size. The captain of the steamer and the Indian pilots informed me that this was the only timber to be procured for some distance, so I disembarked the men and camp outfit and camped. We spent a week here, and during that time we cut and built into a raft about 100 logs varying in length from 25 to 35 feet, and from 10 to 14 inches at the top end. The labour of getting these logs to the water we found to be tremendous, as the only available way of moving them, was by rolling and carrying them, as the great depth of the moss which covered the island, and the wide beach, prevented anything being accomplished with a block and tackle. Perceiving that it would take the rest of summer season to secure enough logs, if we could not make more headway, I made several excursions in search of timber, that was more accessible. I at last found a bunch of timber, growing on the bank of a dry slough, that had formed part of a creek, that emptied itself into the river, a mile below the island. We left the island with our raft, and moved down to the mouth of the creek, when we commenced cutting timber again. The head of the slough was divided from the creek by a blockade of gravel, logs and bush which prevented the water from the creek coming into it. We had to dig a canal through this to let the water in, and then by building a dam at the foot of the slough, we got water enough to float the logs into the creek, and down it to the main river, when they were stopped by men stationed there for that purpose, and hauled up on shore ready for rafting. By the middle of August we had over 400 logs, from 20 to 35 feet in length, and from 10 to 22 inches in diameter, at the top end, cut and rafted. We left the creek and floated down the Yukon on Friday, August 17th, arriving safely at Fort Cudahy in the evening. Timber is very scarce along the river, and all of it that grew close to the shore has been cut for mining and building purposes, so that all (ours) had to be pulled and carried a long distance. The flies were very bad indeed during the whole of our work in the woods, several of the men being badly poisoned by the bites. We found plenty of traces of large game, such as bear, and moose, but were unfortunate in being unable to shoot any. We managed to secure several fine salmon which proved a very acceptable addition to our rations. The conduct of the non-commissioned officers and men of my party was very satisfactory, throughout the whole trip, and they stood the hard work well.

I have the honour to be, sir,  
Your obedient servant,

D. A. E. STRICKLAND,  
*Inspector.*

FORT CONSTANTINE, 20th January, 1896.

SIR,—I have the honour to submit this my report for the time during which I have been in medical charge of the Yukon Detachment.

I assumed my duties June 1st, 1895, when I left Calgary. During the ocean voyage no illness other than sea-sickness occurred amongst the party. On the river trip constable Pinkerton was the only patient under my care. He complained of pain and swelling in the perineum. On examination I found a large perineal abscess, which I immediately lanced. He recovered quickly and was able to undertake his duties on reaching our destination.

We arrived at Fort Cudahy on the morning of the 24th July. The flat upon which this place is built is a very wet and mossy swamp.

Camping was entirely out of the question as no place could a dry spot be found sufficiently large on which to pitch a tent. Fortunately the trading company had a requisite number of vacant buildings to accommodate our party. The men were comfortably housed in a large two storey building and the officers were supplied with small cottages.

Two days after our arrival a party in charge of Inspector Strickland went up the river to procure house logs. S. Sergeant Hayne was one of the number and was equipped with some simple medicines, bandages, surgical dressings, etc., no illness nor accident occurred.

During the building of the post a number of small cuts and bruises were treated but few of them were severe enough to appear on sick reports or to interfere with usual duties.

The hospital is a good sized building and will accommodate if necessary six or eight patients. This winter it is a little cold but no worse than other buildings. When more lumber can be procured it can be made very comfortable.

The instruments and drugs arrived here in good order and are very satisfactory. Only one bottle (nitric acid) was broken in transport.

The order for "fluid beef" was not properly filled. Johnson's, Mosquera beef jelly, and Liebig's were the three kinds ordered. The first two named were correct, but the last was composed of a few jars of Liebig's, and balance Armour's and Libby's of all sizes. These last two brands I consider inferior in quality to Liebig's.

No hospital forms were sent in. They have been requisitioned for and when they arrive full returns will be sent out.

It may be of interest to mention something concerning the climate, mode of living of the people generally, and diseases met with.

The climate is wet. The rainfall last summer was heavy. Although there is almost a continuous sun in summertime evaporation is very slow owing to the thick moss which will not conduct the heat, in consequence the ground is always swampy. It is only after several years of draining that ground will become sufficiently dry to allow the frost to go out and then only for a few feet. During the winter months the cold is intense with usually considerable wind.

A heavy mist rising from open places in the river settles down in the valley in calm extreme weather. This dampness makes the cold to be felt much more and is conducive to rheumatic pains, colds, etc.

Miners are a very mixed class of people. They represent many nationalities and come from all climates. Their lives are certainly not enviable. The regulation "miners' cabin" is 12 feet by 14 feet with walls 6 feet and gables 8 feet in height. The roof is heavily earthed and the cabin is generally very warm. Two, and sometimes three or four men will occupy a house of this size. The ventilation is usually bad. Those miners who do not work their claims during the winter confine themselves in these small huts most of the time.

Very often they become indolent and careless, only eating those things which are most easily cooked or prepared. During the busy time in summer when they are "shovelling in," they work hard and for long hours, sparing little time for eating and much less for cooking.

This manner of living is quite common amongst beginners and soon leads to debility and sometimes to scurvy. Old miners have learned from experience to value health more than gold and they therefore spare no expense in procuring the best and most varied outfit of food that can be obtained.

In a cold climate such as this, where it is impossible to get fresh vegetables and fruits, it is most important that the best substitutes for these should be provided. Nature helps to supply these wants by growing cranberries and other wild fruits in abundance, but men in summer are usually too busy to avail themselves of these.

The diseases met with in this country are dyspepsia, anaemia, scurvy caused by improperly cooked food, sameness of diet, overwork, want of fresh vegetables, overheated and badly ventilated houses; rheumatism, pneumonia, bronchitis, enteritis, cystitis and other acute diseases, from exposure to wet and cold; debility and chronic diseases, due to excesses. Venereal diseases are not uncommon. One case of typhoid fever occurred in "Forty mile" last fall probably due to drinking water polluted with decayed vegetable matter.

In selecting men to relieve in this country I beg to submit a few remarks, some of which will be of assistance to the medical examiners in making their recommendations.

Men should be sober, strong and healthy. They should be practical men, able to adapt themselves quickly to their surroundings. Special care should be taken to see that their lungs are sound, that they are free from rheumatism and rheumatic tendency, and that their joints, especially knee joints are strong and have never been weakened by injury or synovitis or other disease. It is also very important to consider their temperaments. Men should be of cheerful, hopeful dispositions and willing workers. Those of sullen, morose natures, although they may be good workers, are very apt, as soon as the novelty of the country wears off, to become dissatisfied, pessimistic and melancholy.

Before concluding my report, I desire to state that I have received every assistance and consideration from the commanding officer of the post, in connection with my duties.

Constable Telford, who is acting as hospital orderly, has performed his duties very satisfactorily.

I hereby append a list of diseases treated.

I have the honour to be, sir,  
Your obedient servant,

A. E. WILLS,

*Assistant Surgeon.*

To the Officer Commanding  
Yukon Detachment N. W. M. Police,  
Fort Constantine.

FORT CONSTANTINE, 20th January, 1896.

Disease.	No. of Cases.	No. of Days.	Average Duration.	Remarks.
Abscess (perineal) .....	1	12	12	On board steamer "P. B. Weare."
Abscess of toe.....	1	2	2	Returned to duty.
Bite from dog.....	1	1	1	Medicine and duty.
Cold, feverish.....	1	2	2	Returned to duty.
Cold, bronchial.....	1	1	1	Medicine and duty.
Cuts.....	2	6	3	Returned to duty.
Diarrhea.....	1	1	1	Medicine and duty.
Ingrowing toe nail.....	1	1	1	Treatment and duty.
Muscular rheumatism.....	2	2	1	Medicine and duty.
Pleuritic pains.....	2	4	2	Returned to duty.
Sprains.....	2	4	2	do
Synovitis.....	2	20	10	Returned to duty; light duty at present time.
Wound (punctured).....	1	2	2	Returned to duty.

A. E. WILLS,  
*Assistant Surgeon.*





