607

Report on

Jay Claims: No's. 5 - 24 Inclusive
29
31 - 43 Inclusive
45 & 47
48 Fraction

situated in the Buttle Lake Area

of Strathcona Park

in the

Alberni Mining Division

Province of British Columbia

By: Buttle Lake Mining Company Ltd., (N.P.L.)

Date: December 18, 1964.

Contents:

Maps in Folder

1) Location Map
2) Geochemistry contour map:
   - in 50 ppm intervals & showing topography & claim outlines
3) Geological map:
   - showing geology applicable to the geochem. grid, with claim lines & trench positions plotted

Statement of Qualifications of Persons Employed During the Investigation of the Jay Group of Mineral Claims in the Vicinity of Buttle Lake in Strathcona Park.

---

1) Supervised by : L. G. White P.Eng.

2) Geochemistry by: L. C. Armstrong B.Sc.
University of B.C.

Four years intermittently with various mining companies, including two seasons with Buttle Lake Mining Co. Ltd. (N.P.L.).

3) Assistance in Correlation of Geochemical and Geological Data :

T. E. Lisle B.Sc.
University of B.C.

Eight years intermittently with the firm of Hill-Starck & Assoc.

Two years with Buttle Lake Mining Co., Ltd., (N.P.L.)

R. P. Chilcott B.Sc.
University of B.C.

Seven years intermittently with various mining companies, including three years with Buttle Lake Mining Co., Ltd., (N.P.L.).

4) Assistance in Surveying
& Mapping :

G. McRobbie B.Sc.)
University of B.C.)

W. Baxter)
University of B.C.)

No previous experience

H. Kepper)
University of B.C.)

E. Stonehocker)
Prospector)

Summary & Conclusions:

During the period August 17 to October 17, 1964, a four man crew employed by Buttle Lake Mining Co., Ltd., (N.P.L.) spent 211 man days working on the Company's property, located 37 air miles from Campbell River, between Phillips Creek and Western Mines, in the Buttle Lake Area.

The majority of this time was spent preparing a grid system to be used as control for an extensive geochemical and sampling program. The remainder of this time was allotted to preparation and analysis of 487 soil samples.

Each sample was analyzed for lead, zinc and copper. Lead and zinc concentrations were determined using a Dithizone test. Copper concentrations were determined by the Biquinoline test. Complete analytical procedures for these tests are contained in the body of this report.

The results for lead and zinc were found to be inconclusive. In both cases readings in parts per million were negligible. This may be partially explained by the instability of the complexes formed between lead, zinc, and the Dithizone that constitute the color intensity for these tests. It is more probable, however, that both elements exist in such minute quantities at the surface as to make detection difficult. The gradation in occurrence of lead on this property was nil, while zinc gave a gradation of only 0 to 50 parts per million. The lack of Geochemical values for lead and zinc are supported by the assay results for corresponding rock samples which were, in most cases, only trace values, as reported in Appendix #2.

The Biquinoline test for copper gave quite favorable results. The gradation between color complex intensities in this case was easily visible and the parts per million range was from 50 ppm to 500 ppm, as shown in Appendix #1.

The contoured map (map #2) for these values gives indications of several anomalous areas. The plotted highs for copper values are, however, only relative anomalies. That is, relative with respect to background readings and the overburden conditions that exist.

The anomalous areas referred to are within the range of 400 - 500 parts per million copper. On a percentage basis these readings represent .05% copper. However, when consideration is given to the fact that background readings represent as little as .0004% copper, as well as considering the extensive overburden that exists between the level of Western's mineralized shear and the surface of Buttle Lake's property, one might conclude that relative anomalous conditions do exist.

Those high areas that are found around lakes and in low swampy areas must be excluded due to the high copper content normally associated with such conditions. These conditions result from ground-water run-off and humic acid content in decaying organic matter.

Of the remaining anomalous areas, several coincide with exposed shear zones located by geological mapping during the 1963 season. Surface inspection and assays of sample pits from these areas failed to indicate any high degree of mineralization, due possibly to the depletion of vertical mineralization through forces and solutions. However, the fact that geochemical values in respect to these areas of shearing activity were greater than was found elsewhere lends support to the conclusion that these may be areas of possible future interest.

Recommendations:

In view of the correlation found to exist between the previously mentioned anomalous areas and shear zones, it is recommended

that this report and previous geological reports of the property be given further consideration by the Company's Consulting Engineer before further exploration work is planned.

This Report Covers the Surveying, Blasting and Sampling, and Geochemical Analysis Carried Out on the Jay Group of Mineral Claims Situated in the Buttle Lake Area, for the Period August 17, 1964 to October 17, 1964.

Introduction:

The north-west group, or "Jay" claims worked by the Buttle Lake Mining Co., Ltd., (N.P.L.), consist of 36 claims and 1 fraction. These claims are all located in the Buttle Lake Area of Strathcona Park on Vancouver Island within the Alberni Mining Division.

On August 17, 1964, a crew of four men set up camp on the Company's property and prepared to carry out an extensive geochemical program over the shear zones located from previous geological mapping. This work continued until October 17, 1964. During this time a grid network 4000 feet by 4600 feet, with staked and flagged stations at 200 foot intervals, was prepared. This grid accounts for 19.6 miles of line prepared and surveyed accurately, with all closures being made within ten feet.

As the grid progressed, existing posts were tied in. These claim lines, as shown on both the geochemical and geological maps, were scaled and plotted accurately where applicable, others being adjusted accordingly.

Similarly, any areas of shearing activity or surface mineralization were tied in, blasted and sampled. This work accounts for 89 pits (as placed on map #3), of which 34 were sampled. Assay results for sampled pits are tabled in Appendix #2. Drilling for these pits was done with an Atlas Copco gas drill. A total of 583 feet of drilling was completed, accounting for 314 cubic yards of moved material as tabled in Appendix #3.

As grid stations were run in, soil samples were taken, prepared and analyzed according to the procedure to follow. The individual station results were then plotted and contoured (map #1). These results, in parts per million copper, are tabled in Appendix #1.

The sum total of the season's work, from August 17 to October 17, 1964, accounts for 211 man days of field work, and 65 man days of office work.

Location and Access:

The "Jay" group of mineral claims is situated on moderate to rugged terrain between Phillips Creek and the northern boundary of Western Mines, at the 4000 - 5000 foot elevation.

For our purposes, access to the property was restricted to air travel (37 miles south-west from Campbell River). The main existing road follows the western shore-line of Buttle Lake, but comes only to within 21 miles of the property. The initial stages required 12,000 pounds of laboratory and camp equipment and supplies be flown from Campbell River to the head of Buttle Lake through the facilities of Island Airlines. The equipment was then taken to campsite, at elevation 4250, by charter of a Hiller Helicopter from Okanagan Helicopters Ltd.. After this initial stage contact was maintained through once weekly supply flights by Okanagan Helicopters Ltd..

History:

The existing claims were originally staked early in 1962 and were the basis for the formation of the Company.

Under an agreement with Newmont Mining Corp., of Canada, $25,000 was allotted to carry out a program of general prospecting, mapping and geophysical work. Most of this sum was confined to the property north of Western Mines.

Upon completion of this agreement, Buttle Lake Mining Co. Ltd., (N.P.L.), carried out Geological mapping and prospecting during May 1 to September 10, 1963, on the Buttle Bell, Rose Rick and Jay groups of mineral claims, all of which are situated in the Buttle Lake area.

The south-east group of claims, (Rose ,Buttle Bell and Rick groups), were not worked during the 1964 season.

The north-west group of claims (Jay group), consists of 37 claims, of which 34 are owned outright by the Company. (Jay 5 - 14 inclusive; Jay 17; Jay 19 - 24 inclusive; Jay 29, Jay 31 - 43 inclusive; Jay 45; Jay 47; and Jay 48 fraction). The remaining three claims, (Jay 15-16-18), are held under a pending Bill of Sale from L. C. Armstrong.

During the 1963 season a program of prospecting and mapping was started in an attempt to locate the northern extension of Western Mines' mineralized shear. Several north-west trending shears were found to exist on the property. Detailed geology established that a main sericite shear, which was exposed over 6000 feet at widths up to 100 feet, could be the extended shear from Western Mines.

However, the forces and solutions were found to have depleted vertical mineralization of this main shear to such an extent that only occasional pyrite mineralization was visible at the surface.

On the basis of these finds and conclusions, it was felt that any mineralized extension from Western Mines probably existed well under the diorite intrusive, or over 1500 feet below the surface. It was therefore felt that before any expensive diamond drilling could

be undertaken, it would be best to carry out geochemical analyses for copper, lead and zinc over an area extensive enough to complement the shearing activity previously established. This would help to pinpoint any anomalous conditions which might correlate with these shear zones, thus establishing more favorable drill targets.

Surveying:

All previous lines surveyed in the area were found to be non-existent or obliterated by weathering. Since the area worked is within a class "A" park, previously run-in lines were marked with tape only, in accordance with regulations of the Department of Parks and Recreation. It was therefore necessary to replace the old grid with a completely new system.

During the 1964 Season a grid system was laid out, with the base line at North - 30 West and parallel to the main shear. All surveying was done with a Brunton, tripod and chain. The base line was surveyed in with stations at 200 foot centres along it's 4600 foot length. Cross lines from these 200 foot centres were extended 2000 feet Westerly and 2000 feet Easterly, with each line being closed across the end, to within 10 feet. Each individual station was marked with flagging tape and appropriately marked stakes. The finished grid was comprised of 487 individual stations over 19.6 miles of line.

Geochemistry:

All procedures and related information to follow were taken from : Analytical methods used in Geochemical Exploration by the U. S. Geological Survey: Geological Survey Bulletin #1152; U. S. Gov't., Printing Office, Washington D. C. 1963.

Method of Collection:

Approximately one pound of soil material was taken from each of the 487 stations. A grub hoe was used to remove leached top soil and humus to a depth of not less than six inches, to ensure that the sample was as free of organic material as possible.

Method of Preparation:

Each sample was completely dried over propane burners. The dried sample was then screened through a 40 - 80 mesh sieve. From this screened material a 2 gram sample was taken and dry ashed in porcelain crucibles at 300 degrees fahrenheit for one hour, to remove all but trace quantities of organic material.

Method of Analysis:

All testing reagents used in the lab at the property were prepared from chemically pure solid and/or liquid components. In addition, chemically pure ion free water used in the preparation and dilution of reagents was purchased in Vancouver in non-metallic containers.

After preparation, all reagents were tested for oxidation by-products, indicative of impurities in the chemicals, and found to be well within the limits so specified for work with metallic ion materials.

The technique used for the determination of copper, lead and zinc was the Pyrosulfate-Fusion method. This procedure is designed to give near total solution of these metals in most soils.

In this method, Dithizone is used to determine zinc by mixed color comparisons with standards of known metal concentration. When a solution of Dithizone in carbon tetrachloride is shaken with a buffered solution containing zinc, red zinc-dithizonate is formed. The resulting color of the solution - a mixture of red zinc-dithizonate and unreacted dithizone - ranges from blue through purple to red, depending upon the amount of zinc extracted.

Similarly, dithizone was used, in the presence of cyanide, to determine lead as the lead-dithizonate by means of the monocolor method, in which different shades of pink indicate the amount of lead present.

The reaction between 2,2"-Biquinoline and copper to form a pink compound was used to determine the amount of copper present by the monocolor method.

Preparation of Sample Solution:

A .1 gm sample of the dry ashed soil was fused with .5 gm potassium pyrosulfate flux for 2 minutes. To this melt was added 3 ml 6M hydrochloric acid and the solution diluted to 10 ml with metal free water. Three, 2 ml aliquots of this sample solution were taken and tested as follows :

1) Estimation of Lead:

Ten ml of lead buffer solution was added to a 2 ml aliquot of the sample solution. The pH of the solution was adjusted to 8.5 and 5 ml of dithizone solution added and the total was agitated for 15 seconds. The organic carbon tetrachloride layer was run off into 10 ml potassium

cyanide solution. The resulting colored organic layer was then compared with known standards.

In this test, copper and zinc, as well as lead, will react with the dithizone of pH 8.5. In order to negate the interference of copper and zinc in this test for lead, potassium cyanide is added in order to complex these two metals. In this non-ionic state copper and zinc are thus prevented from reacting with the dithizone.

2) Estimation of Zinc:

A 2 ml aliquot of the sample solution was transferred to 8 ml of zinc buffer solution. To this was added 5 ml of dithizone test solution and the total agitated for 30 seconds. The resulting colored organic layer was compared with known standards.

Interference of other elements in this test for zinc is prevented through the complexing reaction between these elements and sodium thiosulfate, one of the components of the zinc buffer solution.

3) Estimation of Copper:

A 2 ml aliquot of the sample solution was added to 10 ml copper buffer solution. To this solution 2 ml 2,2' biquinoline was added, and the total agitated for 2 minutes. The resulting colored isoamyl alcohol layer was compared with known standards.

Interference of ammonium ions that form strong complexes with copper may mask the color of the copper-biquinoline complex. To prevent this interference the initial soil samples were dry ashed to remove most of the humic acid present in organic matter and diminish the source of the ammonium ions.

Estimation of Values on a Parts Per Million Basis:

In all cases, readings obtained were compared with standards known to contain a given number of micrograms of the trace element tested for. The conversion of these microgram values to parts per million was made using the following formula :

$$\text{p.p.m.} = \frac{\text{Volume of sample solution, in milliliters}}{\text{Sample weight taken for analysis, in grams}} \times \frac{\text{Micrograms of trace element found}}{\text{Aliquot of sample solution, in milliliters}}$$

If a sample was found to contain 6 micrograms of copper, using the biquinoline test, the parts per million value reported in Appendix #1 would be arrived at as follows :

Volume of sample solution = 10 ml (fixed factor)
Sample weight taken = .1 gm (fixed factor)
Micrograms element found = 6 (variable factor)
Aiquot of sample solution = 2 ml (fixed factor)

then

$$\text{ppm} = \frac{10}{.1} \times \frac{6}{2} = 300 \text{ ppm}$$

CERTIFICATION OF WORK

I, Leonard George White, P. Eng., hereby certify that I personally examined the work programme completed under the supervision of Mr. L.C. Armstrong on October 13th and 15th, 1964, and vouch for the authenticity of the above report.

Signed: L. C. Armstrong

For: Buttle Lake Mining Co., Ltd. (N.P.L.)

L. G. White, P. Eng.

Expenses Incurred
During Investigation of
Jay Group Mineral Claims
From August 17 - October 17, 1964.

Field work:

L. Armstrong	: 57 days @ $18.75/day	=	$1,068.75	
E. Stonehocker	: 40 days @ $18.75/day	=	750.00	
G. McRobbie	: 54 days @ $15.00/day	=	810.00	
H. Kepper	: 36½ days @ $15.00/day	=	547.50	
W. Baxter	: 17½ days @ $15.00/day	=	262.50	
T. Lisle	: 2 days @ $25.00/day	=	50.00	
P. Chilcott	: 2 days @ $23.00/day	=	46.00	
L. White	: Consulting fees	=	233.25	$3,768.00

Office work:

L. Armstrong	: 55 days @ $18.75/day	=	$1,031.25	
E. Stonehocker	: 10 days @ $18.75/day	=	187.50	1,218.75

Camp costs

#7.60/ man-day -	211 man days	1,603.60

Air charter:

Okanagan Helicopter	: 15½ hours @ $118/hr.	=	$1,829.00	
Island Airlines	: 9 return trips - Campbell River to Myhra Falls	=	468.50	2,297.50
	Total Expenditure			$8,887.85

APPENDIX #1

Station	p.p.m. cu.	Station	p.p.m. cu.	Station	p.p.m. cu.
30N-20W	50	26N-20W	150	22N-20W	150
18W	50	18W	500	18W	150
16W	75	16W	350	16W	40
14W	50	14W	300	14W	40
12W	75	12W	300	12W	75
10W	75	10W	300	10W	75
8W	50	8W	300	8W	300
6W	40	6W	150	6W	350
4W	75	4W	450	4W	300
2W	75	2W	300	2W	40
00	100	00	300	00	75
2E	250	2E	450	2E	200
4E	N.S.	4E	75	4E	300
6E	150	6E	200	6E	50
8E	150	8E	75	8E	200
10E	100	10E	50	10E	250
12E	250	12E	400	12E	300
14E	300	14E	N.S.	14E	450
16E	150	16E	N.S.	16E	250
18E	40	18E	100	18E	500
20E	150	20E	150	20E	50
28N-20W	150	24N-20W	150	20N-20W	250
18W	150	18W	150	18W	350
16W	75	16W	150	16W	75
14W	75	14W	75	14W	100
12W	75	12W	50	12W	75
10W	40	10W	50	10W	400
8W	150	8W	50	8W	50
6W	300	6W	75	6W	300
4W	150	4W	150	4W	150
2W	250	2W	150	2W	40
00	150	00	100	00	200
2E	50	2E	40	2E	300
4E	75	4E	50	4E	N.S.
6E	75	6E	150	6E	75
8E	100	8E	250	8E	400
10E	75	10E	300	10E	300
12E	150	12E	300	12E	450
14E	N.S.	14E	N.S.	14E	400
16E	N.S.	16E	450	16E	350
18E	75	18E	150	18E	150
20E	150	20E	150	20E	150

Station	p.p.m. cu.	Station	p.p.m. cu.	Station	p.p.m. cu.
18N-20W	40	14N-20W	250	10N-20W	50
18W	300	18W	N.S.	18W	75
16W	150	16W	400	16W	40
14W	300	14W	350	14W	350
12W	300	12W	50	12W	100
10W	100	10W	300	10W	75
8W	150	8W	N.S.	8W	75
6W	40	6W	150	6W	200
4W	300	4W	40	4W	75
2W	300	2W	150	2W	350
00	350	00	450	00	350
2E	300	2E	400	2E	500
4E	400	4E	100	4E	40
6E	250	6E	150	6E	300
8E	350	8E	150	8E	250
10E	300	10E	50	10E	500
12E	150	12E	75	12E	75
14E	175	14E	50	14E	40
16E	150	16E	100	16E	75
18E	150	18E	300	18E	250
20E	400	20E	200	20E	150
16N-20W	75	12N-20W	75	8N-20W	50
18W	40	18W	50	18W	75
16W	150	16W	75	16W	100
14W	150	14W	300	14W	300
12W	50	12W	350	12W	150
10W	150	10W	200	10W	50
8W	350	8W	150	8W	75
6W	150	6W	400	6W	40
4W	50	4W	300	4W	75
2W	75	2W	75	2W	40
00	150	00	150	00	50
2E	100	2E	300	2E	300
4E	450	4E	200	4E	350
6E	450	6E	400	6E	150
8E	150	8E	100	8E	200
10E	150	10E	75	10E	350
12E	150	12E	N.S.	12E	450
14E	75	14E	100	14E	75
16E	100	16E	N.S.	16E	N.S.
18E	450	18E	300	18E	150
20E	150	20E	100	20E	300

Station	p.p.m. cu.	Station	p.p.m. cu.	Station	p.p.m. cu.
6N-20W	150	2N-20W	200	2S-20W	75
18W	100	18W	40	18W	150
16W	100	16W	50	16W	50
14W	350	14W	150	14W	40
12W	300	12W	50	12W	150
10W	300	10W	50	10W	150
8W	100	8W	40	8W	150
6W	100	6W	200	6W	350
4W	150	4W	350	4W	75
2W	75	2W	150	2W	150
00	300	00	400	00	400
2E	350	2E	75	2E	350
4E	300	4E	75	4E	N.S.
6E	150	6E	75	6E	100
8E	N.S.	8E	400	8E	150
10E	250	10E	75	10E	50
12E	40	12E	40	12E	100
14E	40	14E	75	14E	300
16E	150	16E	300	16E	150
18E	400	18E	300	18E	200
20E	40	20E	300	20E	150
4N-20W	150	00N-20W	75	4S-20W	75
18W	150	18W	100	18W	150
16W	75	16W	50	16W	75
14W	40	14W	40	14W	75
12W	N.S.	12W	50	12W	75
10W	50	10W	100	10W	75
8W	75	8W	400	8W	100
6W	75	6W	50	6W	100
4W	100	4W	300	4W	75
2W	100	2W	450	2W	75
00	450	00	400	00	400
2E	100	2E	400	2E	400
4E	100	4E	75	4E	N.S.
6E	50	6E	300	6E	300
8E	50	8E	300	8E	75
10E	50	10E	150	10E	100
12E	75	12E	300	12E	50
14E	75	14E	150	14E	150
16E	75	16E	300	16E	200
18E	75	18E	40	18E	300
20E	75	20E	150	20E	150

Station	p.p.m. cu.	Station	p.p.m. cu.	Station	p.p.m. cu.
6S-20W	75	10S-20W	40	14S-20W	50
18W	200	18W	150	18W	40
16W	300	16W	100	16W	40
14W	150	14W	150	14W	150
12W	75	12W	100	12W	50
10W	75	10W	100	10W	40
8W	75	8W	150	8W	75
6W	300	6W	75	6W	100
4W	100	4W	300	4W	75
2W	100	2W	50	2W	75
00	200	00	40	00	150
2E	N.S.	2E	300	2E	75
4E	N.S.	4E	300	4E	400
6E	75	6E	75	6E	50
8E	150	8E	400	8E	150
10E	150	10E	150	10E	40
12E	75	12E	400	12E	150
14E	400	14E	75	14E	75
16E	450	16E	75	16E	N.S.
18E	150	18E	75	18E	150
20E	150	20E	100	20E	150
8S-20W	50	12S-20W	75	16S-20W	75
18W	250	18W	50	18W	40
16W	300	16W	40	16W	150
14W	300	14W	40	14W	150
12W	350	12W	40	12W	50
10W	400	10W	40	10W	40
8W	200	8W	75	8W	75
6W	500	6W	250	6W	50
4W	400	4W	100	4W	40
2W	150	2W	100	2W	75
00	300	00	150	00	75
2E	300	2E	400	2E	150
4E	N.S.	4E	75	4E	50
6E	150	6E	50	6E	75
8E	300	8E	150	8E	450
10E	400	10E	75	10E	75
12E	40	12E	300	12E	50
14E	300	14E	400	14E	150
16E	400	16E	400	16E	400
18E	250	18E	300	18E	75
20E	100	20E	200	20E	75

APPENDIX #2

Sample No.	Pit No.	ozs. per ton gold	ozs. per ton silver	% lead	% zinc	% cu
6953	27	.01	.9	Tr.	Tr.	5.77*
6962	2	Tr.	Tr.	Tr.	Tr.	.10
6963	31	Tr.	Tr.	Tr.	Tr.	.05
6964	16	Tr.	Tr.	Tr.	Tr.	.03
6965	15	Tr.	Tr.	Tr.	Tr.	.03
6966	21	Tr.	Tr.	Tr.	Tr.	.04
6967	14	Tr.	Tr.	Tr.	Tr.	.04
6968	4	Tr.	Tr.	Tr.	.05	.03
6959	6	Tr.	Tr.	Tr.	Tr.	.05
6960	9	Tr.	Tr.	Tr.	Tr.	.01
6961	7	Tr.	Tr.	Tr.	.10	.03
6954	27	Tr.	.3	Tr.	.07	.03
6955	19	Tr.	Tr.	Tr.	.07	.03
6956	10	Tr.	Tr.	Tr.	.12	.03
6957	13	Tr.	Tr.	Tr.	Tr.	.03
6958	22	Tr.	Tr.	Tr.	.15	.03
6779	53					Tr.
6780	58					Tr.
6781	34					Tr.
6782	37					Tr.
6783	39					Tr.
6784	44					Tr.
6785	47					Tr.
6786	50					Tr.
6787	54					.01
6788	56					Tr.
6789	70					.01
6790	71					Tr.
6791	73					Tr.
6792	77					Tr.
6993	79					Tr.
6794	81					Tr.
6795	83					Tr.
6796	67					Tr.

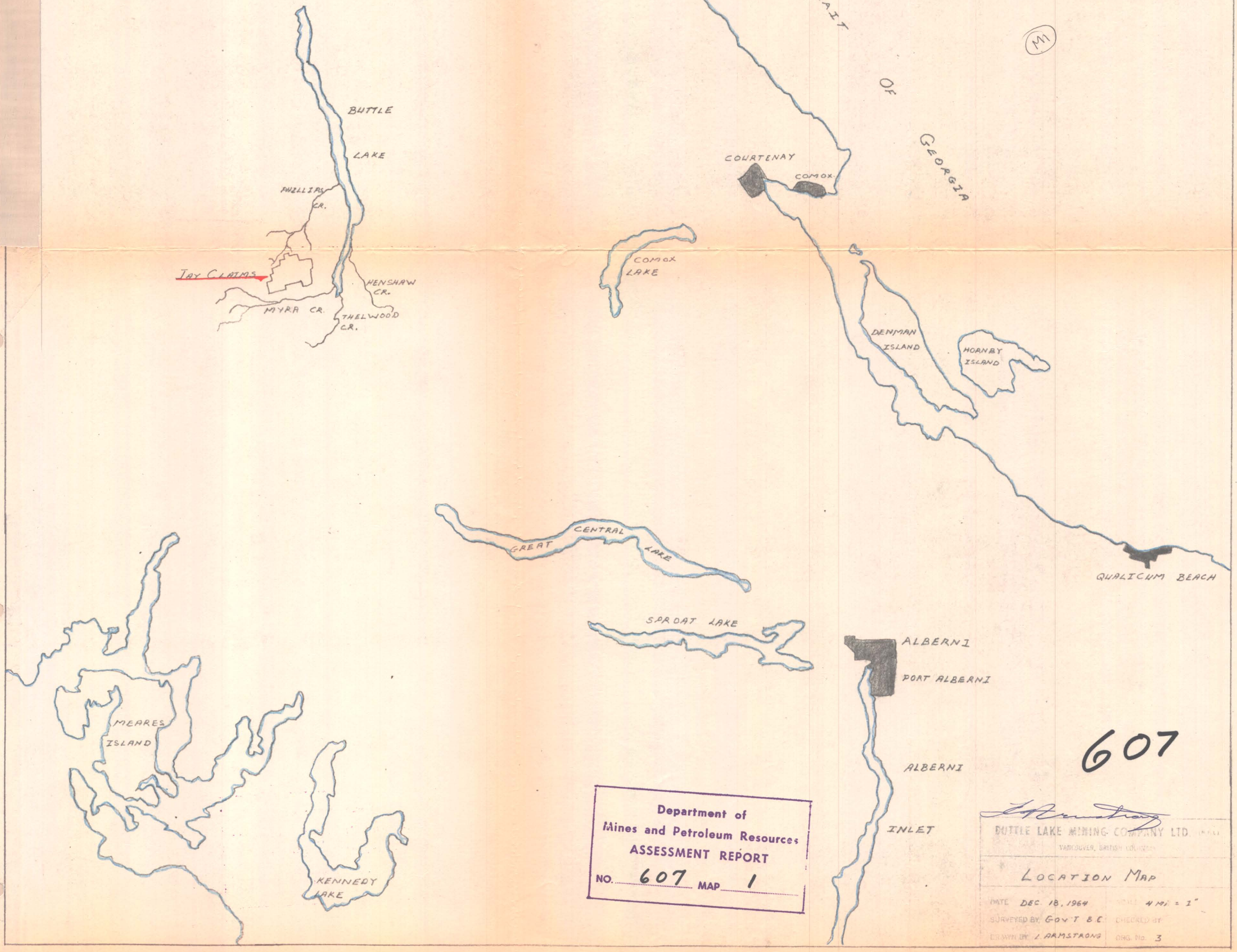
Assay results certified by Coast Eldrige Engineers & Chemists Ltd., 125 E 4th Ave., Vancouver 10, B.C., per: File no's :

A.3-B.13-64 13714
13641
13832
15138

APPENDIX #3

Pit #	Yards	Pit #	Yards	Pit #	Yards
1	10	30	2	61	6
1A	3	31	4	62	4
2	2	32	3	63	10
3	3	33	8	64	6
4	3	34	2	65	7
4A	2	35	2	66	3
5	2	36	3	67	3
6	2	37	3	68	2
7	4	38	3	69	2
8	3	39	1	70	4
9	2	40	3	71	9
10	3	41	1	72	5
11	2	42	2	73	2
12	1	43	3	74	3
13	2	44	3	75	3
14	3	45	5	76	2
15	3	46	3	77	2
16	2	47	2	78	3
17	3	48	4	79	6
18	2	49	3	80	5
19	4	50	5	81	4
20	1	51	5	82	2
21	2	52	2	83	4
22	3	53	3	84	3
23	3	54	2	85	2
24	4	55	2	86	2
25	3	56	5	87	5
26	3	57	5	88	7
27	3	58	3	89	3
28	4	59	5		
29	3	60	8		
	90		105		119

Total: 314 cu. yds.



M1

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 607 MAP 1

607

L. Armstrong

BUTTLE LAKE MINING COMPANY LTD. (N.P.L.)
VANCOUVER, BRITISH COLUMBIA

LOCATION MAP

DATE DEC. 18, 1964 SCALE 4 Mi. = 1"
SURVEYED BY GOV'T B.C. CHECKED BY
DRAWN BY L. ARMSTRONG DWG. No. 3

Jay 34 · Jay 29 · Jay 30 · Jay 42 · Jay 14 · Jay 12 · Jay 10 · Jay 8 · Jay 6 · Jay 41 · Jay 13 · Jay 11 · Jay 9 · Jay 7 · Jay 5 · Jay 33 · Jay 16 · Jay 17 · Jay 19 · Jay 21 · Jay 23 · Jay 15 · Jay 18 · Jay 20 · Jay 22 · Jay 24

N

4000 · 4450 · 4400 · 4350 · 4300 · 4250 · 4200 · 4150 · 4100 · 4050 · 4500 · 3925 · 3850 · 3825 · 3800 · 3900

N-30 · N-28 · N-26 · N-24 · N-22 · N-20 · N-18 · N-16 · N-14 · N-12 · N-10 · N-8 · N-6 · N-4 · N-2 · 00 · S-2 · S-4 · S-6 · S-8 · S-10 · S-12 · S-14 · S-16 · N-30W · W-20 · W-18 · W-16 · W-14 · W-12 · W-10 · W-8 · W-6 · W-4 · W-2 · E-2 · E-4 · E-6 · E-8 · E-10 · E-12 · E-14 · E-16 · E-18 · E-20

Note: Claim outlines corrected to grid where applicable; others adjusted.

Note: Topo contours at 50 foot intervals scaled & traced from Huntingtон Survey Corp., topo map Nov. 1962

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 607 MAP 2

BUTTLE LAKE MINING CO., LIMITED (npl)
JAY-CLAIMS—ISLAND PROJECT
GEOCHEMISTRY

SCALE : 1 inch ~ 200 feet
DATE : Nov. 23, 1964
Drawn by : L. Armstrong
Geochem. by : L. Armstrong
Contour Interval ~ 50 ppm.

	ppm Cu
400+	
350~400	
300~350	
250~300	
200~250	
150~200	
100~150	
50~100	
0~50	

607

Jay 34 | Jay 29 | Jay 30 | Jay 42 | Jay 14 | Jay 12 | Jay 10 | Jay 41 | Jay 13 | Jay 11 | Jay 9 | Jay 8 | Jay 6 | Jay 33 | Jay 16 | Jay 17 | Jay 19 | Jay 7 | Jay 5 | Jay 21 | Jay 23 | Jay 15 | Jay 18 | Jay 20 | Jay 22 | Jay 24

N

4450 4400 4350 4300 4250 4200 4150 4100 4050 4000 3975 3925 3900 3875 3850 3825 3800 3775 3750 3700

N-30 N-28 N-26 N-24 N-22 N-20 N-18 N-16 N-14 N-12 N-10 N-8 N-6 N-4 N-2 00

S-2 S-4 S-6 S-8 S-10 S-12 S-14 S-16

W-2 W-4 W-6 W-8 W-10 W-12 W-14 W-16 W-18 W-20

E-2 E-4 E-6 E-8 E-10 E-12 E-14 E-16 E-18 E-20

N-30W

WESTERN MINES

Note: Claim outlines corrected to grid where applicable; others adjusted.

Note: Topo contours at 50 foot intervals scaled & traced from Huntington Survey Corp., topo map Nov. 1962.

Note: Geol. scaled & traced from Geol. Report by Buttle Lake Mining Co., Ltd., Oct. 1963.

BUTTLE LAKE MINING CO., LIMITED (npl)

JAY-CLAIMS-ISLAND PROJECT

GEOLOGY

SCALE : 1 inch ~ 200 feet

DATE : Nov. 23, 1964

Drawn by: L. Armstrong

Dwg #2.

Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 607 MAP 3

- cherty tuffs
- joint
- weak shear
- strong shear
- trench (1963)
- intrusive areas-diorite & gabbro
- dykes
- volcanic breccia & agglomerate
- contact-approximate
- ① pits (1964)

607