

D. L. COOKE AND ASSOCIATES LTD.

MINERAL EXPLORATION CONSULTANTS

FILE NO: JAN 30 RD.

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FILE NO: OCT 25 1991 RD.

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FILE NO.

ASSESSMENT REPORT

RECONNAISSANCE GEOCHEMISTRY AND GEOLOGY

OF THE CATO 1 & 2 CLAIMS

MT. MILLIGAN AREA

CARIBOO M.D.

N.T.S. 930/3

Latitude : 55° 06' North

Longitude : 123° 23' West

RECEIVED

OCT 23 1991

by

Gold Commissioner's Office
VANCOUVER, B.C.

David L. Cooke, Ph.D., P.Eng.

D. L. COOKE AND ASSOCIATES LTD.

811 - 675 WEST HASTINGS STREET

VANCOUVER B.C., V6B 1N2

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21/753

Report Date: October 22, 1991

Work Done: July 25 - 28, 1990

July 1, 3, & 5, 1991

Claim on which work was done:

<u>Claim</u>	<u>Units</u>	<u>Record No.</u>	<u>Month of Record</u>
Cato 1	20	10764	July
Cato 2	20	10765	July

D. L. COOKE AND ASSOCIATES LTD.
MINERAL EXPLORATION CONSULTANTS

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- Figure 2 : Claim Map; Cato 1 & 2 Mineral Claims, 1:50,000
- Figure 3 : Geology and Sample Locations;
Cato 1 & 2 Mineral Claims, 1:10,000
- Figure 4 : Geochemistry; Zn, Cu, Mo.
Cato 1 & 2 Mineral Claims, 1:10,000.

SUMMARY

The Cato 1 and 2 mineral claims were staked to cover an aeromagnetic anomaly 53 kilometres by road west of McKenzie, B.C. The regional geology of the area include the Wolverine Metamorphic Complex and the Slide Mountain Group. The Wolverine Complex is made up of granitoid gneiss, schist, amphibolite and quartzite. The Slide Mountain Group consists of greenstone schist, amphibolite, argillite and limestone. The Takla terrain which hosts the Mt. Milligan porphyry copper-gold deposit, lies some 25 kilometres to the west. The metamorphic rocks are intruded by granitic stocks of Cretaceous to Tertiary age.

The Cato property is underlain by limestone and black pyritic argillite, which appear to belong to the Slide Mountain Group rather than the Wolverine Complex. Skarn type copper and zinc mineralization occurs at the contact of the limestones and granitic stocks which intrude the sedimentary package. This mineralization occurs as massive pyrite and pyrrhotite lenses which are roughly strataform in nature. Garnetiferous skarns where present contain sphalerite with minor amounts of chalcopyrite and molybdenite.

A reconnaissance program of prospecting, mapping and soil geochemistry was done to evaluate the potential of the claims for copper and gold mineralization. Little was obtained from the soil geochemical survey which could be considered strongly anomalous for gold, or indicative of gold mineralization. Assays of rock samples were also low in precious metals. Assay of mineralized skarns indicated the presence of up to 8.7% zinc and 0.3% copper in massive pyrite-pyrrhotite specimens.

It is concluded that the potential for porphyry copper and gold mineralization has been substantially reduced by this survey. However, there is good potential for the development of pyrite-pyrrhotite skarn deposits which may contain economic amounts of copper, zinc and molybdenum.

INTRODUCTION

The Cato 1 & 2 mineral claims cover a package of rusty, pyritic metasedimentary rocks, which were thought to have potential for hosting porphyry copper-gold and replacement copper-zinc mineralization. The initial exploration on the property was done by Wim Vanderpoll in late July of 1990, which resulted in locating massive zinc and copper mineralization. Additional exploration work in 1991 by D. L. Cooke and W. Vanderpoll was done to further evaluate the potential of the Cato 1 & 2 claims. The area of the claims was previously partially covered by the Koots and NU claims of Dennison Mines Ltd. Soil sampling and trenching was done, and samples assayed for copper, molybdenum, zinc and silver. Samples were not checked for gold. This survey was done partly to evaluate the gold potential of the claims.

Due to a washout of the logging access road 4 1/2 kilometres west of the Cato 1 claim, a third to a half of each working day was walking time to and from the claim. This extra hardship restricted work to the southwestern part of the Cato 1 claim.

A total of \$5,255.03 was expended in this exploratory work on the Cato 1 & 2 mineral claims. This report summarizes the results of the exploration work and is being submitted for assessment credits to maintain the Cato 1 & 2 claims for two years.

1990/91 EXPLORATION PROGRAM

The current exploration work consisted of mapping and soil sample traverses along the south western parts of the Cato 1 claim. Control was provided by compass and topofil chain. Prospecting, geological mapping and rock sampling were done at the same time as the soil sampling. This work was performed by Wim Vanderpoll, B.Sc., Geologist, on July 25 - 28, 1990, and by Wim Vanderpoll and David L. Cooke, Ph.D., P.Eng., Geologist, on July 1, 3 and 5, 1991.

LOCATION AND ACCESS

The Cato 1 and 2 mineral claims are situated between McKenzie, B.C. and the Mt. Milligan area, which lies about 70 kilometres to the west (Figure 1). Access is by 53 kilometres of good gravel road west from McKenzie by way of the Philip Lakes logging main operated by Fletcher Challenge Ltd. The south-western part of the claim may be reached by a secondary logging road nine kilometres north from the main access road.

The property covers an area of moderate relief which ranges from 1,400 feet to 1,600 metres in elevation. Vegetation consists mainly of spruce, fir and lodgepole pine. Stands of timber have been harvested on the northwestern and southern parts of the claim.

PROPERTY AND OWNERSHIP

The Cato 1 & 2 claims are registered in the name of Wim Vanderpoll of Vancouver, B.C. The pertinent claim data is listed below:

<u>Claim</u>	<u>Units</u>	<u>Record Number</u>	<u>Record Date</u>
Cato 1	20	10764	July 26, 1990
Cato 2	20	10765	July 25, 1990

REGIONAL GEOLOGY AND MINERALIZATION

Mt. Milligan occurs at the centre of an area of porphyry copper and gold mineralization, which runs northwesterly from Carp Lake to the Nation River in the Omineca Mining Division of B.C. This area is part of the Quesnel Trough of Upper Triassic rocks, which extend northwesterly from the U.S. border through B.C. to the Yukon.

The Upper Triassic rocks in the Mt. Milligan area belong to the Takla Group and consist mainly of andesitic and basaltic flows and pyroclastics. Minor amounts of black argillite occur locally. Older metamorphic rocks of the Slide Mountain and Wolverine Metamorphic Complex occur to the east of the Takla rocks. The Slide Mountain Group is mapped as Upper Palaeozoic in age and consists of gneissic quartz diorite, amphibolite, schist, greenstone, argillite and limestone (Tipper, 1974). The Wolverine Metamorphic Complex occurs to the east and south of the Slide Mountain Group. The Wolverine rocks, which are of possible Proterozoic age, consist of granitoid gneiss, pegmatite, schist, amphibolite and quartzite (Tipper, 1974). The metamorphic rocks are intruded by Cretaceous and Tertiary granites, granodiorites and quartz diorites.

The Mt. Milligan porphyry copper-gold deposit, which is currently being developed by Placer Dome Inc., contains 385 million tons of probable ore with a grade of 0.22% copper and 0.016 ounce gold per ton. The mineralization consists of pyrite, chalcopyrite and free gold within Takla volcanic rocks and in coeval alkaline intrusions (monzonite, diorite etc.) of Triassic age. The sulphides occur as disseminations and stockworks in both intrusive and volcanic host rocks.

Copper, molybdenum, zinc and tungsten mineralization is associated with the granitic intrusions which cross cut the older metamorphic terrain. In addition, placer gold occurs in some of the drainages of the area.

PROPERTY GEOLOGY

The Cato 1 and 2 claims are characterized by strong positive magnetic anomalies which mark the development of contact skarn mineralization. The Cato 1 claim is underlain by limestone and black graphitic argillites which are intruded by granitic stocks and dikes (Figure 3). Abundant magnetite-pyrrhotite skarns are developed at the margins of the granites where they intrude limestone country rocks. Diopside, garnet, calcite and epidote are prominently developed in these contact areas. The adjacent graphitic argillites are impregnated with abundant pyrite.

Massive pyrite-pyrrhotite lenses occur over a strike distance of 50 metres in association with pink garnet skarns carrying values in zinc and copper. A 1 metre section of massive sulphide mineralization returned 8.7% zinc and 0.13% copper. An adjacent 2 1/2 metre section of skarn ran 0.53% zinc and trace copper. This appears conformable to the enclosing sugary limestone and garnet skarn. Mineralized green diopside skarn from an old trench assayed 0.3% copper and 0.07% Mo over 2 metres.

GEOCHEMISTRY

SAMPLE COLLECTION AND ANALYSIS

Soil samples were taken with a shovel from depths of 15-30 centimetres on claim lines at 50 metre intervals. Soil samples were placed in numbered Kraft sample bags and shipped to Min-En Laboratories in North Vancouver, B.C. for analysis. Rock samples were collected where outcrop and/or float contained abundant pyrite, chalcopyrite, sphalerite or molybdenite. The sample location sites and numbers are indicated on Figure 3.

The soil samples were dried at approximately 60°C and then sieved to minus 80 mesh. A 1.0 gram sample was then digested with HNO₃ and HClO₄ mixture. These samples were then diluted to standard volume after cooling, and the solution analyzed for 30 elements by computer operated Jarrell Ash 9000 Induction Coupled Plasma (ICP) Analyzer. Gold was determined on separate solutions by atomic absorption spectrophotometry. Rock samples were crushed and analyzed in a similar manner as the soil samples.

DISCUSSION OF RESULTS

The analytical results are presented in Appendix III. Because of the small sample population, statistical treatment of the data was not attempted. By inspection and experience, the following values were assumed to be anomalous:

gold	: + 10 ppb	lead	: + 50 ppm
silver	: + 1.0 ppm	zinc	: + 200 ppm
arsenic	: + 20 ppm	molybdenum	: + 10 ppm
copper	: + 100 ppm		

It is quite evident that the soil and silt samples returned very few anomalous values for copper and gold. Analyses of massive pyrrhotite skarn and green diopside skarn mineralization returned significant copper, zinc and molybdenum values. These values include:

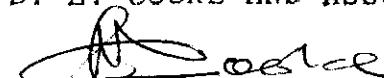
	Sample	Width	ppm Cu	ppm Zn	ppm Mo
North Showing:	C91-13R	1 metre	1,360	44,300	2
	C91-14R	2½ metres	29	5,300	90
	C91-16R	1 metre	2,380	212	10
South Showing:	C91-21R	Grab	3,030	213	218
	C91-22R	2 metres	840	125	790

CONCLUSIONS AND RECOMMENDATIONS

The massive pyrite-pyrrhotite and diopside-pyrrhotite-molybdenum skarns on the Cato 1 claim are related to the granite contact area, and as such, have limited size potential.

The reconnaissance geochemical and geological program examined two prominent areas of sulphide mineralization. Soil sampling along the south boundary of Cato 1 did not suggest any southern extension of the south skarn mineralization. The northern showing is well exposed and appears to pinch out along strike (50 metres). Other mineralized zones may occur elsewhere on the property at the granite-limestone contact. The airborne magnetic survey over the area shows other positive magnetic anomalies which are worth checking on the ground by mapping, prospecting and soil geochemistry.

Report by
D. L. COOKE AND ASSOCIATES LTD.



David L. Cooke, Ph.D., P.Eng.
October 22, 1991



REFERENCES

1. Faulkner, R.L., 1980:A, Report on the Geology of The Koots 1 Claim, Cariboo M.D. Assessment Report 8775 for Dennison Mines Ltd., 12 pp.
2. Faulkner, R. L., 1981: A Geological and Geochemical Prospecting Report for the NU 1 and NU 2 Claims. Assessment Report 9851 for Dennison Mines Ltd., 6 pp.
3. Geophysical Paper, 1961: Tudyah Lake, British Columbia. Map 1563G, Geological Survey of Canada.
4. Muller, J. E., 1961: Geology, Pine Pass, British Columbia, Map 11-1961, Geological Survey of Canada.
5. Tipper, H. W., et al, 1974: Parsnip River, British Columbia, Map 1424A, Geological Survey of Canada.

TABLE I

DESCRIPTION OF SAMPLES (1991)
CATO 1 AND 2 CLAIMS

SOIL SAMPLES

Soil samples were taken with a shovel from depths of 8 to 12 inches (15 - 30 cm). Generally, sample material consisted of good red brown to medium brown soil. Occasionally, in low-lying areas, the sampled material consisted of a mixture of soil, grey sandy clay and black organic matter.

ROCK SAMPLES

<u>Sample Number</u>	<u>Description</u>	<u>Width</u>
C91 - 13R	Massive sulphide zone consisting of pyrrhotite, pyrite and sphalerite.	1.0 metre
C91 - 14R	Sugary to massive pink garnet skarn below sample 13R. Minor disseminated sulphides.	2.5 metres
C91 - 15R	Lens of massive sulphide consisting of pyrrhotite, pyrite and sphalerite.	0.5 metre
C91 - 16R	Massive pyrrhotite, pyrite, sphalerite skarn.	Chip sample 1 x 1m area
C91 - 18R	Rusty biotite-rich phyllite with trace chalcopyrite and about 3% pyrite.	Grab
C91 - 19R	Float of pyrrhotite skarn.	Grab
C91 - 20R	Garnet skarn with pyrrhotite, pyrite and molybdenite.	Grab
C91 - 21R	Float of massive green diopside skarn containing submassive sulphides.	Grab
C91 - 22R	Old trench - Green diopside skarn with submassive pyrite, pyrrhotite, and minor chalcopyrite and molybdenite.	Grab
C91 - 23R	Grossularite skarn. No obvious sulphides.	Random chip over 5 m.

APPENDIX I

1990 - 1991 EXPENDITURES - JULY 16, 1991

CATO 1 & 2 MINERAL CLAIMS

SALARIES - GEOLOGISTS

D. L. Cooke, : July 1, 3, 5/91, 3 days @ \$350 . \$1,050.00
W.Vanderpoli : July 1, 3, 5/91, 3 days @ \$300 . 900.00
W.Vanderpoll : July 25 - 28/90, 3 1/2 days@\$300 1,050.00 \$3,000.00

GEOCHEMISTRY

Analyses: 31 Soils and Silts samples @ \$12/each \$372.00
11 Rock samples @ \$13.25/each 145.75
10 Rock samples @ \$14.50/each 145.00
Materials: Sample Bags, flagging, etc. 35.00 697.75

DOMICILE

Room and Board: 9 1/2 man days @ \$50 ea \$475.00
Equipment Rental: 6 1/2 days @ \$30/day 195.00 670.00

TRANSPORTATION

Truck Rental: 3 1/2 days @ \$50/day \$175.00
Gasoline, etc. (40% of \$115.21) 46.08
Mileage: (40% of 2,077 km) 831 km @ 20 cents/km ... 166.20 387.28

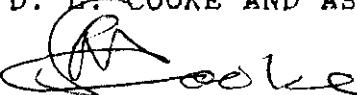
REPORT

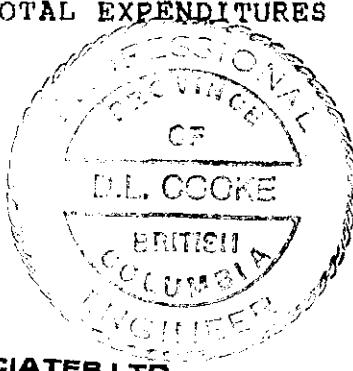
D. L. Cooke, Geologist: 1 day @ \$350/day 350.00
Typing and Drafting 150.00 500.00

TOTAL EXPENDITURES \$5,255.03

PREPARED BY:

D. L. COOKE AND ASSOCIATES LTD.


David L. Cooke Ph.D., P.Eng.
October 22, 1991



D. L. COOKE AND ASSOCIATES LTD.

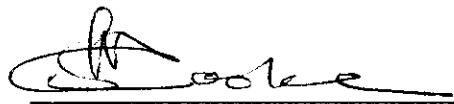
D. L. COOKE AND ASSOCIATES LTD.
MINERAL EXPLORATION CONSULTANTS

APPENDIX II

STATEMENT OF QUALIFICATIONS

I, DAVID LAWRENCE COOKE, of the Municipality of Surrey in the Province of British Columbia, hereby certify:

1. That I am a Consulting Geologist, residing at 10667 Arbutus Wynd, Surrey, B.C., V3R 0B5, with a business office at 811 - 675 West Hastings Street, Vancouver, B.C., V6B 1N2.
2. That I graduated with a B.Sc. degree in Geology from the University of New Brunswick in 1959, and with M.A. and Ph.D. degrees in Geology from the University of Toronto in 1961 and 1966 respectively.
3. That I have practised my profession as an exploration geologist from 1959 to the present time in Canada, the U.S.A., Mexico, the Caribbean and South America.
4. That I am a Registered Member of the Association of Professional Engineers of the Province of British Columbia.
5. That I personally performed the exploration work on Cato 1 and 2 claims described herein.
6. And that I am the author of this report on the Cato 1 and 2 mineral claims, dated October 22, 1991.



DAVID L. COOKE, PH.D., P.ENG.

October 22, 1991



APPENDIX III

ANALYTICAL RESULTS

CU AU PORPHYRY ACQ-WD

CATO

Job V 91-0310R
REPORT DATE 21 OCT 1991

LAB NO	FIELD NUMBER	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Au PPB	WT Au. GRAM	Mo PPM	W PPM
R9106051	C91-3R	35	132	191	.5	<10	5	<2	
R9106052	C91-6R	121	10	72	.5	<10	5	3	
R9106053	C91-12R	170	<4	73	<.4	<10	5	42	
R9106054	C91-13R	1360	<4	E44300	1.6	<10	5	2	
R9106055	C91-14R	29	<4	5300	<.4	<10	5	90	
R9106056	C91-15R	170	23	1250	.6	<10	5	14	
R9106057	C91-16R	2380	<4	212	.5	<10	5	10	
R9106058	C91-20R	118	<4	50	<.4	<10	5	148	
R9106059	C91-21R	3030	15	213	4	<10	5	218	
R9106060	C91-30R	85	7	55	.6	<10	5	3	
R9106096	C91-8R	593	<4	45	.5	<10	5	6	
R9106097	C91-10R	8	6	32	<.4	<10	5	<2	
R9106098	C91-18R	45	8	46	<.4	<10	5	20	
R9106099	C91-22R	840	30	125	.7	<10	5	790	
R9106100	C91-23R	<1	<4	35	<.4	<10	5	3	
R9106101	C91-6AR	88	9	26	<.4	<10	5	2	
R9106102	C91-76R	78	<4	80	<.4	<10	5	7	
R9106103	C91-78R	140	<4	85	.9	<10	5	2	
R9106104	C91-79R	96	<4	68	<.4	<10	5	2	
R9106105	C91-80R	191	20	68	.8	<10	5	11	
R9106106	C91-81R	29	14	135	<.4	<10	5	<2	
R9106107	C91-77R	36	<4	32	.7	<10	5	34	
R9106108	C91-122R	68	73	17	.6	<10	5	7	

I=INSUFFICIENT SAMPLE X=SMALL SAMPLE E=EXCEEDS CALIBRATION C=BEING CHECKED R=REVISED
 If requested analyses are not shown / results are to follow

ANALYTICAL METHODS

- Cu AQUA REGIA DECOMPOSITION / AAS
- Pb AQUA REGIA DECOMPOSITION / AAS
- Zn AQUA REGIA DECOMPOSITION / AAS
- Ag AQUA REGIA DECOMPOSITION / AAS
- Au AQUA REGIA DECOMPOSITION / SOLVENT EXTRACTION / AAS
- WT Au THE WEIGHT OF SAMPLE TAKEN TO ANALYSE FOR GOLD (GEOCHEM)
- Mo HNO3 - HClO4 DECOMPOSITION / AAS
- W PYROSULPHATE FUSION / COLORIMETRIC

CU AU PORPHYRY ACQ-WD

Joe

U.P.D.—CORPR

REPORT DATE 19 FEB 1991

LAB NO	FIELD NUMBER	AU	WT AU	AG	PB	ZN
		PPM	GRAM	PPM	PPM	PPM
R91009 10	CATO 1&2	<10	5	1.2	<4	E87000
R91009 11	PIL-1	<10	5	.4	<4	25
R91009 12	PIL272-1	<10	5	.5	<4	229
R91009 13	PIL282-1	<10	5	.6	<4	24

TESTED TEST SAMPLE X=SMALL SAMPLE E=EXCEEDS CALIBRATION C=BEING CHECKED R=REVISED
 IF & = 0 ANALYSES ARE NOT SHOWN / RESULTS ARE TO FOLLOW

ANALYTICAL METHODS

- AU : IR REFLX DECOMPOSITION / SOLVENT EXTRACTION / AAS
- Ag : WET ASH OF SAMPLE TAKEN TO ANALYSE FOR GOLD (GEOCHEM)
- As : IR REFLX DECOMPOSITION / AAS
- Pb : IR REFLX DECOMPOSITION / AAS
- Zn : IR REFLX DECOMPOSITION / AAS

→ D. Cooke - 13R

COMP: D.L. COOKE & ASSOCIATES LTD.

PROJ: CATO

ATTN: DAVID L. COOKE

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 1V-0866-SJ1+2

DATE: 91/08/27

* SOIL * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-WET PPB
C91-1S	2.3	20190	6	1	263	.1	7	7000	.1	14	38	31850	2950	37	9410	319	1	190	30	520	13	1	20	1	1524	80.2	109	3	1	3	47	5
C91-2S	1.0	30640	5	1	234	.1	6	4970	.1	22	38	41600	2410	41	11390	382	1	120	50	1050	10	1	13	1	1685	99.4	183	4	1	4	68	10
C91-3S	.4	13560	3	1	109	.1	1	1990	.1	7	50	26620	810	16	2410	120	1	40	31	1370	12	1	37	1	594	114.7	187	2	1	2	32	5
C91-4S	1.7	23640	3	1	135	.1	8	3630	.1	13	25	41910	1700	20	6170	217	1	100	16	1700	19	1	16	1	1889	106.0	114	4	1	3	50	5
C91-5S	.7	27090	7	1	158	.1	8	4040	.1	21	40	48640	2320	41	13790	221	1	800	105	950	23	1	12	1	2069	97.7	161	4	1	7	152	5
C91-6S	1.0	33410	1	1	270	.1	10	7110	.1	25	66	45570	3070	41	15960	322	1	220	85	1450	15	1	24	1	2628	129.1	163	4	1	6	114	5
C91-7S	.9	23410	1	1	165	.1	5	4610	.1	16	32	38830	1870	28	8970	261	1	140	33	1610	17	1	15	1	1576	82.7	98	4	1	3	56	5
C91-8S	1.2	20660	6	1	169	.1	5	5260	.1	15	27	33290	2320	25	9060	260	1	140	32	1380	10	1	16	1	1474	71.5	94	4	1	3	56	10
C91-9S	1.3	26530	6	1	214	.1	7	5700	.1	18	37	45520	3010	34	10650	375	1	170	28	1940	27	1	18	1	1811	89.0	155	4	1	4	63	5
C91-10S	.8	29390	1	1	251	.1	8	6660	.1	21	48	52740	2910	31	11700	377	1	210	55	2020	14	1	15	1	2459	99.2	101	4	1	5	97	5
C91-24S	.8	25830	4	1	371	.1	6	7400	.1	20	50	40760	4100	31	12800	565	1	200	45	1340	13	1	20	1	1880	106.7	113	4	1	4	63	5
C91-25S	.6	29300	9	1	450	.1	7	9000	.1	23	85	49300	5540	32	16220	635	2	250	65	1800	19	1	24	1	1953	147.5	181	4	1	5	80	5
C91-26S	.6	28880	6	1	251	.1	6	5730	.1	18	55	43980	3600	34	12440	486	1	160	42	1280	15	1	16	1	1736	114.6	140	4	1	4	66	5
C91-27S	.7	22810	6	1	368	.1	6	8120	.1	18	57	38860	4780	29	12850	505	1	230	46	1530	14	1	22	1	1795	112.4	132	4	1	3	58	10
C91-28S	.6	24380	4	1	233	.1	5	5630	.1	15	45	39410	3650	28	10850	386	1	150	34	1280	14	1	15	1	1638	105.0	110	4	1	3	55	5
C91-29S	.5	28050	10	1	415	.1	6	7520	.1	23	66	44930	6440	37	14100	674	1	270	61	1250	20	1	23	1	1894	102.1	121	3	1	4	73	5
C91-30S	.7	24360	9	1	344	.1	7	10720	.1	20	58	40390	6480	35	12960	523	1	380	48	1260	12	1	34	1	1802	84.2	106	3	1	4	66	10
C91-31S	.7	20980	9	1	306	.1	6	7290	.1	18	37	33940	4140	30	10790	399	1	210	35	1720	16	1	17	1	1804	73.2	104	4	1	3	51	5
C91-32S	.9	21570	8	1	259	.1	5	9130	.1	17	30	32160	3140	28	8730	732	1	620	31	1240	19	1	19	1	1365	73.5	101	4	1	3	49	10
C91-33S	1.6	29820	13	1	346	.2	4	17420	.1	20	52	36510	3940	34	9840	1256	1	1070	48	1290	23	1	37	1	1172	79.7	148	5	1	4	63	5
C91-34S	.8	18650	8	1	134	.1	4	4830	.1	10	19	30900	1900	22	6080	253	1	590	15	850	15	1	14	1	1309	63.9	77	4	1	3	40	5
C91-35S	.9	39040	3	1	390	.1	8	11250	.1	23	55	44800	6060	39	18030	840	1	830	50	980	16	1	38	1	2052	102.8	104	4	1	4	74	5
C91-36S	.8	36080	3	1	264	.5	6	9740	.1	19	32	37010	4550	34	16900	807	1	820	26	690	21	1	28	2	1611	56.2	82	6	1	3	54	10
C91-37S	.7	23470	4	1	204	.1	5	6780	.1	13	25	34520	2940	33	9900	333	1	180	24	890	10	1	17	1	1656	75.1	100	4	1	3	53	30
C91-38S	2.0	22070	11	1	239	.1	4	5930	.1	14	29	30830	3770	29	8730	367	1	220	29	1070	24	1	16	1	1423	65.7	103	4	1	3	46	5
C91-39S	.7	26240	2	1	389	.1	7	7730	.1	20	58	44150	7740	34	12090	394	1	350	50	1160	20	1	20	1	1923	95.9	126	4	1	4	62	5
C91-40S	.5	27410	8	1	400	.1	7	7000	.1	21	53	41750	7410	35	12340	567	1	260	46	1740	24	1	15	1	1925	92.9	108	4	1	4	64	5
C91-41S	.4	23360	3	1	158	.1	5	4500	.1	12	34	39370	2890	23	6920	238	1	100	18	1060	18	1	13	1	1361	82.6	93	4	1	3	47	5
C91-42S	.5	18930	7	1	146	.1	4	3380	.1	11	25	30950	2670	21	6640	277	1	90	22	1220	13	1	9	1	1052	64.9	75	4	1	2	40	5
C91-43S	.2	23060	1	1	137	.1	4	3670	.1	13	29	38480	3920	30	9030	306	1	90	20	960	13	1	8	1	1244	70.1	79	4	1	3	48	5
C91-44S	.8	17950	1	4	187	.1	6	9620	.1	13	25	28460	3450	22	9530	399	1	170	23	1000	15	1	18	1	1372	75.7	92	3	1	3	55	5
C91-45S	.1	21100	4	1	168	.1	6	3890	.1	12	31	36970	3730	27	8250	262	1	110	24	1090	23	1	10	1	1294	76.1	94	3	1	3	46	5
C91-46S	.9	22650	1	1	231	.1	5	11910	.1	14	28	31020	2750	29	6480	1058	1	970	22	1250	25	1	25	1	991	62.5	122	3	1	2	42	10
C91-47S	.3	25970	2	1	167	.1	8	5540	.1	13	28	39300	3220	42	9430	307	1	150	22	950	15	1	14	1	1589	75.2	90	4	1	3	49	5
C91-48S	.2	26850	4	1	173	.1	7	6880	.1	15	30	41880	3680	40	10000	400	1	120	22	820	16	1	16	1	1626	80.8	100	4	1	3	53	5
C91-49S	.4	30960	12	1	207	.2	8	5050	.1	18	36	36330	2300	30	10400	289	1	220	41	490	18	1	14	1	1645	75.3	77	4	1	3	57	5
C91-50S	.4	38880	7	1	173	.2	8	5230	.1	20	33	44570	2180	43	12180	268	1	260	35	770	55	1	16	1	1796	81.1	151	4	1	3	61	5
C91-51S	.6	44420	1	1	182	.1	11	5400	.1	21	33	52590	1910	38	12940	225	1	960	21	760	15	1	15	1	2508	120.8	287	4	3	4	62	10
C91-52S	.5	43210	1	1	225	.4	9	4000	.1	21	29	42210	2730	40	15350	380	1	230	30	780	38	1	12	1	1843	83.2	162	5	2	3	59	5
C91-53S	.6	37140	1	1	172	.1	10	6390	.1	17	16	41380	1750	42	16050	510	1	1230	18	920	25	1	22	1	2375	85.9	177	6	2	3	57	10
C91-54S	.5	38710	1	1	169	.5	9	5530	.1</																							

COMP: D.L. COOKE & ASSOCIATES LTD.

PROJ: CATO

ATTN: DAVID L. COOKE

MIN-EN LABS — ICP REPORT
 705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
 (604)980-5814 OR (604)988-4524

FILE NO: 1V-0866-SJ3+4

DATE: 91/08/27

* SOIL * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-WET PPB
C91-74S	.5	31070	5	6	173	.1	12	5930	.1	28	41	51870	1760	62	12710	509	1	100	48	2360	11	1	13	1	2354	96.2	137	4	3	5	69	10
C91-75S	.9	42380	1	2	304	.6	10	13790	.1	22	57	45060	3780	49	21710	523	1	1980	59	920	15	1	63	1	2228	116.4	135	4	3	4	59	5
C91-79S	.1	42320	1	4	199	-.1	15	10370	.1	64	131	111030	2240	49	20210	1431	1	720	108	1870	3	1	28	1	3860	141.0	104	1	3	6	146	5
C91-82S	2.8	35940	28	6	140	.8	9	5970	.1	17	154	43900	1910	71	9550	476	1	340	27	1160	136	1	15	1	1459	92.1	204	6	5	3	50	5
C91-83S	.3	17210	2	1	77	-.1	5	5550	.1	8	14	27780	680	16	4220	426	1	320	6	1010	31	1	20	1	869	60.8	177	5	1	2	26	5
C91-84S	.3	21310	2	1	54	-.1	5	7740	.1	10	20	29520	980	29	6380	284	1	120	14	770	22	1	26	1	1121	56.1	87	4	3	2	33	5
C91-85S	.5	35420	5	2	215	2.0	8	7120	.1	20	36	37910	2800	35	12640	489	1	200	43	1420	54	1	22	1	1440	79.5	263	5	2	3	47	5
C91-86S	.1	20960	4	1	98	-.1	6	4140	.1	11	23	43090	1440	23	7930	247	1	340	13	1530	30	1	13	1	1254	89.4	97	4	2	3	41	5
C91-87S	.2	29250	10	1	112	-.1	5	4360	.1	14	23	45490	1200	34	6600	334	1	100	15	1430	26	1	11	1	1089	68.0	105	3	2	3	41	10
C91-88S	.1	33270	3	1	114	.5	6	4420	.1	13	23	37580	1310	31	8240	282	1	90	22	860	33	1	12	1	1156	75.1	123	4	2	3	44	5
C91-89S	.4	37080	3	3	52	.9	3	17110	.1	20	19	50430	300	11	3970	1057	1	420	23	1830	30	1	93	2	402	18.5	62	3	1	1	18	5
C91-90S	.1	20410	1	1	79	-.1	6	3690	.1	10	14	32280	830	25	5490	326	1	80	12	1380	27	1	12	1	1136	62.8	87	4	2	2	30	5
C91-91S	.4	25790	1	1	121	.8	5	6380	.1	14	19	30150	1210	27	8240	439	1	190	26	1270	29	1	18	1	1062	60.3	115	4	2	3	35	5
C91-92S	.4	32150	7	1	66	-.6	8	4590	.1	16	19	39060	1300	35	9480	249	1	130	19	700	20	1	11	1	1444	59.2	152	4	2	3	41	5
C91-93S	.4	28910	5	1	66	-.2	6	3750	.1	12	14	34240	1300	35	6860	191	1	90	14	600	14	1	10	1	1313	55.9	118	5	2	3	38	10
C91-94S	.7	22760	7	1	114	-.1	8	5320	.1	13	17	33960	1150	29	8780	426	1	160	22	1080	31	1	12	1	1463	66.2	180	6	2	3	42	5
C91-95S	.3	18230	11	1	115	-.1	8	3860	.1	12	20	40740	1420	18	5270	420	1	80	7	780	24	1	11	1	1446	82.7	169	5	2	3	33	5
C91-96S	.5	20600	5	1	101	-.1	5	3750	.1	11	20	31150	1780	25	6490	260	1	90	18	620	20	1	13	1	1176	59.3	82	4	1	3	35	5
C91-97S	.7	28190	5	1	193	-.7	7	6090	.1	15	29	35520	2560	35	10420	511	7	160	32	910	31	1	19	1	1546	87.1	129	4	2	4	62	10
C91-98S	.3	31880	11	1	202	-.5	7	3860	.1	14	34	40720	2230	34	9480	364	1	110	34	1210	50	1	10	1	1403	94.8	148	4	2	3	38	5
C91-99S	.8	23980	9	1	144	1.2	6	5380	.1	14	29	31870	2130	26	8870	450	13	140	28	1220	30	1	14	1	1352	79.6	110	5	2	3	48	5
C91-100S	1.1	13970	6	1	73	-.1	5	2900	.1	7	17	26530	1560	9	4280	197	4	70	12	1260	22	1	10	1	1020	70.1	66	4	1	3	32	5
C91-101S	1.0	22650	8	1	104	1.2	7	2900	.1	13	37	33140	1750	20	7340	403	8	90	26	860	32	1	10	1	1464	73.1	107	6	2	4	52	5
C91-102S	.7	22980	6	1	97	-.7	5	2990	.1	12	27	34590	1830	24	6220	363	8	90	16	1050	25	1	10	1	1099	62.6	91	5	2	3	38	10
C91-103S	.6	17930	4	1	65	-.3	5	2980	.1	8	15	29810	1340	15	4280	203	8	80	6	720	23	1	11	1	1043	57.3	59	5	1	2	29	10
C91-104S	.2	23180	8	1	53	-.7	4	2740	.1	9	18	32920	940	23	5330	209	5	70	9	580	30	1	10	1	758	53.6	61	5	1	2	32	5
C91-105S	.8	25690	6	1	127	-.1	10	3840	.1	17	20	52600	1640	33	8600	282	3	520	12	950	25	1	9	1	2696	130.0	85	4	3	4	47	5
C91-106S	.5	17710	1	1	47	-.1	10	1280	.1	11	13	37380	1590	17	5750	148	1	70	5	1230	17	1	7	1	2364	110.5	48	6	3	3	35	5
C91-107S	.3	11700	2	1	65	-.8	4	3690	.1	7	7	18860	1140	14	3700	311	27	50	6	620	28	1	10	1	874	41.4	58	4	1	1	21	5
C91-108S	.3	11460	3	1	36	-.5	2	1620	.1	3	11	10640	560	8	1930	106	1	150	3	780	21	1	7	1	354	23.6	37	4	1	1	13	5
C91-109S	.2	10890	1	3	57	-.1	4	1900	.1	6	12	23380	800	6	1710	546	3	260	3	640	20	1	7	1	945	64.3	62	3	1	2	18	5
C91-110S	.7	19580	1	2	67	-.7	4	8530	.1	11	27	29000	1100	27	4100	1840	62	440	11	1140	24	1	28	3	904	59.3	150	3	1	3	28	5
C91-111S	.6	8010	1	1	31	-.1	4	1040	.1	2	7	5320	610	2	580	59	2	580	2	330	11	1	7	1	678	20.1	18	3	1	1	10	5

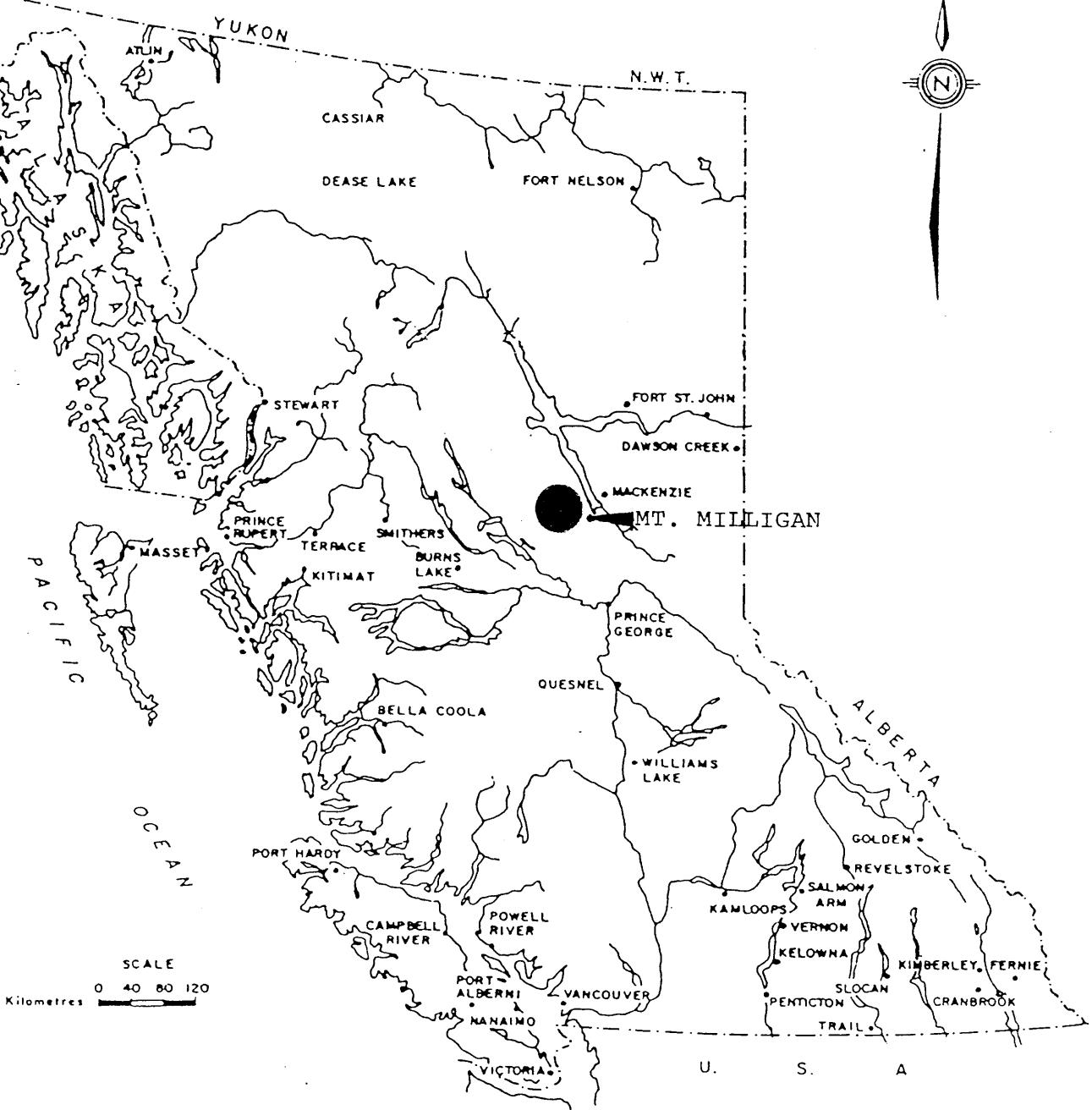
COMP: D.L. COOKE & ASSOCIATES LTD.

MIN-EN LABS — ICP REPORT
705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 1V-0866-SJ5

DATE: 91/08/27

* SILT * (ACT:F31)



D. L. COOKE AND ASSOCIATES LTD.

MT. MILLIGAN AREA

LOCATION MAP

CATO MINERAL CLAIMS

OMINECA M.D.

NTS 930/3W

D. L. COOKE AND
ASSOCIATES LTD.

OWN. BY:	DATE:
CHK. BY:	FIGURE
SCALE: AS SHOWN	

