NTS 082M/01W TRIM 082M 018
LAT. 51 07' 50" N
LONG. 118 27' 39 W

MT COPELAND PROJECT-
GEOCHEMICAL REPORT

COPELAND CREEK, JORDAN RIVER, B.C.

REVELSTOKE MINING DIVISION

FOR
TORCH RIVER RESOURCES LTD.,
BANKERS HALL, WEST TOWER,
SUITE 1000, 888-3rd Street SW,
CALGARY, AB T2P 5C5

BY

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SOOKE, B.C.
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DEC 2, 2011

TABLE OF CONTENTS **Page Number**

LIST OF FIGURES

BRITISH COLUMBIA

Ministry of Energy & Mines
Energy & Minerals Division
Geological Survey Branch

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TITLE OF REPORT [type of survey(s)]: Geochemical Report

TOTAL COST: $13,957.26

AUTHOR(S): Andris Kikauka SIGNATURE(S): A. Kikauka

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): no surface disturbance YEAR OF WORK: 2011

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S): 5004042

PROPERTY NAME: Mount Copeland

CLAIM NAME(S) (on which work was done):

COMMODITIES SOUGHT: REE-Y-Nb-Ti-Mo-W

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 082M.002

MINING DIVISION: Revelstoke NTS: 082 M/1W BCGS 082M.018

LATITUDE: 51 ° 07 ' 50 " LONGITUDE: 118 ° 27 ' 39 " (at centre of work)

OWNER(S)

1) WE Pfaffenberger 2)

MAILING ADDRESS

4-4522 Gordon Point Dr
Victoria BC V8N 6L4

OPERATOR(S) [who paid for the work]

1) Same 2)

MAILING ADDRESS

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
Proterozoic nepheline syenite (K-spar porphyroblasts, augen texture) gneiss adjacent to diopside-garnet-actinolite calc-silicates. Fenitization, caused by peralkaline solutions, has resulted in REE bearing minerals apatite, zircon pyrochlore, columbite, tantalite, allanite, and monazite, trending 110 degrees, 5 dip -40

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 679, 776, 1788, 8752, 24328

(OVER)

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for ...)			
Soil	9 multi-element REE pkg ME-MS81	501827	4,782.71
Silt			
Rock	22 multi-element REE and Base metals	501827	9,174.55
Other			
DRILLING (total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST	13,957.26

1.0 SUMMARY

Mount Copeland nepheline syenite complex geologically correlates with the west flank of the Frenchman's Cap gneiss dome, which includes REE enriched deposits located along the Perry River/Ratchford Creek and Mount Grace areas. Rare Earth Elements, Yttrium, Niobium & Zirconium bearing mineralization has been identified on Mt Copeland Project mineral tenure 501827. Adjacent tenures 546342, 706490, 706491, 834169, 837784, including 501827 comprise the 'Copeland Project' tenure group. Geochemical analysis of rock-soil samples from tenure 501827 identifies significant REE-Y-Nb–Mo values occur in the 'Marble Breccia Ridge Zone' (adjacent to and 100 m in elevation above the 1970-73 molybdenum mine workings), as well as the '2300 Zone' bearing mineralization located on Copeland Ridge (Fig 4).

Copeland Project mineral tenures are situated within the Revelstoke Mining Division, located approximately 30 km northwest of Revelstoke at the headwaters of Hiren Creek (Fig. 1 & 2). Access to the property is by helicopter (Selkirk Helicopters Ltd., Westside Road, Revelstoke) or by hiking abandon mine access road 11 km up Hiren Creek valley (on north side of valley) along access road to the de-actified south portal at 6,100 ft, 1,859.3 m elevation (site of haulage tunnel & nearby mill site that was active in 1970-73).

Marble Breccia Ridge and 2300 Zones were the focus of 2011 fieldwork, consisting of 22 rock chip, and 9 soil samples (Fig 5-11). Rock chip samples were analyzed by lithium borate fusion with ICP-MS finish, (Pioneer Labs, Richmond, BC certificate 2111123), and aqua regia digestion, multi-element ICP analysis (Pioneer Labs, Richmond, BC certificate 2111123A). A total of 9 soil samples were analyzed by lithium borate fusion with fusion ICP-MS finish, code ME-MS81 (ALS Minerals, N Vancouver, BC certificate VA11233292). Elevated values of cerium, lanthanum, neodymium, praseodymium, samarium, dysprosium, gadolinium, europium, thorium, zirconium, strontium, potassium, calcium, manganese, molybdenum, lead, zinc, silver & titanium occur in rock chip samples from Marble Breccia Ridge Zone listed in the following table:

Marble Breccia Ridge Zone Rock Chip Samples (5 of 10 samples highlighted, Fig 6, 10 & 11):
(Easternmost 5 X 15 m outcrop, at 2010 rock sample site COPE10AR-22, 2163-2166 m elev)

Rock sample	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm Sm	ppm Dy	ppm Gd	ppm Eu	ppm Th	ppm Zr	ppm Sr
804	2220	1650	432	155	59.3	42.8	48.1	16.3	407	291	476
805	2120	1740	339	133	40.9	34.1	33.7	11	405	113	629
808	3440	2790	552	218	65.6	64.2	57.2	18.3	575	164	290
809	1820	1540	277	112	31.5	25.6	25.1	7.84	527	149	1449
810	2920	2690	389	168	41.6	33.9	33.8	10.5	351	81	1028

Rock sample	% K	% Ca	ppm Mn	ppm Mo	ppm Pb	ppm Zn	ppm Ag	% Ti
804	.72	2.42	1237	8	43	82	.4	.19
805	1.18	3.7	2375	25	599	155	.7	.34
808	1.2	4.51	5953	70	863	337	.4	.29
809	1.03	5.69	1778	21	263	97	.2	.27
810	.46	6.79	807	3	19	39	.3	.11

NOTE- all 5 rock chip samples listed represent a sampled true width of 0.5 m.

Elevated values of cerium, lanthanum, neodymium, praseodymium, zirconium, & strontium and relatively low values of uranium & thorium occur in rock chip samples from 2300 Zone listed in the following table:

2300 Zone Rock Chip Samples (5 of 12 samples highlighted, Fig 6 & 7):
(between 2250-2335 m elevation on Copeland Ridge)

Rock sample	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm U	ppm Th	ppm Zr	ppm Sr
11AR-201	103	39.8	41.5	11.7	8.7	11.7	>1000	223
11AR-202	362	170	97.5	32.5	4.66	11.5	489	1340
11AR-209	249	128	93	26.8	6.73	11.1	432	495
11AR-210	343	168	103	32.3	5.14	9.7	563	2052
11AR-212	220	102	19	19	1.07	3.1	>1000	253

NOTE- 5 rock chip samples listed represent a sampled true width of 0.45-0.6 m.

Elevated values of cerium, lanthanum, neodymium, praseodymium, niobium, zirconium, rubidium, & strontium and relatively low values of thorium occur in soil samples from 2300 Zone listed in the following table:

2300 Zone Soil Samples (7 of 9 samples highlighted, Fig 6, 8 & 9):
(between 2264-2337 m elevation on Copeland Ridge)

Soil sample	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm Nb	ppm Th	ppm Zr	ppm Rb	ppm Y
1	678	399	191.5	61.9	398	37	2580	143.5	145.5
2	840	293	195.5	59.9	329	44.9	2450	187	109.5
3	602	325	181.5	58.4	297	27.2	1720	205	133
4	953	527	319	99	445	31.7	2160	175	267
5	426	223	126	40.8	340	16.9	2310	300	106
8	1325	678	428	139	733	67.2	4310	255	348
9	277	152	94.3	29	391	16.6	4060	202	74

The geological setting for the Copeland molybdenite-REE occurrence is within concordant bodies of nepheline syenite gneiss that occur adjacent to the calc-silicate gneiss and marble unit. The syenite have locally developed an augen texture with large porphyryblasts of K-feldspar in a fine-grained groundmass. Calc-silicate assemblages contain diopside, garnet and actinolite. Carbonates and carbonatites are re-crystallized to medium and locally coarse-grained granoblastic marbles and biotite-amphibole rich marble that has extremely high soda and potash content, and this is likely attributed to fenitization, caused by peralkaline fluids. These fluids are thought to complex and transport REE, associated with minerals such as apatite, zircon, pyrochlore, allanite, monazite and bastnaesite.

Mount Copeland Glacier Zone features underground production (1970-73) that extracted 169,729 tonnes and recovered 2,625,046 pounds (1,190,713 kilograms) of molybdenum. When the Mount Copeland Glacier Zone molybdenum mine went into production in 1970, development work (diamond drilling, mapping, sampling) indicated there was 163,340 tonnes @ 1.1% Mo (Fyles, 1973). Mount Copeland nepheline syenite complex geologically correlates with the west flank of the Frenchman's Cap gneiss dome, which includes REE enriched deposits located along the Perry River/Ratchford Creek and Mount Grace areas.

Mount Copeland nepheline syenite has high background values of rare earth elements such as Nb, Rb, Nd, Ce, La, and Y (with significant values of Zr, Sr, and Ti). Marble Breccia Ridge, with REE bearing minerals such as monazite-columbite-tantalite (and other complex unidentified minerals), account for above average REE, yttrium, niobium & titanium values hosted in marble, calc-silicate, and syenite lithologies (pegmatite and aplite phases). Torch River Resources will be following up potential REE targets with exploration geochemistry, geophysics and diamond drilling in the area of the molybdenite occurrences and exploring granoblastic marble to test for REE mineral potential.

In order to complete follow-up exploration work on REE, Y, Nb, Ti, Zr and molybdenum bearing mineralization present on the subject property, a 2 phase fieldwork program is recommended. Phase 1 recommendations include 3,000 feet of core drilling (914.4 m), geological, geophysical and geochemical core and rock chip sampling with a proposed budget of $300,000.00. Contingent on the results of phase 1, a second phase of core drilling, rock sampling and geological/geochemical surveys is recommended. The estimated total budget for phase 2 is $500,000.00. The total recommended core drilling for phase 2 is 5,000 feet (1,524 m). The total recommended expenditures to complete proposed two phase program are about $800,000.00. This recommendation of expenditures is intended as a general guideline for further exploration and is not compliant to National Instrument 43-101.

2.0 INTRODUCTION AND TERMS OF REFERENCE

This report summarizes geological fieldwork carried out on the Copeland claim and evaluates economic mineral potential of REE, Y, Nb, Ti, Zr and molybdenum-tungsten bearing mineral zones as well as nepheline syenite (industrial mineral with numerous commercial applications) situated within the subject property. The purpose of the report is to qualify targets for future exploration/development on the subject property, and compliance with requirements of assessment reports.

This report is partly based on geological fieldwork carried out by the author, who was present on the subject property between August 2-9, 2011. This report is partly based on published and unpublished fieldwork reports carried out by various private sector mining company personnel and public sector government personnel as well as fieldwork carried out by the author on the Copeland claim. Geological and geochemical data compilation has identified numerous areas of interest. Potential exists for the discovery of economic concentrations of REE, Y, Nb, Ti, Zr and molybdenum-tungsten bearing mineralization.

3.0 DISCLAIMER

This report is comprised of a compilation of data based in part on documents and technical reports prepared by various authors. The portions of this report that give information gathered from various authors are referenced. Documents & technical reports from various authors were used to compile Copeland Molybdenum property history.

4.0 PROPERTY DESCRIPTION AND LOCATION

Copeland claim group, Revelstoke MD. Details of claims are listed in table as follows:

Claim Name	Mining Division	Area	Tenure Number	Issue Date	Expiry Date
No Name	Revelstoke	405.633 Ha	501827	Jan 12, 2005	Oct 16, 2018
Mt Copeland 4	Revelstoke	324.479 Ha	546342	Dec 2, 2006	Dec. 2, 2018
Copeland 2	Revelstoke	142.01 Ha	706490	Feb 17, 2010	Feb. 17, 2017
Copeland 3	Revelstoke	121.68 Ha	706491	Feb 17, 2010	Feb. 17, 2017
Copeland 4	Revelstoke	324.43 Ha	834169	Sept 23, 2010	Oct 26, 2016
Mt Copeland 20	Revelstoke	162.18 Ha	837784	Nov 6, 2010	Oct 26, 2016
Mt Copeland 5	Revelstoke	223.23 Ha	838832	Nov 24, 2010	Oct 26, 2016
Copeland6	Revelstoke	182.66 Ha	935569	Dec 1, 2011	Dec 1, 2012

Note- extended expiry date based on filing a statement of qualified assessment work
Note- The last tenure listed was acquired after the work was done and is not part of qualified work reported in this document.

The claims are registered to William E Pfaffenberger (president, Torch R Res). The total area of the mineral tenures is approximately 1,703.642 hectares. The claims are 100% owned by Torch R Res Ltd, with an underlying royalty (by Letter of Agreement) to original title holders.

The abandon mine access road is in need of repair at approximately 12 creek crossings where washouts and snow-slides have taken out parts of the roadbed that was constructed in 1969 by King Res Co. To the knowledge of the writer, the pre-existing mining and related exploration activity (published work and unpublished activity) that has occurred on the Copeland property from 1966 to 2007 would not adversely affect exploration and development on the mineral tenures owned by Torch R Resources Ltd.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Access to the property is by helicopter from Revelstoke or by hiking up the abandon road that follows Hiren Creek to the south facing slope of Copeland Ridge.

The Copeland property has cool/cold moderately wet winters and warm relatively dry summers. Total yearly rainfall on the property is estimated at between 35-55 inches (88.9-137.5 cm). At higher elevations of 1,900-2,400 meters (6,232-7,872 ft) above sea level, work could be carried out between June and October. Snowfall, avalanche hazard and cold weather would hamper activity in the winter months.

The primary vegetation is mixed fir-hemlock-cedar-spruce. The landforms are typical alpine terrain of the Selkirk Mountains which contain uplifted, foliated and folded intrusive, meta-sedimentary and meta-volcanic rocks.

6.0 COPELAND PROPERTY HISTORY

During 1964, several claims (Joan and Knox) were staked on the north side of Copeland Ridge in the vicinity of the existing claim. These claims were purchased by King Resources Company from Gulliver Mining and Exploration in January 1965. Additional staking in the area of the existing workings was accomplished during the summer of 1965. In 1966, the "Glacier Zone" was discovered, channel samples were taken, the zone was mapped, and a bulk sample was shipped to Colorado School of Mines Research Foundation for analysis and preliminary metallurgical testing. A short field season did not allow time for further work on the property until 1967 when 6 diamond drill holes were collared on the Glacier Zone. Encouraging drill results led King Resources to initiate an underground operation on the north side only. In 1967, approximately 700 feet of cross-cutting and drifting took place on the north side (Glacier Zone), and Interior Engineering Services Ltd provided a geodetic and astronomic survey of the Glacier Zone. In 1968, King Resources excavated a 6,000 ft (1,828.8 m) adit cross-cut and 600 ft (182.9 m) raise. Access to the site was via a 11 km long road along the north side of Hiren Creek valley and a camp was erected near the south portal.

The following consultants and contractors have prepared various reports and/or worked on certain aspects of the Copeland molybdenum mine: 1) George Wilson – geology, 2) M.C. Robinson – geology, 3) Interior Engineering Services Ltd. – Surveying, Road, Power, and Water, 4) Colorado School of Mines Research – Ore Beneficiation, 5) Versatile Engineering – General Contractors, 6) Rupert Drilling – Underground drilling contractors, 7) Chapman, Wood, & Griswold Ltd. – General Advisory, 8) E.H. Robinson – Mill Design.

Recorded production from 1970 to 1973 comprised 191,126 tonnes. A total of 169,729 tonnes of ore was milled produced 1,190,713 kilograms (2,622,715 pounds) of molybdenum (source: MINFILE).

In 1996, Discovery Consultants staked the Copeland claim and completed a program of whole rock sampling of the nepheline syenite body located south of the molybdenite occurrence. A total of 8 different sites were sampled and results indicated that sampling of nepheline syenite and nepheline syenite gneiss on the property shows that several samples fall within the range of commercial deposits exploited for the use as an industrial mineral and recommended detailed mapping and sampling on the property to define the grade and assess the extent of high-purity grade nepheline syenite on the Copeland claim.

In 2008, Torch R Res Ltd carried out diamond drilling (see section 11), and soil geochemical analysis and magnetometer geophysics. Soil geochemistry identified a 150 X 100 m area which averaged 673.4 Mo in soil located near the old workings. This Mo

in soil anomaly extends east of the adit and suggests there are extensions of the old workings to the east. Also, a new Mo in soil zone was identified in the West Basin where 3 samples returned anomalous Mo (average value 190.1 ppm Mo). The West Basin Zone is located 450-550 m west of the adit. Additional anomalous Mo in soil (501 ppm Mo) was detected directly below the Sub-Portal Zone (located 100 m NE of adit), and can be considered an additional target for future exploration.

In 2008, Torch R Res magnetometer surveys were carried out on E-W surveyed tie lines. A well defined 1000-2000 nT (high intensity) positive total field anomaly (about 300 m in length) was identified. This magnetometer anomaly is associated with the marble bands located in the Marble Breccia Ridge Zone. This positive magnetometer anomaly suggests the presence of massive magnetite (and/or pyrrhotite) and related skarn type mineralization. There are some old trenches in this area, but a reconnaissance soil geochemical analysis of this area in 2005 resulted in little or no anomalous Mo values (Note-REE, Y, Nb, Th was not analyzed).

Marble Breccia Ridge Zone contains 4 positive total field anomalies identified by a magnetometer survey carried out in 2008. These positive total field magnetic anomalies (moderate strength 200-500 nT increase, strong >500 nT increase) are listed as follows:

Easting	Northing	Elevation	Relative strength	Zone Name
397350	5665500	2320 m	Moderate	West Basin
397500	5665350	2340 m	Strong	Marble Bx Ridge
397550	5665350	2335 m	Moderate	Marble Bx Ridge
397650	5665300	2340 m	Strong	Marble Bx Ridge
397600	5665250	2410 m	Moderate	Marble Bx Ridge
397690	5665250	2395 m	Moderate	W Glacier

The 2008 magnetometer survey strong anomalies are located in an area of marble with extensive zones of pyrrhotite and/or magnetite/ilmenite replacement mineralization which coincides with elevated REE geochemical analysis of rock chips taken in 2010 for Torch R Resources (COPE10AR-22 to 26 are from Marble Bx Ridge). These geophysical anomalies represent potential for buried sulphide/oxide REE bearing mineralization and are represent priority drill targets.

Soil and rock chip samples were analyzed by lithium borate fusion with ICP-MS finish, and Mo assay (Pioneer Labs, Richmond, BC certificate 2102718). A total of 8 select rock chip samples were re-analyzed by lithium borate fusion with ICP-MS finish ME-MS61 (ALS Chemex Labs, N Vancouver, BC certificate VA10144345). A compilation of geochemical analysis (and assays for Mo), is listed as follows:

rock no	% Mo	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm Sm	ppm Y	ppm Dy	ppm Nb	% Ti	Ppm Zr
10AR-1	**0.63**	165.2	79.7	49	15.1	7.1	31.3	5.7	94.9	0.058	4
10AR-2	0.49	132.1	44.3	36.2	12	4.1	8.2	1.8	74.2	0.094	3
10AR-3	**0.95**	**1855**	**1105**	**531.2**	**165.5**	47.4	113	24.5	**3760**	**0.966**	**979**
10AR-4	**1.33**	297.8	187.3	80.3	26.6	10.4	39.1	7.5	**3450**	**2.587**	19
10AR-5	**0.56**	142.9	79.7	45.1	14.2	6.7	18.6	4	**18500**	**1.396**	11
10AR-9	**0.77**	103.3	51.8	36.2	10.7	6.2	32.3	5.4	**641.9**	**0.771**	5
10AR-10	**1.2**	116.3	66	33.5	11.2	4.7	11.7	2.2	43.9	0.037	16
10AR-11	0.1	396.1	170.1	128.8	39.8	23.1	**101.1**	18.5	84.2	0.287	5
10AR-12	0.01	**1110**	**638**	**241**	92.6	23.2	66.1	12.1	255	0.287	**638**
10AR-14	0.19	35.5	20.1	11.3	3.5	1.7	4.1	0.8	18.2	0.055	1
10AR-15	0.21	96.3	47.4	39.4	10.7	6.3	19.5	3.9	23.8	0.117	8
10AR-19	0.01	**754**	**742.5**	**175.5**	61.2	22	76.5	11.8	**236**	**1.466**	**1865**
10AR-20	0.01	**131000**	**102000**	**17650**	**7700**	**1200**	**623.8**	**284.1**	**527.4**	**2.928**	**6190**
10AR-22	0.01	**18450**	**18200**	**2550**	**1185**	**209.6**	**414.8**	**80.1**	31.4	0.277	136
10AR-23	0.01	**1270**	**1205**	**176.3**	87.1	23.1	**103.8**	16.7	73.5	0.361	484
10AR-24	0.21	183	164.1	37.4	13.3	4.6	23.2	3.7	22.1	0.171	6
10AR-25	0.01	593	**722.3**	99.9	43.3	13.7	**106.9**	17.2	147.1	0.566	219
10AR-26	0.22	**1440**	**1520**	**166.8**	89.2	24.6	**152.4**	20.6	35.3	0.254	95
10AR-27	**0.92**	23.5	15	7.5	2.3	1.3	3.4	0.7	32.1	0.227	6
10AR-28	0.43	191.4	129.7	45.8	15.8	6.7	25.3	4.4	89.6	0.486	12
10AR-30	**3.4**	175.1	99.4	70	20.6	12.6	38.5	8.5	126.8	0.06	7

rock no	width cm	elev m	strike	dip	zone name	comments
10AR-1	100	2056	100	45 S	Glacier Mine	K-spar, kaol, chlorite, trace pyo
10AR-2	120	2053	105	48 S	Glacier Mine	K-spar, kaol, chlorite, trace pyo
10AR-3	60	2046	100	45 S	Glacier Mine	K-spar, kaol, chlorite, trace pyo
10AR-4	100	2076	103	47 S	Glacier Mine	450 cm wide peg-aplite zone
10AR-5	100	2079	100	39 S	East ext, Glacier	K-spar, chlorite
10AR-9	200	2059	114	52 S	East ext, Glacier	K-spar, kaol, chlorite, trace pyo
10AR-10	100	2055	112	50 S	East ext, Glacier	K-spar, kaol, chlorite, trace pyo
10AR-11	52	2032	115	51 S	East ext, Glacier	K-spar, kaol, chlorite, trace pyo
10AR-12	float	1980			Sub-portal	angular float, 1% magnetite
10AR-14	200	1939	140	62 SW	J-5	increased limonite-chlorite with Mos2
10AR-15	20	1977	135	20 S	Sub-portal	3 m north is open cut
10AR-20	18	2270	110	48 S	Glacier.East	red-yellow-brown gossan in cliff
10AR-22	70	2170	101	30 S	West Marble Ridge	350 cm wide py-pyo-ank skarn band
10AR-23	180	2169	100	30 S	West Marble Ridge	275 cm wide py-pyo-ank skarn band
10AR-24	280	2181	100	50 S	West Marble Ridge	limonitic aplite-carbonate breccia contact
10AR-25	25	2204	100	34 S	West Marble Ridge	limonitic aplite-carbonate breccia contact
10AR-26	30	2218	100	34 S	West Marble Ridge	limonitic aplite-carbonate breccia contact
10AR-27	25	2212	115	62 S	West Marble Ridge	limonitic aplite-carbonate breccia contact
10AR-28	22	2203	105	63 S	West Basin	K-spar, kaol, chlorite, trace pyo
10AR-30	float	2171			West Basin	K-spar, kaol, chlorite, trace pyo

In 2010, Petrographic descriptions were done by Vancouver Petrographics Ltd on 3 rock chip samples; COPE10AR-3, 20 & 22, that contained the highest REE values. These 3 rock chip samples consist of leucocratic syenite, unknown and syeno-monzonite gneiss host rock (respectively). Based on Petrographic descriptions (2010) on samples from the Glacier Zone, East Glacier Zone & Marble Ridge Zone, REE bearing minerals include:

COPE10AR-3: monazite? (pyrite-green biotite-chlorite-carbonate-phlogopite-sphene-magnetite gangue).

COPE10AR-20: REE oxides? Columbite? Allanite? (iddingsite?-amphibole-carbonate-quartz-plagioclase-sphene gangue).

COPE10AR-22: REE oxides (K-feldspar-plagioclase-pyrrhotite-pyrite-marcasite-limonite-carbonate-sphene gangue).

Mean average values for elements listed, from 72 soil samples geochemically analyzed:

Ce	Dy	Er	La	Nd	Pr	Sm	U	Y	Nb	Ti
519.0 ppm	19.0 ppm	11.0 ppm	389.6 ppm	170.5 ppm	60.0 ppm	29.0 ppm	21.5 ppm	104.7 ppm	323.3 ppm	0.98 %

Anomalous REE, Y, Nb, Ti, Zr values in soil samples are widespread. The areas that have the highest concentrations of REE, Y, Nb, Ti, Zr values in soil include Glacier East extension (especially where the soil grid terminates to the east up against the steeper portions of the receding glacier, where COPE10AR-3, 4 & 5 are located), Sub-Portal (La and Ti in soil is elevated, and Ti anomaly extends uphill to Glacier Zone), West Basin/Marble Breccia Ridge (elevated Zr, Ce, La, Nd & Nb in soil where COPE10AR-22 is located) and the East Glacier Zones (the steep cliff area on the east side of the glacier is where COPE10AR-20 is located)

Anomalous REE (La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu), yttrium (Y), zirconium (Zr), and niobium (Nb) values may be related to granitic intrusions that are associated with molybdenite-pyrite-pyrrhotite-ilmenite-magnetite-chalcopyrite mineralization. Mount Copeland nepheline syenite has high background values of rare earth elements such as Nb, Rb, Nd, Ce, La, and Y (with significant values of Zr, Sr, and Ti). REE bearing minerals monazite-columbite-tantalite (and other complex unidentified minerals) are hosted in marble, calc-silicate, and syenite (pegmatite and aplite phases). REE mineralization at Mt Copeland occurs in a tabular zone (as defined by highly anomalous REE samples COPE10AR-20 & 22) that occur roughly parallel to and approximately 100 meters uphill from the (110 trending, 25-50 degree south dipping), Copeland Glacier Zone Mo deposit (King Res underground workings, 1970-73). This mineral zone appears to be a stratabound (layercake metamorphic rocks), and is laterally extensive, however the distribution of REE minerals in this horizon is poorly understood. There does seem to be a correlation with REE's and magnetite/illmenite/pyrrhotite, and pegmatitic/aplitic phases of the nepheline syenite gneiss.

REE bearing mineralization occurs in the East Glacier Zone (e.g. rock chip sample COPE10AR-20). The East Glacier and Marble Bx Ridge Zones are about 500 meters apart, but they occur on the same stratigraphic horizon and may be part of an extensive REE bearing mineral zone that extends under the glacier. In addition to REE bearing mineralization, a zone of elevated molybdenum and coincident niobium occurs in the east extension of the Copeland underground workings. This area has been targeted for possible extensions of Mo bearing mineralization, but this zone appears to have elevated

Mo-Nb-Ti (e.g. rock chip sample COPE10AR-4 & 5). Also, directly adjacent to the underground workings there is a rock chip sample that contains elevated Mo-REE-Nb-Ti (rock chip sample COPE10AR-3).

7.0 GEOLOGICAL SETTING

The Copeland claim lies within the Shuswap Metamorphic Complex, a narrow belt of high grade (amphibolite-granulite facies) metamorphic rocks flanked to the north and south by the Aphebian (i.e. Canadian, Proterozoic orogeny) 'Frenchman's Cap' gneiss dome. This 'migmatitic core gneiss' is considered to be the center of the Shuswap Metamorphic Complex with fringes containing meta-sedimentary and meta-volcanic rocks that are intruded by syenite (pegmatite/aplite phases present suggesting >10 km depth of burial), which in turn has been folded and displaced by at least 3 different phases of deformation. The metasedimentary rocks comprise a series of rock units comprised of biotite schist, grey schist, white quartzite, calc-silicate gneiss, marble and grey gneiss. Concordant bodies of nepheline syenite gneiss occur within the calc-silicate gneiss and marble unit. The margins of the syenite bodies are nepheline-free, which may be the result of reaction with enclosing rocks. Amphibolite grade metamorphism occurring on a regional scale at the margins of the Frenchman's Cap gneiss dome has produced sillimanite-kyanite, sillimanite, and sillimanite-potassic feldspar bearing assemblages in pelitic rocks. Calc-silicate assemblages contain diopside, garnet & actinolite. Carbonates are re-crystallized to medium and locally coarse-grained granoblastic marbles.

The following lithologies (distinct rock units) are present on the Copeland claim:

PROTEROZOIC (PRE-CAMBRIAN)

8- Syenite Aplite/Syenite Pegmatite: K-feldpsar, kaolinite, sericite, calcite, biotite, pyrrhotite, pyrite, molybdenite, ilmenite, chalcopyrite, scheelite
7- Hangingwall Syenite Gneiss, Nepheline Syenite: microcline/oligoclase, green/brown mica, chlorite, accessory apatite, zircon, & sphene
6- Biotite-Amphibole Marble: weathered and deeply pitted appearance, biotite, hornblende, chlorite, marble, actinolite, diopside
5- Black Biotite Amphibole Gneiss: schistose, biotite, hornblende, chlorite, oligoclase, magnetite
4- Quartzite Gneiss: massive feldspar, granular texture, interbedded marble bands with actinolite and diopside
3- Footwall Schist: massive biotite, minor feldspar, chlorite
2- Footwall Syenite Gneiss: brown weathering, microcline/oligoclase, green/brown mica, chlorite
1- Green Diopside Gneiss: 50% feldspar, 10-35% biotite, 2-10% green diopside,

The 8 listed and physically distinct rock units have been subjected to 3 phases of deformation. The oldest folds are recumbent and isoclinal with deformed axial surfaces and shallow easterly or westerly plunging axes. Second phase of folds have overturned axial surfaces which dip steeply to the southwest and south. A broad curvature of

foliation around the southwest portion of the Glacier Zone is referred to as a phase 3 fold. Lenses of syenite pegmatite or syenite aplite are common along the northern border of the nepheline syenite unit, and because of their concentrations of molybdenum, are the main focus of economic interest. Characteristically, the syenite aplite/pegmatite are parallel with foliation, but locally they cross it. Massive disseminated molybdenite occurs randomly in the aplite and pegmatite lenses, and to a lesser extent in calc-silcate gneisses adjacent to the syenite-gneiss contact. During the life of the Copeland moly mine, almost all the production was from the aplite-pegmatite bodies within the syenite gneisses; more specifically the Glacier Zone, which is 1-10 meters thick and exposed for 121 meters along strike. The Glacier Zone occurs in a digitation of either a fold limb or a sill of syenite gneiss in the calc-silcate gneiss unit. In these digitations, the syenite gneiss appears to be free of nepheline.

8.0 DEPOSIT TYPES

The 6950 Glacier Zone (2030-2115 m, 6658-6937 ft elevation) consists of vein/replacement molybdenite (and niobium) bearing mineralization that is hosted in metamorphosed soda syenite. Sulphide mineralization is associated with late-stage differentiates including sugary textured aplite and very coarse-grained microcline megacrysts (pegmatite). In addition to aplite/pegmatite veins, zones of pyrite-pyrrhotite-magnetite mineralization are associated with abundant calcite and inter-layered marble suggesting this deposit type can also be classified as a metamorphosed skarn.

In the Marble Breccia Ridge Zone (2150-2200 m, 7050-7216 ft elevation), calcite (marble) occurs as 1-5 cm wide lenses, streaks, granoblasts, and massive 5-15 m wide layers. The calcite is present in small amounts and locally prominent in the syenite gneiss. The distribution of calcite-diopside-epidote in the syenite/gneiss contact zone suggests a skarn fluid metasomatic process of mineral emplacement (i.e. calcic skarn mineralization), however the environment of formation i.e. replacement 'exoskarn' or replacing earlier skarn alteration 'retrograde skarn' is still in question. The Marble Breccia Ridge Zone with REE bearing minerals such as monazite-columbite-tantalite (and other complex unidentified minerals), account for above average REE, yttrium, niobium & titanium values hosted in marble, calc-silicate, and syenite lithologies (pegmatite and aplite phases). Marble Breccia Ridge Zone is also the location of several 1000-2000 nT positive magnetometer anomalies, suggesting the presence of massive magnetite and/or pyrrhotite associated with this marble band (Kikauka, 2008).

Mount Copeland nepheline syenite complex geologically correlates with the west flank of the Frenchman's Cap gneiss dome, which ineludes REE enriched deposits located along the Perry River/Ratchford Creek and Mount Grace areas. The Glacier Zone geochemical survey indicates there is anomalous Nb and Ce near the adit and may be related to granitic intrusions that are associated with molybdenite-pyrite-ilmenite-magnetite-chalcopyrite mineralization. Mount Copeland nepheline syenite has high background values of rare earth elements such as Nb, Rb, Nd, Ce, La, and Y (with significant values of Zr, Sr, and Ti). The syenite have locally developed an augen texture with large porphyryblasts of K-feldspar in a fine-grained groundmass. Calc-silicate assemblages

contain diopside, garnet and actinolite. Carbonates and carbonatites are re-crystallized to medium and locally coarse-grained granoblastic marbles and biotite-amphibole rich marble that has extremely high soda and potash content, and this is likely attributed to fenitization, caused by peralkaline fluids.

9.0 ALTERATION & MINERALIZATION

In the syenite gneisses, feldspars are clouded by kaolinite alteration or stained pink by sericite-calcite alteration. Biotite is locally chloritized. The pegmatite-aplite zones are similarly altered. Epidote and chlorite coat late-stage fractures in the rocks. Veinlets commonly consist of calcite, potassium feldspar or rarely, quartz. Minor constituents of the syenite gneiss include zircon, sphene, apatite, magnetite and minor fluorite, pyrite, pyrrhotite, magnetite, ilmenite, molybdenite, & chalcopyrite. Lenses of molybdenite-bearing syenite aplite and syenite pegmatite have been folded into tightly compressed, overturned (phase 2) folds plunging 15 degrees southeast. The axial surfaces dip at moderate angles to the south. The contacts between aplite, pegmatite, and/or syenite gneiss may be either sharp or gradational. Pegmatite and aplite have similar mineralogies. Both are leucocratic relative to the enclosing gneisses but both have mafic-rich folia and lenses. Potassium feldspar is the dominant mineral. Locally, the pegmatite matrix consists of masses of calcite that contain clusters of biotite, pyrrhotite, pyrite, ilmenite. Minor amounts of zircon are present; quartz is rare but occurs interstitially or as vug fillings. The iron oxide minerals magnetite and ilmenite are common, locally forming equant grains and blebs to 2 cm across. Sulphide minerals present include pyrite, pyrrhotite, molybdenite, and rare chalcopyrite. The sulphide mineral trends (including the 6950 Glacier, 7000 Glacier West, 6420 Pegmatite, 6400 Quartz-Gneiss, 6,300 J-5, 6650 East Basin) are all roughly sub-parallel, and trend at 110 degrees, dipping 30-70 degrees to the south.

Molybdenite has a number of habits; it may be disseminated, form clumps and rosettes of crystals along hairline cracks, fill vugs, or occur as intergrowths in calcite, sericite, and/or potassium feldspar (rare quartz as veins and patches). Large crystals of molybdenite contain inclusions of potassium feldspar, calcite and zircon. Molybdenite also occurs in potassium feldspar crystals, and commonly concentrated around potassium megacrysts in the syenite pegmatites as well as aplitic texture syenite. Pyrite and pyrrhotite are distributed as disseminations, fracture fillings and vug infillings adjacent to molybdenite mineralization.

Elevated REE, Y, Nb, Ti and Zr geochemical values are associated with pyrite/pyrrhotite-magnetite bearing pegmatitic, aplitic, and breccia textured nepheline syenite gneiss, as well as pyrite/pyrrhotite-magnetite bearing, altered calc-silcate (calcite, diopside, tremolite, epidote, scapolite, & idocrase) in country rock (exoskarn, replacement type mineralization). These fluids are thought to complex and transport REE, associated with minerals such as apatite, zircon, pyrochlore, allanite, monazite, columbite, tantalite and bastnaesite are hosted in marble, calc-silicate, and syenite (pegmatite and aplite phases). REE mineralization in Marble Breccia Ridge Zone occurs in a tabular zone roughly parallel to and approximately 100 meters uphill from the (110 trending, 25-50 degree

south dipping), Copeland Glacier Zone Mo deposit, defined by King Res underground workings, 1970-73 (Fig 4 & 10).

10.0 DRILLING (HISTORIC AND RECENT)

Eight diamond drill holes were located in the area of the 6950 Glacier Zone by King Resources Company in 1970. These drill holes intersected significant Mo values as indicated below:

DDH No. (year drilled, s-surface	DIP	AZIMUTH	END OF HOLE m. (ft.)	FROM m. (ft.)	TO m. (ft.)	INTERVAL m. (ft.)	% Mo
S701 (s-1970)	-80	0	30.17 (99)	7.32 (24)	21.64 (71)	14.32 (47)	0.14
S702 (s-1970)	-80	75	36.88 (121)	23.16 (76)	27.13 (89)	3.96 (13)	0.095
S703 (s-1970)	-45	15	42.06 (138)	16.46 (54)	19.51 (64)	3.05 (10)	0.15
S704 (s-1970)	-80	315	38.71 (127)	21.34 (70)	35.05 (115)	13.72 (45)	0.218
S705 (s-1970)	-70	15	36.58 (120)	17.37 (57)	23.32 (76.5)	5.94 (19.5)	0.083
S706 (s-1970)	-80	15	57.61 (189)	26.82 (88)	36.88 (121)	10.06 (33)	0.235
S707 (s-1970)	-65	35	50.29 (165)	31.39 (103)	35.97 (118)	4.57 (15)	0.187
S708 (s-1970)	-45	320	63.40 (208)	58.52 (192)	61.11 (200.5)	2.59 (8.5)	0.454

Source- King Resources 1970 diamond drill sampling data, BC Min of Energy & Mines, Property File

Torch River Resources Ltd completed a program of diamond drilling, geological, geochemical and geophysical fieldwork on mineral tenure 501827 during August and September, 2008. Fieldwork consisted of 2,212.8 m (7,258 ft) of NQTW core drilling, 2.8 km grid lines for magnetometer survey, and a total of 53 soil (talus fines) samples were collected. Diamond drilling carried out on 2008 identified several new molybdenite bearing mineral zones located in the East Basin and West Glacier Zones. Highlights of geochemical analysis from the East Basin and Glacier West Zones are summarized from diamond drill hole data in the following table:

DDH No.	Zone Name	FROM (m)	TO (m)	WIDTH (m)	Sample ID #	% Mo
COP08-2	Glacier W	37.39	39.53	2.14	071	**0.068**
COP08-4	Glacier W	38.7	39.1	0.4	173	**0.061**
COP08-8	East Basin	116.8	117.2	0.4	414	**0.137**
COP08-8	East Basin	127.6	128	0.4	424	**0.086**
COP08-8	East Basin	161.55	161.85	0.3	446	**0.416**
COP08-9	East Basin	151.3	154	2.7	519, 520, 521	**0.214**
COP08-9	East Basin	152.4	153.1	0.7	520	**0.527**

Previous drilling has focused on the molybdenum bearing aplitic phases nepheline syenite complex. The new area of attention is the marble ridge breccia zone (pyrite/pyrrhotite-magnetite bearing rock chip samples COPE10AR-22 to 26), located approximately 100 meters uphill from the Glacier Mo zone. The Marble Breccia Ridge Zone represents significant REE, Y, Nb, Ti, Zr bearing mineral potential, and the east and west extension of this mineral trend are high priority diamond drill targets.

11.0 FIELDWORK RESULTS, AUGUST, 2011
11.1 ROCK GEOCHEMISTRY SURVEY (2011)

The geological setting for the Copeland molybdenite-REE occurrence is within concordant bodies of nepheline syenite gneiss that occur adjacent to the calc-silicate gneiss and marble unit. The syenite have locally developed an augen texture with large porphyryblasts of K-feldspar in a fine-grained groundmass. Calc-silicate assemblages contain diopside, garnet and actinolite. Carbonates and carbonatites are re-crystallized to medium and locally coarse-grained granoblastic marbles. Lithologies present are summarized as follows:

PROTEROZOIC (PRE-CAMBRIAN)

8- Syenite Aplite/Syenite Pegmatite: K-feldpsar, kaolinite, sericite, calcite, biotite, fluorite, garnet, sphene, specularite, pyrrhotite, pyrite, molybdenite, ilmenite, chalcopyrite, scheelite, tourmaline, apatite, riebeckite, poikilitic aegirine, zircon, zeolite, cancrinite, and analcite
7- Hangingwall Syenite Gneiss, Nepheline Syenite: K-feldspar, green/brown phlogopite, calcite, chlorite, accessory apatite, zircon, sphene, tourmaline, sphene, apatite, riebeckite, poikilitic aegirine, zircon, fluorite, zeolite, cancrinite and analcite
6- Biotite-Amphibole Marble: weathered and deeply pitted appearance, biotite, hornblende, chlorite, marble (granoblastic), actinolite, diopside
5- Black Biotite Amphibole Gneiss: biotite, hornblende, chlorite, oligoclase, magnetite
4- Quartzite Gneiss:feldspar, granular, interbedded marble bands, actinolite & diopside

Unit 6 (biotite-amphibole marble) has extremely high soda and potash content, and this is likely attributed to fenitization, caused by peralkaline fluids. These fluids are thought to complex and transport REE, associated with minerals such as apatite, zircon, pyrochlore, allanite, monazite and bastnaesite.

Marble Breccia Ridge and 2300 Zones were the focus of 2011 fieldwork, consisting of 22 rock chip samples. Rock chip samples were analyzed by lithium borate fusion with ICP-MS finish, (Pioneer Labs, Richmond, BC certificate 2111123), and aqua regia digestion, multi-element ICP analysis (Pioneer Labs, Richmond, BC certificate 2111123A).

Elevated values of cerium, lanthanum, neodymium, praseodymium, samarium, dysprosium, gadolinium, europium, thorium, zirconium, strontium, potassium, calcium, manganese, molybdenum, lead, zinc, silver & titanium occur in rock chip samples from Marble Breccia Ridge Zone listed in the following table:

'Marble Breccia Ridge Zone' 2011 Rock Chip Samples (5 of 10 samples highlighted, Fig 6, 10 & 11)):
(Easternmost 5 X 15 m outcrop, at 2010 rock sample site COPE10AR-22, 2163-2166 m elev)

Rock sample	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm Sm	ppm Dy	ppm Gd	ppm Eu	ppm Th	ppm Zr	ppm Sr
804	2220	1650	432	155	59.3	42.8	48.1	16.3	407	291	476
805	2120	1740	339	133	40.9	34.1	33.7	11	405	113	629
808	3440	2790	552	218	65.6	64.2	57.2	18.3	575	164	290
809	1820	1540	277	112	31.5	25.6	25.1	7.84	527	149	1449
810	2920	2690	389	168	41.6	33.9	33.8	10.5	351	81	1028

Rock sample	% K	% Ca	ppm Mn	ppm Mo	ppm Pb	ppm Zn	ppm Ag	% Ti
804	.72	2.42	1237	8	43	82	.4	.19
805	1.18	3.7	2375	25	599	155	.7	.34
808	1.2	4.51	5953	70	863	337	.4	.29
809	1.03	5.69	1778	21	263	97	.2	.27
810	.46	6.79	807	3	19	39	.3	.11

NOTE- all 5 rock chip samples listed represent a sampled true width of 0.5 m.

Elevated values of cerium, lanthanum, neodymium, praseodymium, zirconium, & strontium and relatively low values of uranium & thorium occur in rock chip samples from 2300 Zone listed in the following table:

'2300 Zone' 2011 Rock Chip Samples (5 of 12 samples highlighted, Fig 6 & 7):
(between 2250-2335 m elevation on Copeland Ridge)

Rock sample	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm U	ppm Th	ppm Zr	ppm Sr
11AR-201	103	39.8	41.5	11.7	8.7	11.7	>1000	223
11AR-202	362	170	97.5	32.5	4.66	11.5	489	1340
11AR-209	249	128	93	26.8	6.73	11.1	432	495
11AR-210	343	168	103	32.3	5.14	9.7	563	2052
11AR-212	220	102	19	19	1.07	3.1	>1000	253

NOTE- 5 rock chip samples listed represent a sampled true width of 0.45-0.6 m.

Mount Copeland nepheline syenite complex geologically correlates with the west flank of the Frenchman's Cap gneiss dome, which includes REE enriched deposits located along the Perry River/Ratchford Creek and Mount Grace areas. Mount Copeland nepheline syenite has high background values of rare earth elements such as Nb, Rb, Nd, Ce, La, and Y (with significant values of Zr, Sr, and Ti). Marble Breccia Ridge, with REE bearing minerals such as monazite-columbite-tantalite (and other complex unidentified minerals), account for above average REE, yttrium, niobium & titanium values hosted in marble, calc-silicate, and syenite lithologies (pegmatite and aplite phases). Torch River Resources will be following up potential REE targets on its 100% owned Mount Copeland mineral property. Management will be conducting REE exploration and diamond drilling in the area of the molybdenite occurrences and exploring granoblastic marble (Marble Breccia Ridge) to test for REE bearing minerals.

11.2 SOIL GEOCHEMISTRY SURVEY (2011)

A total of 9 soil samples (talus fines), were collected from the 2300 Zone (Fig 6, 8 & 9). All 9 soils were taken at 25-100 m spacing along a 110 bearing along the north and south side of Copeland Ridge (near 2300 m elevation). Soil sample sites were surveyed with a

Garmin 60Cx GPS, and 9 soil samples were analyzed by lithium borate fusion with fusion ICP-MS finish, code ME-MS81 (ALS Minerals, N Vancouver, BC certificate VA11233292, Appendix B).

The soil geochemical survey collected of a total of 9 samples consisting of 300-500 gms of talus fine material that was collected using a hoe and placed in marked kraft envelopes and dried. The soil samples were shipped to ALS Minerals Labs, N Vancouver, BC for lithium borate fusion preparation and REE suite ICP-MS (ME-MS81). Soil geochemical analysis identified what can be considered an additional target for future exploration.

Elevated values of cerium, lanthanum, neodymium, praseodymium, niobium, zirconium, rubidium, & strontium and relatively low values of thorium occur in soil samples from 2300 Zone listed in the following table:

'2300 Zone' 2011 Soil Samples (7 of 9 samples highlighted, Fig 6, 8 & 9):
(between 2264-2337 m elevation on Copeland Ridge)

Soil sample	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm Nb	ppm Th	ppm Zr	ppm Rb	ppm Y
1	678	399	191.5	61.9	398	37	2580	143.5	145.5
2	840	293	195.5	59.9	329	44.9	2450	187	109.5
3	602	325	181.5	58.4	297	27.2	1720	205	133
4	953	527	319	99	445	31.7	2160	175	267
5	426	223	126	40.8	340	16.9	2310	300	106
8	1325	678	428	139	733	67.2	4310	255	348

Soil geochemical analysis identified what can be considered an additional target for future exploration, the 2300 Zone has the highest overall Zr in soil values relative to all the lower elevation zones (i.e 1950-2200 m elev). The increased Zr in soil within the 2300 Zone correlates with increased Zr in rock chip samples, and partially correlates with increased REE values in soil. The 2300 Zone area is a low priority follow-up exploration target because soil and rock chips do not respond as well as the Marble Breccia Ridge and Glacier Zones to the north and at lower elevations. A rudimentary magnetometer survey, to cover the area where 2011 soil samples 1-5, 8 & 9 are located (Fig 8 & 9), may be useful to investigate the cause of the anomalous REE, Y, Zr in the east & west portion of 2300 Zone. The easternmost samples are close to the 'Big Gully' that trends 020 degrees towards the molybdenum mine located approximately 500 m to the NNE. The westernmost samples of the 2300 Zone are near the ridge crest and there are few cliffs, unlike the north facing 'Big Gully' which is a series of cliffs.

12.0 SAMPLING METHOD AND APPROACH

Rock chip samples were collected from outcrop exposures of 45-60 cm in a line perpendicular to 110 bearing of mineralization. The rock samples were collected using hammer and moil with careful attention to taking sample perpendicular to strike of mineral trend. Rock chip samples consist of 1-3 kilograms of acorn sized rock fragments

from hammering outcrop (or float). Rock chip sample material collected was placed in marked poly ore bags and shipped to Pioneer Labs, Richmond, BC for 30 element ICP, and REE suite elements. As well, soil samples were sent to ALS Chemex, N Vancouver BC, for ME-MS81 REE and trace element ICP-MS analysis

Marble Breccia Ridge and 2300 Zones were the focus of 2011 fieldwork, consisting of 22 rock chip, and 9 soil samples (Fig 5-11). Rock chip samples were analyzed by HNO3-HClO4-HF-HCl digestion with ICP-MS finish, (Pioneer Labs, Richmond, BC certificate 2111123), and aqua regia digestion, multi-element ICP analysis (Pioneer Labs, Richmond, BC certificate 2111123A). A total of 9 soil samples were analyzed by lithium borate fusion with fusion ICP-MS finish, code ME-MS81 (ALS Minerals, N Vancouver, BC certificate VA11233292).

The soil (talus fine) samples consist were taken from a thin veneer of 'C' horizon (weathered parent material), because essentially there is no developed soil horizon at the elevation of the survey (2,000-2,200 m above sea level). Talus fine material was collected with a hoe and 9 samples were collected, placed in marked kraft bags, dried and shipped to ALS Minerals, N Vancouver, BC

13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

A total of 22 rock chip samples were shipped to Pioneer Labs, Richmond BC. A total of 9 soil samples were shipped to ALS Minerals Lab, N Vancouver BC, where ME-MS81 analysis was done which involves lithium borate fusion and multi-element ICP-MS for REE mineral suite. Sampling and geochemical analysis from 2011 rock chip and soil sampling were carried out using relevant and reliable methods. The samples were prepared using standard analytical procedures by Pioneer Labs, Richmond, B.C. This includes crushing the rock chip samples, and passing through -10 mesh, and splitting 250 grams and pulverizing and passing -150 mesh. Multi-element ICP analysis was done on all samples which involves taking 0.5 grams sample and digesting with 3 ml of aqua regia, diluted with 10 ml water. Mo analysis uses 1 gram sample digested with 50 ml aqua regia, diluted to 100 ml with water and is finished by ICP/ES. The soil samples shipped to ALS Minerals, were dried and screened to -180um. There are no reasons to suspect that samples were unsecure and tampered with.

14.0 DATA VERIFICATION

Repeat sampling and/or check/blank/standard sample inserts were not carried out on rock chip or soil samples. Future trenching and drilling samples require inserts of blanks and standard mineral samples for data verification.

15.0 ADJACENT PROPERTIES

River Jordan (MINFILE 082M 001) is located approximately 2 km east of mineral tenure 501827. River Jordan is a developed prospect and a 1961 resource estimate from CIM Bull 57, page 48 states River Jordan contains a total of 2,605,826 tons grading 37.7 g/t

Ag, 5.1% Pb and 5.6% Zn. River Jordan is classified as a stratabound Broken Hill type Ag-Pb-Zn-(Cu). Other nearby mineral deposits (10-20 km radius) include Cottonbelt Ag-Pb-Zn, J & L Au-Ag-As-Pb-Zn, and Goldstream Cu-Zn-Ag, all of which are stratabound base and precious metal bearing mineral occurrences.

16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

In 1967-68, Colorado School of Mines Research Foundation Inc conducted two series of metallurgical bench tests on samples submitted to them by King Resources Company (Wood, 1969). The first series, completed in March, 1967, was on a 500 pound (226.8 kilogram) sample taken from the surface exposure of the 6950 Glacier Zone. The second series, completed in June, 1968, was on one sample from the 6950 Glacier Zone and one sample from the peripheral zone. Test were conducted to determine optimum size grind, necessity for regrinding the rougher concentrate, dispersants or depressants required, impurities in the concentrate, optimum pH modifiers, tailings effluent composition and tailings settling requirements. Metallurgical test results indicate:

1) Finer grind does increase recovery, but 65 mesh size is sufficient to give desired concentrate grade if reagents are used in flotation circuit for control of iron sulphides and other gangue minerals.

2) The ore is amenable to production of high grade, high recovery concentrate using regrinding and dispersants, but other tests produce similar results without regrinding.

3) The use of dispersants and depressants are necessary to provide and acceptable concentrate grade.

4) Impurities are present, as indicated below, but are low enough to satisfy market requirements:

Zone	% Cu	% Pb	% P	% Sn + As	% Insoluble	% Fe
Glacier	0.04	0.014	0.003	<0.01	1.59	0.86
Peripheral	0.026	0.050	0.004	<0.04	1.91	1.91

A spectrographic analysis reveals the presence of silver in quantities too small to be significant. Arsenic, bismuth and lead impurities are either absent or insignificant.

5) The use of soda ash as a pH modifier was shown to be superior to lime insofar as a higher concentrate grade is concerned.

6) A tailing water effluent test was conducted using the equivalent reagent quantities. The conclusions drawn were that the pine oil, sodium silicate and sodium carbonate are not added in sufficient quantities to be considered pollutants. The cyanide exists mostly mostly as the radical $M(CN)_x$ and not as the iron (CN)-, it resists decomposition, and is considered stable.

7) Utilizing tailings thickener has been recommended to minimize groundwater pollution.

8) Metallurgy of the Glacier Zone appears to be relatively uncomplicated:
-Apparent optimum grind is 75-80% at -65 mesh
-Concentrate ratio is 25-30 to 1
-Moisture content of concentrate is 10-12%
-Concentrate production from a 200 tons/day mill is approximately 8 tons/day
-Percentage recovery is 93%
-Concentrate grade is 90-92% MoS_2
Reagents used: Fuel oil (standard petroleum product), Syntex L (sulphated monoglyceride of coconut oil, a detergent), pine oil (terpineal derivative from pine trees), Separan MGL (high molecular weight synthetic polymer), sodium cyanide (depressant), sodium silicate (dispersant), sodium carbonate (pH control and flotation agent).

These metallurgical tests are dated (1967-68), and do not conform with present day industry standards and sampling protocol, the data generated by Colorado School of Mines Research Foundation ean not be relied upon.

17.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

Mount Copeland Glacier Zone features underground production (1970-73) that extracted 169,729 tonnes and recovered 2,625,046 pounds (1,190,713 kilograms) of molybdenum in 1970-73. When the Mount Copeland Glacier Zone molybdenum mine went into production in 1970, development work (diamond drilling, mapping, sampling) indicated there was 163,340 tonnes @ 1.1% Mo (Fyles, 1973). Presently, there are no categorized mineral resources and mineral reserve estimates on the subject property.

18.0 OTHER RELEVANT DATA AND INFORMATION

Three rock chip samples taken by Discovery Consultants in 1995 on Copeland Ridge (2.378-2,432 m elevation) were tested for suitability for high-purity nepheline syenite (nepheline, potash and soda feldspar with minor biotite, hornblende and magnetite accessory minerals), used in glassmaking, ceramics, glazes, cleaning compounds, insulators, dental spar, and flux coatings. A typical chemical analysis for high-purity nepheline syenite is 60% SiO_2, 23.6% Al_2O_3, 0.07% Fe_2O_3, 0.3% CaO, 0.1% MgO, 5.3% K_2O, 10.2% Na_2O, 0.5% LOI (source: Canadian Minerals Yearbook, Energy, Mines and Resources, Canada). The Copeland Ridge samples fall in the range of nepheline syenite given the relatively comparative silicon, aluminium, potassium and sodium oxide values obtained from geochemical analysis. Effort should be directed to finding samples similar to MC95-3 (taken by T.H.Carpenter, 1995 for Discovery Consultants on Copeland Ridge, A.R. 24,328) which returned values of 0.66% Fe_2O_3 as well as being very low in other impurities.

19.0 INTERPRETATION AND CONCLUSIONS

REE bearing mineralization occurs in the East Glacier Zone (e.g. rock chip sample COPE10AR-20). The East Glacier and Marble Breccia Ridge Zones are about 500 meters apart, but they occur on the same stratigraphic horizon and may be part of an extensive REE bearing mineral zone trending east under the glacier and/or west (towards the west basin). In addition to REE bearing mineralization, a zone of elevated molybdenum and coincident niobium occurs in the east extension of the Copeland underground workings. This area has been targeted for possible extensions of Mo bearing mineralization mined by King Res 1970-73, and this zone contains elevated Mo-Nb-Ti (e.g. rock chip sample sample COPE10AR-3, 4 & 5 returned an average value of 0.947 % Mo, 8570 ppm Nb, 1.64 % Ti, 765.2 ppm Ce, 457.4 ppm La, across true width of 60-100 cm.).

The magnetometer survey strong anomalies are located in an area of marble with extensive zones of pyrrhotite and/or magnetite/ilmenite replacement mineralization which coincides with elevated REE geochemical analysis of rock chips taken in 2010 for Torch R Resources (COPE10AR-22 to 26 are from Marble Breccia Ridge). These geophysical anomalies represent potential for buried sulphide/oxide REE bearing mineralization and are high priority follow-up drill targets. The results warrant exploration in the area of the Marble Breccia Ridge Zone, In order to drill test the east extension of surface mineralization in rock chip sample COPE10AR-22 (& rock chip samples 801-810) . Previous drilling has focused on the molybdenum bearing aplitic phases nepheline syenite complex of the Glacier Zone. The new area of attention is the marble ridge (pyrrhotite-magnetite) breccia zone. The area represents a significant REE, Y, Nb, Ti, Zr bearing mineral potential, and on strike extension of this mineral trend are high priority diamond drill targets (Fig 10 & 11).

Additional targets for REE bearing mineralization include the Glacier Zone east extension where sample COPE10AR-3, 4 & 5 returned an average value of 0.947 % Mo, 8570 ppm Nb, 1.64 % Ti, 765.2 ppm Ce, 457.4 ppm La, across true width of 60-100 cm.

The other type of mineral occurrence present on the property is high-purity nepheline syenite. Copeland Ridge area is reported to contain nepheline, potash and soda feldspar minerals suitable for industrial applications.

20.0 RECOMMENDATIONS

Mount Copeland nepheline syenite has high background values of rare earth elements such as Nb, Rb, Nd, Ce, La, and Y (with significant values of Zr, Sr, and Ti). Marble Breccia Ridge, with REE bearing minerals such as monazite-columbite-tantalite (and other complex unidentified minerals), account for above average REE, yttrium, niobium & titanium values hosted in marble, calc-silicate, and syenite lithologies (pegmatite and aplite phases). Torch River Resources will be following up potential REE targets on its 100% owned Mount Copeland mineral property. Future fieldwork recommended includes REE exploration and diamond drilling in the area of the molybdenite occurrences and exploring granoblastic marble to test for REE mineral potential.

In order to complete follow-up exploration work on REE, Y, Nb, Ti, Zr and molybdenum bearing mineralization present on the subject property, a 2 phase fieldwork program is recommended. Phase 1 recommendations include 3,000 feet of core drilling (914.4 m), geological, geophysical and geochemical core and rock chip sampling with a proposed budget of $300,000.00. Contingent on the results of phase 1, a second phase of core drilling, rock sampling and geological/geochemical surveys is recommended. The estimated total budget for phase 2 is $500,000.00. The total recommended core drilling for phase 2 is 5,000 feet (1,524 m). The total recommended expenditures to complete proposed two phase program are about $800,000.00. This recommendation of expenditures is intended as a general guideline for further exploration and is not compliant to National Instrument 43-101.

Based on the results of previous exploration and mining activity, there is potential to outline further economic concentrations of molybdenite-(scheelite) and REE, Y, Nb, Ti, Zr bearing mineralization on the subject property. A two phase program consisting of preliminary geological mapping, trenching, and magnetometer geophysics, litho-geochemical sampling as well as fence pattern diamond drill holes and further detailed geological mapping are proposed to test the depth extension of surface mineral occurrences on Marble Breccia Ridge, East Glacier, Glacier Zone (upper and lower, surface mineralization trends), and West Basin. Concurrent with drilling, a program of hand trenching, geological mapping and rock chip sampling (e.g. East Glacier Zone, 2300 Zone & West Basin Zone) is required to outline further extensions of known mineral trends.

A detailed budget of this 2 phase exploration program is described as follows:

PHASE 1: PROPOSED BUDGET FOR COPELAND Mo-(W):

FIELD CREW- Geologist, 1 geotechnician, 21 days	$	12,500.00
FIELD COSTS-Assays 250		5,400.00
Rock chip geological/geochemical survey		15,000.00
Core drilling 3,000 feet (914.4 m)		200,000.00
Geophysics (magnetometer)		23,000.00
Soil Grid		2,500.00
Equipment and Supplies		2,000.00
Communication		900.00
Food		2,400.00
Transportation		17,100.00
Emergency camp construction		7,350.00
REPORT		1,850.00
Contingency		10,000.00
Total =	$	300,000.00

PHASE 2: PROPOSED BUDGET FOR COPELAND Mo-(W) TARGETS:

FIELD CREW-	Geologist, 1 geotechnician, 1 cook 120 days	$ 46,000.00
FIELD COSTS-	Core drilling, 5,000 feet (1,524 m) .	325,000.00
	Assays 1,400	28,000.00
	Equipment and Supplies	4,000.00
	Communication	3,000.00
	Food	6,500.00
	Transportation	58,000.00
REPORT		1,200.00
	Contingency	18,300.00
	Total =	$ 500,000.00

TOTAL PHASE 1 + 2 = $ 800,000.00

The total recommended core drilling for phase 1 + 2 is 8,000 feet (2.438.4 m).

21.0 REFERENCES

Canadian Minerals Handbook 1978, Energy, Mines and Resources Canada

Carpenter, T.H., (1996) Geological Report for Discovery Consultants, Assessment Report 24,328, BC Ministry of Energy & Mines

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EMPR Bulletin 57 pp. 22, 40, 58-61

EMPR EXPL 1978 pp. 100, 101; 1980 pp. 137,138

EMPR PF (Fyles, J.T., McCammon, J.W., 1969) Mineral Resources Revelstoke Area.

EMPR MP CORPFILE (King Resources Company, 1969, 1970)

GAC Special Paper No. 6, pp. 87-98 (Fyles, J.T., 1970)

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Kirkham, R.V., 1972, Intermineral Intrusions and their Bearing on Porphyry Copper and Molybdenum Deposits, Econ Geol., Volume 66, 1244-1249

Wood, John A., (1969) Preliminary Feasibility Study, Copeland Mountain Molybdenum Project, Revelstoke Mining Division, King Resources Company

22.0 DATE AND CERTIFICATE

I, Andris Kikauka, of 4901 East Sooke Rd., Sooke B.C. V0S 1NO am a self employed professional geoscientist. I hereby certify that:

1. I am a graduate of Brock University, St. Catharines, Ont., with an Honours Bachelor of Science Degree in Geological Sciences, 1980.
2. I am a Fellow in good standing with the Geological Association of Canada.
3. I am registered in the Province of British Columbia as a Professional Geoscientist.
4. I have practiced my profession for twenty years in precious and base metal exploration in the Cordillera of Western Canada, U.S.A., Mexico, Central America, and South America, as well as for three years in uranium exploration in the Canadian Shield..
5. The information, opinions, and recommendations in the Technical Report are based on fieldwork carried out in my presence on the subject properties during Aug 2-9, 2011 during which time a technical evaluation consisting of geological mapping, geochemical sampling of mineral zones located on the subject property was carried out by the writer.
6. As at the date hereof, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
7. This report summarizes technieal data for the purpose of reporting fieldwork for geological, geochemical and geophysical assessment work.
8. Recommendations and proposed budgets listed in this report are guidelines, and are not intended for the purpose of public financing or NI 43-101.

Andris Kikauka, P. Geo.,

A. Kikauka

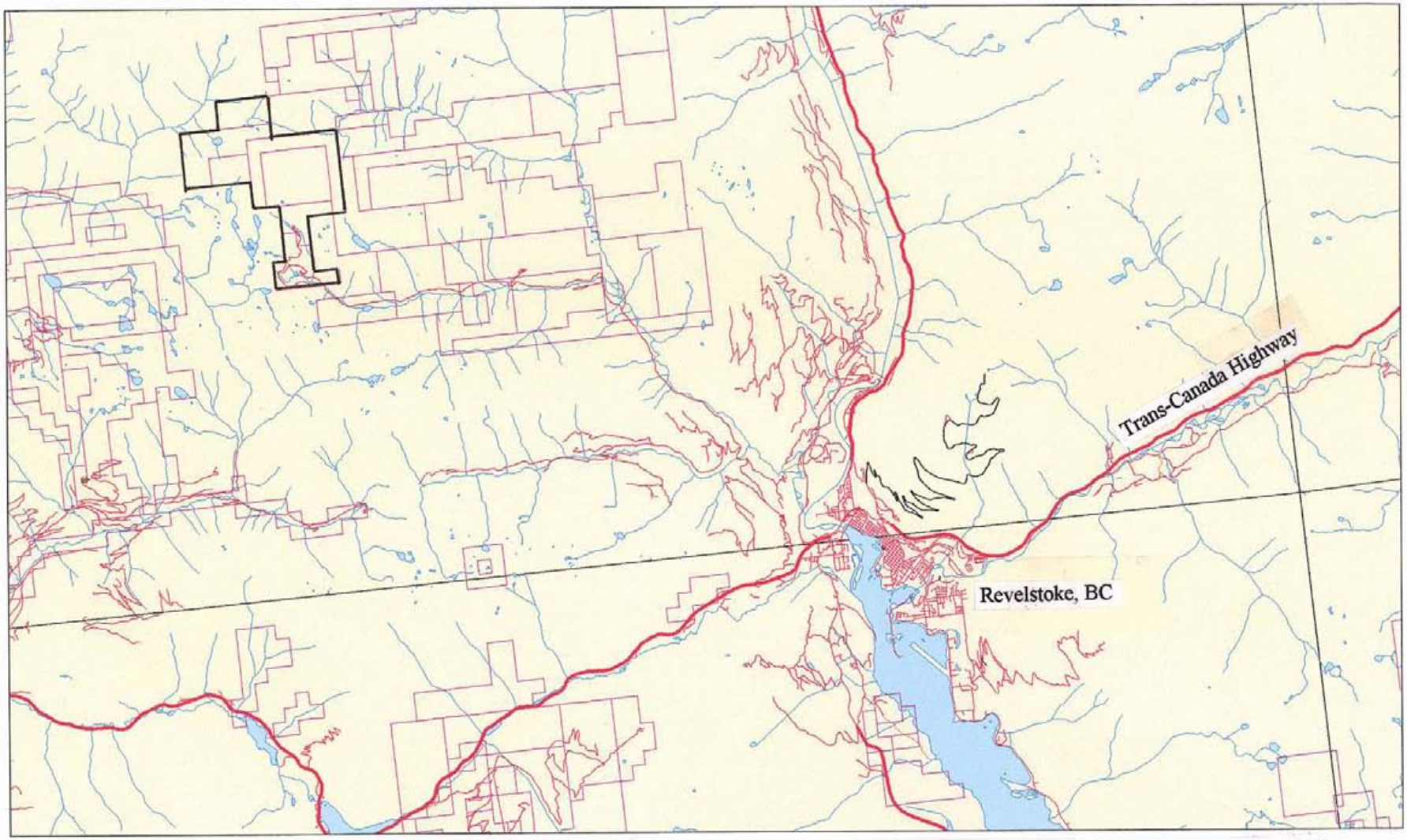
December 1, 2011

ITEMIZED COST STATEMENT-

COPELAND FIELDWORK, GEOCHEMICAL SAMPLING, AUGUST 2-9, 2011
ON MINERAL TENURE 501827
TRIM 082M.018, REVELSTOKE MINING DIVISION

FIELD CREW:	
Andris Kikauka (Geologist) 8 Days	$ 3,484.00
Craig Ellis (Geotechnician) 2 days	796.00
FIELD COST:	
Mob and Demob	$ 913.26
Equipment and Supplies	330.00
Geochemical analysis 9 soil 22 rock chip samples,	
22 rock chip samples ICP,	480.00
22 rock chip samples REE	648.00
9 soil samples REE	297.00
Helicopter charter (2.9 hours)	5,440.00
Food	719.00
Report	850.00
Total amount=	$ 13,957.26

Copeland Mineral Tenure General Location



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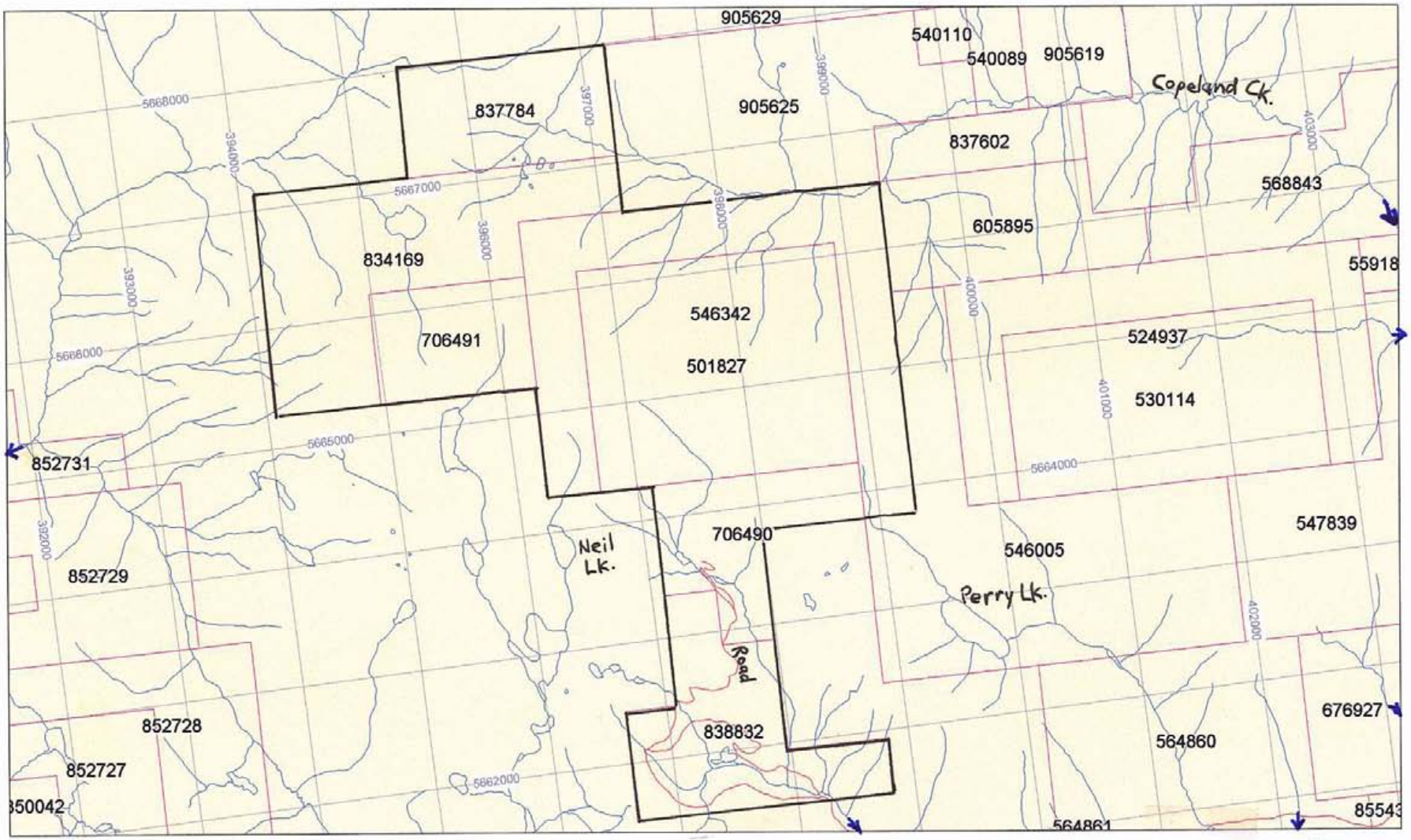
TORCH RIVER RES LTD
COPELAND PROJECT
FIG 1 MINERAL TENURE GENERAL LOCATION
BCGS 082M.018, Revelstoke Mining Division
MTO mineral tenures in red

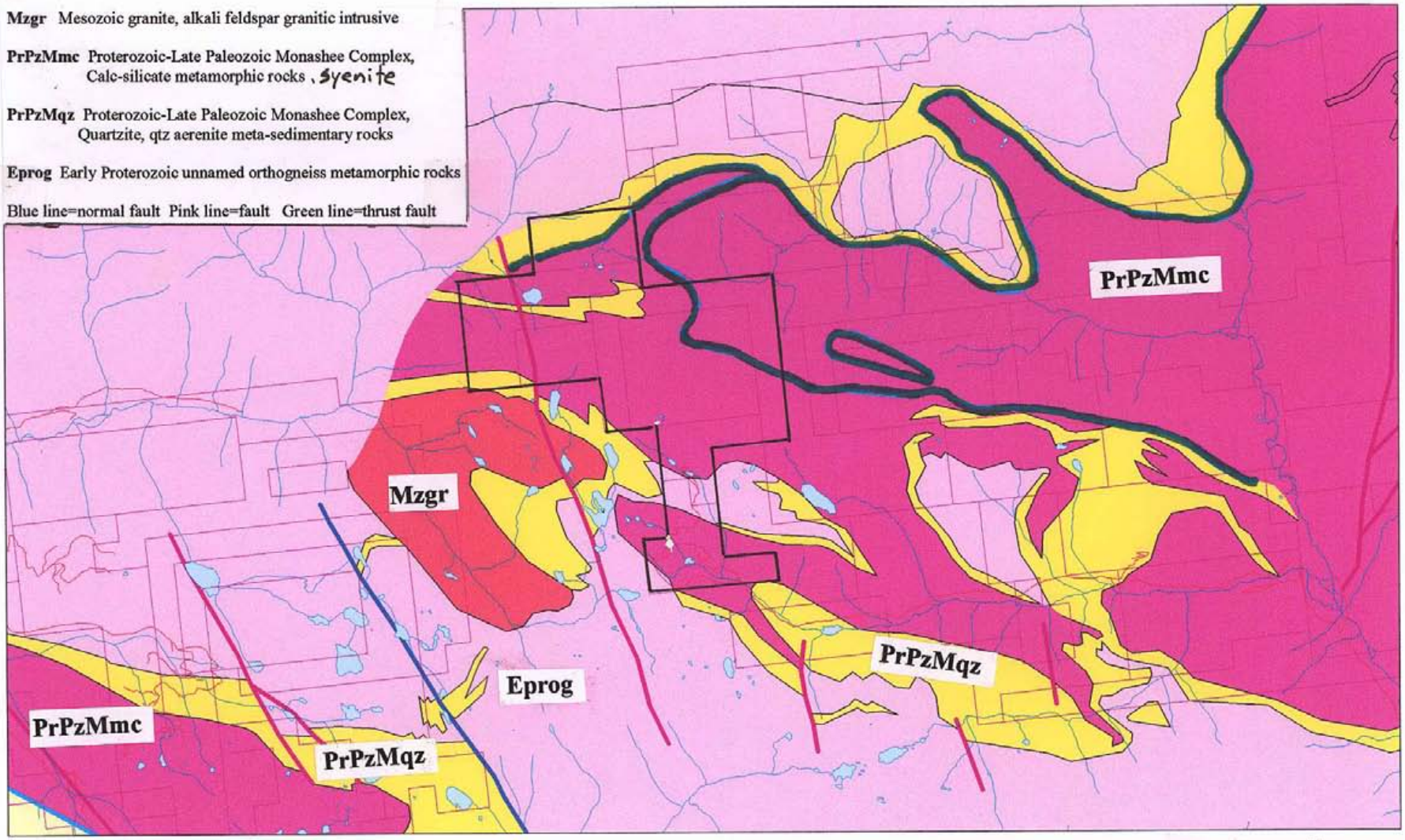
N

Copeland Mineral Tenure Location



TORCH RIVER RES LTD
COPELAND PROJECT
FIG 2 MINERAL TENURE LOCATION
BCGS 082M.018, Revelstoke Mining Division
MTO mineral tenures in red

Copeland Mineral Tenure General Geology



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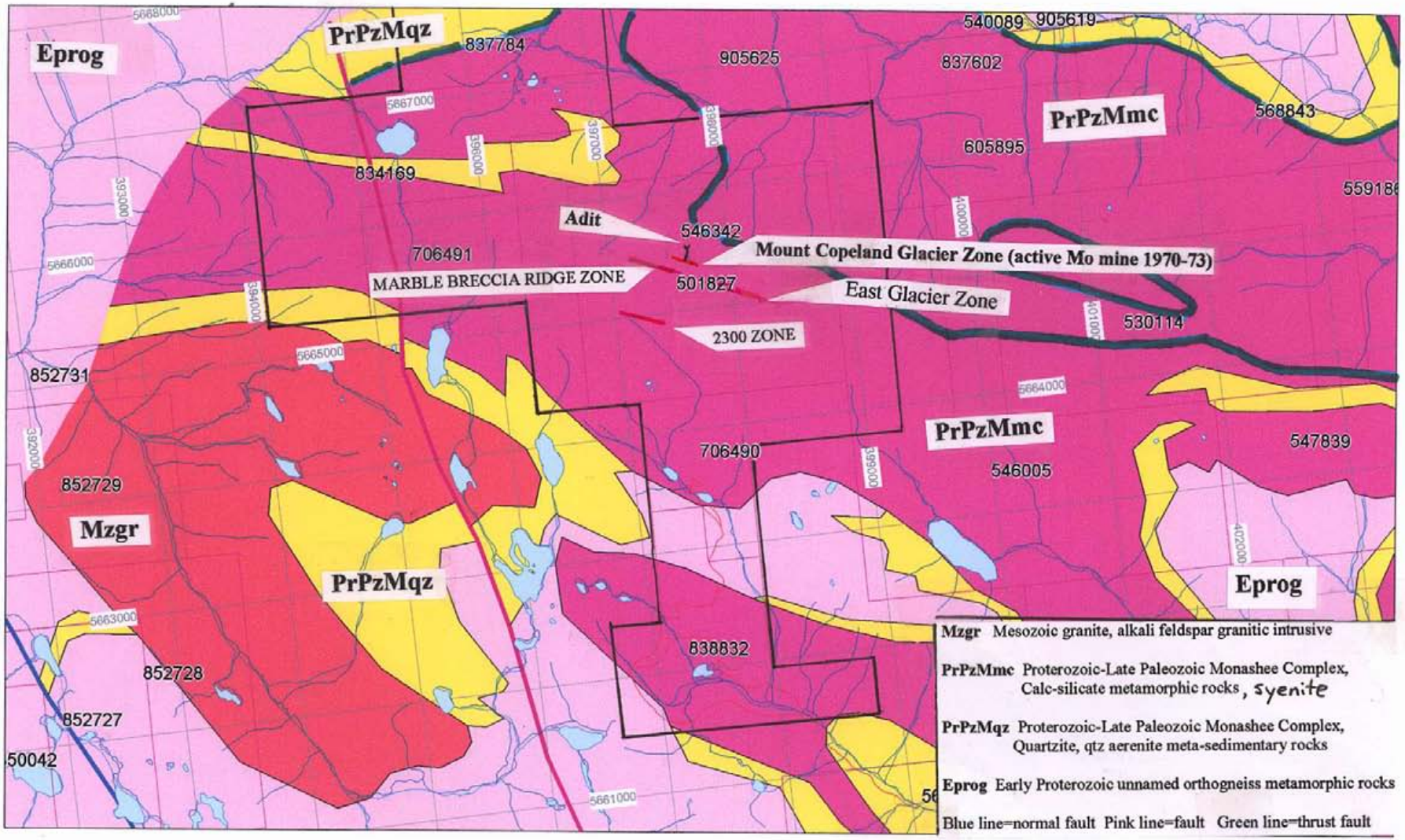
TORCH RIVER RES LTD
COPELAND PROJECT
FIG 3 MINERAL TENURE GENERAL GEOLOGY
BCGS 082M.018, Revelstoke Mining Division

N

Copeland Mineral Tenure Geology



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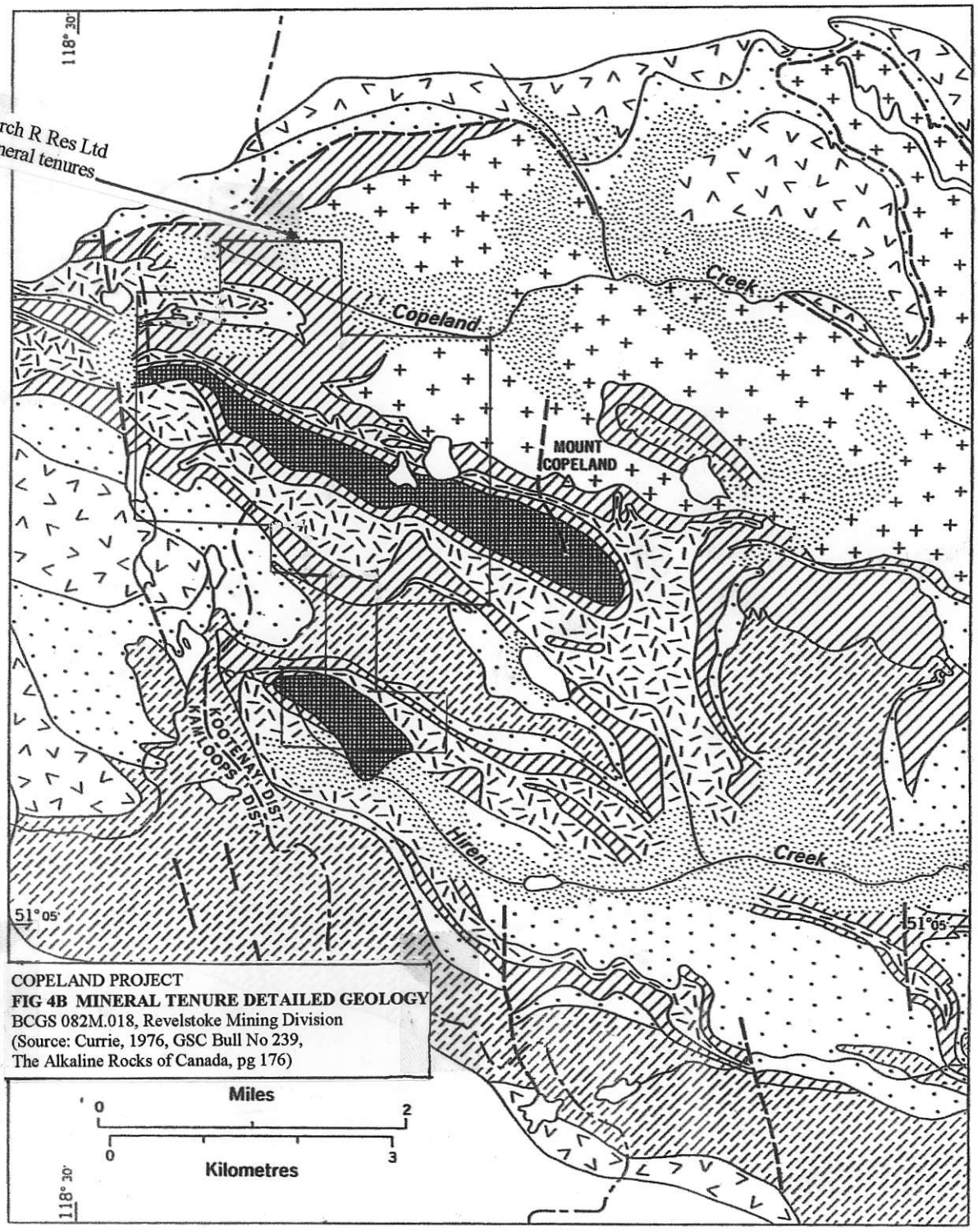
TORCH RIVER RES LTD
COPELAND PROJECT
FIG 4 MINERAL TENURE GEOLOGY
BCGS 082M.018, Revelstoke Mining Division

N

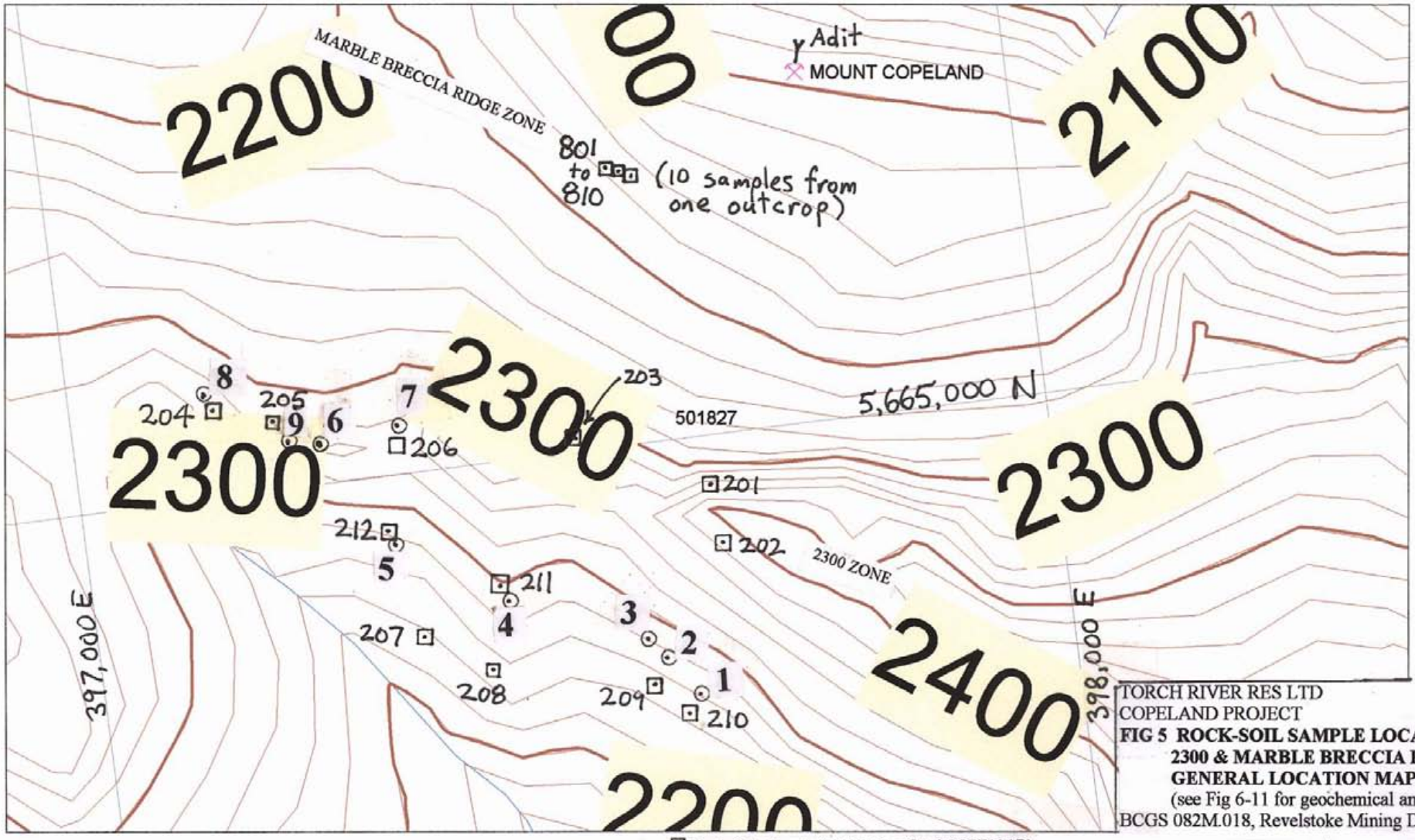
0 1 2 3Km



GSC

. Geology of the Mount Copeland nepheline syenite (after Fyles, 1970).

Copeland 2011rock-soil locations Marble Breccia Ridge, 2300 Zone



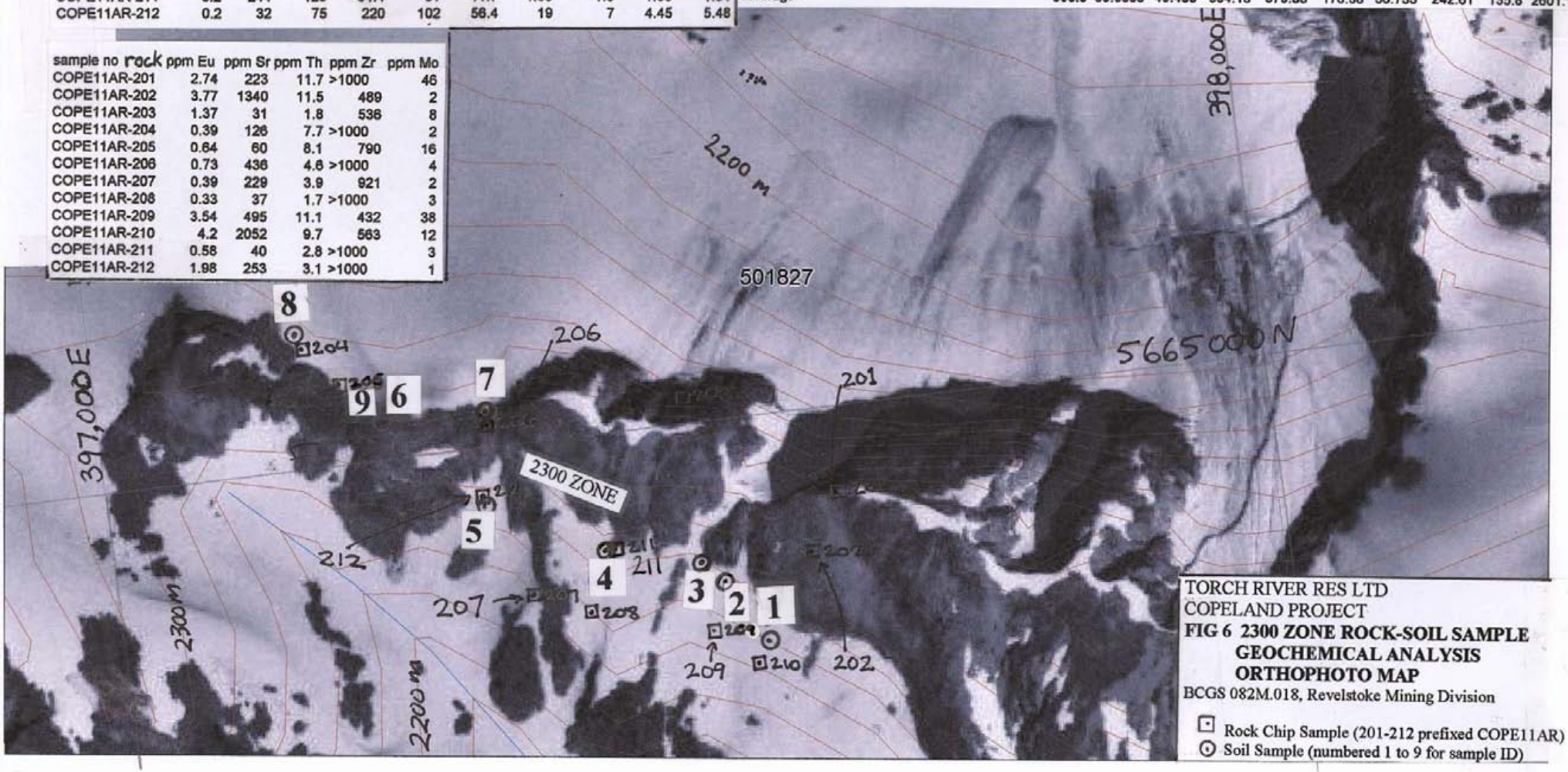
Copeland Soil-Rock Chip Sample Locations Aug, 2011

sample no rock	ppm Ag	V ppm	ppm Zn	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm Sm	ppm Dy	ppm Gd
COPE11AR-201	0.2	63	158	103	39.8	41.5	11.7	7.9	7.42	7.16
COPE11AR-202	0.3	26	28	362	170	97.5	32.5	13	9.85	10.4
COPE11AR-203	0.6	142	68	19.2	9.1	14.8	3.58	3.7	4.55	3.96
COPE11AR-204	0.5	46	99	43	42.7	11.6	4.57	1.2	0.85	0.83
COPE11AR-205	0.9	74	173	28.8	22.3	7.7	2.49	1.3	1.53	1.33
COPE11AR-206	1.1	190	452	69.9	53.1	18	6.35	2.5	2.14	2.11
COPE11AR-207	0.4	29	53	16	15.8	6.3	2.08	0.9	0.8	0.78
COPE11AR-208	0.3	257	141	51.2	30.4	8.5	3.17	1	0.93	0.84
COPE11AR-209	0.4	86	96	249	128	93	26.8	12	4.04	7.44
COPE11AR-210	0.3	377	389	343	168	103	32.3	14.3	10.1	11.8
COPE11AR-211	0.2	244	125	54.4	31	11.7	4.06	1.8	1.55	1.54
COPE11AR-212	0.2	32	75	220	102	56.4	19	7	4.45	5.48

sample no rock	ppm Eu	ppm Sr	ppm Th	ppm Zr	ppm Mo
COPE11AR-201	2.74	223	11.7	>1000	46
COPE11AR-202	3.77	1340	11.5	489	2
COPE11AR-203	1.37	31	1.8	536	8
COPE11AR-204	0.39	126	7.7	>1000	2
COPE11AR-205	0.64	60	8.1	790	16
COPE11AR-206	0.73	436	4.6	>1000	4
COPE11AR-207	0.39	229	3.9	921	2
COPE11AR-208	0.33	37	1.7	>1000	3
COPE11AR-209	3.54	495	11.1	432	38
COPE11AR-210	4.2	2052	9.7	563	12
COPE11AR-211	0.58	40	2.8	>1000	3
COPE11AR-212	1.98	253	3.1	>1000	1

soil

sample #	easting	northing	elev m	elev ft	ppm Ce	ppm Ga	ppm Hf	ppm La	ppm Nb	ppm Nd	ppm Pr	ppm Rb	ppm Y	ppm Zr
1	397550	5664815	2308	7544	678	40	49.7	399	398	191.5	61.9	143.5	145.5	2580
2	397520	5664860	2270	7580.08	840	46.1	45.9	293	329	195.5	59.9	187	109.5	2450
3	397500	5664880	2295	7655.52	602	43	32	325	297	181.5	58.4	205	133	1720
4	397420	5664900	2308	7665.36	953	47.7	40.3	527	445	319	99	175	267	2160
5	397320	5664950	2300	7425.92	426	50.2	44.3	223	340	126	40.8	300	106	2310
6	397240	5665030	2332	7445.6	125	39.9	29.7	74.5	200	34.9	11.3	246	20.1	1680
7	397330	5665030	2334	7527.6	115.5	73.9	42.1	65.9	281	34.7	11.3	470	19.4	2140
8	397180	5665100	2290	7570.24	1325	69.1	73.1	678	733	428	139	255	348	4310
9	397220	5665040	2311	7544	277	67.6	87.8	152	391	94.3	29	202	74	4060
Average =					593.5	53.0556	49.433	304.16	379.33	178.38	56.733	242.61	135.8	2601.1



TORCH RIVER RES LTD
COPELAND PROJECT
FIG 6 2300 ZONE ROCK-SOIL SAMPLE GEOCHEMICAL ANALYSIS ORTHOPHOTO MAP
BCGS 082M.018, Revelstoke Mining Division

⊡ Rock Chip Sample (201-212 prefixed COPE11AR)
⊙ Soil Sample (numbered 1 to 9 for sample ID)

SCALE 1 : 5,000

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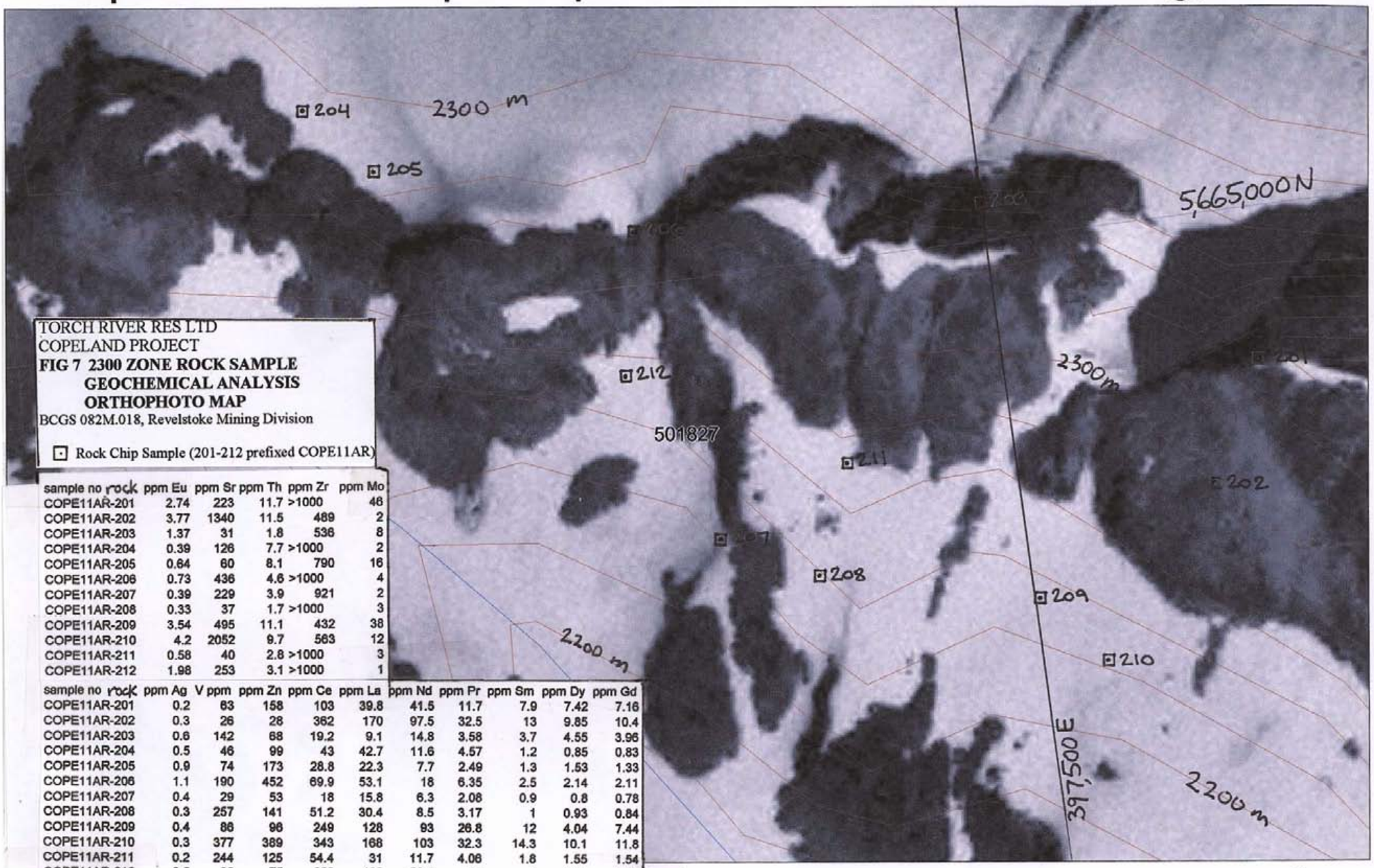
0 100 200 m

N

Copeland Rock Chip Sample Locations '2300 Zone', Aug, 2011



TORCH RIVER RES LTD
COPELAND PROJECT
FIG 7 2300 ZONE ROCK SAMPLE GEOCHEMICAL ANALYSIS ORTHOPHOTO MAP
BCGS 082M.018, Revelstoke Mining Division

⊡ Rock Chip Sample (201-212 prefixed COPE11AR)

sample no rock	ppm Eu	ppm Sr	ppm Th	ppm Zr	ppm Mo
COPE11AR-201	2.74	223	11.7	>1000	46
COPE11AR-202	3.77	1340	11.5	489	2
COPE11AR-203	1.37	31	1.8	536	8
COPE11AR-204	0.39	126	7.7	>1000	2
COPE11AR-205	0.64	60	8.1	790	16
COPE11AR-206	0.73	436	4.6	>1000	4
COPE11AR-207	0.39	229	3.9	921	2
COPE11AR-208	0.33	37	1.7	>1000	3
COPE11AR-209	3.54	495	11.1	432	38
COPE11AR-210	4.2	2052	9.7	563	12
COPE11AR-211	0.58	40	2.8	>1000	3
COPE11AR-212	1.98	253	3.1	>1000	1

sample no rock	ppm Ag	V ppm	ppm Zn	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm Sm	ppm Dy	ppm Gd
COPE11AR-201	0.2	63	158	103	39.8	41.5	11.7	7.9	7.42	7.16
COPE11AR-202	0.3	26	28	362	170	97.5	32.5	13	9.85	10.4
COPE11AR-203	0.6	142	68	19.2	9.1	14.8	3.58	3.7	4.55	3.96
COPE11AR-204	0.5	46	99	43	42.7	11.6	4.57	1.2	0.85	0.83
COPE11AR-205	0.9	74	173	28.8	22.3	7.7	2.49	1.3	1.53	1.33
COPE11AR-206	1.1	190	452	69.9	53.1	18	6.35	2.5	2.14	2.11
COPE11AR-207	0.4	29	53	18	15.8	6.3	2.08	0.9	0.8	0.78
COPE11AR-208	0.3	257	141	51.2	30.4	8.5	3.17	1	0.93	0.84
COPE11AR-209	0.4	86	96	249	128	93	26.8	12	4.04	7.44
COPE11AR-210	0.3	377	389	343	168	103	32.3	14.3	10.1	11.8
COPE11AR-211	0.2	244	125	54.4	31	11.7	4.06	1.8	1.55	1.54
COPE11AR-212	0.2	32	75	220	102	56.4	19	7	4.45	5.48

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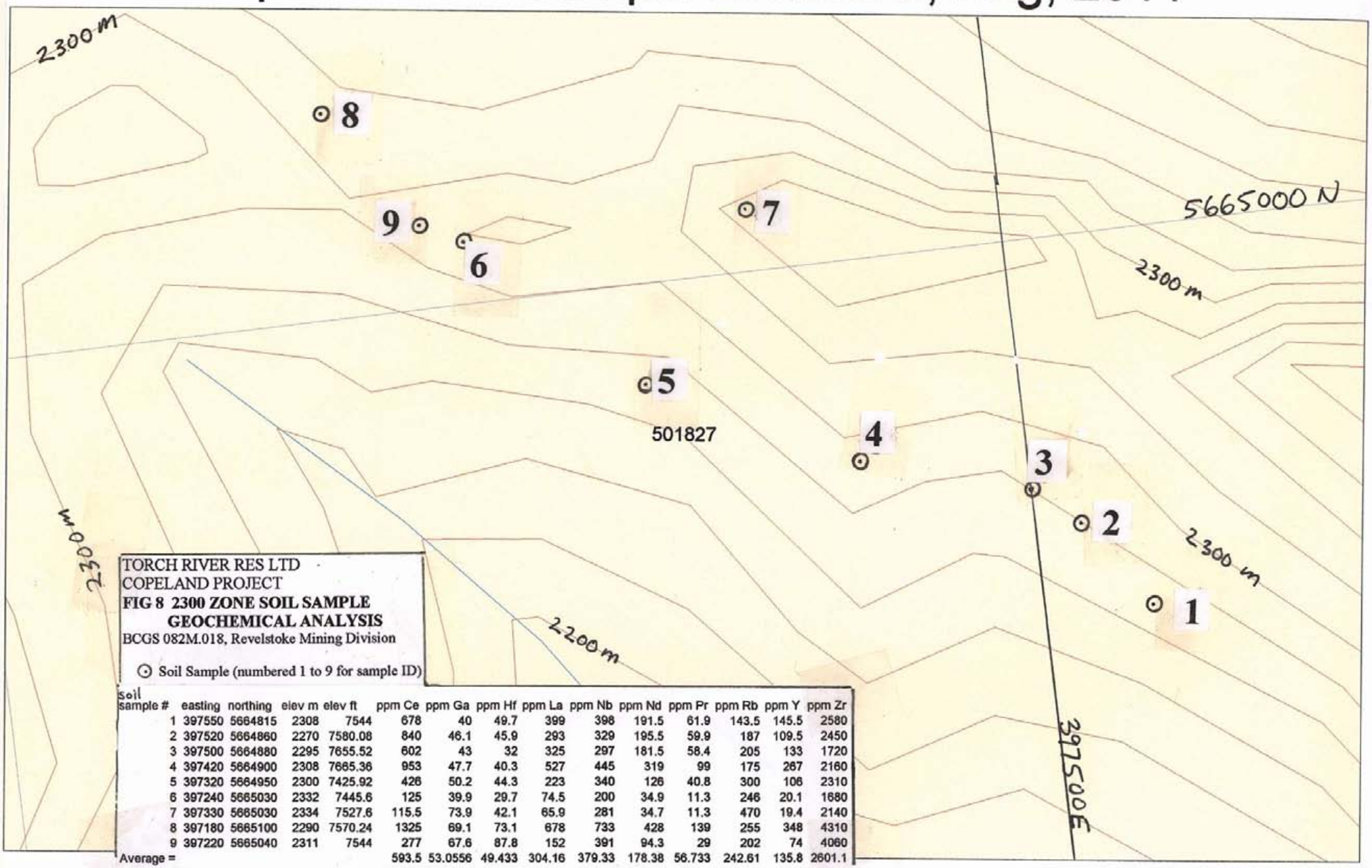
Copeland Soil Sample Locations, Aug, 2011



TORCH RIVER RES LTD
COPELAND PROJECT
FIG 8 2300 ZONE SOIL SAMPLE GEOCHEMICAL ANALYSIS
BCGS 082M.018, Revelstoke Mining Division

⊙ Soil Sample (numbered 1 to 9 for sample ID)

soil sample #	easting	northing	elev m	elev ft	ppm Ce	ppm Ga	ppm Hf	ppm La	ppm Nb	ppm Nd	ppm Pr	ppm Rb	ppm Y	ppm Zr
1	397550	5664815	2308	7544	678	40	49.7	399	398	191.5	61.9	143.5	145.5	2580
2	397520	5664860	2270	7580.08	840	46.1	45.9	293	329	195.5	59.9	187	109.5	2450
3	397500	5664880	2295	7655.52	602	43	32	325	297	181.5	58.4	205	133	1720
4	397420	5664900	2308	7665.36	953	47.7	40.3	527	445	319	99	175	267	2160
5	397320	5664950	2300	7425.92	426	50.2	44.3	223	340	126	40.8	300	106	2310
6	397240	5665030	2332	7445.6	125	39.9	29.7	74.5	200	34.9	11.3	246	20.1	1680
7	397330	5665030	2334	7527.6	115.5	73.9	42.1	65.9	281	34.7	11.3	470	19.4	2140
8	397180	5665100	2290	7570.24	1325	69.1	73.1	678	733	428	139	255	348	4310
9	397220	5665040	2311	7544	277	67.6	87.8	152	391	94.3	29	202	74	4060
Average =					593.5	53.0556	49.433	304.16	379.33	178.38	56.733	242.61	135.8	2601.1

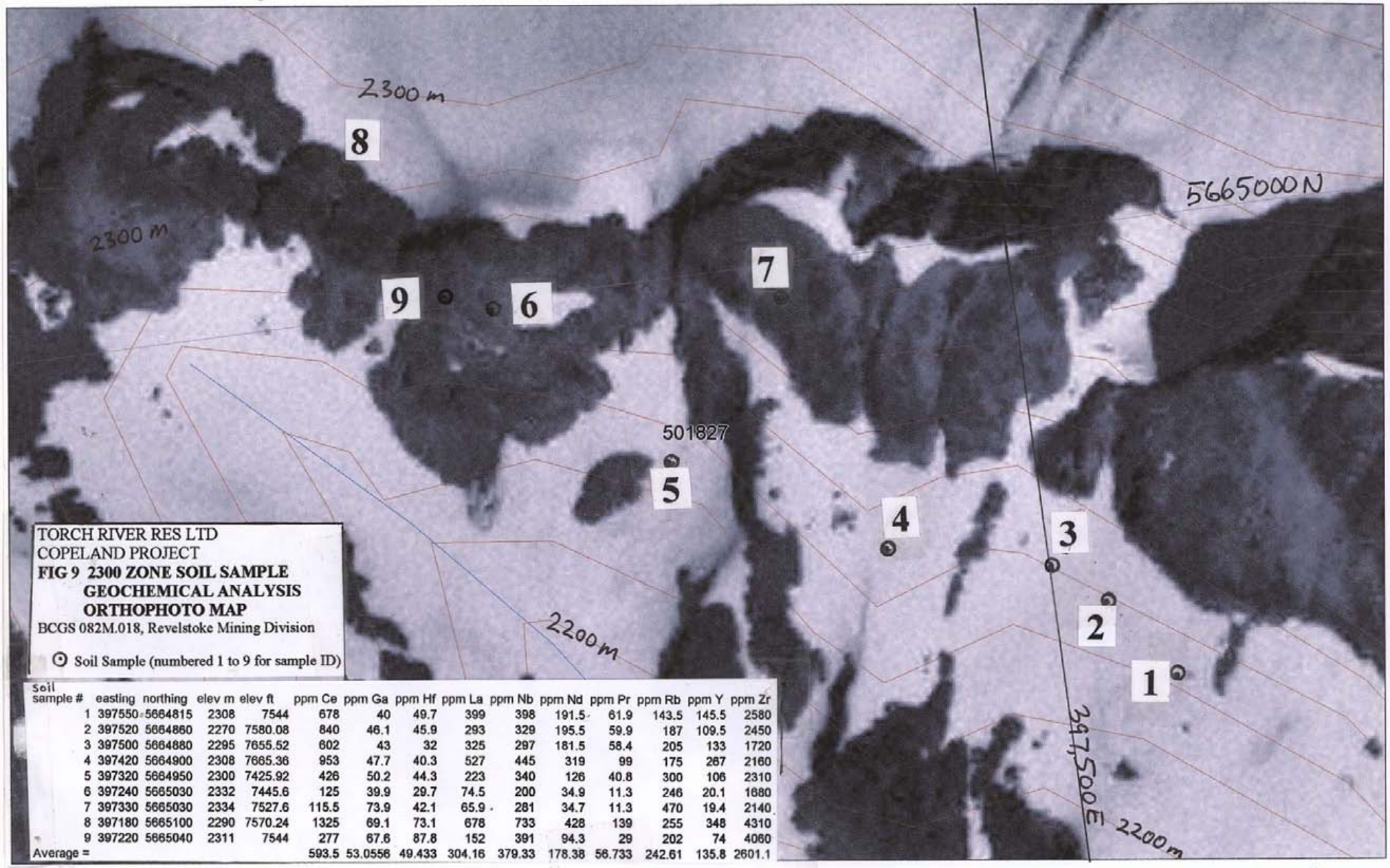
SCALE 1 : 2,500

200 0 200 400 600
FEET

0 50 100 m

N

Copeland Soil Sample Locations, Aug, 2011



TORCH RIVER RES LTD
COPELAND PROJECT
FIG 9 2300 ZONE SOIL SAMPLE GEOCHEMICAL ANALYSIS ORTHOPHOTO MAP
BCGS 082M.018, Revelstoke Mining Division

⊙ Soil Sample (numbered 1 to 9 for sample ID)

Soil sample #	easting	northing	elev m	elev ft	ppm Ce	ppm Ga	ppm Hf	ppm La	ppm Nb	ppm Nd	ppm Pr	ppm Rb	ppm Y	ppm Zr
1	397550	5664815	2308	7544	678	40	49.7	399	398	191.5	61.9	143.5	145.5	2580
2	397520	5664860	2270	7580.08	840	46.1	45.9	293	329	195.5	59.9	187	109.5	2450
3	397500	5664880	2295	7655.52	602	43	32	325	297	181.5	58.4	205	133	1720
4	397420	5664900	2308	7665.36	953	47.7	40.3	527	445	319	99	175	267	2160
5	397320	5664950	2300	7425.92	426	50.2	44.3	223	340	126	40.8	300	106	2310
6	397240	5665030	2332	7445.6	125	39.9	29.7	74.5	200	34.9	11.3	246	20.1	1680
7	397330	5665030	2334	7527.6	115.5	73.9	42.1	65.9	281	34.7	11.3	470	19.4	2140
8	397180	5665100	2290	7570.24	1325	69.1	73.1	678	733	428	139	255	348	4310
9	397220	5665040	2311	7544	277	67.6	87.8	152	391	94.3	29	202	74	4060
Average =					593.5	53.0556	49.433	304.16	379.33	178.38	56.733	242.61	135.8	2601.1

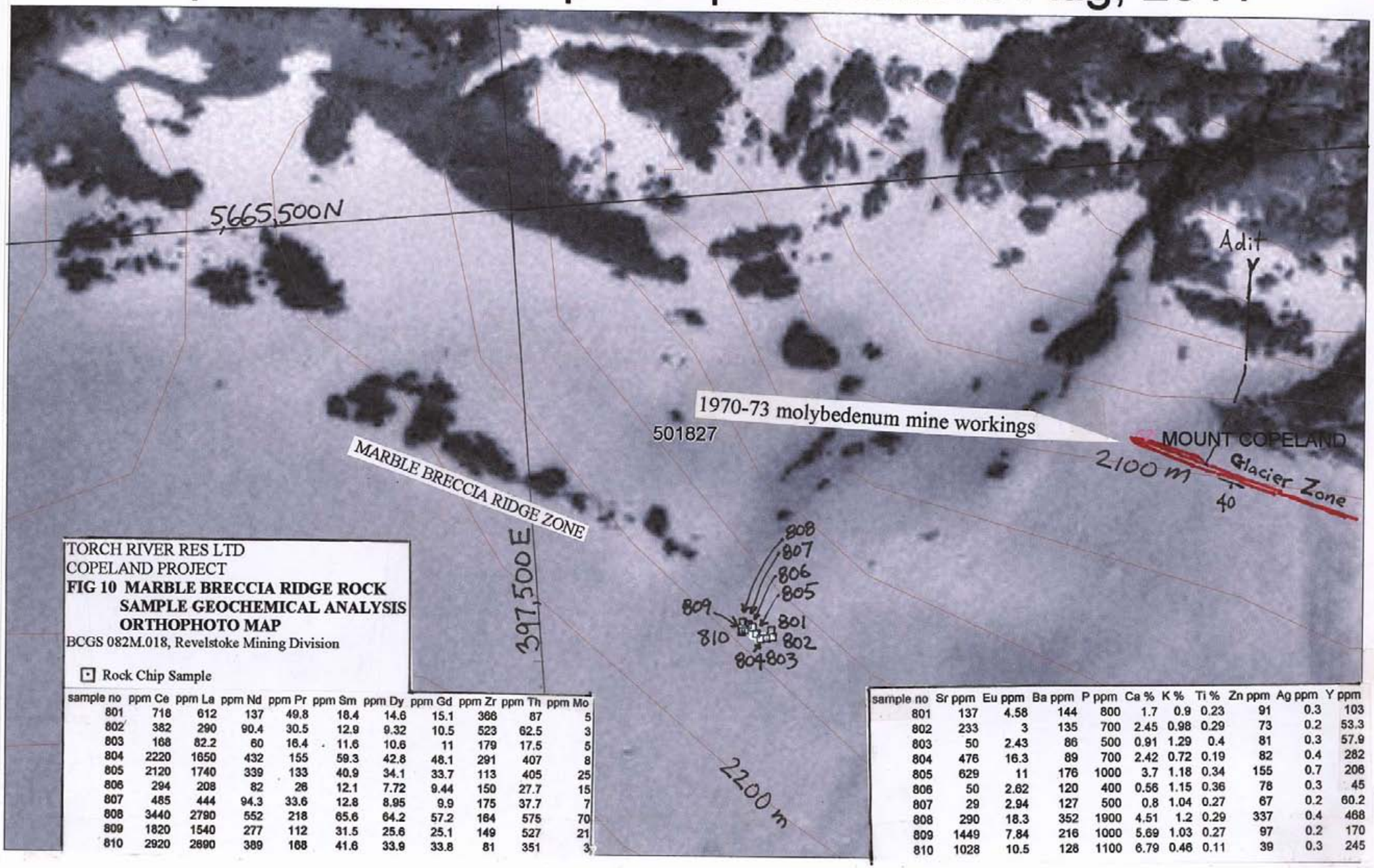
SCALE 1 : 2,500

200 0 200 400 600
FEET

0 100 200m

N

Copeland Rock Chip Sample Locations Aug, 2011



TORCH RIVER RES LTD
COPELAND PROJECT
FIG 10 MARBLE BRECCIA RIDGE ROCK SAMPLE GEOCHEMICAL ANALYSIS ORTHOPHOTO MAP
BCGS 082M.018, Revelstoke Mining Division

⊡ Rock Chip Sample

sample no	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm Sm	ppm Dy	ppm Gd	ppm Zr	ppm Th	ppm Mo
801	718	612	137	49.8	18.4	14.6	15.1	366	87	5
802	382	290	90.4	30.5	12.9	9.32	10.5	523	62.5	3
803	168	82.2	60	16.4	11.6	10.6	11	179	17.5	5
804	2220	1650	432	155	59.3	42.8	48.1	291	407	8
805	2120	1740	339	133	40.9	34.1	33.7	113	405	25
806	294	208	82	26	12.1	7.72	9.44	150	27.7	15
807	485	444	94.3	33.6	12.8	8.95	9.9	175	37.7	7
808	3440	2790	552	218	65.6	64.2	57.2	164	575	70
809	1820	1540	277	112	31.5	25.6	25.1	149	527	21
810	2920	2690	389	168	41.6	33.9	33.8	81	351	3

sample no	Sr ppm	Eu ppm	Ba ppm	P ppm	Ca %	K %	Ti %	Zn ppm	Ag ppm	Y ppm
801	137	4.58	144	800	1.7	0.9	0.23	91	0.3	103
802	233	3	135	700	2.45	0.98	0.29	73	0.2	53.3
803	50	2.43	86	500	0.91	1.29	0.4	81	0.3	57.9
804	476	16.3	89	700	2.42	0.72	0.19	82	0.4	282
805	629	11	176	1000	3.7	1.18	0.34	155	0.7	206
806	50	2.62	120	400	0.56	1.15	0.36	78	0.3	45
807	29	2.94	127	500	0.8	1.04	0.27	67	0.2	60.2
808	290	18.3	352	1900	4.51	1.2	0.29	337	0.4	468
809	1449	7.84	216	1000	5.69	1.03	0.27	97	0.2	170
810	1028	10.5	128	1100	6.79	0.46	0.11	39	0.3	245

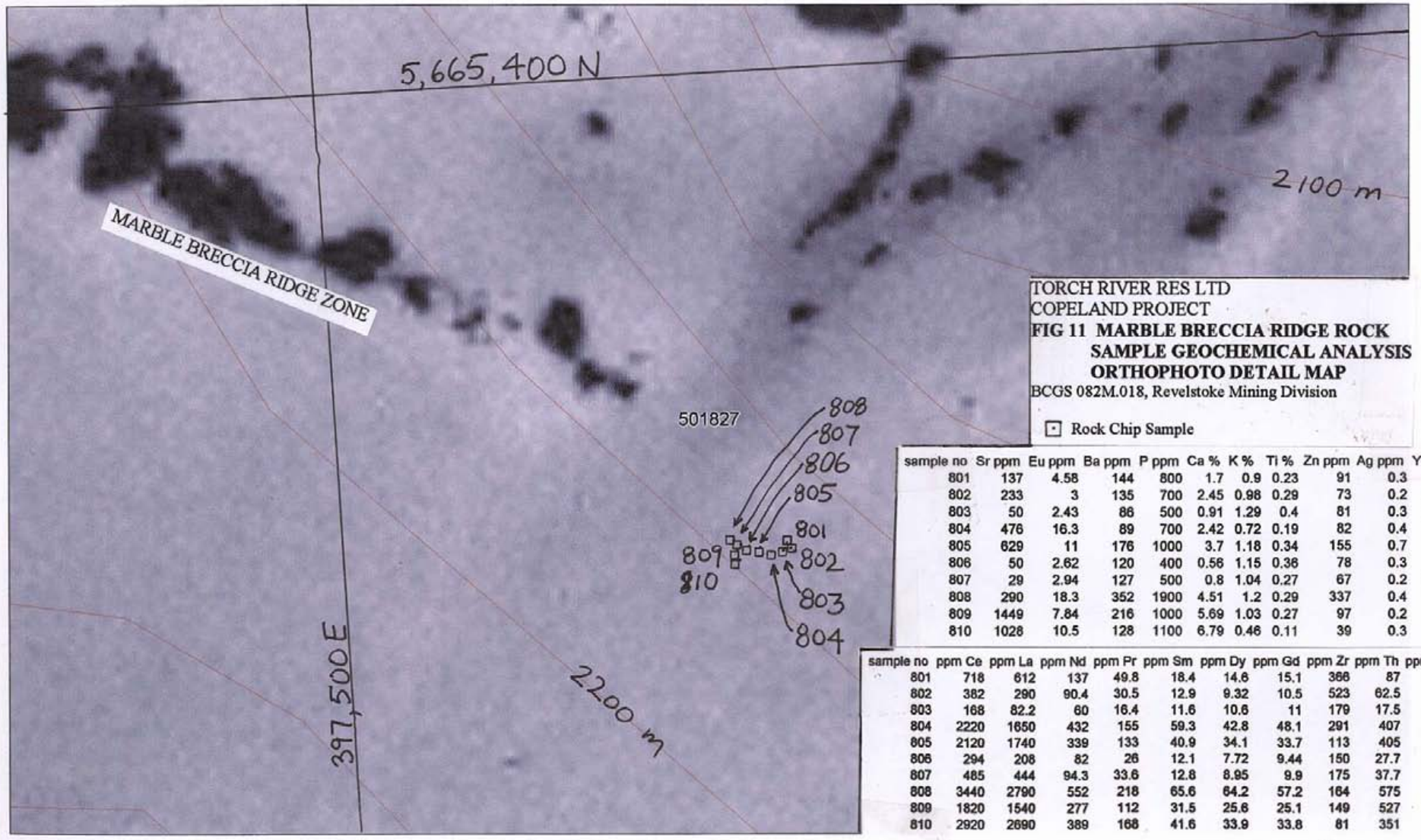
SCALE 1 : 2,500

200 0 200 400 600
FEET

0 100 200 m

N

Copeland Marble Breccia Ridge (2010 sample AR-22 location) rock chip sample locations



TORCH RIVER RES LTD
COPELAND PROJECT
FIG 11 MARBLE BRECCIA RIDGE ROCK SAMPLE GEOCHEMICAL ANALYSIS ORTHOPHOTO DETAIL MAP
BCGS 082M.018, Revelstoke Mining Division

⊡ Rock Chip Sample

sample no	Sr ppm	Eu ppm	Ba ppm	P ppm	Ca %	K %	Ti %	Zn ppm	Ag ppm	Y ppm
801	137	4.58	144	800	1.7	0.9	0.23	91	0.3	103
802	233	3	135	700	2.45	0.98	0.29	73	0.2	53.3
803	50	2.43	86	500	0.91	1.29	0.4	81	0.3	57.9
804	476	16.3	89	700	2.42	0.72	0.19	82	0.4	282
805	629	11	176	1000	3.7	1.18	0.34	155	0.7	206
806	50	2.62	120	400	0.56	1.15	0.36	78	0.3	45
807	29	2.94	127	500	0.8	1.04	0.27	67	0.2	60.2
808	290	18.3	352	1900	4.51	1.2	0.29	337	0.4	468
809	1449	7.84	216	1000	5.69	1.03	0.27	97	0.2	170
810	1028	10.5	128	1100	6.79	0.46	0.11	39	0.3	245

sample no	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm Sm	ppm Dy	ppm Gd	ppm Zr	ppm Th	ppm Mo
801	718	612	137	49.8	18.4	14.6	15.1	366	87	5
802	382	290	90.4	30.5	12.9	9.32	10.5	523	62.5	3
803	168	82.2	60	16.4	11.6	10.6	11	179	17.5	5
804	2220	1650	432	155	59.3	42.8	48.1	291	407	8
805	2120	1740	339	133	40.9	34.1	33.7	113	405	25
806	294	208	82	26	12.1	7.72	9.44	150	27.7	15
807	485	444	94.3	33.6	12.8	8.95	9.9	175	37.7	7
808	3440	2790	552	218	65.6	64.2	57.2	164	575	70
809	1820	1540	277	112	31.5	25.6	25.1	149	527	21
810	2920	2690	389	168	41.6	33.9	33.8	81	351	3

SCALE 1 : 1,500

100 0 100 200 300
FEET

0 50 100 m

N

PIONEER LABORATORIES INC. #103 - 2691 VISCOUNT WAY, RICHMOND, BC CANADA V6V 2R5 TELEPHONE (604) 231-8165

APPENDIX A- GEOCHEMICAL ANALYSIS, PIONEER LABS

GEOCHEMICAL WHOLE ROCK ANALYSIS

TORCH RIVER RESOURCES LTD.
Project:
Sample Type: Rocks

Analysis by HNO3 - HClO4 - HF - HCl digestion, ICP/MS finished.

Analyst _____
Report No. 2111123
Date: September 12, 2011

ELEMENT / SAMPLE	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Th ppm	Tm ppm	U ppm	Y ppm	Yb ppm	Zr ppm
Cope-11 AR-201 (R)	103.0	7.42	4.82	2.74	7.16	1.57	39.8	.76	41.5	11.70	7.9	1.21	11.7	.80	8.70	43.6	5.5	>1000
Cope-11 AR-202 (R)	362.0	9.85	6.68	3.77	10.40	2.16	170.0	1.08	97.5	32.50	13.0	1.63	11.5	1.07	4.66	59.7	7.4	489
Cope-11 AR-203 (R)	19.2	4.55	3.03	1.37	3.96	.97	9.1	.57	14.8	3.58	3.7	.70	1.8	.48	.59	25.6	3.5	536
Cope-11 AR-204 (R)	43.0	.85	.74	.39	.83	.22	42.7	.17	11.6	4.57	1.2	.14	7.7	.14	41.40	5.2	1.0	>1000
Cope-11 AR-205 (R)	28.8	1.53	1.15	.64	1.33	.37	22.3	.17	7.7	2.49	1.3	.24	8.1	.19	3.81	12.9	1.3	790
Cope-11 AR-206 (R)	69.9	2.14	1.74	.73	2.11	.50	53.1	.66	18.0	6.35	2.5	.33	4.6	.34	2.77	15.8	3.1	>1000
Cope-11 AR-207 (R)	18.0	.80	.66	.39	.78	.19	15.8	.13	6.3	2.08	.9	.12	3.9	.12	34.30	5.6	.9	921
Cope-11 AR-208 (R)	51.2	.93	.86	.33	.84	.24	30.4	.36	8.5	3.17	1.0	.15	1.7	.18	7.53	6.0	1.7	>1000
Cope-11 AR-209 (R)	249.0	4.04	1.81	3.54	7.44	.71	128.0	.23	93.0	26.80	12.0	.84	11.1	.26	6.73	16.5	1.5	432
Cope-11 AR-210 (R)	343.0	10.10	6.20	4.20	11.80	2.13	168.0	.82	103.0	32.30	14.3	1.71	9.7	.94	5.14	73.6	6.0	563
Cope-11 AR-211 (R)	54.4	1.55	1.22	.58	1.54	.37	31.0	.39	11.7	4.06	1.8	.25	2.8	.24	13.20	9.4	2.1	>1000
Cope-11 AR-212 (R)	220.0	4.45	3.09	1.98	5.48	.98	102.0	.54	56.4	19.00	7.0	.78	3.1	.48	1.07	31.5	3.4	>1000
801 (R)	718.0	14.60	8.80	4.58	15.10	3.06	612.0	1.00	137.0	49.80	18.4	2.41	87.0	1.30	4.94	108.0	7.9	366
802 (R)	382.0	9.32	5.18	3.00	10.50	1.85	290.0	.64	90.4	30.50	12.9	1.61	62.5	.76	5.58	53.3	4.7	523
803 (R)	168.0	10.60	6.24	2.43	11.00	2.20	82.2	.77	60.0	16.40	11.6	1.77	17.5	.91	4.87	57.9	5.7	179
804 (R)	2220.0	42.80	25.50	16.30	48.10	8.76	1650.0	3.22	432.0	155.00	59.3	7.19	407.0	3.82	3.43	282.0	23.9	291
805 (R)	2120.0	34.10	20.40	11.00	33.70	7.10	1740.0	2.45	339.0	133.00	40.9	5.47	405.0	3.00	3.14	206.0	18.6	113
806 (R)	294.0	7.72	4.35	2.62	9.44	1.55	208.0	.62	82.0	26.00	12.1	1.35	27.7	.67	3.01	45.0	4.3	150
807 (R)	485.0	8.95	5.09	2.94	9.90	1.82	444.0	.70	94.3	33.60	12.8	1.50	37.7	.77	3.86	50.2	4.9	175
808 (R)	3440.0	64.20	40.60	18.30	57.20	14.00	2790.0	5.14	552.0	218.00	65.6	9.76	575.0	6.07	4.55	468.0	38.1	164
809 (R)	1820.0	25.60	15.80	7.84	25.10	5.45	1540.0	2.01	277.0	112.00	31.5	4.10	527.0	2.36	5.40	170.0	14.8	149
810 (R)	2920.0	33.90	20.30	10.50	33.80	7.09	2690.0	2.19	389.0	168.00	41.6	5.48	351.0	2.91	4.00	245.0	17.3	81

PIONEER LABORATORIES INC. #103-2691 VISCOUNT WAY RICHMOND, BC CANADA V6V 2R5 TELEPHONE (604) 231-8

GEOCHEMICAL ANALYSIS CERTIFICATE

Multi-element ICP Analysis - 0.500 gram sample is digested with 3 ml of aqua regia, diluted to 10 ml with water. This leach is partial for B, Ba, Cr, Fe, Mg, Mn, Na, P, S, Sn, Ti and limited for Na, K and Al. *Au Analysis- 20 gram sample is digested with aqua regia, MIBK extracted, and is finished by AA or graphite furnace AA.

TORCH RIVER RESOURCES LTD.
Project: Mt. Copeland
Sample Type: .Rocks

Analyst _____
Report No. 2111123A
Date: September 13, 201

ELEMENT / SAMPLE	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	S %	Sb ppm	Sn ppm	Sr ppm	Te ppm	Tl %	Tl ppm	V ppm	Zn ppm	W ppm
Cope-11 AR-201 [R]	.2	1.42	13	<5	27	<10	.31	<1	3	29	23	3.33	.46	.43	781	46	.53	8	.02	25	1.85	<2	<2	223	<5	.24	<5	63	158	<10
Cope-11 AR-202 [R]	.3	2.77	6	<5	14	<10	3.14	<1	2	13	22	1.34	.62	.01	653	2	2.12	3	.01	19	.48	<2	<2	1340	<5	.02	<5	26	26	<10
Cope-11 AR-203 [R]	.6	.45	20	<5	13	<10	.39	<1	9	27	86	4.47	.25	.11	592	8	.11	4	.02	6	.83	<2	<2	31	<5	.35	<5	142	68	<10
Cope-11 AR-204 [R]	.5	1.26	<5	8	21	<10	.26	<1	10	28	28	5.33	.43	.10	439	2	.40	3	.03	11	1.18	<2	<2	126	<5	.38	<5	46	99	<10
Cope-11 AR-205 [R]	.9	.20	37	<5	38	<10	.13	<1	2	19	16	8.23	.13	.04	504	16	.03	2	.04	16	.15	<2	<2	60	<5	.03	<5	74	173	<10
Cope-11 AR-206 [R]	1.1	.50	63	<5	46	<10	.49	<1	7	14	73	13.16	.28	.12	455	4	.05	2	.23	11	.29	<2	<2	436	<5	.17	<5	190	452	<10
Cope-11 AR-207 [R]	.4	.59	16	<5	68	<10	.09	<1	2	25	16	1.51	.21	.06	311	2	.18	6	.01	14	.02	<2	<2	229	<5	.09	<5	29	53	<10
Cope-11 AR-208 [R]	.3	.16	8	<5	18	<10	.12	1	3	26	6	5.94	.09	.03	651	3	.06	2	.02	9	.01	<2	<2	37	<5	.24	<5	257	141	<10
Cope-11 AR-209 [R]	.4	1.89	7	<5	223	<10	2.89	<1	16	45	34	3.86	.73	1.68	940	38	.55	28	.40	54	.58	<2	<2	495	<5	.41	<5	86	96	<10
Cope-11 AR-210 [R]	.3	3.30	13	<5	73	<10	6.21	<1	2	9	3	9.00	.57	.09	1415	12	2.58	4	.30	31	.23	<2	<2	2052	<5	.27	<5	377	389	<10
Cope-11 AR-211 [R]	.2	.20	35	<5	17	<10	.06	<1	3	29	4	5.88	.11	.05	640	3	.06	3	.02	11	.02	<2	<2	40	<5	.19	<5	244	125	<10
Cope-11 AR-212 [R]	.2	1.68	7	<5	34	<10	.51	<1	2	6	5	1.07	.91	.15	467	1	1.15	5	.01	9	.03	<2	<2	253	<5	.17	<5	32	75	<10
801 [R]	.3	1.60	6	<5	144	<10	1.70	<1	13	56	61	2.99	.90	1.71	744	5	.09	25	.08	33	1.79	<2	<2	137	<5	.23	<5	55	91	<10
802 [R]	.2	2.34	24	<5	135	<10	2.45	<1	14	50	45	2.96	.98	1.67	469	3	.12	27	.07	30	1.89	9	<2	233	<5	.29	<5	53	73	<10
803 [R]	.3	2.18	40	<5	86	<10	.91	<1	22	59	74	4.15	1.29	2.17	552	5	.20	43	.05	16	2.93	5	<2	50	<5	.40	<5	83	81	<10
804 [R]	.4	1.65	16	<5	89	<10	2.42	<1	18	43	67	4.48	.72	1.56	1237	8	.14	39	.07	43	2.30	3	<2	476	<5	.19	<5	47	82	<10
805 [R]	.7	1.45	60	<5	176	<10	3.70	<1	24	63	79	5.17	1.18	2.21	2375	25	.07	51	.10	599	2.56	7	<2	629	<5	.34	<5	62	155	<10
806 [R]	.3	1.54	11	<5	120	<10	.56	<1	19	62	54	3.69	1.15	2.14	589	15	.09	38	.04	34	1.94	5	<2	50	<5	.36	<5	65	78	<10
807 [R]	.2	1.36	40	<5	127	<10	.89	<1	18	76	63	3.90	1.04	1.75	623	7	.08	38	.05	38	2.19	3	<2	29	<5	.27	<5	68	67	<10
808 [R]	.4	1.64	36	<5	352	<10	4.51	<1	8	27	26	2.18	1.20	2.08	5953	70	.25	15	.19	863	1.28	14	<2	290	<5	.29	<5	38	337	<10
809 [R]	.2	2.06	18	<5	216	<10	5.69	<1	14	45	51	3.53	1.03	1.97	1778	21	.16	25	.10	263	1.72	11	<2	1449	<5	.27	<5	53	97	<10
810 [R]	.3	2.22	10	8	128	<10	6.79	1	22	20	83	5.19	.46	1.49	807	3	.29	45	.11	19	3.30	10	<2	1028	<5	.11	<5	10	39	<10

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: TORCH RIVER RESOURCES LTD.
BANKER'S HALL WEST TOWER
1000 - 888 3RD STREET SW
CALGARY AB T2P 5C5

Finalized Date: 24- NOV- 2011
Account: TORRIV

APPENDIX B- GEOCHEMICAL ANALYSIS, ALS MINERALS

CERTIFICATE VA11233292

Project: Copeland
P.O. No.: Soil
This report is for 9 Pulp samples submitted to our lab in Vancouver, BC, Canada on 12- OCT- 2011.

The following have access to data associated with this certificate:

ANDRIS KIKAUKA	W. PFAFFENBERGER	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 24	Pulp Login - Rcd w/o Barcode
TRA- 21	Transfer sample

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME- MS81	38 element fusion ICP- MS	ICP- MS

To: TORCH RIVER RESOURCES LTD.
ATTN: ANDRIS KIKAUKA
406 - 4901 EAST SOOKE ROAD
SOOKE BC V9Z 1B6

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

ALS Canada Ltd.
2103 Dollarton Hwy
North Vancouver BC V7H 0A7
Phone: 604 984 0221 Fax: 604 984 0218 www.alsglobal.com

To: TORCH RIVER RESOURCES LTD.
BANKER'S HALL WEST TOWER
1000 - 888 3RD STREET SW
CALGARY AB T2P 5C5

Finalized Date: 24- NOV- 2011
Account: TORRIV

Project: Copeland

CERTIFICATE OF ANALYSIS VA11233292

Sample Description	Method Analyte Units LOR	WEI-21 Recvd Wt. kg 0.02	ME-MS81 Ba ppm 0.5	ME-MS81 Ce ppm 0.5	ME-MS81 Co ppm 0.5	ME-MS81 Cr ppm 10	ME-MS81 Cs ppm 0.01	ME-MS81 Dy ppm 0.05	ME-MS81 Er ppm 0.03	ME-MS81 Eu ppm 0.03	ME-MS81 Ga ppm 0.1	ME-MS81 Gd ppm 0.05	ME-MS81 Hf ppm 0.2	ME-MS81 Ho ppm 0.01	ME-MS81 La ppm 0.5	ME-MS81 Lu ppm 0.01
Pg 1 (1) 5664-815N 397-550E	1	0.02	684	678	5.3	10	6.32	20.4	14.10	7.08	40.0	20.6	49.7	4.31	399	2.28
Pg 1 (2) 5664-860N 397-520E	2	0.02	1095	840	7.2	40	22.2	20.0	12.70	8.02	46.1	21.1	45.9	4.05	293	1.96
Pg 1 (3) 5664-880N 397-500E	3	0.02	774	602	3.1	10	4.46	19.30	12.95	7.14	43.0	19.45	32.0	3.98	325	2.03
Pg 1 (4) 5664-900N 397-420E	4	0.02	676	953	4.7	10	17.30	39.3	26.3	13.75	47.7	39.9	40.3	8.14	527	4.03
Pg 1 (5) 5664-950N 397-320E	5	0.04	881	426	3.0	10	4.60	15.00	10.40	5.29	50.2	14.75	44.3	3.17	223	1.69
Pg 1 (6) 5665-030N 397-240E	6	0.02	1355	125.0	2.0	<10	27.9	3.07	2.10	1.24	39.9	3.52	29.7	0.61	74.5	0.39
Pg 1 (7) 5665-030N 397-330E	7	0.02	507	115.5	9.5	<10	21.9	3.20	2.21	1.28	73.9	3.25	42.1	0.67	65.9	0.39
Pg 1 (8) 5665-100N 397-180E	8	0.02	570	1325	3.2	10	14.05	49.1	32.7	17.65	69.1	48.9	73.1	10.10	678	5.20
Pg 1 (9) 5665-040N 397-220E	9	0.02	788	277	2.3	<10	6.18	11.10	7.47	3.74	67.6	11.45	87.8	2.34	152.0	1.24

ALS Canada Ltd.
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To: TORCH RIVER RESOURCES LTD.
BANKER'S HALL WEST TOWER
1000 - 888 3RD STREET SW
CALGARY AB T2P 5C5

Finalized Date: 24- NOV- 2011
Account: TORRIV

Project: Copeland

CERTIFICATE OF ANALYSIS VA11233292

Sample Description	Method Analyte Units LOR	ME- MS81 Mo ppm 2	ME- MS81 Nb ppm 0.2	ME- MS81 Nd ppm 0.1	ME- MS81 Pr ppm 0.03	ME- MS81 Rb ppm 0.2	ME- MS81 Sm ppm 0.03	ME- MS81 Sn ppm 1	ME- MS81 Sr ppm 0.1	ME- MS81 Ta ppm 0.1	ME- MS81 Tb ppm 0.01	ME- MS81 Th ppm 0.05	ME- MS81 Tl ppm 0.5	ME- MS81 Tm ppm 0.01	ME- MS81 U ppm 0.05	ME- MS81 V ppm 5
Pg 1 (1) 5664- 815N 397- 550E	1	6	398	191.5	61.9	143.5	28.3	2	1595	4.3	3.25	37.0	<0.5	2.26	32.1	75
Pg 1 (2) 5664- 860N 397- 520E	2	5	329	195.5	59.9	187.0	30.5	3	797	4.5	3.32	44.9	1.0	1.99	22.3	91
Pg 1 (3) 5664- 880N 397- 500E	3	3	297	181.5	58.4	205	26.5	2	1890	4.5	3.17	27.2	<0.5	2.00	14.70	61
Pg 1 (4) 5664- 900N 397- 420E	4	4	445	319	99.0	175.0	49.6	3	1095	5.5	6.40	31.7	0.5	4.04	25.1	85
Pg 1 (5) 5664- 950N 397- 320E	5	<2	340	126.0	40.8	300	18.90	3	2030	4.6	2.44	16.90	<0.5	1.67	25.9	70
Pg 1 (6) 5665- 030N 397- 240E	6	7	200.0	34.9	11.30	246	5.08	1	1615	2.5	0.51	5.09	0.9	0.33	14.70	78
Pg 1 (7) 5665- 030N 397- 330E	7	<2	281	34.7	11.30	470	4.70	4	1280	2.7	0.53	5.01	0.6	0.35	16.85	171
Pg 1 (8) 5665- 100N 397- 180E	8	2	733	428	139.0	255	65.0	4	1095	10.4	7.99	67.2	1.2	5.15	29.3	124
Pg 1 (9) 5665- 040N 397- 220E	9	3	391	94.3	29.0	202	14.80	6	539	4.1	1.82	16.60	0.8	1.19	22.9	116

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BANKER'S HALL WEST TOWER
1000 - 888 3RD STREET SW
CALGARY AB T2P 5C5

Finalized Date: 24- NOV- 2011
Account: TORRIV

Project: Copeland

CERTIFICATE OF ANALYSIS VA11233292

Sample Description	Method Analyte Units LOR	ME- MS81 W ppm 1	ME- MS81 Y ppm 0.5	ME- MS81 Yb ppm 0.03	ME- MS81 Zr ppm 2
Pg 1 (1) 5664- 815N 397- 550E	1	2	145.5	14.80	2580
Pg 1 (2) 5664- 860N 397- 520E	2	3	109.5	13.00	2450
Pg 1 (3) 5664- 880N 397- 500E	3	1	133.0	12.95	1720
Pg 1 (4) 5664- 900N 397- 420E	4	3	267	25.9	2160
Pg 1 (5) 5664- 950N 397- 320E	5	1	106.0	10.85	2310
Pg 1 (6) 5665- 030N 397- 240E	6	3	20.1	2.32	1680
Pg 1 (7) 5665- 030N 397- 330E	7	1	19.4	2.35	2140
Pg 1 (8) 5665- 100N 397- 180E	8	3	348	33.7	4310
Pg 1 (9) 5665- 040N 397- 220E	9	11	74.0	8.05	4060

APPENDIX C- ROCK CHIP SAMPLES '2300 ZONE' (COPE11AR-201 to 212)

sample no	minerals	easting	northing	elev m	elevation ft	strike	dip
COPE11AR-201	pyrite, pyrrhotite, magnetite	397622	5664925	2319	7606.32	100	45 S
COPE11AR-202	pyrite, pyrrhotite, magnetite, fluorite	397593	5664877	2327	7632.56	100	55 S
COPE11AR-203	pyrite, pyrrhotite, magnetite	397501	5665018	2301	7547.28	110	86 S
COPE11AR-204	pyrite, pyrrhotite, magnetite	397180	5665105	2310	7576.8	100	85 S
COPE11AR-205	pyrite, pyrrhotite, magnetite	397209	5665068	2306	7563.66		
COPE11AR-206	pyrite, pyrrhotite, magnetite	397332	5665026	2334	7655.52	100	80 S
COPE11AR-207	pyrite, pyrrhotite, magnetite	397355	5664869	2282	7484.96	80	85 S
COPE11AR-208	pyrite, pyrrhotite, magnetite	397398	5664848	2276	7465.28		
COPE11AR-209	pyrite, pyrrhotite, magnetite	397502	5664823	2277	7468.56		
COPE11AR-210	pyrite, pyrrhotite, magnetite, fluorite	397528	5664790	2250	7380		
COPE11AR-211	pyrite, pyrrhotite, magnetite	397418	5664902	2309	7573.52		
COPE11AR-212	pyrite, pyrrhotite, magnetite	397320	5664956	2303	7553.84		

sample no	width cm	host rock	alteration
COPE11AR-201	50	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite
COPE11AR-202	50	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite
COPE11AR-203	60	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite
COPE11AR-204	45	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite
COPE11AR-205	float	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite
COPE11AR-206	50	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite
COPE11AR-207	50	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite
COPE11AR-208	float	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite
COPE11AR-209	float	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite
COPE11AR-210	float	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite
COPE11AR-211	float	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite
COPE11AR-212	float	sy gneiss, nepheline sy, peg-aplitic	cal, K-spar, chlorite, sericite

sample no	ppm Ag	V ppm	ppm Zn	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm Sm	ppm Dy	ppm Gd
COPE11AR-201	0.2	63	158	103	39.8	41.5	11.7	7.9	7.42	7.16
COPE11AR-202	0.3	26	28	362	170	97.5	32.5	13	9.85	10.4
COPE11AR-203	0.6	142	68	19.2	9.1	14.8	3.58	3.7	4.55	3.96
COPE11AR-204	0.5	46	99	43	42.7	11.6	4.57	1.2	0.85	0.83
COPE11AR-205	0.9	74	173	28.8	22.3	7.7	2.49	1.3	1.53	1.33
COPE11AR-206	1.1	190	452	69.9	53.1	18	6.35	2.5	2.14	2.11
COPE11AR-207	0.4	29	53	18	15.8	6.3	2.08	0.9	0.8	0.78
COPE11AR-208	0.3	257	141	51.2	80.4	8.5	3.17	1	0.93	0.84
COPE11AR-209	0.4	86	96	249	128	93	26.8	12	4.04	7.44
COPE11AR-210	0.3	377	389	343	168	103	32.3	14.3	10.1	11.8
COPE11AR-211	0.2	244	125	54.4	31	11.7	4.06	1.8	1.55	1.54
COPE11AR-212	0.2	32	75	220	102	56.4	19	7	4.45	5.48

sample no	ppm Eu	ppm Sr	ppm Th	ppm Zr	ppm Mo
COPE11AR-201	2.74	223	11.7	>1000	46
COPE11AR-202	3.77	1340	11.5	489	2
COPE11AR-203	1.37	31	1.8	536	8
COPE11AR-204	0.39	126	7.7	>1000	2
COPE11AR-205	0.64	60	8.1	790	16
COPE11AR-206	0.73	436	4.6	>1000	4
COPE11AR-207	0.39	229	3.9	921	2
COPE11AR-208	0.33	37	1.7	>1000	3
COPE11AR-209	3.54	495	11.1	432	38
COPE11AR-210	4.2	2052	9.7	563	12
COPE11AR-211	0.58	40	2.8	>1000	3
COPE11AR-212	1.98	253	3.1	>1000	1

APPENDIX D- ROCK CHIP SAMPLES 'MARBLE BRECCIA RIDGE' (801-810)

easting	northing	elevation m	elevation ft	strike	dip	sample no	zone name
397610	5665281	2163	7094.64	105	65 S	801	marble breccia ridge' COPE10AR-22 showing
397609	5665283	2163	7094.64	110	65 S	802	marble breccia ridge' COPE10AR-22 showing
397608	5665282	2163	7094.64	110	65 S	803	marble breccia ridge' COPE10AR-22 showing
397605	5665284	2164	7097.92	110	65 S	804	marble breccia ridge' COPE10AR-22 showing
397604	5665283	2164	7097.92	110	65 S	805	marble breccia ridge' COPE10AR-22 showing
397603	5665288	2164	7097.92	110	65 S	806	marble breccia ridge' COPE10AR-22 showing
397602	5665286	2165	7101.2	110	65 S	807	marble breccia ridge' COPE10AR-22 showing
397601	5665287	2165	7101.2	110	65 S	808	marble breccia ridge' COPE10AR-22 showing
397597	5665289	2165	7101.2	105	65 S	809	marble breccia ridge' COPE10AR-22 showing
397595	5665287	2166	7104.48	105	65 S	810	marble breccia ridge' COPE10AR-22 showing

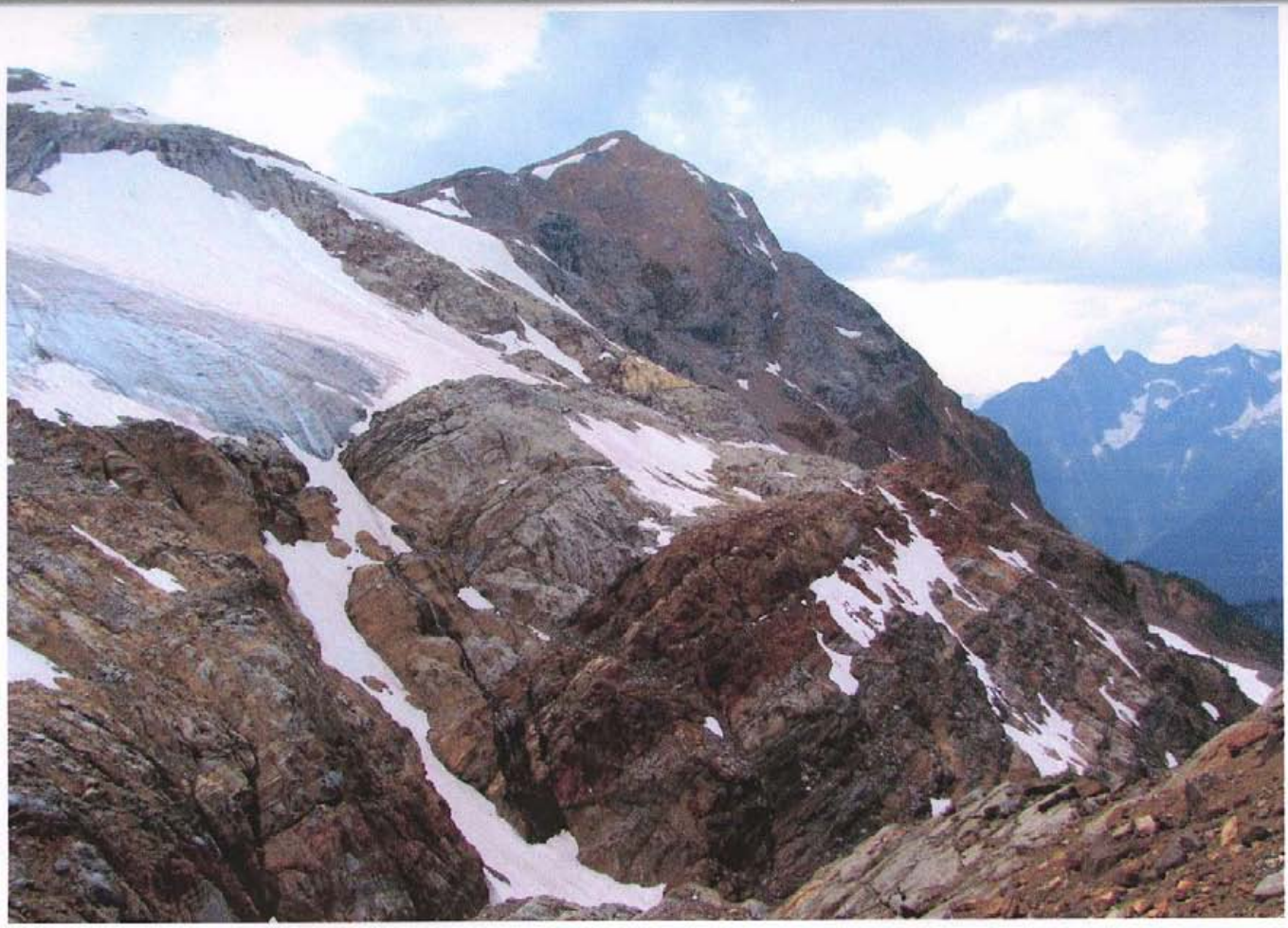
sample no	width cm	host rock	alteration	sample no	minerals
801	50	sy gneiss, nepheline sy, marble breccia	cal, K-spar, chlorite, sericite	801	pyrite, pyrrhotite, magnetite
802	50	sy gneiss, nepheline sy, marble breccia	cal, K-spar, chlorite, sericite	802	pyrite, pyrrhotite, magnetite
803	50	sy gneiss, nepheline sy, marble breccia	cal, K-spar, chlorite, sericite	803	pyrite, pyrrhotite, magnetite
804	50	sy gneiss, nepheline sy, marble breccia	cal, K-spar, chlorite, sericite	804	pyrite, pyrrhotite, magnetite
805	50	sy gneiss, nepheline sy, marble breccia	cal, K-spar, chlorite, sericite	805	pyrite, pyrrhotite, magnetite
806	50	sy gneiss, nepheline sy, marble breccia	cal, K-spar, chlorite, sericite	806	pyrite, pyrrhotite, magnetite
807	50	sy gneiss, nepheline sy, marble breccia	cal, K-spar, chlorite, sericite	807	pyrite, pyrrhotite, magnetite
808	50	sy gneiss, nepheline sy, peg-aplitic, marble bx	cal, K-spar, chlorite, sericite	808	pyrite, pyrrhotite, magnetite, fluorite
809	50	sy gneiss, nepheline sy, marble breccia	cal, K-spar, chlorite, sericite	809	pyrite, pyrrhotite, magnetite
810	50	sy gneiss, nepheline sy, marble breccia	cal, K-spar, chlorite, sericite	810	pyrite, pyrrhotite, magnetite

comments	sample no	ppm Ce	ppm La	ppm Nd	ppm Pr	ppm Sm	ppm Dy	ppm Gd	ppm Zr	ppm Th	ppm Mo
0.5 m channnel,1.5 m intervals, 5 m outcrop	801	718	612	137	49.8	18.4	14.6	15.1	366	87	5
0.5 m channnel,1.5 m intervals, 5 m outcrop	802	382	290	90.4	30.5	12.9	9.32	10.5	523	62.5	3
0.5 m channnel,1.5 m intervals, 5 m outcrop	803	168	82.2	60	16.4	11.6	10.6	11	179	17.5	5
0.5 m channnel,1.5 m intervals, 5 m outcrop	804	2220	1650	432	155	59.3	42.8	48.1	291	407	8
0.5 m channnel,1.5 m intervals, 5 m outcrop	805	2120	1740	339	133	40.9	34.1	33.7	113	405	25
0.5 m channnel,1.5 m intervals, 5 m outcrop	806	294	208	82	26	12.1	7.72	9.44	150	27.7	15
0.5 m channnel,1.5 m intervals, 5 m outcrop	807	485	444	94.3	33.6	12.8	8.95	9.9	175	37.7	7
0.5 m channnel,1.5 m intervals, 5 m outcrop	808	3440	2790	552	218	65.6	64.2	57.2	164	575	70
0.5 m channnel,1.5 m intervals, 5 m outcrop	809	1820	1540	277	112	31.5	25.6	25.1	149	527	21
0.5 m channnel,1.5 m intervals, 5 m outcrop	810	2920	2690	389	168	41.6	33.9	33.8	81	351	3

sample no	Sr ppm	Eu ppm	Ba ppm	P ppm	Ca %	K %	Ti %	Zn ppm	Ag ppm	Y ppm
801	137	4.58	144	800	1.7	0.9	0.23	91	0.3	103
802	233	3	135	700	2.45	0.98	0.29	73	0.2	53.3
803	50	2.43	86	500	0.91	1.29	0.4	81	0.3	57.9
804	476	16.3	89	700	2.42	0.72	0.19	82	0.4	282
805	629	11	176	1000	3.7	1.18	0.34	155	0.7	206
806	50	2.62	120	400	0.56	1.15	0.36	78	0.3	45
807	29	2.94	127	500	0.8	1.04	0.27	67	0.2	60.2
808	290	18.3	352	1900	4.51	1.2	0.29	337	0.4	468
809	1449	7.84	216	1000	5.69	1.03	0.27	97	0.2	170
810	1628	10.5	120	1100	6.70	0.46	0.11	39	0.3	245

APPENDIX E- SOIL SAMPLE DATA TABLE '2300 ZONE'

soil sample #	easting	northing	elev m	elev ft	ppm Ce	ppm Ga	ppm Hf	ppm La	ppm Nb	ppm Nd	ppm Pr	ppm Rb	ppm Y	ppm Zr
1	397550	5664815	2308	7544	678	40	49.7	399	398	191.5	61.9	143.5	145.5	2580
2	397520	5664860	2270	7580.08	840	46.1	45.9	293	329	195.5	59.9	187	109.5	2450
3	397500	5664880	2295	7655.52	602	43	32	325	297	181.5	58.4	205	133	1720
4	397420	5664900	2308	7665.36	953	47.7	40.3	527	445	319	99	175	267	2160
5	397320	5664950	2300	7425.92	426	50.2	44.3	223	340	126	40.8	300	106	2310
6	397240	5665030	2332	7445.6	125	39.9	29.7	74.5	200	34.9	11.3	246	20.1	1680
7	397330	5665030	2334	7527.6	115.5	73.9	42.1	65.9	281	34.7	11.3	470	19.4	2140
8	397180	5665100	2290	7570.24	1325	69.1	73.1	678	733	428	139	255	348	4310
9	397220	5665040	2311	7544	277	67.6	87.8	152	391	94.3	29	202	74	4060
Average =					593.5	58.0556	49.433	304.16	379.33	178.38	56.733	242.61	135.8	2601.1



Looking West at West Basin
MTO tenure 546342 foreground
MTO tenure 706491 background

APPENDIX F- PHOTOS