COMINCO LTD.

EXPLORATION

WESTERN CANADA

NTS: 82F/4

15 DECEMBER 1988

ASSESSEMENT REPORT

DIAMOND DRILLING ON

ROSSLAND FREEPORT JOINT VENTURE

TRAIL CREEK M.D.

LATITUDE: 49°05' LONGITUDE: 117°50'

REPORT BY

H. KANG

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ATTACHMENTS

SUMMARY

Drill Holes R88-1 and R88-2 were drilled in September, 1988 to test a soil geochem anomaly. The holes did not intersect any significant Au mineralization.

Hole R88-1 intersected the St. Elmo Fault structure, now filled with a series of vertical to steeply dipping lamprophyre and diorite dykes. No Au mineralization was associated with this structure.

INTRODUCTION

A joint venture between Cominco and Freeport McMoran Gold Company Ltd. was convened in 1987 to explore 25 Crown Grants, 5 Mineral Leases and 17 mineral claims jointly contributed by Cominco and Freeport.

Drilling of R88-1 and 2 was completed from September 6 to October 11, 1988 to test the soil geochem anomaly on the Golden Queen and Coxey claims.

Diamond drilling was carried out by Kootenay Exploration Drilling of Rossland, B.C., using a BB1-1 drill. Core recovery averaged 98% or better in mineralized and unmineralized sections.

Drill site locations were mostly gentle to moderately sloped. A D-8 Cat was utilized for site preparation, but existing bush roads were used whenever possible. Sites normally took 6-7 hours to prepare.

Drill moves between sites were carried out by the D-8 Cat and normally took 3-4 hours.

Ground conditions for drilling were generally good except for local, minor fault/fracture zones.

Diamond drill program was supervised by H.Kang, S. Smith and temporarily by R. Aulis.

LOCATION AND ACCESS

The property is located on the north side of the Rossland Cu-Au camp 3 km north of the town of Rossland (Fig.1). Access to the property is via two gravel roads, the Jumbo Creek road, an all weather gravel road, and a four-wheel drive bush road, both of which leave the Cascade Highway 2 km and 1 km, respectively west of Rossland. Jumbo Creek road passes throughy the Red Mountain Mines mill complex and extends to the top of Red Mountain. The four-wheel drive bush roads winds its way up the south side of Red Mountain to join the Jumbo Creek road on the Novelty claim. Numerous bush roads in various stages of disuse extend from the access roads throughout the property.

TOPOGRAPHY

The property is situated on the west side of Red Mountain at elevations between 1050 m and 1600 m. The City of Rossland is at roughly 1000 m. Slopes are moderate to steep and moderately covered with evergreen and less commonly deciduous tress.

PROPERTY AND OWNERSHIP (Fig.2)

Crown Grants	Lot Nos.	Area(Ha)	1986 Mineral Land Taxes	Surface Rights(Ha)	1987 Surface Taxes
Annie	730	12.22	$12.10	12.23	96.36
Annie Fr	3198	0.96	0.95		
Black Bear	538	19.89	19.69	2.63	347.72
California	956	20.90	20.69		
Giant	997	17.00	16.83		
LeRoi Annie Fr	8723	0.03	0.03		
Mariposa	1214	12.33	12.21		
Monita	689	6.29	6.22		63.93
Number One (a)	687	6.63	6.57	6.63	70.95
Number One Fr	2723	0.09	0.09		
Rockingham	731	1.70	1.68		
Rockingham Fr	1434	0.10	0.10		
San Francisco	1056	16.09	15.93		
St. Patrick Fr	11474	0.15	0.15		
You Know	982	3.19	3.16	3.19	
Eureka	946				
Evening	947				
Gold King	1061				
Coxey	1221				
Good Friday	967	129.12	127.83		
Mountain View	682				
Nevada	966				
Ontario	1057				
Peak	1209				
Sam Hayes	3014				
		117.57	244.23	24.68	

Mineral Leases

ML	Lot Nos.	Acreage	Amount	Rental Due	Renewal Due
ML 5 (Little Darling)	1043	25.00	$50.00	Jan 3/89	Jan 3/92
ML 14 (Victor)	1062	46.54	94.00	Sep 14/88	Sep 14/93
ML 15 (Eddie J)	803	44.00	88.00	Sep 26/88	Sep 26/93
ML 17 (Northern Belle)	644/645 1347	87.00	174.00	Aug 20/88	Aug 20/94
ML 22 (Southern Belle)	1348	29.80	60.00	Apr 8/89	Apr 8/2006
		$232.34	$466.00		

Claims	Units	Record No.	Recorded	Due Date
Baltic Fr	1	508	Mar 19/80	Mar 19/93
Golden Queen	1	543	Jun 23/80	Jun 23/92
Grey 1,2	2x1	1055,1056	Nov 16/61	Nov 16/92
Grey 9 Fr., 10 Fr.	2x1	1063,1064	Nov 16/61	Nov 16/92
Hal 1 Fr., 4 Fr.	2x1	539,540	Aug 8/80	Aug 8/92
Hal 2 Fr., 3 Fr.	2x1	548,549	Aug 8/80	Aug 8/92
Novelty	1	332	Oct 11/78	Oct 11/92
St. Elmo	1	542	Jun 23/80	Jun 23/92
Surprise	1	368	Mar 23/79	Mar 23/93
Tor 1 Fr., 2 Fr.	2x1	1429,-30	Jan 30/64	Jan 30/93
Tor 3 Fr., 4 Fr.	2x1	1758,-59	Nov 6/64	Nov 6/92

GEOLOGY

The Rossland property, in the northwest section of the Rossland Cu-Au camp, is underlain by siltstones and argillaceous siltstones of either Paleozoic, Roberts Mountain Formation or Jurassic Rossland Formation rocks which strike northerly and dip westerly at 15-40°. The sediments have been intruded by diorite dykes of suspected Jurassic (160 MY) age possibly related to the Trail granodiorite and/or Rainy Day stock. Sediments and diorites on east half of Giant claim and to north onto Novelty, Coxey, Golden Queen, Nevada, Mountain View, Good Friday, St. Elmos Peak, Northern Belle, Queen's Own and Good Hope claims have been extensively brecciated, intruded and metasomatized by feldspar porphyry and monzonite plugs, dykes and veinlets thought to be consanguinaceous with some of the diorites. Later diorite and Tertiary lamprophyre dykes intrude all rock types.

DIAMOND DRILLING

Drill hole R88-1 was commenced September 13, 1988 and completed to a depth of 373 feet on September 17, 1988. R88-2 started September 19, 1988 and was completed to a depth of 295 feet on September 24, 1988. Both holes were inclined at -45° with an azimuth of 090°. The drill holes were targeted to test the downward extensions of the Au, As, Mo soil geochemical anomaly. Both holes encountered weakly to strongly metasomatized, black/grey to green silstones with very finely dissemianted pyrrhotite/pyrite 2-15%, but no significant Au bearing intersections. Hole R88-1 also intersected St. Elmo fault structure, now filled with a series of steeply dipping lamprophyre dykes.

The drill holes were logged by H. Kang and S. Smith and are described in detail in Appendix B. The assay data is in Appendix C. Analysis for Au was by fire assay with fusion technique for sample digestion.

CONCLUSIONS

Drill Holes R88-1 and R88-2 showed that the surface soil geochem anomaly where tested does not overlie significant Au mineralization.

Reported by: _____
H. Kang

Endorsed by: _____
M.J. Casselman
Senior Geologist

Approved for
Release by: _____
W.J. Wolfe,
Manager, Exploration-
Western Canada

HK/pm
15 December 1988

APPENDIX A

STATEMENT OF EXPENDITURES

Diamond Drill Hole R88-1 and R88-2 were part of 7751 foot drill program from September 6 to November 13, 1988.

Salaries:			
M.J. Casselman - September 30	-	@ $350/day	$ 350.00
H. Kang - Sept. 9 - Oct. 11	-	@ $210/day	6,930.00
S. Smith - Sept. 6 - Oct. 7			
Oct. 17 - Oct. 31	-	@ $165/day	7,590.00
R. Aulis - Oct. 31 - Nov. 13	-	@ $203/day	2,842.00
			$ 17,712.00
Drilling			$176,620.37
Drill site preparation			30,863.00
Field & Office Supplies			2,123.89
Expense Account			10,032.09
Assay			4,955.80
Water Truck			17,850.00
Transportation - 4 x 4 rental			2,767.07
Drafting			5,000.00
		TOTAL:	$267,924.22

Cost per foot drilling $267,924.22 for 7751 feet = $34.57/ft.

Diamond drill hole R88-1 and R88-2 cost = $34.57/ft x 668 ft = $23,092.76

15 December 1988

APPENDIX B - DIAMOND DRILL HOLE LOG

12 inches = 30.5 cm

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Rossland Freeport J.V	District	Trail Creek M.D.	Hole No.	R 88-1
Commenced	Sept. 12 1988	Location	Soil Geochemistry Grid	Tests at	186 (-53) 373' (-56) Hor. Comp.
Completed	Sept. 17 1988	Core Size	NQ	Corr. Dip	-45 Vert. Comp.
Co-ordinates	17 S 225E			True Brg.	90 Logged by H.K.
Objective	To test possible downdip extension of Au-soil Geochem. anomaly			% Recov.	Date 88-9-13 to 88-9-17

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	Footage To	Description	Sample No.	Length	Analysis
0	9.8	Casing - Overburden			
9.8	25	Depth of oxidation - 25ft. Green/Grey Siltstone- strongly fractured, oxidized; sulphides leaching out has left stockwork stringers of cavities; lower contact with lamprophyre dyke is sharp - contact/ core axis angle 50° ; contact is also marked by fine fsp veinning and disseminated pyrrhotite/pyrite ≤ 5%	20-25		
25	32.5	LAMPROPHYRE DYKE - dark green to black fine grained, biotite rich; disseminated calcite amygdules and veinlets locally; core is moderately to strongly fractured, with slickensides on fracture surfaces - slickenside/core axis angle 45-50° ; lower contact with green siltstone is sharp - contact/ core axis angle 60°; core is strongly fractured near the lower contact with slickensides - fault zone.			
32.5	39	GREEN SILTSTONE - fine grained, massive, no bedding features; weak calcite veinning and disseminated/stringers of pyrite/pyrrhotite up to 8%, disseminated blebs of hematite ≤2% and weak garnet veinning locally; lower contact with lamprophyre dyke is marked by by strong fracturing with slickensides on fracture surfaces - slickenside/core axis angle 30° - fault zone.	32.5-35 35-39		
39	49.5	LAMPROPHYRE DYKE - as described in 25-32.5; lower contact to diorite/core axis angle 65°			
49.5	64	DIORITE - dark green, massive equigranular, fine to medium grained, with disseminated, chloritized, subhedral, originally pyroxene crystals =5% throughout; disseminated pyrite / pyrrhotite ≤ 2%			

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Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	Footage To	Description	Sample No.	Length	Analysis
64	87.5	GREEN SILTSTONE - massive fine grained, weak to moderate calcite veinning and tan/grey colored bleaching of rock throughout; disseminated and stringers of pyrite/pyrrhotite up to 5-7% throughout; local, weak to moderate, dark green pyroxene veinning; upper contact with diorite dyke/core axis angle 35° -marked by slickensides - slick/core axis angle 35° thin bedded locally - bedding/core axis angle 60° @ 69' and 65°@ 72'	64-67 67-72 72-77 77-82 82-86 86-87.5		
		64-67 moderate to strong bleaching of rock - tan/grey coloration and locally strong calcite/pyroxene vein/vein brecciation			
		73-75 zones of bleaching with garnet and calcite			
		80-82 strong chlorite veinning and crackle brecciation			
		82-86 disseminated and stringers of pyrite/pyrrhotite 15%			
		lower contact with intrusine/altered sed.(?) is marked by sharp contact-contact/core axis angle 50°			

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Colour Plot & Dips

Drill Hole Record

Property | District | Hole No.

Commenced | Location | Tests at | Hor. Comp.

Completed | Core Size | Corr. Dip | Vert. Comp.

Co-ordinates | True Brg. | Logged by

Objective | % Recov. | Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	Footage To	Description	Sample No.	Length	Analysis
87.5	92.5	FELSIC INTRUSIVE (Monzite?) /FELSPATHIZED SILTSTONE? - fine to medium grained, feldspar shows equigranular intrusine texture; garnet veining and associated epidote common; pyrite/pyrrhotite 5% found disseminated and in stringers throughout; weak to moderate calcite veinning and disseminated calcite blobs throughout; moderate pyroxene veins/veinlets quite widespread and associated to garnet veins, locally weakly fractured; lower contact to green siltstone marked by finer grain size and veins of sulphides/ core axis angle 50°	87.5-92.5		
92.5	107	GREEN SILTSTONE -fine grained, weakly fractured, weak to moderate calcite and garnet veining; tan/grey colored bleaching of rock outliner bedding; pyrite/pyrrhotite 2-5%finely disseminated and in stringers; garnet veins and larger calcite veins follow bedding. bedding features (thin) visible locally- bedding/core axis angle 60° @98' and 55° at 103'; lower contact with lamprophyre is marked by highly fractured zone 6" wide	92.5-97.5 97.5-102 102-107		

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Colour Plot & Dips

Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	To	Description	Sample No.	Length	Analysis
107	131	LAMPROPHYRE DYKE			
		~~black, meduim grained, moderatly to strongly~~ fractured ~~equigranular, biotite-rich;~~ disseminated calcite filled amygdules and veinlets throughout; slickensides common as fractured surfaces - slicks/core axis angle 55-60°; lower contact with green siltstone is stronglyfractured in slickensides/core axis angle 45-50° (fault zone) -contact/core axis angle 40°			
131	158.5	GREY SILTSTONE	131-136		
		Fine grained, massive, weak to moderatly fractured; wear to moderate calcite veining;	136-141		
		disseminated pyrite/pyrrhotite and locally in stringer/veins up to 8%; locally , weak	141-146		
		to moderate green pyroxene veining	146-148.5		
			148.5-152		
			152-156		
		139.5-140' strong garnet veinning	156-158.5		
		149-149.5 feldspar and calcite veining, crackle brecciation and strong pyrite/ pyrrhotite veinning			
		152-158.5 biotized, locally bleached with epidote and sulphide stringers, feldspathization, eqiugranular, intrusive texture;-at contact with diorite dyre, siltstone shows strong			

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Drill Hole Record

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by SWS
Objective		% Recov.	Date 88-9-15

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	To	Description	Sample No.	Length	Analysis
171.5	173	DIORITE DYKE			
		as described in 158.5-170'; contact to green siltstone/core axis angle 35°; locally feldspar porphyritic			
			173-178		
173	183.5	GREY SILTSTONE	178-183.5		
		as described in 170-171.5 thinly bedded- bedding/core axis angle 60° at			
		175' locally weak to moderate calcite veining			
		175-176 and 177.5-178 mod to strongly feldspathized stringers/veins of			
		pyrite/pyrrhotite up to 10%; equigranular intrusive texture			
		179-179.5			
		small diorite dyre as described in 17.5-173- irregular contact			
		lower contact at 183.5' to diorite dyke sharp/core axis angle 35°; small calcite vein			
		along contact			

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Colour Plot & Dips

Drill Hole Record

Comaco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	Footage To	Description	Sample No.	Length	Analysis
183.5	197	DIORITE DYKE			
		AS DESCRIBED IN 158.5-170' contact to grey siltstone/core axis angle 40°			
197-235.5		GREY SILTSTONE	197-202		
		fine grained weakly fractured thinly bedded -bedding defined by thin green and brown	202-207		
		(biotized?) layers; locally white/tan layers are siliceous;disseminated pyrite/	207-212		
		pyrrhotite 2-5%, locally in stringers/veins and parallel to bedding up to 10%;	212-217		
		locally highly metasonatized pale green layers- bedding structures/core axis angle	217-222		
		60° at 204' 55°at 210' 65°at 224' 60°at 230'	222-227		
		197-203	227-232		
		moderate to strongly chloritized pyroxene veining /stockwork,weak feldspathization,	232-235.5		
		equigranulas/intrusive texture, disturbed bedding -soft sedimentstructures possible			
		214.5 bleb of quartz (~3-4mm) ringed by pyrite/pyrrhotite			
		223'			
		amount of brown (biotized?) layers decrease lower contact with felsic intrusive			
		(feldspathized siltstone?) follows bedding/ core axis angle 65° at 235.5			

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Colour Plot & Dips

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Drill Hole Record

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Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	Footage To	Description	Sample No.	Length	Analysis
235.5	238.5	FELSIC INTRUSIVE (MONZONITE?) FELDSPATHIZED SILTSTONE fine to medium grained K-fsp grains show , equigranula intrusive texture; moderately hard rock, local quartz and epidote veinning and moderate pyroxene veining; disseminated pyrite /pyrrhotite and in stringers /veins ≤10% -lower contact with grey siltstone sharp, and follows bedding/core axis angle 55°	235.5-238.5		
238.5	269.5	GREY SILTSTONE fine grained weakly fractured, thinly bedded, defined by grey/green, white and brown layers; rock is very hard, locally quartz veined ; locally highly metasomatized and strong green pyroxene veining; disseminated pyrite /pyrrhotite 2-5% locally in stringers/veins up to 10% which offset bedding and also follow bedding , minorchalcopyrife on fractures -bedding structures/core axis angle 60° at 240.5' 58°at 249 55°at 267.5 2685-269 - disseminated pyrite/pyrrhotite and chalcopyrite and in veins ≤30% -lower contact with feldspar porphyry/core axis angle 60°	238.5-243 243-248 248-253 253-257 257-262 262-266 266-269.5		

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Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	To	Description	Sample No.	Length	Analysis
269.5	317.5	FELDSPAR PORPHYRY			
		-weakly fractured, pale green to dark brown fine to medium grained matrix with porphyritic feldspar crystals 2-4 mm; weakly biotized porphyritic meedles and clots (≤25mm) -probably biotized mafics; locally mod to strong pyroxeue and quartz veining; disseminated pyrite /pyrrhotite≤2% locally in stringer/veins and coating fracture surfaces up to 8%			
		272-272.5 DIORITE DYKE			
		-dark green, fine to medium grained, subhedral equigranular chloritized mafic crystals disseminated pyrite/pyrrhotite≤2%;-upper contact sharp core axis angle 80°; lower contact gradational back into feldspan porphyry			
		301-317.5			
		matrix becomes more feldspar rich; locally moderate to strong pyroxeue veining /stockwork lower contact to grey siltstone /core acis angle 65°			
317.5	332	GREY SILTSTONE	317.5-322		
		-fine grained , weakly fractured, thinly bedded, defined by grey/green, white and brown layers; grey/green vein stockwork bleaching the rock locally; locally green pyroxeue veining/stockwork with weak to moderate feldspathigatia, locally shows equigranular intrusive texture; locally epidate and garnet veins and epidotized and garnetized beds disseminated pyrte/pyrrhotite≤2% and locally in stringers/veins up to 10% locally minor chalcopyrite coating fracture surface.	322-327 327-332		

Scale

Colour Plot & Dips

Drill Hole Record

Comaco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	Footage To	Description	Sample No.	Length	Analysis
		-bedding structurer/core axis angle 75° at 320' 80° at 332'			
		-lower contact with altered diorite is gradational from 332-335			
332-	373	DIORITE	332-337		
		-dark to medium green, fine grained, weakly fractured, equigranular intrusive	337-342		
		texture; weak to moderate pyroxene/pyrrhotite ≤2%, locally in stringers/veins to	342-347		
		minor chalcopyrite up to 5%; locally bleached with strong pyroxene stockwork			
		veining; unit is hard, locally quartz veined (≤7mm in width) containing pyrite/	365-370		
		pyrrhotite; mafix crystals, subhedral dark green/black pyroxene/hornblende(?); locally			
		moderate to strong feldspathization			
		EOH #&#			

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Colour Plot & Dips

Drill Hole Record

Property | District | Hole No.

Commenced | Location | Tests at | Hor. Comp.

Completed | Core Size | Corr. Dip | Vert. Comp.

Co-ordinates | True Brg. | Logged by

Objective | % Recov. | Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	To	Description From	To	Length	Amount Recovered		%Recovered	Sample No.	Length	Analysis
		16	25	108"	7'5"	89"	82			
		25	32	84"	6'10"	82"	98			
		32	39	84	6'10"	82	98			
		39	45	72	5'9"	69	96			
		45	55	120	9'10"	118	98			
		55	65	120	9'11"	119	99			
		65	75	120	9'10"	118	98			
		75	85	120	9'10"	118	98			
		85	95	120	9'10"	119	99			
		95	105	120	9'11"	119	99			
		105	114.5	114	9'11"	119	100			
		114.5	124.75	123	9'10	118	96			
		124.75	134.5	117	9'9"	117	100			
		134.5	144.5	120	10'	120	100			
		144.5	154.5	120	9'11"	119	99			
		154.5	164.5	120	9'10"	118	98			
		164.5	174.5	120	10'	120	100			
		174.5	185	126	9'10	118	98			
		185	195	120	9'11"	119	99			
		195	205	120	10'	120	100			
		205	215	120	9'10"	118	98			

Scale

Colour Plot & Dips

Drill Hole Record

Property | District | Hole No.

Commenced | Location | Tests at | Hor. Comp.

Completed | Core Size | Corr. Dip | Vert. Comp.

Co-ordinates | True Brg. | Logged by

Objective | % Recov. | Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	To	Description	True length	Core Recovered		%Recovered	Sample No.	Length	Analysis
		215-225	120"	9'11"	119	99			
		225-235	120	9'10"	118	98			
		235-245	120	9'10"	118	98			
		245-255	120	9'9"	117	98			
		255-265	120	10'	120	100			
		265-275	120	9'11"	119	99			
		275-285	120	10'	120	100			
		285-295	120	9'11"	119	99			
		295-305	120	10'	120	100			
		305-315	120	10'	120	100			
		315-325	120	10'	120	100			
		325-335	120	9'10"	118	98			
		335-345	120	9'11"	119	99			
		345-355	120	10'	120	100			
		355-365	120	9'10"	118	98			
		365-373	96	7'11"	95	99			

12 inches = 30.5 cm

DRILL HOLE RECORD

COMINCO LTD.

Property:	Rossland-Freeport Jv	District:	Trail Creek M.D.	
Commenced:	Sept.19,1988	Location:	Soil Geochem Grid Tests at: 147'(-48°) 295 (-50°)	Hor. Comp:
Completed:	Sept.24,1988	Core Size:	Tests at: 147'(-48°) 295 (-50°) 38S 125E,1988	Vert. Comp:
Co-ordinates:	38S 125E	Claim:	NQ	Logged by: S.W. Smith
Objective:	To test possible downdip extension of Au soil geochem anomaly	Collar Dip:		Date: Sept.21-24,1988
		Length:		

FOOTAGE FROM	TO	DESCRIPTION	ANALYSIS SAMPLE	FROM	TO
0	6	CASING			
6	22	Black Siltstone Fine grained, massive, moderate to strongly fractured, rubbly appearance, weak to moderate calcite veining; locally thinly bedded with bleached layers defining bedding/core axis angle 30° at 11'; disseminated pyrite pyrrhotite <2%; unit is hard. Lower contact with green siltstone is sharp, small gradational colour change (black-tan/grey-green); also marked by feldspar and quartz veining contact/core axis angle 70°.			
22	30	Green Siltstone Fine grained, massive to thinly bedded, weakly fractured; weak calcite, quartz, feldspar veining; locally moderate to strong quartz/feldspar veining with crackle brecciation/stockwork; locally and at lower contact moderate dark green pyrite veining/stockwork; disseminated pyrrhotite <2%; locally epidote coating fractures; unit is hard. Bedding/core axis angle 60° at 27'. Lower contact with black siltstone is sharp with rapid colour change; contact is marked by dark green pyroxene veining with quartz/feldspar veining also. Contact/core axis angle 40°.			
30	97	Black Siltstone Fine grained, thinly bedded to locally massive, and moderate to strongly fractured; moderate calcite veining, locally strong; unit is hard; disseminated pyrite/pyrrhotite <2%, locally in stringers, minor chalcopyrite <2%.			

D R I L L   H O L E   R E C O R D

COMINCO LTD.

Property: Rossland-Freeport JV

FOOTAGE FROM - TO	DESCRIPTION
	Bedding/core axis angle 45° at 31', 40° at 36', 65° at 51', 56° at 79', 50° at 94'.
	At 36' calcite vein 25 mm thick parallel to bedding. At 59-60.5 - brecciated, bleached, strong pyroxene/quartz vein/stockwork calcite coated fractures; pyrrhotite/chalcopyrite <2%, minor arsenopyrite. At 81.5-85 - fine to medium grained, weak to moderately fractured; weakly to moderately feldspathized, bleached, equigranular intrusive texture; disseminated pyrrhotite/chalcopyrite <2%; calcite/quartz veins follow bedding/core axis angle 57°.
	Lower contact with diorite is sharp. Contact/core axis angle 30°; over last 5' of siltstone gradational change from black to grey.
97 - 102.5	Diorite Black, medium grained, equigranular texture, weakly fractured; calcite filled amygdules approx. 2-3 mm; locally large quartz blobs (<50 mm); Lower contact with siltstone is quite sharp/core axis angle 20°; at contact diorite shows zoned chilled margin.
102.5 - 142	Black Siltstone Fine grained, thinly bedded, weakly fractured; weak to moderate quartz veining, siliceous unit; disseminated pyrite/pyrrhotite <2% locally grey, bleached areas with weak to moderate feldspar veining/stockwork contains stringers of pyrite/pyrrhotite <5%; locally dark green pyroxene veining/stockwork.
	Bedding structure/core axis angle 50° at 112', 55° at 121', 60° at 134', 55k° at 138'.
	125-127 - and 140-142 - grey siltstone - thinly bedded; locally dark green pyroxene veining/stockwork.
	Lower contact with monzonite/feldspar porphyry is sharp-contact/core axis is angle 60° and contact is parallel to bedding.

SAMPLE	FROM	TO	ANALYSIS				

DRILL HOLE RECORD

COMINCO LTD.

Property: Rossland-Freeport JV

FOOTAGE FROM	TO	DESCRIPTION
141.5	142.5	Monzonite/Feldspar Porphyry Grey/white, medium grained with porphyritic feldspar laths (<5 mm) within fine, brown weakly biotized matrix; weakly fractured; disseminated pyrite/pyrrhotite <5%, locally in stringers <5%; locally dark green pyroxene veining/stockwork, brecciated clasts bleached to white, unit is hard; lower contact with diorite is sharp - contact/core axis angle 60°.
142.5	143.5	Diorite As described in 97-102.5'. Lower contact with monzonite/feldspar porphyry is sharp/core axis angle 25°.
143.5	147	Monzonite/Feldspar Porphyry As described in 141.5-142.5'. Lower contact with diorite/core axis angle 45°.
147	162	Diorite As described in 97-102.5 At 153-154' and 156-159'. Monzonite/Feldspar porphyry as described 141.5-142.5'. Contacts/core axis angle approx. 20°. Lower contact with mixed breccia is sharp. Contact/core axis angle 30°; contact is strongly fractured.
162	180	Mixed Breccia Fragments of grey/green siltstone and brown/red feldspar-porphyry within medium to coarse grained k-feldspar vein stockwork matrix; strongly altered weak to moderately fractured; locally large clasts(?) or unbrecciated grey siltstone, weakly to moderately feldspathized; weak to moderate quartz/calcite/pyroxene veining.

ANALYSIS							
SAMPLE	FROM	TO					

DRILL HOLE RECORD

COMINCO LTD.

Property: Rossland-Freeport JV

FOOTAGE FROM	TO	DESCRIPTION
		At 175-177 - grey/black siltstone brecciated by calcite veining; strongly fractured; slickensides-fault zone? Lower contact with black siltstone highly fractured in siltstone slickensides/core axis angle 45° contact/core axis angle 50°.
180	212	Black Siltstone Fine grained, weakly fractured, massive, locally thinly bedded; breaks with conchoidal fracture; disseminated pyrite/pyrrhotite paint on fractures <2%; thin <7 mm calcareous(?) layers accentuate bedding structure. Bedding/core axis angle approx. 55°; locally thin (<5 mm) syngenetic sulfide layers parallel to bedding; sharp lower contact with diorite- contact/core axis angle 60°.
212	220	Diorite Weakly to moderately altered: green/grey, fine to medium grained, equigranular with coarse (<6 mm) biotite laths; weak to moderate pale green feldspar/pyroxene veining; stringer/veinlets of pyrite/pyrrhotite <2%; weakly fractured. Lower contact with brecciated diorite is gradational.
220	229.5	Diorite Strongly veined/brecciated. Strongly bleached clasts of diorite (as described 212-220') in a matrix of pale/dark green feldspar/pyroxene veining/stockwork; disseminated and stringers of pyrite/pyrrhotite <5%, trace amount of Mo in stringers. Lower contact with strongly altered grey siltstone is gradational; weakly fractured.
229.5	233	Grey Siltstone - Strongly altered. Strongly bleached, fine grained, strong pale green medium grained feldspar veining/stockwork; locally dark green pyroxene veining; locally calcite veins and coating fractures. Disseminated and locally stringers of pyrite/pyrrhotite <5%; weakly fractured. Lower contact with black siltstone is sharp but irregular contact/core aix angle approximately 90°.

ANALYSIS							
SAMPLE	FROM	TO					

DRILL HOLE RECORD

COMINCO LTD.

Property: Rossland Freeport JV

FOOTAGE FROM	TO	DESCRIPTION
233	236	Black Siltstone As described in 180-212'.
236	244	Green Siltstone Medium grained, moderate feldspar veining, locally strong veining/stockwork of quartz, feldspar and calcite and calcite disseminated throughout; weakly fractured; disseminated pyrite/pyrrhotite and locally in stringers <5%. Lower contact with grey siltstone is gradational
244	259	Grey Siltstone Fine grained, massive, locally relic? bedding; moderate but locally strong quartz/calcite veining and feldspar veining; disseminated pyrite/pyrrhotite <2%; bedding/core axis angle averages 50°; unit is hard; lower contact with black siltstone is gradational and marked by calcite rich layers.
259	263	Black Siltstone As described in 180-212'. Lower contact with green siltstone strongly fractured; slickensides/core axis angle 25° - fault zone.
263	295	Green Siltstone Fine grained massive; locally weak to moderate calcite veining; locally bleached with weak feldspar veining; disseminated pyrite/pyrrhotite and in stringers <2%; locally clots/veins of calcite and pink feldspar? weakly to moderately fractured. END OF HOLE 295' (898.92 m)

			ANALYSIS				
SAMPLE	FROM	TO					

D R I L L H O L E R E C O R D

COMINCO LTD.

Property:

FOOTAGE FROM TO

DESCRIPTION

CORE RECOVERY

From-To	Recovered	True Depth	% Recov.
6-15	8' 7" (103")	108"	95
15-25	7' 9" (91)	120	76
25-35	9' 11"(119)	120	99
35-45	10' (120)	120	100
45-55	9' 9" (117)	120	98
55-65	9' 11"(119)	120	99
65-75	10' (120)	120	100
75-85	9' 9" (117)	120	98
85-95	9' 11"(119)	120	99
95-105	10' (120)	120	100
105-115	10' (120	120	100
115-125	10' (120)	120	100
125-135	10' (120)	120	100
135-145	10' (120)	120	100
145-155	9' 11"(119)	120	99
155-165	9' 11"(119)	120	99
165-175	10' (120)	120	100
175-185	10' (120)	120	100
185-195	9' 11"(119)	120	99
195-205	10' (120)	120	100
205-215	10' (120)	120	100

ANALYSIS

SAMPLE	FROM	TO					

D R I L L H O L E R E C O R D

COMINCO LTD.

Property:

FOOTAGE FROM	TO	DESCRIPTION

CORE RECOVERY

From-To	Recovered	True Depth	% Recov.
215-225	9' 11"(119)	120	99
225-235	10' (120)	120	100
235-245	10' (120)	120	100
245-255	10' (120)	120	100
255-265	10' (120)	120	100
265-275	10' (119)	120	100
275-285	9' 11"(119)	120	99
285-295	10' 120	120	100

			ANALYSIS				
SAMPLE	FROM	TO					

APPENDIX C - DIAMOND DRILL HOLE ASSAY DATA

Analysis Certificate

Analytical Services, Trail, B.C

Cominco

AS98 880919 0001 ROS-FREEPORT R88-1 (32.5 TO 35 FT)

AU
OZ/TON
<0.010

AS98 880919 0002 ROS-FREEPORT R88-1 (35 TO 39 FT)

AU
OZ/TON
<0.010

AS98 880919 0003 ROS-FREEPORT R88-1 (64 TO 67 FT)

AU
OZ/TON
<0.010

AS98 880919 0004 ROS-FREEPORT R88-1 (67 TO 72 FT)

AU
OZ/TON
<0.010

AS98 880919 0005 ROS-FREEPORT R88-1 (72 TO 77 FT)

AU
OZ/TON
<0.010

AS98 880919 0006 ROS-FREEPORT R88-1 (77 TO 82 FT)

AU
OZ/TON
<0.010

Certificate Number 09 74192 Page 1

Chief Chemist

Original

AS98 880919 0007 ROS-FREEPORT R88-1 (82 TO 86 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0008 ROS-FREEPORT R88-1 (86 TO 87.5 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0009 ROS-FREEPORT R88-1 (87.5 TO 92.5 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0010 ROS-FREEPORT R88-1 (92.5 TO 97.5 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0011 ROS-FREEPORT R88-1 (97.5 TO 102 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0012 ROS-FREEPORT R88-1 (102 TO 107 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0013 ROS-FREEPORT R88-1 (131 TO 136 FT)

AU
OZ/TON
<0.010

AS98 880919 0014 ROS-FREEPORT R88-1 (136 TO 141 FT)

AU
OZ/TON
<0.010

AS98 880919 0015 ROS-FREEPORT R88-1 (141 TO 146 FT)

AU
OZ/TON
<0.010

AS98 880919 0016 ROS-FREEPORT R88-1 (146 TO 148.5 FT)

AU
OZ/TON
<0.010

AS98 880919 0017 ROS-FREEPORT R88-1 (148.5 TO 152 FT)

AU
OZ/TON
<0.010

AS98 880919 0018 ROS-FREEPORT R88-1 (152 TO 156 FT)

AU
OZ/TON
<0.010

Chief Chemist

AS98 880919 0019 ROS-FREEPORT R88-1 (156 TO 158.5 FT)

AU
OZ/TON
<0.010

AS98 880919 0020 ROS-FREEPORT R88-1 (170 TO 171.5 FT)

AU
OZ/TON
<0.010

AS98 880919 0021 ROS-FREEPORT R88-1 (173 TO 178 FT)

AU
OZ/TON
<0.010

AS98 880919 0022 ROS-FREEPORT R88-1 (178 TO 183.5 FT)

AU
OZ/TON
<0.010

AS98 880919 0023 ROS-FREEPORT R88-1 (197 TO 202 FT)

AU
OZ/TON
<0.010

AS98 880919 0024 ROS-FREEPORT R88-1 (202 TO 207 FT)

AU
OZ/TON
<0.010

AS98 880919 0025 ROS-FREEPORT R88-1 (207 TO 212 FT)

AU
OZ/TON
<0.010

AS98 880919 0026 ROS-FREEPORT R88-1 (212 TO 217 FT)

AU
OZ/TON
<0.010

AS98 880919 0027 ROS-FREEPORT R88-1 (217 TO 222 FT)

AU
OZ/TON
<0.010

AS98 880919 0028 ROS-FREEPORT R88-1 (222 TO 227 FT)

AU
OZ/TON
<0.010

AS98 880919 0029 ROS-FREEPORT R88-1 (227 TO 232 FT)

AU
OZ/TON
<0.010

AS98 880919 0030 ROS-FREEPORT R88-1 (232 TO 235.5 FT)

AU
OZ/TON
<0.010

Chief Chemist

AS98 880919 0031 ROS-FREEPORT R88-1 (235.5 TO 238.5 FT)

AU
OZ/TON
<0.010

AS98 880919 0032 ROS-FREEPORT R88-1 (238.5 TO 243 FT)

AU
OZ/TON
<0.010

AS98 880919 0033 ROS-FREEPORT R88-1 (243 TO 248 FT)

AU
OZ/TON
<0.010

AS98 880919 0034 ROS-FREEPORT R88-1 (248 TO 253 FT)

AU
OZ/TON
<0.010

AS98 880919 0035 ROS-FREEPORT R88-1 (253 TO 257 FT)

AU
OZ/TON
<0.010

AS98 880919 0036 ROS-FREEPORT R88-1 (257 TO 262 FT)

AU
OZ/TON
<0.010

AS98 880919 0037 ROS-FREEPORT R88-1 (262 TO 266 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0038 ROS-FREEPORT R88-1 (266 TO 269.5 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0039 ROS-FREEPORT R88-1 (317.5 TO 322 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0040 ROS-FREEPORT R88-1 (322 TO 327 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0041 ROS-FREEPORT R88-1 (327 TO 332 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0042 ROS-FREEPORT R88-1 (20 TO 25 FT)

AU	
OZ/TON	
<0.010	

AS98 880919 0043 ROS--FREEPORT R88-1 (365 TO 370 FT)

AU	
OZ/TON	
<0.010	

09 74192

8

END CERTIFICATE

Chief Chemist

Original

AS98 880926 0001 ROS-FREEPORT R88-1 (332 TP 337 FT)

AU
OZ/TON
<0.010

AS98 880926 0002 ROS-FREEPORT R88-1 (337 TP 342 FT)

AU
OZ/TON
<0.010

AS98 880926 0003 ROS-FREEPORT R88-1 (342 TP 347 FT)

AU
OZ/TON
<0.010

AS98 880926 0004 ROS-FREEPORT R88-2 (22 TO 26 FT)

AU
OZ/TON
[redacted]0.040

AS98 880926 0005 ROS-FREEPORT R88-2 (26 TO 30 FT)

AU
OZ/TON
0.010

AS98 880926 0006 ROS-FREEPORT R88-2 (59 TO 60.5 FT)

AU
OZ/TON
[redacted]

Chief Chemist

10 74658 1

Original

AS98 880926 0007 ROS-FREEPORT R88-2 (81.5 TO 85 FT)

AU
OZ/TON
<0.010

AS98 880926 0008 ROS-FREEPORT R88-2 (143.5 TO 147 FT)

AU
OZ/TON
<0.010

AS98 880926 0009 ROS-FREEPORT R88-2 (162 TO 167 FT)

AU
OZ/TON
<0.010

AS98 880926 0010 ROS-FREEPORT R88-2 (167 TO 171 FT)

AU
OZ/TON
<0.010

AS98 880926 0011 ROS-FREEPORT R88-2 (172 TO 175 FT)

AU
OZ/TON
<0.010

AS98 880926 0012 ROS-FREEPORT R88-2 (177 TO 180 FT)

AU
OZ/TON
<0.010

AS98 880926 0013 ROS-FREEPORT R88-2 (220 TO 225 FT)

AU
OZ/TON
<0.010

AS98 880926 0014 ROS-FREEPORT R88-2 (225 TO 229.5 FT)

AU
OZ/TON
<0.010

AS98 880926 0015 ROS-FREEPORT R88-2 (229.5 TO 233 FT)

AU
OZ/TON
<0.010

AS98 880926 0016 ROS-FREEPORT R88-2 (236 TO 240 FT)

AU
OZ/TON
<0.010

AS98 880926 0017 ROS-FREEPORT R88-2 (240 TO 244 FT)

AU
OZ/TON
[redacted] .02

AS98 880926 0018 DOS-FREEPORT R88-3 (51 TO 56 FT)

AU
OZ/TON
[redacted] .02

APPENDIX "D"

EXPLORATION WESTERN CANADA

IN THE MATTER OF THE B.C. MINERAL ACT AND

IN THE MATTER OF DIAMOND DRILLING

CARRIED OUT ON THE ROSSALAND PROPERTY

LOCATED IN THE TRAIL CREEK MINING DIVISION OF THE

PROVINCE OF BRITISH COLUMBIA - MORE PARTICULARLY N.T.S. 82F/4

A F F I D A V I T

I, H. KANG, OF THE CITY OF VANCOUVER IN THE PROVINCE OF BRITISH COLUMBIA, MAKE OATH AND SAY:

1. THAT I AM EMPLOYED AS A PROJECT GEOLOGIST BY COMINCO LTD AND AS SUCH HAVE A PERSONAL KNOWLEDGE OF THE FACTS TO WHICH IN HEREINAFTER DEPOSE;

2. THAN ANNEXED HERETO AND MARKED AS "APPENDIX A" TO THIS REPORT IS A TRUE COPY OF EXPENDITURE OF A DIAMOND DRILLING PROGRAM CARRIED OUT ON THE ROSSLAND PROPERTY;

3. THAT THE SAID EXPENDITURES WERE INCURRED BETWEEN THE 6 DAY OF SEPTEMBER 1988 AND THE 11 DAY OF OCTOBER 1988 FOR THE PURPOSE OF MINERAL EXPLORATION ON THE ABOVE NOTED PROPERTY.

H. KANG, B.Sc.

APPENDIX "E"

EXPLORATION WESTERN CANADA

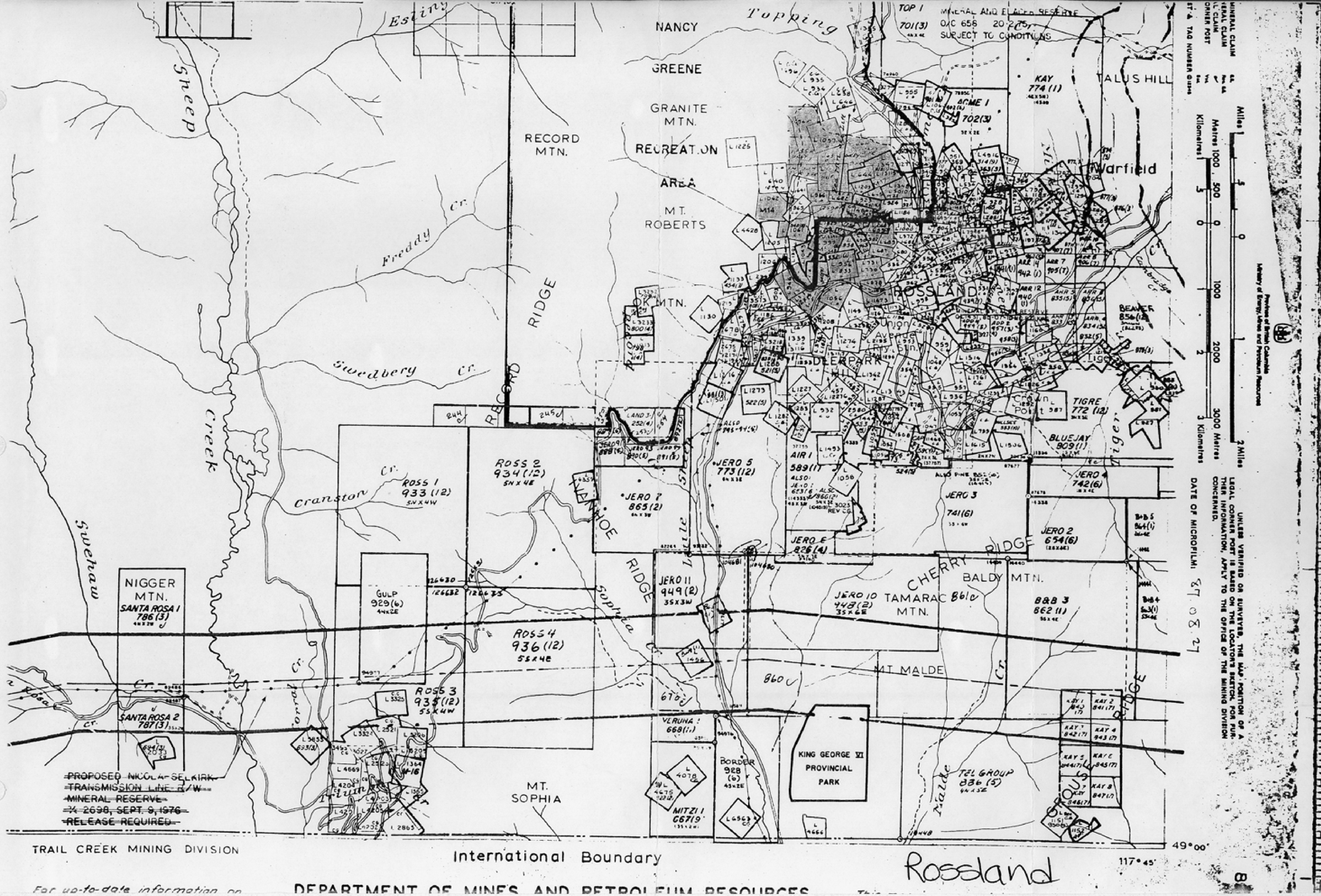
STATEMENT OF QUALIFICATIONS

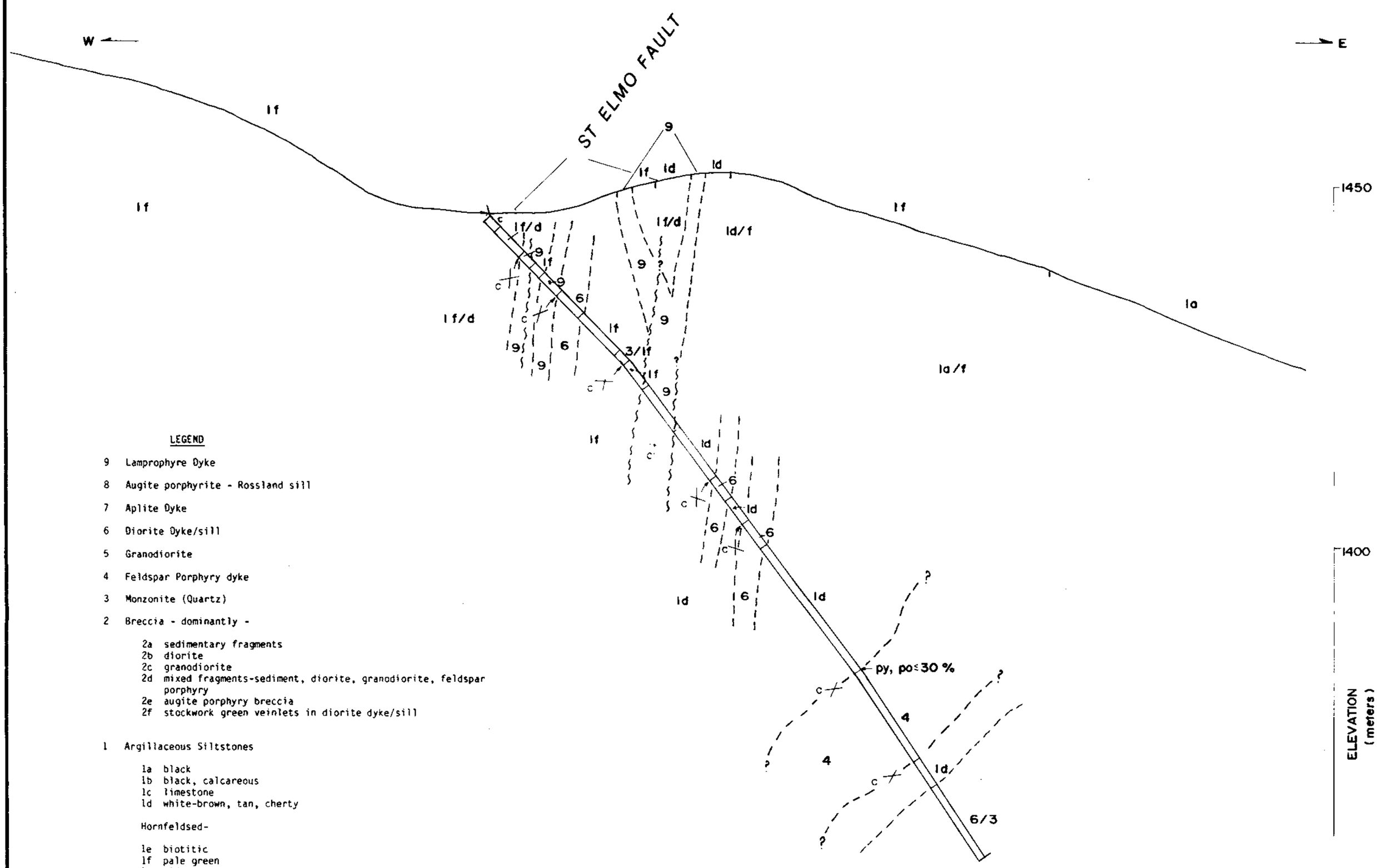
I, H. KANG, OF THE CITY OF VANCOUVER, BRITISH COLUMBIA, HEREBY CERTIFY:

- THAT I AM EMPLOYED WITH COMINCO LTD. WITH A BUSINESS ADDRESS AT 700-409 GRANVILLE STREET, VANCOUVER, BRITISH COLUMBIA.
- THAT I GRADUATED WITH B.SC. DEGREE IN GEOLOGY FROM THE UNVERSITY OF BRITISH COLUMBIA IN 1986.
- THAT I HAVE PRACTISED GEOLOGY WITH COMINCO LTD. FROM 1986 TO PRESENT.

DATED THIS 15TH DAY OF DECEMBER, 1988 AT VANCOUVER, BRITISH COLUMBIA.

H. KANG, B.SC.


NANCY
GREENE
GRANITE
MTN.
RECREATION
AREA
MT.
ROBERTS
RECORD
MTN.
RECORD RIDGE
TOP 1
701(3)
MINERAL AND PLACER RESERVE
O/C 656 20-2-75
SUBJECT TO CONDITIONS
KAY
774 (1)
TALUS HILL
ACME 1
702(3)
Warfield
ROSSLAND
DEERPARK
HILL
BEAVER
856(12)
TIGRE
772 (12)
BLUEJAY
909(1)
Sheep Creek
Freddy Cr.
Swedberg Cr.
Cranston Cr.
Sweham
Topping
ROSS 1
933 (12)
ROSS 2
934 (12)
ROSS 3
935 (12)
ROSS 4
936 (12)
GULP
929 (6)
JERO 7
865 (2)
JERO 5
773 (12)
AIR 1
589 (1)
JERO 3
741 (6)
JERO 4
742 (6)
JERO 2
654 (6)
JERO E
826 (4)
JERO 11
949 (2)
JERO 10
448 (2)
IVANHOE
RIDGE
CHERRY RIDGE
BALDY MTN.
TAMARAC
MTN.
B&B 3
862 (1)
MT MALDE
NIGGER
MTN.
SANTA ROSA 1
786 (3)
SANTA ROSA 2
787 (3)
VERUNA 1
668 (1)
BORDER
928
(6)
MITZI 1
667 (9)
KING GEORGE VI
PROVINCIAL
PARK
TEL GROUP
886 (5)
MT.
SOPHIA
Sophia Cr.
PROPOSED NICOLA-SELKIRK
TRANSMISSION LINE R/W
MINERAL RESERVE
⅞ 2698, SEPT. 9, 1976
RELEASE REQUIRED
TRAIL CREEK MINING DIVISION
International Boundary
49°00'
117°45'
Rossland
For up-to-date information on
DEPARTMENT OF MINES AND PETROLEUM RESOURCES
UNLESS VERIFIED OR SURVEYED, THE MAP POSITION OF A LEGAL CORNER POST IS BASED ON THE LOCATOR'S SKETCH. FOR FURTHER INFORMATION, APPLY TO THE OFFICE OF THE MINING DIVISION CONCERNED.
DATE OF MICROFILM: 27 08 87
Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
Miles
Metres
Kilometres
0
1000
2000
3000



LEGEND

9 Lamprophyre Dyke

8 Augite porphyrite - Rossland sill

7 Aplite Dyke

6 Diorite Dyke/sill

5 Granodiorite

4 Feldspar Porphyry dyke

3 Monzonite (Quartz)

2 Breccia - dominantly -

- 2a sedimentary fragments
- 2b diorite
- 2c granodiorite
- 2d mixed fragments-sediment, diorite, granodiorite, feldspar porphyry
- 2e augite porphyry breccia
- 2f stockwork green veinlets in diorite dyke/sill

1 Argillaceous Siltstones

- 1a black
- 1b black, calcareous
- 1c limestone
- 1d white-brown, tan, cherty

Hornfeldsed-

- 1e biotitic
- 1f pale green
- 1g mid-dark green

SYMBOLS

Casing

contact orientation

bedding orientation

breccia complex

fault

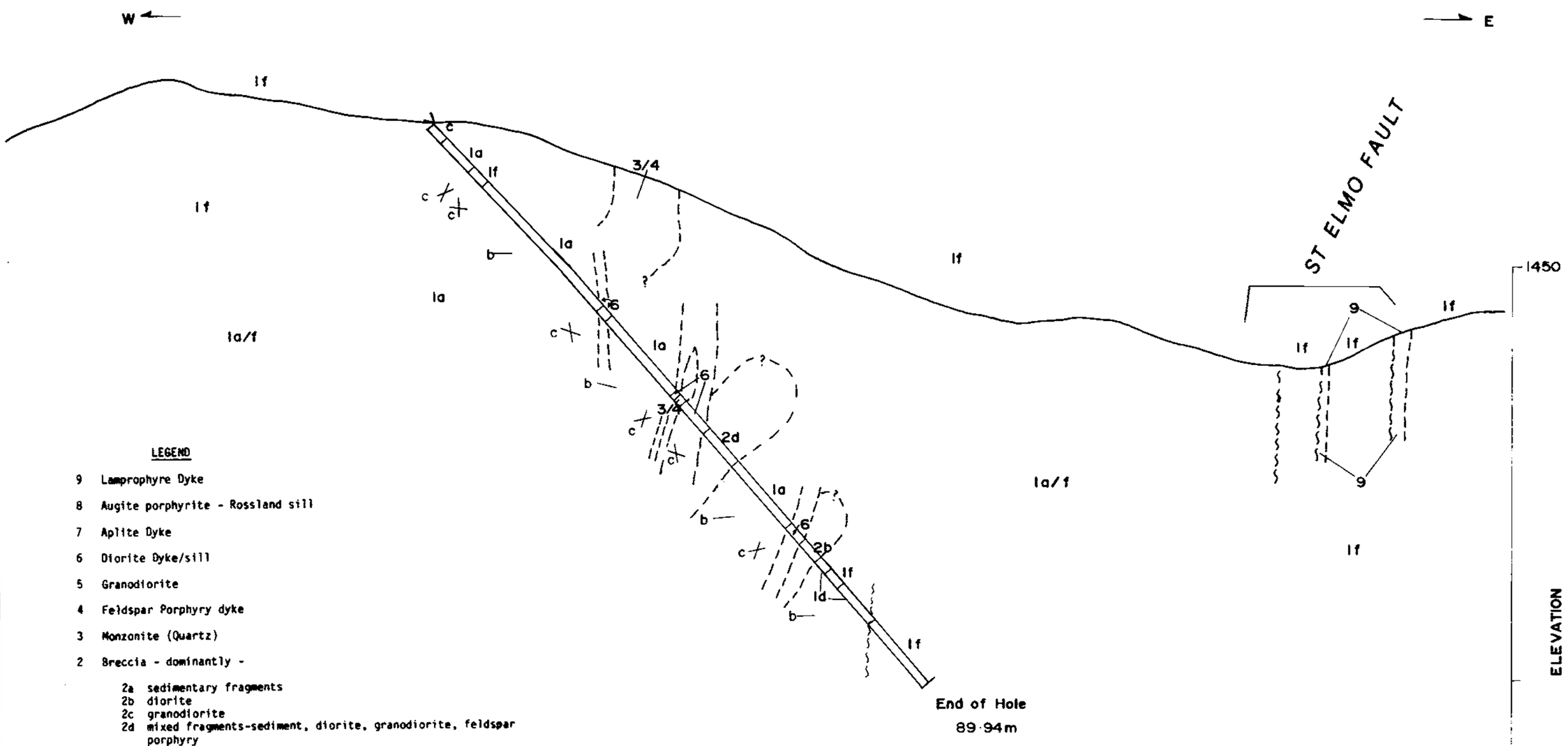
pyrite

pyrrhotite

arsenopyrite

ROSSLAND FREEPORT J. V.

Drawn by H.K	Traced by	Diamond Drill Hole R88-1	
Revised by / Date	Revised by / Date		
		Scale: 1 : 500	Date: Dec 1988
			Plate:



LEGEND

9 Lamprophyre Dyke

8 Augite porphyrite - Rossland sill

7 Aplite Dyke

6 Diorite Dyke/sill

5 Granodiorite

4 Feldspar Porphyry dyke

3 Monzonite (Quartz)

2 Breccia - dominantly -

- 2a sedimentary fragments
- 2b diorite
- 2c granodiorite
- 2d mixed fragments-sediment, diorite, granodiorite, feldspar porphyry
- 2e augite porphyry breccia
- 2f stockwork green veinlets in diorite dyke/sill

1 Argillaceous Siltstones

- 1a black
- 1b black, calcareous
- 1c limestone
- 1d white-brown, tan, cherty

Hornfeldsed-

- 1e biotitic
- 1f pale green
- 1g mid-dark green

SYMBOLS

Casing

contact orientation

bedding orientation

breccia complex

fault

pyrite

pyrrhotite

arsenopyrite

ROSSLAND FREEPORT J. V.

Drawn by: H. K.		Traced by:	
Revised by	Date	Revised by	Date

Diamond Drill Hole R88-2

Scale: 1 : 500 | Date: Dec 1988 | Plate:

ST ELMO M. C.

MOUNTAIN VIEW M. C.

E. Pit

F. Pit

BRECCIA COMPLEX

COXEY M. C.

GOLDEN QUEEN M. C.

COXEY M. C.

NOVELTY M. C.

GERTRUDE M. C.

ST ELMO FAULT

Novelty Zone

1550

1500

1450

1400

1350

1300

1250

R88-1

R88-2

R88-5

R88-8

If

Id

Ia/d

6a

2d

4/3

If/3

8

3

6

py ≤5%

po,py ≤15%

py,po ≤5%

py,po ≤2%

aspy≤1%

mo≤2%

LEGEND

9 Lamprophyre Dyke

8 Gabbro/Pyroxenite Plug, Dyke

7 Aplite Dyke

6 Diorite Dyke -

- 6a Hornblende Needle Porphyry
- 6b Equigranular

5 Granodiorite

4 Feldspar Porphyry

3 Monzonite (Quartz)

Altered-monzonitic-Kspar-rich breccia (stockworks/disseminations/pervasive)

2 Breccia Complex (with dominant fragment types)

- 2a siltstone
- 2b diorite
- 2c granodiorite
- 2d mixed (siltstone and diorite)

1 Argillaceous Siltstones

Fresh to weakly altered

- 1a black
- 1b black, calcareous
- 1c limestone
- 1d brown, tan

Moderately to strongly altered

- 1e biotitic
- 1f pale green (Zone 1 or 2 alteration)
- 1g mid-dark green (Zone 2 alteration)

SYMBOLS

- py pyrite
- po pyrrhotite
- mo molybdenite
- aspy arsenopyrite
- trench
- geological contact
- 40 bedding attitude
- margin of breccia complex
- fault
- road, trail
- open pit
- adit
- building permanent structure
- outcrop
- diamond drill hole (1988)

0 100

metres

18,146

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Cominco

Drawn by SWS | Traced by

Revised by	Date	Revised by	Date

Surface Geology
(Soil Anomaly Area)

Scale 1:1000 | Date Aug, 1988 | Plate 88-3