COMINCO LTD.

EXPLORATION

WESTERN CANADA

NTS: ~~92E/16;~~ 92F/13W

ASSESSMENT REPORT

GEOLOGICAL MAPPING, PROSPECTING AND SOIL SAMPLING ON THE CHUMMING PROPERTY

ALBERNI MINING DISTRICT, B.C.

LATITUDE: 49° 56' N

LONGITUDE: ~~126° 01'~~ W 125° 59'

TIME PERIOD: AUG. 21,22 AND SEPT. 11/12, 1994

DECEMBER 1994

DARIN WAGNER

TABLE OF CONTENTS

COMINCO LTD.

EXPLORATION WESTERN DISTRICT

ASSESSMENT REPORT

GEOLOGICAL MAPPING, PROSPECTING AND SOIL SAMPLING ON THE CHUMMING PROPERTY

I. INTRODUCTION

On August 21 and 22, 1994 Cominco geologist Darin Wagner and assistant Darren Senft mapped/prospected the main Horseshoe Creek drainage on the Chumming property where previous reconnaissance work had located several copper-mineralized boulders.

Based on the discovery of several semi-massive sulphide boulders in the tributaries draining the area west of the main creek during this initial program D. Wagner returned to the property on Sept. 11/12 with Cominco technicians Kim Bilquist and David Vanderkley to conduct additional mapping of the western tributaries. Two contour soil lines were also completed at this time.

II. LOCATION AND ACCESS

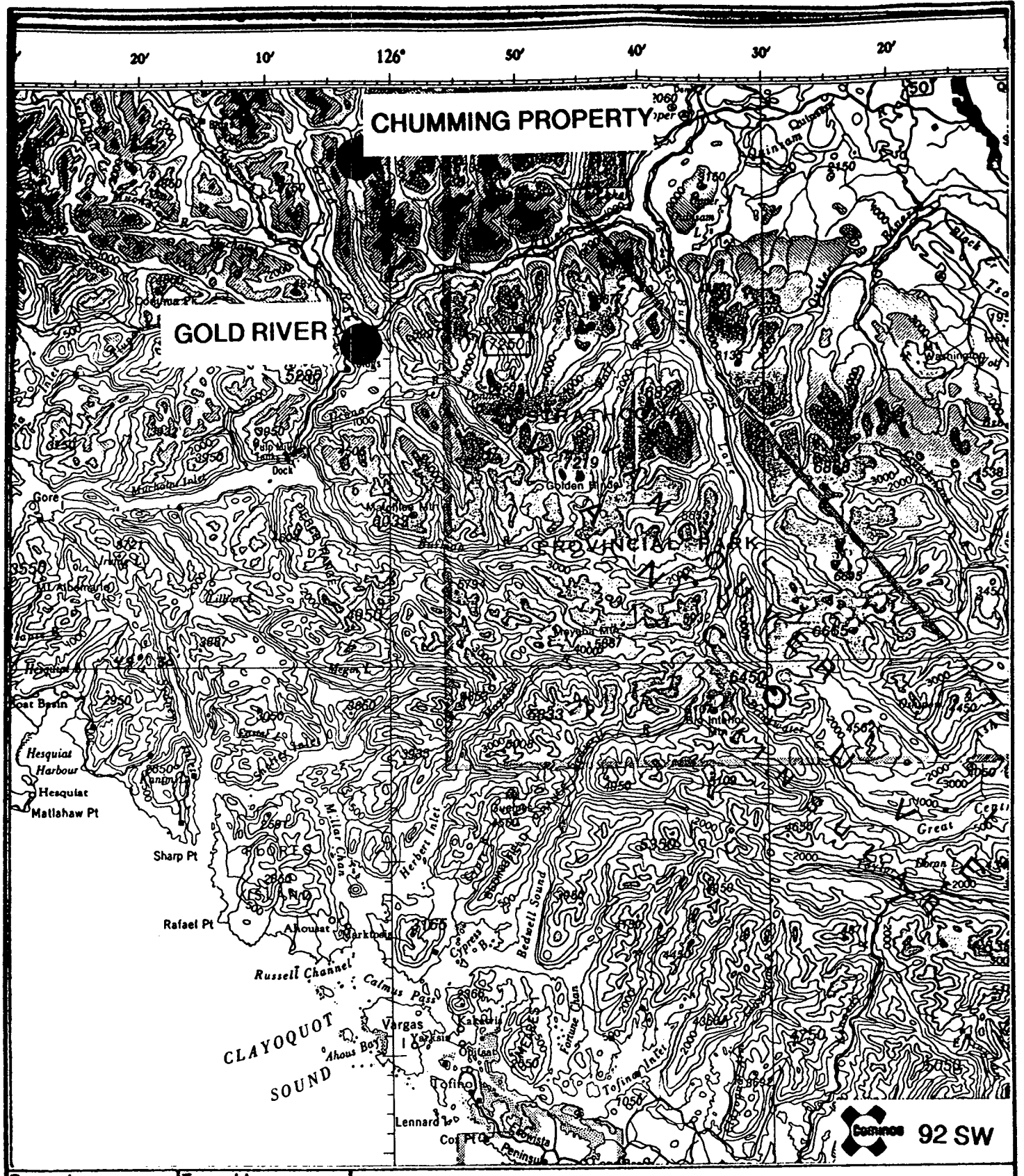
The Chumming property is located approximately 35 km NNE of Gold River, on Vancouver Island (Figure 1). The property is accessible via logging roads from Gold River. The roads currently end at the northern edge of the property and from there access is by foot.

The Chumming property covers the headwaters of Horseshoe Creek which occupies a relatively narrow valley between two north-south trending mountain chains. Elevation reaches 3800 metres on the property with greater than 1.2 km's of vertical relief (Figure 2).

Vegetation on the property is mainly large fir and spruce trees with limited underbrush, except along the numerous creeks where devil's club and alders reaching heights of six to eight feet are common.

III. TENURE

The Chumming property consists of twenty two-post claims (Chum 1-20; Tenure Numbers 322099-322118) which were recorded Oct. 18/93 and are due, upon acceptance of this report, Oct. 18/97. The claims are 100% owned by Cominco Ltd., 700-409 Granville St., Vancouver, B.C.; V6C 1T2.



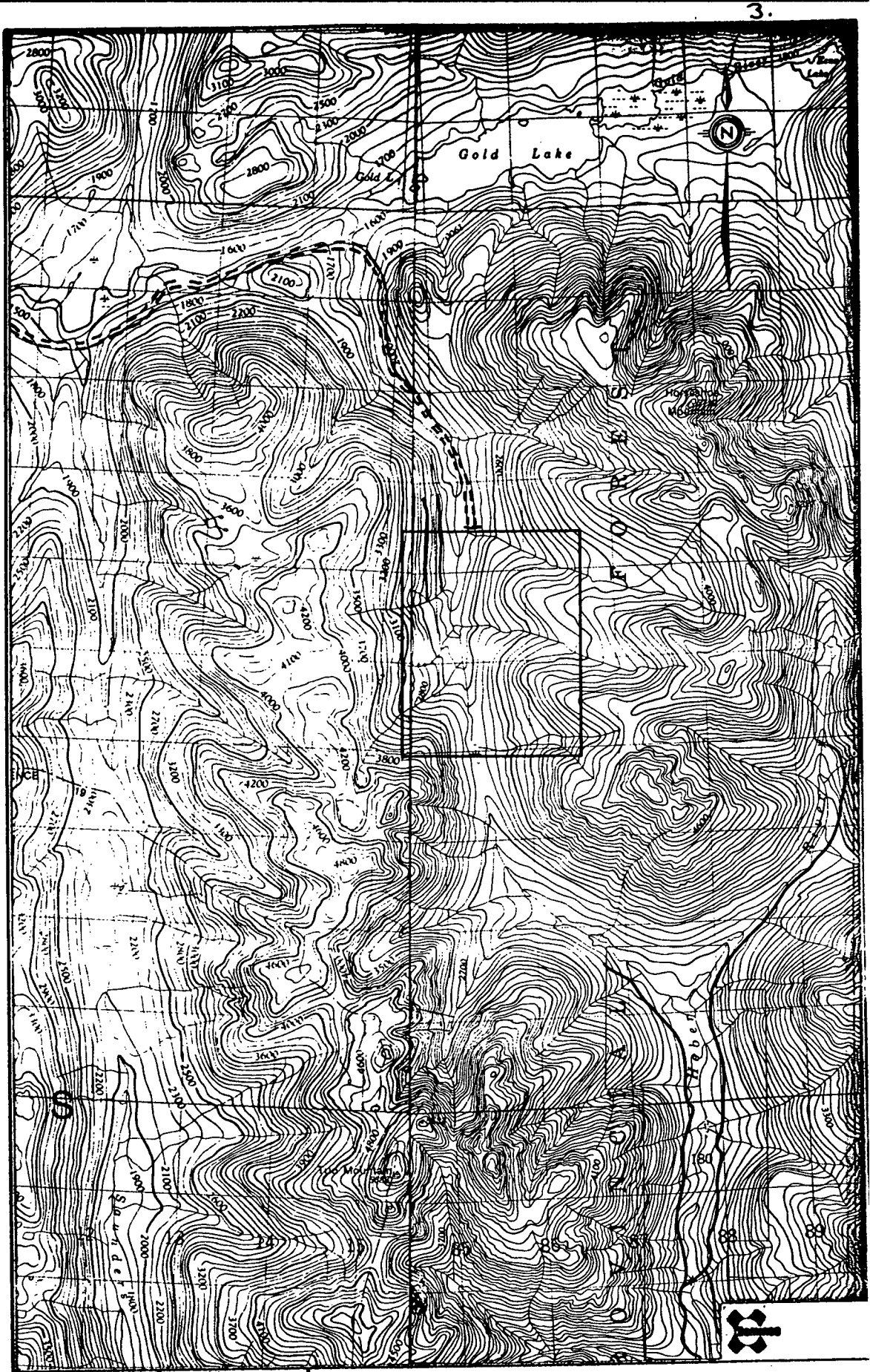
Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

LOCATION MAP

Scale: 1:500,000 | Date: | Plate: 1

NCI 112A CL

210-0610



Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

CHUMMING PROPERTY

Scale: 1 : 50,000

Date:

Plate: 92 E/16 F/13

IV. GEOLOGY

Outcrop on the Chumming property is mainly limited to steep-sided exposures in Horseshoe Creek and its tributaries. Hillside exposures are present in some of the steeper areas (Figure 3).

The majority of the Chumming property is underlain by grey-green weathering, quartz-calcite amygdaloidal basalt of the Upper Triassic Karmutsen Group. The basalts are locally weakly feldspar porphyritic and/or pillowed. Unaltered basalts are typically moderately magnetic due to the presence of finely disseminated magnetite (< 1%). Minor accessory pyrite and epidote are common.

Regional 1:125,000 scale mapping (Muller, 1965) indicates that the property straddles a NW-striking upright anticline. Little in the way of tops indicators or bedding measurements are available on the property. One bedding measurement from just north of the property, however, exhibited a similar strike to that indicated by Muller (138°) and a shallow (5°) south-westward dip.

The Karmutsen basalt sequence is cut by five distinct intrusive suites, at least three of which are associated with significant pyrite+/-chalcopyrite mineralization.

At the north end of the property numerous less than one metre wide, fine-grained lamprophyre dykes where observed cutting unaltered Karmutsen basalt. The lamprophyre dykes typically trend 015-020°.

Within the main Horseshoe Creek valley two dyke suites cross-cut an area of strongly fractured, pyritic, chlorite+biotite-altered Karmutsen. The first are a series of medium-grained, equigranular granodiorite dykes ranging in width from 3 to 15 metres. These dykes are typically comprised of 15-20% chlorite-altered biotite, 5-10% quartz, 5% fine-grained pyrite and 65-75% feldspar. The granodiorite dykes are oriented between 90 and 120° and dip steeply to the south and north.

The second dyke suite cross-cutting strongly altered Karmutsen rocks in Horseshoe Creek is a series of 2-5 metre wide, strongly feldspar-hornblende porphyritic dykes of intermediate composition. The fine-grained matrix to these dykes is typically grey weathering and hosts 10-15% medium-grained crystals of white weathering plagioclase and 1-2% medium-grained hornblende. These feldspar porphyry dykes are commonly strongly fractured. Both the porphyry and granodiorite dykes are cross-cut by quartz-pyrite-chlorite+/-chalcopyrite veins. No cross-cutting relationships were observed between the two dyke suites.

Near the southern boundary of the property altered Karmutsen volcanic rocks are intruded by a fresh, hornblende granodiorite. The granodiorite is characterized by 10-15% medium-grained hornblende, 5-7% quartz, 2-3% biotite and 1-2% magnetite, making

the rock moderately magnetic. Mafic xenoliths are abundant and minor potassium feldspar-epidote alteration is observed along the contact. Muller maps the southeastern extension of this stock as being part of the Jura-Cretaceous coast intrusion suite.

The fifth intrusive phase observed on the property is a small, poorly exposed stock, or dyke, of dioritic composition near the north-west corner. The diorite is grey-brown weathering, fine-grained and moderately magnetic. It contains 1-2% disseminated pyrite and tr-1% disseminated chalcopyrite. No significant alteration is associated with this intrusive body and only weak fracturing is evident.

IV. ALTERATION AND MINERALIZATION

As mentioned above a significant area of biotite-chlorite altered and pyrite mineralized Karmutsen is exposed in the main Horseshoe Creek drainage on the property.

The altered basalts are characterized by strong fracturing, with fractures typically filled by narrow quartz-pyrite-chlorite veins, strong to locally intense fine-grained biotite and lesser chlorite alteration and up to 15% disseminated pyrite. Minor epidote and hematite alteration is also present throughout.

The altered area is spatially related to the occurrence of the granodiorite and porphyry dyke suites described above and alteration is frequently most intense for 2-3 metres around individual dykes. In several instances small breccia bodies (to 3 metres) have formed adjacent these dykes.

Pyrite mineralization occurs throughout the altered area as described above. The pyrite is typically fine to medium-grained and is occasionally haloed by chlorite. Chalcopyrite is observed sporadically throughout the altered basalt sequence, as is molybdenum. Both these metals are most abundant in a series of 3-5 cm wide white quartz veins which are found along the southern and eastern margin of the area of altered basalt.

Several 10-60 cm semi-massive sulphide boulders/cobbles were discovered in Dahl and Silver creeks which drain the west side of the property. These boulders are comprised of varying quantities of pyrite, pyrrhotite, magnetite, chlorite, Fe-carbonate, quartz, epidote and chalcopyrite. Analysis of these boulders returned elevated copper, silver, nickel, zinc, cobalt and gold values (see Figure 3 and Appendix 1).

V. SOIL/SILT SAMPLING

Fifty-seven B Horizon soil and twelve silt samples were collected from two contour soil lines along the western side of Horseshoe Creek, as

indicated on Figure 3. All samples were analyzed by 27-element ICP after hot reverse aqua regia digestion, with Au analysis by solvent extraction/AAS after aqua regia decomposition. Results are included in Appendix 1.

The soil sampling results indicated the presence of sporadically elevated copper (to 844 ppm), cobalt (to 594 ppm), molybdenum (to 15 ppm), iron (to 10.49%), gold (to 95 ppb) and manganese (to 7023 ppm) values. The silt samples show similar anomalies.

VI. CONCLUSIONS AND RECOMMENDATIONS

A significant area of altered and weakly Cu-Mo mineralized Karmutsen basalt occurs within the Horseshoe Creek drainage. Porphyry-style mineralization and alteration appear to be related to a swarm of Cretaceous (?) granodiorite and feldspar porphyry dykes observed mainly within Horseshoe Creek itself. Cu-Mo mineralization is best developed along the southern and eastern margins of this zone.

The semi-massive sulphide boulders located in drainages along the west side of the property, and results of the soil/silt sampling program in this area, suggest the presence of a second style of mineralization on the property.

It is recommended that future work on the property concentrate on defining the limits of the known porphyry mineralization in the valley bottom and on locating the source of the semi-massive sulphide boulders along the western side of the property. Mapping, supplemented by contour soil sampling and followed by magnetometer and I.P. surveys should delineate areas for physical testing.

VII. REFERENCES

Muller, J.E. 1965. Geology of the Comox Lake Area. GSC Map 2-1965.

Report By: _____
Darin Wagner
Geologist II,
Western District

Approved For Release By: _____
J.M. Hamilton, P.Eng/P.Geo
Manager, Exploration
Western District

Distribution:
Mining Recorder (2)
Western District Files

APPENDIX I

GEOCHEMICAL ANALYSIS OF

ROCK AND SOIL/SILT SAMPLES

FROM 1994 EXPLORATION ON THE

CHUMMING PROPERTY

SOCKEYE-WD

Job V 94-0567R

CHUMMING Report date 21 OCT 1994

LAB NO	FIELD NUMBER	Au ppb	Wt Au gram	Pt ppb	Pd ppb
R9410521	WR94-167	1484	5	<100	<34
R9410522	WR94-146	<10	5		
R9410523	WR94-123	<10	5		
R9410524	WR94-149	<10	5		
R9410525	WR94-167B	2520	5	<100	136

I=insufficient sample X=small sample E=exceeds calibration C=being checked R=revised
If requested analyses are not shown ,results are to follow

ANALYTICAL METHODS

Au Aqua regia decomposition / solvent extraction / AAS
Wt Au The weight of sample taken to analyse for gold (geochem)
Pt Fire assay, lead collection / AA analysis / 20 or 50g
Pd Fire assay, lead collection / AA analysis / 20 or 50g

SOCKEYE-WD

Job V 94-0567R

CHUMMING

Report date 21 OCT 1994

LAB NO	FIELD NUMBER	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Ba ppm	Cd ppm	Co ppm	Ni ppm	Fe %	Mo ppm	Cr ppm	Bi ppm	Sb ppm	V ppm	Sn ppm	W ppm	Sr ppm	Y ppm	La ppm	Mn ppm	Mg %	Ti %	Al %	Ca %	N
R9410521	WR94-167	E11425	14	136	25.1	79	<5	<1	860	1799E	51.70	3	15	164	5	33	34	<2	<2	<2	<2	172	.36	<.01	.96	.09	<.0
R9410522	WR94-146	416	20	21	1.3	23	7	<1	45	53	7.41	<2	100	<5	<5	<2	2	<2	<2	<2	<2	33	.01	<.01	.02	<.01	<.0
R9410523	WR94-123	87	<4	108	1.0	24	76	9	6	20	2.84	8	35	<5	6	43	2	<2	9	5	<2	117	.40	.02	.92	.08	.0
R9410524	WR94-149	92	<4	44	<.4	9	10	<1	13	4	3.41	<2	25	<5	<5	47	7	<2	239	7	3	347	.94	.06	6.45	5.96	.0
R9410525	WR94-167B	E38070	277	1954	61.7	965	<5	15	1387	1637E	37.65	13	65	240	5	34	28	<2	4	5	<2	462	.54	<.01	1.13	1.07	<.0

I=insufficient sample X=small sample E=exceeds calibration C=being checked R=revised
If requested analyses are not shown ,results are to follow

ANALYTICAL METHODS

ICP PACKAGE :0.5 gram sample digested in hot reverse aqua regia (soil,silt) or hot Aqua Regia(rocks).

CHUMMING-WD

Job V 94-0630R

Report date 28 OCT 1994

LAB NO	FIELD NUMBER	Au ppb	Wt Au gram
R9412031	WR94-196	134	5
R9412032	WR94-199	<10	5
R9412033	WR94-200	<10	5
R9412034	WR94-203	160	5
R9412035	WR94-207	<10	5
R9412036	WR94-209	<10	5
R9412037	HST-1	<10	5

I=insufficient sample X=small sample E=exceeds calibration C=being checked R=revised
If requested analyses are not shown ,results are to follow

ANALYTICAL METHODS

Au Aqua regia decomposition / solvent extraction / AAS

Wt Au The weight of sample taken to analyse for gold (geochem)

CHUMMING-WD

Job V 94-0630R

Report date 28 OCT 1994

LAB NO	FIELD NUMBER	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Ba ppm	Cd ppm	Co ppm	Ni ppm	Fe %	Mo ppm	Cr ppm	Bi ppm	Sb ppm	V ppm	Sn ppm	W ppm	Sr ppm	Y ppm	La ppm	Mn ppm	Mg %	Ti %	Al %	Ca %	Na %
R9412031	WR94-196	3955	9	38	4.7	6	<5	<1	164	28E	3.94	6	19	8	<5	342	13	<2	<2	<2	<2	68	.01	<.01	.06	.05	<.01
R9412032	WR94-199	141	12	63	.6	7	<5	<1	15	41	2.43	<2	49	<5	<5	68	3	<2	9	6	2	255	.92	.10	1.94	3.10	<.01
R9412033	WR94-200	23	17	45	<.4	<2	43	<1	1	1	1.21	<2	17	<5	<5	6	<2	<2	23	8	4	597	.17	<.01	.39	1.44	.02
R9412034	WR94-203	5205	9	47	7.6	<2	<5	<1	101	36E	4.70	<2	31	7	<5	194	10	<2	3	<2	<2	142	.26	<.01	.33	.35	<.01
R9412035	WR94-207	38	<4	25	<.4	<2	<5	<1	9	4	1.59	<2	11	<5	<5	12	2	<2	65	<2	<2	258	.46	.02	3.11	3.51	.01
R9412036	WR94-209	1045	56	1069	1.9	12	25	7	16	44	4.86	<2	63	<5	7	131	4	<2	29	12	3	684	1.15	.24	1.97	1.37	.14
R9412037	HST-1	165	<4	101	1.0	<2	8	<1	31	58	6.31	<2	75	<5	5	183	4	<2	36	12	3	1072	2.61	.40	3.53	1.88	.04

I-insufficient sample X-small sample E-exceeds calibration C-being checked R-revised
If requested analyses are not shown ,results are to follow

ANALYTICAL METHODS

ICP PACKAGE :0.5 gram sample digested in hot reverse aqua regia (soil,silt) or hot Aqua Regia(rocks).

EXP LAB NUMBER	FIELD NO	MAP ZONE	EAST	NORTH	#	MAT'L	ORIG	SITE	COLOUR	SIZE	ORG	DEPTH WET cm	WIDTH SLOPE	FLOW HORIZ	PPT	pH	Au ppb	Wt Au gram
S9423042	238983		+0	+800	1	Soil	Collu		Yel-brown	Silty -clay	Med	M'st 50	Steep	B2		.	11	10
S9423043	238982		+0	+850	1	Soil	Collu		Med-brown	Sandy -silt	Low	M'st 55	Steep	B2		.	<10	10
S9423044	238981		+0	+890	1	Soil	Resid		Yel-brown	Gravly-silt	Low	M'st 60	Steep	B2		.	20	10
S9423045	238951		289284	5535851	1	Silt		Active	Med-grey	B'ldry-gravel	Low	Wet 30	3. m	Med		7.5	<10	10
S9423046	238952		289300	5535100	1	Silt		Active	Dk -green	bouldr	Med	Wet 02	1. m	Med		7.5	<10	10
S9423047	238953				1	Silt		Active	Dk -green	bouldr	Med	Wet 10	1. m	Med		8.0	<10	10
S9423048	238954				1	Silt		Active	Med-green	B'ldry-gravel	Med	Dry	5. m			.	<10	10
S9423049	238955				1	Silt		Active	Med-green	B'ldry-gravel	Low	Wet 50	1. m	Fast		7.5	<10	10
S9423050	238750		+0	+0	1	Soil	Collu		Red-yellow	silt	Low	M'st 40	Steep	B2		.	<10	10
S9423051	239000		+0	+50	1	Soil	Resid		Red-yellow	silt	Med	M'st 45	Steep	Bf		.	<10	10
S9423052	238999		+0	+85	1	Silt		Active	Med-grey	B'ldry-gravel	Med	Wet 01	1. m	3		.	24	10
S9423053	238998		+0	+100	1	Soil	Collu		Red-yellow	Gravly-silt	Low	M'st 20	Steep	Bf		.	89	10
S9423054	238997		+0	+150	1	Soil	Collu		Red-yellow	silt	Med	M'st 35	Steep	Bf		.	10	10
S9423055	238996		+0	+200	1	Soil	Collu		Red-yellow	Sandy -silt	Low	M'st 35	Steep	Bf		.	<10	10
S9423056	238995		+0	+250	1	Soil	Collu		Red-brown	Gravly-silt	high	M'st 40	Steep	B		.	95	10
S9423057	238994		+0	+300	1	Soil	Collu		Yel-brown	Gravly-silt	Med	M'st 35	Steep	B2		.	10	10
S9423058	238993		+0	+350	1	Silt		Active	Med-grey	B'ldry-gravel	Med	Wet 10	1. m	2		.	<10	10
S9423059	238992		+0	+400	1	Soil	Collu		Red-yellow	Gravly-silt	Med	M'st 40	Steep	Bf		.	14	10
S9423060	238991		+0	+450	1	Silt		Active	Med-grey	B'ldry-gravel	Med	Wet 05	1. m	1		.	<10	10
S9423061	238990		+0	+500	1	Soil	Collu		Yel-brown	Gravly-silt	Med	M'st 50	Steep	B2		.	<10	10
S9423062	238989		+0	+550	1	Soil	Collu		Yel-brown	Gravly-clay	Low	M'st 55	Steep	B2		.	<10	10
S9423063	238988		+0	+600	1	Soil	Collu		Yel-brown	Gravly-silt	Med	M'st 65	Steep	B2		.	<10	10
S9423064	238987		+0	+650	1	Soil	Collu		Yel-brown	Silty -clay	Med	M'st 60	Steep	B2		.	<10	10
S9423065	238986		+0	+700	1	Soil	Collu		Red-brown	Silty -clay	Low	M'st 55	Steep	B2		.	<10	10
S9423066	238985		+0	+750	1	Soil	Collu		Yel-brown	Gravly-silt	Med	M'st 50	Steep	B2		.	<10	10
S9423067	238984		+0	+780	1	Silt		Active	Med-grey	Gravly-sand	Low	M'st 01	1. m	Slow		.	45	10
S9423068	238696		+0	+950		Soil	Collu	Dry	Dk -brown	Sandy -silt	Low	Dry 40	Steep	B		.	<10	10
S9423069	238697		+0	+1000		Soil	Alluv	Dry	Gry-brown	B'ldry-gravel	Low	Dry 20	Steep	B		.	30	10
S9423070	238698		+0	+1050		Soil		Dry	black	clay	Low	Dry 35	Steep	A		.	<10	10
S9423071	238699		+0	+1100		Soil	Collu	Dry	Brn-red	Sandy -silt	Low	Dry 40	Steep	B		.	<10	10
S9423072	238700		+0	+1150		Soil	Collu	Dry	Brn-red	Sandy -silt	Low	Dry 10	Steep	B		.	<10	10
S9423073	238701		+0	+1200		Soil	Collu	Dry	Lt -brown	Sandy -silt	Low	Dry 25	Steep	B		.	<10	10
S9423074	238702		+0	+1250		Soil	Collu		Med-brown	Sandy -silt	Low	Dry 35	Steep	B		.	10	10

HUMMING-WD

Job V 94-0628S

Report date 27 OCT 1994

LAB NO	FIELD NUMBER	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Ba ppm	Cd ppm	Co ppm	Ni ppm	Fe %	Mo ppm	Cr ppm	Bi ppm	Sb ppm	V ppm	Sn ppm	W ppm	Sr ppm	Y ppm	La ppm	Mn ppm	Mg %	Ti %	Al %	Ca %	Na %
9423042	238983*12 YB452	844	<4	58	1.2	<2	24	<1	128	31	5.20	8	45	<5	<5	107	16	<2	25	24	5	1716	.83	.11	3.58	.91	.01
9423043	238982*12 2B341	16	<4	19	<.4	4	11	<1	3	3	2.47	<2	19	<5	<5	150	4	<2	12	2	<2	81	.13	.20	1.03	.53	.01
9423044	238981*14 YB241	51	4	39	.6	<2	10	<1	6	14	5.75	<2	45	<5	15	243	9	<2	15	<2	<2	220	.53	.53	2.23	.39	.01
9423045	238951*1 12G121	129	<4	105	.7	2	13	<1	24	46	4.17	<2	47	<5	<5	115	5	<2	52	14	4	950	1.60	.34	3.95	2.27	.01
9423046	238952*1 13N 12	127	<4	80	.4	4	13	<1	22	34	3.34	<2	24	<5	<5	91	9	<2	48	11	3	893	1.22	.26	3.77	2.35	.02
9423047	238953*1 13N 12	239	<4	103	.6	6	19	<1	24	43	3.92	<2	36	<5	16	106	21	<2	54	12	3	700	1.67	.28	4.44	2.49	.03
9423048	238954*1 12N122	260	<4	120	.7	16	22	<1	26	48	3.96	4	65	<5	<5	109	7	<2	45	18	5	1467	1.73	.27	4.18	2.16	.02
9423049	238955*1 12N121	131	<4	90	.5	10	10	<1	23	46	4.04	<2	35	<5	<5	111	13	<2	41	11	3	660	1.81	.38	3.18	1.56	.01
9423050	238750*12 RY 41	61	<4	34	.6	<2	11	<1	6	13	5.82	<2	79	<5	6	223	18	<2	11	3	<2	203	.47	.48	4.43	.34	<.01
9423051	239000*14 RY 42	37	<4	27	.9	11	7	<1	2	8	7.43	<2	59	<5	5	313	18	<2	10	<2	<2	129	.31	.54	2.47	.34	.01
9423052	238999*1 12G122	210	<4	92	.7	4	39	<1	36	73	4.20	<2	49	<5	7	105	7	<2	166	9	3	1009	2.59	.23	4.38	1.81	.11
9423053	238998*12 RY241	349	<4	73	1.3	<2	21	<1	15	22	8.63	5	29	<5	9	118	17	<2	46	22	4	694	1.21	.19	6.45	.53	.01
9423054	238997*12 RY 42	111	<4	69	.7	3	16	<1	12	29	7.06	<2	82	<5	5	181	11	<2	15	2	<2	320	.80	.46	5.86	.45	.01
9423055	238996*12 RY341	64	<4	50	.6	4	32	<1	7	10	5.57	2	21	<5	<5	162	13	<2	26	2	<2	502	.65	.02	4.29	.26	.01
9423056	238995*12 RB243	143	<4	62	.7	<2	33	<1	43	22	4.93	4	46	<5	<5	105	22	<2	26	12	4	1341	.88	.20	6.89	.42	.01
9423057	238994*12 YB242	73	<4	35	.8	<2	15	<1	3	8	8.47	<2	56	<5	12	214	29	<2	12	4	<2	146	.32	.37	4.01	.19	.01
9423058	238993*1 12G122	260	<4	88	<.4	<2	33	<1	35	43	5.31	5	39	<5	<5	113	<2	<2	77	10	4	1050	1.55	.17	4.16	1.62	.02
9423059	238992*12 RY242	55	<4	30	.7	<2	9	<1	2	9	8.43	2	49	<5	5	273	<2	2	8	2	<2	140	.28	.44	2.77	.22	.01
9423060	238991*1 12G122	335	<4	76	.4	13	33	<1	54	37	5.92	15	28	<5	<5	93	10	<2	68	10	4	1101	1.03	.11	4.15	1.79	.02
9423061	238990*12 YB242	36	<4	31	.5	11	12	<1	2	6	7.46	2	42	<5	<5	299	20	<2	13	<2	<2	123	.24	.51	2.40	.27	.01
9423062	238989*12 YB251	69	<4	42	<.4	<2	18	<1	10	18	3.93	3	39	<5	<5	149	10	5	19	5	<2	254	.65	.29	3.59	.50	.01
9423063	238988*12 YB242	74	<4	72	.7	2	20	<1	11	23	5.88	3	46	<5	10	191	9	<2	17	6	<2	285	.68	.45	3.03	.58	.01
9423064	238987*12 YB452	173	<4	45	.9	10	13	<1	8	19	5.59	3	44	<5	13	227	8	<2	18	5	<2	204	.42	.42	2.95	.71	.01
9423065	238986*12 RB451	263	<4	52	.5	8	16	<1	9	18	5.27	5	43	<5	6	161	14	<2	17	7	2	236	.45	.41	4.01	.57	.01
9423066	238985*12 YB242	129	<4	69	.5	11	20	<1	36	30	5.61	4	46	<5	5	167	20	<2	22	8	2	420	.71	.38	2.91	1.04	.01
9423067	238984*1 12G231	430	<4	61	<.4	<2	22	<1	89	49	5.53	8	41	<5	13	89	12	<2	76	10	3	1144	.91	.13	4.60	2.28	.01
9423068	238696* 223B341	120	<4	40	.4	<2	22	<1	6	13	5.82	2	62	<5	14	203	7	2	12	3	<2	246	.59	.23	4.37	.20	.01
9423069	238697* 12GB121	255	<4	80	.8	<2	19	<1	36	34	4.28	3	46	<5	18	107	2	<2	66	10	3	1342	1.32	.15	4.81	2.01	.01
9423070	238698* 2 K 51	8	<4	81	<.4	<2	8	<1	<1	1	.12	2	<4	<5	<5	3	<2	<2	21	<2	<2	56	.07	<.01	.13	1.42	.02
9423071	238699* 22BR341	110	<4	60	.4	2	18	<1	18	25	5.08	3	65	<5	<5	149	<2	<2	17	28	4	1003	.79	.43	3.13	.73	.01
9423072	238700* 22BR341	126	<4	42	.7	11	10	<1	11	26	4.74	7	62	<5	9	135	9	<2	11	15	2	255	.66	.41	6.41	.42	.01
9423073	238701* 221B341	77	<4	35	.6	2	11	<1	5	11	4.70	2	38	<5	10	192	7	<2	16	3	<2	195	.45	.44	3.26	.34	.01
9423074	238702* 2 2B341	342	<4	95	<.4	4	27	<1	24	35	4.79	2	50	<5	<5	156	2	<2	65	16	5	1766	1.68	.26	4.81	1.55	.01

EXP LAB NUMBER	FIELD NO	MAP ZONE	EAST	NORTH	#	MAT'L	ORIG	SITE	COLOUR	SIZE	ORG	WET	DEPTH cm	WIDTH SLOPE	FLOW HORIZ	PPT	pH	Au ppb	Wt Au gram
S9423075	238703		+0	+1300		Soil	Collu	Dry	Med-brown	Sandy -silt	Low	Dry	20	Steep	B		.	<10	10
S9423076	238704		+0	+1350		Soil		Dry	Dk -brown	sand	Low		30	Steep	B		.	<10	10
S9423077	238705		+0	+1400		Soil	Collu	Dry	Brn-red	B'ldry-sand	Low	Dry	30	Steep	B		.	<10	10
S9423078	238706		+0	+1450		Soil	Collu	Dry	Brn-red	Sandy -silt	Low	Dry	40	Steep	B		.	<10	10
S9423079	238707		+0	+1500		Soil	Collu	Dry	Med-brown		Med	Dry	35	Steep	B		.	<10	10
S9423080	238980		+0	+950		Soil			black		high	Dry	25	Steep	A		.	<10	10
S9423081	238979		+0	+1000		Soil	Collu	Dry	Med-brown	Gravly-sand	Low	Dry	40	Steep	B		.	<10	10
S9423082	238978		+0	+1050		Soil			Brn-red	silt	high	Dry	50	Steep	B		.	<10	10
S9423083	238977		+0	+1100		Soil	Collu	Dry	Dk -brown	Gravly-sand	Med	Dry		Steep	C		.	<10	10
S9423084	238976		+0	+1150		Soil	Collu	Dry	Dk -brown	Gravly-sand	Low	Dry	35	Steep	B		.	<10	10
S9423085	238975		+0	+1200		Soil	Collu	Dry	Med-brown	Sandy -silt	Low	Dry	45	Steep	B		.	<10	10
S9423086	238974		+0	1250		Soil	Collu	Dry	Med-brown	Sandy -silt	Low	Dry	35	Steep	B		.	<10	10
S9423087	238973		+0	+1300		Soil	Collu	Dry	Med-brown	Sandy -silt	Med	Dry	40	Steep	B		.	<10	10
S9423088	238972		+0	+1350		Soil	Collu	Dry	Med-brown	B'ldry-silt	high	Dry	40	Steep	B		.	<10	10
S9423089	238971		+0	+1400		Soil		Dry	Dk -brown		high	Dry	30	Steep	A		.	<10	10
S9423090	238970		+0	+1450		Soil	Collu		Dk -brown		high	Dry	40	Steep	A		.	<10	10
S9423091	238969		+0	+1500		Soil	Collu	Dry	Brn-red	Sandy -silt	Low	Dry	35	Steep	B		.	<10	10
S9423092	238677		+0	+0		Silt		Dry	Med-brown	B'ldry-sand	Low	Dry	15	Med			.	<10	10
S9423093	238678		+0	+50		Soil	Collu	Dry	Dk -brown	Gravly-sand	Low	Dry	50	Med	B		.	<10	10
S9423094	238679		+0	+100		Soil	Collu	Dry	Med-brown	Sandy -silt	Low	Dry	30	Med	B		.	<10	10
S9423095	238680		+0	+150		Soil	Collu		Dk -brown	Sandy -silt	Low	Dry	40	Med	B		.	<10	10
S9423096	238681		+0	+200		Soil	Collu	Dry	Dk -brown	Gravly-sand	Low	Dry	20	Steep	B		.	<10	10
S9423097	238682		+0	+250		Soil	Collu	Dry	Dk -brown	Sandy -silt	Med	Dry	40	Steep	B		.	<10	10
S9423098	238683		+0	+300		Soil	Collu	Dry	Lt -brown	Sandy -silt	Med	Dry	40	Steep	B		.	<10	10
S9423099	238684		+0	+350		Soil	Collu	Dry	Med-brown	Sandy -silt	Med	Dry	40	Steep	B		.	<10	10
S9423100	238685		+0	+400		Soil	Collu	Dry	Dk -brown	Gravly-sand	Low	Dry	25	Steep	B		.	<10	10
S9423101	238686		+0	+465		Silt		Active	Lt -grey	bouldr			10		2		.	<10	10
S9423102	238687		+0	+500		Soil											.	<10	10
S9423103	238688		+0	+560		Soil	Alluv	Dry	Med-brown	Gravly-sand	Med	Dry	20	Steep	B		.	55	10
S9423104	238689		+0	+600		Soil	Collu	Dry	Med-brown	Sandy -silt	Low	Dry	40	Steep	B		.	<10	10
S9423105	238690		+0	+650		Soil	Collu	Dry	Dk -brown	Sandy -silt	high	Dry	40	Steep	B		.	<10	10
S9423106	238691		+0	+700		Soil	Collu	Dry	Dk -brown	Sandy -silt	Med	Dry	40	Steep	B		.	<10	10
S9423107	238692		+0	+750		Soil	Collu	Dry	Med-brown	Sandy -silt	Low	Dry	35	Steep	B		.	<10	10
S9423108	238693		+0	+800		Silt		Active	Dk -brown	Sandy -silt			15		2		.	<10	10
S9423109	238694		+0	+850		Soil	Collu	Dry	Med-brown	Sandy -silt	Low	Dry	45	Steep	B		.	<10	10
S9423110	238695		+0	+900		Soil	Collu	Dry	Med-brown	Sandy -silt	Low	Dry	40	Steep	B		.	<10	10

LAB NO	FIELD NUMBER	Cu ppm	Pb ppm	Zn ppm	Ag ppm	As ppm	Ba ppm	Cd ppm	Co ppm	Ni ppm	Fe %	Mo ppm	Cr ppm	Bi ppm	Sb ppm	V ppm	Sn ppm	W ppm	Sr ppm	Y ppm	La ppm	Mn ppm	Mg %	Ti %	Al %	Ca %	
S9423075	238703* 222B341	158	4	76	.4	<2	21	<1	14	24	5.84	3	49	<5	<5	212	20	<2	37	6	<2	499	1.15	.34	3.60	.57	
S9423076	238704* 23B 31	10	<4	46	<.4	<2	8	<1	1	1	1.13	<2	10	<5	10	67	<2	<2	9	<2	<2	56	.06	.08	.46	.30	
S9423077	238705* 22BR131	67	<4	68	.5	6	39	<1	14	28	4.81	<2	57	<5	13	152	12	<2	12	6	<2	449	.87	.34	3.92	.50	
S9423078	238706* 22BR341	110	<4	74	.7	<2	28	<1	20	26	4.74	<2	55	<5	5	172	3	<2	20	15	5	1772	.66	.25	3.69	.82	
S9423079	238707* 222B 2	101	4	80	.7	<2	33	<1	20	19	3.97	3	41	<5	10	151	2	<2	19	16	6	4766	.54	.25	3.05	1.08	
S9423080	238980* K 3	5	8	36	<.4	<2	9	<1	1	<1	.08	<2	<4	<5	<5	2	<2	<2	10	<2	<2	579	.03	<.01	.10	.89	
S9423081	238979* 222B231	152	<4	79	.9	3	25	<1	17	29	5.39	2	53	<5	<5	163	18	<2	20	10	2	1145	.88	.46	3.21	.91	
S9423082	238978* BR 43	6	<4	64	.5	<2	5	<1	1	2	.37	5	<4	<5	5	22	<2	<2	11	<2	<2	79	.10	.06	.21	.26	
S9423083	238977* 223B232	130	6	61	.5	9	27	<1	46	20	2.73	3	26	<5	<5	82	13	<2	26	9	2	2918	.69	.14	2.40	1.17	
S9423084	238976* 223B231	154	<4	55	.9	13	12	<1	20	31	3.55	4	53	<5	5	117	9	<2	18	15	3	622	1.21	.33	3.42	.96	
S9423085	238975* 222B341	34	<4	34	.9	10	9	<1	4	10	6.75	4	58	<5	11	268	16	4	9	<2	<2	202	.42	.68	2.25	.46	
S9423086	238974* 222B341	96	<4	41	.8	4	12	<1	7	15	6.99	2	60	<5	18	258	10	<2	13	2	<2	266	.64	.59	3.46	.31	
S9423087	238973* 222B342	21	<4	37	1.0	9	13	<1	5	12	7.92	<2	57	<5	12	420	8	<2	13	<2	<2	496	.30	.82	1.70	.47	
S9423088	238972* 222B143	4	<4	20	.4	<2	<5	<1	3	7	2.16	<2	19	<5	5	248	7	2	4	<2	<2	90	.22	.43	.94	.29	
S9423089	238971* 23B 3	7	8	46	<.4	<2	17	<1	<1	1	.12	<2	<4	<5	<5	7	<2	<2	10	<2	<2	152	.05	.01	.09	.57	
S9423090	238970* 2 3B 3	91	<4	50	.6	<2	7	<1	7	17	6.42	2	65	<5	13	250	14	<2	9	2	<2	285	.56	.58	2.40	.48	
S9423091	238969* 22BR341	116	<4	68	.8	20	22	<1	36	26	7.66	3	83	<5	11	268	6	<2	17	18	4	1268	1.01	.58	3.69	.93	
S9423092	238677* 22B131	161	<4	50	.6	13	32	<1	36	27E	10.49	11	50	<5	18	135	24	<2	108	5	<2	1087	1.53	.17	4.43	.92	
S9423093	238678* 223B231	129	<4	90	.6	12	25	<1	22	33	4.41	<2	51	<5	10	130	14	<2	54	6	2	968	1.44	.14	3.83	1.38	
S9423094	238679* 222B341	69	5	57	<.4	5	19	<1	12	29	4.83	<2	38	<5	10	161	10	<2	39	2	<2	941	1.13	.17	2.78	.42	
S9423095	238680* 2 3B341	82	<4	67	.7	7	23	<1	11	27	5.60	3	36	<5	10	141	11	<2	51	3	<2	455	1.12	.16	3.18	.51	
S9423096	238681* 223B231	172	<4	45	.7	6	25	<1	39	18	5.80	2	26	<5	15	120	17	<2	73	12	4	766	.85	.21	5.51	1.10	
S9423097	238682* 223B342	12	4	21	<.4	<2	7	<1	2	4	3.10	2	14	<5	7	178	5	<2	8	<2	<2	103	.17	.17	1.17	.26	
S9423098	238683* 221B342	108	<4	38	<.4	<2	22	<1	6	11	5.42	5	40	<5	7	119	7	<2	20	6	2	186	.42	.11	7.75	.21	
S9423099	238684* 222B342	76	<4	30	.6	<2	20	<1	2	7	7.00	2	41	<5	6	155	13	<2	14	5	2	181	.45	.20	5.18	.24	<
S9423100	238685* 223B231	183	<4	44	<.4	<2	28	<1	18	23	5.96	6	35	<5	7	156	13	<2	35	12	2	513	.99	.24	5.44	.73	
S9423101	238686* 11G 1	265	<4	78	.6	9	27	<1	28	36	4.93	9	35	<5	8	103	17	<2	79	8	3	801	1.28	.16	4.51	1.85	
S9423102	238687*	66	<4	28	.8	<2	10	<1	3	9	5.01	4	51	<5	9	181	8	<2	19	3	<2	130	.29	.45	3.94	.34	
S9423103	238688* 122B232	153	<4	74	.4	16	50	<1	41	29	3.90	3	29	<5	<5	85	5	<2	46	20	6	1871	.80	.12	3.77	1.54	
S9423104	238689* 222B341	68	<4	38	<.4	<2	16	<1	6	9	5.96	4	45	<5	15	210	12	3	13	5	<2	212	.36	.29	4.47	.28	
S9423105	238690* 223B343	211	<4	107	.7	7	39	1	594	47	4.03	5	41	<5	8	84	11	<2	26	27	6	7023	.44	.17	5.32	1.01	
S9423106	238691* 223B342	22	8	29	<.4	9	7	<1	12	10	2.95	2	38	<5	6	190	3	<2	13	4	<2	234	.33	.46	1.39	.27	
S9423107	238692* 222B341	71	<4	38	.8	4	19	<1	7	12	5.98	5	48	<5	9	242	6	<2	14	3	<2	168	.40	.51	2.37	.53	
S9423108	238693* 13B34	219	<4	67	.5	2	27	<1	130	33	2.72	8	50	<5	7	62	<2	<2	20	24	6	2250	.49	.14	5.48	.94	
S9423109	238694* 222B341	113	<4	42	.8	2	13	<1	7	13	8.06	2	75	<5	10	362	12	<2	9	5	<2	244	.51	.55	3.00	.23	<
S9423110	238695* 222B341	86	<4	41	.7	9	13	<1	5	13	8.01	<2	88	<5	10	251	17	<2	8	2	<2	201	.50	.44	4.34	.18	<

I=insufficient sample X=small sample E=exceeds calibration C=being checked R=revised
If requested analyses are not shown ,results are to follow

ANALYTICAL METHODS

Au	Aqua regia decomposition / solvent extraction / AAS
Wt Au	The weight of sample taken to analyse for gold (geochem)

I=insufficient sample X=small sample E=exceeds calibration C=being checked R=revised
If requested analyses are not shown ,results are to follow

ANALYTICAL METHODS

ICP PACKAGE :0.5 gram sample digested in hot reverse aqua regia (soil,silt) or hot Aqua Regia(rocks).

APPENDIX II

IN THE MATTER OF THE B.C. MINERAL ACT

AND IN THE MATTER OF THE A GEOLOGICAL MAPPING

AND SOIL/SILT SAMPLING PROGRAM CARRIED OUT ON

THE CHUMMING PROPERTY,

LOCATED 35 KM NORTH OF GOLD RIVER, B.C.,

IN THE ALBERNI MINING DISTRICT OF THE

PROVINCE OF BRITISH COLUMBIA,

MORE PARTICULARLY NTS 92E/16 AND 92F/13

STATEMENT

I, Darin W. Wagner, of 12211 210th Street, in the City of Maple Ridge, in the Province of British Columbia, make oath and say:

1. That I am employed as a geologist by Cominco Ltd. and, as such have a personal knowledge of the facts to which I herein-after dispose;

2. That annexed hereto and marked as Exhibit "A" to this statement is a true copy of expenditures incurred during a geological mapping and soil/silt sampling program on the Chumming Property;

3. That said expenditures were incurred in August and September, 1994 for the purpose of mineral exploration on the above noted property.

Darin W. Wagner
Geologist
Cominco Ltd.

Dated this 14th day of December, 1994
at Vancouver, B.C.

APPENDIX III - EXHIBIT "A"

STATEMENT OF EXPENDITURES

CHUMMING PROPERTY - AUG./SEPT. 1994

1. AUGUST 21/22

Salaries : D. Wagner	$ 750.00
D. Senft	450.00
	1200.00
Truck Rental	300.00
Expenses (Food, Accommodations, Gas)	570.00
Rock Geochemical Analysis (9 x 14.50 + 2 x 16.00)	160.00
Misc. Supplies (Sample Bags/boxes, Acid)	150.00
	$2330.00

2. SEPTEMBER 11/12

Salaries : D. Wagner	$ 750.00
D. Vanderklay	600.00
K. Bilquist	480.00
	1830.00
Truck Rental	300.00
Expenses (Food, Accommodations, Gas)	1050.00
Soil/Silt Geochemical Analysis (69 x 13.50)	930.00
Misc. Supplies (Samples Bags/Boxes, Maps, etc.)	250.00
Report Writing, Drafting	1000.00
	$5360.00
TOTAL	**$ 7690.00**

APPENDIX IV

CERTIFICATION OF QUALIFICATIONS

I, Darin W. Wagner, of 12211 210th Street, in the City of Maple Ridge, in the Province of British Columbia, do hereby certify:

i. That I graduated with a B.Sc. in Earth Sciences from the University of Waterloo in 1989.

ii. That I graduated with a M.Sc. in Earth Sciences from Carleton University in 1993.

iii. That I have been actively practising geology from 1989 to 1994 and am presently an employee of Cominco Ltd.

Darin W. Wagner, M.Sc.

December, 1994

LEGEND
7 Lamprophyre Dykes (Age Uncertain)
Upper Cretaceous/Eocene(?)
6 Hornblende Granodiorite
Possibly Upper Triassic - Cretaceous
5 Feldspar - Hornblende Dyke
4 Granodiorite Dykes
3 Diorite
Upper Triassic
2 Altered Karmutsen Basalt
1 Karmutsen Basalt
Outcrop
X Float Sample
x 12-1 1993 Sampling (results omitted)
x WR94-201 1994 Sampling (results included)
RGS Sample
Cu, Mo, Au
Cominco Silt Sample
Cu, Mo, Au L = Less Than Detection
Contour Soil Line (with sample numbers)
cp chalcopyrite
py pyrite
po pyrrhotite
mo molybdenum
mt magnetite
Van Hall Geochemical Survey Assessment Report No. 3953
Van Hall Geochem.
Della / Dahl Ck
Silver Ck
STRATHCONA PARK
0 100 200 300 400 500 metres
AR 23654
CHUMMING PROPERTY
92 E/16 F/13
Drawn by:
Traced by:
Revised by
Date
GEOLOGY - GEOCHEMISTRY
ALBERNI M.D., B.C.
Scale: 1 : 5,000
Date: Dec., '94
Plate: 3