HIAWATHA RESOURCES INC.

GEOCHEMICAL REPORT

ROZAN and OGG PROPERTIES

NELSON M.D., B.C. NTS 82-F-6 W/2

by

P.H. SEVENSMA, Ph.D., P.Eng.

Osoyoos, B.C. October 1st, 1991

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HIAWATHA RESOURCES INC.

Rozan and OGG Properties

1. INTRODUCTION

The property has been under a 100% option since 1988-1989 by Hiawatha Resources Inc.

Since that time, old roads and trails up Hall Creek have been improved to a 4 W.D. road up Hall Creek to Rozan Creek. About half the property has been geologically mapped and grids have been established with about 1000 soil samples taken along lines 200m apart, and 50m sample spacing.

In 1990, between July 22nd and November 15th, 1990, these surveys were completed by a Southerly line, 1200 S with 79 samples at 50m, a detailed soil survey of 34 samples on lines 25m apart with a 20m sample spacing around a selected high grade sample of 560 ppb gold, 20 ppm tungsten, 10 ppm molybdenum and 11 ppm bismuth.

Also, 12 rock samples were taken from old workings on OGG 6 along the West boundary of the Group, where strong arsenic had been reported, and some geological observations made, all by Alex Fraser, an independent geologist of Nelson, B.C.

2. PROPERTY

The property consists of the following claims, on sheet 82-F-6 W/2, between elevations 1300m and 2200, centered on lat. 49° 23'N and long. 117° 22'W.

Access to the claims is by a bushroad from Blewett, up Forty-nine Creek, or a 10 km bushroad from Hall siding up Hall Creek from Hiway 6.

Both these creeks were gold placer creeks. The bushroad from Blewett terminates at the old fire-tower on Copper Mountain, at elevation 2200m.

Name	Record No.	Area	Expiry Date
Rozan	1281	6 Units	Oct. 5, 1998
Gold 1	4464	1 Unit	Oct. 22, 1998
Gold 2	4463	1 Unit	Oct. 22, 1998
Golden Eagle	1629	Rev. C. gr.	April 1, 1999
Golden Eagle 2	1004	" " "	April 3, 1999
Golden Eagle 3	1005	" " "	April 3, 1999
Golden Eagle 5	1006	" " "	April 3, 1999
Eagle 1	4961	4 Units	Feb. 17, 1994
Eagle 2	5029	15 Units	April 13, 1994
Rozan Group	Subtotal	31 Units	
OGG 9	302688	15	July, 1992
OGG 2	3339	6	July 19, 1992 *
OGG 4	2732	4	Sept. 1, 1993 *
OGG 5	2733	9	Sept. 2, 1992 *
OGG 6	2703	6	July 23, 1993 *
OGG 7	3340	6	July 10, 1992 *
OGG	Subtotal	46 Units	
	GRAND TOTAL	77 Units	

* subject to acceptance of this report

3. TERRAIN

The terrain is moderately rugged with small cirque bowls on the northerly slopes of the 2100m high ridges. Hall Creek Valley is U-shaped and glacial till has been encountered to about elevation 1500m, above which there is rapid thinning of glacial material up slope, where most colluvium is of local derivation and is thought, at least above 1500m, to give a good reading on nearly directly or slightly upslope underlying bedrock.

In the general area, mineralized float in the lower till could have a more remote bedrock source, but above 1500m float should have a nearby source.

4. SOIL SURVEY

Samples were collected in the apparent "B" horizon with a pick and trowel at depths of from 5"-10", placed in kraft paper bags containing about 6-8 spoonfuls, taken to town and dried in the bags prior to shipment to Acme Analytical Laboratories in Vancouver. .500 grams of -80 mesh material is then digested for each sample with 3m.l. 3-1-2 HCI - HN03-H20 at 95°C for one hour and diluted to 10ml with water. The leach is partial for a number of metals and complete for about 15 of the more current metals, like As, Bi, Dc, Co, Cu, Fe, Pb, Mn, Ni, P, Ag, U and Zn.

W is leached only partially, like Bi, Ca, Mg, K, Sr and V. Au is not detected below 3 ppm, and requires a special acid leach followed by atomic absorption (AA), whereas a standard ICP analysis is done on the 30 metals by inductively coupled plasma atomic emission spectroscopy.

5. RESULTS DETAILED GRID, 1400 West, 250 S, OGG CLAIM

See Acme Report 90-4990, page 2, Fig. 5, 3 and 4.

This area was selected for detailed work because it had revealed a high gold assay with high minor metals, and is located downslope from a possible EM conductor evidenced by an airborne survey flown on an adjoining claim, and because there was no special geological feature to explain a high assay.

Main values of interest were (Acme report 89-3051, p.1) Au: 560 ppb, Mo 10 ppm, Cu 84 ppm, Co 24 ppm, Sr 113 ppm. Bi: 11 ppm, W 28 ppm, at location 250S, 1400 W. Sample spacing of 34 samples was 20m on lines spaced at 25m.

CONCLUSIONS ARE:

The original high is not accidental, but indicates the centre of a 100m long anomalous core of over 300 ppb gold. The Bi indicates this is a centre of a Bi-anomaly which may lie at the intersection of two zones. The whole occurs at the N fringe of a + 50 ppm copperzone. W follows the edge of the high copper.

5. CONCLUSIONS cont'd...

Cursory examination on surface does not provide a ready explanation for the anomaly. Careful mapping and back-hoe trenching are indicated. The anomaly may be a typical anomaly of a blind concentration of possibly commercial mineralization. If core-drilling and ICP 30 metal assaying were to show an increase of the anomalous values with depth, deeper drilling, possibly after geophysical work, would be justified.

The values are comparable to those reported for a gold-copper-bismuth-tungsten deposit near Celina in Czechoslovakia in the Jilove' Belt, South of Prague, which, however, is high in arsenic and occurs in a wide stock-work of steep quarty veins. The tungsten is bedding controlled. The Celina mineralization occurs in an albite-granite and volanic sedimentary sequences of about 300 million years old (J. of Geohem Exploration, Vol. 37, No.3, July, 1990, by Janatha & Moravek).

Bi was routinely sampled by ICP 30 metals, which cannot show Bi below 2 ppm. Recent work has shown that different methods for a detection unit of o.2 ppm are required to determine the truly anomalous values. Under the 2 ppm limit, 3 ppm has been considered the anomalous threshold.

6 LINE 1200S, FROM 1750m EAST TO 2150W

79 samples, Acme 90-3038 p. 1-2 and 90-4990, p.1

This line was run in an endeavour to locate the end of the gold anomalous area. A much earlier reconnaissance for Cu, Mo, Pb and Zn had found anomalous erratic values for Cu, Mo, and Zn on a very irregular unsurveyed grid.

The 3900m long line did encounter anomalous values for gold between 4+00W to 1500E with higher than usual silver up to .9 ppm as well as As from 13+50W to 6+50W, and scattered Bi from 17+00W to 7+50W. This is definitely anomalous. Weak (0.10-0.16%) K occurs mainly at 1100W to 950W and may reflect alteration as elsewhere on the property.

These values are of definite, but secondary interest. Mapping should look for epidote in the K areas. Weak Cd up to 1.5 ppm could be of some interest. As there is no outcrop West of Hall Creek, the thickness of overburden is unknown in this area.

6. LINE 1200S, FROM 1750m EAST TO 2150W cont'd...

Bismuth and lead often form trace elements in gold, according to a study by Antweiler & Campbell (Precious Metals in the Northern Cordillera, Vancouver Symposium, April, 1981). As well, Bi, often with lead, forms numerous sulfo-salts, as well as "alloys" with gold and silver. With arsenic, Bi forms traces in Mesothermal gold, and with tungsten, and molybdenum traces in porphyry-copper-gold. It occurs frequently in gold deposits, like the skarn type gold deposits;in Salsigne (France) and in iron-stone lodes in Tenant Creek, Australia, the last two being commercial producers of bismuth, copper and gold (Economic Geology, Monograph 6, 1988).

7. SPECIAL FEATURES

The Hall Creek - Rozan road was maintained and improved in 1990. The last few hundred feet exposed abundant quartz-eye rhyolite of unknown attitude. A 4" vein in a 75' long drift was sampled at the face, giving high values in Au, W, Bi, Co, and Mo, with a small Uranium kick of 21 ppm versus 5 ppm background. Silver at 9.5 ppm was higher than the ubiquitous 0.1 to 0.7 ppm. See assay report in Appendix.

A search of recent assessment reports, revealed report No. 18,923 dated July 26, 1989, on the Gold Bug property under option to Cupratec Resources at the time. It recorded a Sept., 1988, 8 sample assay report, of samples partly derived from the Eagle 2, at the junction of Hall Creek and Spider Creek, in stream sediments from Hall Creek, as well as an assay of pannings performed by Noranda of 6300 ppb in this location. These assays were compared to a recently published streamsediment report BC-RG530, G.S.C. Open file 2355, with a sample station about 1 - 2 km below the Bayonne mine North of the Salmo Creston raod. These assays may be compared to those of the 4" wide end of road vein mentioned above.

7. SPECIAL FEATURES cont'd...

	BAYONNE MINE Streamseds(5094)	SPIDER FORKS Streamseds,88-4299	END OF ROAD VEIN Rock Samples
Au	130 ppb	1245 ppb	3980 ppb
Cu	18 ppm	90 ppm	39 ppm
Pb	285 ppm	13 ppm	58 ppm
Zn	196 ppm	83 ppm	20 ppm
Fe%	1.30%	6.10%	26.99%
W	75 ppm	19 ppm	122 ppm
Ag	0.8 ppm	0.2 ppm	9.5 ppm
Bi	? ppm	2 ppm	129 ppm
As	25 ppm	14 ppm	15 ppm
K%	? ppm	.26 ppm	.06 ppm
Mo	1 ppm	1 ppm	132 ppm

The Bayonne deposit is a low-iron quartz vein deposit which has produced 89,000 tons @ .47 oz/t gold and 0.10 oz/t Ag. The sample location is on Bayonne Creek.

As a whole, on the average, iron in the Rozan Group, is quite high and the Red Mountain area has a large very red area, maybe reminiscent of red copper beds. The tungsten-gold-magnetite combination suggests that a porphyry type deposit is possible below the red sediments, or a skarn type deposit.

It is now a matter of trenching and drilling, supported and preceded by ground-magnetics and electromagnetics.

The soil sampling suggests a Rossland type deposit (Au, W, Mo, Bi and Co) as does the multiple vein system, which also occurs in the Second Relief, 5 km to the Sout.

8. OGG 6 OCCURRENCE

This occurrence has been reported as a wide zone of quartz-arsenopyrite associated with skarn. It was examined by Alex Fraser, an independent geologist living in Nelson.

His report is appended and assays are recorded on Acme #90-4990, page 3.
Some scattered values of Cu, Mo, Zu, As, Sr, Bi, Ag and Au are recorded, and the workings lie along a NE fault, mapped as the Red Mountain Fault by Trygve Hoy (fig. 7).

The occurrence merits further examination and study but so far does not appear to reflect a potentially economic zone.

Mapping at the higher elevations should resolve the structure of the major Red Mountain Fault, which appears to form a horse-tailing structure that may be of exonomic significance due to its apparent relation to the major gold anomaly.

9. SUMMARY

The property covers an outstanding combination of favourable factors for the discovery of a significant deposit of Rossland-type mineralization.

It is located in a belt of lower Rossland rocks, about in the centre of the Nelson-Salmo gold belt, and marked by a stream sediment sample of 1245 ppb, taken by a third party. A panned sample gave 6300 ppb (Figure 7).

Streams draining the area have had placer production, exclusive to this area.

The Archibald formation pierces the overlying Elise volanics along a major regional fault, forming a sort of dome. 5 km to the South the Second Relief deposit has produced 228,000 tons @ 0.43 oz/ton gold in one out of five veins in the Archibald, with minor silver (1902-1959).

9. SUMMARY cont'd...

A 3000 meter long gold anomaly in the soils with a peak of 2625 ppb crosses the property, related and parallel to a Silver King porphyry body, as in the Rossland camp and the Second Relief.

Big dykes of N-S lamprophyre dykes are present, as in Rossland, Bralorne and other gold camps worldwide.

Minor elements in the soil provide the same signature as the Rossland ore would (bismuth, molybdenite, copper, tungsten and some cobalt).

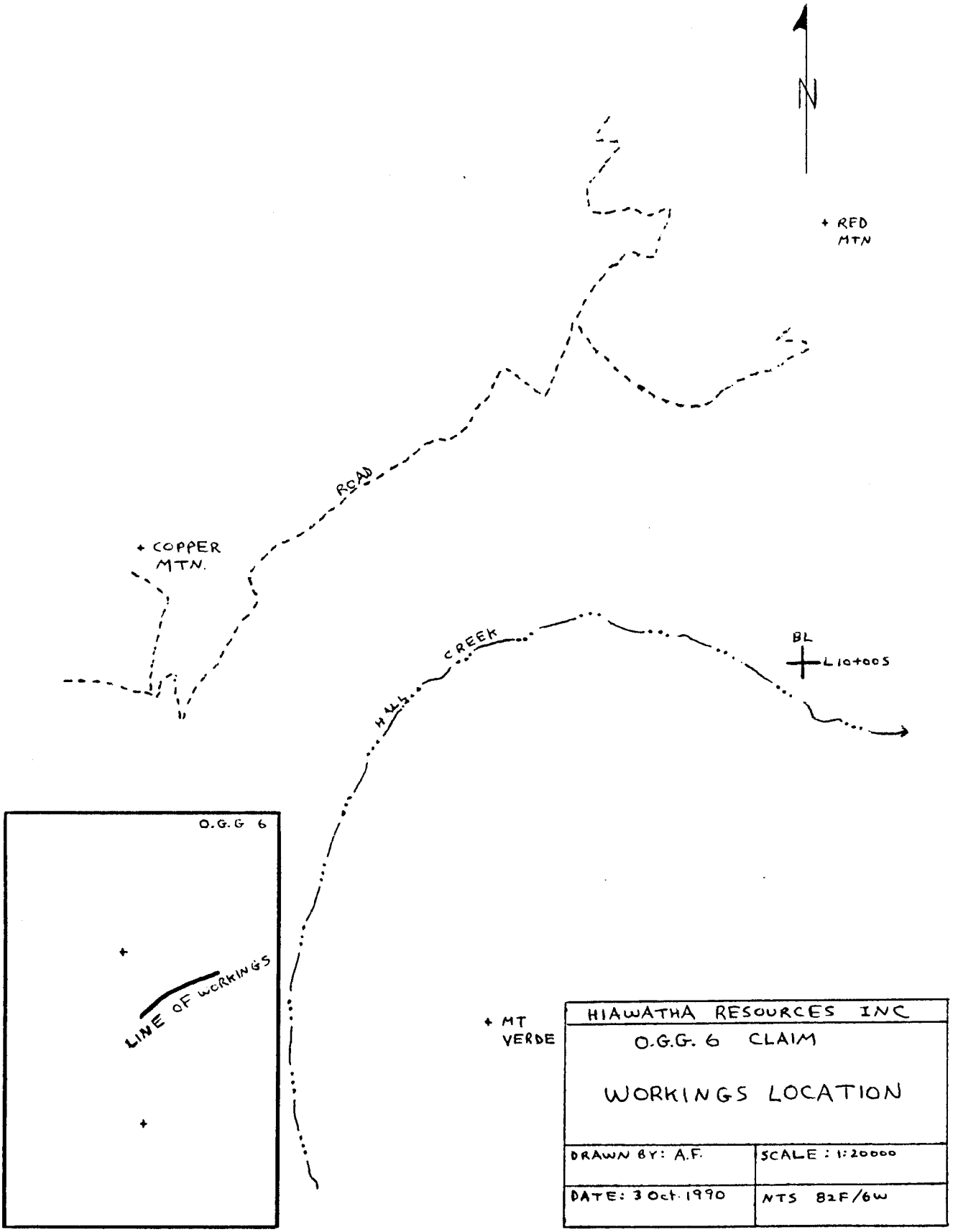
A substantial program of exploration is justified.

BRIEF ON LITHOGEOCHEMICAL SAMPLING OF WORKINGS O.G.G. 6 CLAIM NELSON MINING DIVISION FOR HIAWATHA RESOURCES INC

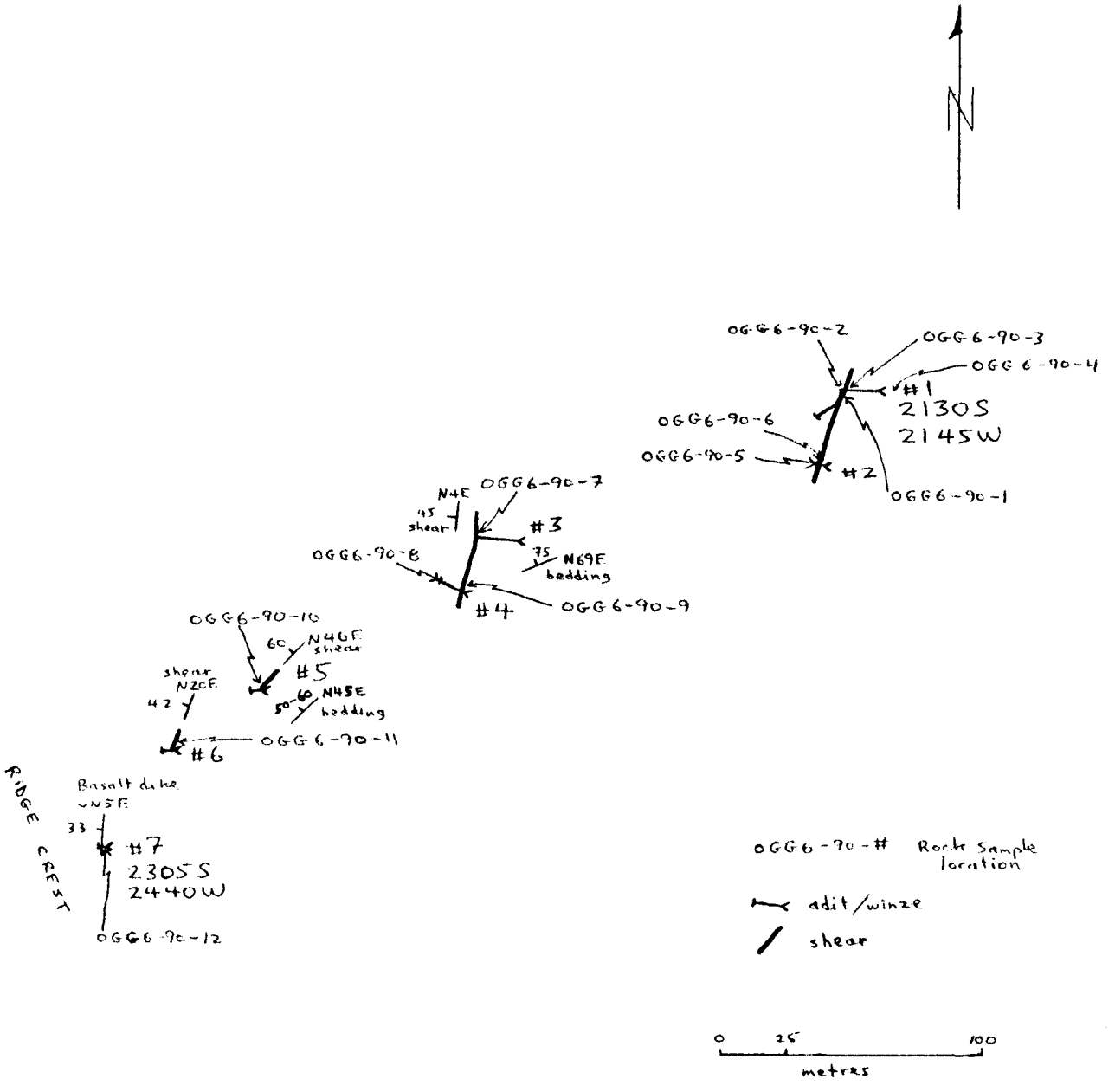
Alex Fraser
A403-1102 Gordon Rd.
Nelson, BC
V1L 3M4

604-352-6039

3 Oct., 1990



HIAWATHA RESOURCES INC	
O.G.G. 6 CLAIM	
WORKINGS LOCATION	
DRAWN BY: A.F.	SCALE : 1:20000
DATE: 30 Oct. 1990	NTS 82F/6W



HIAWATHA RESOURCES INC	
O.G.G.6 CLAIM PLAN OF WORKINGS AND SHEAR ZONES	
DRAWN BY: AF	SCALE: 1:2500
DATE: 3 Oct 1990	NTS 82F/6W

SUMMARY
Twelve rock samples of various rock types and features were collected on 25 Sept., 1990 from a series of workings west of Hall Creek on the O.G.G. 6 claim.

ACCESS
The location was reached by way of the May and Jennie road from Blewett to Copper Mountain, and a ridge-trail south from the mountain.

WORKINGS
The workings consist of six adits and a winze roughly along a line that extends from 25 metres east of the ridge crest for 340 metres to the northeast. The elevation difference between the top and bottom workings is 205 metres (675 feet), the highest working (the winze) sitting at 2065 metres (6775 feet) elevation (17 metres (55 feet) below the ridge crest) and the lowest working sitting at 1860 metres (6100 feet). The lowest working, the main adit, has been designated the #1 level with successive numbering resulting in the winze being the #7 level.

GRID LOCATION
The coordinates of the #7 portal were calculated with respect to L10+00S/21+50W of the OGG Group soil grid and the coordinates of the #1 portal were calculated with respect to the #7. Compass and hip-chain surveying was used, along with altimeter readings for slope correction purposes along the trend of the workings.

GEOLOGY
The trend of the workings lies in rusty fine-grained argillaceous Archibald Formation sediments, parallel to the contact with Elise Formation andesitic pyroclastics 25 to 50 (?) metres to the northwest. Dikes of various compositions including white aplite and pegmatite, dacite, and basalt are found in the sediments. The workings test a series of en echelon shears of low displacement which contain veinlets, pods and veins of quartz. Shears strike northnortheast to northeast with moderate dips west while bedding strikes northeast to eastnortheast with moderate to steep dips west. Mineralization, consisting mostly of pyrite in quartz, altered sediments and dacite, generally improves with decreasing elevation (#1 level is near break-in-slope and most of the area from there to the creek appears to be void of outcrop). Associated with shearing are silicification, argillic alteration, muscovite, and minor calcite.

ROCK SAMPLE DESCRIPTIONS

OGG6-90-1	½ metre chip across shear in ceiling	Fe-stained light grey and medium purplish dacitic volcanic (dike?) with disseminated pyrite; sheared with quartz stringers with pyrite
OGG6-90-2	2 metre chip (horizontal) from wall adjacent to shear -west side	same pyritic dacite
OGG6-90-3	same as OGG6-90-2 but east side	same pyritic dacite
OGG6-90-4	selective grab of dump debris	quartz with pyrite and muscovite
OGG6-90-5	1 metre chip (horizontal) across face	Fe-stained fine-grained medium brown and light grey metasediment?; disseminated pyrrhotite and pyrite
OGG6-90-6	1½ metre chip (horizontal) from wall adjacent to face	same rock as OGG6-90-5 but mostly argillic altered; goethitic fractures and minor quartz
OGG6-90-7	composite grab from narrow shear at face	brown and Fe-stained 'gouge'; minor quartz and a trace of calcite
OGG6-90-8	1 metre chip (horizontal) across face	silicified and fractured fine-grained sediment; minor quartz and pyrite
OGG6-90-9	chip across and along 10-20 centimetre wide by ½ metre long shear in north wall	Fe-stained altered argillaceous sediment; irregular rotten quartz veinlets
OGG6-90-10	composite grab along 1 metre of 6 centimetre wide shear at portal	sheared fine-grained medium grey metasediment; quartz veinlets
OGG6-90-11	composite grab along ¼ metre of 5 centimetre wide shear on north side of portal	bleached fine-grained sediment; disseminated pyrite and minor fracture-controlled calcite
OGG6-90-12	composite grab from 10 centimetre wide vein in hanging wall and outcrop	quartz

10. COST STATEMENT

PHASE 1	Supervision, P.H. Sevensma, 6 days @ $200 starting July 23,1990.	$1200.00
	4 W.Drive Osoyoos-Nelson & return 646 km @ .50¢	323.00
	Villa Motel, 4 days 8 melas	231.32
	Line cutting, J. Denny, 2.5 km	646.25
	Soil sampling (44 samples)	184.85
	Acme analysis, report 90-3038	430.35
		$3015.77
PHASE 2	Rehabilitation Road Supervision, P.H. Sevensma, 2 days @ $200	400.00
	J. Denny, swamping, Sept. 21,1990	175.00
	Bulldozer, H. Huser, Sept. 21,1990	862.50
		$1437.50
PHASE 3	P.H. Sevensma, Sept. 17-Sept. 26 8 days @ $200	1600.00
	J. Denny, Linecutting & sampling	856.10
	Acme, 69 soils, 13 rocks 90-4990 & 90-4994	790.60
	Alex Fraser, Geohem sampling	320.00
	Acme, part of 90-4990	172.25
	P.H. Sevensma, Supervision, 2 days	400.00
	Hotel (Villa Motel & Queens Hotel)	369.87
	Transportation, 1292 km @ .50¢ and battery Nelson	788.67
		$5337.49

PHASE 1	$3015.77
PHASE 2	1437.50
PHASE 3	5337.49
TOTAL	**$9790.76**

CERTIFICATE

I, Peter H. Sevensma, of 8404 - 85th Street,

Osoyoos, British Columbia, DO HEREBY CERTIFY:

1) That I am a Consulting Geologist with business address as above.

2) That I graduated at the University of Geneva, Switzerland in 1937 and that I obtained my Ph.D. in Geological Sciences in 1941 at the same institution, my thesis subject being the study of certain gold mines in Central France.

3) That I am a registered Professional Engineer, member of the Association of Professional Engineers in British Columbia.

4) That I have practiced my profession for the last fifty-four years with the only interruption being the war in the Far East from 1942 to 1946.

5) That I have personally directed this work program on the OGG property after examining the area in 1988.

6) That I am the exploration manager of Hiawatha Resources Inc.

P. H. Sevensma.

P. H. Sevensma, Ph.D., P.Eng.

Osoyoos, British Columbia.
October 15, 1991.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Hiawatha Resources Inc. File # 90-3038 Page 1

Box 1199, Osoyoos BC V0H 1V0

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
12+00S 21+50W	1	38	17	53	.1	13	7	256	2.39	11	5	ND	1	25	.5	2	2	40	.29	.162	6	14	.40	37	.18	4	6.77	.02	.04	1	3
12+00S 21+00W	1	32	14	85	.2	16	12	535	3.15	8	5	ND	1	33	.3	2	2	65	.23	.128	6	20	.85	49	.17	2	3.67	.01	.04	1	4
12+00S 20+50W	1	18	14	89	.2	15	12	373	3.35	2	5	ND	1	26	.2	2	2	66	.19	.118	6	19	.86	49	.19	3	4.12	.01	.04	1	5
12+00S 20+00W	1	33	19	87	.2	26	15	666	4.28	3	5	ND	1	81	.2	3	2	93	.48	.100	7	30	1.65	66	.20	2	3.35	.01	.06	1	3
12+00S 19+50W	1	25	9	92	.3	19	14	592	3.91	2	5	ND	2	60	.8	3	2	85	.34	.059	7	21	1.24	59	.22	4	3.32	.01	.06	2	4
12+00S 19+00W	1	37	18	84	.2	14	15	578	4.01	6	5	ND	1	38	.8	3	2	88	.27	.097	7	19	1.12	57	.20	3	3.77	.01	.06	1	4
12+00S 18+50W	1	39	19	85	.2	16	15	1149	4.03	3	5	ND	1	52	.8	2	2	88	.37	.114	7	20	1.17	82	.13	3	2.98	.01	.07	1	2
12+00S 18+00W	1	43	23	132	.5	11	15	2458	3.40	2	5	ND	1	144	.7	3	2	61	.94	.126	6	17	.91	187	.06	6	2.81	.01	.14	1	2
12+00S 17+50W	1	39	18	81	.1	30	17	729	4.88	4	5	ND	1	77	.8	2	2	100	.65	.092	12	47	1.34	83	.24	2	2.64	.02	.08	1	3
12+00S 17+00W	2	45	10	97	.3	32	18	1353	4.94	2	5	ND	1	95	.2	3	7	100	.72	.123	15	50	1.23	120	.22	4	2.74	.02	.07	2	2
12+00S 16+50W	2	54	9	97	.3	22	17	948	4.56	4	5	ND	1	79	.2	2	9	87	.67	.168	10	28	1.14	109	.16	2	3.16	.02	.08	1	2
12+00S 16+00W	2	45	13	81	.2	19	15	479	4.34	4	5	ND	1	65	.5	2	6	85	.51	.100	10	28	.93	86	.19	3	3.11	.01	.07	1	3
12+00S 15+50W	2	39	18	87	.2	20	13	586	4.48	2	5	ND	1	61	.3	2	2	85	.43	.076	15	28	.56	78	.20	3	2.52	.02	.06	1	3
12+00S 15+00W	2	41	15	124	.5	21	15	2229	3.93	3	5	ND	1	53	.6	2	2	72	.40	.107	10	24	.73	192	.15	4	2.27	.02	.05	1	2
12+00S 14+50W	4	63	12	89	.5	18	15	1880	3.70	2	5	ND	1	62	.3	2	7	84	.57	.090	27	24	.82	95	.13	4	2.97	.02	.06	5	4
12+00S 14+00W	2	38	12	85	.5	16	11	463	4.05	4	5	ND	1	45	.7	2	2	73	.32	.109	6	24	.69	73	.18	4	2.97	.01	.05	1	2
12+00S 13+50W	5	48	24	77	.7	15	11	628	3.51	2	5	ND	1	48	.5	2	4	64	.43	.116	9	23	.69	85	.14	2	4.13	.02	.06	1	4
12+00S 13+00W	4	45	26	92	.3	27	14	430	3.96	13	5	ND	1	38	.8	2	2	90	.42	.056	9	44	.94	115	.16	2	3.62	.03	.11	2	3
12+00S 12+50W	4	31	16	94	.1	16	9	406	3.47	10	5	ND	1	39	.6	2	6	68	.36	.076	9	26	.61	85	.13	4	3.72	.02	.07	1	3
12+00S 12+00W	4	32	21	120	.3	18	12	1014	3.65	10	5	ND	1	51	1.0	2	3	78	.56	.066	11	29	.68	67	.13	5	2.79	.02	.07	1	3
12+00S 11+50W	3	31	15	87	.7	16	11	745	3.48	8	5	ND	1	22	.7	2	2	73	.16	.063	10	25	.52	67	.14	3	2.37	.02	.06	1	4
12+00S 11+00W	5	46	18	124	.9	21	16	1213	3.59	16	5	ND	1	27	.6	3	2	88	.33	.073	11	32	.76	77	.11	2	2.71	.02	.09	4	2
12+00S 10+50W	3	84	22	121	.3	21	16	852	4.08	14	5	ND	1	27	.6	2	2	92	.26	.073	13	34	.87	106	.14	5	3.50	.02	.10	1	3
12+00S 10+00W	3	60	15	157	.6	28	15	902	4.92	37	5	ND	1	23	.8	2	4	112	.23	.070	7	39	.94	158	.15	2	3.40	.02	.15	1	2
12+00S 9+50W	4	40	24	132	.5	20	12	796	4.26	19	5	ND	1	21	.8	2	2	95	.20	.062	11	33	.71	139	.18	4	2.81	.02	.10	1	3
12+00S 9+00W	3	49	17	116	.7	22	13	772	4.09	21	5	ND	1	33	.9	3	10	92	.35	.072	8	33	.88	126	.13	2	2.93	.02	.08	1	3
12+00S 8+50W	3	33	16	100	.4	21	12	555	4.21	12	5	ND	1	34	.2	2	5	88	.27	.065	8	33	.82	91	.17	3	3.06	.02	.06	2	4
12+00S 8+00W	3	43	16	90	.1	23	13	423	4.10	8	5	ND	1	39	.2	2	2	85	.42	.050	10	32	.86	87	.16	2	3.48	.02	.06	1	2
12+00S 7+50W	5	42	15	95	.5	20	18	1351	3.72	11	5	ND	1	26	.2	2	7	77	.24	.059	14	30	.66	87	.15	2	3.03	.02	.07	2	3
12+00S 7+00W	4	30	22	100	.4	18	10	711	3.98	12	5	ND	1	31	.6	2	2	78	.43	.060	7	28	.57	86	.17	2	2.59	.02	.07	1	3
12+00S 6+50W	4	38	26	131	.2	25	14	611	4.38	9	5	ND	2	27	1.2	2	4	86	.29	.067	8	33	.73	141	.18	4	3.97	.02	.07	2	3
12+00S 6+00W	2	36	15	83	.4	12	9	1587	2.91	4	5	ND	1	22	.2	2	3	60	.20	.065	8	20	.29	128	.12	2	1.91	.02	.05	1	6
12+00S 5+50W	3	35	6	94	.2	27	14	492	3.88	4	5	ND	1	52	.6	2	5	77	.45	.131	15	46	.83	102	.16	2	3.64	.02	.06	3	7
12+00S 5+00W	4	23	18	82	.1	17	9	501	4.75	4	5	ND	1	25	1.0	2	2	75	.18	.104	9	33	.41	79	.22	2	2.63	.02	.06	1	4
12+00S 4+50W	6	60	16	102	.5	21	17	1899	4.13	6	5	ND	1	53	.9	2	4	82	.60	.085	24	35	.62	87	.13	3	2.57	.02	.08	2	6
12+00S 4+00W	4	39	25	96	.3	23	13	511	4.89	7	5	ND	2	47	1.0	2	2	93	.40	.059	16	42	.75	98	.21	2	2.62	.02	.07	2	14
STANDARD C/AU-S	20	58	42	132	7.0	73	32	1053	3.96	38	16	7	38	52	18.4	15	20	57	.48	.094	38	59	.88	179	.08	34	1.88	.06	.14	11	47

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-P2 Soil P3 Rock AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: AUG 1 1990 DATE REPORT MAILED: Aug 8/90. SIGNED BY..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Acme 90-3038. L.1200-W.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
12+00S 3+50W	2	40	15	105	.3	19	13	365	4.29	20	5	ND	1	35	1.0	2	2	79	.35	.054	9	36	.70	115	.17	2	2.91	.02	.09	1	11
12+00S 3+00W	2	48	13	109	.5	19	14	597	3.82	20	5	ND	1	45	1.3	2	3	72	.50	.106	12	33	.71	84	.09	2	3.15	.02	.08	1	12
12+00S 2+50W	5	29	13	127	.7	17	14	1307	3.68	15	5	ND	1	26	1.0	2	2	71	.28	.052	11	25	.45	92	.15	2	2.40	.02	.06	1	4
12+00S 2+00W	2	40	11	130	.5	20	10	1067	3.94	18	5	ND	1	27	1.3	2	5	80	.23	.090	7	32	.62	132	.11	3	2.10	.01	.07	1	1
12+00S 1+50W	2	39	12	116	.4	23	14	1168	3.76	12	5	ND	1	50	1.2	2	2	70	.59	.091	13	37	.63	96	.12	2	2.29	.02	.07	1	2
12+00S 1+00W	1	31	12	95	.4	16	11	369	4.59	11	5	ND	1	25	1.3	2	7	71	.19	.309	8	34	.48	118	.16	2	3.01	.01	.04	2	18
12+00S 0+50W	3	79	5	74	.6	19	14	857	3.71	12	5	ND	1	59	1.5	2	2	67	.64	.078	41	40	.61	79	.13	3	2.41	.02	.05	5	20
12+00S B.L.	3	44	12	120	.4	28	14	1600	3.87	16	5	ND	1	56	.8	2	3	61	.50	.210	7	39	.87	232	.08	2	2.50	.01	.08	3	25
STANDARD C	18	59	37	131	6.8	72	31	1052	3.96	41	16	7	39	52	18.6	16	19	56	.48	.097	39	60	.88	182	.07	32	1.88	.07	.13	13	-

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
707	1	4	19	83	.3	2	16	663	5.32	4	5	ND	1	108	.9	2	2	133	.44	.095	3	11	1.43	29	.29	4	2.20	.04	.06	1	34
709	1	8	8	92	.3	11	19	853	4.98	3	5	ND	2	61	.8	2	2	117	.66	.121	10	12	1.89	41	.25	3	2.07	.05	.10	2	16
710	1	5	15	72	.4	1	15	612	5.26	4	5	ND	1	106	.8	2	2	141	.41	.096	3	12	1.26	28	.33	4	2.24	.04	.07	1	6

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Hiawatha Resources Inc. File # 90-4990 Page 1

Box 1199, Osoyoos BC V0H 1V0

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb	Hg ppb
12+00S 0+50E	4	39	13	103	.4	18	14	689	3.88	12	5	ND	1	32	.2	2	2	69	.22	.124	8	32	.56	163	.13	2	1.61	.01	.07	1	18	40
12+00S 1+00E	6	64	8	134	.9	33	20	1023	3.48	8	5	ND	1	97	1.4	2	2	64	.87	.167	35	48	1.08	174	.09	2	2.84	.02	.14	6	28	20
12+00S 1+50E	7	45	20	137	.7	19	16	955	4.11	6	5	ND	1	35	.5	2	2	70	.26	.100	10	34	.68	128	.17	2	2.34	.01	.08	3	54	30
12+00S 2+00E	11	50	29	214	.4	19	16	1898	3.89	10	5	ND	1	52	1.1	2	2	66	.51	.104	10	32	.67	114	.13	3	2.32	.02	.07	9	970	20
12+00S 2+50E	8	49	19	103	.4	17	14	1372	3.63	6	5	ND	1	23	.8	2	2	57	.12	.103	8	23	.50	69	.09	2	2.54	.01	.06	8	52	30
12+00S 3+00E	3	21	19	74	.6	10	10	285	2.91	8	5	ND	2	16	1.1	2	2	37	.14	.153	6	14	.20	101	.16	2	4.73	.02	.04	3	9	30
12+00S 3+50E	22	37	10	100	.5	17	18	1296	3.97	2	5	ND	1	27	.2	2	2	75	.21	.065	12	26	.63	102	.21	2	2.50	.02	.06	3	26	20
12+00S 4+00E	2	28	18	82	.6	19	14	715	3.60	5	5	ND	2	19	.2	2	2	60	.14	.108	6	22	.50	126	.18	2	4.87	.02	.05	1	13	40
12+00S 4+50E	5	47	8	83	.4	19	14	429	3.78	7	5	ND	3	27	.6	2	3	64	.19	.105	10	31	.73	86	.18	2	4.37	.01	.08	1	60	30
12+00S 5+00E	3	51	9	75	.4	23	13	360	3.59	5	5	ND	3	21	.5	2	3	61	.12	.090	8	29	.66	98	.17	2	4.56	.01	.07	3	39	40
12+00S 5+50E	2	49	16	73	.5	27	15	366	3.70	2	5	ND	3	22	.2	2	2	62	.14	.083	8	31	.66	111	.18	2	4.49	.02	.06	4	16	50
12+00S 6+00E	2	57	16	113	.4	27	18	1138	4.35	7	5	ND	1	49	.5	2	2	77	.43	.125	8	38	.95	185	.14	6	2.52	.01	.09	3	95	20
12+00S 6+50E	4	49	14	128	.5	26	22	1344	4.34	5	5	ND	1	43	.4	2	2	68	.37	.084	11	31	.66	135	.16	2	3.37	.01	.10	3	16	30
12+00S 7+00E	2	50	18	119	.4	31	19	1635	4.10	11	5	ND	1	60	.7	2	3	70	.47	.124	8	40	.92	258	.17	5	2.24	.02	.10	2	19	20
12+00S 7+50E	3	76	14	108	.7	29	19	885	4.58	6	5	ND	2	34	.2	2	2	82	.24	.092	8	37	.99	166	.19	3	3.32	.01	.11	7	350	10
12+00S 8+00E	4	41	15	119	.6	24	16	1041	4.17	7	5	ND	3	28	.4	2	3	66	.18	.163	8	27	.62	165	.19	3	4.18	.02	.08	3	43	30
12+00S 8+50E	3	58	19	132	.6	32	18	880	4.06	9	5	ND	1	37	.8	2	5	67	.25	.094	11	35	.83	201	.16	2	3.97	.02	.10	4	30	20
12+00S 9+00E	3	56	14	230	.5	37	25	2399	4.81	16	5	ND	1	50	.6	2	2	81	.36	.124	9	40	1.08	265	.15	3	3.00	.02	.16	3	26	10
12+00S 9+50E	2	37	17	130	.7	33	18	853	4.16	12	5	ND	1	46	1.1	2	5	61	.28	.180	10	28	.64	160	.19	4	4.86	.03	.08	1	15	20
12+00S 10+00E	2	49	18	375	.5	57	25	1901	5.04	17	5	ND	1	60	1.4	3	2	83	.32	.207	10	46	1.26	405	.19	3	3.31	.02	.13	10	22	10
12+00S 10+50E	2	39	17	138	.4	37	17	690	4.96	19	5	ND	1	61	.4	2	5	83	.33	.217	8	41	1.03	256	.20	2	4.93	.03	.09	2	21	20
12+00S 11+00E	3	32	24	164	.4	18	12	747	4.13	8	5	ND	2	19	.6	2	2	62	.12	.326	6	26	.52	166	.21	2	4.77	.03	.06	1	8	20
12+00S 11+50E	2	33	16	120	.4	26	14	678	3.69	11	5	ND	1	29	.5	2	2	60	.18	.187	7	30	.59	206	.21	2	4.81	.02	.07	1	6	30
12+00S 12+00E	4	45	17	106	.5	27	17	449	4.49	10	5	ND	2	26	.3	2	4	79	.16	.117	7	40	.79	144	.19	2	5.62	.02	.07	3	2	20
12+00S 12+50E	5	44	14	158	.4	27	17	868	4.07	11	5	ND	1	32	.6	2	2	71	.31	.097	7	41	.86	113	.17	2	3.55	.02	.08	1	13	40
12+00S 13+00E	2	50	16	112	.8	25	17	961	4.11	5	5	ND	2	24	.3	2	2	73	.19	.092	10	38	.75	141	.19	3	3.99	.02	.07	1	6	60
12+00S 13+50E	7	54	13	112	.6	22	21	1135	4.38	5	5	ND	1	35	.4	2	2	73	.30	.080	13	42	.87	96	.19	2	3.28	.02	.07	1	7	50
12+00S 14+00E	2	42	16	101	.3	27	17	578	3.81	3	5	ND	1	27	.2	2	2	61	.24	.119	7	39	.81	156	.18	2	4.44	.02	.08	3	7	40
12+00S 14+50E	2	50	12	91	.5	27	16	572	3.89	8	5	ND	1	21	.5	2	2	64	.15	.104	7	39	.75	110	.19	2	4.52	.02	.06	1	74	70
12+00S 15+00E	1	65	21	118	.4	33	19	758	4.34	9	5	ND	1	37	.8	2	4	76	.32	.107	8	48	1.07	137	.17	4	3.63	.02	.09	1	260	50
12+00S 15+50E	1	70	20	103	.4	28	18	497	3.81	10	5	ND	2	27	.8	2	2	67	.21	.114	9	42	.96	126	.18	4	4.64	.01	.09	1	6	40
12+00S 16+00E	1	50	19	91	.4	24	19	474	3.94	9	5	ND	1	30	.2	2	2	61	.27	.125	8	38	.75	115	.18	2	4.30	.01	.07	1	6	30
12+00S 16+50E	1	56	14	85	.3	26	18	579	4.29	8	5	ND	1	31	.5	2	2	75	.24	.178	6	43	.98	114	.15	2	3.71	.01	.07	1	6	40
12+00S 17+00E	1	35	14	113	.5	21	14	344	4.06	9	5	ND	2	16	.7	2	2	57	.12	.206	5	35	.58	116	.19	2	4.74	.01	.05	1	1	70
12+00S 17+50E	1	87	7	81	.4	36	23	1051	4.86	9	5	ND	1	43	.5	2	2	87	.32	.089	7	61	1.49	119	.17	4	3.14	.01	.16	1	10	30
STANDARD C/AU-S	18	58	38	131	7.1	73	32	1051	3.95	43	17	7	37	53	18.4	18	22	55	.45	.092	37	58	.89	180	.08	31	1.88	.06	.14	13	49	1300

Original

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1 TO P2 SOIL P3 TO P4 ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. HG ANALYSIS BY FLAMELESS AA.

DATE RECEIVED: OCT 2 1990 **DATE REPORT MAILED:** Oct 10/90 **SIGNED BY.** C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Acme 90-4990 L1200 - E

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb	Hg ppb
2+00S 14+60W	8	31	10	69	.2	5	13	793	4.94	3	5	ND	1	67	.4	4	6	86	.15	.075	4	15	.69	64	.14	3	2.26	.01	.09	6	32	40
2+00S 14+40W	5	31	4	69	.3	8	8	341	4.69	3	5	ND	1	28	1.1	5	2	76	.13	.084	5	14	.54	46	.16	4	3.69	.01	.08	7	11	70
2+00S 14+20W	3	41	10	66	.1	9	7	219	4.57	11	5	ND	1	21	.6	2	2	70	.11	.142	7	24	.51	51	.15	5	5.22	.01	.07	1	16	60
2+00S 14+00W	3	40	16	76	.3	18	11	484	4.00	7	5	ND	1	24	.9	6	2	66	.12	.132	8	30	.63	76	.13	7	2.87	.01	.07	1	69	70
2+00S 13+80W	3	46	19	107	.2	30	15	1369	3.68	9	5	ND	1	45	1.1	2	2	60	.20	.203	16	41	.76	115	.09	6	3.07	.01	.11	1	130	40
2+00S 13+60W	4	48	17	89	.2	28	12	526	4.74	10	5	ND	2	36	1.0	5	2	78	.17	.249	13	55	.75	95	.20	7	2.94	.01	.09	1	57	50
2+00S 13+40W	2	34	14	77	.2	51	12	296	4.78	10	5	ND	3	22	.9	2	7	85	.21	.174	19	63	1.01	70	.25	6	2.63	.02	.12	2	13	50
2+25S 14+60W	4	69	15	87	.2	25	14	522	4.48	5	5	ND	2	54	.5	3	3	78	.24	.203	10	47	1.04	78	.17	6	3.46	.01	.08	1	350	60
2+25S 14+40W	4	37	6	86	.1	16	11	830	3.48	3	5	ND	1	32	.9	3	2	59	.14	.132	8	24	.58	75	.13	4	2.83	.01	.07	3	16	50
2+25S 14+20W	3	40	9	83	.1	12	9	514	3.10	3	5	ND	1	21	.5	2	5	44	.09	.216	8	17	.34	55	.12	5	5.96	.01	.05	2	30	60
2+25S 14+00W	5	61	6	80	.3	18	13	423	4.46	6	5	ND	2	44	1.4	2	3	69	.21	.169	10	31	.61	78	.16	4	5.24	.01	.06	3	190	10
2+25S 13+80W	7	85	12	87	.6	27	24	1688	4.19	7	5	ND	1	71	1.1	2	2	56	.28	.230	16	30	.73	137	.10	6	4.47	.01	.08	4	240	10
2+25S 13+60W	9	94	13	77	.3	23	18	601	4.31	5	5	ND	1	45	.6	2	2	59	.20	.208	14	32	.62	95	.16	6	4.37	.01	.07	5	280	20
2+25S 13+40W	3	58	12	90	.2	27	15	381	3.71	11	5	ND	1	41	1.0	2	3	54	.09	.203	11	36	.55	170	.16	2	4.82	.01	.07	16	13	80
2+50S 14+60W	2	31	14	88	.1	21	13	1417	4.04	4	5	ND	1	34	.7	2	2	63	.14	.105	8	29	.58	148	.20	6	3.77	.02	.07	1	11	40
2+50S 14+40W	5	48	2	100	.2	14	16	748	4.50	2	5	ND	1	127	1.3	2	2	64	.62	.139	8	16	.69	112	.13	5	5.80	.01	.08	20	32	30
2+50S 14+20W	7	56	40	93	.2	23	25	1760	3.74	11	5	ND	1	85	1.3	2	2	62	.34	.131	12	30	.76	140	.14	2	2.94	.01	.09	9	110	40
2+50S 14+00W	9	91	2	75	.5	17	25	1600	4.44	3	5	ND	1	143	1.0	2	6	60	1.00	.185	7	20	.65	102	.10	5	5.09	.01	.10	13	320	20
2+50S 13+80W	7	88	15	82	.2	21	18	548	4.35	4	5	ND	1	54	1.1	2	6	68	.25	.133	8	27	.70	90	.17	2	4.93	.01	.08	7	100	30
2+50S 13+60W	5	51	16	96	.2	31	15	626	4.68	7	5	ND	1	77	1.1	2	2	69	.44	.181	10	36	.99	198	.18	2	2.72	.02	.10	4	62	10
2+50S 13+40W	2	69	17	118	.4	59	18	679	4.86	7	12	ND	4	183	1.1	3	2	78	.72	.458	48	67	1.24	183	.25	3	3.66	.02	.18	3	35	30
2+75S 14+60W	6	115	29	96	.4	20	19	732	4.56	6	5	ND	2	91	1.2	2	2	71	.29	.101	10	28	.82	130	.17	2	4.88	.01	.08	5	87	30
2+75S 14+40W	6	80	15	93	.5	27	24	2269	3.91	11	5	ND	1	103	.8	3	2	59	.66	.154	12	31	.78	143	.12	2	4.35	.02	.08	6	97	20
2+75S 14+20W	7	181	34	83	.8	14	45	3377	5.28	13	5	ND	1	142	2.0	2	5	58	.92	.199	8	13	.65	120	.08	6	3.93	.02	.09	14	590	10
2+75S 13+80W	8	142	3	76	.3	23	22	466	4.26	2	5	ND	1	93	1.0	2	4	65	.58	.110	10	28	.79	106	.19	3	7.01	.02	.08	7	390	10
2+75S 13+60W	5	61	17	100	.2	59	18	484	4.06	10	5	ND	2	94	1.0	2	2	62	.45	.270	22	89	1.14	138	.27	6	4.94	.02	.09	7	28	30
2+75S 13+40W	2	57	12	89	.2	46	17	533	3.99	8	5	ND	4	61	.7	2	2	71	.26	.210	16	73	1.05	152	.23	4	4.09	.01	.10	4	100	40
3+00S 14+60W	5	110	2	80	.4	18	17	603	3.87	5	5	ND	1	81	.8	2	2	63	.29	.134	9	22	.65	104	.15	3	5.13	.01	.07	5	78	10
3+00S 14+40W	5	73	13	69	.1	13	22	2388	3.94	8	5	ND	1	67	.6	3	2	60	.28	.069	7	16	.54	110	.12	3	2.33	.01	.08	1	32	20
3+00S 14+20W	3	127	2	71	.7	14	28	526	3.90	5	5	ND	2	63	.9	2	2	45	.39	.148	7	12	.49	89	.16	3	6.99	.02	.06	6	490	30
3+00S 14+00W	4	116	15	77	.2	16	32	683	5.66	2	5	ND	1	70	.9	2	2	59	.38	.206	7	12	.59	110	.16	2	6.09	.02	.08	9	240	10
3+00S 13+80W	4	88	17	66	.2	11	20	863	3.21	19	5	ND	1	39	.8	3	3	44	.18	.152	5	12	.43	80	.09	3	2.10	.02	.07	4	93	30
3+00S 13+60W	4	101	16	89	.6	19	12	846	3.06	9	5	ND	1	33	.9	2	5	48	.18	.230	12	22	.55	96	.12	4	3.81	.02	.11	1	47	70
3+00S 13+40W	2	47	16	88	.2	39	15	412	3.81	5	5	ND	2	46	1.0	3	4	66	.21	.201	14	58	.78	120	.21	4	4.05	.01	.08	2	24	30
STANDARD C/AU-S	19	61	38	133	7.4	73	32	1054	3.99	42	23	7	39	52	19.8	15	19	59	.46	.100	40	61	.90	178	.08	34	1.89	.06	.14	13	53	1300

Original assay.

250S - 1400W 10/84 4 11 38/560

Special detailed grid

250 S — 1400 W.

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb	Hg ppb
OGG6-90-1	1	52	7	60	4.5	19	51	349	6.72	24	6	ND	1	26	1.0	2	2	28	.88	.089	4	13	.59	43	.01	8	1.29	.01	.20	1	43	5
OGG6-90-2	1	52	2	94	.3	12	43	386	6.26	2	5	ND	1	36	.9	4	2	84	.92	.088	3	13	1.04	45	.05	3	1.77	.06	.43	1	7	5
OGG6-90-3	5	43	2	24	.2	14	31	69	6.11	8	5	ND	1	16	1.8	2	36	25	.24	.102	3	11	.32	38	.01	5	.91	.03	.22	1	7	5
OGG6-90-4	6	12	2	3	.1	11	29	71	3.04	9	5	ND	1	7	.4	2	3	21	.09	.034	2	5	.30	34	.01	5	.54	.02	.10	1	3	5
OGG6-90-5	2	50	4	40	.3	9	10	316	3.79	3	5	ND	1	40	.4	2	2	82	.67	.073	4	17	.84	41	.16	2	1.49	.11	.28	1	3	10
OGG6-90-6	4	41	2	37	.2	5	6	425	4.10	3	5	ND	1	32	.7	3	2	105	.51	.066	3	23	1.36	42	.19	2	1.82	.07	.42	1	1	5
OGG6-90-7	2	79	52	202	3.5	17	14	1756	5.53	72	5	ND	1	44	2.4	4	2	82	1.17	.095	11	21	1.00	62	.11	5	2.51	.01	.21	1	6	10
OGG6-90-8	5	215	2	121	.5	25	14	419	3.10	5	5	ND	2	46	1.1	2	2	39	1.20	.114	8	27	.26	23	.12	4	1.15	.06	.05	1	1	5
OGG6-90-9	5	51	4	72	.4	13	6	191	4.63	13	5	ND	1	129	2.0	2	2	82	2.09	.078	4	24	.67	20	.12	2	3.62	.01	.14	1	1	5
OGG6-90-10	1	86	19	136	.3	33	17	418	3.27	22	5	ND	1	487	1.6	5	2	65	3.42	.053	4	28	.99	164	.09	2	7.30	.19	.71	1	1	5
OGG6-90-11	1	54	4	79	.3	12	4	153	3.57	34	5	ND	1	107	1.1	5	2	44	2.07	.045	3	13	.51	12	.08	2	4.20	.01	.08	1	2	10
OGG6-90-12	3	4	2	4	.1	8	1	23	.31	2	5	ND	1	3	.2	2	2	1	.03	.003	2	9	.01	1	.01	2	.08	.01	.01	1	3	5
STANDARD C/AU-R	18	62	40	131	7.4	72	31	1056	3.97	42	20	7	37	53	18.4	15	19	57	.45	.094	39	61	.89	182	.07	33	1.90	.06	.13	13	520	1600

See Alec Fraser sketches.

Hiawatha Resources Inc. FILE # 90-4990

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	AU* ppb	Hg ppb
GE-90-1	132	39	58	20	9.5	11	315	383	26.99	15	21	3	2	14	.2	2	129	34	.15	.053	4	29	.14	6	.01	10	.38	.01	.06	122	3980	5

Sample of 4" pyrite vein at end of new road, see figure 6. ± E-W
Face of 75' drift. Steep dip N.
Note unusually high cobalt (315 ppm).
and a uranium kick of 21 ppm
This is related to quartz-eye ~~rhyolite~~ rhyolite on surface.

T. M. Swenson.

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Hiawatha Resources Inc. File # 90-4994 Page 1

Box 1199, Osoyoos BC V0H 1V0

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb	Hg ppb
P-1-90	12	41	9	54	.3	17	14	745	4.76	6	10	ND	1	39	.2	2	4	89	.36	.091	18	39	.64	50	.13	2	5.15	.04	.10	17	81	20
R-34	3	66	18	81	.2	30	18	436	4.07	16	5	ND	2	24	.2	2	2	76	.16	.133	10	48	.96	91	.17	2	4.54	.01	.12	4	31	10
PS-1	1	45	14	77	.1	42	18	628	4.41	18	5	ND	10	22	.4	7	2	103	.89	.044	16	74	1.98	135	.13	2	2.27	.01	.68	1	2	20
PS-2	1	33	51	75	.1	26	11	393	2.59	13	5	ND	13	18	.2	3	2	30	.48	.039	22	20	.64	98	.06	2	1.61	.01	.29	1	1	10
PS-3	1	21	62	93	.1	45	15	1273	3.61	42	5	ND	22	31	.3	8	2	30	.96	.038	20	23	1.37	178	.04	4	1.70	.01	.18	1	6	20
PS-4	1	28	21	46	.2	33	14	675	3.16	25	5	ND	16	17	.2	6	2	33	.26	.040	25	29	.49	69	.07	3	1.34	.01	.25	1	11	10
PS-5	1	22	26	50	.1	19	11	361	2.22	12	5	ND	8	10	.2	2	2	25	.18	.029	19	14	.36	57	.06	2	1.09	.01	.17	1	2	20
PS-6	3	40	41	82	.1	34	19	422	2.96	12	5	ND	10	12	.2	3	2	26	.16	.030	40	19	.47	105	.07	2	2.04	.01	.18	1	1	10
STANDARD C	20	57	36	132	7.1	72	31	1055	3.99	42	18	7	38	52	18.5	15	22	57	.46	.094	39	61	.89	182	.07	31	1.89	.06	.13	11	-	1600

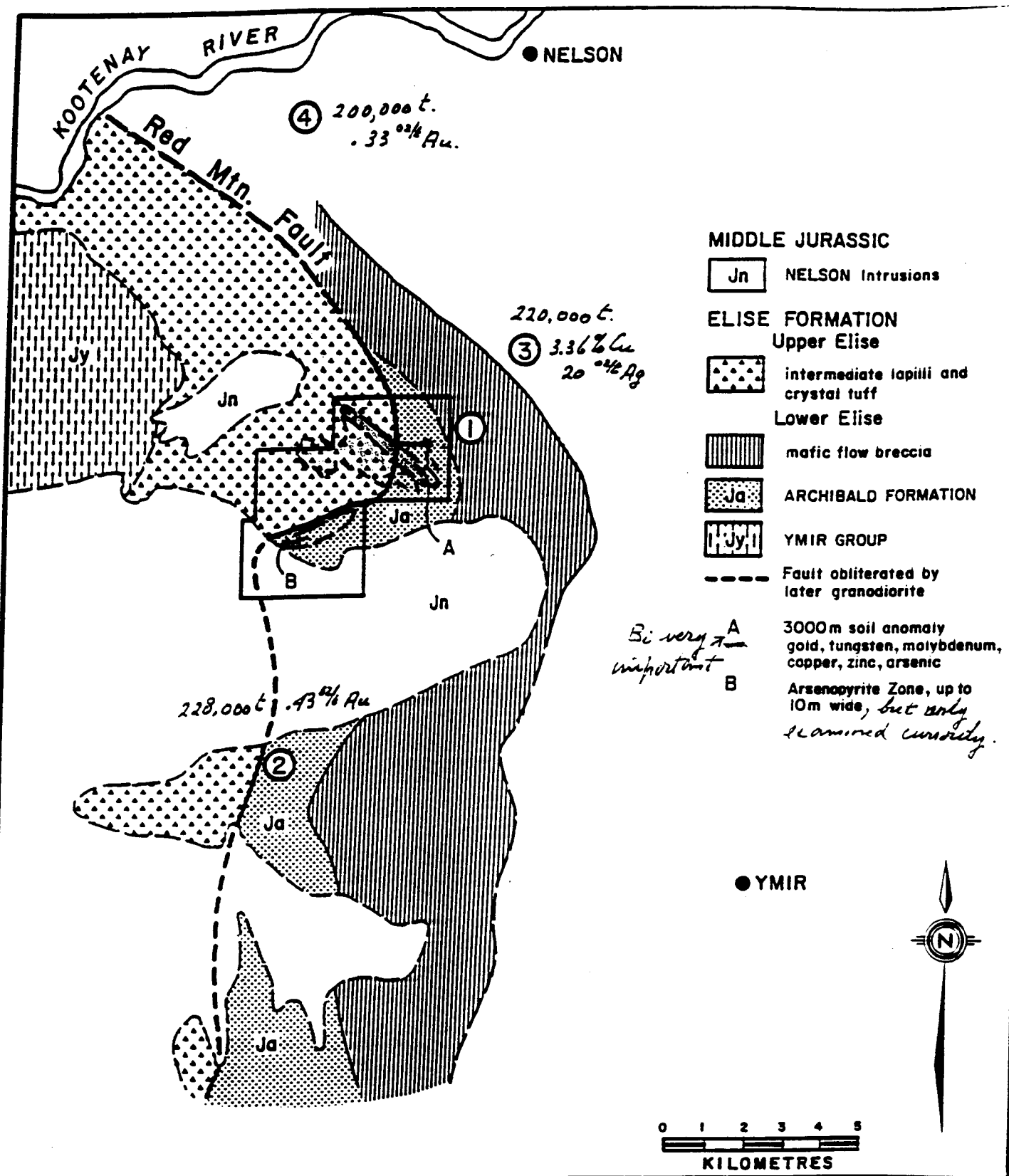
ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1 SOIL P2 ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. HG ANALYSIS BY FLAMELESS AA.

DATE RECEIVED: OCT 3 1990 **DATE REPORT MAILED:** Oct 11/90 **SIGNED BY** C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb	Hg ppb
PS-3	1	5	5	14	.1	16	4	272	1.61	27	5	ND	18	7	.2	2	2	6	.39	.008	5	7	.21	48	.01	9	.37	.03	.08	1	5	180
PS-4	3	10	5	13	.1	22	9	376	2.00	7	5	ND	12	12	.2	2	2	7	.58	.026	25	17	.24	35	.03	7	.73	.02	.25	1	1	20
PS-5	2	10	19	33	.1	16	7	227	1.65	8	5	ND	12	10	.2	3	2	12	.22	.028	17	15	.40	50	.05	4	.92	.04	.31	1	1	130
PS-6	1	25	59	35	.1	16	10	353	4.18	11	5	ND	4	13	.2	3	2	20	.77	.258	13	23	.99	37	.06	3	1.76	.02	.21	1	1	120
PS-7	1	3	15	15	.1	6	2	85	.26	7	5	ND	25	1	.2	2	2	1	.01	.004	29	2	.01	2	.01	4	.09	.05	.01	1	1	100
PS-8	1	1	13	8	.2	6	1	74	.32	2	5	ND	24	2	.2	2	2	1	.02	.007	49	3	.01	5	.01	4	.14	.05	.04	1	1	30
PS-9	1	3	125	25	.1	10	4	214	1.11	2	5	ND	65	25	.2	2	2	15	.44	.032	18	15	.25	40	.01	2	.20	.04	.05	1	1	180

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	AU* ppb
1400W 2+75S	9	145	19	69	.1	13	25	753	4.53	2	5	ND	1	126	.6	2	2	62	.74	.108	6	15	.66	117	.13	6	5.27	.02	.13	16	230

Soil OGC, in selected area. Missed in first pass.



① Hiawatha Resources Inc.
② Second Relief (Closed)
③ Silver King Mine (Closed)
④ Granite Poorman (Operating)

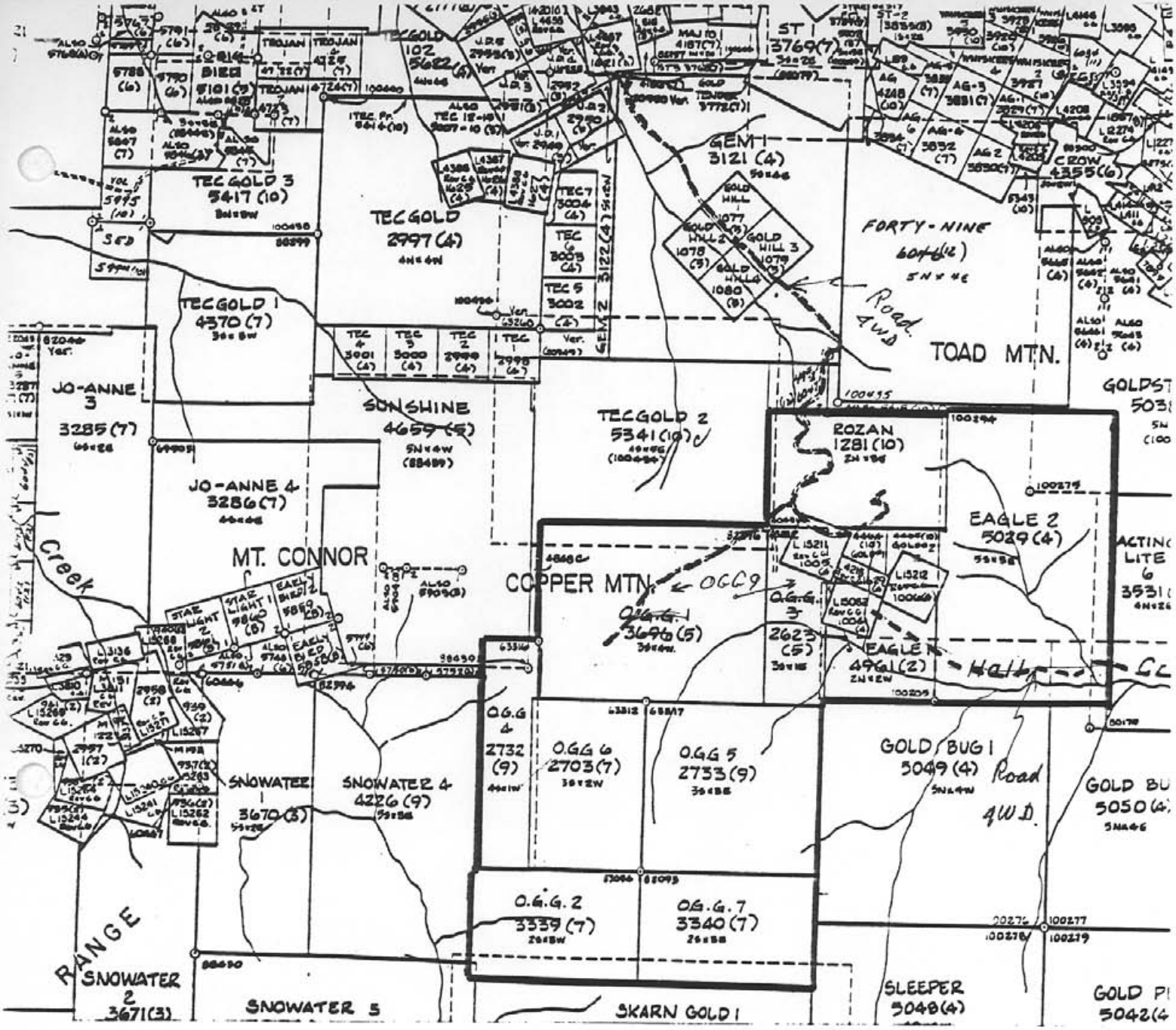
P.H. Sevensma

HIAWATHA RESOURCES INC.

ARCHIBALD FORMATION & RED MOUNTAIN FAULT
BRITISH COLUMBIA

PETER H. SEVENSMA, PH.D., P. ENG.

DRAWN: J.J.E.	MINING DIV.: NELSON	FIGURE 1.
N.T.S.: 82F/6W	SCALE: 1:50000	
DATE: JAN., 1980		



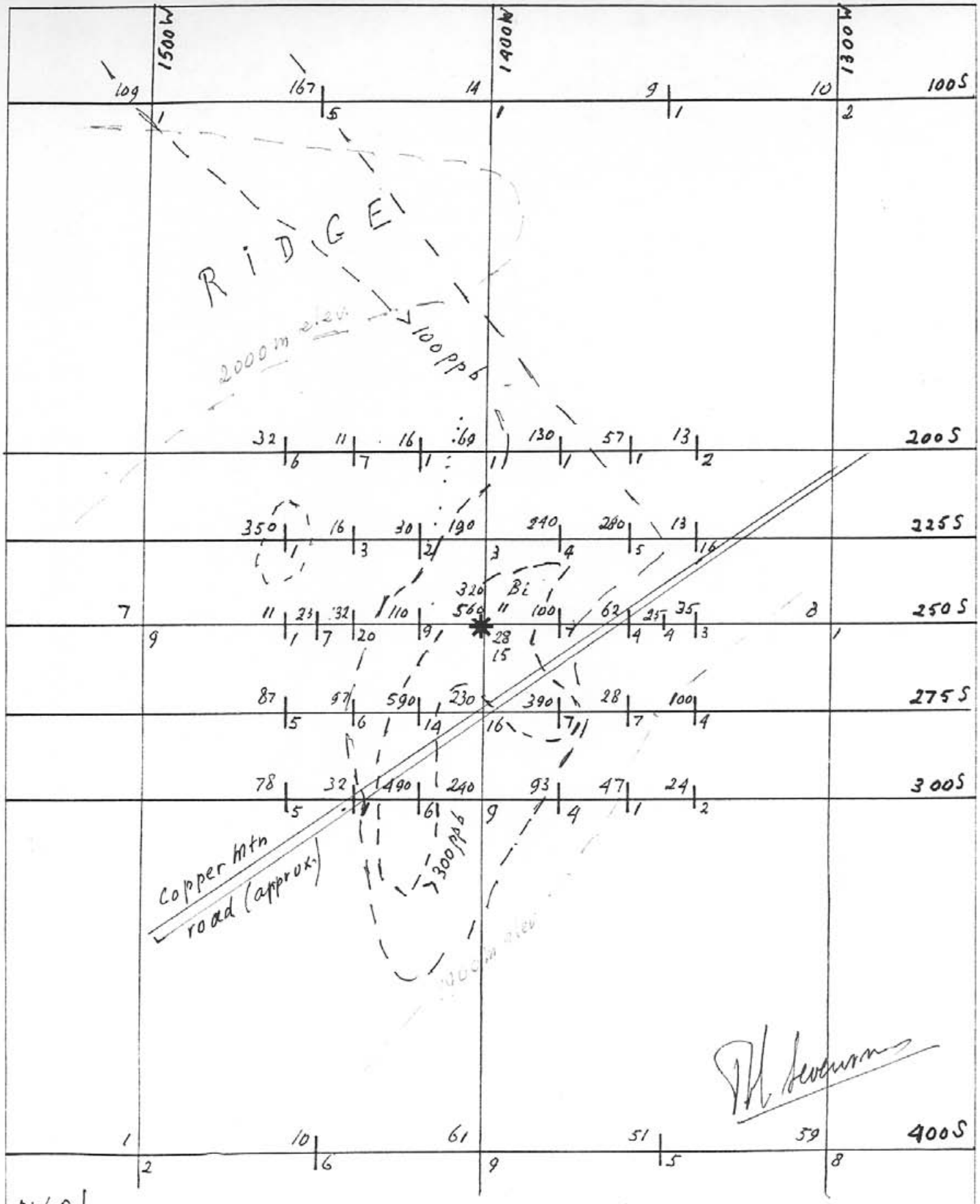
CLAIM MAP, MARCH 29, 1990

HIAWATHA CLAIMS, ROZAN,

EAGLE 1, EAGLE 2, OGG 1-7

NTS 82-F-6, W/2 Nelson, M.D., B.C.

Figure 2



ppb Au
W ppm

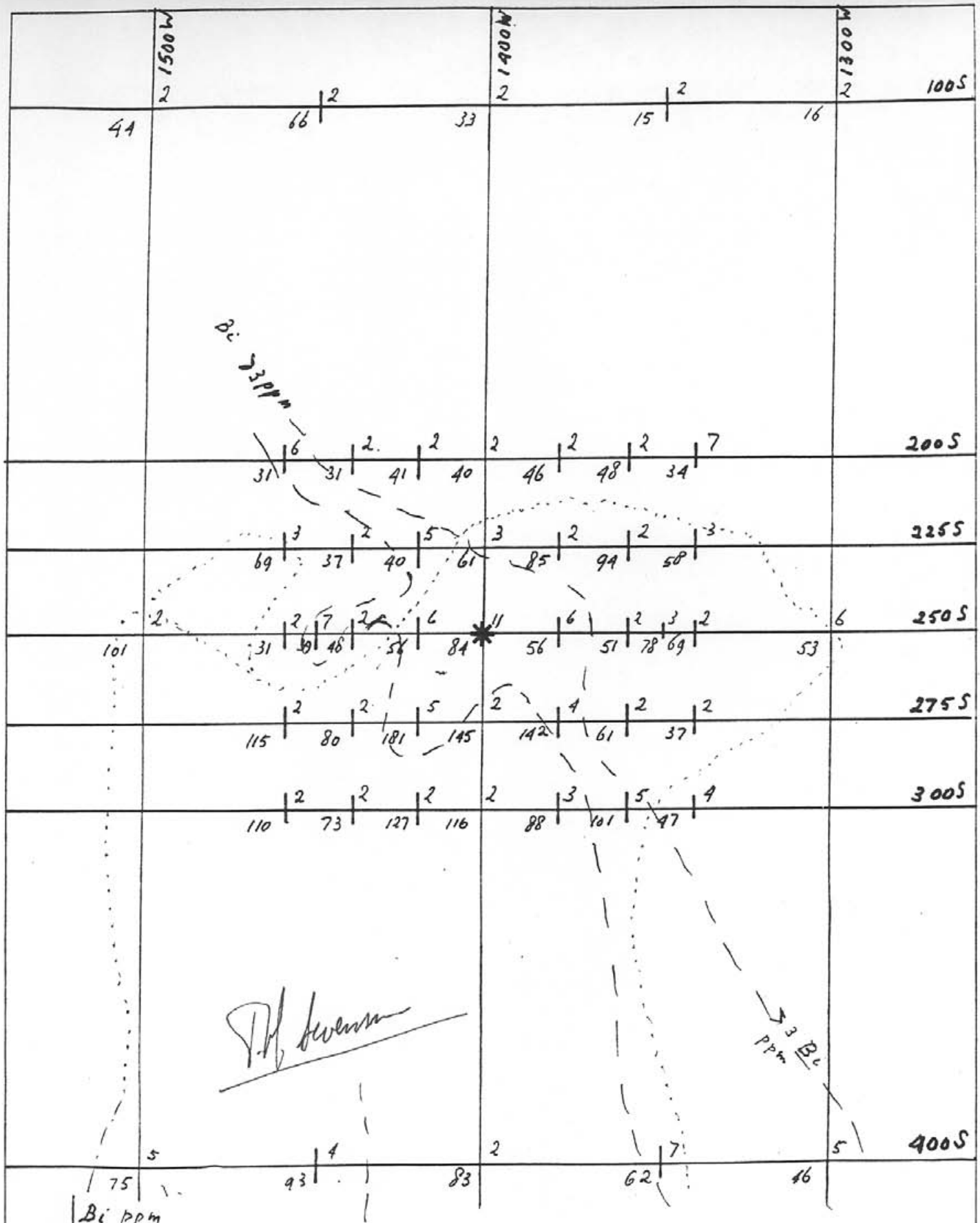
320 check
560 * Original
28 high.
15

OGG 9 Claim Nelson M.D. B.C.

Detailed I.C.P. Soil sampling

Peter H. Sevensma Consultants Ltd., Vancouver, B.C.

October 1990 | Scale: 0 m. 20 40 | Fig: 3.



OGG 9 Claim Nelson M.D. B.C.

Detailed I.C.P. soil sampling

Peter H. Sevensma Consultants Ltd., Vancouver, B.C.

October 1990 | Scale: 0 m. 200 400 | Fig: 4

Now: OGG

O.G.G. 1

3696(5)

L.C.P.

L.C.P.

O.G.G. 3

2623(5)

Detailed Grid

Copper Mtn Road

HALL CREEK

West/2

ROZA

C.R.

Au

0 100 200 meters.

Absente

Au = 37 ppm

× 1990 (Aug) sample points

°Bi > 3ppm

Acme, #90-3038.

March 1990

T.H. Stevens ma

Oct-1991.

Fig. 5, Oct. 1991.

Rozan

Gold 2 Cl.

→ Eagle 2 cl.

050N

0

100S

200S

250S

400S

600S

800S

1200S

B. L.

1990 line

2 E

4 E

6 E

8 E

10 E

12 E

14 E

N

Eagle 2 claim.

1600

1800

1800m

1600m

Rozan Cr.

Shaft

Old tunnel

41 Pg vein. sample GE-90-1.

Hall Creek

Eagle 1 claim

4WD to Hall creek.

1655 (R-33)

1989 line

Line 1200S, to East. #90-4990, page

Spider Creek

East/2

AU.

ACME ANL { # 89-4634

Hiawatha Resources Inc.

Rozan, Nelson M.D. Soil sampling, 1990-

P. H. Sevenson Consultants Ltd. Vancouver, B.C.

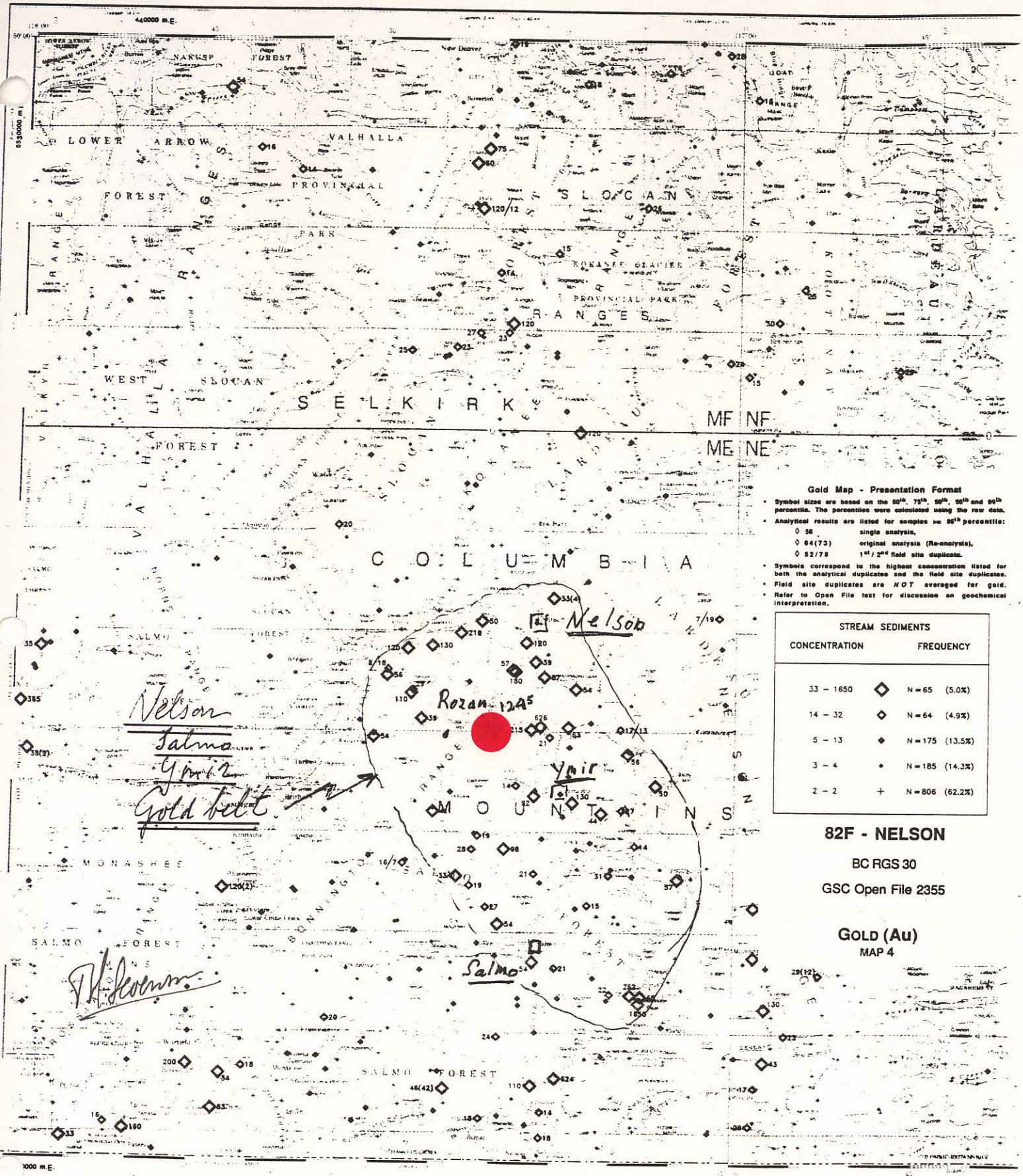
Dwg. No:

Fig: 6

x 1990 samples.

Scale: 0 50 100 m.

82 F



Gold Map - Presentation Format

- Symbol sizes are based on the 50th, 75th, 90th, 95th and 99th percentile. The percentiles were calculated using the raw data.
- Analytical results are listed for samples ≥ 95th percentile:
  - ◊ 56 — single analysis,
  - ◊ 64(73) — original analysis (Re-analysis),
  - ◊ 52/78 — 1st / 2nd field site duplicate.
- Symbols correspond to the highest concentration listed for both the analytical duplicates and the field site duplicates.
- Field site duplicates are *NOT* averaged for gold.
- Refer to Open File text for discussion on geochemical interpretation.

STREAM SEDIMENTS		
CONCENTRATION		FREQUENCY
33 – 1650	◇	N = 65 (5.0%)
14 – 32	◇	N = 64 (4.9%)
5 – 13	◆	N = 175 (13.5%)
3 – 4	•	N = 185 (14.3%)
2 – 2	+	N = 806 (62.2%)

82F - NELSON

BC RGS 30

GSC Open File 2355

GOLD (Au)

MAP 4

Magnetic declination 1986 varies from 20°03' easterly at centre of west edge to 19°25' easterly at centre of east edge. Mean annual change decreasing 12.3'.

Contour interval 500 feet.
Elevations in Feet above Mean Sea Level.

1: 500,000

FIG. 7

GOLD in Stream Sediments (ppb)

Analytical Method - INAA

N_T = 1295 Samples

km 5 0 5 10 15 20 km

Hiawatha

Rozan

Prospects