GEOCHEMICAL AND GEOLOGICAL ASSESSMENT REPORT

ON THE KOS GROUP CLAIMS

Nanaimo M.D.

92L/5W

50 27'N 127 50'W

For Owner & Operator
Electrum Resources Corp.

Vancouver, B.C.
December, 1992

S. Zastavnikovich,Geochemist
J. R. Wilson, Geologist

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GEOCHEMICAL & GEOLOGICAL ASSESSMENT REPORT
ON THE KOS GROUP CLAIMS
Nanaimo M.D., North Vancouver Island, B.C.

INTRODUCTION & DESCRIPTION

The KOS Group mineral property, consisting of KOS1, KOS2 & KOS3 claims totalling 53 units, is situated between Koskimo Bay and the Mahatta logging camp on the sourth shore of Quatsino Sound on northern Vancouver Island, on NTS Map 92L/5W in the Nanaimo Mining Division (Figs 1 & 2).

The claims are accessible by logging spur roads from the Mahatta camp, which is served by an all-weather logging road from Port Alice. The northern portion of the claims lies along the shore of the Quatsino Sound and is accessible by boat. Elevations in the central area of the claims reach 1700 feet, or 520 m., and the topography is moderate with some cliffs present along both sides of the central northwesterly ridge (Fig. 5).

The KOS1-3 claims are presently owned by Electrum Resources Corporation, who paid for the work described in this report. The present status of the claims on which assessment work based on this report has been recorded is as follows:

Claim	Record No.	Units	Expiry
KOS 1	305385	20	Oct.3, 1993*
KOS 2	305386	15	Oct. 3,1993*
KOS 3	305387	18	Oct. 3,1993*

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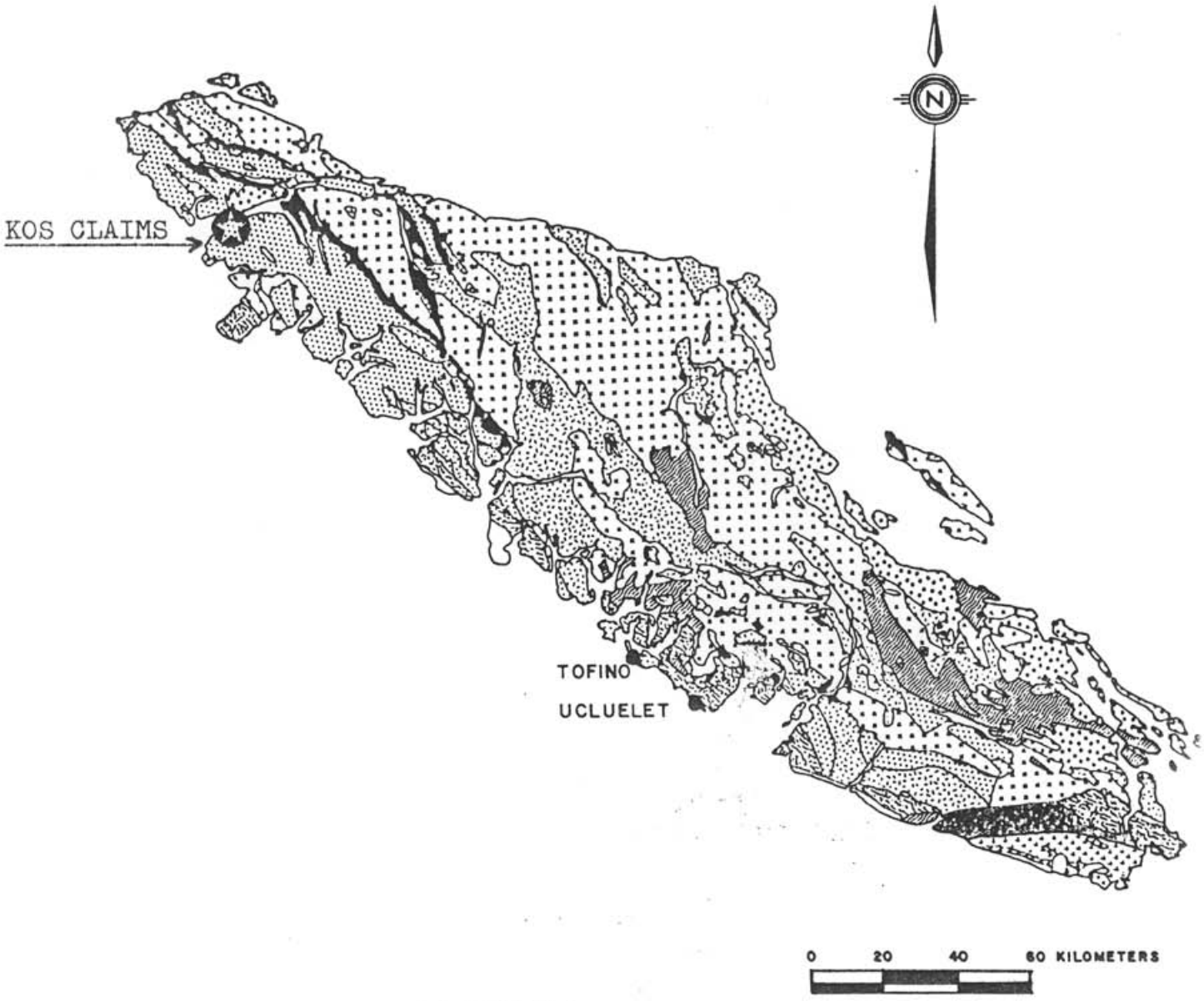
*Upon report approval

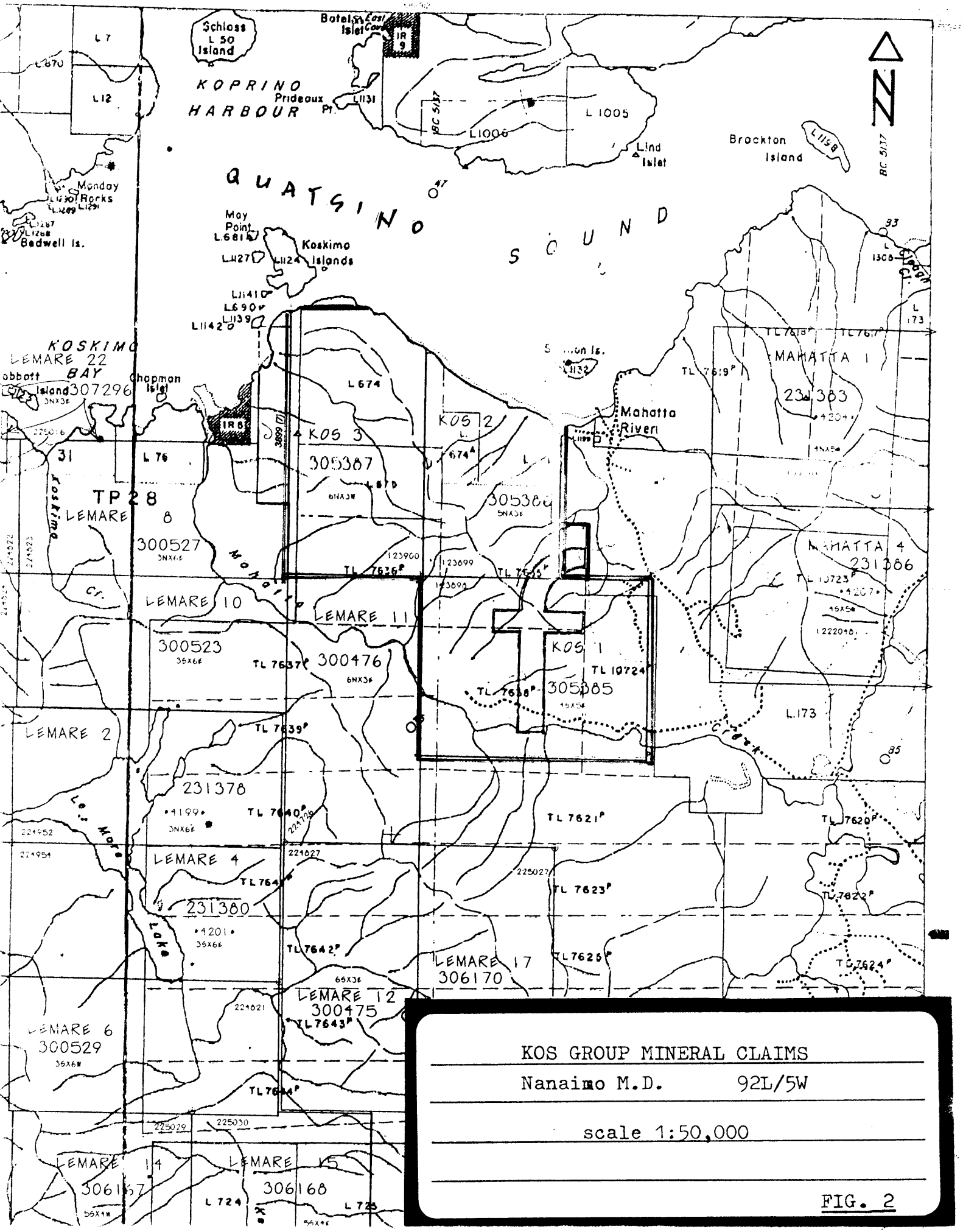
From Sept. 28 to Oct.1, 1992 the writer and geologist J.R. Wilson carried out geochemical and geological exploration work on the KOS property, accompanied by owner, J. Barakso of Electrum Resources. The main purpose of the fieldwork described in this report was to collect geochemical stream sediment and soil samples in previously unsampled areas on the claims, Figs. 5 & 6, and to provide initital geological mapping and additional outcrop and soil sampling in previously outlined areas of anomalous trace elements geochemistry Figs 3 & 4, as here reported upon by J. Wilson in the section under 'Property Geology'.



LEGEND

TERTIARY SEDIMENTS	MIDDLE TERTIARY	BONANZA SUBGROUP	EARLY JURASSIC
TERTIARY INTRUSIONS	EARLY TO MIDDLE TERTIARY	QUATSINO, PARSON BAY FORMATIONS	LATE TRIASSIC
TERTIARY VOLCANICS	EARLY TERTIARY	KARMUTSEN FORMATION	TRIASSIC
LATE MESOZOIC SEDIMENTS	LATE JURASSIC TO CRETACEOUS	SICKER GROUP	LATE PALEOZOIC
LEECH RIVER SCHIST	JURA - CRETACEOUS ?	METAMORPHIC COMPLEX	JURASSIC OR OLDER
ISLAND INTRUSIONS	JURASSIC		

FIGURE 1 LOCATION
(GEOLOGY BY MULLER)



KOS GROUP MINERAL CLAIMS

Nanaimo M.D. 92L/5W

scale 1:50,000

FIG. 2

As indicated on the geochemical sample location and anomaly maps, Figs 4-6, and the analytical results in Appendix IV, a narrow zone of soil samples anomalous in gold has been located at the top of the main ridge, while the petrographic report, Appendix I, and geological rock sample descriptions, Appendix II, indicate presence of introduced silicification, consistent with possible presence of epithermal precious metals mineralization at depth in the claims area.

HISTORY

The KOS1-3 mineral claims were staked in Oct. 1991 for Electrum Resources Corporation on the basis of previously established presence of anomalous trace elements geochemistry, particularly Hg, Mo, Zn (Barakso & Tarnocai, CIMM Bulletin, April, 1977), in the regular -80 mesh fraction, and anomalous geochemical gold values in the heavy minerals (H.M.) fraction in rock, soil, and sediment samples on the property (S. Zastavnikovich, company report). The claims however contain no known precious metals mineralization.

GEOLOGY

Regional Geology

The latest GSC 1:250,000 scale geology map of Vancouver Island by J.E. Muller (O.F. 463, 1977) indicates the general area of KOS claims to be underlain by early Jurassic Bonanza Group basaltic to rhyolitic volcanics, and dissected by strong northwesterly regional faults accompanied by slivers of the late Triassic Parsons Bay Formation calcareous sediments, and intruded by the mid Jurassic granitic Island Intrusions.

Property Geology

The Property geology as mapped by J. Wilson is described by him overleaf, and presented on maps Figs. 3 & 4:

Igneous lithologies encountered during the current project conform to Bonanza Group characteristics

The interlayered andesites and argillites found at the northern part of figures 3 and 4 are very poorly exposed. They may represent intercalated beds of argillite known to occur within the Bonanza Group or they may be argillites of the Upper Triassic Parson Bay Formation that have been interlayered with Bonanza andesites. Muller (1977) classified the unit as Parson Bay Formation and also mapped a prominent northwest trending fault that cuts through the northern edge of the claim block, approximately 400 meters from the mapped argillites of figure 4. It is conceivable that the mapped fault zone played a role in interlayering the andesites and argillites in the study area.

Thirty-five rock samples were collected through the map areas and brief descriptions are included as Appendix II.

References

Muller, J.E. (1977) Geology of Vancouver Island. Geological Survey of Canada Open File number 463.

Bedrock Geology on Parts of KOS 3 and KOS 4 Mineral Claims, Mahatta River, B.C.
Nanaimo Mining Division. N.T.S. 92L / 5W

By John R. Wilson, F.G.A.C.

Parts of KOS 3 and KOS 4 mineral claims were geologically sampled and quickly mapped during a short property examination in the fall of 1992. Figures 3 and 4 illustrate sample locations and the distribution of lithologies that consist of andesitic to rhyolitic igneous rocks and some argillite.

All rock types exhibit occasional silicification. Other alteration is not prominent.

Outcrops of igneous rocks are massive, pink to pale grey-green in colour and sometimes exhibit pyroclastic textures with fragments up to lapillus in size. Hand specimens are usually fine grained and often have plagioclase and mafic phenocrysts to a few millimetres in length. Minor disseminated pyrite is common in the andesites.

Argillite outcrops are usually small and intensely shattered. Black, platy fragments of argillite, commonly found in the upturned roots of fallen trees help delineate the argillite zone. Bedding attitudes were obtainable from only one site and varied from horizontal to a strike of N 175° W with a dip of 40 degrees westerly.

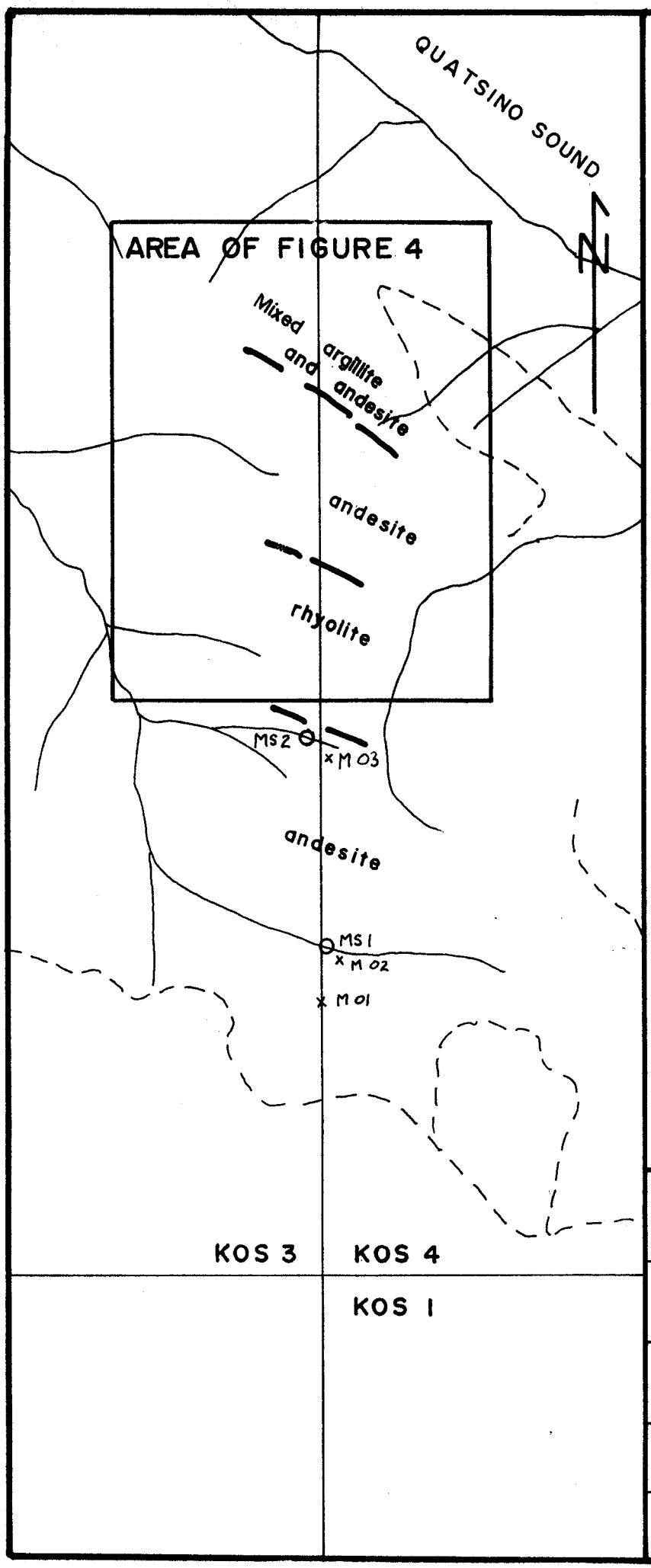
At another site, a poorly exposed, sheared argillite outcrop was located in a shallow gully cutting through thin overburden. Samples numbered KR 13 to KR 16 were taken from the gouge, some of which had badly decomposed, pale coloured fragments of possible granitics.

Several steeply dipping quartz veins, measuring up to 30 centimetres wide, occur in the mixed argillite-andesite zone at the northern part of the mapped area. The veins in argillite are often vuggy and carry angular fragments of wallrock while those in andesite are massive.

Rock sample number M 04 was identified as a rhyolite by Vancouver Petrographics Ltd. (Appendix I). Alternatively, the specimen could have been named quartz latite since the potash feldspar is not a high percentage of total feldspar content. The phaneritic equivalents would thus be granite or quartz monzonite.

Petrographic examination revealed that quartz had been introduced. If the initial quartz content was less than the current 10% to 12%, the original rock would likely have been a trachyte or latite porphyry, the equivalents of syenite or monzonite.

The volcanic units underlying the map area were mapped as Bonanza Group rocks by Muller (1977). Bonanza Group volcanics consist of basaltic, rhyolitic and lesser andesitic and dacitic types. They are of Lower Jurassic age.



SYMBOLS

APPROXIMATE GEOLOGICAL CONTACT

MS1 STREAM SEDIMENT SAMPLE NUMBER MS1

x_{M01} ROCK SAMPLE NUMBER M01

LOGGING ROAD

CREEK

SCALE 1 : 12500

0 200 400 600 metres

KOS CLAIMS

MAHATTA RIVER

GEOCHEMISTRY, GEOLOGY

NTS 92 L / 5W 1992

BY J.W. FIGURE NUMBER 3

Igneous lithologies encountered during the current project conform to Bonanza Group characteristics

The interlayered andesites and argillites found at the northern part of figures 3 and 4 are very poorly exposed. They may represent intercalated beds of argillite known to occur within the Bonanza Group or they may be argillites of the Upper Triassic Parson Bay Formation that have been interlayered with Bonanza andesites. Muller (1977) classified the unit as Parson Bay Formation and also mapped a prominent northwest trending fault that cuts through the northern edge of the claim block, approximately 400 meters from the mapped argillites of figure 4. It is conceivable that the mapped fault zone played a role in interlayering the andesites and argillites in the study area.

Thirty-five rock samples were collected through the map areas and brief descriptions are included as Appendix II.

References

Muller, J.E. (1977) Geology of Vancouver Island. Geological Survey of Canada Open File number 463.

GEOCHEMISTRY

A total of 62 outcrop and float rock, 55 B-horizon soil and 31 field-sieved stream sediment samples were collected by the writer, J. Wilson and J. Barakso as shown on the large scale sample location maps, Figs. 3-6. All the samples were analyzed at Min-En Laboratory of North Vancouver for 30 trace elements by ICP , for mercury , and for fire-geochemical gold , using standard geochemical methods, as described in Appendix III.

The rock samples are described in Appendix II, and three selected rocks are described in detail in the petrographic report by K. Northcotte of Vancouver Petrographics Ltd., Appendix I. Complete analytical results are inscribed on the large scale maps, Figs. 4 - 6, and also enclosed in Appendix IV.

Rock Samples Geochemistry

Of the 62 outcrop and float rock samples collected, samples number M01-29 and KRO11-16 were collected by J. Wilson on the KOS2 & 3 claims, as shown on maps Figs. 3 & 4, while samples J01-10 were taken by J. Barakso and samples KRO01-10 and 102R to 550R were collected by the writer, mostly near the stream sediment sites sampled, Fig. 5.

As indicated in the analytical results, the highest geochemical gold values were obtained in samples KRO-14, 15, 16 with 44, 66, and 136 ppb Au respectively, described as "dark brown-black gouge from sheared argillite " in Appendix II. Anomalous trace element values of up to 5.6 ppm Be , 25 ppm Li , 7 ppm Mo , 27 ppm Ni , 2540 ppm P , 50 ppm Pb , 143 ppm Zn , and 710 ppb Hg accompany the anomalous gold values in these samples, probably indicating presence of deep vertical structures in the immediate vicinity.

Rock sample KRO-03, with anomalous 11ppb Au value is indicated by negatively anomalous trace elements geochemistry to be strongly silicified. In the remaining rock samples containing gold values greater than 5 ppb, namely 110R and M29, with 6 and 24 ppb Au respectively, are associated with anomalous silver values of 5.4 and 3.1 ppm Ag and anomalous calcium values of 5.28 & 15.0% Ca respectively, suggesting that the anomalous precious metals values are present in introduced calcium carbonates.

Soil Samples Geochemistry

Of the 55 B-horizon soil samples taken, those on lines L1, L2 and L3 were collected by the writer at 25m. intervals on the KOS1 claim, Figs. 5 & 6, while those on lines 15S, 20S and 30S were collected by J. Wilson in the sediments/volcanics contact areas on the KOS 2 & 3 claims, Fig. 4. No soil samples, except two, contain gold values greater than 6 ppb.

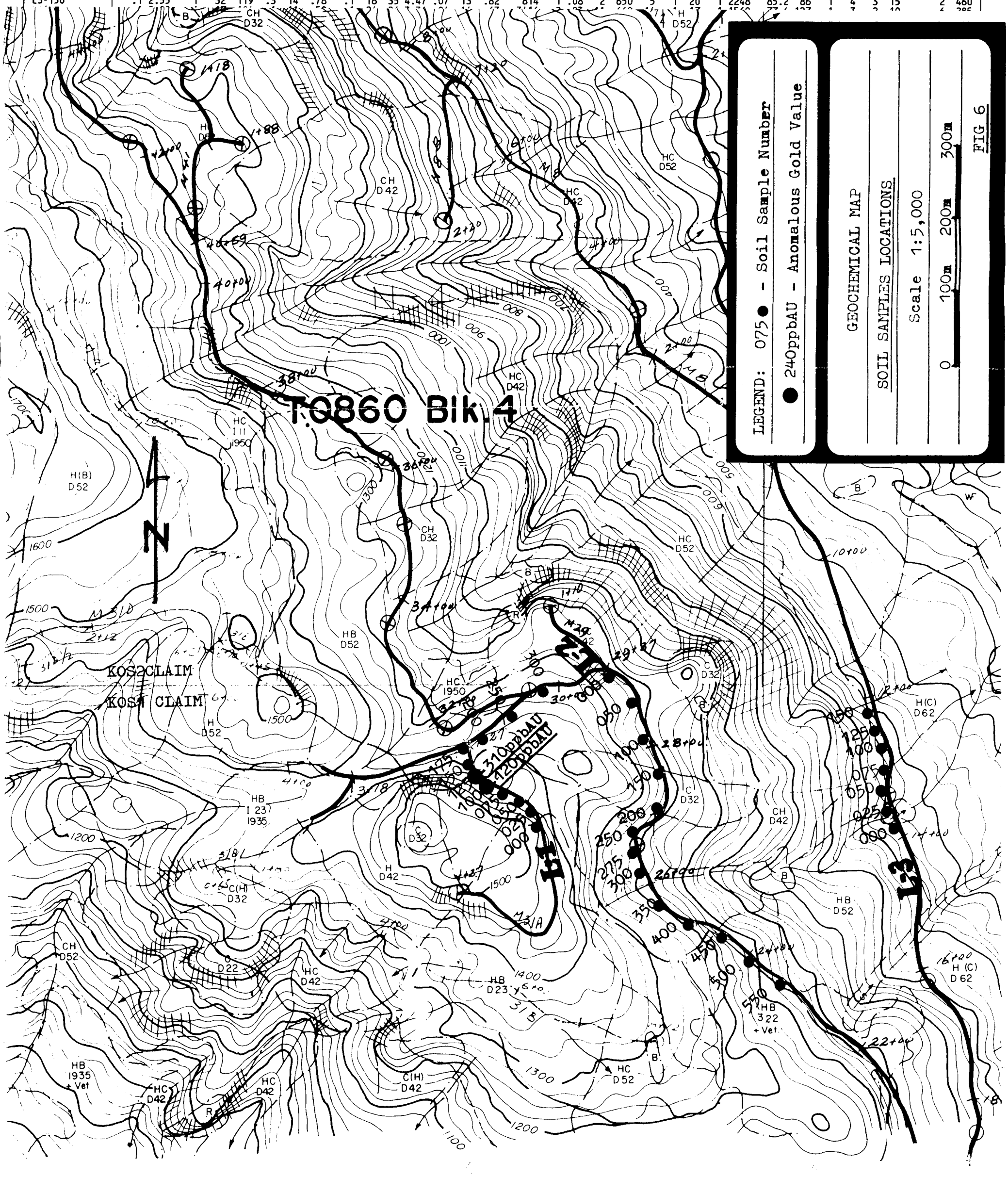
Two consecutive samples however, at -100m. and -125m. on line L1, contain strongly anomalous gold values of 120 ppb Au and 310 ppb Au respectively indicating a possible anomalous zone of at least 25m. width, as shown on the large scale 1:5,000 sample location map, Fig. 6. Anomalous trace elements values of up to 40 ppm B , 15 ppm Bi , 1.60% Ca , 3904 ppm Mn , 4 ppm Mo , 2690 ppm P , and 280 ppm V , are directly associated with the anomalous gold values in the two samples. In addition, anomalous Ba, Li, Mg, Mn, Mo, Ni, Pb, V, and Zn geochemical values are present in the soil samples on either side of the gold anomaly, as indicated in the analytical results, Fig. 6 and Appendix IV.

On line L2, located topographically below L1, anomalous trace elements geochemistry in sample L2-250 with 188 ppm Ba , 1.3 ppm Be , 0.5 ppm Cd , .07%K , 20 ppm Pb , 2 ppm Th , 442 ppm Zn , and 600 ppm Hg values may indicate the extension of the gold anomalous zone on line L1 above. A second structure with similarly anomalous trace elements is indicated at the end of the line at sample L2-550, having additionally anomalous 179 ppm Cu , 22 ppm Ni, and 10 ppm Sb . Outcrop sample 550R from the immediate area contains similarly anomalous B, Ba, Be, Ca, Cu, Fe, K, Mg, Mn, Ni, P, Sb, Sr, and Hg values confirming that the trace elements anomaly is bedrock related.

In absence of anomalous gold values in the area of the argillite/volcanics contacts near the TOQ 2 & 3 claim line, anomalous trace elements values of up to 10.7ppm Cd ,120 ppm Cu, 0.14%K , 62 ppm Mo , 13 ppm Ni , 910 ppm P , 136 ppm Pb , 3634 ppm V , 961 ppm Zn, 36 ppm W , and 595 ppm Hg in samples 15S-87 to 15S-112, Fig. 4, indicate that the contact lies at approximately -100m. E on line L15S.

On line L30S, similarly anomalous trace elements geochemistry in sample L30S-30E, with 104 ppm Mo , 185 ppm Pb , 283 ppm V , 919 ppm Zn and 640 ppb Hg indicates proximity to the argillite/andesite contact zone.

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB
L1-000	.1	3.89	1	23	28	.1	26	.22	.1	16	25	6.71	.03	13	.41	592	1	.03	1	750	1	1	6	1	4295	158.8	56	1	4	4	25	1	430
L1-025	.1	3.74	1	22	200	.2	19	.50	.1	15	129	4.07	.08	72	3.91	>10000	7	.04	42	580	48	1	19	1	1669	136.8	190	1	4	3	1	1	305
L1-050	.1	3.82	1	22	84	.8	14	.18	.1	12	23	3.97	.03	19	.77	>10000	11	.07	13	1160	26	1	8	1	1337	95.1	121	1	3	3	1	2	490
L1-075	.1	2.76	1	18	142	.7	10	.75	.1	14	29	4.29	.02	25	6.39	3904	1	.04	1	560	1	1	11	1	1763	340.2	99	1	3	2	1	4	220
L1-100	.1	1.84	1	40	115	.6	15	1.60	.1	15	28	4.64	.04	17	1.42	2998	2	.04	1	860	16	1	14	1	2097	280.7	67	1	2	4	1	120	235
L1-125	.1	2.09	1	13	54	.1	14	.37	.1	11	18	3.83	.02	9	.48	1220	4	.04	1	2690	8	1	12	1	2084	140.2	49	1	3	3	8	310	375
L1-150	.1	2.80	1	17	111	.9	5	.21	.1	14	39	4.39	.02	21	1.48	3373	4	.03	2	960	15	1	7	1	271	92.2	95	1	2	2	3	3	305
L1-175	.1	3.09	1	18	111	.5	15	.10	.1	19	28	4.79	.03	32	4.85	3325	1	.03	1	280	1	1	7	1	2475	96.0	112	1	3	1	3	1	175
L1-200	.1	3.40	1	19	26	.1	14	.12	.1	8	14	4.21	.02	8	.20	205	6	.05	1	450	1	1	2	1	2094	83.5	42	1	3	2	18	1	445
L1-250	.1	2.05	1	13	25	.3	6	.08	.1	6	9	4.64	.03	5	.09	247	1	.02	1	400	2	1	2	1	762	45.4	37	1	1	1	5	1	285
L1-300	.1	2.54	1	14	26	.2	8	.09	.1	5	9	3.83	.02	6	.10	140	1	.02	1	430	1	1	2	1	1016	50.9	41	1	2	1	7	1	410
L2-000	.1	2.07	1	13	145	.4	14	.18	.1	9	12	4.52	.02	5	.14	1210	1	.04	1	650	5	1	5	1	2114	88.7	46	1	3	2	13	1	290
L2-050	.1	.71	1	8	252	2.2	3	.25	.1	11	18	5.49	.04	3	.18	2013	1	.03	1	920	12	1	6	1	366	17.6	197	1	1	1	1	5	400
L2-100	.1	2.57	1	16	52	.5	8	.15	.1	14	10	5.91	.03	7	.12	1442	1	.03	1	560	6	1	4	1	1147	62.3	59	1	2	1	9	1	610
L2-150	.1	3.94	1	22	65	1.0	5	.08	.1	8	8	5.04	.02	13	.07	1877	1	.01	1	600	1	1	3	1	381	48.5	205	1	2	1	7	1	770
L2-200	.1	.72	1	11	104	.6	4	.44	.1	5	13	3.05	.04	6	.34	570	1	.06	1	440	8	1	7	1	388	24.7	146	1	1	1	4	1	415
L2-250	.1	.89	1	20	188	1.3	6	.75	.5	8	20	4.06	.07	7	.71	1409	2	.03	1	620	20	1	13	2	786	35.4	442	1	1	1	2	2	600
L2-275	.1	4.29	1	26	60	.4	19	.78	.1	18	47	5.02	.03	19	1.98	1957	3	.03	1	750	13	1	8	1	2670	218.4	113	1	4	4	13	1	515
L2-300	.1	4.36	1	25	83	.1	23	.33	.1	28	73	6.96	.02	12	.62	1423	1	.04	1	820	3	1	15	1	3780	190.5	77	1	4	4	26	1	430
L2-350	.1	3.46	1	24	89	.4	18	1.06	.1	20	44	4.92	.04	19	1.22	2135	1	.04	13	870	10	1	22	1	2715	118.2	92	1	4	4	32	3	315
L2-400	.1	2.93	1	33	72	.3	18	.91	.1	22	41	5.19	.04	18	1.28	1684	1	.03	6	670	9	1	33	1	3011	133.6	88	1	4	4	27	2	350
L2-450	.1	2.14	1	29	44	.2	16	1.46	.1	19	43	4.44	.04	22	1.74	961	1	.05	8	630	5	1	18	1	2655	97.0	75	1	3	3	22	1	320
L2-500	.1	4.08	1	28	68	.1	24	.50	.1	24	33	5.99	.03	28	.69	1391	1	.05	4	710	1	1	21	1	4010	152.2	84	1	5	5	52	1	385
L2-550	.1	1.80	1	26	428	1.1	8	.81	.1	35	179	7.50	.08	16	.87	3514	1	.03	22	880	18	10	21	1	1040	177.4	189	1	1	4	17	1	4250
L3-000	.1	4.84	1	30	40	.1	23	.43	.1	22	85	5.77	.03	15	.79	1014	1	.04	5	780	1	1	13	1	3860	147.0	70	1	5	5	31	1	265
L3-025	.1	4.85	1	28	26	.1	24	.28	.1	15	57	5.39	.02	9	.37	409	1	.04	1	720	1	1	6	1	3827	141.6	51	1	6	4	33	1	345
L3-050	.1	3.85	1	25	65	.1	17	.92	.1	22	65	4.66	.05	17	.98	802	1	.08	11	590	1	1	43	1	2797	122.6	60	1	4	4	43	1	350
L3-075	.1	5.18	1	30	29	.1	25	.38	.1	17	41	7.47	.03	19	.42	259	1	.03	1	440	1	1	13	1	4216	199.6	51	1	5	6	76	1	695
L3-100	.1	3.73	1	85	235	1.0	26	1.37	.1	41	60	8.14	.09	22	2.11	3212	1	.07	1	920	3	1	51	1	4694	142.0	124	1	5	3	2	3	435
L3-125	.1	2.53	1	28	223	1.1	7	.56	.1	11	31	4.31	.07	10	.45	1191	2	.04	1	800	5	1	16	1	809	36.4	232	1	3	1	5	2	1540
L3-150	.1	2.55	1	32	119	.3	14	.78	.1	16	35	4.47	.07	13	.82	814	1	.08	2	650	5	1	20	1	2248	85.2	86	1	4	3	15	2	460



Stream Sediments Geochemistry

A total of 30 field-sieved stream sediment samples were collected by the writer from the tributaries draining into Mahatta River on the KOS1 claim and the area of the common LCP, as shown on the geochemical sample location map, Fig. 5, in pocket.

The purpose of the sediment sampling survey was to provide reconnaissance-scale drainage sampling coverage in previously unsampled portions of the claims, and establish indications of possible precious metals mineralization in the claims area. Wet-sieving the sediments through the stainless steel mesh into a perforated pan device helped isolate the lithic silt material from organic debris, and reduce the clay content, resulting in greater sample homogeneity and reduced analytical background variations, thus facilitating geochemical interpretation.

Only sediment samples K20 and K21 contain clearly anomalous geochemical gold values of 20 ppb Au and 10ppb Au respectively. Anomalous trace elements values of up to 45 ppm Cu , 23 ppm Li , 8962 ppm Mn , 0.6%Na , 40 ppm Ni , 840 ppm P , 29 ppm Pb , 181 ppm Zn , and 715 ppm Hg are associated with the anomalous gold values in the two sediment samples located near the top of the main northwesterly trending ridge. Strongly anomalous boron values of 29 & 52 ppm B in nearby sediment samples K113 & K114 respectively suggest possible presence of boro-silicates such as tourmaline, which could in turn be associated with gold-bearing quartz-carbonate veins or skarns at depth, in the main ridge area of the claims.

CONCLUSIONS:

1. Good correspondence for anomalous precious metals and trace elements values has been obtained between rock, soil and sediment samples collected on the KOS claims property.

2, In the rock samples, the geochemically anomalous gold values obtained are associated with shear zones and the introduced carbonates and silicification.

3. The consecutively anomalous pair of gold values in soil samples on line L1 near the top of the main ridge, and in the pair of sediment samples also located along the ridgetop, suggest that the anomalous precious metals and associated trace elements geochemistry is bedrock related, though at some depth.

4. Additional reconnaissance and fill-in sampling is needed for more accurate geochemical interpretation of the precious metals mineralization potential on the KOS claims property.

STATEMENT OF EXPENDITURES

KOS Group Claims
Sept 28 - Oct 01, 1992

Fieldwork-		
	S. Zastavnikovich, geochemist, 3 1/2 days @ 290/day	$1,015
	J.R. Wilson, geologist, 3 days @ 250/day	750
	Food, S.Z., J.R.W., J.B., 10 man days @ 30/day	300
	Lodging, 3 men for 3 nights motels	310
	Travel, 4x4 truck, 3 1/2 days @ 50/day	175
	Gas, mileage, ferries	200
	Field expenses, supplies, sample delivery	50
Analysis-		
	62 rocks, 30 sediments, 55 soils @ $6.00 ICP, 7.25 Fire Au, 4.00 Hg & prep.	2,830
Report Writing, Maps, Reproduction		1,000
	TOTAL	$6,630

Statement of Qualifications

I, John R. Wilson, of Merville, British Columbia hereby certify that:

1. I am a graduate of the University of British Columbia with a B.Sc. (honours geology), 1972.
2. I am a Fellow of the Geological Association of Canada.
3. I have worked as a professional mineral exploration geologist in B.C. and eastern North America every year since 1972.

John R. Wilson, F.G.A.C.

CERTIFICATE

I, Sam Zastavnikovich, do hereby certify that:

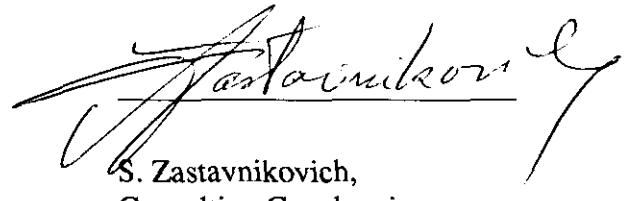
1. I am a graduate of the University of Alberta with the Degree of B. Ed. in Physical Sciences, 1969.

2. I have been a practising exploration geochemist with Falconbridge Ltd. of Toronto and Vancouver for thirteen continuous years as:
   1969-1975: Field geochemist, international.
   1975-1979: Project geologist-geochemist, B.C.
   1979-1982: Exploration geochemist, worldwide, where I was engaged in all aspects of geochemical exploration, including research and development of improved sampling techniques, and advanced geochemical interpretation, as well as the writing of geochemical budget and assessment reports.

3. From 1982 to present, I have practised as a consulting geochemist in the mineral exploration industry.

4. I am a Voting Member of the Association of Exploration Geochemists.

5. I am a consulting geochemist with offices at 5063-56th Street, Delta, B.C., V4K 3C3.



S. Zastavnikovich,
Consulting Geochemist

APPENDIX I

Petrographic Report on

Rock Samples M04, J07, and J10

KOS Claims

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JOB # 092
November 10, 1992

Dear John,

Re: Petrographic descriptions 26419-20, M-4, JB-7, JB-10

Samples M-4, JB-7, JB-10 are from the same rock unit. Now rhyolite composition but there are some problems here too!!! Obviously quartz has been introduced. There are quartz veins and quartz from the veins permeates and locally replaces the groundmass. The sample lacks rounded partially resorbed phenocrysts that would be anticipated in silica saturated magma. A few clusters of quartz grains, which appear to be unrelated to quartz veins, may be original.
There is also the problem of composition of plagioclase phenocrysts. Twinning (with extinction of 16° to 20° and R I < epoxy) indicates an "albite" composition. Albite phenocrysts are not all that common, I looked for sanidine phenocrysts which were also anticipated, especially among less altered featureless grains. None were identified and none were noted with K-stain.

Best regards

[2] M-4
Feldspar porphyry (now of rhyolite composition)

Summary description
Porphyritic texture. Fine/medium grained plagioclase (albite ?) lesser chlorite-biotite altered mafic phenocrysts. In a fine/very fine felted K-feldspar-rich groundmass containing plagioclase laths, lesser altered mafic and conspicuous interstitial quartz.

Lacks rounded partially resorbed quartz phenocrysts which would be anticipated in this section.

Suspect that the K-feldspar and at least some quartz is original. Lacks k-feldspar veinlets which would be anticipated if K-feldspar is introduced. Quartz is also introduced. Conspicuous quartz veinlets.

Mottled by iron-staining, weathering.

Microscopic description
Phenocrysts
Plagioclase; 15%, subhedral/euhedral, (0.4 to 4.0 mm). Disseminated single grains/clusters of grains (glomerophenocrysts). Moderate alteration dusting, very slight irregular disseminated sericite. Conspicuous remnant twinning and RI < epoxy indicates composition in albite(?) range. [Albite not that common as phenocrysts, so there may be a problem here]

Altered mafic; 6-7%, anhedral (0.1 to 0.8 mm). Chlorite/biotite; irregular diffuse clusters/compact interlocking pseudomorphs composed of microgranular felted chlorite/biotite. Partial masking by iron staining.

Groundmass
Plagioclase; 25%, subhedral/euhedral (<.05 to 0.4 mm). Felted rectangular interlocking crystals. Finer grains slightly more intense alteration dusting but relict polysynthetic twinning distinct. Except for coarser crystals, lacks sericitic alteration.

K-feldspar; 30-35%(?), anhedral (<.05 to 0.1 mm). Irregular grains interstitial to minute plagioclase laths. Similar intensity of alteration dusting but patchy as compared to plagioclase. Not consistently identified in thin section.

Note: Stained slab indicates greater abundance of K-feldspar than supported by thin section. K-stain appears uniformly predominant throughout groundmass but probably a function of very fine grain size. Minute unstained plagioclase laths in a stained K-rich groundmass. Quartz component conspicuous in stained slab, unetched, unstained.

Quartz; 10-12%, anhedral (<.01 to .05 mm). Anhedral clusters of grains interstitial to other groundmass minerals. Forms a pseudographic texture because of shape of interstitices it fills.

M-4 Continued

Altered mafic; 4-5% anhedral (<.01 to 0.1 mm). Irregular grains, clusters of grains. Complete alteration to chlorite/biotite.

Accessory minerals

Apatite; trace, euhedral (0.3 mm)

Leucoxene(?); 1%, anhedral (microgranular) clusters of grains associated with altered mafics.

Veins/veinlets; 1-2%

Quartz

[3] JB-7
Feldspar porphyry (now of rhyolite composition)

Summary description
Porphyritic texture. Fine/medium grained plagioclase (albite ?), lesser chlorite-biotite altered mafic phenocrysts. Very minor quartz clusters. Lacks rounded partially resorbed quartz phenocrysts which would be anticipated in this section. In a fine/very fine felted K-feldspar-rich groundmass containing plagioclase laths, lesser altered mafic and conspicuous interstitial quartz.

Suspect that the K-feldspar and at least some quartz is original. Lacks k-feldspar veinlets which would be anticipated if K-feldspar is introduced. At least some quartz, however, is introduced. Few quartz veinlets.

Mottled by iron-staining, weathering.

Microscopic description
Phenocrysts; 15%, subhedral/euhedral (0.4 to >5.0 mm). Disseminated single grains/clusters of grains (glomerophenocrysts). Moderate alteration dusting, very slight irregular disseminated sericite. Conspicuous remnant twinning and RI< epoxy indicates albite (?) composition.

Altered mafic; 2-3%, subhedral pseudomorphs (0.1 to 0.4 mm). Chlorite (and quartz) replacement of mafic grains/clusters. Quartz replacement of portions of margins. Not conspicuous in section.

Quartz; 3%, anhedral (.05 to 0.6 mm). Scattered clusters of interlocking grains. Lacks well formed subrounded phenocrysts. Most clusters appear to be isolated. One or two are associated with diffuse fracture controlled quartz.

Groundmass

Plagioclase; 20%, subhedral/euhedral (<.05 to 0.4 mm). Felted rectangular interlocking crystals. Moderate alteration dusting. Some polysynthetic twinning evident confirming plagioclase.

K-feldspar; 35-40%, anhedral (<.05 to mm). Irregular grains interstitial to plagioclase. Patchy weak alteration dusting. More conspicuous in thin section than in M-4. Stained slab indicates K-feldspar is uniformly distributed and predominates over plagioclase, quartz and altered mafics in groundmass.

Quartz; 8-10%, anhedral (<.01 to 0.2 mm). Interstitial to other groundmass minerals. Forms regular distinct linear outlines producing a pseudographic texture as for M-4. No conspicuous association with quartz veining.

Altered mafic; 2-3%, anhedral (<.01 to 0.2 mm). Irregular grains. Complete chlorite alteration. Inconspicuous.

Accessory minerals [none detected]

[4] JB-10
Feldspar porphyry (now of rhyolite composition)

Summary description
Porphyritic texture. Fine/medium grained plagioclase (albite) phenocrysts. Minor quartz clusters, some in direct association with quartz veinlets; (introduced). In a fine/very fine K-feldspar-rich groundmass interstitial to felted plagioclase. Conspicuous interstitial quartz associated with diffuse quartz veins permeates and replaces patches of the groundmass. Disseminated irregular patches and veinlets of carbonate.

Suspect that K-feldspar and at least some quartz is original. Lacks K-feldspar veinlets which would be indicative of introduced K-feldspar. Quartz veinlets are present and are associated with conspicuous quartz impregnated patches which confirm introduction of quartz.

Consistent with porphyritic rhyolite dyke/flow rock.

Samples M-4, JB-7 and JB-10 are from the same rock unit.

Microscopic description
Phenocrysts

Plagioclase; 12-15%, subhedral/euhedral (0.4 to 3.0 mm). Single crystals, clusters of crystals (glomerophenocrysts) Moderate alteration dusting and weak spotty microcrystalline sericite alteration. Distinct twinning remnants and R.I. < epoxy indicates albitic composition.

Quartz; 7-8%, anhedral (0.4 to 2.0 mm). Irregular shaped grains, clusters of grains. [Lacks smooth subrounded quartz phenocrysts] Some grains contain inclusions of groundmass and show direct association with diffuse quartz veinlets. At least some quartz is introduced.

Altered mafic; none detected.

Groundmass
Plagioclase; 18-20%, subhedral (<.05 to 0.4 mm). Regular shaped felted laths. Many grains show conspicuous polysynthetic twinning confirming plagioclase.

K-feldspar; 30%, anhedral/subhedral (<.05 to 0.2 mm). Interstitial to plagio clase. Less distinct grains than plagioclase.

Quartz; 20-23%, anhedral (<.01 to 0.4 mm). Irregular shaped interstitial grains and optically continuous masses among other groundmass minerals. Similar texture to M-4 and JB-7 but shows impregnation and replacement patches associated with numerous quartz veinlets. Mostly introduced.

Carbonate; 10%, anhedral (microcrystalline to 0.1 mm). Irregular clusters of grains, iron-stained, scattered throughout groundmass. Associated carbonate veinlets.

Opaques; 3-4%, anhedral (<.01 to .05 mm). Irregular hematitic grains.

JB-7 Continued

Opaques; 3%, anhedral (<.01 to >0.5 mm). Single grains/clusters of grains. Hematitic.

Veinlets;

Quartz; very minor.

Hematite; patches of crackle fracture infilling. Weathered surfaces.

Lithic fragment inclusions; 1%
Scattered lithic fragments, loosely felted, laths of K-feldspar (sanidine?) and irregular grains of quartz in a hematite-rich groundmass.

JB-10 (Continued)

Veins; 7-8%
Quartz irregular veinlets, permeate groundmass.

Carbonate; irregular veinlets.

APPENDIX II
Rock Sample Notes
KOS Group Claims

Sample No.		Description
KRO-01	-	2 cm. wide quartz-carbonate vein in sheared, rusty, intermediate volcanic.
KRO-02	-	quartz-carbonate veinlets in reddish, altered feldspar porphyry.
KRO-03	-	siliceous, pinkish volcanic, rusty fractures.
KRO-04	-	4 cm. wide quartz-carbonate vein float.
KRO-05	-	sheared intermediate volcanic, rusty fractures.
KRO-06,07	-	intermediate volcanic, 2% py., silicified.
KRO-08	-	1 cm. wide quartz-carbonate veinlets in sheared andesite.
KRO-09	-	quartz veinlet in 10 cm. wide vertical shear in grey-green chloritic andesite.
KR10	-	vessicular andesitic volcanic, rusty.
KR11	-	andesitic volcanic, rusty, fine grained, silicified.
KR12	-	andesitic volcanic, grey coloured, fine grained, vesicular, pyritic amygdales.
KR13	-	shear/fault gouge with badly decomposed possible granitic fragments
KR14	-	dark brown-black gouge from sheared argillite.
KR15	-	dark brown-black gouge from sheared argillite.
KR16	-	dark brown-black gouge from sheared argillite.
102R	-	dark green basalt, magnetic.
110R	-	20 cm. wide vertical shear zone in vessicular basalt, rusty carbonate on fractures.
113R	-	greyish, fine grained andesite, silicified.
114R	-	quartz-carbonate-epidote vein float, rusty.
115R	-	quartz vein float, vuggy.
116R	-	5 cm. wide quartz-carbonate vein float.
117R	-	quartz veinlets in altered, reddish feldspar porphyry, rusty carbonate on fractures.
550R	-	fine grained acid volcanic, with 1 mm. wide quartz veinlets, 2% disseminated py and possible minor cpy.
J01	-	quartz vein float, with 1% disseminated pyrite.
J02-04	-	purplish intermediate volcanic, weakly silicifed, with rusty fractures.
J07	-	see petrographic description, Appendix I.
J08	-	pinkish feldspar porphyry, calcite veinlets, weakly magnetic.
J09	-	grey-pink feldspar porphyry, 2% disseminated py., magnetic.
J10	-	see petrographic description, Appendix I.
J11	-	siliceous volcanic, with quartz-carbonate veinlets.

APPENDIX II
Hand Specimen Descriptions

M 01 Andesitic volcanic. Grey-green coloured. Fine grained. Possibly weakly hornfelsed, magnetic.

M 02 Float sample. Andesitic volcanic. Grey. Aphanitic groundmass with fine, black anhedral phenocrysts.

M 03 Andesitic volcanic. Rusty coloured. Fine grained. Weakly pyritic. Weathered and probably weakly clay altered. Taken from probable fault/shear trending 100 degrees.

M 04 Rhyodacite. Pink coloured. Fine grained with fine feldspar phenocrysts. (see Petrographic Descriptions, Appendix I.)

M 05 Rhyodacite. Pink coloured. Fine grained with fine feldspar phenocrysts and minor medium grained mafics.

M 06 Rhyodacite. Pink coloured. Fine grained with fine feldspar phenocrysts. Obvious silicification. Minor disseminated pyrite.

M 07 Rhyodacite. Pink coloured. Fine grained with fine feldspar phenocrysts. Obvious silicification. Up to 5% disseminated pyrite.

M 08 Andesitic volcanic. Grey. Fine grained. Up to 15% disseminated, fine grained pyrite.

M 09 Float sample. Quartz vein material with fragments of fine grained intermediate volcanic. Rusty coloured. Quartz vein contains goethite and abundant open space.

M 10 Float sample. Intermediate volcanic. Grey. Fine grained. Obviously silicified. Minor disseminated pyrite.

M 11 Intermediate volcaniclastic consisting of lapilli sized aphanitic to fine grained fragments. Grey coloured. Silicified. Minor disseminated pyrite and fine, dark grey mineral.

M 12 Vuggy, eight centimetre quartz vein within black argillite. Some argillite chips within the vein.

M 13 Silicified, brecciated black argillite with some vuggy quartz veins to 5 millimetres.

M 14 Massive 3 centimetre quartz vein with minor possible chalcopyrite in silicified, tuffaceous andesitic volcaniclastic.

M 15 Andesitic tuffaceous volcanidastic. Grey-green. Silicified.

M 16 Andesitic volcanic. Grey. Fine grained. Weakly silicified. Weak disseminated pyrite.

M 17 Massive 30 centimetre wide quartz vein in andesitic, fine grained, grey-green volcanic.

M 18 Five centimetre wide sample of silicified andesite wall rock,. Adjacent to sample M 17.

M 19 Five centimetre wide sample of andesitic wall rock adjacent to sample M 18. Fine to medium grained. Grey. Minor disseminated pyrite.

M 20 Float probably close to bedrock. Vuggy quartz veining in black argillite. Located in roots of upturned tree bearing considerable argillite chips.

M 21 Andesitic volcanic. Grey. Fine grained.

M 22 Float sample. Black argillite with minor quartz veinlets.

M 23 Andesitic volcanic. Grey. Fine grained. Weak disseminated pyrite.

M 24 Float sample. Five centimetre wide, massive quartz vein with intermediate volcanic wall rock.

M 25 Float probably close to bedrock. Black argillite. Located in roots of upturned tree bearing considerable argillite chips.

M 26 Float probably close to bedrock. Brecciated mixture of intermediate volcanic and black argillite. Located in roots of upturned tree bearing considerable argillite chips.

M 27 Andesitic volcanic. Grey. Fine grained.

M 28 Black argillite with quartz veinlets.

M 29 Black argillite with quartz veinlets, and calcite.

KR 11 Andesitic volcanic. Rusty coloured. Fine grained. Silicified.

KR 12 Andesitic volcanic. Grey coloured. Fine grained. Vesicular. Pyritic amygdales.

KR 13 Shear/fault gouge with badly decomposed possible granitic fragments.

KR 14 Dark brown-black gouge from sheared argillite.

APPENDIX III.

Analytical Procedure - The samples were analyzed by Min-En Laboratories Ltd. of 705 West 15th St., N.Vanc, as follows:

The stream sediments were oven-dried in their original water-resistant kraft paper bags at 95°C and screened to obtain the minus 80 mesh fraction for analysis. The rock samples were crushed and pulverized in a ceramic-plated pulverizer.

A suitable weight og 5.0 or 10.0 grams is pretreated with HNO_3 and $HClO_4$ mixture.

After pretreatment the samples are digested with Aqua Regia solution, then taken up with 25% HCl to suitable volume and aliquot used for the 26 element ICP trace element analysis.

From the major remaining portion of the sample, Gold is preconcentrated by standard fire assay methods, then extracted with Methyl Iso-Butyl Ketone and analyzed by Atomic Absorption.

For Mercury analysis, 1 gram of sieved material is sintered at 90°c for 4 hours, then digested in HNO_3 and HCl acids mixture, and analyzed by the Hatch and Ott flameless AA method.

PHONE: (604) 980-5814 or 988-4524

TELEX: 04-352828

APPENDIX III

MIN-EN Laboratories Ltd.

Specialists in Mineral Environments

Corner 15th Street and Bewicke
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
CANADA V7M 1T2

FIRE GOLD GEOCHEMICAL ANALYSIS BY MIN-EN LABORATORIES LTD.

Geochemical samples for Fire Gold processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed and pulverized by ceramic plated pulverizer.

A suitable sample weight 15.00 or 30.00 grams are fire assay preconcentrated.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

Further oxidation and treatment of at least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solution gold is analysed by Atomic Absorption instruments. The obtained detection limit is 1 ppb.

PHONE 980-5814

APPENDIX III

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
Corner 15th Street and Bewicke
705 WEST 15TH STREET
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ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK - 26 ELEMENT ICP

Ag,Al,As,B,Bi,Ca,Cd,Co,Cu,Fe,K,Mg,Mn,Mo,
Na,Ni,P,Pb,Sb,Sr,Th,U,V,Zn

Samples are processed by Min-En Laboratories Ltd., at 705 W. 15th St., North Vancouver Laboratory employing the following procedures.

After drying the samples at 95°C soil and stream sedimint samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for 6 hours with HNO_3 and $HClO_4$ mixture.

After cooling samples are diluted to standard volume. The solutions are analysed by Computer operated Jarrell Ash 9000ICP. Inductively coupled Plasma Analyser. Reports are formated by routing computer dotline print out.

APPENDIX IV

Analytical Results

KOS Claims

COMP: ELECTRUM RESOURCES
PROJ: MAHATTA
ATTN: JOHN BARAKSO/SAM ZASTAVNIKOVICH

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 2V-1138-RJ1+2
DATE: 92/11/03
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB
102R	.1	2.30	1	10	99	.4	20	2.50	.1	30	68	6.66	.11	17	1.61	1280	1	.14	16	1490	74	1	32	1	4276	204.6	226	1	1	7	53	1	80
110R	5.4	.77	156	8	55	.1	13	5.28	.1	43	64	6.35	.02	6	.85	747	29	.04	22	350	866	9	14	1	2865	173.2	174	1	1	8	105	6	445
113R	.2	.76	44	4	95	.4	3	.49	.1	6	24	2.12	.11	9	.55	325	3	.06	1	410	176	3	10	1	181	24.4	341	1	1	3	69	2	250
114R	.7	4.60	1	10	31	.2	18	6.41	.1	19	198	3.76	.01	9	1.04	541	2	.02	21	430	29	5	195	1	3148	109.0	58	1	1	6	66	4	50
115R	.4	.31	24	2	9	.1	3	.73	.1	2	10	.69	.01	1	.03	90	1	.01	6	40	13	1	43	1	325	11.8	19	1	1	17	413	1	35
116R	.1	.26	1	7	93	.4	4	7.46	.1	22	5	5.52	.02	1	3.38	3357	1	.01	22	250	38	4	52	1	24	95.0	152	1	1	5	55	3	325
117R	.1	.32	2	8	159	.8	1	.72	.1	5	12	2.66	.16	1	.12	918	1	.04	1	280	27	1	9	1	57	4.8	86	1	1	3	81	2	105
550R	.1	.74	1	20	279	1.6	4	6.34	.1	31	456	5.59	.17	7	2.56	1358	1	.01	32	610	35	49	63	1	18	105.5	103	1	1	4	37	3	16125
M01	.1	3.63	1	22	143	.1	18	2.00	.1	37	59	6.25	.12	48	3.18	1350	1	.34	47	700	34	3	61	1	3393	114.7	83	1	1	5	50	2	200
M02	.9	1.85	1	7	80	.1	31	2.72	.1	24	161	6.67	.06	9	1.52	1150	1	.07	3	1680	25	1	22	1	6854	149.4	144	1	2	6	20	2	285
M03	.1	.81	5	4	42	.7	2	.37	.1	5	5	2.65	.04	5	.51	611	2	.06	1	450	45	2	7	2	139	6.9	110	1	1	4	71	6	135
M04	.1	.97	1	5	79	.8	2	.39	.1	5	8	3.21	.11	5	.36	541	1	.09	1	460	55	3	7	2	159	7.7	100	1	1	4	92	1	120
M05	.1	.49	1	3	44	.6	1	.12	.1	4	4	3.08	.07	2	.12	307	1	.05	1	430	22	1	2	2	44	3.8	61	1	1	2	50	1	90
M06	.1	.29	45	6	67	.8	2	.85	.1	6	16	3.05	.08	2	.39	678	1	.03	1	500	46	3	13	2	20	13.2	114	1	1	2	45	5	260
M07	.7	.46	5	4	42	.7	1	.09	.1	4	11	3.01	.07	2	.02	143	2	.07	1	560	23	2	3	2	38	3.3	236	1	1	5	110	1	245
M08	.6	1.02	1	3	65	.9	2	.18	.1	5	4	3.34	.08	5	.52	538	1	.05	1	570	134	3	4	2	42	3.2	70	2	1	3	64	1	195
M09	.1	.70	1	2	115	.2	6	.12	.1	8	14	3.31	.10	3	.36	273	5	.05	1	570	27	1	4	1	1192	48.4	43	1	1	9	185	3	155
M10	.4	.28	13	4	54	.5	1	.70	.1	5	23	2.18	.05	3	.40	412	5	.04	1	420	54	2	11	1	27	3.4	68	1	1	3	63	1	245
M11	.1	2.88	1	7	17	.1	28	1.40	.1	31	39	8.42	.02	20	2.99	1994	1	.09	17	750	154	1	8	1	6450	226.3	220	1	1	7	49	2	60
M12	.3	.03	18	1	10	.1	2	.08	.1	1	4	.30	.01	1	.02	37	2	.03	5	20	14	1	2	1	38	4.2	29	2	1	9	231	3	85
M13	.1	.08	12	2	10	.1	1	.70	.1	4	6	.45	.01	1	.05	91	46	.03	2	110	26	2	4	1	84	42.9	33	1	1	8	180	2	80
M14	.1	.44	12	2	8	.1	4	.57	.1	7	207	1.52	.01	4	.49	549	2	.02	13	90	18	1	2	1	573	32.8	77	1	1	18	412	1	35
M15	.1	3.85	1	24	21	.1	24	2.78	.1	34	37	5.90	.02	36	2.37	1859	1	.05	45	710	32	3	13	1	4765	161.3	701	1	1	8	113	1	90
M16	.1	6.16	1	31	27	.6	33	6.60	35.6	32	165	7.60	.02	24	2.36	2303	8	.03	52	880	1229	9	25	1	6234	308.2	2686	1	1	12	158	2	385
M17	.1	.19	6	1	24	.1	1	.34	.1	3	21	.79	.01	1	.12	149	7	.02	7	70	24	1	2	1	49	84.3	48	1	1	14	322	1	45
M18	.1	1.05	1	2	29	.4	1	.06	.1	6	13	3.04	.03	5	.62	347	18	.11	1	380	21	1	5	1	65	163.6	24	1	1	8	126	2	180
M19	.1	1.97	1	4	79	.5	1	.10	.1	15	21	4.87	.09	8	1.53	939	11	.08	1	480	33	3	7	2	68	906.5	71	1	1	16	60	1	260
M20	.1	.14	21	2	12	.1	1	.26	.1	3	7	.78	.02	1	.04	87	24	.06	9	70	15	1	3	1	43	45.0	25	1	1	20	476	1	70
M21	.5	1.49	1	3	60	.2	16	.92	.1	11	6	4.25	.07	5	1.13	1002	2	.13	1	1640	21	1	37	1	3568	54.3	77	1	1	6	87	1	95
M22	.5	.17	36	3	42	.1	2	.13	.1	3	10	.97	.03	1	.10	128	26	.03	12	100	215	3	5	1	117	40.1	105	1	1	34	814	1	55
M23	.1	.97	25	6	73	.7	2	.31	.1	5	8	3.51	.09	5	.42	534	3	.06	1	560	18	1	6	2	160	12.0	55	1	1	4	89	2	270
M24	.3	.15	14	1	10	.3	1	.04	.1	2	3	.70	.01	1	.01	86	4	.09	2	10	17	1	1	1	12	2.8	97	2	1	6	142	1	105
M25	.1	1.40	1	3	94	.4	3	.09	1.5	7	13	2.86	.07	28	1.47	666	11	.07	1	320	107	3	7	2	203	75.0	197	1	1	5	86	4	135
M26	.1	1.88	1	5	76	.5	2	.14	.1	11	80	4.50	.09	16	1.67	907	21	.05	1	540	53	3	7	2	67	102.7	390	1	1	6	93	2	105
M27	.1	1.08	1	3	107	.4	2	.19	.1	4	5	2.74	.17	3	.52	907	4	.13	1	680	16	2	6	2	91	8.5	62	1	1	6	120	2	1600
M28	1.1	.21	20	3	38	.1	5	9.29	40.2	6	25	.67	.03	2	.05	527	22	.09	4	320	25	6	31	1	23	38.7	4218	1	1	3	121	3	220
M29	3.1	.04	39	4	10	.1	11	>15.00	>100.0	5	25	.53	.01	1	.05	837	8	.04	5	160	36	13	57	1	7	13.9	>10000	30	3	1	32	24	385
J01	.5	.26	16	3	20	.2	1	.99	4.8	6	5	1.21	.04	2	.03	76	6	.15	2	20	10	2	3	1	18	4.5	762	1	1	8	203	1	185
J02	.1	.91	14	6	37	.5	1	.74	.1	3	3	1.63	.07	10	.02	342	2	.01	1	240	7	2	13	1	33	3.3	254	1	1	5	128	1	610
J03	.1	.69	1	7	68	.5	1	.24	.1	4	2	2.37	.06	7	.03	684	2	.01	1	210	10	2	14	1	42	4.3	94	1	1	5	123	2	400
J04	.1	1.09	7	6	47	.5	1	.09	.1	3	158	1.76	.05	17	.02	567	2	.01	1	200	10	5	10	1	59	3.5	51	1	1	4	93	1	7750
J08	.1	.60	1	10	254	1.7	2	1.59	.1	4	9	2.91	.12	4	.45	800	4	.08	1	510	15	2	22	2	102	4.5	74	1	1	6	127	4	250
J09	.1	.66	1	4	158	1.9	1	.66	.1	4	15	3.12	.07	4	.46	839	2	.06	1	530	27	2	12	3	84	3.9	115	1	1	3	64	3	235
J10	.1	.33	17	3	169	.5	1	.28	.1	2	5	.84	.18	2	.03	374	10	.10	3	520	12	2	7	1	69	4.6	48	1	1	9	207	2	65
J11	.3	.31	6	11	689	1.1	3	3.49	14.4	3	5	2.27	.14	1	.89	812	3	.02	1	280	21	4	62	1	48	5.0	444	1	1	5	111	5	3500
ROAD SHOW	.4	.16	21	3	167	.5	1	.12	.1	4	9	2.68	.16	1	.04	229	5	.03	1	80	25	2	1	1	12	1.1	33	1	1	5	116	2	75

CONSULTANTS

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

(604)980-5814 OR (604)988-4524

FILE NO: 1V-1278-RJ1

DATE: 91/10/21

ATTN: JOHN BARAKSO

* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB	BA-TOT PPM
KRO-01	1.5	9720	60	9	61	.1	12	16510	.1	7	11	19430	60	1	550	422	3	90	1	120	25	1	185	1	1997	84.0	26	1	2	10	220	1	150	35
KRO-02	1.2	8700	9	16	87	3.5	3	7500	.1	2	5	6570	6400	1	3120	162	1	70	1	50	11	1	13	1	58	2.3	34	1	1	1	21	3	95	421
KRO-03	.8	5550	1	12	43	.6	4	750	.1	3	14	20920	1870	2	220	304	2	480	1	10	13	1	5	1	40	5.0	39	1	1	5	118	11	155	421
KRO-04	1.2	2340	28	8	258	1.5	6	164190	.1	15	14	40090	250	1	30160	3841	1	150	1	220	19	1	136	1	111	56.9	102	1	1	1	18	2	130	239
KRO-05	2.0	11020	1	4	6	.1	12	47530	.1	8	328	23470	130	1	3530	601	1	40	1	270	11	1	135	1	2030	94.2	32	1	2	6	126	3	160	39
KRO-06	1.9	3930	8	6	17	.1	4	258040	.1	2	7	9000	280	1	960	878	1	10	1	60	14	1	50	1	49	10.8	9	2	1	2	50	1	130	44
KRO-07	1.6	5750	1	5	5	.2	4	139140	.1	1	6	10130	300	1	400	692	1	10	1	70	11	1	82	1	57	8.8	5	1	1	2	59	1	140	32
KRO-08	1.7	8010	1	3	8	.1	8	76780	.1	6	23	17540	50	1	3580	999	1	10	1	110	11	1	100	1	1215	73.4	27	1	1	7	150	1	125	35
KRO-09	1.9	44210	1	2330	5	.1	16	70820	.1	10	107	23180	30	4	5570	338	1	140	10	460	13	1	46	1	2210	101.2	15	1	2	5	90	2	145	39
KRO-10	2.5	28590	1	73	26	.1	41	19270	.1	36	43	76290	430	23	38910	1012	1	690	11	2000	5	1	17	1	7130	170.3	87	1	5	4	74	1	165	135
KRO-11	.7	12040	1	23	31	.4	6	4370	.1	4	13	27750	700	4	5580	632	1	760	1	420	11	1	4	1	175	5.8	37	2	1	3	65	3	430	290
KRO-12	1.6	20700	1	14	12	.1	43	13400	.1	29	28	101780	90	6	17360	926	1	990	1	1980	5	1	9	1	7630	168.5	100	1	6	4	63	2	95	60
KRO-13	.6	16790	1	11	23	.6	6	2440	.1	4	6	21920	850	11	1810	1088	1	610	3	390	12	1	3	1	309	11.3	67	1	1	3	71	1	255	287
KRO-14	.5	88130	1	12	66	5.6	13	5530	.1	9	16	24880	490	25	1670	8185	5	600	25	2540	46	1	10	1	481	23.7	143	1	1	3	61	44	710	144
KRO-15	.7	78910	1	9	69	5.5	12	5070	.1	9	17	23140	390	21	1920	9145	7	750	27	2420	50	1	9	1	353	23.8	126	1	1	5	91	66	650	137
KRO-16	.4	49550	1	9	19	1.0	8	1790	.1	8	12	32160	540	22	1670	1760	1	460	6	720	28	1	3	1	376	21.1	123	1	1	3	76	136	450	158

COMP: ELECTRUM RESOURCES
PROJ: MAHATTA
ATTN: JOHN BARAKSO/SAM ZASTAVNIKOVICH

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 2V-1138-SJ1+2
DATE: 92/11/03
* SOIL * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB
L1-000	.1	3.89	1	23	28	.1	26	.22	.1	16	25	6.71	.03	13	.41	592	1	.03	1	750	1	1	6	1	4295	158.8	56	1	4	4	25	1	430
L1-025	.1	3.74	1	22	200	.2	19	.50	.1	15	129	4.07	.08	72	3.91	>10000	7	.04	42	580	48	1	19	1	1669	136.8	190	1	4	3	1	1	305
L1-050	.1	3.82	1	22	84	.8	14	.18	.1	12	23	3.97	.03	19	.77	>10000	11	.07	13	1160	26	1	8	1	1337	95.1	121	1	3	3	1	2	490
L1-075	.1	2.76	1	18	142	.7	10	.75	.1	14	29	4.29	.02	25	6.39	3904	1	.04	1	560	1	1	11	1	1763	340.2	99	1	3	2	1	4	220
L1-100	.1	1.84	1	40	115	.6	15	1.60	.1	15	28	4.64	.04	17	1.42	2998	2	.04	1	860	16	1	14	1	2097	280.7	67	1	2	4	1	120	235
L1-125	.1	2.09	1	13	54	.1	14	.37	.1	11	18	3.83	.02	9	.48	1220	4	.04	1	2690	8	1	12	1	2084	140.2	49	1	3	3	8	310	375
L1-150	.1	2.80	1	17	111	.9	5	.21	.1	14	39	4.39	.02	21	1.48	3373	4	.03	2	960	15	1	7	1	271	92.2	95	1	2	2	3	3	305
L1-175	.1	3.09	1	18	111	.5	15	.10	.1	19	28	4.79	.03	32	4.85	3325	1	.03	1	280	1	1	7	1	2475	96.0	112	1	3	1	3	1	175
L1-200	.1	3.40	1	19	26	.1	14	.12	.1	8	14	4.21	.02	8	.20	205	6	.05	1	450	1	1	2	1	2094	83.5	42	1	3	2	18	1	445
L1-250	.1	2.05	1	13	25	.3	6	.08	.1	6	9	4.64	.03	5	.09	247	1	.02	1	400	2	1	2	1	762	45.4	37	1	1	1	5	1	285
L1-300	.1	2.54	1	14	26	.2	8	.09	.1	5	9	3.83	.02	6	.10	140	1	.02	1	430	1	1	2	1	1016	50.9	41	1	2	1	7	1	410
L2-000	.1	2.07	1	13	145	.4	14	.18	.1	9	12	4.52	.02	5	.14	1210	1	.04	1	650	5	1	5	1	2114	88.7	46	1	3	2	13	1	290
L2-050	.1	.71	1	8	252	2.2	3	.25	.1	11	18	5.49	.04	3	.18	2013	1	.03	1	920	12	1	6	1	366	17.6	197	1	1	1	1	5	400
L2-100	.1	2.57	1	16	52	.5	8	.15	.1	14	10	5.91	.03	7	.12	1442	1	.03	1	560	6	1	4	1	1147	62.3	59	1	2	1	9	1	610
L2-150	.1	3.94	1	22	65	1.0	5	.08	.1	8	8	5.04	.02	13	.07	1877	1	.01	1	600	1	1	3	1	381	48.5	205	1	2	1	7	1	770
L2-200	.1	.72	1	11	104	.6	4	.44	.1	5	13	3.05	.04	6	.34	570	1	.06	1	440	8	1	7	1	388	24.7	146	1	1	1	4	1	415
L2-250	.1	.89	1	20	188	1.3	6	.75	.5	8	20	4.06	.07	7	.71	1409	2	.03	1	620	20	1	13	2	786	35.4	442	1	1	1	2	2	600
L2-275	.1	4.29	1	26	60	.4	19	.78	.1	18	47	5.02	.03	19	1.98	1957	3	.03	1	750	13	1	8	1	2670	218.4	113	1	4	4	13	1	515
L2-300	.1	4.36	1	25	83	.1	23	.33	.1	28	73	6.96	.02	12	.62	1423	1	.04	1	820	3	1	15	1	3780	190.5	77	1	4	4	26	1	430
L2-350	.1	3.46	1	24	89	.4	18	1.06	.1	20	44	4.92	.04	19	1.22	2135	1	.04	13	870	10	1	22	1	2715	118.2	92	1	4	4	32	3	315
L2-400	.1	2.93	1	33	72	.3	18	.91	.1	22	41	5.19	.04	18	1.28	1684	1	.03	6	670	9	1	33	1	3011	133.6	88	1	4	4	27	2	350
L2-450	.1	2.14	1	29	44	.2	16	1.46	.1	19	43	4.44	.04	22	1.74	961	1	.05	8	630	5	1	18	1	2655	97.0	75	1	3	3	22	1	320
L2-500	.1	4.08	1	28	68	.1	24	.50	.1	24	33	5.99	.03	28	.69	1391	1	.05	4	710	1	1	21	1	4010	152.2	84	1	5	5	52	1	385
L2-550	.1	1.80	1	26	428	1.1	8	.81	.1	35	179	7.50	.08	16	.87	3514	1	.03	22	880	18	10	21	1	1040	177.4	189	1	1	4	17	1	4250
L3-000	.1	4.84	1	30	40	.1	23	.43	.1	22	85	5.77	.03	15	.79	1014	1	.04	5	780	1	1	13	1	3860	147.0	70	1	5	5	31	1	265
L3-025	.1	4.85	1	28	26	.1	24	.28	.1	15	57	5.39	.02	9	.37	409	1	.04	1	720	1	1	6	1	3827	141.6	51	1	6	4	33	1	345
L3-050	.1	3.85	1	25	65	.1	17	.92	.1	22	65	4.66	.05	17	.98	802	1	.08	11	590	1	1	43	1	2797	122.6	60	1	4	4	43	1	350
L3-075	.1	5.18	1	30	29	.1	25	.38	.1	17	41	7.47	.03	19	.42	259	1	.03	1	440	1	1	13	1	4216	199.6	51	1	5	6	76	1	695
L3-100	.1	3.73	1	85	235	1.0	26	1.37	.1	41	60	8.14	.09	22	2.11	3212	1	.07	1	920	3	1	51	1	4694	142.0	124	1	5	3	2	3	435
L3-125	.1	2.53	1	28	223	1.1	7	.56	.1	11	31	4.31	.07	10	.45	1191	2	.04	1	800	5	1	16	1	809	36.4	232	1	3	1	5	2	1540
L3-150	.1	2.55	1	32	119	.3	14	.78	.1	16	35	4.47	.07	13	.82	814	1	.08	2	650	5	1	20	1	2248	85.2	86	1	4	3	15	2	460
MS1	.1	2.02	1	17	104	.1	11	.58	.1	24	26	3.36	.04	14	.63	3416	2	.03	11	660	14	1	17	1	1560	77.4	127	1	3	2	10	6	285
MS2	.1	.53	1	5	22	.1	3	.09	.1	4	7	1.60	.02	2	.09	201	1	.05	1	400	5	1	4	1	434	37.3	17	1	1	1	2	1	200
MS3	.1	4.45	1	26	37	1.2	4	.10	.1	5	9	2.07	.02	20	.07	866	1	.04	5	630	1	1	5	1	190	17.6	139	1	3	1	5	1	390
MS4	.1	1.39	1	11	137	.1	6	.42	.1	18	11	3.78	.03	8	.32	3514	3	.03	8	520	17	1	14	1	833	62.0	118	1	2	2	6	4	205
15S 075	.1	1.03	1	9	27	.1	13	.18	.1	8	16	3.66	.02	4	.15	458	12	.02	1	440	17	1	7	1	2321	151.4	70	1	2	3	8	2	365
15S 087	.1	2.35	1	15	27	.1	14	.18	.1	12	41	4.72	.02	6	.16	2262	17	.04	1	720	16	1	7	1	2144	150.0	81	1	2	3	16	1	535
15S 100	.1	2.33	1	16	1	.3	7	.10	.1	19	120	4.50	.14	11	.31	2195	62	.03	1	650	136	1	5	1	730	3634.6	961	1	2	36	1	5	595
15S 112	.1	.64	1	6	15	.1	5	.14	.1	9	25	2.47	.03	4	.07	599	30	.06	1	540	46	1	5	1	748	520.6	248	1	1	5	1	1	390
15S 125	.1	1.35	1	9	88	.1	6	.34	10.7	11	39	1.94	.02	4	.09	6583	29	.06	13	910	36	1	9	1	517	163.9	477	1	1	2	1	5	405
L20W 050S	.1	2.61	1	15	77	1.0	5	.31	.1	5	6	1.70	.01	11	.13	1279	1	.03	2	600	5	1	10	1	470	29.8	79	1	2	1	5	1	325
L20W 075S	.1	5.33	1	27	29	.5	9	.14	.1	7	14	1.80	.01	8	.15	214	1	.04	2	670	1	1	5	1	919	38.0	44	1	4	2	12	4	505
L20W 100S	.1	1.00	1	9	23	.1	6	.10	.1	5	8	3.46	.02	5	.05	177	1	.04	1	370	5	1	5	1	939	62.6	28	1	1	1	6	1	340
L20W 125S	.1	3.63	1	22	23	.1	8	.12	.1	10	13	5.03	.02	13	.12	467	1	.05	1	440	1	1	7	1	1203	77.2	45	1	3	2	12	1	580
L20W 150S	.1	2.77	1	19	26	.1	7	.09	.1	9	13	7.29	.02	12	.09	247	1	.04	1	320	1	1	5	1	1357	106.9	38	1	2	2	10	5	260
L30S 50W	.1	1.78	1	12	21	.1	8	.10	.1	6	13	5.06	.02	3	.04	366	1	.04	1	630	1	1	7	1	1349	73.4	29	1	2	1	4	1	1675
L30S 40W	.1	2.45	1	15	34	.1	13	.17	.1	9	26	4.47	.02	8	.25	574	1	.03	1	530	1	1	7	1	1959	91.1	42	1	3	2	12	2	585
L30S 30W	.1	1.79	1	12	31	.1	9	.19	.1	9	28	3.35	.02	7	.30	840	2	.02	1	450	20	1	7	1	1350	90.3	215	1	3	2	10	6	610

COMP: ELECTRUM RESOURCES
PROJ: MAHATTA
ATTN: JOHN BARAKSO/SAM ZASTAVNIKOVICH

MIN-EN LABS — ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524

FILE NO: 2V-1138-SJ3+4
DATE: 92/11/03
* SOIL * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB
L30S 20W	.1	2.44	1	14	47	.1	11	.18	.1	10	32	4.00	.02	8	.25	716	1	.09	1	530	3	1	5	1	2098	108.0	71	1	2	2	17	1	395
L30S 10W	.1	1.71	1	11	31	.1	13	.20	.1	10	22	4.71	.02	5	.22	337	1	.04	1	390	6	1	5	1	2534	135.1	65	1	2	3	14	2	185
L30S BL	.1	.84	1	9	34	.1	6	.06	.1	9	26	4.83	.01	2	.07	166	24	.05	1	330	44	1	3	1	1404	201.0	127	1	1	3	6	3	265
L30S 10E	.1	1.59	1	12	49	.1	11	.18	.1	9	21	4.92	.03	8	.29	187	1	.03	1	540	7	1	7	1	2212	135.4	64	1	2	2	12	2	185
L30S 20E	.1	1.72	1	14	102	.7	3	.16	.1	13	31	3.51	.07	10	.17	4808	43	.02	2	1110	126	1	7	1	160	114.0	756	1	1	2	1	1	545
L30S 30E	.1	3.35	1	22	47	.7	6	.08	.1	14	39	5.09	.04	18	.26	1043	104	.04	1	450	185	1	10	1	792	283.1	919	1	2	4	5	1	640
L30S 40E	.1	3.62	1	21	33	.1	19	.26	.1	14	29	6.32	.03	9	.33	397	5	.04	1	480	1	1	8	1	3434	138.0	133	1	3	3	26	1	235
L30S 50E	.1	2.13	1	13	25	.1	14	.15	.1	10	21	6.19	.02	7	.12	255	7	.05	1	420	1	1	4	1	2821	153.7	69	1	2	3	15	2	270
L30S 60E	.1	2.13	1	13	44	.1	14	.29	.1	16	38	4.57	.03	10	.37	859	9	.03	1	450	4	1	10	1	2496	105.2	182	1	3	3	19	1	200
L30S 70E	.1	1.97	1	12	20	.1	12	.13	.1	9	22	4.99	.01	6	.11	202	13	.04	1	340	3	1	4	1	2339	192.0	72	1	2	3	11	2	275
L30S 80E	.1	2.90	1	17	26	.1	16	.19	.1	11	27	5.85	.02	9	.19	432	12	.03	1	350	2	1	6	1	2860	178.9	117	1	3	3	19	3	285
K101	.1	2.64	1	16	65	.2	14	.39	.1	20	46	4.84	.04	13	1.22	786	1	.03	15	430	1	1	15	1	2314	116.4	77	1	3	4	30	2	155
K102	.1	2.24	1	14	62	.2	11	.40	.1	16	35	4.32	.03	12	.92	2054	1	.05	13	700	5	1	16	1	1663	99.3	95	1	2	3	25	2	200
K103	.1	1.97	1	13	43	.1	18	.77	.1	18	32	4.64	.04	9	1.10	753	1	.05	7	680	2	1	18	1	3215	124.1	73	1	3	3	20	4	105
K104	.1	2.71	1	19	87	.1	16	.81	.1	27	71	5.98	.06	11	1.31	1839	1	.05	10	1670	5	1	29	1	2843	157.7	102	1	3	4	21	6	185
K105	.1	1.99	1	14	60	.1	16	.72	.1	20	51	4.92	.05	9	1.21	1078	1	.06	6	1130	4	1	22	1	2693	123.1	81	1	3	3	17	3	130
K106	.1	2.21	1	17	118	.1	22	1.09	.1	23	44	5.04	.04	18	1.31	1471	1	.06	14	750	3	1	29	1	3845	139.5	96	1	4	3	19	3	100
K107	.1	2.25	1	17	77	.1	23	.99	.1	22	40	5.83	.03	23	1.41	1434	1	.03	10	490	1	1	28	1	4235	159.6	126	1	4	4	21	8	65
K108	.1	2.33	1	17	97	.1	21	.98	.1	22	42	5.39	.04	23	1.18	2609	1	.07	19	480	5	1	30	1	3486	154.2	140	1	3	4	21	1	105
K109	.1	2.00	1	19	73	.1	18	.89	.1	22	53	5.59	.06	10	1.35	1404	1	.06	7	1200	4	1	22	1	3254	150.3	86	1	3	4	21	1	125
K110	.1	2.13	1	15	57	.1	14	.72	.1	20	19	3.91	.04	13	1.71	682	1	.05	18	560	1	1	20	1	2665	93.2	91	1	3	3	25	1	95
K111	.1	1.99	1	14	91	.1	13	.65	.1	19	32	4.98	.05	11	1.58	948	1	.05	11	730	5	1	18	1	2212	107.5	87	1	2	3	23	1	105
K112	.1	2.18	1	17	71	.1	21	.73	.1	24	26	4.95	.04	22	1.33	1338	1	.04	15	510	4	1	25	1	3545	99.5	160	1	3	3	15	3	115
K113	.1	2.73	1	29	150	.2	18	.90	.1	22	41	5.27	.09	49	1.75	4375	8	.05	20	570	16	1	27	1	2841	202.1	171	1	3	4	14	3	295
K114	.1	2.52	1	52	58	.1	27	.91	.1	28	44	6.40	.03	28	1.99	1076	1	.04	14	670	1	1	37	1	4292	148.0	209	1	5	3	12	1	220
K115	.1	2.15	1	1	78	.1	23	.86	.1	23	39	6.04	.04	26	1.62	1351	1	.03	11	610	6	1	26	1	3591	174.1	151	1	4	4	14	3	4350
K116	.1	2.05	1	1	139	.1	16	.69	.1	24	35	5.23	.04	21	1.65	1028	1	.03	20	620	5	1	19	1	2505	120.0	110	1	3	3	17	1	320
K117	.1	1.19	1	1	196	.1	9	.46	.1	11	8	2.75	.02	10	.43	1850	1	.02	6	320	9	1	13	1	1280	57.5	65	1	1	2	6	2	350
K118	.1	1.64	1	1	75	.1	17	.52	.1	21	29	4.42	.03	19	1.11	1263	1	.02	16	460	9	1	10	1	2557	104.9	112	1	2	3	11	1	190
K119	.1	1.85	1	1	105	.3	10	.22	.1	22	12	3.28	.02	13	.53	2762	1	.03	10	320	13	1	7	1	1157	66.9	96	1	3	2	6	1	285
K120	.1	2.22	1	1	154	.1	10	.52	.1	30	45	5.25	.04	16	.71	3467	1	.06	21	570	16	1	24	1	1102	107.7	132	1	2	3	8	20	715
K121	.1	2.95	1	1	134	.1	16	.44	.1	28	32	3.83	.02	23	.87	8962	1	.04	40	840	29	1	19	1	1653	76.1	181	1	4	3	6	10	315
K122	.1	1.91	1	1	121	.5	11	.61	.1	12	18	4.19	.03	16	1.18	1845	4	.03	1	720	20	1	11	2	1187	76.3	127	1	2	2	5	3	305
K123	.1	3.16	1	1	129	1.0	9	1.02	.1	12	16	3.37	.03	45	4.68	1745	4	.03	1	750	22	1	20	1	1096	93.8	297	1	3	1	9	1	410
K124	.1	2.56	1	1	176	.1	17	.99	.1	23	69	5.22	.06	27	1.94	3238	1	.04	16	760	16	1	29	1	2352	117.9	117	1	3	4	22	3	1485
K125	.1	1.39	1	1	45	.1	15	.56	.1	15	23	4.01	.03	10	.99	585	1	.03	7	610	6	1	11	1	2085	108.6	79	1	2	3	15	1	150

COMP: ELECTRUM RESOURCES
PROJ: MAHATTA
ATTN: JOHN BARAKSO/SAM ZASTAVNIKOVICH

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

FILE NO: 2V-1138-RJ1+2
DATE: 92/11/03
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB
102R	.1	2.30	1	10	99	.4	20	2.50	.1	30	68	6.66	.11	17	1.61	1280	1	.14	16	1490	74	1	32	1	4276	204.6	226	1	1	7	53	1	80
110R	5.4	.77	156	8	55	.1	13	5.28	.1	43	64	6.35	.02	6	.85	747	29	.04	22	350	866	9	14	1	2865	173.2	174	1	1	8	105	6	445
113R	.2	.76	44	4	95	.4	3	.49	.1	6	24	2.12	.11	9	.55	325	3	.06	1	410	176	3	10	1	181	24.4	341	1	1	3	69	2	250
114R	.7	4.60	1	10	31	.2	18	6.41	.1	19	198	3.76	.01	9	1.04	541	2	.02	21	430	29	5	195	1	3148	109.0	58	1	1	6	66	4	50
115R	.4	.31	24	2	9	.1	3	.73	.1	2	10	.69	.01	1	.03	90	1	.01	6	40	13	1	43	1	325	11.8	19	1	1	17	413	1	35
116R	.1	.26	1	7	93	.4	4	7.46	.1	22	5	5.52	.02	1	3.38	3357	1	.01	22	250	38	4	52	1	24	95.0	152	1	1	5	55	3	325
117R	.1	.32	2	8	159	.8	1	.72	.1	5	12	2.66	.16	1	.12	918	1	.04	1	280	27	1	9	1	57	4.8	86	1	1	3	81	2	105
550R	.1	.74	1	20	279	1.6	4	6.34	.1	31	456	5.59	.17	7	2.56	1358	1	.01	32	610	35	49	63	1	18	105.5	103	1	1	4	37	3	16125
M01	.1	3.63	1	22	143	.1	18	2.00	.1	37	59	6.25	.12	48	3.18	1350	1	.34	47	700	34	3	61	1	3393	114.7	83	1	1	5	50	2	200
M02	.9	1.85	1	7	80	.1	31	2.72	.1	24	161	6.67	.06	9	1.52	1150	1	.07	3	1680	25	1	22	1	6854	149.4	144	1	2	6	20	2	285
M03	.1	.81	5	4	42	.7	2	.37	.1	5	5	2.65	.04	5	.51	611	2	.06	1	450	45	2	7	2	139	6.9	110	1	1	4	71	6	135
M04	.1	.97	1	5	79	.8	2	.39	.1	5	8	3.21	.11	5	.36	541	1	.09	1	460	55	3	7	2	159	7.7	100	1	1	4	92	1	120
M05	.1	.49	1	3	44	.6	1	.12	.1	4	4	3.08	.07	2	.12	307	1	.05	1	430	22	1	2	2	44	3.8	61	1	1	2	50	1	90
M06	.1	.29	45	6	67	.8	2	.85	.1	6	16	3.05	.08	2	.39	678	1	.03	1	500	46	3	13	2	20	13.2	114	1	1	2	45	5	260
M07	.7	.46	5	4	42	.7	1	.09	.1	4	11	3.01	.07	2	.02	143	2	.07	1	560	23	2	3	2	38	3.3	236	1	1	5	110	1	245
M08	.6	1.02	1	3	65	.9	2	.18	.1	5	4	3.34	.08	5	.52	538	1	.05	1	570	134	3	4	2	42	3.2	70	2	1	3	64	1	195
M09	.1	.70	1	2	115	.2	6	.12	.1	8	14	3.31	.10	3	.36	273	5	.05	1	570	27	1	4	1	1192	48.4	43	1	1	9	185	3	155
M10	.4	.28	13	4	54	.5	1	.70	.1	5	23	2.18	.05	3	.40	412	5	.04	1	420	54	2	11	1	27	3.4	68	1	1	3	63	1	245
M11	.1	2.88	1	7	17	.1	28	1.40	.1	31	39	8.42	.02	20	2.99	1994	1	.09	17	750	154	1	8	1	6450	226.3	220	1	1	7	49	2	60
M12	.3	.03	18	1	10	.1	2	.08	.1	1	4	.30	.01	1	.02	37	2	.03	5	20	14	1	2	1	38	4.2	29	2	1	9	231	3	85
M13	.1	.08	12	2	10	.1	1	.70	.1	4	6	.45	.01	1	.05	91	46	.03	2	110	26	2	4	1	84	42.9	33	1	1	8	180	2	80
M14	.1	.44	12	2	8	.1	4	.57	.1	7	207	1.52	.01	4	.49	549	2	.02	13	90	18	1	2	1	573	32.8	77	1	1	18	412	1	35
M15	.1	3.85	1	24	21	.1	24	2.78	.1	34	37	5.90	.02	36	2.37	1859	1	.05	45	710	32	3	13	1	4765	161.3	701	1	1	8	113	1	90
M16	.1	6.16	1	31	27	.6	33	6.60	35.6	32	165	7.60	.02	24	2.36	2303	8	.03	52	880	1229	9	25	1	6234	308.2	2686	1	1	12	158	2	385
M17	.1	.19	6	1	24	.1	1	.34	.1	3	21	.79	.01	1	.12	149	7	.02	7	70	24	1	2	1	49	84.3	48	1	1	14	322	1	45
M18	.1	1.05	1	2	29	.4	1	.06	.1	6	13	3.04	.03	5	.62	347	18	.11	1	380	21	1	5	1	65	163.6	24	1	1	8	126	2	180
M19	.1	1.97	1	4	79	.5	1	.10	.1	15	21	4.87	.09	8	1.53	939	11	.08	1	480	33	3	7	2	68	906.5	71	1	1	16	60	1	260
M20	.1	.14	21	2	12	.1	1	.26	.1	3	7	.78	.02	1	.04	87	24	.06	9	70	15	1	3	1	43	45.0	25	1	1	20	476	1	70
M21	.5	1.49	1	3	60	.2	16	.92	.1	11	6	4.25	.07	5	1.13	1002	2	.13	1	1640	21	1	37	1	3568	54.3	77	1	1	6	87	1	95
M22	.5	.17	36	3	42	.1	2	.13	.1	3	10	.97	.03	1	.10	128	26	.03	12	100	215	3	5	1	117	40.1	105	1	1	34	814	1	55
M23	.1	.97	25	6	73	.7	2	.31	.1	5	8	3.51	.09	5	.42	534	3	.06	1	560	18	1	6	2	160	12.0	55	1	1	4	89	2	270
M24	.3	.15	14	1	10	.3	1	.04	.1	2	3	.70	.01	1	.01	86	4	.09	2	10	17	1	1	1	12	2.8	97	2	1	6	142	1	105
M25	.1	1.40	1	3	94	.4	3	.09	1.5	7	13	2.86	.07	28	1.47	666	11	.07	1	320	107	3	7	2	203	75.0	197	1	1	5	86	4	135
M26	.1	1.88	1	5	76	.5	2	.14	.1	11	80	4.50	.09	16	1.67	907	21	.05	1	540	53	3	7	2	67	102.7	390	1	1	6	93	2	105
M27	.1	1.08	1	3	107	.4	2	.19	.1	4	5	2.74	.17	3	.52	907	4	.13	1	680	16	2	6	2	91	8.5	62	1	1	6	120	2	1600
M28	1.1	.21	20	3	38	.1	5	9.29	40.2	6	25	.67	.03	2	.05	527	22	.09	4	320	25	6	31	1	13	38.7	4218	1	1	3	121	3	220
M29	3.1	.04	39	4	10	.1	11	>15.00	>100.0	5	25	.53	.01	1	.05	837	8	.04	5	160	36	13	57	1	7	13.9	>10000	30	3	1	32	24	385
[illegible]																																	

Rock Sample Geochemistry — KRO Series

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB	BA-TOT PPM
KRO-01	1.5	9720	60	9	61	.1	12	16510	.1	7	11	19430	60	1	550	422	3	90	1	120	25	1	185	1	1997	84.0	26	1	2	10	220	1	150	35
KRO-02	1.2	8700	9	16	87	3.5	3	7500	.1	2	5	6570	6400	1	3120	162	1	70	1	50	11	1	13	1	58	2.3	34	1	1	1	21	3	95	421
KRO-03	.8	5550	1	12	43	.6	4	750	.1	3	14	20920	1870	2	220	304	2	480	1	10	13	1	5	1	40	5.0	39	1	1	5	118	11	155	421
KRO-04	1.2	2340	28	8	258	1.5	6	164190	.1	15	14	40090	250	1	30160	3841	1	150	1	220	19	1	136	1	111	56.9	102	1	1	1	18	2	130	239
KRO-05	2.0	11020	1	4	6	.1	12	47530	.1	8	328	23470	130	1	3530	601	1	40	1	270	11	1	135	1	2030	94.2	32	1	2	6	126	3	160	39
KRO-06	1.9	3930	8	6	17	.1	4	258040	.1	2	7	9000	280	1	960	878	1	10	1	60	14	1	50	1	49	10.8	9	2	1	2	50	1	130	44
KRO-07	1.6	5750	1	5	5	.2	4	139140	.1	1	6	10130	300	1	400	692	1	10	1	70	11	1	82	1	57	8.8	5	1	1	2	59	1	140	32
KRO-08	1.7	8010	1	3	8	.1	8	76780	.1	6	23	17540	50	1	3580	999	1	10	1	110	11	1	100	1	1215	73.4	27	1	1	7	150	1	125	35
KRO-09	1.9	44210	1	2330	5	.1	16	70820	.1	10	107	23180	30	4	5570	338	1	140	10	460	13	1	46	1	2210	101.2	15	1	2	5	90	2	145	39
KRO-10	2.5	28590	1	73	26	.1	41	19270	.1	36	43	76290	430	23	38910	1012	1	690	11	2000	5	1	17	1	7130	170.3	87	1	5	4	74	1	165	135
KRO-11	.7	12040	1	23	31	.4	6	4370	.1	4	13	27750	700	4	5580	632	1	760	1	420	11	1	4	1	175	5.8	37	2	1	3	65	3	430	290
KRO-12	1.6	20700	1	14	12	.1	43	13400	.1	29	28	101780	90	6	17360	926	1	990	1	1980	5	1	9	1	7630	168.5	100	1	6	4	63	2	95	60
KRO-13	.6	16790	1	11	23	.6	6	2440	.1	4	6	21920	850	11	1810	1088	1	610	3	390	12	1	3	1	309	11.3	67	1	1	3	71	1	255	287
KRO-14	.5	88130	1	12	66	5.6	13	5530	.1	9	16	24880	490	25	1670	8185	5	600	25	2540	46	1	10	1	481	23.7	143	1	1	3	61	44	710	144
KRO-15	.7	78910	1	9	69	5.5	12	5070	.1	9	17	23140	390	21	1920	9145	7	750	27	2420	50	1	9	1	353	23.8	126	1	1	5	91	66	650	137
KRO-16	.4	49550	1	9	19	1.0	8	1790	.1	8	12	32160	540	22	1670	1760	1	460	6	720	28	1	3	1	376	21.1	123	1	1	3	76	136	450	158

COMP: ELECTRUM RESOURCES
PROJ: MAHATTA
ATTN: JOHN BARAKSO/SAM ZASTAVNIKOVICH

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

FILE NO: 2V-1138-SJ1+2
DATE: 92/11/03
* SOIL * (ACT:F31)

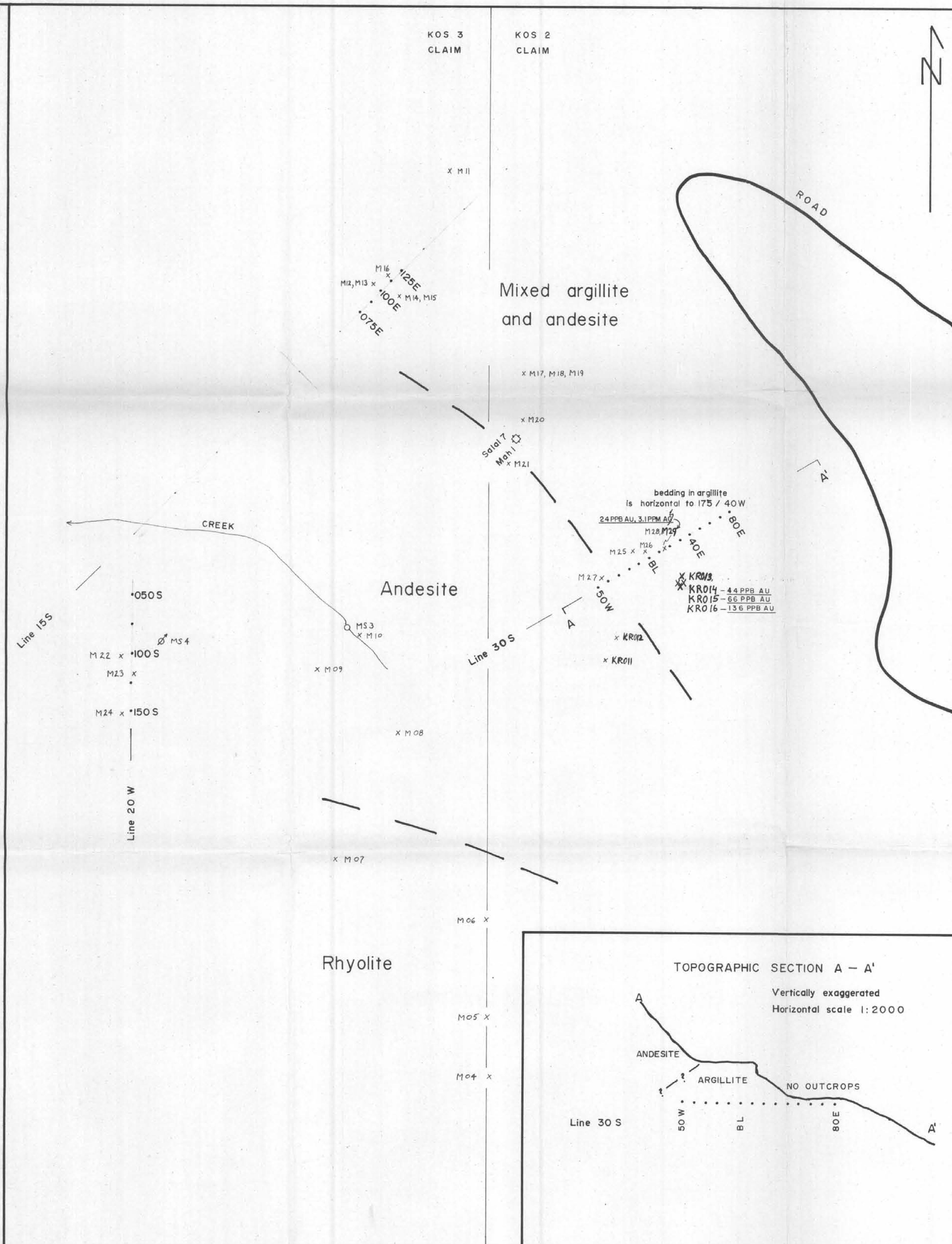
SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB
MS1	.1	2.02	1	17	104	.1	11	.58	.1	24	26	3.36	.04	14	.63	3416	2	.03	11	660	14	1	17	1	1560	77.4	127	1	3	2	10	6	285
MS2	.1	.53	1	5	22	.1	3	.09	.1	4	7	1.60	.02	2	.09	201	1	.05	1	400	5	1	4	1	434	37.3	17	1	1	1	2	1	200
MS3	.1	4.45	1	26	37	1.2	4	.10	.1	5	9	2.07	.02	20	.07	866	1	.04	5	630	1	1	5	1	190	17.6	139	1	3	1	5	1	390
MS4	.1	1.39	1	11	137	.1	6	.42	.1	18	11	3.78	.03	8	.32	3514	3	.03	8	520	17	1	14	1	833	62.0	118	1	2	2	6	4	205
15S 075	.1	1.03	1	9	27	.1	13	.18	.1	8	16	3.66	.02	4	.15	458	12	.02	1	440	17	1	7	1	2321	151.4	70	1	2	3	8	2	365
15S 087	.1	2.35	1	15	27	.1	14	.18	.1	12	41	4.72	.02	6	.16	2262	17	.04	1	720	16	1	7	1	2144	150.0	81	1	2	3	16	1	535
15S 100	.1	2.33	1	16	1	.3	7	.10	.1	19	120	4.50	.14	11	.31	2195	62	.03	1	650	136	1	5	1	730	3634.6	961	1	2	36	1	5	595
15S 112	.1	.64	1	6	15	.1	5	.14	.1	9	25	2.47	.03	4	.07	599	30	.06	1	540	46	1	5	1	748	520.6	248	1	1	5	1	1	390
15S 125	.1	1.35	1	9	88	.1	6	.34	10.7	11	39	1.94	.02	4	.09	6583	29	.06	13	910	36	1	9	1	517	163.9	477	1	1	2	1	5	405
L20W 050S	.1	2.61	1	15	77	1.0	5	.31	.1	5	6	1.70	.01	11	.13	1279	1	.03	2	600	5	1	10	1	470	29.8	79	1	2	1	5	1	325
L20W 075S	.1	5.33	1	27	29	.5	9	.14	.1	7	14	1.80	.01	8	.15	214	1	.04	2	670	1	1	5	1	919	38.0	44	1	4	2	12	4	505
L20W 100S	.1	1.00	1	9	23	.1	6	.10	.1	5	8	3.46	.02	5	.05	177	1	.04	1	370	5	1	5	1	939	62.6	28	1	1	1	6	1	340
L20W 125S	.1	3.63	1	22	23	.1	8	.12	.1	10	13	5.03	.02	13	.12	467	1	.05	1	440	1	1	7	1	1203	77.2	45	1	3	2	12	1	580
L20W 150S	.1	2.77	1	19	26	.1	7	.09	.1	9	13	7.29	.02	12	.09	247	1	.04	1	320	1	1	5	1	1357	106.9	38	1	2	2	10	5	260
L30S 50W	.1	1.78	1	12	21	.1	8	.10	.1	6	13	5.06	.02	3	.04	366	1	.04	1	630	1	1	7	1	1349	73.4	29	1	2	1	4	1	1675
L30S 40W	.1	2.45	1	15	34	.1	13	.17	.1	9	26	4.47	.02	8	.25	574	1	.03	1	530	1	1	7	1	1959	91.1	42	1	3	2	12	2	585
L30S 30W	.1	1.79	1	12	31	.1	9	.19	.1	9	28	3.35	.02	7	.30	840	2	.02	1	450	20	1	7	1	1350	90.3	215	1	3	2	10	6	610

COMP: ELECTRUM RESOURCES
PROJ: MAHATTA
ATTN: JOHN BARAKSO/SAM ZASTAVNIKOVICH

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

FILE NO: 2V-1138-SJ3+4
DATE: 92/11/03
* SOIL * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB
L30S 20W	.1	2.44	1	14	47	.1	11	.18	.1	10	32	4.00	.02	8	.25	716	1	.09	1	530	3	1	5	1	2098	108.0	71	1	2	2	17	1	395
L30S 10W	.1	1.71	1	11	31	.1	13	.20	.1	10	22	4.71	.02	5	.22	337	1	.04	1	390	6	1	5	1	2534	135.1	65	1	2	3	14	2	185
L30S BL	.1	.84	1	9	34	.1	6	.06	.1	9	26	4.83	.01	2	.07	166	24	.05	1	330	44	1	3	1	1404	201.0	127	1	1	3	6	3	265
L30S 10E	.1	1.59	1	12	49	.1	11	.18	.1	9	21	4.92	.03	8	.29	187	1	.03	1	540	7	1	7	1	2212	135.4	64	1	2	2	12	2	185
L30S 20E	.1	1.72	1	14	102	.7	3	.16	.1	13	31	3.51	.07	10	.17	4808	43	.02	2	1110	126	1	7	1	160	114.0	756	1	1	2	1	1	545
L30S 30E	.1	3.35	1	22	47	.7	6	.08	.1	14	39	5.09	.04	18	.26	1043	104	.04	1	450	185	1	10	1	792	283.1	919	1	2	4	5	1	640
L30S 40E	.1	3.62	1	21	33	.1	19	.26	.1	14	29	6.32	.03	9	.33	397	5	.04	1	480	1	1	8	1	3434	138.0	133	1	3	3	26	1	235
L30S 50E	.1	2.13	1	13	25	.1	14	.15	.1	10	21	6.19	.02	7	.12	255	7	.05	1	420	1	1	4	1	2821	153.7	69	1	2	3	15	2	270
L30S 60E	.1	2.13	1	13	44	.1	14	.29	.1	16	38	4.57	.03	10	.37	859	9	.03	1	450	4	1	10	1	2496	105.2	182	1	3	3	19	1	200
L30S 70E	.1	1.97	1	12	20	.1	12	.13	.1	9	22	4.99	.01	6	.11	202	13	.04	1	340	3	1	4	1	2339	192.0	72	1	2	3	11	2	275
L30S 80E	.1	2.90	1	17	26	.1	16	.19	.1	11	27	5.85	.02	9	.19	432	12	.03	1	350	2	1	6	1	2860	178.9	117	1	3	3	19	3	285



SYMBOLS

APPROXIMATE GEOLOGICAL CONTACT

OLD CLAIM POST

STREAM SEDIMENT SAMPLE NUMBER MS3

ROCK SAMPLE NUMBER M12

• 50W SOIL SAMPLE NUMBER 50W

34 PPB AU – ANOMALOUS GOLD VALUE

SCALE 1:2000

0 50 100 150 metres

GEOLOGICAL BRANCH ASSESSMENT REPORT

22,735

KOS CLAIMS

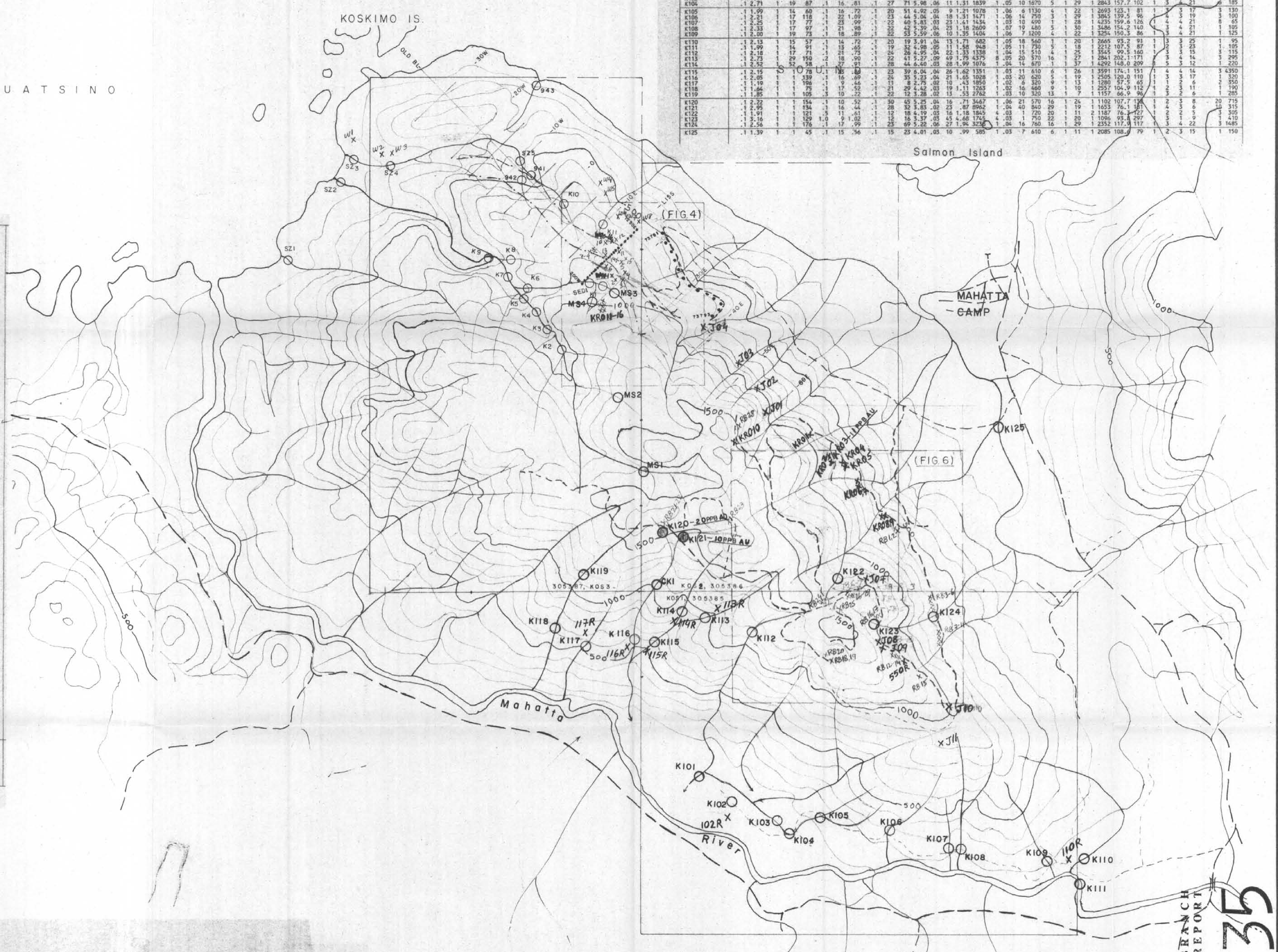
MAHATTA RIVER, B.C.

GEOCHEMISTRY and GEOLOGY

NTS 92L / 5W

DRAWN BY JW, 1992

FIGURE NO. 4



COMP: ELECTRUM RESOURCES
PROJ: MAHATTA

MIN-EN LABS — ICP REPORT
705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2

FILE NO: 2V-1138-SJ3+4
DATE: 92/11/05
* SOIL * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB
K101	.1	2.64	1	16	65	.2	14	.39	.1	20	46	4.84	.04	13	1.22	786	1	.03	15	430	1	1	15	1	2314	116.4	77	1	3	4	30	2	155
K102	.1	2.24	1	14	62	.2	11	.40	.1	16	35	4.32	.03	12	.92	2054	1	.05	13	700	5	1	16	1	1663	99.3	95	1	2	3	25	2	200
K103	.1	1.97	1	13	43	.1	18	.77	.1	18	32	4.64	.04	9	1.10	753	1	.05	7	680	2	1	18	1	3215	124.1	73	1	3	3	20	4	105
K104	.1	2.71	1	19	87	.1	16	.81	.1	27	71	5.98	.06	11	1.31	1839	1	.05	10	1670	5	1	29	1	2843	157.7	102	1	3	4	21	6	185
K105	.1	1.99	1	14	60	.1	16	.72	.1	20	51	4.92	.05	9	1.21	1078	1	.06	6	1130	4	1	22	1	2693	123.1	81	1	3	3	17	3	130
K106	.1	2.21	1	17	118	.1	22	1.09	.1	23	44	5.04	.04	18	1.31	1471	1	.06	14	750	3	1	29	1	3845	139.5	96	1	4	3	19	3	100
K107	.1	2.25	1	17	77	.1	23	.99	.1	22	40	5.83	.03	23	1.41	1434	1	.03	10	490	1	1	28	1	4235	159.6	126	1	4	4	21	8	65
K108	.1	2.33	1	17	97	.1	21	.98	.1	22	42	5.39	.04	23	1.18	2609	1	.07	19	480	5	1	30	1	3486	154.2	140	1	3	4	21	1	105
K109	.1	2.00	1	19	73	.1	18	.89	.1	22	53	5.59	.06	10	1.35	1404	1	.06	7	1200	4	1	22	1	3254	150.3	86	1	3	4	21	1	125
K110	.1	2.13	1	15	57	.1	14	.72	.1	20	19	3.91	.04	13	1.71	682	1	.05	18	560	1	1	20	1	2665	93.2	91	1	3	3	25	1	95
K111	.1	1.99	1	14	91	.1	13	.65	.1	19	32	4.98	.05	11	1.58	948	1	.05	11	730	5	1	18	1	2212	107.5	87	1	2	3	23	1	105
K112	.1	2.18	1	17	71	.1	21	.73	.1	24	26	4.95	.04	22	1.33	1338	1	.04	15	510	4	1	25	1	3545	99.5	160	1	3	3	15	3	115
K113	.1	2.73	1	29	150	.2	18	.90	.1	22	41	5.27	.09	49	1.75	4375	8	.05	20	570	16	1	27	1	2841	202.1	171	1	3	4	14	3	295
K114	.1	2.52	1	52	58	.1	27	.91	.1	28	44	6.40	.03	28	1.99	1076	1	.04	14	670	1	1	37	1	4292	148.0	209	1	5	3	12	1	220
K115	.1	2.15	1	1	78	.1	13	[illegible]	.1	23	39	6.04	.04	26	1.62	1351	1	.03	11	610	6	1	26	1	3591	174.1	151	1	4	4	14	3	4350
K116	.1	2.05	1	1	139	.1	16	.69	.1	24	35	5.23	.04	21	1.65	1028	1	.03	20	620	5	1	19	1	2505	120.0	110	1	3	3	17	1	320
K117	.1	1.19	1	1	196	.1	9	.46	.1	11	8	2.75	.02	10	.43	1850	1	.02	6	320	9	1	13	1	1280	57.5	65	1	1	2	6	2	350
K118	.1	1.64	1	1	75	.1	17	.52	.1	21	29	4.42	.03	19	1.11	1263	1	.02	16	460	9	1	10	1	2557	104.9	112	1	2	3	11	1	190
K119	.1	1.85	1	1	105	.3	10	.22	.1	22	12	3.28	.02	13	.53	2762	1	.03	10	320	13	1	7	1	1157	66.9	96	1	3	2	6	1	285
K120	.1	2.22	1	1	154	.1	10	.52	.1	30	45	5.25	.04	16	.71	3467	1	.06	21	570	16	1	24	1	1102	107.7	138	1	2	3	8	20	715
K121	.1	2.95	1	1	134	.1	16	.44	.1	28	32	3.83	.02	23	.87	8962	1	.04	40	840	29	1	19	1	1653	76.1	181	1	4	3	6	10	315
K122	.1	1.91	1	1	121	.5	11	.61	.1	12	18	4.19	.03	16	1.18	1845	4	.03	1	720	20	1	11	2	1187	76.3	127	1	2	2	5	3	305
K123	.1	3.16	1	1	129	1.0	9	1.02	.1	12	16	3.37	.03	45	4.68	1745	4	.03	1	750	22	1	20	1	1096	93.8	297	1	3	1	9	1	410
K124	.1	2.56	1	1	176	.1	17	.99	.1	23	69	5.22	.06	27	1.94	3238	1	.04	16	760	16	1	29	1	2352	117.9	117	1	3	4	22	3	1485
K125	.1	1.39	1	1	45	.1	15	.36	.1	15	23	4.01	.03	10	.99	585	1	.03	7	610	6	1	11	1	2085	108.6	79	1	2	3	15	1	150

SAMPLE NUMBER	AG PPM	AL %	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CU PPM	FE %	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB
102R	.1	2.30	1	10	99	.4	20	2.50	.1	30	68	6.66	.11	17	1.61	1280	1	.14	16	1490	74	1	32	1	4276	204.6	226	1	1	7	53	1	80
110R	5.4	.77	156	8	55	.1	13	5.28	.1	43	64	6.35	.02	6	.85	747	29	.04	22	350	866	9	14	1	2865	173.2	174	1	1	8	105	6	445
113R	.2	.76	44	4	95	.4	3	.49	.1	6	24	2.12	.11	9	.55	325	3	.06	1	410	176	3	10	1	181	24.4	341	1	1	3	69	2	250
114R	.7	4.60	1	10	31	.2	18	6.41	.1	19	198	3.76	.01	9	1.04	541	2	.02	21	430	29	5	195	1	3148	109.0	58	1	1	6	66	4	50
115R	.4	.31	24	2	9	.1	3	.73	.1	2	10	.69	.01	1	.03	90	1	.01	6	40	13	1	43	1	325	11.8	19	1	1	17	413	1	35
116R	.1	.26	1	7	93	.4	4	7.46	.1	22	5	5.52	.02	1	3.38	3357	1	.01	22	250	38	4	52	1	24	95.0	152	1	1	5	55	3	325
117R	.1	.32	2	8	159	.8	1	.72	.1	5	12	2.66	.16	1	.12	918	1	.04	1	280	27	1	9	1	57	4.8	86	1	1	3	81	2	105
550R	.1	.74	1	20	279	1.6	4	6.34	.1	31	456	5.59	.17	7	2.56	1358	1	.01	32	610	35	49	63	1	18	105.5	103	1	1	4	37	3	16125
J01	.5	.26	16	3	20	.2	1	.99	4.8	6	5	1.21	.04	2	.03	76	6	.15	2	20	10	2	3	1	18	4.5	762	1	1	8	205	1	185
J02	.1	.91	14	6	37	.5	1	.74	.1	3	3	1.63	.07	10	.02	342	2	.01	1	240	7	2	13	1	33	3.3	254	1	1	5	128	1	610
J03	.1	.69	1	7	68	.5	1	.24	.1	4	2	2.37	.06	7	.03	684	2	.01	1	210	10	2	14	1	42	4.3	94	1	1	5	123	2	400
J04	.1	1.09	7	6	47	.5	1	.09	.1	3	158	1.76	.05	17	.02	567	2	.01	1	200	10	5	10	1	59	3.5	51	1	1	4	93	1	7750
J08	.1	.60	1	10	254	1.7	2	1.59	.1	4	9	2.91	.12	4	.45	800	4	.08	1	510	15	2	22	2	102	4.5	74	1	1	6	127	4	250
J09	.1	.66	1	4	158	1.9	1	.66	.1	4	15	3.12	.07	4	.46	839	2	.06	1	530	27	2	12	3	84	3.9	115	1	1	3	64	3	235
J10	.1	.33	17	3	169	.5	1	.28	.1	2	5	.84	.18	2	.03	374	10	.10	3	520	12	2	7	1	69	4.6	48	1	1	9	207	2	65
J11	.3	.31	6	11	689	1.1	3	3.49	14.4	3	5	2.27	.14	1	.89	812	3	.02	1	280	21	4	62	1	48	5.0	444	1	1	5	111	5	3500
ROAD SHOW	.4	.16	21	3	167	.5	1	.12	.1	4	9	2.68	.16	1	.04	229	5	.03	1	80	25	2	1	1	12	1.1	33	1	1	5	116	2	75

ATTN: JOHN BARAKSO
(604)980-5814 OR (604)988-4524
DATE: 91/10/21
* SILT * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB	BA-TOT PPM
KOS-CK1	.7	28280	15	42	45	.1	13	12450	.1	27	42	46460	530	12	13020	3365	1	1590	23	860	31	1	28	1	2486	111.5	119	1	2	5	15	2	500	108

CONSULTANTS
ATTN: JOHN BARAKSO

MIN-EN LABS — ICP REPORT
705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2
(604)980-5814 OR (604)988-4524
* ROCK * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL PPM	AS PPM	B PPM	BA PPM	BE PPM	BI PPM	CA PPM	CD PPM	CO PPM	CU PPM	FE PPM	K PPM	LI PPM	MG PPM	MN PPM	MO PPM	NA PPM	NI PPM	P PPM	PB PPM	SB PPM	SR PPM	TH PPM	TI PPM	V PPM	ZN PPM	GA PPM	SN PPM	W PPM	CR PPM	AU-FIRE PPB	HG PPB	BA-TOT PPM
KRO-01	1.5	9720	60	9	61	.1	12	16510	.1	7	11	19430	60	1	550	422	3	90	1	120	25	1	185	1	1997	84.0	26	1	2	10	220	1	150	35
KRO-02	1.2	8700	9	16	87	3.5	3	7500	.1	2	5	6570	6400	1	3120	162	1	70	1	50	11	1	13	1	58	2.3	34	1	1	1	21	3	95	421
KRO-03	.8	5550	1	12	43	.6	4	750	.1	3	14	20920	1870	2	220	304	2	480	1	10	13	1	5	1	40	5.0	39	1	1	5	118	11	155	421
KRO-04	1.2	2340	28	8	258	1.5	6	164190	.1	15	14	40090	250	1	30160	3841	1	150	1	220	19	1	136	1	111	56.9	102	1	1	1	18	2	130	239
KRO-05	2.0	11020	1	4	6	.1	12	47530	.1	8	328	23470	130	1	3530	601	1	40	1	270	11	1	135	1	2030	94.2	32	1	2	6	126	3	160	39
KRO-06	1.9	3930	8	6	17	.1	4	258040	.1	2	7	9000	280	1	960	878	1	10	1	60	14	1	50	1	49	10.8	9	2	1	2	50	1	130	44
KRO-07	1.6	5750	1	5	5	.2	4	139140	.1	1	6	10130	300	1	400	692	1	10	1	70	11	1	82	1	57	8.8	5	1	1	2	59	1	140	32
KRO-08	1.7	8010	1	3	8	.1	8	76780	.1	6	23	17540	50	1	3580	999	1	10	1	110	11	1	100	1	1215	73.4	27	1	1	7	150	1	125	35
KRO-09	1.9	44210	1	2330	5	.1	16	70820	.1	10	107	23180	30	4	5570	338	1	140	10	460	13	1	46	1	2210	101.2	15	1	2	5	90	2	145	39
KRO-10	2.5	28590	1	73	26	.1	41	19270	.1	36	43	76290	430	23	38910	1012	1	690	11	2000	5	1	17	1	7130	170.3	87	1	5	4	74	1	165	135
KRO-11	.7	12040	1	23	31	.4	6	4370	.1	4	13	27750	700	4	5580	632	1	760	1	420	11	1	4	1	175	5.8	37	2	1	3	65	3	430	290
KRO-12	1.6	20700	1	14	12	.1	43	13400	.1	29	28	101780	90	6	17360	926	1	990	1	1980	5	1	9	1	7630	168.5	100	1	6	4	63	2	95	60
KRO-13	.6	16790	1	11	23	.6	6	2440	.1	4	6	21920	850	11	1810	1088	1	610	3	390	12	1	3	1	309	11.3	67	1	1	3	71	1	255	287
KRO-14	.5	88130	1	12	66	5.6	13	5530	.1	9	16	24880	490	25	1670	8185	5	600	25	2540	46	1	10	1	481	23.7	143	1	1	3	61	44	710	144
KRO-15	.7	78910	1	9	69	5.5	12	5070	.1	9	17	23140	390	21	1920	9145	7	750	27	2420	50	1	9	1	353	23.8	126	1	1	5	91	66	650	137
KRO-16	.4	49550	1	9	19	1.0	8	1790	.1	8	12	32160	540	22	1670	1760	1	460	6	720	28	1	3	1	376	21.1	123	1	1	3	76	136	450	158

MAP REF. NO.:
N.T.S.:

LEGEND

Geochemistry

SZ4 — Sediment Sample No.

797 — Soil Sample No.

W12 — Rock Sample No.

34 PPB AU — Anomalous Gold Value

250m 0 500m 1KM.

SCALE: 1 CM. TO 125 M.
1:12,500

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,735

PROPERTY:	KOS CLAIMS
LOCATION:	MAHATTA RIVER
TYPE OF MAP:	SAMPLE LOCATION MAP (GEOCHEMICAL)
WORKING PLACE:	
BASED ON:	
DATE OF WORK:	MAP REF. NO.:
DRAWN BY: S.Z.	
DATE: OCT., 1992.	N.T.S. NO.: 92L/5W
FIG. NO.:	5