GEOPHYSICAL AND GEOCHEMICAL SURVEY

ON THE

ARBUTUS MINERAL CLAIM
centered at
48° 49'N, 123° 55'W
on
CLAIM MAP NTS 95 B-13
VICTORIA M.D.

FOR

M.S.ELSON
708-543 GRANVILLE ST.
VANCOUVER B.C.
V6C 1X8

BY
G.C.MACDONALD,P.GEOL.
207 CLEARVIEW ROAD
PORT MOODY,B.C.

MAY 2,1991

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SUMMARY

A program of geophysical and geochemical survey work was completed on the Arbutus claim in January and February,1991.Two significant magnetic anomalies,and several potentially important gold soil geochemical anomalies were located.Further exploration work is warranted to evaluate the presently identified targets,and to explore the northern sedimentary-rock underlain part of the property.

INTRODUCTION

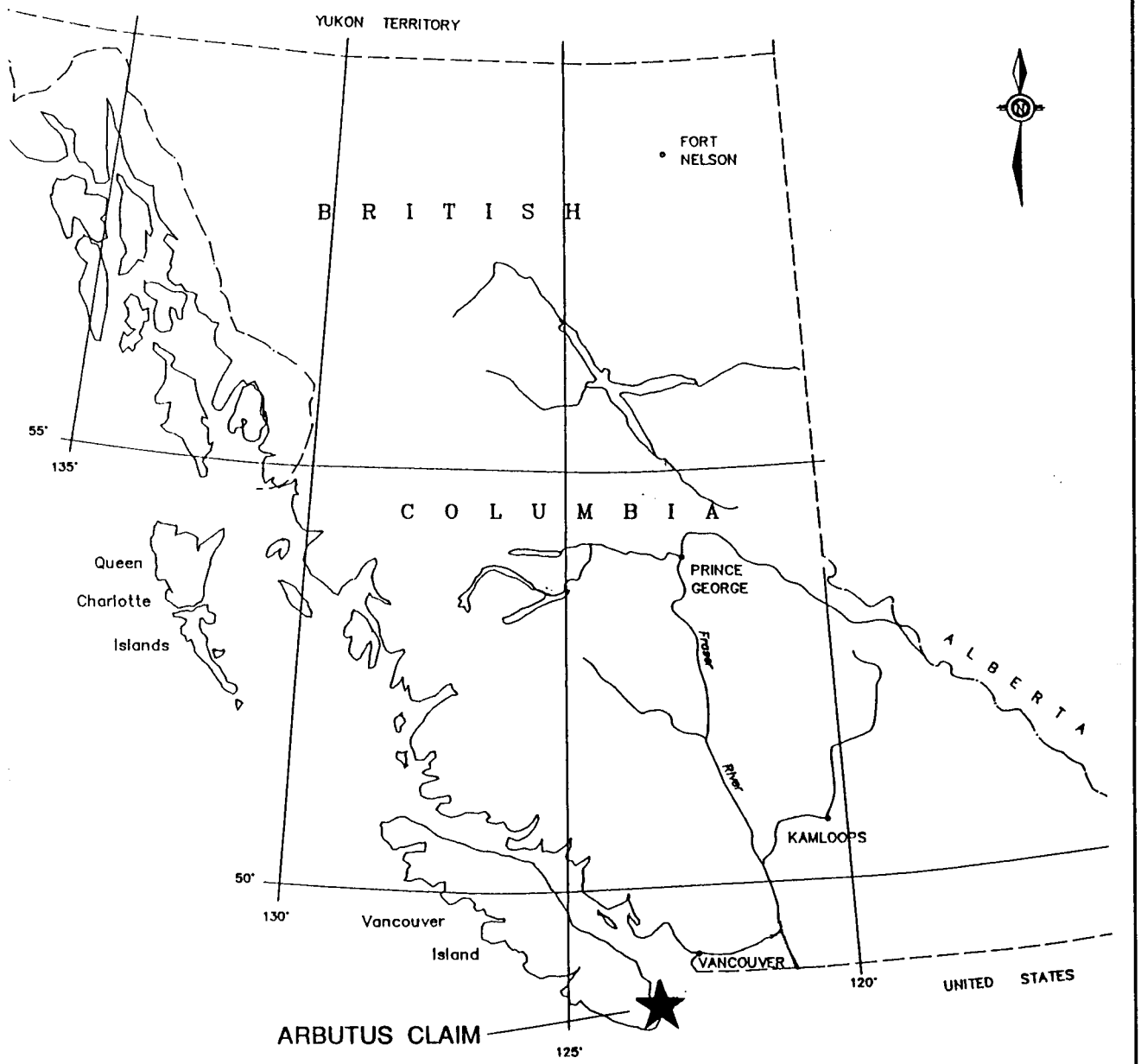
The Arbutus mineral claim (Grant number 2556(5) is centred at geographical coordinates 48° 49′ N-123° 55′W on claim sheet 95 B-13 (W).Access to the claim is via the Hill 60 Road,which crosses the claim,and leaves Highway 18 approximately 3.0 km west of Paldi.Figures 1 and 2 display the property location.

The Arbutus claim was staked by prospector M.Swetz (FMC number 258600) of Vancouver,B.C. on May 28,1990,and optioned to M.S.Elson (FMC number 107666).An exploration program was conducted during January and February,1991,to evaluate gold and base metal potential of the property.The program included establishment of 14.3 km of survey grid of chained and flagged compass lines; collection of 329 soil samples, and measurement of total field magnetic response at 686 stations.

The survey grid was located so as to provide maximum coverage of a region of contact between intrusive and volcanic-sedimentary rocks.The geology of the area was examined briefly to permit proper orientation of the grid and to correlate survey results with local rock types.

MAGNETIC SURVEY

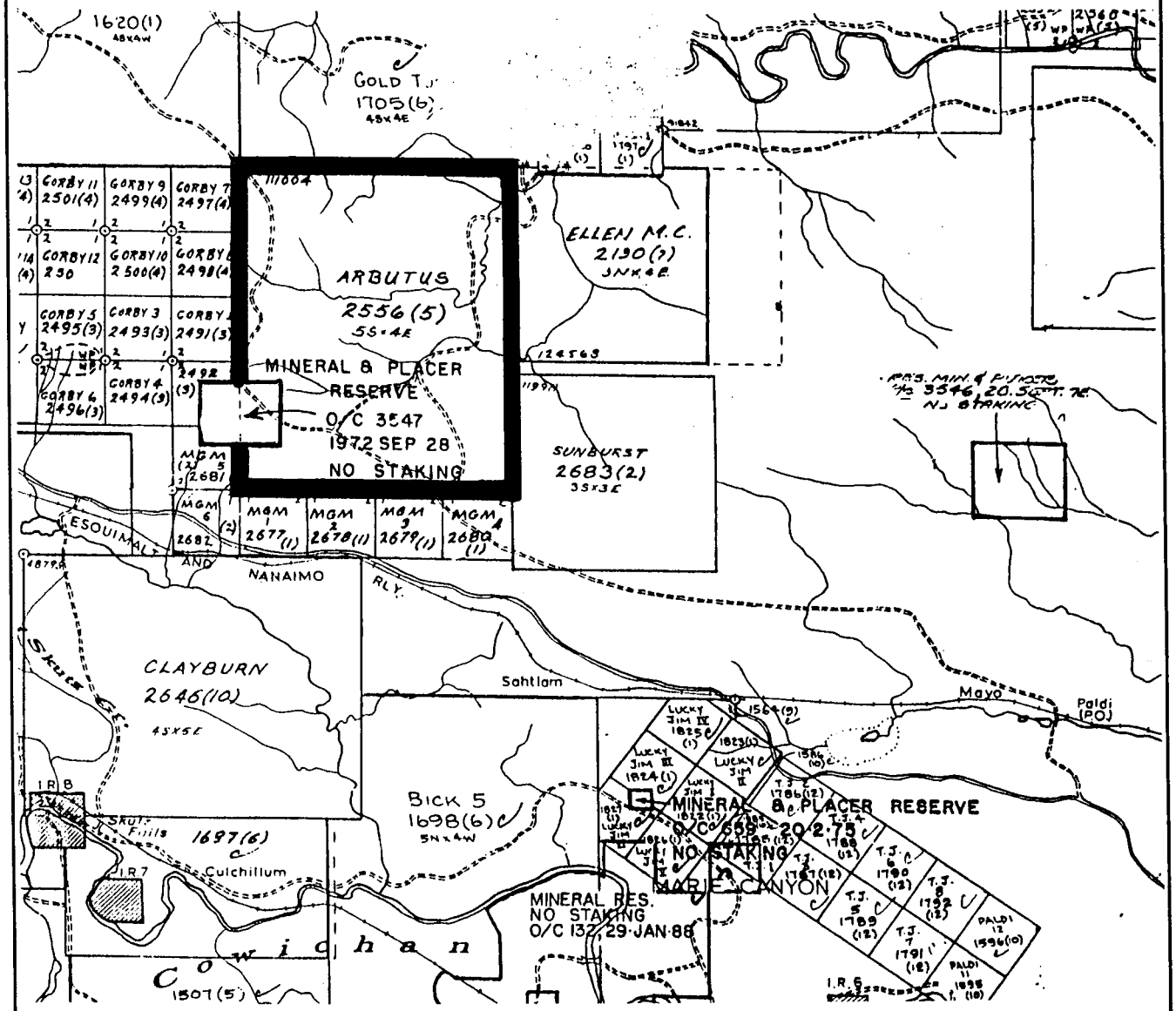
A magnetic survey on the preliminary Arbutus grid was conducted to measure magnetic response of the underlying rock units.A Geometrics G 816 proton magnetometer was used to record total magnetic intensity at 12.5 meter spaced stations along grid lines established at 100 meter centers.Gamma values obtained were recorded and corrected for diurnal variation to a common base station established at the start of the survey.Readings were corrected by applying a linear time difference factor generated by opening and closing each survey circuit at the common base station.Correction factors were assigned after check-ins at the base station every 3 to 4 hours,and a differential assigned for each individual station as its percentage of elapsed time within the circuit.Diurnal variations during the survey period were relatively minor.



ARBUTUS CLAIM
BRITISH COLUMBIA

LOCATION MAP

Figure 1



ARBUTUS CLAIM
BRITISH COLUMBIA

CLAIM MAP

Figure 2

DISCUSSION OF MAGNETIC RESULTS

The grid area of the Arbutus claim shows a moderate magnetic fluctuation.North of approximately grid 4+00 N the magnetic pattern is relatively uniform,with only minor background fluctuation.Two distinct,narrow,linear magnetic anomalies are present south of grid 4+00 N. Anomaly "A" extends from approximately 4+50 E,1+25 N to 0+50 E,1+50 N. Anomaly "A" has a maximum magnetic releif of 686 gammas with a peak value at 1+00 E,1+50 N. This anomaly is narrow,less than 50 meters,and strikes east.

Anomaly "B" is sub-parralel to Anomaly "A",extends from approximately 2+50 E,3+75 N to 0+40 W,3+75 N,and is open to the west.Anomaly "B" is sharply defined,with a width of 20 to 30 meters.Maximum releif recorded for Anomaly "A" is 896 gammas with the peak value occurring at 0+15 W,3+70 N.

These anomalies consist of alternating magnetic lows and highs,suggesting a pole-dipole effect.Detailed survey records for part of anomaly "B" show a series of small spot highs in a band of generally higher values.Both anomalies are generally coincident with the orientation of the underlying strata.Magnetic results are presented as Figure 3 of this report,and a small detailed survey over Anomaly"B" is shown as Figure 4 of this report.

GEOCHEMICAL SURVEY

The southern portion of the Arbutus claim was explored with soil sample geochemistry over the survey grid.Soil samples were taken at 25 meter intervals on grid lines spaced at 100 meters.Samples were collected by digging with a mattock to the "B" horizon,where available.A sample of the "B" horizon or equivalent was collected in a Kraft sample bag and the location coordinates written on the bag.A total of 329 samples were taken during the survey.Depth to the sampled horizon ranges from 10 cm. to 30 cm.Samples were analyzed by Acme Analytical Laboratories Ltd.of 825 East Hastings St.,Vancouver,B.C.Samples were first screened to minus 80 mesh.From the material a 0.5 gram sample is digested in 3ml of 3-1-2,HCl-HNO_3-H_2O at 95° C for one hour, diluted to 10 ml and analyzed for 30 elements by the ICP method.To determine gold content,a 10 gram sample is similarly acid leached and then analyzed by the AA method.Geochemical analyses are presented as Appendix 2 of this report.

DISCUSSION OF GEOCHEMICAL RESULTS

Samples were analyzed for 31 elements,including gold.All elements except gold are present in generally background amounts only.Gold results are plotted as Figure 5 of this report.Only samples with threshhold anomalous or anomalous values are plotted.Several anomalous "regions"are present on the Arbutus grid where moderately anomalous

results occur in a pattern.These areas are partially correlated with the magnetic anomalies.The significance of other gold soil geochemical anomalies (e.g.130 ppb at 11+00 E,3+00 N)is unknown.Gold values are generally background in areas underlain by the granitic rocks,with the anomalous responses restricted to areas underlain by stratified rocks.This result may be a factor of depth of overburden,which is less in parts of the property underlain by the more resistant weathering,cliff-forming rock units.

GEOLOGICAL SURVEY

The geology of the southern portion of the Arbutus claim was investigated as a part of the current exploration project to provide control for placement of grid lines and to identify possible causes of magnetic and geophysical anomalies.Outcrop in this area is scarce,less than 5%,and limited to steeper areas along the southern and western claim boundaries and along some stream gullies cut through the glacial till overburden.

The southern part of Arbutus claim is underlain by volcanic volcano-sedimentary rocks.These stratified units represent the Nitinat Formation and include an intercalated series of banded ribbon cherts and welded feldspar-quartz crystal tuff.A linear "tongue"of a horneblende-biotite granodiorite batholith intrudes the stratified rocks across the central portion of Arbutus claim.The intrusive is a medium grained homogenious unaltered rock,relatively recessive-weathering.

Stratified rocks generally strike easterly and dip steeply.The contact between the intrusive rock and the older rocks also has a general easterly orientation.

CONCLUSIONS

The southern part of Arbutus claim is underlain by geology permissive to host massive sulphide base metal deposits.Two magnetic anomalies,and several moderately anomalous gold soil geochemical anomalies have been located by exploration work during January and February,1991.Some of the geochemical anomalies are partially correlative with the magnetic anomalies.The economic significance of these results requires additional exploration for proper definition.

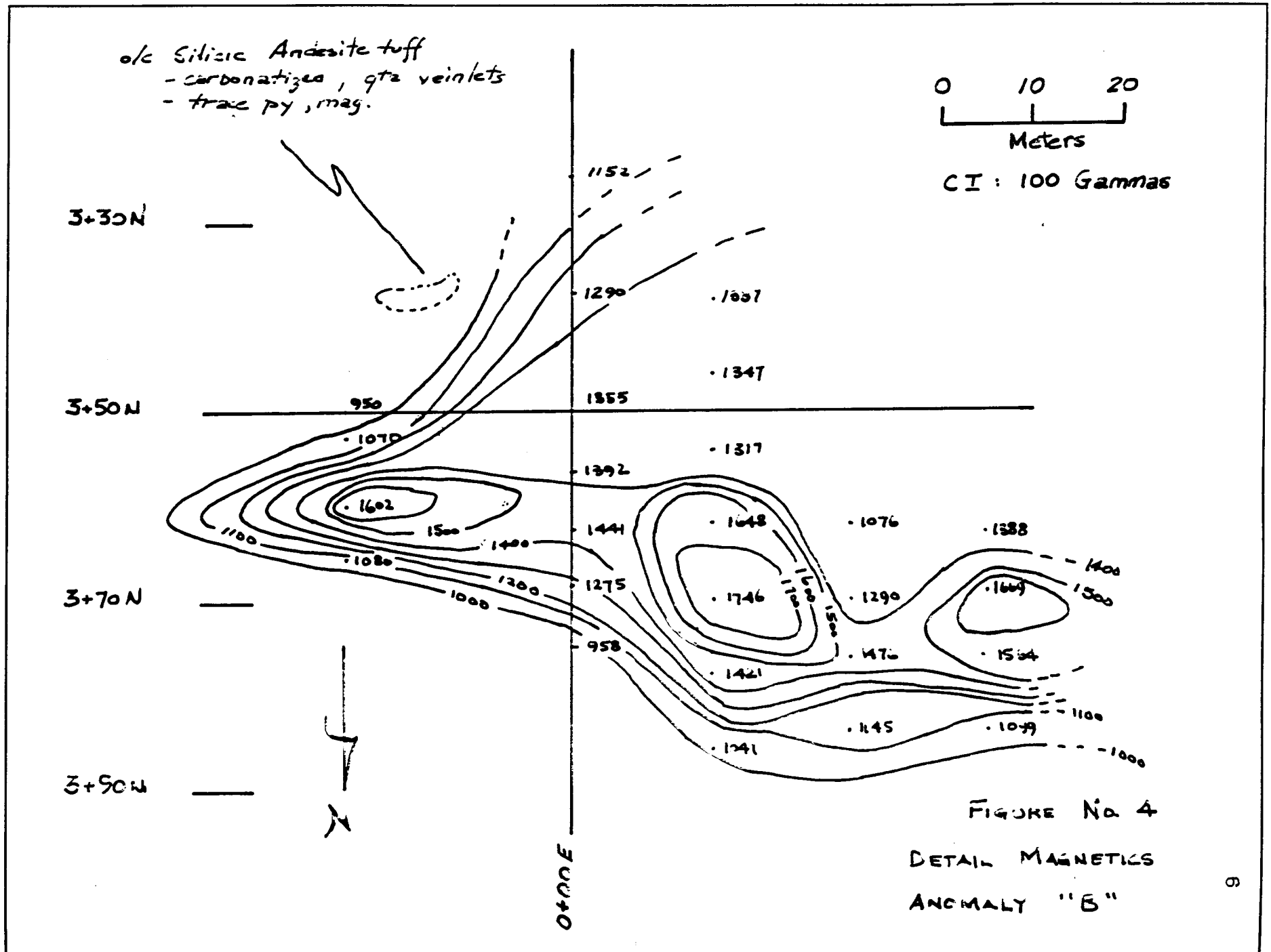


FIGURE No. 4

DETAIL MAGNETICS

ANOMALY "B"

APPENDIX 1
Statement of Costs
Arbutus Claim,1991.

1.Personnel	
M.S.Elson,Field Supervisor.	
35 days at $225/day	
Jan.21 to Feb 24 inclusive	$7875.00
M.Swetz,Prospector	
25 days at $200/day	
Jan.21 to Feb.14 inclusive	$5000.00
G.Macdonald,Geologist	
22 days at $175/day	
Jan.21 to Feb.4 inclusive	
Feb.14 to Feb.16 inclusive	$3850.00
Marc Elson,Field Assistant	
9 days at $100/day	
Jan.25,26,27,Feb.2,3,4,11,12,13	$ 900.00
M.C.Ryan,Field Assistant	
23 days at $100.00/day	
Jan.21 to Feb.12 inclusive	$2300.00
	$19,925.00
2.Equipment Rental	
Magnetometer (9 days)	$305.10
Rock Drill	$ 50.00
Pick-up truck (30 days at $70/day)	$2100.00
	$2455.10
3.Assaying and Field Expenses	
Motel Accomodation	$2018.25
Meals and groceries	$ 904.90
Gasoline and Oil	$ 636.18
Transportation	$ 174.70
Assaying	$3007.77
Flagging,Topofil,Sample Bags	$ 128.10
	$6869.90
Total Cost	$29,250.00

APPENDIX 2

Statement of Qualifications

I,Glen C. Macdonald,of 207 Clearview Drive,Port Moody,B.C.,hereby certify:

1.I am a consulting geologist and have practiced my profession for the past twenty years.

2.I am a graduate of the University of British Columbia with degrees in Geology (B.Sc.1973) and Economics (B.A.1971)and attended post-graduate studies at University of Alaska.

3.I am a member of the Alberta Professional Engineers,Geologists,and Geophysicists Association (No.36214).

4.I have no interest in,nor do I expect to receive any interest in,the Arbutus Mineral Claim.

Certified this 23rd day of April,1991.

G.Macdonald,P.Geol.

APPENDIX 3

GEOCHEMICAL ANALYSES

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

GEOCHEMICAL ANALYSIS CERTIFICATE

Mike Elson PROJECT ARBUTUS File # 91-0464 Page 1

708 - 543 Granville St., Vancouver BC V6C 1X8 Submitted by: MIKE ELSON

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
LOE 13+00N	1	1	13	17	.1	3	2	755	1.06	2	5	ND	1	29	.2	2	2	30	.24	.010	5	6	.11	64	.08	2	.53	.01	.04	1	3
LOE 12+00N	1	10	10	34	.1	12	6	229	2.73	3	5	ND	1	28	.2	2	2	58	.18	.064	5	17	.45	43	.10	2	1.78	.01	.03	1	1
LOE 11+00N	1	11	10	39	.1	13	7	981	2.29	2	5	ND	1	30	.2	2	2	47	.19	.031	5	16	.43	98	.07	2	1.72	.01	.04	1	1
LOE 10+00N	1	13	10	57	.1	10	7	1200	3.10	3	5	ND	1	22	.2	3	2	61	.16	.160	5	23	.32	75	.08	2	2.51	.01	.04	1	1
LOE 9+00N	5	17	8	37	.1	18	27	382	3.21	6	5	ND	2	31	.2	3	2	74	.22	.020	6	22	.51	94	.13	2	2.29	.01	.03	1	5
LOE 8+00N	1	24	15	43	.3	18	10	394	3.48	9	5	ND	2	26	.2	6	2	66	.22	.070	8	21	.47	66	.10	2	2.20	.01	.04	1	7
LOE 7+00N	1	9	13	40	.1	10	7	641	2.52	2	5	ND	1	19	.2	2	2	55	.15	.100	5	15	.22	68	.10	2	1.95	.01	.03	1	1
LO+50E 3+25N	1	11	6	37	.2	15	10	288	3.57	2	5	ND	2	23	.2	3	2	80	.20	.044	6	19	.38	102	.16	2	2.56	.01	.04	1	4
LO+50E 3+00N	1	31	7	49	.1	17	9	384	3.38	2	5	ND	3	23	.2	4	2	75	.15	.147	6	25	.60	73	.12	2	2.67	.01	.04	1	1
LO+50E 2+75N	1	30	3	49	.1	17	9	420	2.65	2	5	ND	2	26	.2	3	2	52	.19	.138	6	20	.59	68	.09	2	1.97	.01	.03	1	1
LO+50E 2+50N	1	19	10	44	.1	13	12	512	2.30	3	5	ND	1	26	.2	2	2	44	.22	.063	8	17	.34	146	.09	2	2.18	.01	.05	1	1
LO+50E 2+25N	1	11	7	50	.1	11	10	1580	2.47	2	5	ND	1	30	.2	2	2	45	.26	.144	6	16	.36	268	.07	2	1.55	.01	.04	1	2
LO+50E 2+00N	1	15	9	54	.1	14	9	840	2.30	2	5	ND	1	31	.2	3	2	44	.26	.140	7	18	.46	198	.08	2	1.68	.01	.05	1	2
LO+50E 1+75N	1	9	10	54	.1	12	9	640	2.39	4	5	ND	2	30	.3	2	2	46	.27	.122	7	18	.43	210	.08	2	1.68	.01	.05	1	5
LO+50E 1+50N	1	14	10	60	.1	14	10	1154	2.43	2	5	ND	1	29	.2	2	2	46	.23	.125	7	18	.45	157	.08	2	1.80	.01	.04	1	2
L2E 0+500N	1	11	16	33	.1	9	14	1850	1.37	2	5	ND	1	31	.3	2	2	30	.27	.044	16	10	.18	100	.05	2	1.33	.01	.04	1	2
L2E 0+475N	1	23	12	46	.1	16	10	649	2.43	2	5	ND	1	32	.3	2	2	49	.27	.056	8	19	.54	107	.10	2	1.93	.02	.05	1	1
L2E 0+450N	1	26	10	49	.2	22	12	405	3.16	2	5	ND	2	25	.3	2	2	62	.17	.060	6	27	.54	83	.12	2	3.26	.01	.05	1	5
L2E 0+425N	1	20	16	45	.2	14	9	1320	2.57	7	5	ND	1	28	.2	3	2	51	.26	.096	6	18	.45	118	.08	2	1.76	.01	.06	1	3
L2E 0+400N	1	12	10	34	.1	6	7	1078	1.76	2	5	ND	1	31	.2	2	2	42	.27	.029	7	10	.20	109	.07	2	.87	.01	.03	1	7
L2E 0+375N	1	15	2	28	.1	11	7	217	3.03	2	5	ND	1	26	.5	2	2	69	.17	.043	5	17	.32	73	.11	2	1.90	.01	.04	1	4
L2E 0+350N	1	7	11	17	.1	4	2	161	.97	2	5	ND	1	35	.2	2	2	25	.34	.015	4	6	.08	92	.05	2	.37	.01	.03	1	1
L2E 0+325N	1	20	8	39	.2	15	9	245	4.26	2	5	ND	2	24	.2	2	2	82	.18	.092	6	23	.45	69	.10	2	2.68	.01	.04	1	5
L2E 0+300N	1	9	8	41	.2	11	10	602	1.84	4	5	ND	1	33	.2	3	2	38	.25	.033	6	13	.37	102	.09	2	1.03	.01	.04	1	1
L2E 0+275N	1	19	10	39	.2	15	10	323	2.63	2	5	ND	1	27	.2	2	2	51	.20	.083	6	20	.53	76	.14	2	1.99	.01	.04	1	1
L2E 0+250N	1	6	12	18	.1	5	4	212	1.37	3	5	ND	1	26	.2	2	2	34	.21	.014	5	9	.20	72	.06	2	.59	.01	.03	1	3
L2E 0+225N	1	12	13	28	.1	11	14	2471	1.59	5	5	ND	1	45	.4	2	2	33	.36	.025	15	12	.27	187	.07	2	.92	.01	.04	1	1
L2E 0+200N	1	33	31	53	.1	13	9	1005	2.34	4	5	ND	1	38	.2	5	2	48	.24	.041	7	18	.46	135	.09	2	1.52	.01	.04	1	5
L2E 0+175N	1	10	8	39	.1	11	9	493	2.42	3	5	ND	1	34	.4	2	2	50	.28	.047	8	15	.38	125	.09	2	1.51	.01	.04	1	4
L2E 0+150N	1	12	10	30	.1	12	8	338	2.51	2	5	ND	1	30	.2	2	2	55	.25	.018	8	16	.39	87	.10	2	1.51	.01	.04	1	1
L2E 0+125N	1	11	13	36	.2	12	7	621	2.14	3	5	ND	2	34	.4	2	2	46	.26	.034	6	15	.39	154	.08	2	1.30	.01	.04	1	2
L2E 0+100N	1	9	4	35	.1	10	7	643	2.12	3	5	ND	1	33	.4	2	2	46	.30	.048	6	14	.36	129	.08	2	1.08	.01	.04	1	1
L2E 0+75N	1	14	9	54	.1	13	9	811	2.82	5	5	ND	2	24	.2	2	2	50	.23	.235	7	17	.36	145	.07	2	1.64	.01	.04	1	5
L2E 0+50N	1	8	8	44	.2	11	8	558	2.45	4	5	ND	2	30	.3	3	3	51	.27	.056	6	15	.38	140	.08	2	1.20	.01	.05	1	2
L2E 0+25N	1	25	9	50	.2	19	10	782	3.15	5	5	ND	2	33	.6	3	2	66	.30	.080	7	22	.48	187	.11	2	2.27	.01	.05	1	19
L2E 0+00N	1	23	2	41	.2	18	10	443	3.37	7	5	ND	2	30	.2	2	2	69	.24	.107	7	21	.51	138	.10	2	2.04	.01	.05	1	5
STANDARD C/AU-S	19	64	41	134	7.3	73	32	1103	3.97	39	22	7	38	52	18.9	15	19	58	.50	.092	38	60	.88	183	.09	32	1.87	.06	.14	11	48

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: P1-5 SOIL P6 ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: FEB 22 1991 **DATE REPORT MAILED:** Feb 27/91. **SIGNED BY** .....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
L2+50E 5+25N	1	16	8	31	.1	10	7	194	3.49	2	5	ND	2	23	.2	2	2	73	.15	.063	7	20	.31	61	.11	2	2.51	.01	.03	1	5
L2+50E 5+00N	1	7	3	28	.1	7	4	149	2.06	2	5	ND	1	27	.2	2	2	50	.18	.038	5	14	.28	58	.11	2	1.49	.01	.03	1	9
L3E 5+50N	1	17	2	75	.1	18	9	548	2.73	2	5	ND	2	31	.2	2	2	52	.24	.065	6	24	.51	101	.09	2	2.28	.02	.03	1	2
L3E 5+25N	1	26	14	34	.1	14	8	406	2.81	2	5	ND	2	27	.2	2	2	61	.17	.045	10	19	.37	66	.12	2	2.25	.01	.04	1	3
L5+50E 1+75N	1	17	2	33	.1	12	7	213	3.35	2	5	ND	1	26	.2	2	2	73	.20	.029	6	18	.40	65	.12	2	1.99	.02	.04	1	4
L5+50E 1+50N	1	21	10	74	.1	12	8	332	2.88	6	5	ND	2	26	.2	2	2	58	.21	.148	5	20	.40	97	.09	2	2.50	.01	.04	1	3
L5+50E 1+25N	1	20	6	41	.1	10	5	180	2.51	2	5	ND	2	19	.2	2	2	47	.14	.054	6	14	.31	64	.05	2	1.93	.01	.04	1	13
L5+50E 1+00N	1	9	5	29	.1	6	4	169	1.50	7	5	ND	1	25	.2	2	2	39	.22	.030	5	10	.21	48	.10	2	.98	.01	.03	1	2
L5+50E 0+75N	1	28	11	53	.1	17	9	325	3.20	2	5	ND	2	24	.2	2	2	64	.18	.063	5	24	.45	110	.13	2	3.30	.01	.04	1	2
L6+50E 1+75N	1	14	10	70	.1	10	10	885	2.32	2	5	ND	1	35	.2	2	2	47	.31	.101	6	17	.40	98	.09	3	1.75	.01	.04	1	2
L6+50E 1+50N	1	14	6	34	.1	12	8	356	3.36	2	5	ND	1	33	.2	2	2	79	.27	.037	6	18	.44	77	.16	2	1.88	.01	.04	1	6
L6+50E 1+25N	1	17	4	54	.1	11	8	843	2.64	2	5	ND	1	29	.2	2	2	52	.24	.083	6	17	.42	97	.09	2	1.86	.02	.04	1	4
L8E 5+00N	1	17	6	44	.1	11	6	876	2.00	2	5	ND	2	24	.2	2	2	44	.19	.045	5	15	.31	62	.08	2	1.84	.01	.04	1	3
L8E 4+75N	1	25	8	53	.1	21	10	273	4.44	12	5	ND	2	21	.2	2	2	82	.14	.071	5	34	.54	56	.14	2	4.94	.01	.03	2	12
L8E 4+50N	1	14	3	44	.1	11	6	298	2.36	2	5	ND	1	25	.2	2	2	50	.19	.037	5	14	.35	58	.07	2	1.98	.01	.04	1	41
L8E 4+25N	1	22	4	57	.1	14	8	322	2.77	2	5	ND	2	27	.2	2	2	55	.22	.056	6	19	.47	69	.08	2	2.10	.01	.04	1	1
L8E 4+00N	1	12	4	42	.1	10	6	246	2.10	2	5	ND	2	28	.2	2	2	44	.20	.039	5	14	.31	49	.07	2	1.89	.01	.04	1	1
L8E 3+75N	1	37	8	64	.2	23	13	351	3.71	2	5	ND	3	25	.2	3	2	70	.17	.067	7	32	.64	80	.14	2	4.27	.02	.05	1	4
L8E 3+50N	1	118	72	62	.2	19	11	553	2.98	2	5	ND	2	24	.5	2	2	59	.24	.066	6	36	.51	88	.11	2	3.71	.01	.05	3	8
L8E 3+25N	1	20	6	54	.1	15	9	236	2.86	2	5	ND	2	24	.2	2	2	51	.17	.057	6	20	.39	62	.09	2	2.67	.01	.03	1	4
L8E 3+00N	1	20	5	45	.1	12	8	264	3.15	2	5	ND	1	30	.2	2	2	57	.22	.091	7	17	.37	64	.11	2	2.77	.01	.04	1	5
L8E 2+75	1	23	4	41	.1	13	8	284	3.51	2	5	ND	1	29	.2	2	2	71	.20	.070	8	20	.39	79	.12	2	3.03	.01	.04	1	3
L8E 2+50N	1	26	11	58	.1	19	11	269	3.69	10	5	ND	2	26	.2	2	2	64	.19	.077	7	25	.50	80	.12	2	3.25	.01	.04	1	1
L8E 2+25N	1	21	7	49	.1	13	8	608	2.62	4	5	ND	1	26	.2	2	2	54	.20	.090	5	20	.42	64	.10	2	1.99	.01	.03	1	4
L8E 2+00N	1	24	13	76	.1	18	11	759	3.69	7	5	ND	2	26	.4	2	2	68	.17	.128	6	25	.38	96	.11	2	3.09	.01	.04	1	4
L8E 1+75N	1	13	11	62	.1	9	9	632	2.21	2	5	ND	2	31	.2	2	2	43	.24	.066	7	16	.27	111	.08	2	1.78	.02	.04	1	1
L8E 1+50N	1	19	4	75	.1	13	9	777	2.41	8	5	ND	1	29	.2	2	2	46	.23	.126	6	17	.40	112	.09	2	2.00	.02	.04	1	2
L8E 1+25N	1	21	11	40	.1	13	12	496	2.51	4	5	ND	1	30	.2	2	2	56	.25	.026	11	17	.38	80	.12	2	1.76	.01	.04	1	1
L8E 1+00N	1	16	6	34	.1	13	10	835	2.20	2	5	ND	1	36	.3	2	2	50	.29	.021	10	16	.55	77	.11	2	1.54	.02	.03	1	5
L8E 0+75N	1	13	10	32	.1	10	10	450	2.74	5	5	ND	1	30	.2	2	2	65	.22	.019	9	16	.40	64	.15	2	1.63	.01	.03	1	5
L8E 0+50N	1	17	9	26	.1	12	8	218	3.61	8	5	ND	2	24	.2	2	2	77	.16	.028	6	22	.37	66	.15	2	2.22	.01	.03	1	1
L8E 0+25N	1	22	8	43	.1	11	8	369	2.95	2	5	ND	2	24	.2	2	2	55	.20	.162	8	16	.33	78	.08	2	1.81	.01	.03	1	29
L8E 0+00N	1	13	13	41	.1	11	7	254	2.40	2	5	ND	1	26	.4	2	2	52	.20	.052	5	16	.34	72	.09	2	1.92	.01	.04	1	5
L9E 5+00N	1	31	9	57	.1	21	10	443	3.20	4	5	ND	2	23	.2	2	2	60	.17	.068	7	25	.71	61	.10	2	3.12	.01	.04	1	1
L9E 4+75N	1	17	10	46	.1	12	6	361	2.45	2	5	ND	1	25	.4	2	2	52	.18	.030	6	17	.36	72	.09	2	2.32	.02	.03	1	2
L9E 4+50N	1	26	8	39	.1	14	8	309	3.34	6	5	ND	2	23	.2	2	2	65	.17	.056	6	23	.44	45	.11	2	2.84	.01	.04	2	2
STANDARD C/AU-S	19	61	39	135	7.5	72	32	1093	4.00	41	19	7	38	52	17.0	14	18	57	.49	.094	38	59	.88	185	.09	32	1.90	.06	.15	11	45

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
L9E 4+25N	1	23	9	66	.1	17	9	413	3.44	2	5	ND	2	21	.2	2	2	65	.16	.087	5	27	.42	61	.10	3	3.33	.01	.04	1	1
L9E 4+00N	1	11	2	55	.1	8	5	479	1.75	4	5	ND	1	26	.2	2	2	41	.21	.033	6	15	.27	69	.07	2	1.61	.01	.03	3	1
L9E 3+75N	1	21	11	62	.1	12	8	970	2.41	2	5	ND	1	25	.2	2	2	52	.22	.057	6	18	.38	76	.07	2	2.14	.01	.04	1	2
L9E 3+50N	1	28	7	72	.1	16	10	345	3.82	2	5	ND	3	21	.2	2	2	73	.18	.085	6	25	.50	73	.12	4	3.97	.01	.05	1	2
L9E 3+25N	1	41	13	58	.1	26	12	933	3.26	9	5	ND	3	28	.2	3	2	68	.22	.073	8	31	.72	106	.14	3	3.45	.01	.07	1	1
L9E 3+00N	1	14	4	47	.1	12	7	507	2.23	4	5	ND	2	27	.2	2	2	50	.21	.042	6	17	.34	86	.08	2	1.99	.01	.05	1	1
L9E 2+75N	1	17	5	64	.1	12	8	1206	2.48	8	5	ND	2	29	.2	2	2	51	.22	.089	5	19	.38	138	.08	2	2.21	.01	.05	1	2
L9E 2+50N	1	38	25	249	.1	14	9	445	2.45	2	5	ND	1	26	.7	2	2	48	.20	.082	5	22	.39	86	.08	2	2.43	.01	.04	1	3
L9E 2+25N	1	28	4	65	.2	23	13	598	3.90	7	5	ND	3	26	.2	3	2	72	.20	.143	7	29	.58	89	.11	2	3.66	.01	.05	1	2
L9E 2+00N	1	10	11	44	.1	9	7	426	2.05	2	5	ND	1	29	.2	2	2	48	.21	.042	5	14	.38	70	.09	2	1.37	.01	.04	1	4
L9E 1+75N	1	25	3	62	.1	17	10	382	3.03	6	5	ND	2	26	.2	2	2	62	.18	.057	6	23	.42	88	.11	2	3.02	.01	.04	1	2
L9E 1+50N	1	24	3	55	.1	18	10	500	2.94	2	5	ND	1	28	.2	2	2	61	.20	.056	5	22	.52	127	.11	2	2.86	.01	.05	1	2
L9E 1+25N	1	25	4	59	.1	23	10	758	2.69	2	5	ND	2	28	.2	3	2	58	.21	.079	6	25	.62	109	.11	2	3.17	.01	.05	1	3
L9E 1+00N	1	17	5	70	.1	18	10	574	2.54	2	5	ND	1	31	.3	2	2	50	.26	.087	6	21	.52	116	.09	2	2.53	.01	.06	3	5
L9E 0+75N	1	17	8	69	.1	12	8	492	2.37	4	5	ND	2	32	.2	2	2	46	.26	.144	6	18	.43	135	.09	3	1.95	.01	.05	1	5
L9E 0+50N	1	13	8	63	.1	11	8	1543	2.09	5	5	ND	1	32	.2	2	2	42	.32	.085	6	16	.34	147	.09	2	1.43	.01	.05	1	3
L9E 0+25N	1	17	9	38	.1	14	11	1211	2.11	3	5	ND	1	39	.2	2	2	45	.37	.041	14	15	.57	108	.10	2	1.47	.01	.04	2	5
L9E 0+00N	1	22	6	77	.1	13	8	287	3.04	2	5	ND	1	30	.4	2	2	66	.21	.023	5	19	.40	77	.13	2	1.80	.01	.03	1	6
L10E 5+00N	1	12	10	55	.1	9	6	443	2.60	3	5	ND	2	21	.2	2	2	52	.18	.070	5	18	.25	59	.07	2	1.86	.01	.04	1	2
L10E 4+75N	1	20	8	64	.1	13	7	474	2.74	2	5	ND	2	21	.2	2	2	55	.17	.044	6	21	.34	70	.07	2	2.80	.01	.04	1	1
L10E 4+50N	1	34	2	54	.1	16	10	816	2.89	2	5	ND	1	21	.4	2	2	59	.17	.068	5	20	.50	72	.08	2	2.34	.01	.04	1	2
L10E 4+25N	1	11	8	41	.1	10	5	240	2.16	5	5	ND	1	21	.4	2	2	50	.17	.048	5	17	.27	47	.07	2	1.75	.01	.03	1	3
L10E 4+00N	1	12	7	45	.1	6	6	952	1.87	2	5	ND	1	26	.2	2	2	44	.24	.054	6	11	.32	71	.07	2	1.19	.01	.04	4	4
L10E 3+75N	1	25	22	43	.2	13	7	404	2.45	7	5	ND	1	23	.2	2	2	53	.19	.056	7	17	.43	82	.09	2	1.91	.01	.04	1	3
L10E 3+50N	1	26	7	84	.1	22	11	285	3.76	4	5	ND	2	22	.2	2	2	68	.16	.075	6	28	.55	87	.09	2	3.91	.01	.05	1	1
L10E 3+25N	1	10	7	37	.1	7	4	284	1.80	3	5	ND	1	25	.2	2	2	42	.23	.052	6	10	.25	75	.06	2	1.25	.01	.04	1	1
L10E 3+00N	1	19	10	68	.1	18	11	323	3.30	6	5	ND	2	25	.2	2	2	67	.19	.076	5	22	.41	107	.08	2	2.98	.01	.05	1	5
L10E 2+75N	1	7	5	30	.1	6	6	479	1.14	2	5	ND	1	29	.2	2	2	30	.23	.016	6	9	.24	74	.09	2	.84	.01	.03	6	3
L10E 2+50N	1	27	8	60	.1	19	12	389	3.47	2	5	ND	2	24	.2	2	2	70	.18	.052	7	24	.56	94	.11	2	2.84	.01	.04	2	4
L10E 2+25N	1	8	6	27	.1	7	5	610	1.70	5	5	ND	1	27	.2	2	2	44	.25	.027	6	10	.22	76	.09	2	1.00	.01	.04	1	3
L10E 2+00N	1	28	7	49	.2	18	11	430	2.81	6	5	ND	2	27	.3	2	2	58	.21	.063	12	22	.50	72	.12	2	2.65	.01	.05	1	3
L10E 1+75N	1	21	5	63	.1	15	10	3368	2.31	4	5	ND	1	32	.2	2	2	49	.27	.058	6	20	.49	192	.08	2	1.79	.01	.05	1	1
L10E 1+50N	1	16	2	47	.1	15	9	343	3.41	3	5	ND	2	25	.3	2	2	68	.19	.050	6	19	.38	84	.11	2	2.28	.01	.04	1	3
L10E 1+25N	1	11	5	47	.1	13	7	581	2.36	2	5	ND	1	29	.2	2	2	54	.23	.055	7	16	.37	90	.10	2	1.78	.01	.04	2	2
L10E 1+00N	1	8	5	37	.1	8	5	294	1.94	3	5	ND	1	28	.2	2	2	47	.22	.043	6	12	.27	85	.10	2	1.32	.01	.04	3	4
L10E 0+75N	1	12	7	39	.1	14	7	495	2.28	6	5	ND	1	29	.2	2	2	53	.22	.038	5	15	.37	82	.09	2	1.84	.01	.04	1	2
STANDARD C/AU-S	20	62	36	134	7.3	74	32	1115	3.98	41	18	7	38	52	17.0	14	20	59	.49	.096	39	60	.89	185	.09	33	1.88	.05	.14	11	47

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
L10E 0+50N	1	7	7	42	.1	8	7	816	1.62	2	5	ND	1	25	.2	2	2	34	.21	.039	5	14	.23	88	.07	2	.86	.01	.04	1	5
L10E 0+25N	1	14	11	46	.1	14	8	442	2.60	2	5	ND	1	24	.2	2	2	52	.20	.062	5	20	.43	117	.08	2	1.71	.01	.05	1	2
L10E 0+00N	1	12	5	37	.1	11	6	266	2.34	2	5	ND	1	26	.2	2	2	49	.20	.019	5	18	.38	108	.08	2	1.55	.01	.04	1	1
L11E 5+00N	1	14	3	38	.1	11	7	405	2.50	4	5	ND	1	19	.3	2	2	51	.15	.038	5	18	.34	44	.08	2	1.86	.01	.02	1	3
L11E 4+75N	1	19	25	37	.2	11	7	641	2.35	4	5	ND	1	22	.2	2	2	46	.17	.061	5	18	.34	84	.07	2	1.74	.01	.03	1	1
L11E 4+50N	1	9	9	28	.2	9	4	376	2.11	2	5	ND	1	23	.2	4	2	51	.23	.032	4	15	.30	48	.07	2	1.16	.01	.04	1	2
L11E 4+25N	1	11	6	42	.1	7	5	567	2.43	5	5	ND	1	19	.2	2	2	50	.16	.085	4	16	.24	59	.06	2	1.40	.01	.03	1	1
L11E 4+00N	1	5	8	12	.1	3	2	106	1.21	2	5	ND	1	17	.2	2	2	34	.15	.016	4	9	.11	20	.07	2	.63	.01	.02	1	1
L11E 3+75N	1	8	10	36	.1	12	5	270	1.78	2	5	ND	1	22	.2	2	2	40	.20	.034	4	17	.42	66	.07	2	1.86	.01	.03	1	1
L11E 3+50N	1	6	10	31	.1	7	4	323	1.87	2	5	ND	1	19	.2	2	2	45	.17	.039	4	11	.25	56	.07	2	1.26	.01	.02	1	1
L11E 3+25N	1	25	18	66	.2	20	12	477	3.81	8	5	ND	2	17	.2	3	2	64	.15	.094	5	27	.46	82	.10	2	3.56	.01	.04	1	3
L11E 3+00N	1	18	6	58	.1	12	8	523	2.66	8	5	ND	1	19	.2	2	2	51	.15	.144	4	20	.36	59	.06	2	2.16	.01	.04	1	130
L11E 2+75N	1	12	8	28	.1	7	4	162	2.06	4	5	ND	1	20	.2	2	2	47	.17	.041	4	12	.23	45	.07	2	1.39	.01	.03	1	9
L11E 2+50N	1	14	6	51	.1	9	6	388	2.05	2	5	ND	1	20	.2	2	2	47	.17	.057	5	14	.37	70	.06	2	1.70	.01	.03	1	2
L11E 2+25N	1	36	2	49	.1	19	10	321	2.99	4	5	ND	1	22	.2	2	2	60	.18	.064	8	25	.63	72	.12	2	2.68	.01	.04	1	2
L11E 2+00N	1	6	5	22	.1	6	3	219	1.45	2	5	ND	1	22	.2	2	2	36	.18	.014	4	10	.18	53	.07	2	.79	.01	.03	1	5
L11E 1+75N	1	18	9	63	.1	15	9	500	2.82	2	5	ND	1	23	.2	2	2	52	.17	.082	5	23	.41	81	.09	2	2.53	.01	.04	3	1
L11E 1+50N	1	7	4	25	.1	6	4	348	1.87	2	5	ND	1	24	.2	2	2	45	.21	.027	5	12	.26	44	.09	2	1.18	.01	.03	1	1
L11E 1+25N	1	16	10	49	.1	13	8	296	2.50	3	5	ND	1	25	.2	2	2	48	.20	.038	5	19	.40	82	.07	2	2.08	.01	.04	1	1
L11E 1+00N	1	29	12	50	.1	20	10	383	3.29	7	5	ND	2	21	.2	4	2	61	.16	.054	5	24	.50	76	.11	2	3.31	.01	.03	1	1
L11E 0+75N	1	13	7	48	.1	10	6	409	2.19	2	5	ND	1	23	.2	2	2	44	.20	.110	5	15	.34	73	.07	2	1.57	.01	.04	1	1
L11E 0+50N	1	14	8	43	.1	12	11	511	2.47	2	5	ND	1	26	.2	2	2	48	.19	.033	5	17	.42	76	.07	2	1.68	.01	.03	1	52
L11E 0+25N	1	21	7	48	.1	19	38	1649	2.57	2	5	ND	1	29	.3	2	2	49	.27	.041	15	19	.42	111	.09	2	2.98	.02	.04	1	3
L11E 0+00N	1	14	3	36	.1	14	9	435	2.71	2	5	ND	1	26	.2	2	2	56	.21	.027	6	18	.47	82	.09	2	1.85	.01	.04	1	2
L12E 5+00N	1	25	4	68	.1	17	10	550	3.23	5	5	ND	1	22	.2	2	2	63	.18	.078	5	27	.50	79	.11	2	3.17	.01	.03	1	13
L12E 4+75N	1	18	9	66	.1	12	7	443	3.03	2	5	ND	1	22	.3	2	2	58	.19	.055	5	21	.33	74	.07	2	2.41	.01	.03	1	1
L12E 4+50N	1	10	8	31	.1	8	5	229	1.97	2	5	ND	1	27	.2	2	2	45	.20	.025	5	13	.35	56	.09	2	1.31	.01	.02	1	1
L12E 4+25N	1	11	8	33	.2	9	4	162	2.03	2	5	ND	1	24	.2	2	2	46	.19	.036	5	13	.23	59	.05	2	1.26	.01	.03	1	1
L12E 4+00N	1	29	6	52	.1	19	10	462	2.91	3	5	ND	2	20	.3	2	2	56	.18	.065	6	23	.56	64	.09	2	2.61	.01	.03	1	1
L12E 3+75N	1	5	6	14	.1	4	2	117	1.34	2	5	ND	1	20	.2	2	2	39	.15	.022	4	8	.19	26	.08	2	.75	.01	.02	1	1
L12E 3+50N	1	12	7	36	.1	8	5	165	2.38	5	5	ND	1	18	.2	2	2	51	.14	.033	5	16	.24	39	.08	2	2.10	.01	.02	1	1
L12E 3+25N	1	17	9	48	.1	12	6	206	3.02	3	5	ND	1	20	.4	2	2	59	.16	.085	5	20	.39	60	.07	2	2.69	.01	.03	1	3
L12E 3+00N	1	18	9	54	.1	14	7	273	3.22	2	5	ND	1	21	.2	2	2	62	.17	.059	5	22	.36	64	.08	2	2.52	.01	.02	1	1
L12E 2+75N	1	19	8	43	.1	10	6	330	2.55	4	5	ND	1	20	.3	2	2	52	.13	.052	5	16	.32	50	.09	2	1.93	.01	.02	1	1
L12E 2+50N	1	30	8	49	.1	16	8	337	3.01	5	5	ND	2	21	.3	2	2	58	.15	.064	6	24	.49	66	.11	2	2.87	.01	.04	1	1
L12E 2+25N	1	16	9	49	.1	9	8	242	2.42	3	5	ND	1	17	.2	3	3	47	.14	.053	5	15	.21	57	.08	2	2.10	.01	.03	1	1
STANDARD C/AU-S	19	61	40	138	7.5	71	32	1094	3.95	42	18	7	37	52	17.0	15	19	57	.49	.092	37	60	.88	182	.09	34	1.88	.06	.13	11	45

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
L12E 2+00N	1	15	7	52	.1	11	6	415	2.56	2	5	ND	1	26	.2	2	2	55	.25	.048	6	18	.32	72	.07	2	2.05	.01	.03	1	6
L12E 1+75N	1	28	3	68	.1	22	12	338	3.76	2	5	ND	2	23	.2	2	2	70	.19	.069	6	29	.61	91	.14	2	3.56	.01	.04	1	4
L12E 1+50N	1	12	7	28	.1	10	6	189	4.15	12	5	ND	2	26	.2	2	2	97	.20	.033	4	17	.28	59	.13	2	1.48	.01	.04	1	8
L12E 1+00N	1	29	2	23	.1	10	7	186	3.64	2	5	ND	2	23	.2	2	2	79	.15	.025	11	21	.26	93	.05	2	3.13	.01	.02	1	3
L12E 0+75N	1	12	9	33	.1	10	8	563	2.96	4	5	ND	1	31	.2	2	2	69	.27	.016	6	16	.30	195	.10	2	1.56	.01	.03	1	1
L12E 0+50N	1	11	6	34	.1	7	7	505	2.13	6	5	ND	1	35	.2	2	2	58	.37	.020	7	12	.30	120	.08	2	1.20	.01	.03	1	2
L12E 0+25N	2	41	2	46	.3	18	15	436	2.84	2	5	ND	2	29	.2	2	2	56	.29	.027	13	25	.53	98	.12	2	3.03	.01	.04	1	4
L12E 0+00N	2	30	2	49	.2	25	25	1091	4.23	2	5	ND	1	30	.2	2	2	73	.31	.033	16	31	.41	146	.12	4	4.46	.02	.04	1	1
L13E 3+50N	1	4	6	9	.1	6	3	120	.60	4	5	ND	1	26	.2	2	2	23	.20	.005	7	8	.18	74	.04	2	.95	.01	.02	1	2
L13E 3+00N	1	4	9	10	.1	4	3	146	.72	4	5	ND	1	38	.2	2	2	26	.29	.010	7	5	.15	84	.05	2	.51	.01	.02	1	1
L13E 2+75N	1	9	6	36	.1	8	6	217	2.63	5	5	ND	1	27	.2	2	2	68	.25	.029	4	13	.48	58	.09	2	1.65	.01	.04	1	1
L13E 2+50N	1	12	7	36	.1	8	5	187	2.39	5	5	ND	1	22	.3	2	2	52	.17	.032	4	14	.25	45	.08	2	1.69	.01	.03	1	5
L13E 2+25N	1	15	6	51	.1	10	7	308	2.89	2	5	ND	2	22	.2	2	2	59	.17	.090	6	20	.37	52	.09	2	2.15	.01	.03	1	1
L13E 2+00N	1	5	4	24	.1	6	4	174	1.63	2	5	ND	1	23	.2	2	2	44	.19	.057	5	10	.16	38	.09	2	1.19	.01	.02	1	3
L13E 1+75N	1	13	7	68	.1	8	6	189	2.79	5	5	ND	2	22	.2	2	2	57	.18	.083	5	17	.28	48	.08	2	1.94	.01	.03	1	3
L13E 1+50N	1	24	2	59	.1	22	13	462	3.24	2	5	ND	2	26	.2	4	2	66	.26	.047	9	26	.58	93	.09	2	2.89	.01	.05	1	2
L13E 1+25N	1	16	7	75	.1	10	8	485	2.66	7	5	ND	2	27	.2	3	2	55	.25	.213	6	19	.38	104	.06	2	1.93	.01	.03	1	2
L13E 1+00N	1	27	3	72	.1	17	8	612	2.96	5	5	ND	2	25	.2	3	2	59	.20	.108	6	23	.49	79	.08	2	2.21	.01	.04	1	1
L13E 0+75N	1	15	2	63	.1	11	8	928	2.17	4	5	ND	1	30	.2	2	2	48	.27	.060	6	17	.41	149	.07	2	1.57	.01	.03	1	6
L13E 0+50N	1	15	4	56	.1	15	11	657	2.90	2	5	ND	1	38	.5	2	2	56	.36	.028	9	19	.39	112	.11	2	1.76	.01	.05	1	4
L13E 0+25N	1	12	6	49	.1	10	8	593	2.51	3	5	ND	1	32	.2	2	2	53	.26	.030	5	16	.33	118	.08	2	1.41	.01	.04	1	1
L13E 0+00N	2	37	4	44	.2	22	15	501	3.20	7	5	ND	1	33	.2	4	2	65	.39	.024	10	23	.75	113	.11	3	2.52	.01	.04	1	4
L14E 2+00N	1	23	2	63	.1	15	11	863	3.23	3	5	ND	2	26	.2	3	3	63	.24	.083	6	23	.38	116	.08	2	2.40	.01	.05	1	3
L14E 1+75N	1	24	4	81	.1	27	14	964	3.51	6	5	ND	1	31	.8	2	2	69	.30	.082	5	34	.66	146	.07	2	3.41	.01	.08	1	1
L14E 1+50N	2	16	2	50	.1	16	13	1036	2.62	2	5	ND	1	33	.4	2	2	57	.27	.021	14	20	.47	111	.07	2	2.01	.01	.04	1	4
L14E 1+25N	1	18	2	52	.1	20	11	406	4.08	4	5	ND	1	31	.2	2	2	83	.28	.030	5	28	.54	104	.11	2	2.80	.01	.04	1	1
L14E 1+00N	1	10	2	41	.1	8	5	233	2.13	4	5	ND	1	29	.3	2	2	49	.24	.045	6	14	.24	62	.05	2	1.31	.01	.04	1	3
L14E 0+75N	1	16	6	60	.1	16	10	1035	2.68	3	5	ND	1	30	.7	2	2	56	.27	.075	6	22	.63	104	.07	2	2.04	.01	.04	1	3
L14E 0+50N	1	32	5	76	.2	28	14	546	3.23	2	5	ND	2	25	.7	3	2	64	.21	.041	6	29	.67	139	.09	2	3.36	.01	.05	1	1
L14E 0+25N	1	15	2	75	.1	13	9	965	2.71	6	5	ND	1	30	.2	2	2	54	.28	.116	6	21	.43	222	.08	2	1.78	.01	.05	1	40
L14E 0+00N	1	17	8	45	.1	18	9	417	2.87	2	5	ND	2	30	.6	3	2	66	.27	.026	5	21	.54	103	.08	2	2.11	.01	.05	1	3
STANDARD C\AU-S	20	62	40	135	7.3	72	32	1109	3.99	42	20	7	39	52	17.0	15	22	60	.49	.091	39	60	.88	186	.09	34	1.89	.06	.15	11	47

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
M-91-1 L0+75E 3+25N	2	17	6	19	.1	11	3	148	.96	2	5	ND	2	11	.2	2	2	12	.04	.007	2	10	.38	92	.07	2	.47	.01	.07	1	12
M-91-2 L0E 3+50N	1	38	2	18	.1	7	3	223	1.11	2	5	ND	1	59	.2	3	2	30	1.39	.057	3	7	.47	114	.08	4	1.31	.05	.10	1	11
M-91-3	3	11	2	4	.1	12	9	3233	.37	2	5	ND	1	4	.2	2	2	10	.09	.002	2	7	.03	43	.01	2	.11	.01	.02	1	3

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

GEOCHEMICAL ANALYSIS CERTIFICATE

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708 - 543 Granville St., Vancouver BC V6C 1X8

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
L0E 6+00N	1	29	11	41	.1	17	10	489	2.58	10	5	ND	2	23	.3	2	2	54	.20	.066	9	24	.56	79	.11	3	2.13	.01	.04	1	3
L0E 5+75N	1	26	7	41	.1	18	10	372	2.51	2	5	ND	3	24	.2	2	2	55	.19	.052	8	24	.54	54	.12	2	2.26	.01	.04	1	5
L0E 5+50N	1	25	12	62	.2	15	10	476	3.15	6	5	ND	3	22	.2	4	2	66	.20	.093	7	24	.40	81	.10	2	2.68	.01	.05	1	4
L0E 5+25N	1	21	16	44	.1	18	10	446	3.17	2	5	ND	2	24	.2	2	2	63	.19	.087	6	22	.47	80	.09	2	2.63	.01	.04	1	3
L0E 5+00N	1	26	13	39	.1	17	10	410	2.98	2	5	ND	2	27	.3	2	2	64	.21	.042	6	24	.56	79	.14	2	2.10	.01	.03	1	8
L0E 4+75N	1	35	10	54	.2	12	7	976	2.17	2	5	ND	2	30	.3	2	2	48	.27	.076	5	16	.34	203	.08	2	1.60	.01	.05	1	4
L0E 4+50N	1	11	11	39	.1	9	7	320	2.28	2	5	ND	2	24	.3	2	2	48	.22	.057	5	15	.30	89	.08	2	1.46	.01	.03	1	2
L0E 4+25N	1	21	10	46	.1	14	9	1054	2.40	7	5	ND	1	29	.2	4	2	51	.23	.077	5	19	.45	83	.09	2	1.83	.01	.03	1	8
L0E 4+00N	1	12	13	65	.1	7	5	535	1.68	2	5	ND	1	27	.2	2	2	38	.28	.095	5	12	.18	99	.07	4	.87	.01	.05	3	6
L0E 3+75N	1	8	6	33	.1	8	5	411	1.85	3	5	ND	1	24	.2	2	2	44	.21	.063	4	13	.23	74	.07	4	1.15	.01	.03	2	1
L0E 3+50N	1	13	9	31	.1	9	6	988	2.34	2	5	ND	1	21	.2	2	2	53	.18	.058	5	16	.32	76	.10	2	1.88	.01	.03	1	3
L0E 3+25N	1	31	17	67	.1	25	18	2629	2.62	8	5	ND	2	33	.4	2	2	55	.26	.108	9	26	.70	175	.10	3	2.66	.01	.04	1	4
L0E 3+00N	1	9	12	32	.1	12	7	910	1.89	2	5	ND	1	30	.4	2	2	42	.26	.032	5	16	.38	114	.07	2	1.17	.01	.05	1	62
L0E 2+75N	1	10	9	37	.1	9	7	1568	1.92	2	5	ND	1	29	.2	2	2	43	.27	.028	5	13	.27	185	.08	2	.93	.01	.04	1	2
L0E 2+50N	1	31	13	49	.1	19	10	637	2.69	6	5	ND	1	22	.7	2	2	59	.20	.040	5	24	.77	126	.13	2	2.28	.01	.04	1	1
L0E 2+25N	1	11	8	32	.1	12	10	398	1.96	2	5	ND	1	29	.2	2	2	44	.24	.022	5	16	.36	108	.09	2	1.11	.01	.04	5	5
L0E 2+00N	1	19	12	41	.1	18	11	998	2.63	7	5	ND	1	30	.2	2	2	55	.22	.067	7	23	.51	139	.12	2	2.49	.01	.04	1	31
L0E 1+75N	1	20	8	40	.1	18	10	544	2.64	2	5	ND	2	30	.2	2	2	53	.24	.042	9	23	.61	138	.11	2	2.29	.01	.05	1	10
L0E 1+50N	1	10	8	32	.1	12	8	706	2.03	2	5	ND	1	30	.2	2	2	39	.24	.051	8	15	.32	132	.08	2	1.34	.01	.03	1	4
L0E 1+25N	1	21	11	47	.1	19	10	476	2.58	2	5	ND	2	24	.2	2	2	52	.20	.051	10	21	.41	128	.12	2	2.47	.01	.05	1	2
L0E 1+00N	1	10	6	54	.1	14	8	693	2.35	2	5	ND	2	26	.2	2	2	44	.23	.133	7	18	.40	171	.08	2	1.72	.01	.04	1	24
L0E 0+75N	1	17	9	54	.1	16	9	2171	2.47	2	5	ND	1	28	.3	2	2	47	.25	.128	7	19	.50	211	.09	2	1.85	.01	.05	1	1
L0E 0+50N	1	12	5	60	.1	14	9	995	2.06	2	5	ND	2	30	.2	2	2	40	.26	.110	6	17	.39	238	.09	2	1.67	.01	.05	1	1
L0E 0+25N	1	21	9	50	.1	21	10	1017	2.76	3	5	ND	1	34	.2	2	2	55	.32	.103	9	23	.55	230	.12	2	2.14	.01	.06	1	2
L0E 0+00N	1	28	13	46	.1	22	11	459	2.97	3	5	ND	2	30	.3	2	2	66	.24	.058	11	26	.55	154	.15	2	3.02	.02	.04	1	6
L1E 0+500N	1	9	16	22	.1	5	3	229	1.60	2	5	ND	1	25	.2	2	2	39	.22	.019	4	10	.11	92	.06	2	.57	.01	.04	1	3
L1E 0+475N	1	16	12	32	.1	11	7	418	2.76	2	5	ND	1	26	.2	2	2	58	.19	.054	6	19	.35	65	.09	2	1.83	.01	.03	1	1
L1E 0+450N	1	21	12	43	.1	13	8	381	2.84	2	5	ND	2	23	.2	2	2	58	.17	.084	6	19	.34	71	.08	2	2.16	.01	.04	1	3
L1E 0+425N	1	9	5	23	.1	6	5	483	1.40	2	5	ND	1	23	.3	2	2	33	.16	.018	4	10	.23	56	.08	2	.73	.01	.03	2	1
L1E 0+400N	1	7	5	18	.1	5	5	289	1.25	2	5	ND	1	27	.2	2	2	34	.22	.015	9	9	.18	68	.07	2	.63	.01	.02	1	1
L1E 0+375N	1	11	10	37	.1	9	7	1623	1.92	4	5	ND	1	25	.2	2	2	42	.19	.050	6	15	.24	90	.07	2	.96	.01	.03	1	2
L1E 0+350N	2	21	12	33	.1	16	10	336	2.94	3	5	ND	2	23	.3	2	2	64	.16	.028	7	19	.51	77	.11	2	2.52	.01	.03	1	1
L1E 0+325N	1	12	13	70	.2	8	8	1702	2.12	2	5	ND	2	29	.2	2	2	43	.24	.067	7	17	.26	170	.07	2	1.37	.01	.04	1	1
L1E 0+300N	1	11	6	37	.1	9	7	773	2.26	2	5	ND	1	27	.2	2	2	52	.26	.041	5	17	.38	109	.09	2	1.18	.01	.04	1	1
L1E 0+275N	1	9	13	54	.1	6	6	2173	1.68	2	5	ND	1	30	.3	2	2	37	.27	.069	5	12	.24	194	.06	2	.88	.01	.04	3	1
L1E 0+250N	1	13	10	41	.1	13	8	467	2.29	2	5	ND	1	28	.2	2	2	47	.21	.046	5	17	.41	80	.10	2	1.81	.01	.04	1	1
STANDARD C/AU-S	19	63	42	134	7.2	72	32	1092	3.97	37	15	7	37	51	19.0	18	20	57	.49	.090	37	58	.88	183	.09	34	1.94	.06	.14	13	50

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: SOIL AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: FEB 4 1991 DATE REPORT MAILED: Feb 8/91

SIGNED BY..... 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
L1E 0+225N	1	9	2	51	.1	10	8	735	2.20	2	5	ND	1	28	.2	2	2	44	.24	.080	6	16	.37	157	.08	3	1.46	.01	.04	1	4
L1E 0+200N	1	13	7	64	.1	14	9	707	2.42	2	5	ND	2	31	.2	3	2	46	.27	.139	7	21	.51	171	.08	2	1.82	.01	.05	1	2
L1E 0+175N	1	16	5	65	.1	12	10	2080	2.41	2	5	ND	1	23	.2	2	2	42	.20	.269	11	19	.30	209	.07	2	1.88	.01	.03	1	2
L1E 0+150N	1	18	3	49	.1	18	10	476	3.28	3	5	ND	2	29	.2	2	2	63	.24	.074	8	25	.58	122	.12	3	2.53	.01	.05	1	5
L1E 0+125N	1	2	4	27	.2	10	7	759	1.78	2	5	ND	1	32	.2	2	2	41	.23	.021	6	15	.36	136	.09	2	1.32	.01	.03	1	13
L1E 0+100N	1	13	5	42	.1	11	8	975	3.06	2	5	ND	1	30	.2	2	2	62	.23	.077	6	18	.39	120	.08	4	1.43	.01	.04	1	3
L1E 0+075N	1	8	9	29	.1	8	6	1189	1.86	2	5	ND	1	34	.2	2	2	40	.30	.039	5	13	.26	164	.08	3	.99	.01	.05	1	2
L1E 0+050N	1	6	6	28	.1	8	7	1543	1.73	3	5	ND	1	29	.2	2	2	37	.24	.041	5	14	.30	124	.08	2	.79	.01	.03	1	4
L1E 0+025N	1	10	3	28	.1	12	7	426	1.91	2	5	ND	1	29	.2	2	2	42	.22	.044	4	16	.45	83	.10	3	1.26	.01	.03	1	7
L1E 0+000N	1	16	3	30	.1	13	8	507	2.31	2	5	ND	1	34	.3	2	2	50	.28	.048	6	18	.46	85	.11	2	1.55	.01	.03	1	5
L3E 5+00N	1	5	3	32	.1	7	6	820	1.69	2	5	ND	1	25	.2	2	2	38	.19	.037	5	13	.23	48	.08	2	.87	.01	.03	1	33
L3E 4+75N	1	32	12	51	.1	20	12	654	3.12	7	5	ND	2	25	.3	4	2	60	.21	.087	11	28	.59	81	.11	2	2.89	.01	.04	1	4
L3E 4+50N	1	13	8	41	.1	14	8	506	2.61	2	5	ND	1	31	.2	3	2	56	.26	.050	5	22	.48	58	.10	2	1.87	.01	.03	1	2
L3E 4+25N	1	28	3	47	.1	24	12	413	3.24	2	5	ND	1	34	.5	2	2	68	.25	.035	6	28	.72	81	.14	2	2.97	.01	.05	1	5
L3E 4+00N	1	14	6	35	.1	12	7	290	2.56	3	5	ND	2	31	.2	4	2	55	.20	.033	8	19	.36	58	.11	2	1.61	.01	.03	1	6
L3E 3+75N	1	9	5	45	.1	11	8	250	3.75	4	5	ND	1	28	.2	2	2	71	.19	.067	6	21	.29	81	.09	2	2.08	.01	.03	1	4
L3E 3+50N	1	9	5	48	.2	9	6	263	2.19	2	5	ND	2	31	.2	2	2	47	.25	.029	6	15	.26	104	.07	2	1.45	.01	.04	1	2
L3E 3+25N	1	7	3	38	.2	8	6	193	2.50	3	5	ND	2	27	.2	3	2	52	.22	.065	7	16	.25	60	.10	2	2.02	.01	.03	1	2
L3E 3+00N	1	20	3	52	.1	14	12	430	2.74	2	5	ND	2	26	.2	2	2	49	.18	.098	8	21	.43	74	.11	2	2.82	.01	.04	1	2
L3E 2+75N	1	24	3	39	.1	17	9	402	2.73	5	5	ND	2	28	.2	4	2	54	.21	.059	6	23	.61	65	.11	2	2.39	.01	.04	1	29
L3E 2+50N	1	8	4	34	.1	7	4	205	2.18	2	5	ND	1	26	.2	2	2	44	.18	.052	5	15	.23	54	.08	2	1.45	.01	.03	2	2
L3E 2+25N	1	17	10	43	.1	11	7	357	2.53	4	5	ND	2	29	.2	3	2	54	.21	.084	5	19	.36	81	.10	2	2.12	.01	.04	1	4
L3E 2+00N	1	41	9	59	.1	14	8	243	3.63	7	5	ND	2	22	.3	4	2	70	.17	.160	6	26	.34	68	.13	2	3.59	.01	.04	1	2
L3E 1+75N	1	21	2	54	.2	12	9	528	3.29	2	5	ND	3	26	.6	2	2	59	.18	.167	7	23	.43	93	.10	3	2.53	.01	.05	1	11
L3E 1+50N	1	40	4	45	.1	19	10	389	3.22	10	5	ND	3	29	.2	4	2	69	.20	.066	10	28	.68	80	.16	3	3.03	.01	.04	1	8
L3E 1+25N	1	16	2	106	.1	11	10	1635	2.75	2	5	ND	2	29	.2	2	2	44	.19	.204	7	21	.34	235	.08	2	2.09	.01	.05	1	5
L3E 1+00N	1	15	4	48	.2	13	8	480	2.38	2	5	ND	1	33	.2	2	2	50	.25	.038	6	18	.43	134	.11	3	1.76	.01	.05	1	1
L3E 0+75N	1	17	2	61	.1	14	8	840	2.60	2	5	ND	1	30	.2	2	2	49	.27	.093	6	19	.47	210	.09	2	1.78	.01	.05	1	3
L3E 0+50N	1	14	3	95	.1	18	10	413	3.06	2	5	ND	2	28	.4	2	2	62	.26	.034	6	19	.39	152	.13	3	2.07	.01	.05	1	2
L3E 0+25N	1	17	4	90	.2	25	44	894	3.51	4	5	ND	2	22	.2	2	2	50	.18	.051	10	19	.16	210	.11	2	3.18	.01	.03	1	1
L3E 0+00N	1	15	4	59	.1	15	11	823	2.97	2	5	ND	1	27	.3	2	2	53	.24	.102	6	20	.45	173	.10	4	1.69	.01	.04	1	1
L4E 5+00N	1	31	5	39	.1	17	9	350	3.16	2	5	ND	2	26	.3	4	2	64	.18	.045	9	24	.54	62	.13	2	2.66	.01	.03	1	5
L4E 4+75N	1	24	4	53	.1	19	10	470	3.41	9	5	ND	2	25	.3	4	2	65	.17	.114	5	25	.47	61	.10	2	3.54	.01	.03	1	2
L4E 4+50N	1	8	3	26	.1	9	4	551	1.65	2	5	ND	1	32	.2	2	2	41	.21	.033	5	14	.32	52	.08	2	1.38	.02	.03	1	8
L4E 4+25N	1	34	2	49	.1	20	12	383	3.35	5	5	ND	2	30	.5	3	2	66	.20	.050	7	28	.67	53	.14	5	2.98	.01	.03	4	5
L4E 4+00N	1	16	2	50	.1	12	7	450	2.61	2	5	ND	2	32	.2	2	2	51	.22	.108	7	19	.37	82	.06	2	1.84	.01	.04	1	4
STANDARD C/AU-S	19	63	37	134	7.4	72	31	1094	3.97	40	18	7	37	52	19.0	15	21	57	.49	.093	38	59	.88	184	.09	33	1.93	.06	.15	13	48

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
L4E 3+75N	1	13	2	28	.3	11	9	212	2.67	7	5	ND	2	22	.8	3	2	58	.15	.025	4	16	.42	61	.09	5	1.77	.01	.02	1	26
L4E 3+50N	1	23	2	37	.2	14	11	317	3.14	5	5	ND	3	24	.8	2	2	60	.19	.031	6	19	.50	60	.10	5	2.00	.01	.02	1	1
L4E 3+25N	1	16	2	28	.1	14	16	461	2.52	4	5	ND	1	24	.8	2	3	58	.17	.021	13	16	.47	51	.12	2	1.62	.01	.02	1	2
L4E 3+00N	1	10	2	38	.1	8	7	204	2.41	2	5	ND	1	22	.5	2	2	50	.17	.034	5	14	.28	68	.08	2	1.51	.01	.02	1	2
L4E 2+75N	1	13	2	24	.1	7	6	148	2.40	4	5	ND	1	20	.6	2	2	57	.13	.022	4	16	.29	40	.08	2	1.63	.01	.01	1	5
L4E 2+50N	1	14	2	28	.1	9	6	225	2.00	4	5	ND	1	24	.4	2	2	48	.16	.038	4	15	.37	40	.09	2	1.51	.01	.02	1	1
L4E 2+25N	1	30	3	47	.1	12	9	465	2.58	2	5	ND	2	19	.8	2	2	49	.13	.123	6	20	.40	56	.09	2	2.45	.01	.02	1	6
L4E 2+00N	1	21	2	49	.1	11	8	406	2.69	2	5	ND	1	20	.4	2	2	53	.14	.151	5	16	.39	66	.08	2	2.34	.01	.03	1	2
L4E 1+75N	1	22	2	56	.5	8	8	264	2.41	7	5	ND	4	15	.4	5	2	43	.12	.097	6	14	.38	71	.06	4	2.14	.01	.03	1	5
L4E 1+50N	1	42	6	52	.2	13	10	331	2.83	3	5	ND	2	20	.3	2	2	51	.15	.189	6	17	.51	94	.08	2	2.35	.01	.04	1	5
L4E 1+25N	1	39	2	49	.3	14	9	405	2.80	2	5	ND	2	20	.8	2	2	54	.17	.107	7	17	.42	121	.09	2	2.45	.01	.03	1	3
L4E 1+00N	1	26	10	59	.2	14	12	680	2.73	6	5	ND	2	21	.3	3	2	49	.18	.178	8	18	.42	177	.09	2	2.09	.01	.03	1	1
L4E 0+75N	1	40	3	51	.4	17	10	438	3.19	2	5	ND	4	21	.8	2	2	63	.15	.067	6	24	.56	124	.15	2	3.26	.01	.03	1	8
L4E 0+50N	1	19	2	38	.1	11	9	459	2.27	2	5	ND	1	23	.8	2	2	46	.19	.078	5	15	.37	144	.10	2	1.77	.01	.03	1	11
L4E 0+25N	1	22	2	48	.2	17	11	610	2.81	3	5	ND	2	23	1.0	2	2	60	.19	.042	7	20	.45	159	.12	5	2.70	.01	.04	1	5
L4E 0+00N	1	21	6	72	.2	17	13	542	3.22	2	5	ND	3	22	.5	2	2	60	.16	.047	6	21	.50	146	.15	3	3.03	.01	.04	1	1
L5E 5+00N	1	19	2	24	.1	9	11	212	1.67	2	5	ND	2	19	.4	2	2	37	.14	.027	9	16	.32	46	.10	2	2.33	.01	.02	1	1
L5E 4+75N	1	12	2	14	.3	5	7	123	1.72	2	5	ND	2	18	.3	2	2	39	.11	.021	6	11	.16	36	.07	2	1.67	.01	.02	1	3
L5E 4+50N	1	13	2	34	.4	6	7	182	3.07	6	5	ND	2	21	.5	3	2	60	.16	.045	5	15	.12	53	.07	2	1.71	.01	.03	1	5
L5E 4+25N	1	27	8	42	.3	15	10	417	2.65	2	5	ND	3	22	.4	2	2	53	.17	.056	8	26	.52	60	.10	3	2.02	.01	.03	1	1
L5E 4+00N	1	14	2	33	.1	6	5	159	1.79	3	5	ND	1	19	.8	2	2	41	.15	.035	4	13	.16	39	.06	2	1.35	.01	.02	1	1
L5E 3+75N	1	20	2	44	.2	13	8	302	2.41	2	5	ND	3	22	.4	3	2	48	.17	.078	6	17	.29	60	.07	2	1.71	.01	.02	1	2
L5E 3+50N	1	10	7	32	.4	7	5	200	2.12	4	5	ND	3	23	.3	3	2	44	.19	.087	5	14	.24	65	.08	3	1.33	.01	.03	1	1
L5E 3+25N	1	25	2	41	.2	17	11	268	2.85	2	5	ND	2	24	.4	2	2	57	.16	.048	6	20	.47	82	.12	2	2.23	.01	.03	1	5
L5E 3+00N	1	19	2	25	.1	8	7	147	2.48	2	5	ND	2	21	.7	2	2	56	.14	.022	7	16	.28	46	.10	2	1.92	.01	.02	1	1
L5E 2+75N	1	9	4	23	.5	11	8	168	1.68	3	5	ND	2	27	.9	4	2	48	.18	.013	6	17	.42	57	.09	2	1.32	.01	.02	1	5
L5E 2+50N	1	11	8	25	.5	7	6	147	2.12	2	5	ND	3	21	.7	2	2	55	.17	.030	5	15	.24	46	.10	4	1.41	.01	.02	1	14
L5E 2+25N	1	15	5	41	.3	10	7	609	2.19	2	5	ND	3	22	.5	2	4	46	.16	.067	5	16	.33	59	.08	2	1.82	.01	.03	1	1
L5E 2+00N	1	21	4	39	.5	9	9	228	3.21	7	5	ND	4	17	.7	2	2	61	.12	.079	5	20	.36	57	.11	4	2.54	.01	.02	1	4
L5E 1+75N	1	26	6	41	.3	12	8	235	2.81	2	5	ND	4	18	.3	2	2	55	.13	.110	5	20	.38	55	.10	3	2.67	.01	.03	1	4
L5E 1+50N	2	35	11	48	.2	13	9	276	4.03	4	5	ND	3	15	.7	2	3	70	.11	.071	6	24	.43	59	.13	2	2.97	.01	.03	2	5
L5E 1+25N	1	32	5	50	.3	12	9	418	2.99	3	5	ND	3	19	.5	2	2	58	.15	.081	6	19	.42	77	.07	4	2.20	.01	.03	1	5
L5E 1+00N	1	34	9	61	.2	12	11	473	3.22	2	5	ND	3	20	.5	2	7	61	.14	.099	6	21	.43	79	.13	2	2.77	.01	.03	3	4
L5E 0+75N	1	66	5	42	.5	14	9	302	2.71	2	5	ND	5	20	.9	2	2	59	.13	.046	6	22	.54	49	.15	4	2.67	.01	.03	1	4
L5E 0+50N	1	31	4	49	.1	12	8	445	2.08	2	5	ND	2	23	.2	2	2	43	.19	.071	6	14	.40	97	.07	2	1.91	.01	.04	1	15
L5E 0+25N	1	31	4	41	.4	10	7	294	2.14	2	5	ND	3	21	.4	3	4	46	.17	.057	6	15	.30	79	.09	2	1.81	.01	.04	1	1
L5E 0+00N	1	46	7	48	.1	16	11	330	2.66	2	5	ND	2	25	.8	2	2	53	.19	.055	10	21	.40	82	.14	5	2.35	.01	.04	1	3
STANDARD C/AU-S	21	61	40	135	7.3	72	32	1091	3.97	38	16	7	39	53	18.9	18	23	58	.49	.093	40	58	.88	187	.09	34	1.90	.07	.15	11	47

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
L6E 5+00N	1	18	7	41	.1	10	6	349	3.22	2	5	ND	1	21	.2	2	2	60	.14	.057	4	26	.31	40	.08	2	2.69	.01	.02	1	3
L6E 4+75N	1	11	4	36	.1	5	3	156	2.04	2	5	ND	1	23	.2	2	2	48	.16	.028	4	15	.17	41	.07	2	1.41	.01	.02	1	2
L6E 4+50N	1	14	3	46	.1	9	5	228	3.00	2	5	ND	1	21	.2	2	2	61	.15	.124	5	21	.24	52	.07	2	2.48	.01	.02	1	1
L6E 4+25N	1	15	3	43	.1	9	5	203	2.40	2	5	ND	1	26	.2	2	2	48	.19	.055	5	19	.29	54	.07	2	1.83	.01	.02	1	2
L6E 4+00N	1	18	5	47	.1	15	10	329	2.72	2	5	ND	1	23	.2	2	2	50	.16	.097	8	23	.48	43	.08	2	2.67	.01	.03	1	2
L6E 3+75N	1	18	6	41	.1	9	7	183	3.27	5	5	ND	1	22	.2	2	2	62	.17	.098	6	20	.26	55	.08	2	2.80	.01	.02	1	4
L6E 3+50N	1	19	5	53	.1	13	8	432	3.10	2	5	ND	2	25	.2	2	2	56	.18	.075	5	21	.47	66	.11	2	2.54	.01	.04	1	4
L6E 3+25N	1	21	4	51	.2	14	10	405	2.97	2	5	ND	1	34	.2	2	2	55	.24	.064	7	19	.50	79	.09	2	2.26	.01	.04	1	4
L6E 3+00N	1	28	5	64	.1	15	11	1134	2.79	2	5	ND	1	37	.2	2	2	57	.28	.064	10	19	.39	158	.12	2	2.70	.02	.07	1	6
L6E 2+75N	1	23	10	58	.1	18	10	964	2.84	2	5	ND	1	29	.2	2	2	57	.23	.093	8	24	.58	123	.12	2	2.60	.01	.03	1	3
L6E 2+50N	1	12	6	67	.1	11	9	809	1.93	2	5	ND	1	32	.2	2	2	40	.30	.049	6	16	.44	95	.09	2	1.67	.01	.04	1	1
L6E 2+25N	1	19	3	61	.1	16	10	698	2.69	2	5	ND	1	36	.2	2	2	56	.25	.067	7	22	.55	97	.10	2	2.67	.01	.04	1	2
L6E 2+00N	1	13	7	57	.1	15	10	768	2.24	2	5	ND	1	33	.2	2	2	46	.27	.048	8	22	.54	104	.11	2	2.07	.01	.02	1	2
L6E 1+75N	1	21	2	41	.1	14	8	476	2.87	2	5	ND	1	28	.2	2	2	58	.25	.040	5	20	.45	93	.11	2	1.75	.01	.03	1	4
L6E 1+50N	1	15	3	39	.1	18	9	272	3.27	2	5	ND	1	23	.2	2	2	64	.17	.028	6	21	.39	97	.12	2	2.28	.01	.03	1	1
L6E 1+25N	1	22	3	53	.1	15	8	624	3.16	2	5	ND	2	23	.2	2	2	61	.18	.081	7	22	.45	81	.10	2	2.42	.01	.03	1	4
L6E 1+00N	1	17	5	44	.1	9	6	394	2.60	5	5	ND	1	24	.2	2	2	48	.18	.146	5	17	.31	84	.07	2	1.55	.01	.03	1	95
L6E 0+75N	1	3	6	17	.1	3	2	355	1.31	2	5	ND	1	20	.2	2	2	34	.21	.023	4	9	.14	62	.09	2	.56	.01	.03	3	4
L6E 0+50N	1	17	4	47	.1	10	6	332	2.07	2	5	ND	1	23	.2	2	2	42	.19	.053	5	15	.37	92	.07	2	1.37	.01	.03	1	5
L6E 0+25N	1	15	9	60	.1	18	9	758	2.67	3	5	ND	1	27	.2	2	2	51	.20	.074	6	21	.47	137	.10	2	2.02	.01	.05	1	2
L6E 0+00N	1	13	6	57	.2	13	8	525	2.72	2	5	ND	1	26	.2	2	2	52	.21	.102	5	20	.47	115	.11	2	2.54	.01	.04	1	3
L7E 5+00N	1	7	2	24	.1	6	4	172	1.97	2	5	ND	1	25	.2	2	2	47	.17	.024	5	13	.30	32	.10	2	1.13	.01	.02	1	2
L7E 4+75N	1	6	11	21	.1	5	3	135	1.51	2	5	ND	1	25	.2	2	2	39	.21	.020	4	11	.23	39	.09	2	.76	.01	.03	1	1
L7E 4+50N	1	7	7	28	.2	6	4	226	2.36	2	5	ND	1	22	.2	2	2	53	.20	.058	4	14	.21	50	.08	2	1.38	.01	.03	2	1
L7E 4+25N	1	13	7	53	.1	12	7	245	3.33	2	5	ND	1	24	.2	2	2	64	.17	.046	5	19	.34	79	.08	2	2.24	.01	.03	1	2
L7E 4+00N	1	8	6	37	.1	6	4	447	2.17	3	5	ND	1	22	.2	2	2	45	.17	.086	5	12	.20	56	.07	2	1.39	.01	.03	1	1
L7E 3+75N	1	11	5	34	.1	9	5	485	1.89	2	5	ND	1	27	.2	2	2	42	.21	.031	6	14	.32	61	.08	2	1.45	.01	.03	1	3
L7E 3+50N	1	8	6	32	.1	6	5	446	1.92	2	5	ND	1	26	.2	2	2	43	.19	.023	5	14	.23	40	.09	2	1.22	.01	.02	1	2
L7E 3+25N	1	13	7	41	.1	11	7	402	2.70	2	5	ND	1	29	.2	2	2	54	.20	.052	5	17	.36	70	.09	2	2.39	.01	.03	1	1
L7E 3+00N	1	11	6	38	.1	9	5	233	2.01	2	5	ND	1	30	.2	2	2	44	.21	.041	6	14	.33	63	.09	2	1.80	.01	.03	1	4
L7E 2+75N	1	12	6	40	.1	11	11	236	2.49	3	5	ND	1	27	.2	2	2	55	.18	.026	6	17	.39	56	.10	2	1.93	.01	.03	1	4
L7E 2+50N	1	7	7	31	.1	6	4	200	1.98	2	5	ND	1	27	.2	2	2	47	.24	.048	5	12	.24	52	.09	2	1.27	.01	.03	1	5
L7E 2+25N	1	17	8	56	.1	15	8	1042	2.60	2	5	ND	1	27	.2	2	2	53	.21	.069	6	19	.45	114	.10	2	2.23	.01	.03	1	5
L7E 2+00N	1	33	12	44	.1	19	11	489	2.70	4	5	ND	2	27	.2	2	2	59	.23	.062	9	25	.71	66	.14	2	2.68	.01	.05	1	7
L7E 1+75N	1	28	11	52	.1	15	10	595	2.77	2	5	ND	1	28	.2	2	2	54	.23	.105	9	21	.50	78	.10	2	2.55	.01	.05	1	23
STANDARD C/AU-S	19	63	40	133	7.5	72	31	1090	3.95	39	17	7	37	54	18.7	15	20	56	.50	.091	37	58	.88	180	.09	33	1.90	.06	.14	13	48

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
L7E 1+50N	2	15	8	43	.2	11	10	258	3.82	4	5	ND	2	25	.3	3	2	77	.19	.053	7	27	.34	77	.12	2	2.27	.01	.03	1	3
L7E 1+25N	1	11	6	36	.1	10	9	440	2.60	3	5	ND	1	28	.2	2	3	54	.22	.021	5	17	.31	91	.08	2	1.48	.01	.02	1	1
L7E 1+00N	1	17	7	27	.1	13	9	263	2.79	4	5	ND	1	29	.4	2	6	64	.22	.016	8	18	.37	99	.11	5	2.11	.01	.03	1	4
L7E 0+75N	1	19	7	75	.3	13	9	739	2.67	6	5	ND	2	25	.3	2	2	47	.21	.135	6	19	.40	141	.08	5	1.83	.01	.04	1	3
L7E 0+50N	1	12	2	41	.1	9	6	244	2.37	2	5	ND	1	27	.2	2	2	44	.18	.052	6	15	.30	89	.09	2	1.43	.01	.02	1	3
L7E 0+25N	1	11	6	34	.1	7	8	1705	2.00	2	5	ND	1	27	.2	2	2	41	.20	.062	5	14	.26	102	.07	2	1.18	.01	.02	1	1
L7E 0+00N	1	12	7	52	.1	12	10	717	2.44	2	5	ND	1	27	.2	2	2	46	.23	.113	5	19	.47	124	.06	3	1.54	.01	.04	1	3
STANDARD C/AU-S	18	59	35	133	7.1	71	34	1063	3.95	39	19	7	39	52	18.5	14	20	55	.48	.090	38	56	.87	184	.09	32	1.87	.06	.14	13	49

APPENDIX 4

LIST OF REFERENCES

Massey,N.W.D. and S.J.Friday,1987.
Geology of the Chemainus River-Duncan Area,Vancouver Island (92 C 16;92 B 13).

Muller,J.E.,1985.
Geological Survey of Canada map 1553A.

17+00E

16+00E

15+00E

14+00E

13+00E

12+00E

11+00E

10+00E

9+00E

8+00E

7+00E

6+00E

5+00E

4+00E

3+00E

2+00E

1+00E

0+00E

ANOMALY "A"

ANOMALY "B"

0+00N

1+00N

2+00N

3+00N

4+00N

5+00N

N

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,380

0 100 200
Meters

ARBUTUS CLAIM

SCALE:	APPROVED BY:	DRAWN BY GM
DATE:		REVISED

MAGNETIC SURVEY

DRAWING NUMBER 3

VANCAL-10 1984

15+00E

10+00E

5+00E

0+00E

Claim Post 55/1E
Arbutus M.C.

Claim Post 55/0E
Arbutus M.C.

0+00N

1+00N

2+00N

3+00N

4+00N

5+00N

N

0 100 200
Meters

41 Soil Sample > 11 PPB Au

Soil Sample < 10 PPB Au

OLD RR GRADE

Access Road.

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,380

ARBUTUS CLAIM

SCALE:	APPROVED BY:	DRAWN BY GM
DATE:		REVISED

SOIL GEOCHEMISTRY - GOLD

DRAWING NUMBER 5