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GEOCHEMICAL REPORT
JOE MINERAL CLAIM
KAMLOOPS MINING DIVISION
LAT 51° 19.5'N LONG 119° 58.5'W
NTS 82M/5
OCTOBER, 1987

FILMED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,884

GEOCHEMICAL REPORT

JOE MINERAL CLAIM

KAMLOOPS MINING DIVISION

LATITUDE 51° 19.5'N NTS 82M/5W LONGITUDE 119° 58.5'W

By

LARRY OVINGTON AND BRYAN ELLIOTT
FOR
LARRY OVINGTON
OWNER AND OPERATOR

RECORD NO. 6400(10)

KAMLOOPS October 20, 1987

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

LIST OF REFERENCES

Woodcock, J.	Geochem Report (Assessment Report 3333) 1971
Vollo, Nels	Geochem, Geophysical Report, B.C. Group (Assessment Report 3716)
Vollo, Nels	Geochem, Geology Report B.C. Group (Assessment Report 4136) 1973
Woodjack, P.	Geochem, Geology Report, Bet Claims (Assessment Report 6202) 1977
Ministry of Mines	Preliminary Map No 56 Geology of the Adams Plateau-Clearwater Area 1984
Schiarrizza, P.	Geology of the Eagle Bay Formation between the Raft and Baldy Batholiths. 1985
Moraal, Dirk	Prospectors Report for Larry Ovington September 15, 1986

1.0 INTRODUCTION

The Joe Claim was first staked in October 1985 and then abandoned and restaked in October 1986. Interest in the area is based on massive sulphide showings along Birk Creek approximately 8 km to the northwest, and the Enargite showing approximately 3 km to the north. Reference (Preliminary Map No. 56) Geology of the Adams Plateau-Clearwater Area. The Enargite showing is on the same Fennel/Eagle Bay contact as the Joe Group of mineral claims. Massive sulphide in place and float found on the Joe Group in 1986 encouraged further work programmes on the property.

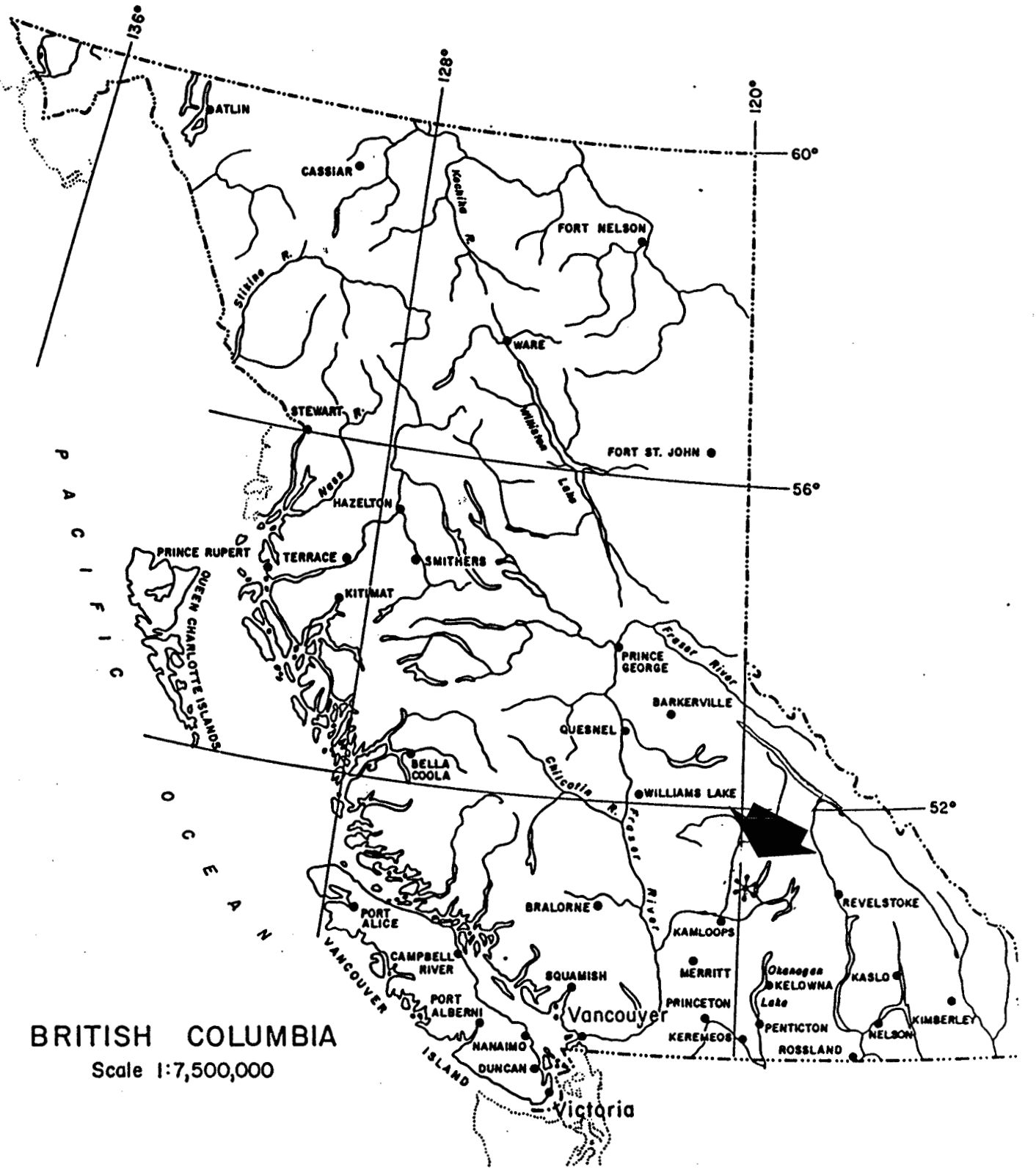
2.0 LOCATION AND ACCESS

The Joe Claim is located at the head of Slate Creek. Access is from the town of Barriere approximately 18 km to the northeast. Access from Barriere is along a paved road to the North Barriere Lake turnoff and then via good gravel logging road to the Birk Creek turnoff. From there a logging road can be followed to the head of Slate Creek which joins the Barriere River about 4 km below the outlet of North Barriere Lake.

The Joe Claim is on an easterly facing slope which has been extensively logged in past years. Heavy growth of buck brush and willows cover patches of spruce, balsam and cedar. Elevations vary from 1345m at the southeast corner to 1735m along the western boundary.

3.0 OWNERSHIP AND CLAIM STATUS

The claim is owned 100% by Larry Ovington of Kamloops, B.C. The Joe Group consists of one 20 unit block group staked under the modified grid system. The L.C.P. is located at UTM co-ordinates 229250m E and 5683650m N. Record Number is 6400(10). The Metal Tag No. is 106880.

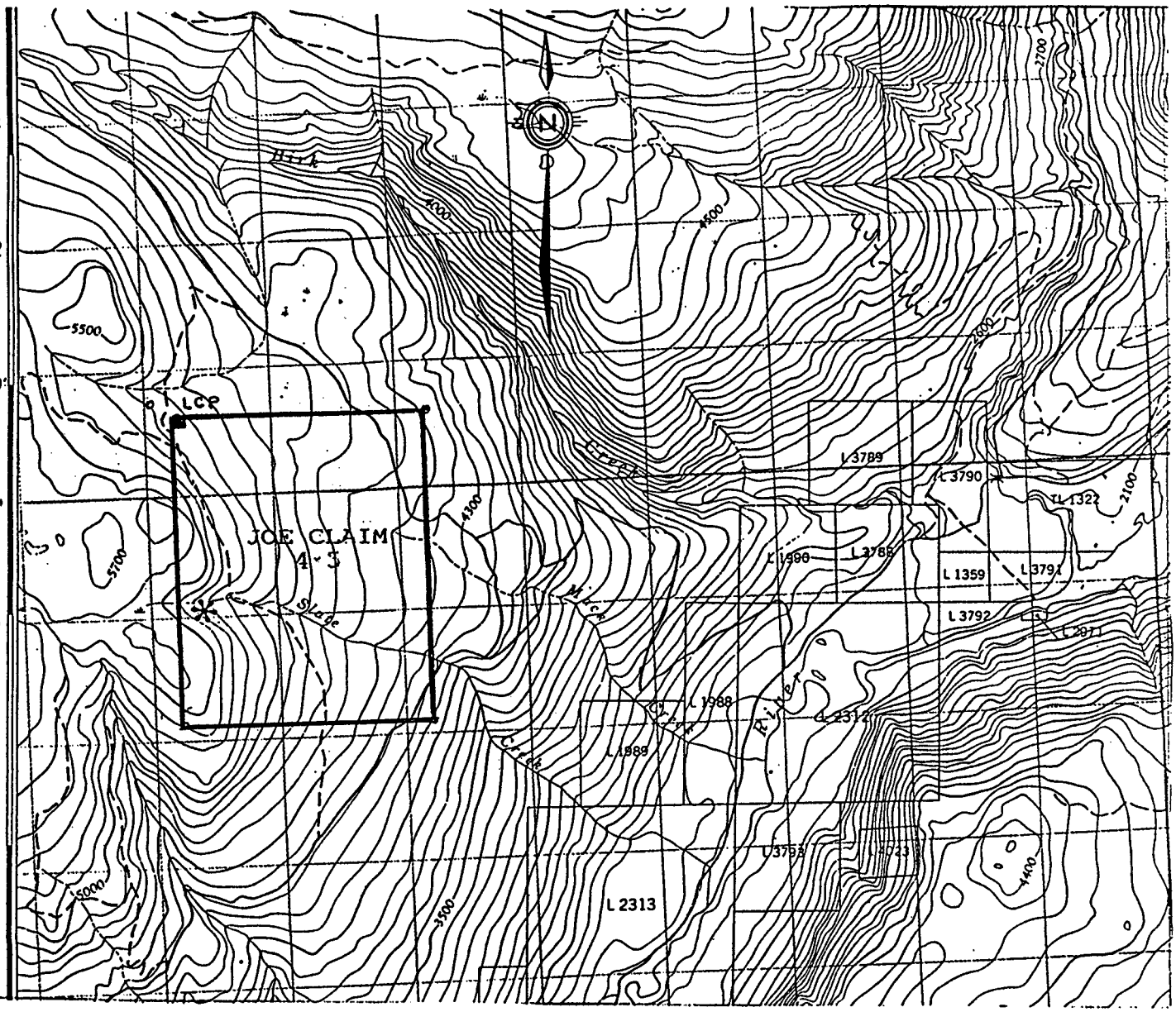


BRITISH COLUMBIA

Scale 1:7,500,000

N

LOCATION MAP	
Joe Mineral Claim Kamloops Mining Division NTS 82M/5	
Plate 1	
B.M.	October 1987



* AREA OF INTEREST

INDEX MAP
Joe Mineral Claim
Kamloops Mining Division
NTS 82M/5
Scale 1:50000

Plate 2

Four 2 post claims adjoin the Joe Claim on the west boundary. They are Flint #1, Flint #2, Pete #3 and Pete #5. The Record Numbers are 6702(7), 6703(7), 6707(7), 6709(7) respectively. The tag Numbers are 534957M, 534958M, 534159M, 534962M. The work described herein cover assessment work until October 24, 1989 on the Joe Claim and July 29, 1990 on the 2 post claims. These claims were grouped on October 16, 1987.

4.0 HISTORY AND PREVIOUS WORK

No assessment reports could be found at the Court House on this specific ground except the Prospectors Report by Dirk Moraal for Larry Ovington, September 1986. There have been numerous reports and drilling done on properties in the general area since 1951. Assessment reports dealing with results are noted in "List of References" II (See Table of Contents). There may be more results of work done on these properties which were never filed for assessment. The September 1986 Prospecting Report referred to covered geological mapping and a massive sulphide occurrence found on the Joe Claim.

5.0 SUMMARY OF WORK PERFORMED IN 1987

Based on the massive sulphide showing found in 1986 and the geology mapped in the immediate area, a soil programme was carried out to test the general area. By utilizing old roads and establishing a grid, a broad soil survey was done centering around the present area of interest. Samples were taken from the B horizon which in some cases was over a foot deep. Samples that were organic are marked on the geochemical map and in most instances were not assayed (except BL 1+30N).

Starting from the current area of interest (BL 0+00) the Base line was extended at 150° for 210 meters southerly (Base line 0+00 to BL 2+10 south) and again extended northerly for 160 meters (BL 0+00 to BL 1+60N). Stations were ribboned and numbered at 10 meter intervals and soils taken. Cross lines were put in at 90° to the base line at BL 0+00 and BL 0+40S. L 0+00 was extended 160 meters to the west. From station 0+00W to station 1+60W. Line 0+40S was run 110 meters easterly (From station 0+10E to station 1+10E). Also Line 0+40S was extended westerly 170 meters (From station 0+10W to station 1+70W). All stations were compassed, hip chained, flagged and numbered with soils taken at 10 meter intervals. The Base line 0+00 to BL 2+10S plus the crosslines 0+00 and L 0+40S were mostly thick buck brush and very hard to move about in. The soil was covered with thick moss and tightly tied together with roots making soil samples difficult to get. After breaking through the matrix of moss and roots we were able, with exception of a few organic samples, to get down to a good oxidized, brown B horizon. All the samples were put in brown Kraft envelopes, numbered and sent to Acme Analytical Laboratories Ltd. for 30 element ICP plus gold. Method of chemical analysis described on Geochemical Analysis Certificates. Soil samples were also taken along some old skid trails running roughly east west and roughly north south as they surround the grid area. These soils were numbered at Stations L1 to L12 and RD1 to RD29. The soils were taken at spots where a good B horizon could be obtained, rather than pre determined distances. The stations are numbered on flagging at such points and they are plotted to scale on the geochemical survey map. Again a hip chain and compass was used. Where rock in place was encountered the rock type, dip and strike were recorded and plotted on the map.

6.0 GEOLOGY

The massive sulphide showing and soil grid is basically in the general area of the contact between the Fennel volcanics and the Eagle

Bay sediments. The contact and assumed thrust fault runs approximately NNW and SSE near the area of I.D. Post 3 south. Diorite can be found in place to the west and the thrust fault appears to be highly altered chert on the eastern limit of the diorite. To the west of this, basically black shales, argillites, phyllites group cut with minor veins has been noted. Quartzite was found in place around L3 (See Geochem Survey Map). Chert float was noted near L6 and L7 area and near the BL 0+80N. This was not recorded on the map. The Fennel/Eagle Bay contact runs the entire length of the Joe Group of Claims (approximately 2500 meters).

7.0 RESULTS

The results of the geochemical survey outlined a broad area of multi-element responses. Gold and arsenic results were plotted on the geochemical map as they appeared to be the most consistently anomalous. In many cases silver, zinc, lead and copper were anomalous but were not plotted (See Geochemical Analysis Certificate). The survey was a success in the fact that the broad area surrounding the showing and to the east of the thrust fault and contact reflect the possibility of a massive sulphide deposit at depth.

8.0 RECOMMENDATIONS AND CONCLUSIONS

Contact zones and thrust faults of the Eagle Bay/Fennel Formations can produce mineral deposits. Thrust faults have produced mineral deposits nearby such as Chu-Chua, Dunn Mountain, Birk Creek and The Enargite. (See Geology of the Adams Plateau-Clearwater Area Preliminary Map No. 56).

The Joe Group of claims based on the work performed so far, has the possibility of producing a new mineral deposit. The following has been established so far, (1) the right type of geology, (2) contacts and thrust faulting, (3) a massive sulphide showing and (4) the presence of a large zone of multi-element anomalous soils. The next steps that would be considered appropriate are (1) to establish and soil sample fill in lines on the existing grid, (2) trench areas of highest values arising from step (1) and trench area of massive sulphide showing and (3) conduct a VLF-EM survey to define the structure below and trace the fault. The black shales dipping 40° to the west and the chert in place dipping about 40° to the east suggest a syncline which may have trapped the minerals giving the broad favorable soil assays received.

STATEMENT OF COSTS

109 soil plus 1 rock (30 element ICP) Acme Analytical Lab.	$ 1 212.25
11 soil plus 1 rock (30 element ICP) Acme Analytical Lab.	139.25
Shipping costs - Greyhound Bus Lines	24.60
Labour: September 15, October 3,4,5, 1987 (8 mandays x $150.00/day)	1 200.00
½ manday October 6, 1987 preparing & shipping samples	75.00
4x4 rental 4 days x $45.00	180.00
4 wheel all terrain vehicle (4 days x $25.00)	100.00
Gas/oil/supplies	155.00
Accommodation-Commercial-Barriere $50.00/day (2men-4days=8mandays)	400.00
Report Cost and typing (2 mandays x $150.00/day)	300.00
Map services for report - DBM Technical Services-Kamloops	230.00
Photocopying Map/Report	25.00
	4 041.10
15% Contingencies	606.16
Total Costs	$ 4 647.26

STATEMENT OF QUALIFICATIONS

I, Larry Ovington, of the City of Kamloops, in British Columbia, hereby state that:

1. I am a prospector and earn my living from the exploration and optioning of Mining Properties.

2. I have worked on various Mining Properties from 1958 to present both for myself and for other Mining Companies.

3. I have optioned at least 13 properties to Junior and Major Mining Companies

4. I have worked on large exploration programmes for Dr. Norman Keevil, Sherwin Kelly, P.Eng., Bill Pentland (Craigmont) and Morris Mathieu (Torwest Resources).

5. I am the sole owner and President of Whopper Holdings Ltd., a B.C. Incorporated company engaged in mineral exploration.

6. I am the Vice-President of Iota Explorations Ltd. a company exploring for precious metals in British Columbia.

7. This report is based on information gathered during the 1987 field season by myself and Bryan Elliott and the knowledge gathered from local experience and research. The work was done to comply with assessment requirements and to enhance the sale of the property.

8. I am the sole owner of the Joe Group of Mineral Claims.

L. Ovington

Larry Ovington

October 23, 1987

STATEMENT OF QUALIFICATIONS

I, Bryan Elliott, of the City of Kamloops, in British Columbia, hereby state that:

1. I am a Professional Prospector and have carried out my profession since 1973.

2. I am a graduate of British Columbia Department of Mines Explorations Course 1979, and have completed college courses in mineralogy and geology, 1978.

3. I have been employed in field supervisory positions for El Paso Mining and Milling, Teck Explorations, and Noranda Explorations. I have held the Exploration Manager position for Tugold Resources and Mary Creek Resources, and am currently President and Exploration Manager for Iota Explorations Ltd.

4. This report is based on information gathered during the 1987 field season, and opinions expressed reflect that knowledge and information gathered from local experience and research.

5. I have no interest either directly or indirectly in the Joe Group of claims.

Bryan Elliott

Bryan Elliott

October 23, 1987

APPENDIX "A"
ASSAY CERTIFICATES

ACME ANALYTICAL LABORATORIES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.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 CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: P1-SOIL P2-ROCK AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 15 1987 DATE REPORT MAILED: Sept 25/87 ASSAYER. D. Toye ..DEAN TOYE, CERTIFIED B.C. ASSAYER

WHOPPER HOLDINGS LTD. File # 87-4177 . Page 1

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
L1	2	74	13	113	.1	46	17	673	4.08	11	5	ND	2	22	1	2	2	69	.62	.026	11	62	1.06	309	.16	2	2.69	.01	.04	1	1
L2	2	58	10	113	.1	31	13	303	5.14	12	5	ND	1	9	1	2	2	86	.26	.028	11	67	.90	156	.23	2	2.96	.01	.03	1	1
L3	3	62	33	252	1.0	54	17	425	4.68	15	5	ND	1	16	1	4	2	77	.33	.025	12	62	.90	199	.21	2	2.67	.01	.03	1	6
L4	2	49	27	241	1.0	39	18	528	4.51	13	5	ND	1	21	1	2	3	71	.37	.047	12	61	.91	215	.15	2	3.16	.01	.04	1	4
L5	2	95	15	425	.5	108	25	1510	4.81	25	5	ND	1	50	2	6	2	68	.48	.038	12	61	.79	379	.17	2	3.27	.01	.04	1	19
L6	2	114	13	499	.1	230	36	854	4.73	31	12	ND	3	30	1	3	2	76	.56	.057	12	70	1.21	261	.18	5	2.26	.02	.06	1	8
L7	8	148	73	1423	.1	688	99	7658	11.80	105	5	ND	3	105	3	4	3	27	.24	.079	14	27	.30	569	.05	5	1.34	.01	.02	1	47
L8	34	743	37	2488	.4	540	96	1972	32.19	137	9	ND	1	24	9	3	2	52	.32	.050	9	47	.45	237	.09	3	1.52	.01	.03	1	12
L9	4	239	288	552	2.5	165	32	1367	9.14	215	5	ND	4	42	2	6	3	36	.17	.039	15	40	.39	296	.03	2	2.02	.01	.05	1	920
L10	5	221	2408	1154	3.4	54	37	571	9.28	429	5	ND	16	63	1	4	2	8	.15	.032	23	11	.08	186	.01	2	.45	.01	.04	1	1040
L11	14	284	4675	4975	2.6	218	39	10488	32.46	126	5	ND	5	103	13	5	2	30	.54	.191	16	18	.16	358	.01	4	.91	.01	.04	1	108
STD C/AU-S	18	56	35	132	6.8	63	26	955	3.93	35	21	7	36	47	16	18	20	55	.45	.079	35	55	.80	174	.06	31	1.91	.06	.13	11	48

APPENDIX "A"

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
L12	3	658	10	199	.4	43	24	276	3.76	2	5	ND	5	9	1	2	2	49	.85	.026	2	63	.91	43	.41	13	1.17	.06	.06	1	1

APPENDIX "A"

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEC. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE 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: P1-3 SOIL P4-ROCK AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: OCT 7 1987 DATE REPORT MAILED: ASSAYER.....DEAN TOYE, CERTIFIED B.C. ASSAYER

WHOPPER HOLDING IND. File # 87-4785 Page 1

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
RD-1	1	42	11	117	.5	29	12	346	3.50	16	5	ND	2	24	1	2	2	53	.81	.035	9	60	.67	232	.16	2	2.58	.03	.03	1	24
RD-2	1	50	12	82	.3	34	16	581	3.79	12	5	ND	2	21	1	3	2	69	.59	.031	10	58	.98	211	.19	2	2.28	.03	.03	1	8
RD-3	1	38	9	60	.3	23	10	356	3.54	5	5	ND	3	9	1	2	2	78	.25	.021	10	53	.66	184	.26	2	1.86	.03	.02	1	6
RD-4	1	53	12	91	.3	45	19	537	3.94	12	5	ND	3	15	1	2	2	70	.43	.028	10	63	1.06	212	.22	2	2.32	.03	.02	1	15
RD-5	2	249	200	651	.9	114	21	697	4.80	59	9	ND	5	23	1	2	2	67	.51	.035	12	71	1.16	278	.19	2	2.33	.03	.04	1	102
RD-6	2	132	108	420	.9	95	28	989	7.62	182	5	ND	3	43	2	8	2	40	.33	.047	13	35	.37	377	.03	2	1.35	.02	.01	1	610
RD-7	1	233	37	306	2.5	80	9	505	2.64	22	5	ND	2	50	3	2	2	31	.74	.039	10	40	.44	247	.15	3	2.99	.04	.03	1	64
RD-8	1	73	34	236	.6	72	21	840	4.60	45	5	ND	3	23	1	3	2	51	.20	.041	14	44	.56	223	.13	2	1.83	.02	.03	1	140
RD-9	6	179	79	982	1.0	167	35	441	10.02	272	5	ND	7	56	1	3	2	23	.11	.027	14	19	.13	358	.01	3	.77	.01	.02	1	280
RD-10	6	132	277	540	1.7	116	45	1833	5.46	153	5	ND	3	49	1	5	2	28	.23	.046	12	30	.28	287	.02	2	1.50	.01	.05	1	191
RD-11	2	63	75	263	1.6	33	10	686	2.48	86	5	ND	4	25	1	2	2	12	.10	.021	22	11	.11	117	.01	2	.54	.01	.01	1	210
RD-12	10	105	105	548	2.4	122	31	904	6.68	215	5	ND	4	32	2	2	2	20	.16	.092	25	16	.08	154	.01	2	.93	.01	.02	1	133
RD-13	1	49	12	118	.8	43	17	523	4.32	20	5	ND	3	10	1	2	2	74	.39	.038	9	71	1.07	117	.25	3	2.46	.03	.05	1	24
RD-14	2	42	29	137	1.2	34	13	715	4.59	42	5	ND	3	10	1	2	2	57	.21	.047	9	49	.58	97	.18	2	2.18	.02	.03	1	73
RD-15	1	45	16	95	1.4	37	12	495	4.60	33	5	ND	2	9	1	2	2	64	.23	.038	9	60	.81	95	.21	2	2.59	.02	.02	1	78
RD-16	1	45	7	85	.6	42	16	556	3.91	12	5	ND	3	10	1	2	2	73	.41	.033	9	62	1.08	123	.26	2	2.33	.03	.02	1	7
RD-17	1	41	9	111	.7	49	15	500	4.05	20	5	ND	2	10	1	2	2	71	.38	.041	8	65	1.00	87	.25	2	2.33	.03	.01	1	28
RD-18	1	31	6	84	.5	31	14	521	3.66	13	5	ND	2	9	1	2	2	71	.39	.040	8	57	.90	85	.26	2	2.07	.03	.02	1	6
RD-19	1	60	13	109	1.5	83	17	629	4.27	31	5	ND	2	42	1	2	2	59	.53	.049	11	59	.84	209	.17	2	2.61	.03	.01	1	49
RD-20	1	61	16	180	2.4	176	29	988	4.16	27	5	ND	3	40	1	2	2	57	.62	.044	10	66	1.04	220	.18	2	2.39	.03	.03	1	31
RD-21	1	35	8	116	1.0	59	18	418	3.87	14	5	ND	4	15	1	2	2	75	.42	.026	10	75	.93	121	.27	2	2.92	.03	.03	1	18
RD-22	1	51	18	104	1.3	93	23	635	4.34	33	5	ND	4	14	1	2	2	61	.32	.040	13	65	.88	173	.18	3	2.52	.03	.03	1	40
RD-23	1	47	22	98	2.4	97	20	650	3.89	30	13	ND	3	30	1	2	2	59	.54	.039	11	60	.92	179	.20	2	2.68	.03	.04	1	24
RD-24	1	72	92	172	2.8	93	22	1234	4.09	50	5	ND	2	55	1	2	2	49	.62	.055	10	49	.60	224	.11	2	2.13	.03	.05	1	51
RD-25	1	59	19	106	2.1	83	21	602	4.36	62	5	ND	3	35	1	2	2	56	.42	.053	12	54	.68	196	.11	2	2.40	.03	.02	1	109
RD-26	1	31	15	108	.6	44	13	484	4.32	72	5	ND	2	10	1	2	2	63	.20	.052	9	45	.53	124	.18	2	1.88	.02	.03	1	112
RD-27	1	107	23	151	3.0	146	18	2132	3.65	38	5	ND	2	71	1	2	2	38	.75	.079	10	45	.54	213	.08	2	2.19	.03	.05	1	38
RD-28	1	73	21	113	3.0	98	19	758	4.13	31	5	ND	3	39	1	2	2	55	.54	.034	12	56	.80	167	.16	2	2.09	.03	.05	1	32
RD-29	1	46	25	105	.9	52	14	577	4.19	31	5	ND	2	24	1	2	2	64	.30	.047	9	45	.49	172	.16	2	1.48	.02	.03	1	16
BL 1+60N	1	39	10	76	.5	37	14	574	3.70	9	5	ND	2	12	1	2	2	75	.43	.031	8	65	.95	152	.26	2	2.20	.03	.03	1	4
BL 1+40N	2	187	19	122	1.5	57	20	1430	4.76	11	5	ND	2	33	2	2	2	77	.86	.070	16	79	.66	436	.13	2	2.77	.04	.07	1	1
BL 1+30N	1	215	14	127	1.0	69	20	1153	4.80	15	5	ND	3	29	1	2	2	74	.75	.056	15	101	.84	470	.15	2	3.08	.04	.07	1	2
BL 1+20N	2	87	15	167	.9	38	14	841	3.63	14	5	ND	2	22	1	2	2	57	.52	.055	9	52	.69	199	.13	2	2.02	.03	.03	1	18
BL 1+10N	1	52	9	57	.5	23	7	309	3.31	9	5	ND	2	28	1	2	2	65	.35	.035	8	41	.45	148	.20	2	1.41	.03	.01	1	1
BL 1+00N	1	69	12	63	.8	25	9	477	2.76	7	5	ND	2	50	1	2	2	53	.79	.045	11	46	.51	227	.15	2	1.70	.03	.03	1	4
BL 0+90N	1	37	8	64	.1	19	8	338	3.64	6	5	ND	2	13	1	2	2	71	.23	.027	5	43	.38	175	.23	2	1.13	.02	.02	1	5
STD C/AU-S	18	59	37	130	6.8	67	26	1019	3.82	38	20	6	37	48	17	17	20	55	.47	.084	36	56	.84	173	.08	36	1.79	.08	.12	13	52

APPENDIX "A"

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
BL 0+80N	1	62	15	112	.5	31	11	1555	2.29	7	5	ND	2	50	2	2	2	42	1.77	.080	11	41	.50	325	.08	9	1.89	.03	.05	1	1
BL 0+70N	1	26	21	79	.3	17	6	286	3.18	7	5	ND	2	11	1	2	3	59	.15	.039	7	31	.25	127	.15	6	1.24	.02	.05	1	26
BL 0+60N	2	20	14	51	.4	9	3	136	2.87	4	5	ND	4	8	1	3	2	81	.14	.020	7	26	.20	85	.28	2	1.03	.02	.04	2	1
BL 0+50N	2	36	31	108	.5	21	7	234	3.97	9	7	ND	2	11	1	2	3	76	.15	.029	8	36	.33	146	.23	4	1.42	.02	.05	2	7
BL 0+40N	2	85	44	176	.9	40	13	740	4.12	15	5	ND	2	39	2	2	2	72	.37	.041	11	41	.42	240	.21	3	1.68	.03	.05	1	13
BL 0+30N	1	43	31	114	.1	24	8	273	4.08	15	7	ND	2	25	1	3	2	74	.29	.033	8	37	.30	167	.22	4	1.20	.02	.04	1	1
BL 0+20N	2	80	66	249	.8	65	17	840	4.46	40	5	ND	3	53	1	2	2	55	.58	.046	12	44	.50	271	.11	2	1.54	.02	.04	1	43
BL 0+10N	2	71	53	234	.6	53	18	985	4.73	35	5	ND	2	21	1	6	2	59	.40	.043	12	45	.50	178	.13	4	1.63	.02	.07	1	143
BL 0+00S	12	211	1267	3739	.8	273	45	7281	16.70	113	8	ND	17	72	13	7	2	19	.40	.127	22	8	.15	257	.01	4	.63	.01	.04	8	104
BL 0+10S	4	40	363	345	1.5	29	10	438	5.85	121	5	2	3	10	1	4	2	35	.06	.048	15	18	.10	107	.03	2	1.14	.01	.04	2	710
BL 0+20S	3	69	110	262	1.8	52	11	595	5.70	144	7	ND	2	22	1	6	2	36	.21	.097	14	18	.10	154	.04	4	.66	.02	.05	2	265
BL 0+30S	2	39	26	132	1.0	20	11	424	5.37	29	5	ND	2	8	1	2	2	43	.11	.056	12	23	.19	143	.09	6	1.41	.02	.04	1	62
BL 0+40S	2	38	30	158	1.0	18	9	534	4.39	29	5	ND	2	22	1	2	2	45	.31	.062	11	24	.29	201	.10	6	1.41	.02	.03	1	18
BL 0+50S	1	22	22	98	.9	15	8	378	3.62	13	8	ND	2	9	1	2	2	65	.15	.043	9	33	.38	98	.18	3	1.31	.02	.03	1	13
BL 0+60S	1	24	20	106	.8	14	7	285	3.50	11	5	ND	1	11	1	2	2	58	.18	.046	9	31	.27	144	.14	3	1.17	.02	.03	1	7
BL 0+70S	2	47	24	178	1.1	25	18	1985	3.46	29	5	ND	2	33	1	2	2	40	.41	.070	13	26	.25	305	.08	6	.98	.02	.05	1	27
BL 0+80S	1	63	29	182	.8	67	19	1010	3.98	29	5	ND	2	41	1	2	2	62	.46	.053	11	56	.79	254	.17	3	1.93	.03	.05	1	29
BL 0+90S	1	69	26	194	.6	51	11	897	2.48	18	5	ND	1	57	2	2	2	37	.70	.073	9	32	.42	216	.08	2	1.55	.03	.07	1	16
BL 1+00S	1	50	25	166	.8	55	12	280	3.27	29	5	ND	2	52	1	5	2	54	.61	.052	10	46	.66	219	.15	4	1.94	.03	.04	1	21
BL 1+30S	1	22	29	123	.5	22	8	423	3.52	37	5	ND	2	41	1	2	2	63	.51	.042	10	29	.29	206	.12	3	1.19	.03	.05	2	16
BL 1+40S	2	26	24	152	.5	25	9	685	3.71	48	5	ND	2	15	1	2	2	65	.21	.051	10	37	.39	166	.11	2	1.55	.02	.04	1	29
BL 1+50S	1	26	22	123	.5	28	10	450	3.77	41	5	ND	2	11	1	2	2	61	.23	.052	11	39	.45	125	.15	2	1.83	.02	.01	1	41
BL 1+60S	1	23	20	106	.8	25	9	486	3.59	39	5	ND	2	15	1	2	2	58	.25	.047	10	35	.43	119	.13	7	1.46	.02	.08	3	24
BL 1+70S	1	23	45	105	.6	21	9	640	3.70	31	5	ND	1	10	1	2	2	62	.15	.046	9	33	.32	120	.14	3	1.42	.02	.05	2	22
BL 1+80S	2	35	25	151	.5	47	12	423	4.16	54	5	ND	2	25	1	2	2	51	.40	.075	11	36	.49	135	.11	2	2.52	.02	.05	1	41
BL 1+90S	1	38	29	166	.8	46	17	1625	4.64	46	5	ND	2	26	1	2	2	47	.36	.112	11	34	.38	203	.08	3	1.75	.02	.07	1	38
BL 2+00S	1	26	26	96	..3	26	10	709	3.58	41	5	ND	1	10	1	2	2	57	.10	.045	10	25	.20	178	.10	3	1.24	.02	.03	1	28
BL 2+10S	1	18	20	88	.3	23	8	783	3.76	43	5	ND	2	9	1	2	2	59	.13	.052	11	30	.28	124	.13	3	1.38	.02	.03	1	46
LO+00 1+60W	2	58	18	133	.7	33	13	398	3.77	13	5	ND	3	46	2	2	2	76	.81	.034	11	52	.63	253	.23	3	2.92	.03	.04	2	2
LO+00 1+40W	2	36	15	100	.4	25	9	545	2.70	9	7	ND	2	30	1	3	2	50	.69	.061	9	34	.44	145	.13	4	1.83	.03	.07	2	3
LO+00 1+30W	3	30	10	105	.5	25	10	383	3.58	11	5	ND	2	21	1	2	2	72	.35	.039	8	37	.52	162	.24	8	2.42	.03	.04	1	4
LO+00 1+20W	2	36	14	282	.8	42	14	1088	3.41	13	5	ND	4	31	1	2	2	58	.62	.034	8	40	.64	275	.19	2	2.29	.03	.07	1	7
LO+00 1+10W	1	32	13	197	.2	30	15	1219	3.68	13	5	ND	2	28	1	2	2	69	.54	.033	9	43	.59	276	.21	2	2.01	.03	.01	1	4
LO+00 1+00W	2	46	19	152	.3	37	17	656	4.24	17	7	ND	4	21	1	2	2	79	.46	.037	10	54	.75	216	.25	8	2.16	.03	.04	1	17
LO+00 0+90W	2	72	70	314	1.0	66	21	1875	4.35	20	5	ND	3	41	2	2	2	66	.68	.052	12	45	.68	318	.17	2	2.55	.04	.05	1	6
LO+00 0+80W	3	195	220	589	2.0	154	34	3618	4.92	23	5	ND	1	67	7	2	2	55	.85	.094	15	51	.62	416	.09	8	2.89	.03	.05	4	15
STD C/AU-S	19	58	41	131	7.3	69	28	1006	3.98	41	7	7	40	52	18	18	22	61	.49	.089	39	63	.89	182	.09	35	1.85	.08	.16	13	51

APPENDIX "A"

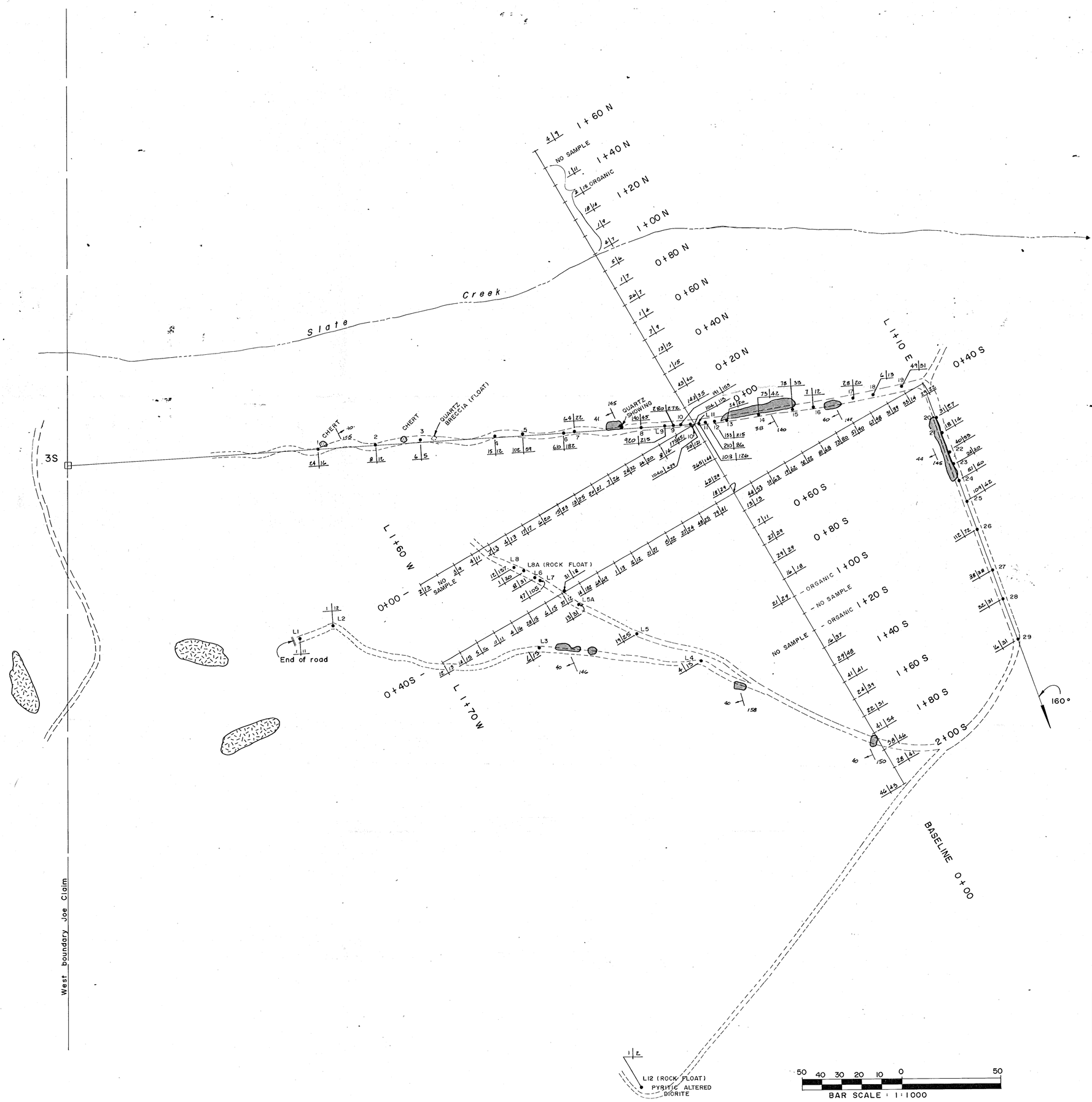
)PPE LDI ND. ILE '-47 Pa

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
L0+00 0+70W	2	74	59	426	.7	109	24	609	5.29	25	5	ND	3	16	1	2	2	67	.28	.037	11	59	.81	258	.18	2	2.74	.03	.05	1	13
L0+00 0+60W	1	61	146	243	2.1	59	13	401	4.01	21	5	ND	3	46	1	2	2	57	.52	.028	9	48	.71	278	.17	2	1.98	.03	.04	1	20
L0+00 0+50W	2	101	200	297	1.2	62	20	1430	3.98	26	5	ND	1	58	2	2	2	52	.48	.050	11	39	.50	317	.11	2	1.86	.03	.02	1	7
L0+00 0+40W	2	39	40	255	.3	43	11	478	3.99	32	5	ND	2	41	1	2	2	42	.30	.031	10	28	.33	176	.12	2	1.16	.02	.02	1	24
L0+00 0+30W	2	71	48	222	1.3	47	18	1095	3.97	20	5	ND	2	51	1	2	2	41	.33	.042	11	29	.27	187	.08	3	1.55	.02	.02	1	34
L0+00 0+20W	1	36	14	140	.4	37	12	376	3.98	14	5	ND	2	11	1	2	2	65	.16	.023	7	43	.56	149	.23	2	1.66	.02	.01	1	8
L0+00 0+10W	4	86	686	639	7.2	92	24	2676	5.34	55	5	ND	3	60	2	4	2	43	.48	.062	15	48	.61	191	.07	3	2.11	.03	.03	14	173
L0+00 1+70W	2	88	14	135	1.4	51	13	2083	3.17	13	5	ND	1	54	2	2	2	51	1.03	.095	10	52	.72	469	.07	2	2.62	.03	.05	1	12
L0+40S 1+60W	2	141	15	158	2.5	61	13	2205	2.83	15	5	ND	1	74	4	2	2	47	1.41	.118	12	51	.68	537	.05	3	2.53	.04	.05	1	14
L0+40S 1+50W	2	183	17	223	3.5	70	12	1864	2.77	16	5	ND	1	55	5	2	2	43	1.03	.101	10	46	.57	428	.05	3	2.36	.04	.03	1	5
L0+40S 1+40W	1	107	10	145	2.2	29	8	259	2.66	11	5	ND	1	57	3	2	2	35	.92	.047	9	31	.33	335	.09	2	1.53	.03	.02	1	11
L0+40S 1+30W	1	154	19	225	4.1	51	25	841	3.60	16	5	ND	3	33	3	2	2	47	.47	.051	13	42	.48	310	.12	2	2.42	.03	.03	1	4
L0+40S 1+20W	2	140	35	150	5.1	43	39	644	3.01	15	5	ND	2	30	3	2	2	43	.36	.066	11	36	.36	204	.06	2	2.00	.02	.03	1	28
L0+40S 1+10W	3	119	22	229	1.9	51	36	1742	3.15	15	5	ND	2	40	3	2	2	47	.32	.043	14	35	.38	190	.12	2	1.95	.02	.03	1	6
L0+40S 1+00W	2	198	10	254	1.9	73	21	995	2.82	12	5	ND	2	35	3	2	2	37	.32	.044	13	53	.45	165	.12	3	3.22	.02	.02	1	37
L0+40S 1+00WHP	6	100	7	522	.4	256	28	6861	3.45	18	5	ND	4	46	6	2	2	51	.42	.027	12	56	.82	498	.17	2	2.79	.03	.03	1	31
L0+40S 0+90W	14	108	6	1448	.3	502	60	21762	9.08	182	5	ND	3	61	8	2	2	43	.43	.069	15	49	.68	1114	.10	2	2.72	.02	.02	1	14
L0+40S 0+80W	7	153	34	823	1.3	311	40	5919	6.25	69	6	ND	3	75	5	2	2	46	.51	.056	14	48	.62	379	.10	2	2.53	.03	.03	1	64
L0+40S 0+70W	2	110	36	420	1.6	68	22	1749	3.88	13	5	ND	1	71	3	2	2	55	.49	.037	12	46	.56	262	.16	4	2.11	.03	.03	1	1
L0+40S 0+60W	2	56	15	279	.4	51	17	1037	3.70	12	5	ND	2	75	1	2	2	59	.56	.034	10	50	.79	281	.14	2	1.76	.03	.04	1	16
L0+40S 0+50W	2	62	14	249	.7	45	15	976	3.58	21	5	ND	1	56	1	2	2	55	.60	.037	7	42	.54	291	.14	2	1.77	.03	.03	1	21
L0+40S 0+40W	2	62	45	235	1.1	56	18	566	4.33	22	5	ND	2	23	1	2	2	69	.26	.024	9	57	.80	269	.19	2	2.26	.03	.03	1	15
L0+40S 0+30W	2	59	232	219	1.2	49	18	866	4.17	24	5	ND	2	40	1	2	2	67	.38	.039	10	53	.71	223	.17	2	1.97	.03	.03	1	27
L0+40S 0+20W	2	53	89	185	.8	36	17	999	3.87	25	5	ND	2	12	1	2	2	60	.18	.048	8	45	.53	170	.14	2	1.79	.02	.03	1	48
L0+40S 0+10W	2	47	57	181	.7	32	15	1165	4.23	41	5	ND	2	16	1	2	2	56	.18	.046	10	38	.46	192	.15	2	1.57	.02	.03	1	79
L0+40S 0+10E	3	33	21	149	.8	31	10	444	4.51	53	5	ND	2	8	1	2	2	45	.09	.054	11	22	.16	145	.08	3	.86	.01	.02	1	44
L0+40S 0+20E	3	29	25	145	.8	30	6	258	4.75	63	5	ND	1	8	1	2	2	37	.09	.077	11	21	.15	88	.04	2	1.00	.01	.02	1	59
L0+40S 0+30E	5	29	21	147	1.6	28	6	274	4.57	62	5	ND	1	6	1	2	2	34	.05	.082	10	17	.15	94	.04	2	1.29	.01	.03	2	19
L0+40S 0+40E	2	17	10	58	.3	15	4	165	2.78	22	5	ND	1	6	1	2	2	48	.14	.048	5	23	.17	57	.11	2	.88	.01	.01	1	52
L0+40S 0+50E	3	34	23	123	.3	35	5	174	3.74	68	5	ND	1	7	1	2	2	32	.02	.047	10	9	.06	64	.03	2	.61	.01	.01	1	81
L0+40S 0+60E	3	36	21	162	1.0	41	7	268	4.10	80	5	ND	1	9	1	3	2	31	.04	.080	12	14	.10	87	.02	2	.98	.01	.02	1	73
L0+40S 0+70E	3	29	13	116	1.0	28	8	528	4.09	40	5	ND	1	10	1	2	2	50	.19	.103	8	39	.43	97	.11	2	1.47	.02	.02	1	51
L0+40S 0+80E	2	34	22	100	1.0	25	7	376	3.97	48	5	ND	1	9	1	2	2	47	.13	.050	8	34	.27	104	.09	2	1.41	.02	.02	1	67
L0+40S 0+90E	1	32	14	94	1.0	27	7	395	3.44	39	5	ND	1	7	1	2	2	44	.14	.049	7	34	.39	120	.11	2	1.45	.02	.01	1	31
L0+40S 1+00E	1	15	14	51	.6	10	4	383	2.14	14	5	ND	1	10	1	2	2	54	.16	.055	4	18	.14	77	.12	2	.53	.02	.03	1	35
L0+40S 1+10E	1	84	13	157	2.2	171	22	783	3.54	22	5	ND	2	39	1	3	2	50	.54	.039	10	53	.91	201	.16	2	2.24	.03	.04	1	29
L5A	3	102	17	338	1.4	75	20	876	5.25	31	5	ND	3	27	1	4	2	65	.33	.041	10	65	.80	164	.19	3	2.60	.03	.01	1	13
STD C/AU-S	18	60	38	132	7.0	67	26	1030	3.88	38	21	7	37	49	17	17	20	55	.48	.084	36	59	.86	174	.08	38	1.80	.08	.12	13	51

APPENDIX "A"

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
L8A	4	99	16	1171	.3	251	46	3156	16.08	30	8	ND	3	21	3	2	2	51	.51	.028	<5	49	.91	398	.19	2	1.33	.05	.03	1	1

APPENDIX "A"



LEGEND

- ROAD
- CREEK
- CLAIM BOUNDARY
- GRID LINE — BASE LINE 150° – 330°, CROSS LINES 240°, USED HIP CHAIN AND COMPASS METHOD
- 19 — SOIL SAMPLE LOCATION & NUMBER RD 19. NOTE L8A & L12 ROCK FLOAT
- CHERT
- SHALES
- DIORITE
- 67 | 48 — Au ppb | As ppm

401W 142 — DIP 40° WEST, STRIKE 142°

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,884

JOE CLAIM

— GEOCHEMICAL SURVEY —

(GOLD/ARSENIC IN SOILS & ROCK)

KAMLOOPS MINING DIVISION
NTS 82M/5W

TECHNICAL WORK BY: LARRY OVINGTON , BRYAN ELLIOTT	SCALE : 1:1000
DRAWN BY: DBM TECHNICAL SERVICES	DATE : OCTOBER , 1987
REVISIONS :	PLATE NO. 3