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**GEOCHEMICAL
ASSESSMENT REPORT
ON THE
BORDER PROPERTY**

Greenwood Mining Division
NTS 82 E/2W
Latitude 49°01'N Longitude 118°52'W

OWNER: James Robertson
Midas Management Inc.
306-850 W. Hastings Street
Vancouver, B.C.
V6E 1E1

OPERATOR: Teck Corporation
600-200 Burrad Street
Vancouver, B.C.
V6C 3L9

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

22,115

S. Jensen
December 1991
Kamloops, B.C.

SUMMARY

The Border property consists of the Border 1 mineral claim totalling 18 units. The property is located adjacent to the United States border, roughly 7 kilometres west of Midway, B.C.

The 1991 program consisted of limited 1:10,000 scale mapping with limited concurrent rock sampling. In addition, one grid was constructed to facilitate soil coverage over the Brooklyn limestones. The purpose of the program was to test for an economic gold deposit, in either a Brooklyn magnetite skarn or Tertiary epithermal system. The aeromagnetic anomaly and favourable stratigraphy were the target of mapping and prospecting. The program was carried out between May 9 and June 19.

1991 mapping and prospecting failed to identify exposures of economic gold mineralization. A large portion of the property is underlain by unmineralized Tertiary volcanics. The thick Tertiary volcanics are commonly weakly magnetic and responsible for the aeromagnetic anomaly.

The soil survey, carried out on the 'Border' grid, failed to reveal anomalous precious metal zones.

RECOMMENDATIONS

No further work is recommended on the Border property at this time due to :

- 1) Lack of significant gold mineralization, near surface.
- 2) Lack of favourable skarn development within the Brooklyn limestone.
- 3) Lack of epithermal system development.

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1. INTRODUCTION

During 1991, a program consisting of grid soil sampling and limited geological mapping and rock sampling was carried out on the Border property. The program was designed to evaluate the potential for an economic gold deposit, in either Au-bearing magnetite skarns or epithermal systems.

Limited regional mapping and prospecting concentrated on the bullseye-type magnetic anomaly outlined on the government aeromagnetic map. Detailed mapping and limited rock sampling was concentrated within the favourable host stratigraphy for gold bearing magnetite skarn development.

This report describes the program and results.

2. LOCATION AND ACCESS (Figures 1, 2)

The Border mineral claim is located approximately 7 kilometres west of the town of Midway in southern British Columbia. The claim is located adjacent to the United States border with the Kettle River transecting the northeastern property area. The property is located on NTS map sheet 82E/2W, with an approximate property centre latitude and longitude of 49° 01'N and 118° 52'W, respectively.

The property is easily road accessible from Midway via well maintained gravel roads along the southern banks of the Kettle River. Secondary logging and ranch roads provide further access to the claim area.

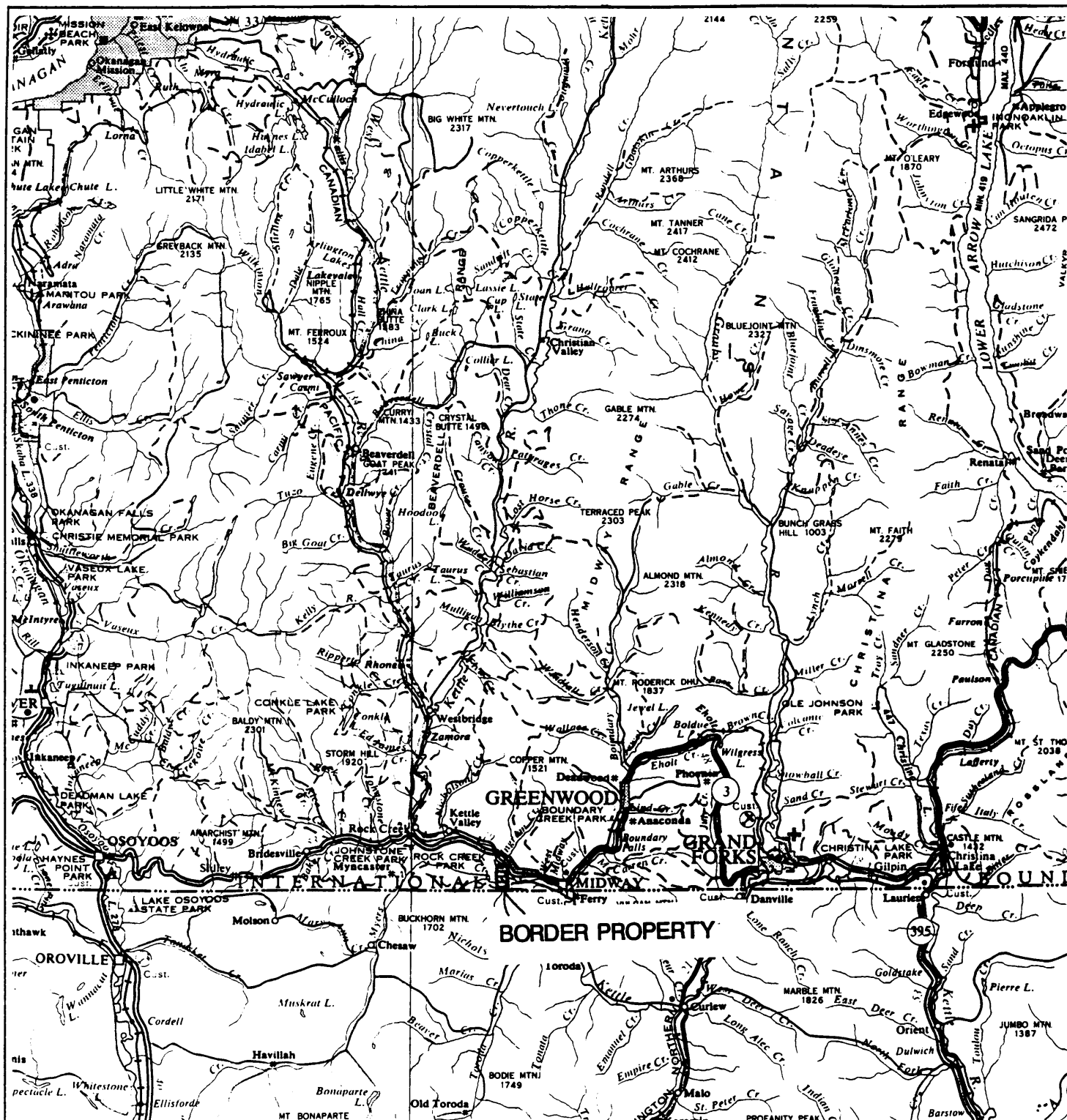
3. TOPOGRAPHY AND VEGETATION

Topography on the property is variable, ranging from gently rolling hills to steep rocky bluffs. Elevations range from 3437 feet (1048 metres) in the central claim area to 1950 feet (594 metres) in the northeastern property region along the Kettle River valley.

Vegetation is moderate to open and consists predominantly of mature spruce, pine and other mixed conifers. Underbrush is generally thin to moderate and consists mostly of grass with locally thick underbrush. A portion of the property area is open rangeland and used as pasture for cattle.



TECK EXPLORATIONS LTD	
LOCATION MAP	
BORDER PROPERTY	
SCALE : 1 : 1,000,000	FIGURE : 1



TECK EXPLORATION LTD

LOCATION MAP

BORDER PROPERTY

SCALE 1: 600,000

FIGURE 2

4. CLAIMS (Figure 3)

The property, located in the Greenwood Mining Division, consists of the 18 unit (\approx 450 hectares) Border 1 mineral claim. The claims are registered in the name of Teck Corporation held in trust for James Robertson. The following table lists all pertinent claim data.

TABLE 1
CLAIM RECORDS

Claim Name	Record No.	Units	Record Date	Expiry Date *
Border 1	215556	18	March 12, 1990	March 12, 1993

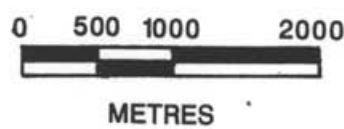
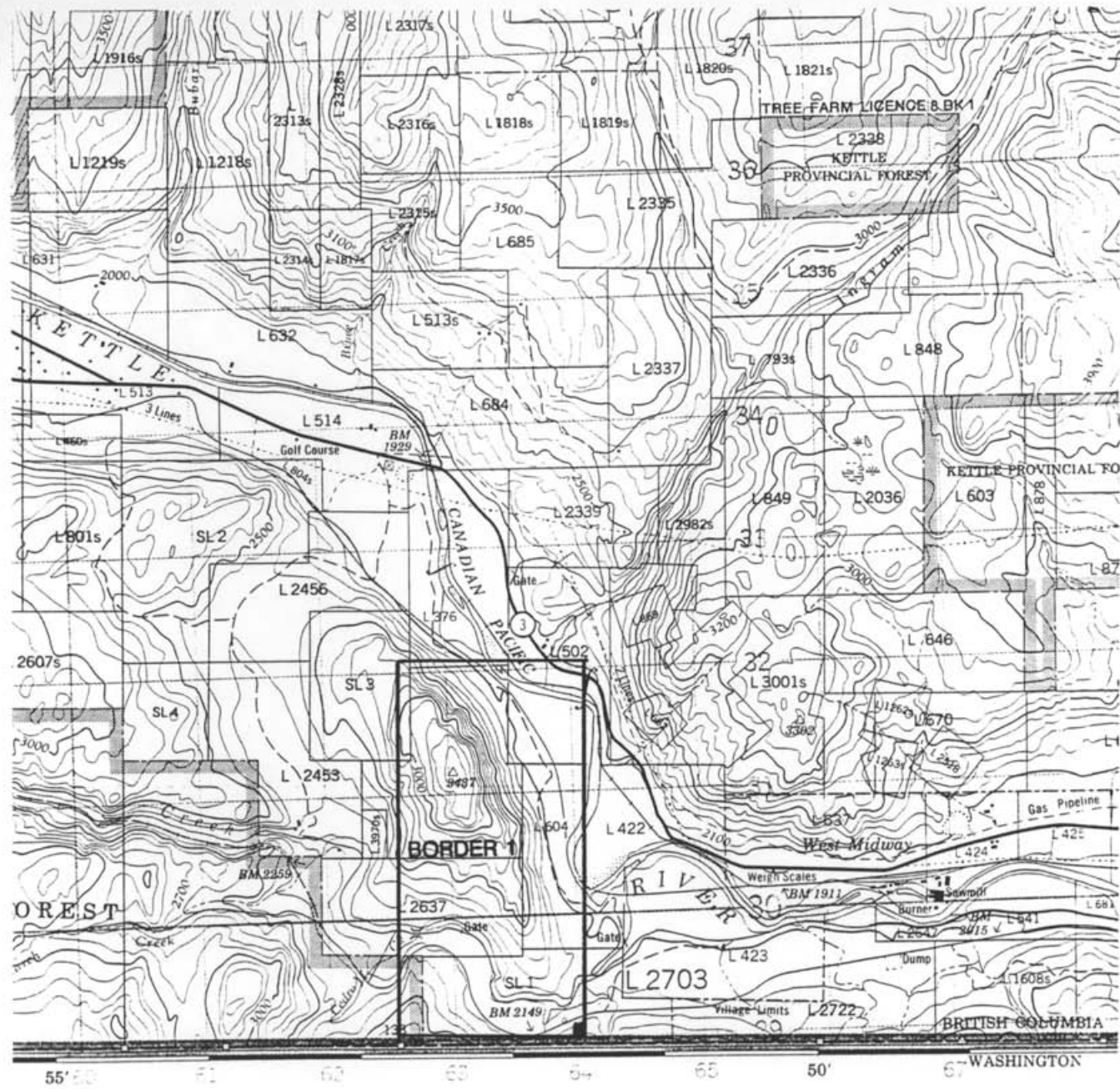
Note * = Expiry Date based on acceptance of this report.

5. PREVIOUS WORK and HISTORY

The Greenwood area has had a long and successful history of gold and copper mineral production since the 1890's. Most of the production has come from Triassic Brooklyn and Permian Knob Hill hosted copper and gold bearing magnetite skarn deposits (Phoenix, Motherlode, Oro Denoro, Emma, Greyhound) and to a lesser extent epithermal quartz veins from various lithologies (Jewel, Winnipeg, Keno). The Greenwood camp is rated sixth in B.C. in terms of gold production with over 1 million ounces being produced.

Active exploration programs adjacent to the Border Property were undertaken by Battle Mountain, Minnova, Canamax, Dentonia Resources and local geologists and prospectors.

Gold exploration in the Greenwood District has been intensified by the recent successes located in northern Washington State. They include Au-bearing magnetite skarns and magnetite replacement deposits, and epithermal Au veins. The Crown Jewel deposit is a Permian hosted magnetite skarn deposit located approximately 12 kilometres southwest of the Border property on Buckhorn Mountain, just west of the Toroda Graben. Current reserves are 5.5 mt of .106 opt Au (mineable) and 8.3 mt of .102 opt Au (geological) with Battle Mountain currently defining additional reserves. The Permian hosted Overlook and Key deposits, located along the eastern edge of the Republic Graben, are magnetite replacement deposits



TECK EXPLORATION LTD	
CLAIM MAP	
BORDER PROPERTY	
SCALE 1 : 50,000	NTS : 82E/2W
NOVEMBER 1991	FIGURE : 3

cut by pyrrhotite and quartz-pyrrhotite veins. The Overlook contains 3.3 mt grading 0.17 opt Au and the Key East and West deposits collectively contain 1 mt grading 0.18 opt Au. Tertiary epithermal veins and stockworks of the Republic District are located along the west margin of the Republic Graben, a large scale N-S extensional feature. Through 1985, production in the district has resulted in about 2.4 million ounces of gold averaging 0.56 opt Au. Hecla Mining has defined reserves of about 1 mt averaging 1.0 opt Au on the Golden Promise epithermal deposit.

The property area has received only minor exploration work in the past. The only recorded work on the claim was a radiometric and geologic survey carried out in 1977 by Harold Jones for Dolmage Campbell & Associates. No anomalies were detected.

The present day Border claim was staked in 1990 by Amex Exploration for James Robertson. It was staked to cover favourable geological, structural, and aeromagnetic targets.

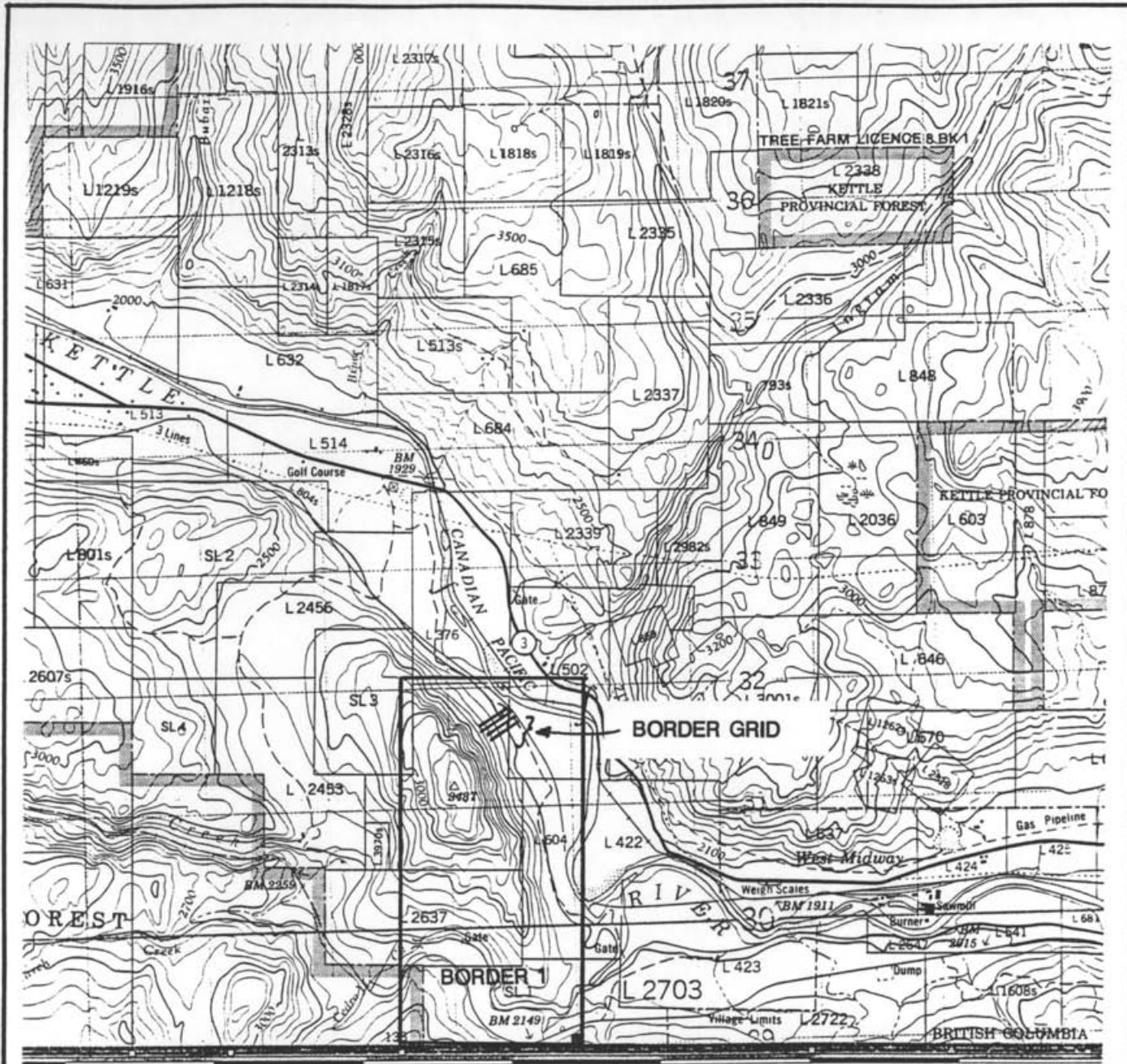
Initial rock, soil, and silt reconnaissance surveys were undertaken by C.J. Westerman and R. Farmer on the claim in the spring of 1991. The program was preliminary in nature; the purpose being to identify anomalous areas that might require immediate follow-up and thus help concentrate the 1991 program undertaken by Teck Exploration Ltd. The results of this program are described in assessment report # 21283. In total 22 soils, 9 rock, and 3 heavy mineral silt samples were collected. Two rock samples collected from the northeastern corner of the claim returned weakly anomalous copper results of 903 and 237 ppm. A heavy mineral silt sample from the south central claim area returned an anomalous value of 237 ppb Au.

6. 1991 PROGRAM

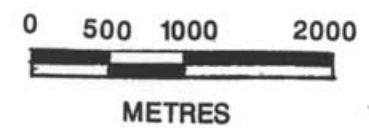
In 1991, 4 mandays were spent on the Border property between May 9 and June 19. The program consisted of grid controlled soil sampling and limited 1:10,000 geological mapping and concurrent rock chip sampling.

One selected area received soil grid coverage totalling 1.1 line km's with 49 soils being collected. A total of 4 rock chip samples were collected as part of the mapping program. Grid location is shown on Figure 4.

Mapping was done by topofil, compass and altimeter. Outcrop exposure on the property is generally good, with ranching and logging roads providing valuable access.



55' 60' 65' 70' 75' 80' 85' 90' 95' 100'



TECK EXPLORATION LTD	
GRID LOCATION MAP	
BORDER PROPERTY	
SCALE 1: 50,000	NTS: 82E/2W
NOVEMBER 1991	FIGURE: 4

7. GEOLOGY

A. Regional Geology (Figure 5)

The Greenwood region has been mapped on several occasions by the federal and provincial governments since the turn of the century. The two most recent mapping projects are 'Geology of the Greenwood Map-Area' by H. Little of the GSC in 1983 (Paper 79-29) and 'Geology of the Greenwood-Grand Forks Area' by J. Fyles of the B.C. MEMPR in 1990 (Open File 1990-25).

This work indicates the Border property is underlain predominantly by Eocene andesitic basalt to trachyte volcanics of the Marron Formation. Limestone of the Triassic Brooklyn Formation is located in the *northeastern corner of the property*.

Structurally, the Greenwood area is dominated by a complicated array of Tertiary extension faults. Three different sets have been recognized, with north-northeast trending high angle normal faults, between which blocks are tilted eastward, being the dominant structural feature. The Eocene extensional faults are the northern continuations of the dominant Toroda and Republic Grabens located immediately south, across the United States boundary. The Border property is located at the north end of the Toroda Graben.

The region has had a long and prosperous mining history since the turn of the century. Gold-bearing magnetite skarns of Permian and Triassic age dominate (Phoenix, Motherlode) with epithermal quartz veins also contributing to a long and successful production history. The reader can refer to the 'Previous Work and History' section for a more complete description of the mining and production summary of the area.

B. Property Geology (Figure 6)

The Border property area can be divided into 2 major formations or groups (see Figure 6 - Property Geology). Tertiary rocks cover the largest portion of the property ($\approx 90\%$) and generally strike northeast and dip to the east. The Middle Triassic Brooklyn rocks generally have bedding attitudes (where measurable) striking east-west and dipping north.

The Tertiary rocks consist of the Marron volcanics; intermediate to mafic volcanics which occupy large portions of the entire property area, most notably on topographic highs. Tertiary volcanics are often found to be magnetic and thus probably responsible for the aeromagnetic anomaly found on the property.

Figure 1
**GEOLOGY OF THE
 GREENWOOD - GRAND FORKS AREA,
 BRITISH COLUMBIA**

NTS 82E/1 & 82E/2
 Geology by James T. Fyles, 1981-1989.
 Tertiary geology of the west half modified from Little (1983)

LEGEND

TERTIARY

PENTICTON GROUP (Ep)

- i Dikes, sills and intrusions of syenite, pulexite, monzonite and diorite (Coryell intrusions).
- s Stratiform units-volcaniclastic and arkosic sediments (Kettle River fm), Sows of andesite, trachyte and phonolite (Marron fm).
- bx Slide breccia.

JURASSIC AND CRETACEOUS

NELSON PLUTONIC ROCKS

- qd Quartz diorite and granodiorite
- d Diorite
- g Gabbro

LEXINGTON INTRUSIONS

- qip Quartz feldspar porphyry, quartz porphyry and porphyritic diorite

TRASSIC

BROOKLYN FORMATION (Tb)

- v Fragmental greenstone and related microdiorite.
- l Limestone, calcareous sandstone and conglomerate, minor siltstone.
- s Green and maroon tuffaceous sandstone, siltstone and horsetail.
- a Dark grey to black siltstone.
- bx Chert breccia and minor tuff, tuffaceous sandstone and maroon and green limestone cobble conglomerate.

CARBONIFEROUS OR PERMIAN

ATTWOOD GROUP (Pa)

- a Black siltstone and phyllite, cherty siltstone, minor sandstone, conglomerate and greenstone.
- l Grey and white limestone, cherty limestone and minor white dolomite
- v Andesite

KNOS HILL GROUP (Pk)

- c Chert, grey argillite, siliceous greenstone and minor limestone.
- v Greenstone, pillow lava and breccia, amphibolite and minor limestone
- bx Chert breccia and conglomerate
- m Grey and green schist and phyllite, buff to white quartzite, minor crystalline limestone, white dolomite, fine grained calc-silicate gneiss, quartz biotite gneiss and amphibolite.
- qd Old diorite complex-coarse to fine-grained hornblende diorite based with talcophic veins.
- sp Serpentine and talc-schist.

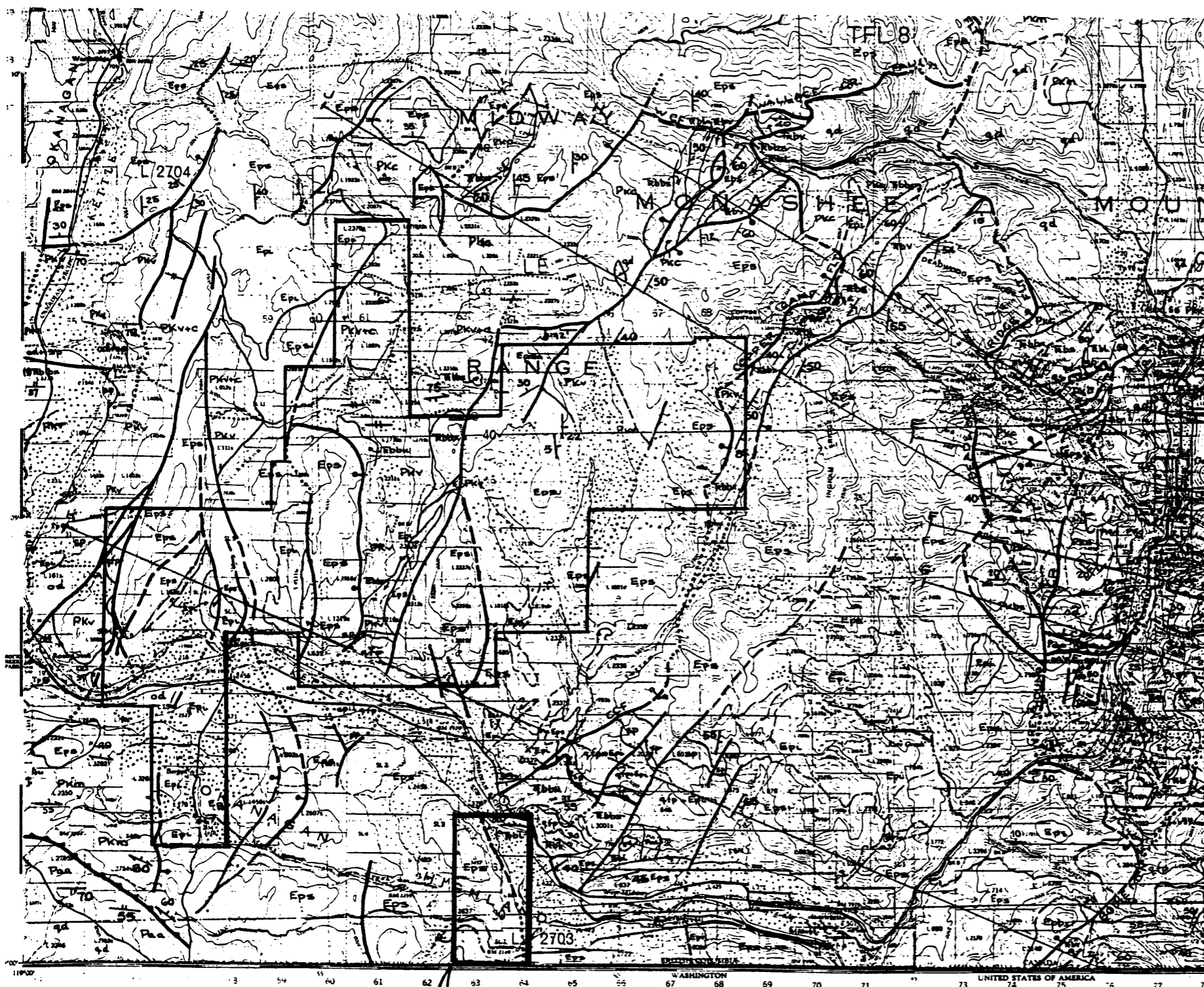
GRAND FORKS GROUP (Pfo, 1979)

- ld Sillimanite and/or biotite paragneiss
- v Fine grained hornblende schist and amphibolite
- D Granodiorite gneiss
- X Crushed and mylonitized quartz monzonite

AREAS WITH LITTLE OR NO OUTCROP

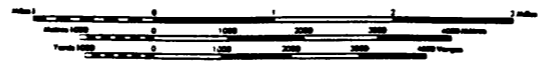
GEOLOGICAL CONTACT
 Located, Approximate, Assumed or Gradational

- FAULT**
 Low dip
 Steep dip
 Thrust
- TREND AND PLUNGE OF FOLD AXES AND LINEATIONS**
 25
 30
- ATTITUDE OF FOLIATION**
 ATTITUDE OF BEDDING



BORDER PROPERTY

GREENWOOD
 SIMILKAMEN DIVISION OF YALE DISTRICT
 BRITISH COLUMBIA



TECK EXPLORATION LTD	
REGIONAL GEOLOGY	
BORDER PROPERTY	
SCALE 1: 100,000	NTS : 82E/2W
NOVEMBER 1991	FIGURE : 5

The Middle Triassic Brooklyn Formation limestone is concentrated in the northeastern corner of the property. The limestones are separated from the dominant Tertiary volcanics by a northwest trending extensional fault.

Units 1 and 2 (Figure 6) are described individually.

Unit 1 : Brooklyn Formation

Unit 1 is a medium to dark grey, fine grained limestone. It locally contains weak calcite veinlets and stringers.

Unit 2 : Marron Volcanics

Rocks of this Middle Eocene unit are grey, green and maroon colored andesites and basalts with a varying porphyritic nature. Unit 2b is fine grained andesites to basalts while unit 2a comprises trachyandesite/basalts to trachyte with increasing alkali feldspar content. This east dipping lava flow unit rests above Kettle River sediments with apparent conformity. The Marron volcanics are distinguished from older volcanics by their fresher looking appearance and trachytic nature.

I. Border Grid Area (Figure 6)

The Border Grid area, located in the northeastern corner of the property, is underlain by Brooklyn Formation limestones. It is the area with the more favourable host (the target being Au-bearing magnetite skarns in Brooklyn rocks) on the property and was subsequently prospected in detail and covered by a soil survey.

The rocks were found to be fresh, unaltered grey limestones. No skarn development was noted in any of the limestones. Magnetite and sulphide mineralization was also notably absent. Two rock samples were collected within the Border Grid area with no significant gold results returned.

II. Aeromagnetic Anomaly (Figures 8,6)

The Border property contains an aeromagnetic anomaly as outlined by the government in GSC map 8497G (Figure 8). The anomaly, located in the west central property area, is also shown on the Property Geology map, Figure 6. Part of the field program carried out during 1991 was the mapping and prospecting of the aeromagnetic anomaly. The 58,000 gamma contour was used as the general anomalous threshold.

Mapping and prospecting identified the aeromagnetic high region to be underlain by a thick sequence of weakly magnetic Tertiary Marron andesites to basalts. No mineralization was noted.

III. Mineralization and Alteration

A total of 4 rock samples were collected from the property. Sample locations are shown on Figure 6b with rock sample descriptions provided in Appendix V. Samples were sent to Eco-Tech Laboratories Ltd. in Kamloops, B.C. and analysed for 29 elements by ICP (Ag, Al, As, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Sb, Sn, Ti, U, V, W, Y, Zn) and gold by fire assay and atomic absorption. Analytical Procedures are included in Appendix IV and Certificates of Analyses in Appendix III.

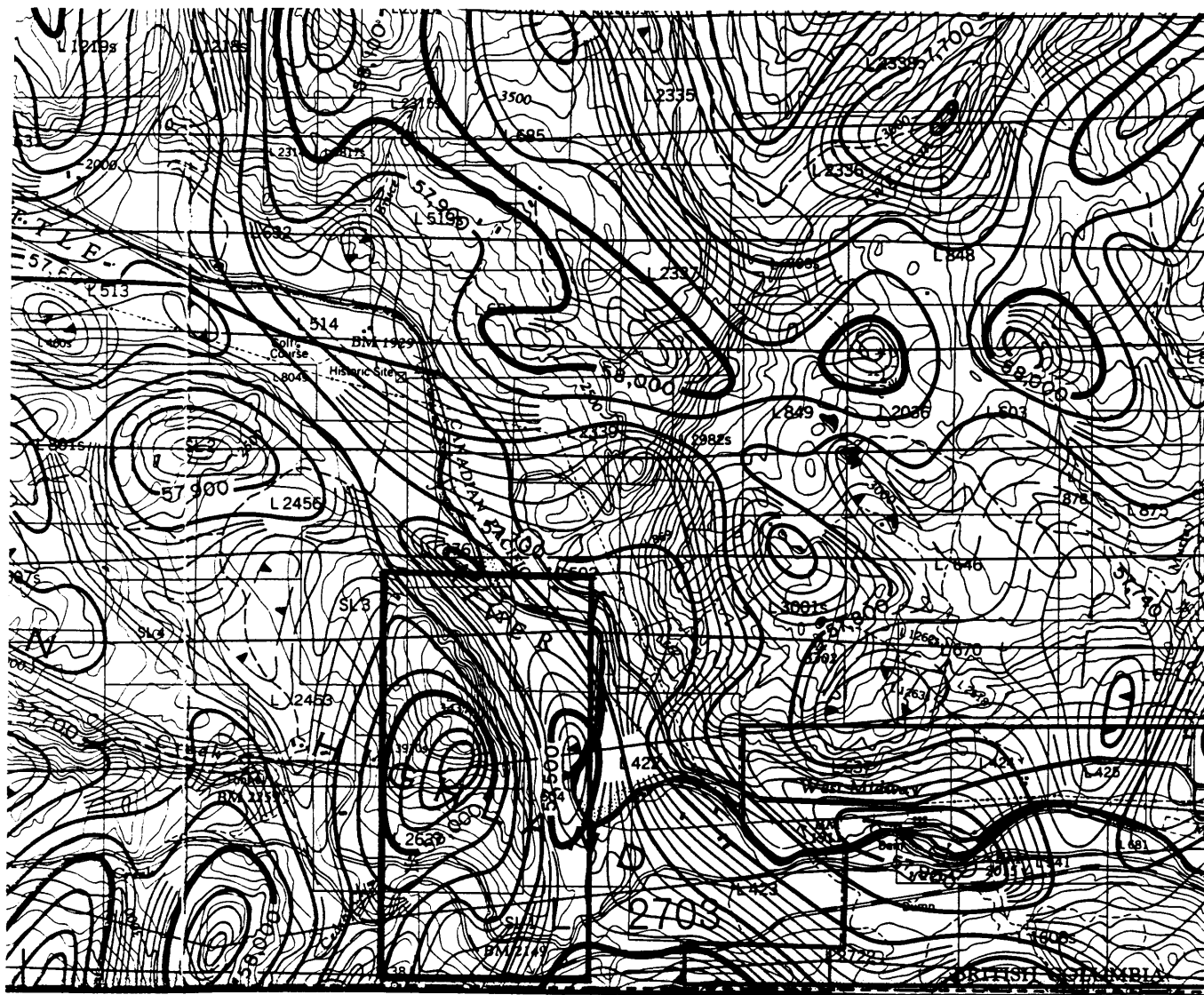
The rock samples were collected from two areas; the Border Grid area and the aeromagnetic high area.

Results from 1991 limited rock sampling are disappointing. A grab of a Brooklyn limestone and Tertiary volcanic float within the Border Grid area failed to return any significant results. Two grabs of the andesites, one with weak chalcedony stringers, within the aeromagnetic anomaly also returned no significant results.

No significant alteration was noted within the limestones and volcanics.

8. GRID PREPARATION (Figures 4,6)

The 'Border Grid', located in the northeastern claim area, was constructed in order to facilitate soil coverage across the Brooklyn limestone. 1.1 line-km's of flagged lines were established by topofil and compass with slope corrected stations established every 25 metres and marked on flagging. Lines were run concurrent with soil sampling. A total of four 50 metre spaced lines from L0+00S to L1+50S were constructed. A total of 49 samples were collected on the 055° bearing lines with the road used as a



55'

BORDER PROPERTY

50'

WASHINGTON

0 500 1000 2000



METRES



REPRODUCED FROM GSC MAP 8497G

TECK EXPLORATION LTD	
AEROMAGNETIC MAP	
BORDER PROPERTY	
SCALE 1: 50,000	NTS: 82E/2W
NOVEMBER 1991	FIGURE: 8

baseline.

9. SOIL GEOCHEMISTRY (Figure 7)

A total of 49 soil samples were collected and sent to Eco-Tech Laboratories Ltd. in Kamloops, B.C. and analysed for 29 elements by ICP (Ag, Al, As, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sn, Ti, U, V, W, Y, Zn) and gold by fire assay and atomic absorption. Samples were collected using a shovel from the 'B' horizon, which generally occurred at a depth of 20-40 centimetres. Often holes had to be dug 40-60 centimetres deep in order to penetrate talus. All soils were collected in Kraft bags and allowed to air dry before shipment to the lab. Sample locations are shown on Figure 7. For a complete list of results see Appendix III - Certificates of Analyses. Analytical procedures are included in Appendix IV. A complete list of soil sample descriptions is provided in Appendix VI.

A. Results

Soil geochemical results of the Teck 1991 program failed to identify any significant anomalous gold zones within the two grids. Gold results were consistently low with all the results returning < 5 ppb Au. Other potential skarn indicators such as silver, antimony and bismuth also returned consistent low results.

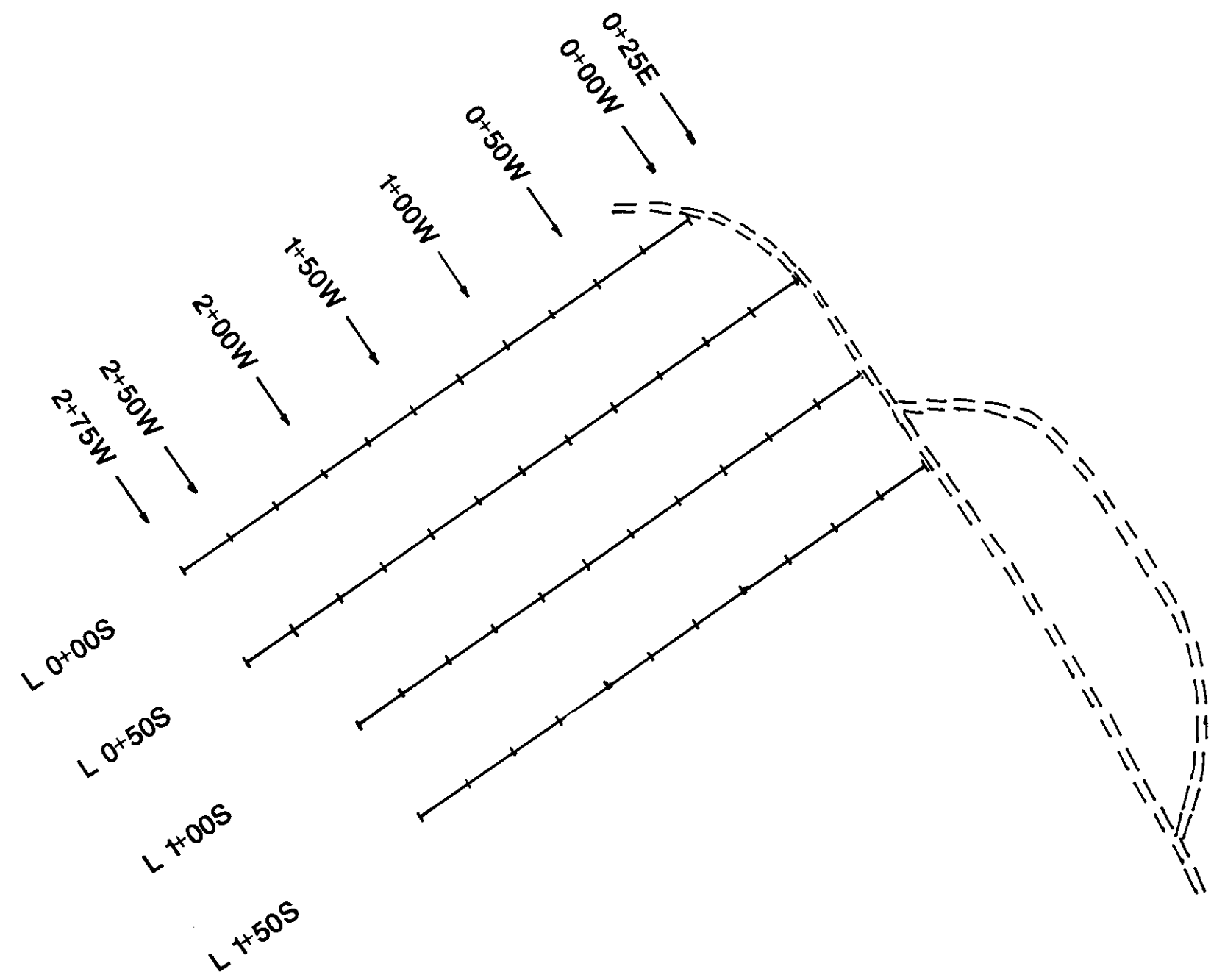
As a consequence of the low soil values, a statistical analysis was not undertaken and sample results are not plotted.


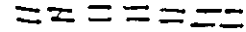
10. CONCLUSION

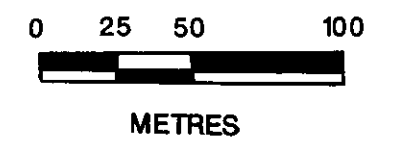
Results from the 1991 program were not encouraging.

Geological mapping has shown the property to be largely underlain by Tertiary volcanics. Mapping and prospecting of the aeromagnetic anomaly showed the ground to be underlain by thick Tertiary volcanic flows. Mapping and prospecting of the Brooklyn Formation in the northeastern property area failed to reveal any skarn development. Subsequent limited rock sampling of the two areas failed to reveal economic precious or base metal mineralization.

Soil sampling on the 'Border Grid' did not return significant precious metal response.



 GRID LINE WITH SOIL SAMPLE LOCATIONS
 ROAD



TECK EXPLORATION LTD	
BORDER GRID	
SOIL SAMPLE LOCATION MAP	
BORDER PROPERTY	
SCALE : 1 : 2500	NTS : 82E\2W
JANUARY 1992	FIGURE : 7

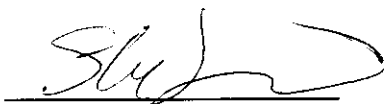
11. REFERENCES

1. Church, B.N.(1986): Geology and Mineralization in the Mount Attwood-Phoenix Area, Greenwood B.C.;B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1986-2.
2. Church, B.N.(1970): Lexington; in Geology, Exploration and Mining in British Columbia 1970, B.C. Ministry of Energy, Mines and Petroleum Resources.
3. Fyles, J.T.(1990): Geology of the Greenwood-Grand Forks Area, British Columbia; B.C. Ministry of Energy, Mines and Petroleum Resources, Open File 1990-25.
4. Little, H.W.(1983): Geology of the Greenwood Map Area, British Columbia; Geological Survey of Canada, Paper 79-29.
5. Monger, J.W.H.(1968): Early Tertiary Stratified Rocks, Greenwood Map area (82E/2), British Columbia; Geological Survey of Canada, Paper 67-42.
6. Parrish, R.R., Carr, S.D. and Parkinson, D.L.(1988): Eocene Extensional and Geochronology of the Southern Omineca Belt, British Columbia and Washington, Tectonics, Volume 7.
7. Preto, V.A.(1970): Structure and Petrology of the Grand Forks Group, British Columbia; Geological Survey of Canada, Paper 69-22.
8. Westerman, C.J.(1990): Exploration Proposal, Midway Gold Project, South-Central British Columbia (Confidential report).
9. Westerman, C.J.(1991): Geochemical Assessment report on the Border mineral claim. Assessment report no. 21283.
10. GSC (1972): Geophysical Series - Aeromagnetic Map; GSC map 8497G, sheet 82E/2.

APPENDIX I
Statement of Qualifications

I, Steve Jensen, do hereby certify that:

- 1) I am a geologist and have practised my profession for the past five years.
- 2) I graduated from University of British Columbia, Vancouver, British Columbia with a Bachelor of Sciences degree in Geology (1987).
- 3) I was actively involved and supervised the Border Property program and authored the report contained herein.
- 4) All data contained within this report and conclusions drawn from it are true and accurate to the best of my knowledge.
- 5) I hold no personal interest, direct or indirect in the Border Property which is the subject of this report.

A handwritten signature in black ink, appearing to read "Steve Jensen", is written over a horizontal line.

Steve Jensen
Project Geologist
December, 1991

APPENDIX II
Cost Statement

BORDER PROPERTY

COST STATEMENT

1.	<u>Geology</u> (includes preparation, field plotting)	
A.	Steve Jensen (Geologist) 1 day @ \$211.46/day May 9	\$211.46
B.	Peter Procter (Geologist) 1 day @ \$181.25/day May 9	\$181.25
C.	Ted Archibald (Prospector) 1 day @ \$179.20/day May 29	<u>\$179.20</u>
		Subtotal \$571.91
2.	<u>Soil Survey</u>	
A.	Ted Archibald (Prospector) 1 day @ \$179.20/day June 10,13-18	<u>\$179.20</u>
		Subtotal \$179.20
3.	<u>Analytical</u> = Eco-Tech Labs, Kamloops, B.C.	
A.	Rock samples 4 @ \$15.23 ea. (29 el. ICP & Au)	\$60.92
B.	Soil samples 49 @ \$12.61 ea. (29 el. ICP & Au)	<u>\$617.89</u>
		Subtotal \$678.81
4.	<u>Food and Accommodation</u>	
A.	Food \$20.00/manday x 4 mandays (May 9 - June 19, 1991)	\$80.00

B. Accommodation
1 day @ \$50.00/day for crew \$50.00

Subtotal \$130.00

5. Report Writing and Typing

A. Steve Jensen (Geologist)
1 day @ \$211.46/day \$211.46
Dec 18

Subtotal \$211.46

BORDER 1991 TOTAL COST \$1821.38

APPENDIX III

Certificates of Analysis

ECO-TECH LABORATORIES LTD.

10041 EAST TRANS CANADA HWY.
 KAMLOOPS, B.C. V2C 2J3
 PHONE - 604-573-5700
 FAX - 604-573-4557

MAY 21, 1991

VALUES IN PPM UNLESS OTHERWISE REPORTED

TECK EXPLORATIONS LTD.- ETK 91-277

960, 175 SECOND AVENUE
 KAMLOOPS, B.C.
 V2C 5W1

ATTENTION: STEVE JENSEN

PROJECT NUMBER: 1701
 27 ROCK SAMPLES RECEIVED MAY 13, 1991

RT#	DESCRIPTION	AR(ppb)	AG AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MO	NO	NA(%)	NI	P	PB	SB	SE	SR	TI(%)	U	V	W	Y	ZN		
277-	1	72801	20	<.2	1.76	<5	4	265	<5	1.74	<1	17	62	37	3.42	.37	193	1.09	583	5	.47	15	3279	50	<5	<20	513	.15	<10	85	<10	10	72
310	- 11	72914	5	<.2	1.01	10	14	65	<5	.80	<1	13	49	20	2.74	.07	30	1.13	386	1	<.01	11	1110	4	<5	<20	60	.10	<10	89	<10	8	56
310	- 12	72915	5	<.2	.73	5	10	80	<5	.52	<1	7	145	30	1.35	.14	10	.37	161	9	<.01	7	430	2	<5	<20	286	.06	<10	38	<10	4	23
366	- 3	72961	5	.2	.06	10	4	5	<5	9.50	<1	1	4	<1	.13	.01	<10	.15	88	1	.01	3	260	2	<5	<20	939	<.01	<10	7	<10	2	5

NOTE: < = LESS THAN

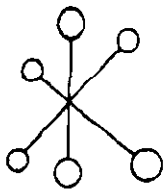

 ECO - TECH LABORATORIES
 CLINTON AYERS
 LABORATORY MANAGER

BORDER GRID SOILS

PAGE 3

ET#	DESCRIPTION	AU(ppb)	AG AL(%)	AS	B	BA	BI CA(%)	CD	CO	CR	CU FE(%)	K(%)	LA MG(%)	MN	MO NA(%)	NI	P	PB	SB	SN	SR TI(%)	U	V	W	Y	EM		
86-	B DLOS 0+ 00 W	<5	<.2 1.89	5	10	85	<5 1.05	<1	8	16	9 1.68	.13	<10 .32	344	<1	.02	13	560	18	<5	<20	61	.09	<10	21	<10	6	38
87-	B DLOS 1+ 00 W	<5	<.2 2.79	5	12	75	<5 .61	<1	16	66	18 3.04	.19	20 1.11	273	<1	.03	41	630	26	<5	<20	116	.16	<10	38	<10	8	53
88-	B DLOS 2+ 00 W	<5	<.2 1.92	<5	14	85	<5 .32	<1	7	19	12 1.41	.18	<10 .32	229	<1	.03	13	680	20	<5	<20	70	.09	<10	17	<10	4	37
89-	B DLOS 0+ 25W	<5	<.2 2.22	10	10	85	<5 .71	<1	16	48	16 3.33	.30	30 .99	463	<1	.05	23	500	24	<5	<20	139	.16	<10	55	<10	9	62
90-	B DLOS 1+ 25W	<5	<.2 1.70	15	10	70	<5 .63	<1	12	50	11 2.74	.34	20 .57	512	<1	.06	14	420	18	<5	<20	131	.16	<10	53	<10	6	60
91-	B DLOS 2+ 25W	<5	<.2 2.27	10	12	65	<5 .43	<1	13	58	16 2.64	.33	20 .77	279	<1	.02	27	520	24	<5	<20	136	.14	<10	35	<10	8	35
92-	B DLOS 0+ 50W	<5	<.2 2.85	5	12	100	<5 .46	<1	13	48	17 2.47	.16	20 .81	280	<1	.03	33	650	26	<5	<20	88	.14	<10	28	<10	7	47
93-	B DLOS 1+ 50W	<5	<.2 1.86	10	10	90	<5 .56	<1	12	32	13 2.70	.24	20 .66	425	<1	.05	13	490	20	<5	<20	134	.15	<10	48	<10	5	70
94-	B DLOS 2+ 50W	<5	<.2 1.98	10	14	130	<5 .67	<1	11	43	16 2.02	.18	10 .57	551	<1	.02	19	1290	22	<5	<20	163	.11	<10	33	<10	5	53
95-	B DLOS 0+ 75W	<5	<.2 3.05	5	12	80	<5 .60	<1	15	57	17 2.90	.22	20 .93	236	<1	.03	39	620	28	<5	<20	100	.16	<10	33	<10	8	51
96-	B DLOS 1+ 75W	<5	<.2 2.15	10	12	95	<5 .40	<1	11	40	12 2.33	.25	20 .55	369	<1	.02	18	510	22	<5	<20	76	.13	<10	32	<10	6	44
97-	B DLOS 2+ 75W	<5	<.2 1.16	10	12	45	<5 .33	<1	7	27	9 1.39	.16	<10 .40	331	<1	.03	13	400	12	<5	<20	68	.08	<10	23	<10	3	28
98-	BDLOS0S 0+ 25E	<5	.6 .83	5	14	140	<5 1.52	<1	5	9	19 1.05	.12	<10 .18	628	<1	.02	7	1950	8	<5	<20	97	.05	<10	19	<10	2	146
99-	BDLOS0S 0+ 00	<5	<.2 .94	5	10	70	<5 1.20	<1	5	7	12 1.06	.06	<10 .17	457	<1	.02	6	770	10	<5	<20	60	.06	<10	21	<10	4	66
100-	BDLOS0S 1+ 00 W	<5	<.2 2.01	10	10	65	<5 .55	<1	14	53	14 2.60	.22	20 .72	386	<1	.04	25	470	22	<5	<20	101	.15	<10	40	<10	7	57

APPENDIX IV
Analytical Procedures



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

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GEOCHEMICAL LABORATORY METHODS

SAMPLE PREPARATION (STANDARD)

1. Soil or Sediment: Samples are dried and then sieved through 80 mesh sieves.
2. Rock, Core: Samples dried (if necessary), crushed, riffled to pulp size and pulverized to approximately -140 mesh.
3. Humus/Vegetation: The dry sample is ashed at 550 C. for 5 hours.

METHODS OF ANALYSIS

All methods have either cannet certified or in-house standards carried through entire procedure to ensure validity of results.

1. MULTI ELEMENT ANALYSES

(a) ICP Packages (6,12,30 element).

Digestion

Hot Aqua Regia

Finish

ICP

(b) ICP - Total Digestion (24 element).

Digestion

Hot HClO₄/HNO₃/HF

Finish

ICP

(c) Atomic Absorption (Acid Soluble)

Ag*, Cd*, Cr, Co*, Cu, Fe, Pb*, Mn, Mo, Ni*, Zn.

Digestion

Hot Aqua Regia

Finish

Atomic Absorption

* = Background corrected

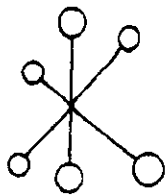
(d) Whole Rock Analyses.

Digestion

Lithium Metaborate
fusion

Finish

ICP



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2. Antimony

Digestion

Finish

Hot aqua regia

ICP

3. Arsenic

Digestion

Finish

Hot aqua regia

Hydride generation - A.A.S.

4. Barium

Digestion

Finish

Lithium Metaborate

ICP

5. Beryllium

Digestion

Finish

Hot aqua regia

Atomic Absorption

6. Bismuth

Digestion

Finish

Hot aqua regia

Atomic Absorption
(Background Corrected)

7. Chromium

Digestion

Finish

Sodium Peroxide
Fusion

Atomic Absorption

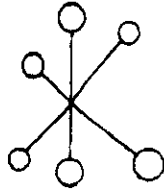
8. Fluorine

Digestion

Finish

Lithium Metaborate
Fusion

Ion Selective Electrode



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9. Gallium

Digestion -----	Finish -----
Hot HClO ₄ /HNO ₃ /HF	Atomic Absorption

10. Germanium

Digestion -----	Finish -----
Hot HClO ₄ /HNO ₃ /HF	Atomic Absorption

11. Mercury

Digestion -----	Finish -----
Hot aqua regia	Cold vapor generation - A.A.S.

12. Phosphorus

Digestion -----	Finish -----
Lithium Metaborate Fusion	ICP finish

13. Selenium

Digestion -----	Finish -----
Hot aqua regia	Hydride generation - A.A.S.

14. Tellurium

Digestion -----	Finish -----
Hot aqua regia Potassium Bisulphate Fusion	Hydride generation - A.A.S. Colorimetric or I.C.P.

APPENDIX V
Rock Sample Descriptions

SAMPLE NUMBER	LOCATION COMMENT	SAMPLE DESCRIPTION
72801	Northeastern claim area	Grab of Tertiary andesite volcanic float (subcrop?) adjacent to Brooklyn limestone outcrop.
72961	Northeastern claim area	Grab of unmineralized grey Brooklyn limestone, moderate calcite veinlets.
72914	Central claim area, ele. 2860'	Grab of unmineralized Tertiary andesite.
72915	Central claim area, ele. 3020'	Grab of Tertiary andesite/basalt with moderate chalcedonic stringers.

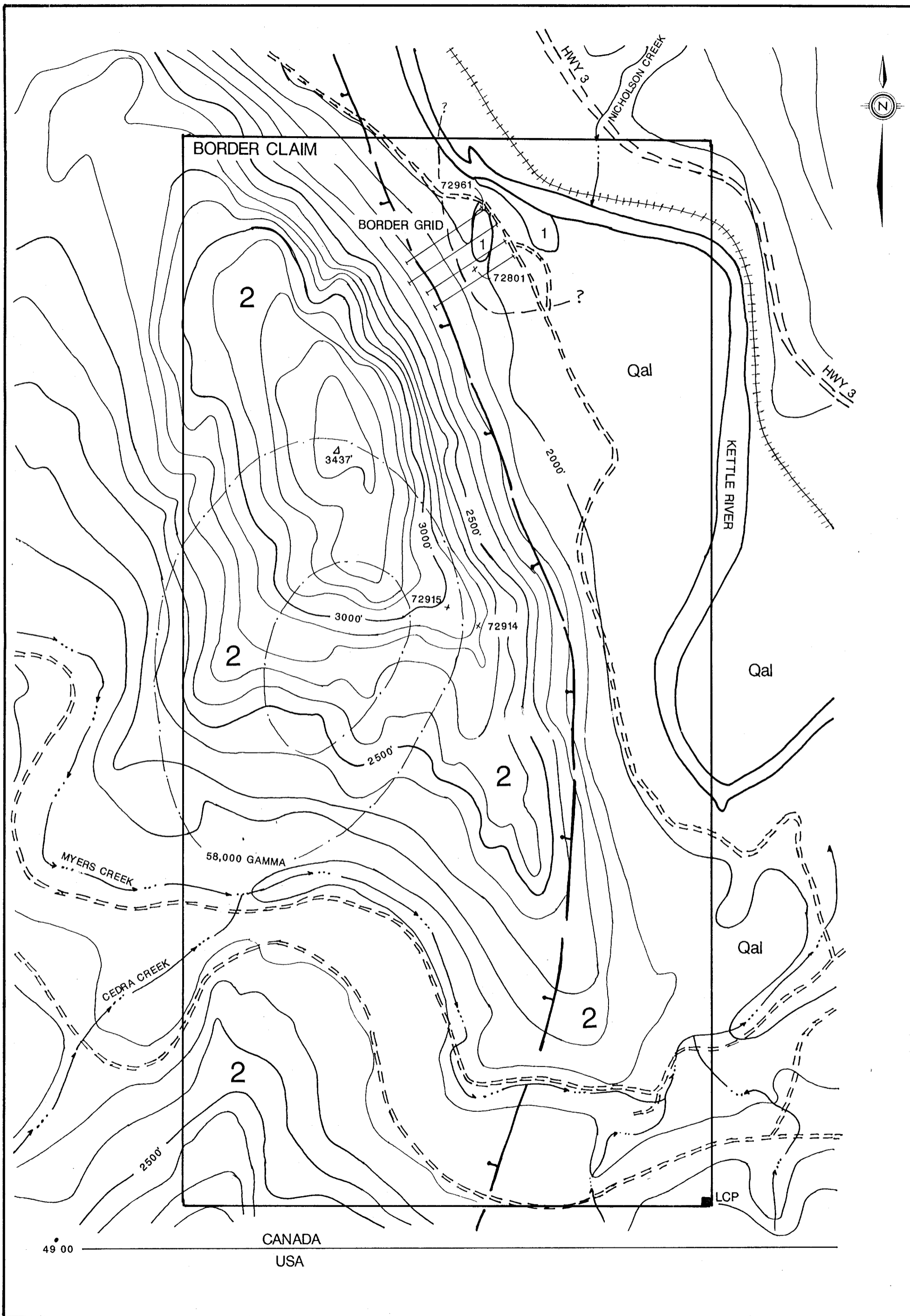
APPENDIX VI

Soil Sample Descriptions

1991		SOIL SAMPLES		PROPERTY PROJECT <u>Midway Gold 1701</u>				SAMPLER <u>(13)</u>				
SAMPLE NO.	GRID LOCATION	DEPTH (cm)	THICK (cm)	HORIZON	COLOUR	PARTICLE SIZE	FRAGMENTS			SLOPE	SEEPAGE	COMMENTS
							%	ROUND	COMP			
BD	Border Claim											
L0100	0100W	10	10	BM	LB							Read
	25	10	10		MB							
	50	25	25		"							
	75	15	15		LB							
	1100W	25	25		MB							
	25	10	10		GB							Rocky
	50	10	10		"							"
	75	20	20		LB							"
	2100W	25	10		GB							"
	25	20	15		LB							"
	50	20	10	BM	MB							o/c
	75	5	5	A	GB							Rocky
L0150S	0125E	3	3	A	GB							Rocky
	0100W	5	5	BM	DB							"
	25	25	25	"	MB							o/c
	50	10	10	"	"							Rocky
	75	3	3	A	GB							"
	1100W	15	5	BM	MB							"
	25	15	15	"	GB							
	50	5	5	A	white							Rocky
	75	5	5	"	"							"
	2100W	10	5	B	MB							"
	25	10	5	BM	MB							"
	50	5	5	BM	DB							"
	75	3	3	A	white							"

1991		SOIL SAMPLES				PROPERTY PROJECT <u>Midway Gold 1701</u>			SAMPLER <u>(Smiley Face)</u>		
SAMPLE NO.	GRID LOCATION	DEPTH (cm)	THICK (cm)	HORIZON	COLOUR	PARTICLE SIZE	FRAGMENTS		SLOPE	SEEPAGE	COMMENTS
							%	ROUND			
BD	Border claim										
L1400S	0+25E	20	20	BM	MB						Road
	0+00W	3	3	A	White						O/C
	25	5	5	A	Grey						O/C
	50	25	25	BM	LB						
	75	10	10	BM	DB						rocky
	1+00W	10	10	BM	"						"
	25	5	5	A	GB						"
	50	3	3	A	Gray						"
	75	5	5	BM	MB						"
	2+00W	15	5	BM	DB						"
	25	5	3	A	GB						"
	50	7	7	BM	DB						"
L1450S	0+25E	25	15	BM	MB						Road
	0+00W	25	25		LB						
	25	25	25		"						
	50	20	20		GB						
	75	20	20	BM	DB						Rocky
	1+00W	10	10	A	GB						"
	25	25	25	BM	LB						
	50										
	75										
	2+00W										
	25	25	25	BM	LB						Rocky
	50	5	5	A	White						"

(14)



LEGEND

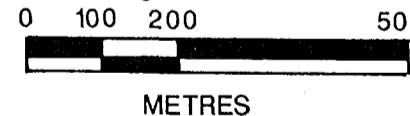
- QUATERNARY
 - Qal ALLUVIUM
- TERTIARY
 - 2 MARRON FORMATION
- ANDESITES/BASALTS TO TRACHYTES
- TRIASSIC
 - 1 BROOKLYN FORMATION
- LIMESTONE

KEY

- OUTCROP
- GEOLOGIC CONTACT
- ROCK SAMPLE
- FAULT
- AEROMAGNETIC ANOMALY
- RAILWAY
- CREEK
- ROAD
- TOPOGRAPHIC CONTOUR
- INTERVAL 100'

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,115



NTS : 82 E/2W

TECK EXPLORATION LTD

BORDER PROPERTY

GEOLOGY & ROCK SAMPLE LOCATIONS

SCALE : 1 : 10,000

DRAWN BY : S. JENSEN

JANUARY 1992

FIGURE : 6