PROSPECTING AND STREAM GEOCHEMICAL REPORT

on the

ELF 19 GROUP

OMINECA MINING DIVISION

NTS 94F/7E

Lat. 57° 17'N Long. 124° 40'W

Owner: Cirque Operating Corp.

Operator: Teck Exploration Ltd.

Author: P.S. Watt, Prospector, Geological Technician,

Date: August 11, 1995

SUMMARY

A program of prospecting and geochemical sampling was carried out on the Elf 19 claim on July 3 and 5, 1995.

The prospecting program confirmed that black shale of the Upper Devonian Gunsteel Formation is present on the claim, however the shales are restricted to a thin, thrust bound slice, bounded by Silurian siltstones and limestone.

Prospecting discovered mineralized float in MacIssac Creek. The float consists of a quartz-carbonate rich metasedimentary rock containing abundant milky quartz and carbonate veins and heavily disseminated sphalerite. Although the source of the float has not yet been discovered, and mineralization is of a different style from that on adjacent claims, potential for high grade mineralization is indicated. Geochemical results indicate a source upstream and upslope on the east side of MacIssac Creek. The float shows some similarities to a stockwork quartz-carbonate veined zone identified on the eastern ridgetop, occurring along the thrust contact between Gunsteel shales and Silurian siltstone and limestone. Additional prospecting and geochemical work are warranted to locate the source.

RECOMMENDATIONS

1. Carry out additional prospecting, geological mapping and stream sampling to locate the source of the mineralized float.

2. Establish a grid with 100 metre lines and 25 metre stations over the source area, and carry out soil sampling to delineate the extent of mineralization and advance the property to the drilling stage.

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INTRODUCTION

Elf 19 claim totals four units and was staked in early July, 1980 by Cyprus Anvil Mining Corporation. The claim forms part of a large claim package known as the Elf Claims. The Elf property was worked during the period of 1978-1982 including, geological mapping, stream and soil geochemistry, and drilling. Geological mapping combined with stream and soil geochemistry led to the discovery of a massive barite-galena showing known as the Elf showing, located on the adjacient Elf claims. The majority of previous work was carried out on the adjacient Elf claims, with little recorded work having been done on the Elf 19 claim. No work has been conducted on the Elf property since 1982.

During the 1995 summer field season work was conducted on the Elf 19 claim to determine if black, siliceous shales of the Devonian Gunsteel Formation are present on the claim, and whether there are any indications of mineralization.

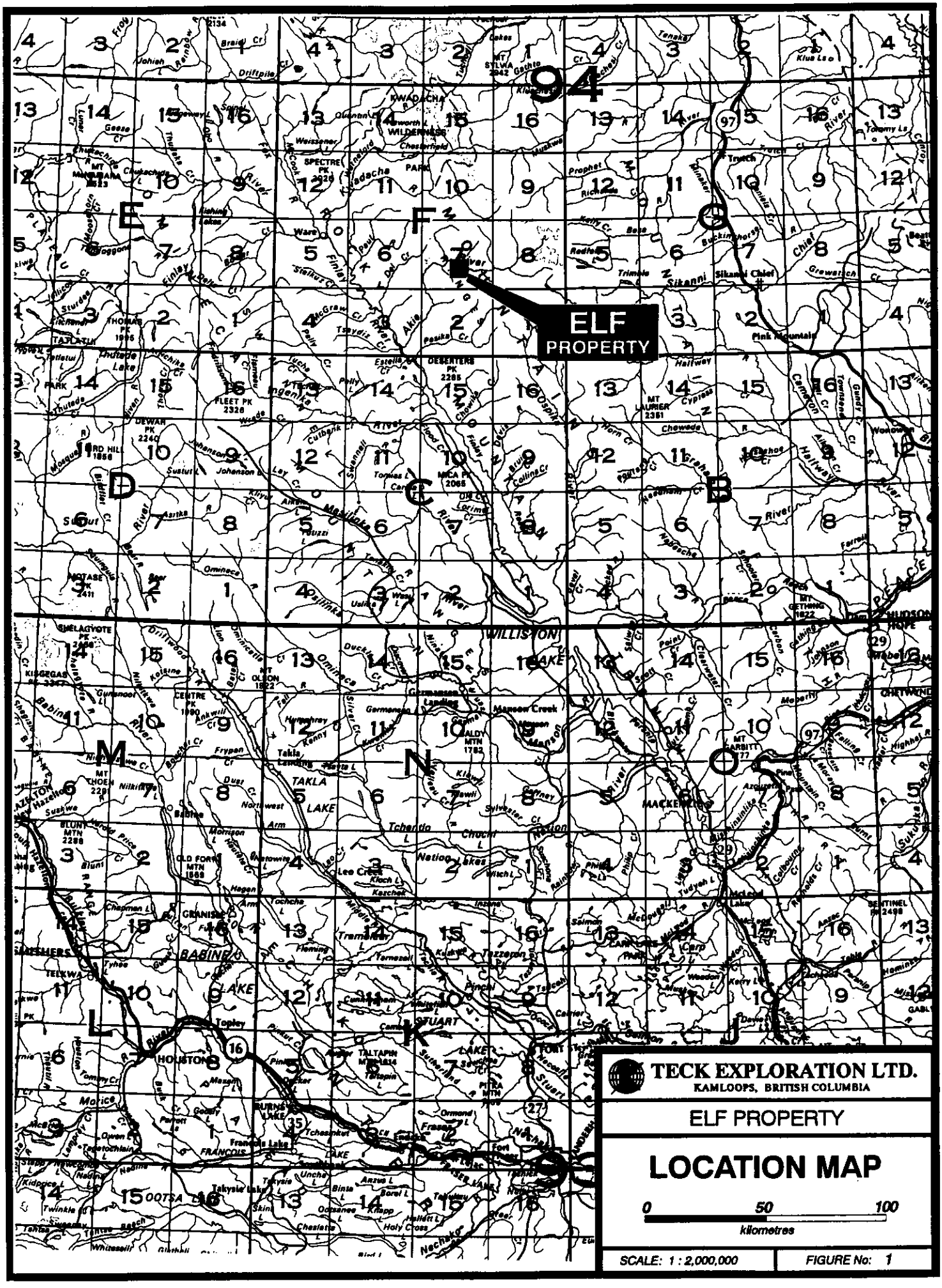
LOCATION AND ACCESS

The Elf 19 claim is located in northern British Columbia and approximately 50 kilometres south-east of the community of Fort Ware (figure 1). The claim covers the upper drainage of MacIssac Creek, a tributary of the Akie River . The center of the claim group is located at latitude 57 17'N and longitude 124 40'W on NTS mapsheet 94F/7E.

The property is only accessible via helicopter. The nearest helicopter base is located at the Finbow logging camp, 40 kilometres to the west. Access to Finbow is by fixed wing aircraft from Mackenzie, B.C., a distance of 250 kilometres. Field work on the property was conducted utilizing helicopter acess from the nearby Cirque Camp located 30 kilometres to the Northwest.

TOPOGRAPHY AND VEGETATION

The property lies within the mid to upper reaches of MacIssac's Creek, typical of the steeply undulating upland region of the western Rockies. A number of small creeks and seepages drain the mid to upper slopes. Elevation are in the 1360 to 1815 metre range. Extensive, thick stands of Juniper blanket 50% of the property with varying amounts of spruce and alder covering the lower, shallower slopes. Lower creek drainages include open areas of wetland grass and shrub and higher ridge tops are characterized by subalpine grass and scrub brush.


ELF
PROPERTY
TECK EXPLORATION LTD.
KAMLOOPS, BRITISH COLUMBIA
ELF PROPERTY
LOCATION MAP
0
50
100
kilometres
SCALE: 1 : 2,000,000
FIGURE No: 1

PROPERTY

The Elf 19 claim consists of a single four unit claim staked in early July 1980, covering an area of approximately 100 hectares. The claim forms part of a large land package known as the Elf property and lies within the Omineca Mining Division (figure 2). Cirque Operating Corporation is the current registered owner.

Details regarding the claim are listed on Table 1 below.

Table 1
Claim Statistics

CLAIM NAME	RECORD NUMBER	NUMBER OF UNITS	OWNER	EXPIRY DATE *
Elf 19	238287	4	Cirque Operating Corp.	11 July 1998

* **Expiry date based on acceptance of this report**

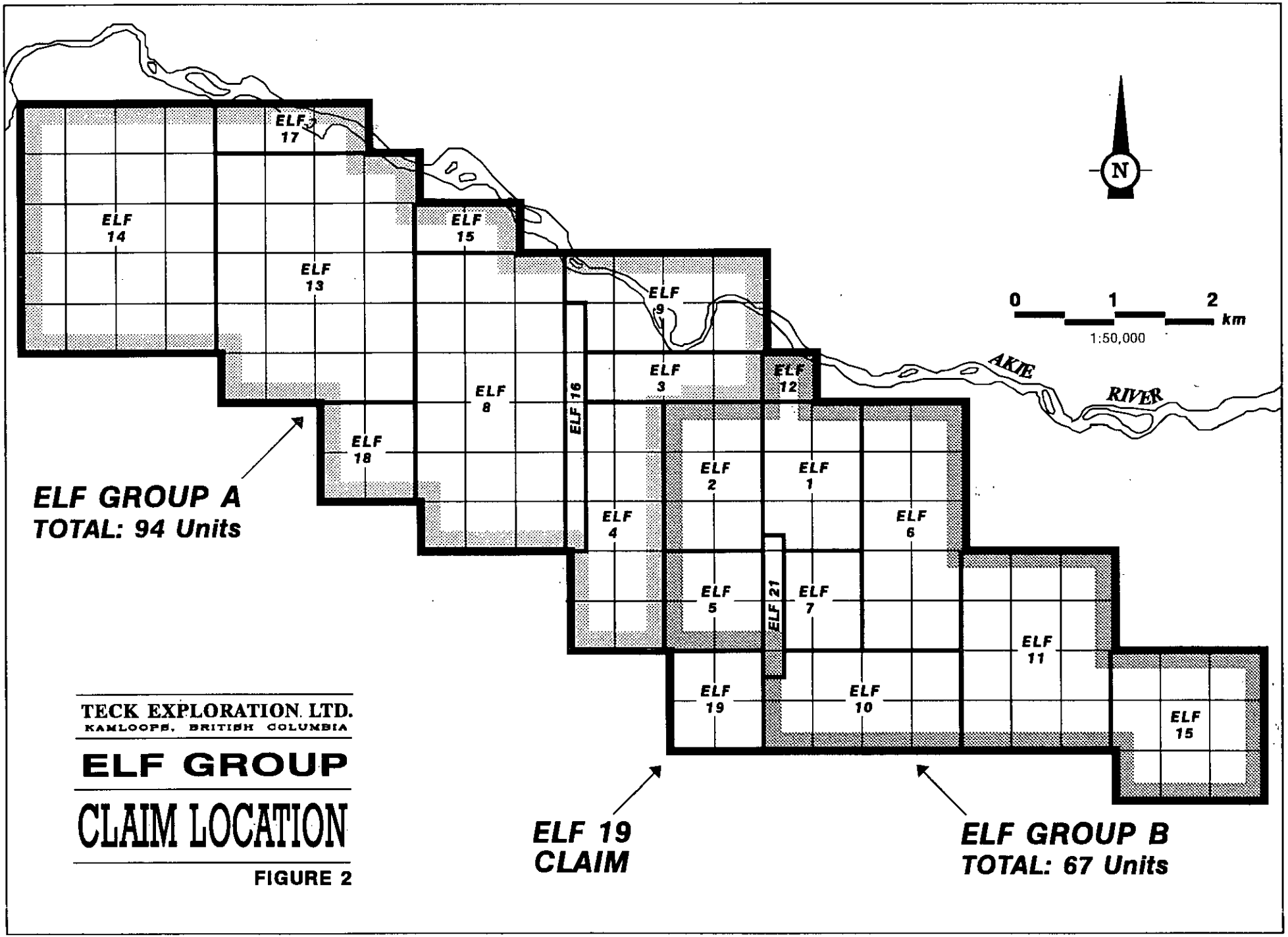
PREVIOUS WORK

Extensive exploration , including geology , geochemistry and diamond drilling has been carried out on claims adjacient to the Elf 19 claim during the period of 1978-1982.

On the Elf 19 claim itself the only recorded previous work is limited geological mapping carried out in 1980 as part of an exploration program on the adjacient claims. The work was not directed towards the Elf 19 claim area, nor did it provide an adequate assessment of the mineral potential of the area covered by the claim.

1995 PROGRAM

The 1995 exploration program on the Elf 19 group was funded by Teck Exploration Ltd. and consisted of two days prospecting on July 3 and 5, 1995. The purpose of the program was to determine if black shale of the Devonian Gunsteel Formation, the host to mineralization on adjacient claims, is present on the Elf 19 claim and to determine if there are any indications of mineralization. Prospecting was performed along ridges and the south-eastern slopes above MacIssac's Creek. Outcrops that were located were plotted accurately on a 1: 5000 scale map utilizing an altimeter for elevation control. Prospecting also consisted of stripping and uncovering moss from outcrops and talus slopes generally within the forest cover. All traverses were plotted on this map along with locations of samples collected. Four stream or seepage samples and one rock (float) sample were collected as part of the program. Stream and seepage samples were



TECK EXPLORATION LTD.
KAMLOOPS, BRITISH COLUMBIA

ELF GROUP

CLAIM LOCATION

FIGURE 2

collected to test for anomalous base metal concentrations draining the generally outcrop-poor valley slopes.

GEOLOGY

a. Regional Geology (Figure 3)

The best description of the geology of the Gataga district - Akie River area, including the Elf property area is provided by MacIntyre (1981, 1992).

The Elf property is located within the Rocky Mountain Fold and Thrust belt of northeastern B.C. The property is located within Paleozoic, miogeoclinal basinal facies rocks of ancestral North America affinity (MacIntyre, 1992). These rocks were deposited in the Kechika Trough, a southeast extension of the Selwyn Basin, and are bounded to the east by platformal carbonates of the Macdonald Platform and to the west by carbonates of the Cassiar Platform. The Kechika Trough is underlain by predominanly clastic rocks, ranging from Proterozoic to Triassic in age which form a northwest trending linear belt. The Elf property is underlain by black shale, siliceous shale and chert of the Gunsteel Formation, Lower Earn Group, of Upper Devonian age. The Stronsay (Cirque) deposit, located 30 kilometres to the northwest (38.5 mt @ 8.0% Zn, 2.2% Pb, 47.2g/t Ag), and the Elf showing located on the adjacient Elf property, is hosted by the same Gunsteel Formation shales. Northeast directed compression has resulted in complex thrusting and related folding, resulting in difficult srtatigraphic correlation.

These Gunsteel Formation black shales are bounded to the west by Silurian siltstone and limestone which has been thrust northeastwards over the Gunsteel shales.

b. Property Geology

The Elf 19 claimis underlain by a thin, thrust bound belt of late Devonian, Gunsteel Formation black shale, exposed on the ridges east and west of MacIassics creek. This belt of black shale is bounded on both sides by calcareous and dolomitic siltstone and limestone of probable Silurian age. These siltstones and limaestones underlie most of the Elf 19 claim area.

Late Devonian shales (Unit 1) are grey to black in colour, variably siliceous and locally weakly calcareous. Silurian stratigraphy has been divided into two lithological subdivisions. A siltstone dominated sequence (Unit 2) that consists of grey to light orange weathering dolomitic to weakly calcareous siltstone is primarily restricted to the lowest or northern most thrust slice. This siltstone is locally bioturbated and forms the western boundary of the main Gunsteel belt, located north and east of the Elf 19 claim. The second subdivision (Unit 2a), consists of more thinly bedded siltstone, limestone and chert and is exposed along ridgetops in the south and west portion of the claim. A distinctive

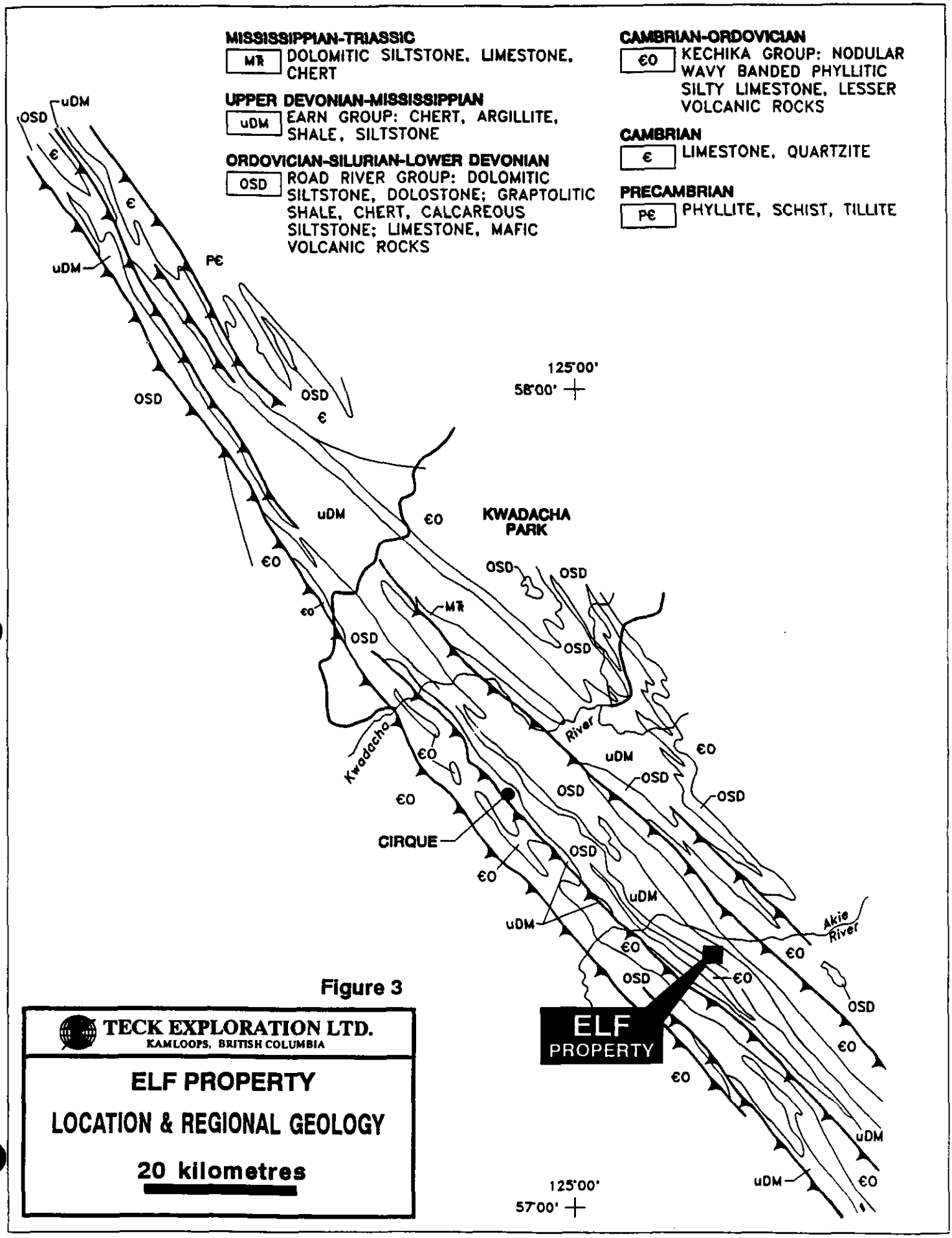


Figure 3

TECK EXPLORATION LTD.
KAMLOOPS, BRITISH COLUMBIA

ELF PROPERTY

LOCATION & REGIONAL GEOLOGY

20 kilometres

AFTER MacINTYRE, 1983

7313 4127 Zn/ 244 Pb/
512 Ba/ 0.1 Ag

7310 12.00% Zn/ 0.19% Pb/
0.88% Ba/ 2.8g/t Au

M7312 568 Zn/ 20 Pb/
3250 Ba/ 0.8 Ag

7314 2938 Zn/ 243 Pb/
528 Ba/ 1.6 Ag

7311 2441 Zn/ 30 Pb/
4460 Ba/ 0.3 Ag

LCP
ELF 19

MACISSACS CREEK

8 000 E

8 500 E

9 500 N

ELF 5
ELF 10
ELF 7

PROFESSIONAL GEOSCIENTIST
PROVINCE OF BRITISH COLUMBIA
R. D. FARMER

LEGEND

Late Devonian

1 — WEAKLY CALCAREOUS SHALE: undivided Gunsteel weathering, black and siliceous, may be weakly sericitized

Silurian

2 — SILTSTONE: gray to orange weathering, bioturbated to dolomitic to calcareous.

2a — Thinly bedded chert to calcareous siltstone

TRAVERSE LINE — — — —

SAMPLE LOCATIONS
- ●M7312..... Moss sample
- ●7311..... silt sample
- ●7313-7314...gossan seepage sample
- ●7310..... rock sample float

KEY

- OUTCROP
- STOCKWORK QUARTZ VEINING
- BEDDING
- FOLIATION
- THRUST FAULT

TECK EXPLORATION LTD.
KAMLOOPS, BRITISH COLUMBIA

ELF PROPERTY-ELF 19 CLAIM

PROPERTY GEOLOGY & SAMPLE LOCATION

0 100 200 metres

SCALE: 1:5,000 | NTS No: 94F/7W,E | FIGURE No: 4

feature of this unit is the presence of thin "pancake shaped" discontinuous limestone beds separated by more continuous siltstone beds. Rocks of unit 2a are generally separated from those of unit 2 by the thin, thrust bound slice of late Devonian black shale.

On the ridge west of MacIssacs creek, near the contact between late Devonian shales and thin bedded siltstone/limestone of unit 2a lies an area of strongly altered quartz-iron-carbonated stock work veins and associated quartz breccia. Pyrite occures in minor concentrations as widely spaced disseminated grains. Fuchsite occurs as aggregate blebs in variable abundance, mainly associated with highly fractured rock. Veinlet density increases near the ridge top where it is exposed and appears to dissipate and erraticly reoccur on the southwestern side of MacIssacs creek. One sample taken near this area (7310) returned 12% zinc from a large float boulder of quartz-iron-carbonate. See sample descriptions for further details.

PROSPECTING

A total of two days were spent prospecting and mapping with some silt, moss, and seepage silt samples collected. The program was supervised by Randy Farmer of Teck Exploration Ltd. of Kamloops, B.C. Prospecting did not cover the entire Elf 19 property due to limited funds and poor accessability. On the eastern ridge overlooking Macissac's Creek a traverse was made from the top near the claim boundary and along the ridge north, then conturing to MacIssac's Creek. Outcrop is sparse within heavily treed areas and removal of moss and other vegetation was necessary to uncover exposures. The second traverse was made on the top of the western-side of the ridge and along and down to a known heli-pad. Prospecting was aided by previous ortho-photo mapping for correct outcrop positioning and location of samples.

SAMPLE DESCRIPTIONS

All samples collected (5) were sent to Min-En Laboratories of Vancouver, B.C. Silt samples were analysed for 30 elements by ICP plus barium, while the one rock sample was assayed for Pb, Zn, Ag, Ba. Sample locations and results for Pb, Zn, Ag and Ba are plotted on figure 4 and complete results are included in Appendix III. Analytical procedures are included in Appendix IV.

Silt samples from creeks and iron seepage zones were collected to test for anomalous base metal concentrations originating in the outcrop poor valley walls. The following section provides a description of samples collected.

Sample No. 7310

Rock sample: float of highly sulphidic medium grained quartz-carbonate rock with granular quartz grains, 30% feldspar and are light vitreous. Spotty erratic subhedral pyrite probable 1-2% as disseminated grains. Sphalerite predominates up to 30% of rock as brown green clusters mainly along fracture planes. Variably calcareous and strongly oxidized with swarms of milky veins, strongly weathered along exposed surface. Assay results:

Ba - 0.88%
Pb - 0.19%
Zn - 12.00%
Ag - 2.8 g/t

Sample No. 7311

Silt sample taken from a small stream draining from the eastern side of slope into MacIssac's Creek. Due to steep run-off, quality of silt fraction was limited and fragments are composed of 30% calcareous siltstones and the remaining gray to black shales. Assay results:

Ba - 4460 ppm
Pb - 30 ppm
Zn - 2441 ppm
Ag - 0.3 ppm

Sample No. 07312

Moss sample taken from upper MacIssac's Creek mainly composed of a variety of limestones, shales, quartz, and cacareous siltstones. The stream has a high velocity of flow and exposes outcrop along the upper reaches. Assay results include:

Ba - 3250 ppm
Pb - 20 ppm
Zn - 568 ppm
Ag - 0.8 ppm

Sample No's. 07313, 07314

Samples taken from iron-seepages draining from the south-west side of slope within thick talus debris. Calcrete is wide spread in this area and quickly raises the ph down slope from the seepage outlet. Iron from seepage is largely derived from well

drained structures or distribution of bedrock and composed mainly of Fe rich silt derived from solution. Assay results are as follows:

07313	07314
Ba - 512 ppm	Ba - 538 ppm
Pb - 244 ppm	Pb - 243 ppm
Zn - 4127 ppm	Zn - 2938 ppm
Ag - 0.1 ppm	Ag - 1.6 ppm

DESCRIPTION OF RESULTS

Sample 07310 is a float sample returning 12.00% Zn, in a strongly oxidized siliceous arkose in the upper reaches of MacIssac's Creek. The sample, composed mainly of sphalerite, is anomalous in Pb, Ba, and Ag. Sphalerite is evenly distributed throughout the 35 cm rock. This sample appears to have come from an area on the western side of the slope which is underlain by strongly altered quartz/iron-carbonate stockwork veins and quartz breccias. This sample clearly shows a different style of mineralization and may represent remobilization of minerals through hydrothermal processes.

Silt sample 07311 shows high values of barium (4460 ppm) and zinc (2441 ppm) and low values in lead (30 ppm) and silver (0.3 ppm). This sample clearly indicates highly anomalous values within the sampled area. This may in part be caused by the Gunsteel Formation that underlies the sample site which, based on the composition of fragments present, consists mainly of gray-black shales.

Sample 07312 shows high values in barium (3250 ppm), lower values in zinc (568 ppm) and low values in lead (20 ppm) and silver (0.8 ppm) within MacIssac's Creek. This may also be in part related to the Gunsteel Formation that trends through the creek. The sample site was taken near the hanging wall of the Gunsteel Formation, near its contact with Silurian siltstones limestones and calcareous cherts.

Samples 07313 and 07314 show lower values in barium (512 ppm and 538 ppm) in iron seepages with lead (244 ppm and 243 ppm) and silver (0.1 and 1.6 ppm) being more elevated. This may show mineral distribution and dispersion patterns are a combination of weathering and mechanical movement, and minerals in solution with a higher ph. The two samples are some distance apart, but show near equivalent values.

CONCLUSIONS

The 1995 prospecting and stream sampling program outlined concentrations of base metals within the Elf 19 claim and clearly demonstrates the presence of mineralization

by the high values of zinc found within a float sample collected. The 1995 stream sampling and prospecting has identified float mineralization not previously known on the claim. Although the source of the float has not yet been discovered, and mineralization is of a different style from that on adjacent claims, potential for high grade mineralization is indicated. Mineralization associated with stockwork veining (iron quartz-carbonate) may have been remobilized from a buried mineralized horizon.

Black shales of the Gunsteel Formation are present on the property, but only as a very thin, thrust bound slice. Unless the thrust slice thickens downdip, potential for shale hosted mineralization on the Elf 19 claim appears to be poor.

REFERENCES

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Taylor, G.C., and MacKenzie, W.S. (1970): Devonian stratigraphy of northeast B.C.; GSC Bulletin 186.

Taylor, G.C., Cecile, M.P., Jefferson, C.W. and Norford, B.S. (1979): Stratigraphy of the Ware E1/2 map area; in Current Research, Part A, GSC Paper 79-1A, Report 37.

APPENDIX I : COST STATMENT

COST STATEMENT

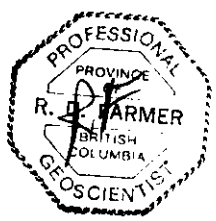
Stream sampling, prospecting
Paul Watt, July 3, 5, 1995. 1.5 days @ $232.00/day $348.00

Plotting and report writing
1 day @ $232.00/day $232.00

Helicopter, Northern Mtn. Helicopters
July 3, 1.4hrs @ $735.80/hr $1030.12
July 5, 0.4hrs @ $735.80/hr $294.32

Analytical, Min-En Labs Ltd., Vancouver, B.C.
1 rock sample, assay for Pb, Zn, Ba, Ag
1 @ $26.30/ea. $26.30
4 silt samples, analysed for, 30 elements by ICP + Ba
4 @ $13.55/ea. $80.50

Total expenditures on the Elf 19 Claim in 1995 ..... $1984.94



APPENDIX II : STATMENT OF QUALIFICATIONS

STATEMENT OF QUALIFCATIONS

I, Paul Watt of the city of Kamloops, British Columbia, do hereby certify that:

1. I am an active member of the Kamloops geological Group of British Columbia.

2. I have been an active prospector within the Kamloops region since 1987.

3. I have been employed by a number of companies in good standing since 1987.

4. I am currently employed by Teck Exploration LTD. of Kamloops.

5. I have also been self employed as independent contractor as (Trywest Exploration services).
6. Taken several short courses and work shops on Lithogeochemistry, Soil Geochemistry, and Structural Vein systems 1989-1994.
7. Completed UCC geology 2nd year, petrology and petrographic credit cource 1994.

8. I also have taken the Ministry of mines courses Petrology for Prospectors 1990 (Smithers, BC.)
9. Advanced Prospectors Geology Course, Ministry of Mines 1988, (Mesachie Lake, BC.)
10. Introduction to Prospecting and Geology Course 1987, (Kamloops, BC.)

P.S. Watt Prospector,Geological Technician.

Singed and dated in Kamloops, BC. August 11, 1995

Signature 

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P.S. Watt Prospector,Geological Technician.

Singed and dated in Kamloops, BC. August 11, 1995

Signature 

I, Randy Farmer, do hereby certify that:

1) I am a geologist and have practised my profession for more than 15 years.

2) I graduated from Lakehead University in Thunder Bay, Ontario with an Honours Bachelor of Science degree, (Geology), in 1980.

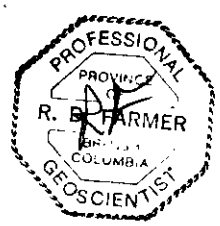
3) I supervised the program on the Elf 19 claim and proof read the report contained herein.

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 Elf 19 claim which is the subject of this report.

6) I am a Professional Geoscientist registered in the Province of British Columbia (Registration No. 20192).

Randy Farmer



Randy Farmer, P. Geo.
Senior Project Geologist
September, 1995

APPENDIX III : CERTIFICATES OF ANALYSES

MINERAL
•ENVIRONMENTS
LABORATORIES
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

VANCOUVER OFFICE:
8282 SHERBROOKE STREET
VANCOUVER, B.C. CANADA V5X 4E8
TELEPHONE (604) 327-3436
FAX (604) 327-3423

SMITHERS LAB:
3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TEL (604) 847-3004
FAX (604) 847-3005

Assay Certificate

5V-0229-RA1

Company: **TECK EXPLORATION LTD.**
Project: 1755
Attn: Fred Daley

Date: JUL-14-95
Copy 1. Teck Exploration Ltd., Kamloops, B.C.

We hereby certify the following Assay of 4 rock samples submitted JUL-06-95 by F. Daley.

Sample Number	Ag g/tonne	Ag oz/ton	Ba %	Pb %	Zn %
07310	2.8	.08	.88	.19	12.00

Certified by _____

MIN-EN LABORATORIES

MINERAL
•ENVIRONMENTS
LABORATORIES
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

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SMITHERS LAB:
3176 TATLOW ROAD
SMITHERS, B.C. CANADA V0J 2N0
TEL (604) 847-3004
FAX (604) 847-3005

Geochemical Analysis Certificate

5V-0229-SG1

Company: **TECK EXPLORATION LTD.**
Project: 1755
Attn: Fred Daley

Date: JUL-14-95
Copy 1. Teck Exploration Ltd., Kamloops, B.C.

We hereby certify the following Geochemical Analysis of 4 silt/moss/gossan samples submitted JUL-06-95 by F. Daley.

Sample Number	Ba PPM
07311	4460
07312	3250
07313	512
07314	538

Certified by _____

MIN-EN LABORATORIES

COMP: TECK EXPLORATION LTD.
PROJ: 1755
ATTN: Fred Daley

MIN-EN LABS — ICP REPORT

8282 SHERBROOKE ST., VANCOUVER, B.C. V5X 4E8
TEL:(604)327-3436 FAX:(604)327-3423

FILE NO: 5V-0229-SJ1
DATE: 95/07/14
* silt/moss/gossan * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	GA PPM	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SN PPM	SR PPM	TH PPM	TI %	U PPM	V PPM	W PPM	ZN PPM
07311	.3	.25	1	349	.6	1	1.91	13.4	21	10	54	1.75	1	.05	3	.91	621	36	.01	305	1000	30	1	2	59	1	.01	1	39.6	1	2441
07312	.8	.42	26	134	.8	1	2.49	.1	10	16	31	1.87	1	.10	11	1.56	237	5	.01	57	1090	20	1	3	58	1	.01	1	20.3	1	568
07313	.1	.04	1	175	1.6	43	6.38	.1	259	25	8	>15.00	1	.02	1	.12	5588	70	.01	828	270	244	1	27	229	1	.01	1	4.5	1	4127
07314	1.6	.01	1378	254	4.1	43	6.17	.1	28	59	5	>15.00	3	.01	1	.15	1	29	.01	113	990	243	36	27	280	1	.01	1	8.6	1	2938

APPENDIX IV : ANALYTICAL PROCEDURES

MINERAL
• ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK: PROCEDURE FOR 31 ELEMENT TRACE ICP

Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Sr, Th, Ti, V, Zn, Ga, Sn, W, Cr

Samples are processed by Min-En Laboratories, at 705 West 15th Street, North Vancouver, using the following procedures.

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

0.5 gram of the sample is digested for 2 hours with an aqua regia mixture.

After cooling samples are diluted to standard volume. The solutions are analyzed by computer Jarrell Ash ICP (Inductively Coupled Plasma Spectrometers). Reports are formatted and printed using a laser printer.

OFFICE AND LABORATORIES:
705 WEST FIFTEENTH STREET, NORTH VANCOUVER, B.C.
CANADA V7M 1T2

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MINERAL
• ENVIRONMENTS
LABORATORIES

Division of Assayers Corp. Ltd.

Ag, Cu, Pb, Zn, Ni, AND Co ASSAY PRODEDURE

Samples are dried @ 95 C and when dry are crushed on a jaw crusher. The -1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to -1/8 mesh. The whole sample is then riffled on a Jones Riffle down to a statistically representative 500 gram sub-sample (in accordance with Gy's statistical rules.) This sub-sample is then pulverized in a ring pulverizer to 95% minus 140, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

A 0.200 to 2.000 gram sub-sample is weighed from the pulp bag for analysis. Each batch of 70 assays has a natural standard and a reagent blank included. The samples are digested using a HNO3 - KClO3 mixture and when reaction subsides, HCL is added before it is placed on a hotlplate to digest. After digestion is complete the flasks are cooled, diluted to volume and mixed.

The resulting solutions are analyzed on an atomic absorption spectrometer using the appropriate standard sets. The natural standard digested along with this set must be within 2 standard deviations of it's known or the whole set is re-assayed. If any of the assays are >1% they are re-assayed at a lower weight. 10% of samples are assayed in duplicate.

OFFICE AND LABORATORIES:
705 WEST FIFTEENTH STREET, NORTH VANCOUVER, B.C.
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ANALYTICAL PROCEDURE REPORT FOR ASSESSMENT WORK:

PROCEDURE FOR Ba ASSAY

Samples are dried @ 95 C and when dry are crushed on a jaw crusher. The 1/4 inch output of the jaw crusher is put through a secondary roll crusher to reduce it to - 1/8 inch. The whole sample is then riffled on a Jones Riffle down to a statistically representative 300 gram sub-sample (in accordance with Gy's statistical rules.) This sup-sample is then pulverized on a ring pulverizer to 95% - 150 mesh, rolled and bagged for analysis. The remaining reject from the Jones Riffle is bagged and stored.

Samples are weighed and fused at 1200 C with lithium metaborate prior to being dissolved in nitric acid. The resulting solutions are analyzed by ICP. The CANMET standards are employed as check standards with each set of 24 samples. Reports are formatted and printed using a laser printer.

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