

GEOCHEMICAL, MAPPING, AND GEOLOGICAL REPORT

ON THE

DOMINION CREEK PROPERTY

AK, DM, AND DOM MINERAL CLAIMS

CARIBOO MINING DIVISION - BRITISH COLUMBIA

LATITUDE 53° 27'

LONGITUDE 121° 16' 12"

NTS 93H/6E/7W

FOR

GOLD CITY INDUSTRIES LTD.

GEOLOGICAL SURVEY BRANCH

MINING REPORT

NOVEMBER 1998

BY: ALAN RAVEN

25,888

TABLE OF CONTENTS

	Page
INTRODUCTION	3
LOCATION ACCESS AND PHYSIOGRAPHY	3
HISTORY AND PREVIOUS WORK	3
CLAIM INFORMATION	4
REGIONAL GEOLOGY	4
PROGRAM OBJECTIVES	5
PROPERTY GEOLOGY	5
GEOLOGICAL MAPPING OVERVIEW	5
Observations	
BOULDER SURVEY	6
Observations	
Results	
GEOCHEMISTRY	8
General Discussion	
Soil Survey	
Panned Concentrate Sampling	
CONCLUSIONS / RECOMMENDATIONS	9

APPENDIX

Analytical Results	Appendix I	12
Methodology	Appendix II	13
Statement of Qualifications		14
Statement of Costs		15

LIST OF FIGURES

Fig 1	Location Map
Fig 2	Claim Map
Fig 3	Sample Location Map pit area (in pocket)
Fig. 4	Sample Location Map soil grid in 9600N anomaly area (in pocket)
Fig. 5	Compilation Map (in pocket)

INTRODUCTION

This report describes the results of a geochemical sampling and mapping program carried out on the Dominion Creek property during July/August 1998. The property is located in the Cariboo Mining Division along Dominion Creek approx 110 km east south east of Prince George BC

LOCATION ACCESS AND PHYSIOGRAPHY

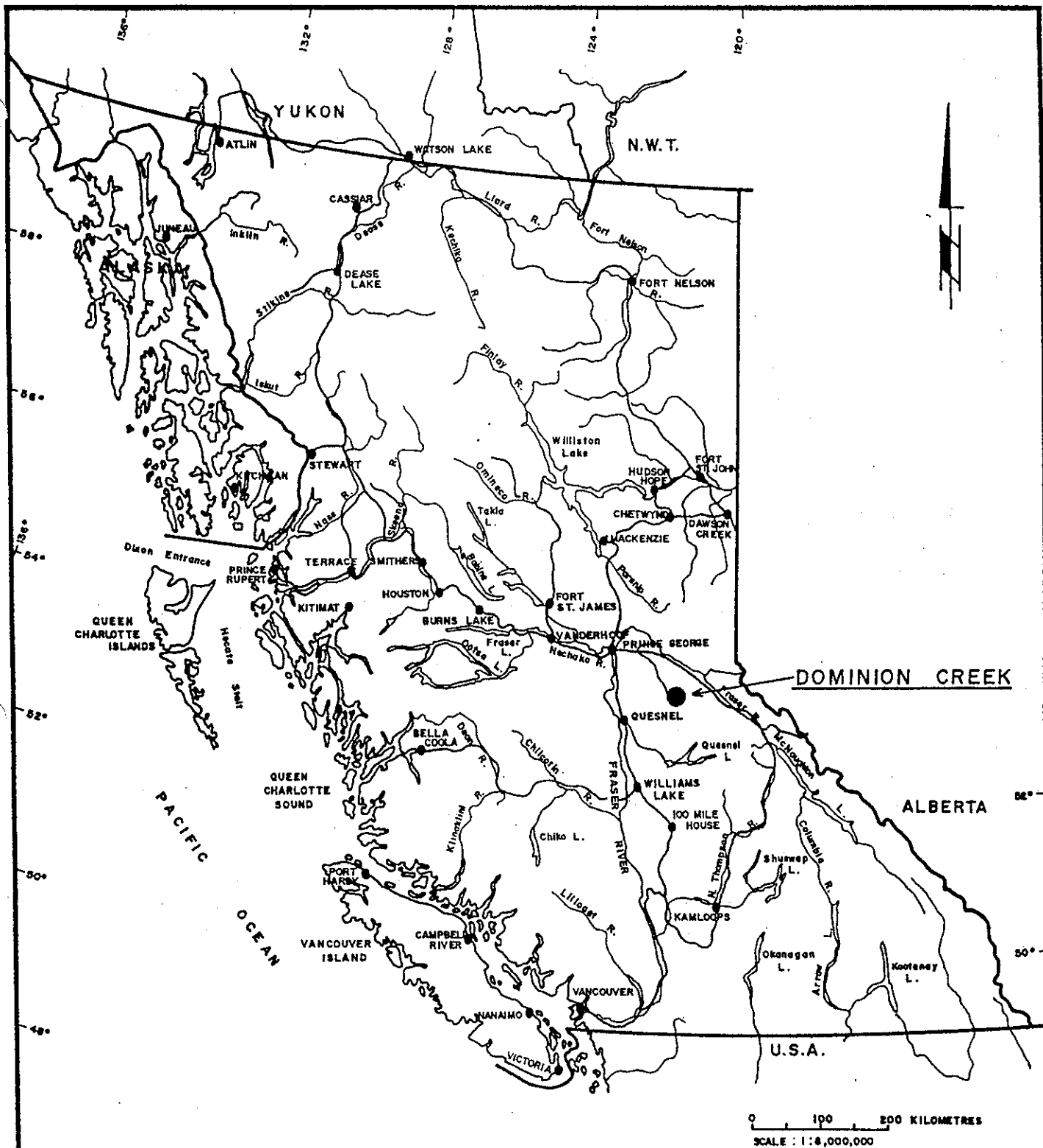
The Dominion Creek property is located along Dominion Creek, tributary of Haggen Creek, near Clear Mountain in the Cariboo Mining District of central British Columbia. The central part of the property, the South Zone, is situated at 1,460 m. a.s.l., on UTM coordinates 5923500mN and 615000mE.

The property is situated along the western edge of the Cariboo Mountains in an area where local relief varies from 1,160 to 1,860 m. a.s.l. The terrain across the property slopes moderately to steeply along Dominion Creek between the 1,220m. and 1,520m elevations, and the slopes are moderate above the 1,520 m. elevation. Most of the property is forested with mature spruce and balsam fir and is covered with a moderate to dense underbrush of dwarf willow, huckleberry and devilsclub.

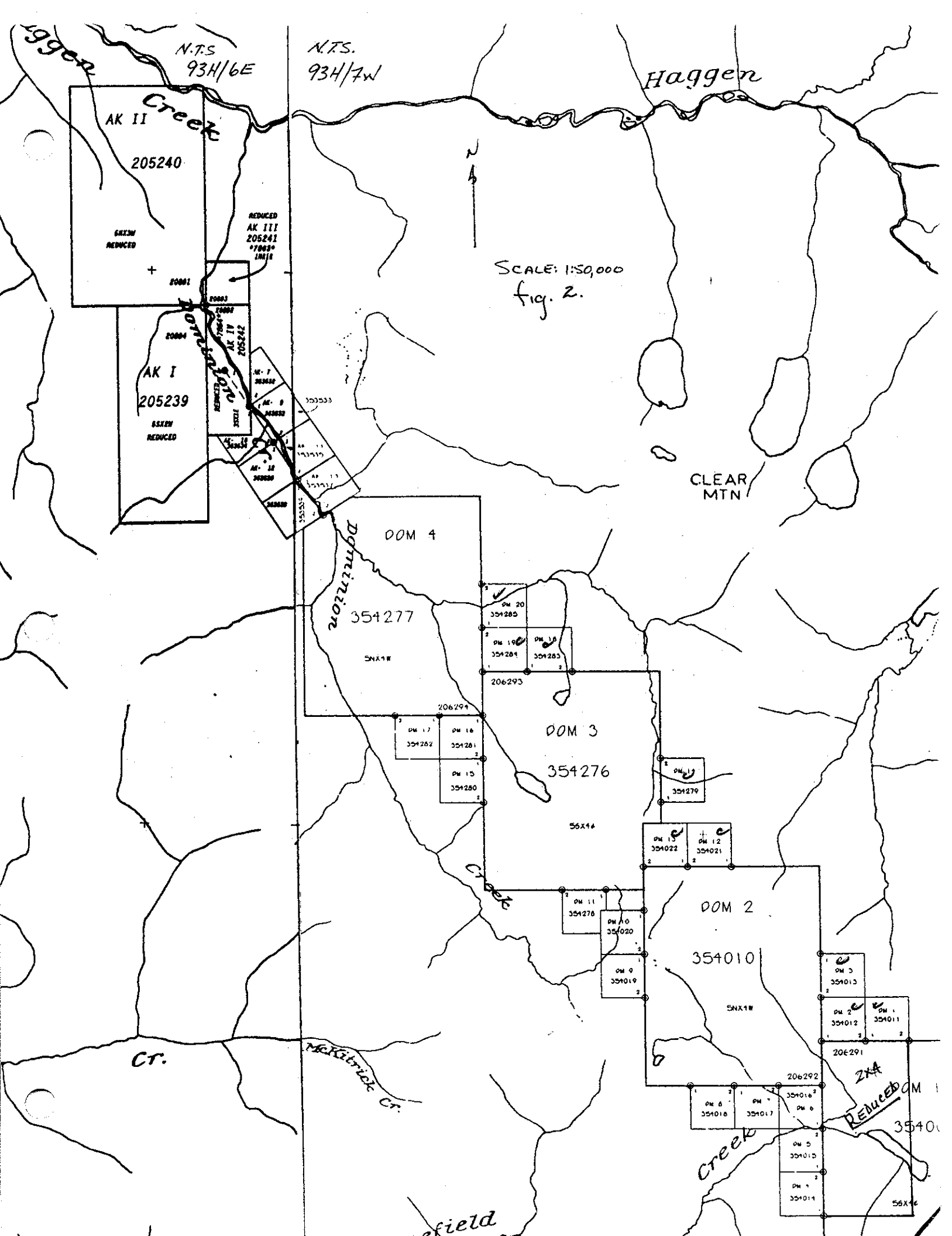
The property is located on NTS map 93H/6E/7W approximately 43 km.north-northeast of Wells and about 110 km. east-southeast of Prince George. Access from Prince George is by Highway 16 East to the Bowron Forest Road then southerly to km. 85 then on the Narrow Forest Road to km. 104 then easterly on the Haggen Forest Road to km. 22 then southeasterly on the old Rustad road to the last cut block and then by the old Noranda access road to the property. The final 13 km is not gravelled and a 4-wheel drive vehicle may be required to access the property.

HISTORY AND PREVIOUS WORK

- 1986 - claims staked by N. Kencayd
- 1986 - claims optioned by Noranda - geological mapping, soil geochem
- 1987 - Noranda - soil and stream geochem, geological mapping, diamond drilling, trenching.
- 1988 - Noranda - diamond drilling
- 1989 - Noranda returned the property to the prospector (Kencayd)
- 1989 - Raven purchased the property from the prospector
- 1989 - Raven - exposed the South Zone and stock piled ore grade material
- 1990 - Raven/Aquila Resources J.V. - begin clearing and stockpiling ore for bulk sample
- 1992 - Raven/Aquila J.V. - complete mining and milling of bulk sample
- 1998 - Raven - prospecting, geological mapping and geochem survey of streams



REVISED	DOMINION CREEK
	LOCATION MAP
PROJ. No.	
N.T.S. 93H6	
DWG. No.	
1	



CLAIM INFORMATION

The claims consist of modified grid and two post claims as described below (total 115 units):

CLAIM NAME	RECORD #	UNITS	EXPIRY DATE
AK I	205239	10 (mod. grid)	Aug. 8, 2003
AK II	205240	15 (mod. grid)	Aug. 8, 2003
AK III	205241	1 (mod. grid)	Aug. 8, 2003
AK IV	205242	3 (mod. grid)	Aug. 8, 2003
AK 7	353532	1 (2 post)	Feb. 4, 1999
AK 9	353533	1 (2 post)	Feb. 4, 1999
AK 10	353534	1 (2 post)	Feb. 4, 1999
AK 11	353535	1 (2 post)	Feb. 4, 1999
AK 12	353536	1 (2 post)	Feb. 4, 1999
AK 13	353539	1 (2 post)	Feb. 4, 1999
AK 14	353537	1 (2 post)	Feb. 4, 1999
DOM 4	354277	20 (mod. grid)	Mar. 13, 1999
DM 15	354280	1 (2 post)	Mar. 13, 1999
DM 16	354281	1 (2 post)	Mar. 13, 1999
DM 17	354282	1 (2 post)	Mar. 13, 1999
DOM 1	354009	8 (reduced mod. grid)	Feb. 22, 1999
DOM 2	354010	20 (mod. grid)	Feb. 22, 1999
DOM 3	354276	20 (mod. grid)	Mar. 13, 1999
DM 4	354014	1 (2 post)	Feb. 20, 1999
DM 5	354015	1 (2 post)	Feb. 20, 1999
DM 6	354016	1 (2 post)	Feb. 22, 1999
DM 7	354017	1 (2 post)	Feb. 22, 1999
DM 8	354018	1 (2 post)	Feb. 22, 1999
DM 9	354019	1 (2 post)	Feb. 21, 1999
DM 10	354020	1 (2 post)	Feb. 21, 1999
DM 11	354278	1 (2 post)	Mar. 12, 1999

REGIONAL GEOLOGY

The property lies in the Cariboo Mountains of the Omineca belt. The regional geology is comprised of Upper Proterozoic to Cambrian continental margin sediments including quartzite, sandstone, siltstone, shale and limestone. The area has been mapped at a scale of 1 inch to four kilometres (Map 1356A) and studied in Paper 72-35. Struik (1986) considers these rocks part of the Cariboo subterrane which is part of the displaced continental margin sediments.

These rocks have been grouped with the Upper Proterozoic Windermere tectonic assemblage, consisting of mainly continental margin sediments of the Lower Gog tectonic assemblage, which consists of rifted and passive continental margin sediments. On the property only rocks of the Isaac and Cunningham Formation (Windermere assemblage) are exposed.

The area has been deformed into a series of northwest plunging major fold structures. The northwest trending Isaac Lake Fault which roughly cuts through the centre of the property separates the Isaac Lake Synclinorium to the east and the Lanezi Arch or Anticlinorium to the west. This deformational episode appears to have resulted in folding of the deeper, older formations whereas younger, high level formations display more fault dominated structures. This is probably a function of the physical characteristics (less competent shales at depth) of the rocks and the higher temperatures at depth. The rocks display low-grade metamorphic effects.

PROGRAM OBJECTIVES

The objectives of the 1998 program were:

- a) To review the previous geological mapping by Noranda to see if it was complete and accurate.
- b) To locate and map as many mineralized boulders as possible in an effort to see if clusters or boulder trains could be outlined and hopefully lead to insitu mineralization.
- c) To investigate previously unexplained soil geochem anomalies outlined by the Noranda sampling.
- d) To do an orientation heavy mineral and silt sampling survey in the area of known mineralization and extend the sampling to the south.

PROPERTY GEOLOGY:

The property is underlain by the rocks of the Isaac and Cunningham Formations. The Isaac Formation consists predominantly of dark grey to black, fine grained, finely laminated, fissile, phyllitic to slaty argillite. It is variably graphitic, calcareous and pyritic. Pyrite forms medium to coarse grained cubes with shadows of quartz or calcite. Lesser amounts of grey siltstone and quartzite are interbedded with the argillite. Grey to black micritic limestone also forms a major component of the Isaac Formation, especially near the upper gradational contact with the Cunningham Formation. This limestone may be finely interbedded with the argillite or form individual beds up to 25 - 30 metres thick increasing in proportion of limestone upwards towards the Cunningham Formation. The overlying Cunningham Formation consists of massive to faintly laminated, micritic to finely crystalline, medium grey limestone with minor interbeds of graphitic argillite.

In general the bedding attitudes are consistently northwest to west-northwest and moderate to steeply dipping southwestward. A southeast plunging anticlinal axis was mapped on Dominion Creek near the east edge of the property. In the vicinity of the AK claims LCP, bedding trends have shifted to a east-west orientation.

A major northwest trending fault cuts through the centre of the property and is evidenced by topographic lineaments and abrupt lithological contacts. This structure is thought to be the extension of the Isaac Lake Fault and strikes at about 145 degrees. Several smaller faults trending at about 155 degrees have been mapped and are believed to be splays of the Isaac Lake Fault.

Two prominent jointing sets were measured. The first set is generally parallel to foliation, which is usually parallel to bedding. The second set is generally perpendicular to the foliation and dips steeply to the east. These fractures are generally filled with a network of thin quartz and/or calcite veinlets.

GEOLOGICAL MAPPING OVERVIEW

Observations:

A field review of the previous mapping carried out by Noranda as filed in their assessment reports indicates that there are significant outcrops along Discovery Creek and Dominion Creek which are not plotted on their maps. Some rock cuts exposed along the drill access roads are not mapped. Also detailed prospecting along the west slope of the Dominion Creek valley located a number of locally derived rubble and sub-outcrop areas which were not mapped by Noranda. Other priorities and limited financing did not allow for time to conduct mapping during 1998.

Previous mapping and drilling by Noranda has not clearly indicated if there is a lithological control on the location of the mineralized veins although there is some suggestion that the best veins are developed within a black, fine grained limestone unit. The writer thinks that a property geological mapping program should provide a much better picture of the distribution of this unit and would help in determining how this unit is in controlling the location of mineralization. The importance of the southeast-northwest trending structures has been noted in the past. More complete mapping should help better define the location of these structures and other potentially important cross structures. In addition, mapping will undoubtedly outline further occurrences of quartz vein rubble or outcrops to be sampled.

BOULDER SURVEY

Observations:

One of the notable geological features of the Dominion Creek area is the amount of quartz and quartz-carbonate vein material, both in outcrop and boulders. This is especially noticeable along Dominion Creek. Obviously not all of these veins are mineralized although many of them have a misleading rusty surface coloration. At first it seems like an overwhelming sampling problem to determine which veins carry gold. In an effort to prioritize the sampling of the quartz vein material, the detail features of the gold bearing quartz were noted. Assay results from the drilling and trench samples were correlated with the remaining core, trench outcrops, pit area exposures and assays from the first trip of this year. The following observations were made:

- a) The presence of visible base metal sulphides and/or pyrite is almost a sure fire positive indicator for the presence of gold. Even minor amounts of these sulphides can indicate high gold values.
- b) The lack of visible sulphides is not necessarily negative, since some white sulphide free veins cut by drilling carried high gold values. It seems that this favorable quartz has a "sparkly" fine crystalline nature to it as opposed to the more massive barren bull quartz and the quartz-iron carbonate veins that are also abundant. Once one has developed the "eye" for this "sparkly" type of quartz then picking out the gold bearing quartz is much easier. As well, the sulphide distribution within the mineralized veins can be quite patchy with the sulphides restricted to one side of the vein in stringers or patches. Sometimes it is necessary to break and study vein outcrops or boulders very thoroughly before one can detect sulphides as they can be highly weathered or look very similar to the patches of graphitic schist caught up in many of the veins. In this regard a large hammer and a good backswing is recommended.

Some ten days (20 man/days) were spent in detail examination and tracing of the quartz boulders along the creek valleys. The extremely low water levels in Dominion Creek allowed the examination of boulders that would normally be under water. Detail prospecting along the slopes of Dominion Creek in the areas of the unexplained soil geochem anomalies was also done.

Results

Along Dominion Creek the quartz material is much more abundant than is normal for the region, especially quartz containing sulfides. After a few days of working in the creek and Main Zone area we decided that there are three types of quartz vein material on the property. The three "types" are :

- Type 1 - which is quartz-carbonate vein material formed as "sweats" in the dilation zones of the structurally deformed sediments.
- Type 2 - which is quartz vein material without any appreciable carbonates nor readily visible sulphides. I have called this "sparkly" quartz to help differentiate it from the type 1 quartz.
- Type 3 - which is "sparkly" quartz with obvious sulphide content. These sulphides may be galena sphalerite, chalcopyrite or iron pyrite which may occur in any combination.
(Type 2 and type 3 quartz may be different zones of the same veins or an overprint of two different mineralizing events)

Type 1 quartz contains "no" gold (usually <10 ppb) and only background values in base metals
e.g. Rock sample #DCR 98-3 10 ppb Au, <0.01% Pb, <0.01% Zn

Type 2 quartz contains good gold values with very little if any base metal values
e.g. Sample #17918 from DDH-21 78.79 g/t Au, <0.01% Pb, <0.01% Zn
Rock sample from the 155 vein 11.12 g/t Au, <0.01% Pb, <0.01% Zn

Type 3 quartz contains both high gold and base metal values
e.g. Sample #17798 from DDH-13 49.3 g/t Au, 3.75% Pb, 3.88% Zn
Sample #17830 from DDH-16 67.5 g/t Au, 1.00% Pb, 5.80% Zn
Sample #18270 from DDH-23 11.11 g/t Au, 9.10% Pb, 2.80% Zn

Note: all examples are from Noranda data except #DCR 98-3.

In order to ascertain the extent of the quartz vein material with "ore" grade gold values I would recommend an extensive sampling of quartz floats be carried out in the following areas of the property:

- ⇒ on the east facing slope (west side of Dominion Creek) between the Main Zone and the confluence of the East and West forks of Dominion Creek
- ⇒ in Dominion Creek itself as far upstream as is practical
- ⇒ in all the tributaries of Dominion Creek, especially those draining from the west. The east side only needs to be surveyed up to the Issac/Cunningham contact

It is very important, during this survey, to accurately locate and plot the sample locations and to provide a detailed field description of the samples. There must also be a duplicate of each sample kept for correlating with positive results and in case a more detailed study of the sample specimen is required.

The point I am making here is that this property is a gold rich quartz anomaly with an excellent probability of having more zones of high grade gold and that there are many quartz floats that may contain ore grade gold values but cannot be visually identified.

Type 3 Quartz

I had determined that it would be very useful to locate and plot as many type 3 quartz boulders as possible to help me ascertain if there were any concentrations of these readily identifiable quartz floats. A very careful and detailed boulder survey was carried out this season during the low water levels of this extremely dry summer. During our many trips up and down Dominion Creek doing our pan con and prospecting traverses we noted and flagged any type 3 boulders we found (first trip). During the boulder survey we prospected for additional type 3 quartz and plotted the previously flagged floats. We also attempted to locate as many type 2 quartz boulders as possible but there was just too many of these boulders in the area so it was decided that a detailed survey would be the only fair and practical way to map these floats. Only type 3 quartz floats, with obvious sulfides were plotted and sampled (not yet analyzed) but there are many type 1 and type 2 quartz boulders in the Dominion Creek drainage. The plotted type 3 quartz range in size from "chunks" of 25 cm. in "diameter" to boulders of about 1.5x1.0x1.0 metres with the majority of the plotted pieces about 0.8x0.5x0.5 metres

There were four clusters of the type 3 quartz located. I have described these boulder clusters (BC) starting at the junction of Discovery Creek and working southward (upstream and up-ice) as:

- BC 1 - downslope from the Main Zone there is a number of boulders spread over about 150 metres which are probably from the Main Zone but some of the upstream ones may be from the 9600N anomaly.
- BC 2 - directly downslope from the 9600N soil anomaly
- BC 3 - a small group downstream and downslope from the 8800N soil anomaly; this cluster is about 900 metres upstream from the Main Zone.
- BC 4 - this is a large group of boulders immediately downstream of the 8000N soil anomaly and the pan con anomaly in 8000N Creek; this cluster is about 1700 metres upstream of the Main Zone.

The farthest upstream/up-ice location of a type 3 boulder (1.5x0.8x0.5 metres) is about 2000 metres southerly from the Main Zone and is located in the Dominion Creek drainage, well above any known showing or anomaly. A type 3 boulder (1.5x1.25x1.0 metres) was located east of the LCP for AK I-IV and outside of the present Dominion Creek drainage; there was also another piece (1.0x0.75x0.5 metres) located just above 9600N 10500E on the Norex grid (inside the 9600N anomaly); two boulder trains were located at about 9450N 10400E (Norex grid) which is in the soil anomaly that stretches southerly from 9650N 10400E for 400 metres.

The results of the boulder survey have confirmed the presence of additional gold bearing zones outside the known showings area. At least three areas of mineralized quartz concentration, two of which were not previously recognized and the location of a large float 2000 metres upstream and up-ice of the Main Zone. Boulder cluster #4 is a large group of floats 1700 metres upstream of the Main Zone and in the immediate vicinity of both a good soil anomaly and the highest pan con samples found this year

GEOCHEMISTRY

General Discussion

As the geochemical surveys conducted by Noranda were carried out over 10 years ago using only a flagged grid it was necessary to spend considerable time in relocating the key sample sites. Fortunately after extensive searching in the dense bush enough sample site markers were located to re-establish the location of the anomalous areas (this was done by Brennan and myself on the first trip). However because the Noranda sampling was in part not detailed enough additional sampling was required to reconfirm and better outline the anomalies. The samples collected in 1998 are plotted on fig. 4. For convenience I have plotted only the gold, lead and zinc values. The complete results are included in the appendix. It should be noted that there is a significant location error in the plotting of the southern part of the Noranda grid. A more correct location of the grid is shown in fig. 5. The location error on the Noranda grid appears to be a combination of a compass error in the layout of the southern part of the Noranda base line and the error caused by the use of the photocopy blowup of the 1:50,000 topo map on which they plotted their data.

The 1998 sampling has reconfirmed the Noranda anomalies and better defined the location. In fact the anomaly located on line 8000N 10080E is on the east side of Dominion Creek rather than on the west side as their map would indicate.

Panned Concentrate Sampling

There were a total of 23 pan cons collected from the Dominion Creek drainage system (fig 5). The area covered was from the confluence of Dominion Creek and Discovery (Camp) Creek to about 1.5 kilometres up the East fork of Dominion Creek; about 1.5 kilometres up the West fork of Dominion Creek and on the east side of Dominion Creek well above the Isaac/Cunningham contact. The samples were taken as close to bedrock as possible and in the active part of the drainages. The samples were processed in the field by sieving with a Barakso sieve/pan set which produced approximately a 1 kilo sample that was taken to camp and panned down to about 50 to 100 grams. This concentrate was submitted to Chemex Labs for 32 element ICP and gold geochem (results in appendix)

I have included a few of the samples for discussion;

Sample	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm
DCPC 98-17 (Discovery Creek)	170	0.8	57	384	154	74
DCPC 98-13 (8000N Creek)	265	0.2	75	40	118	104
DCPC 98-14 (8000N Creek)	1370	2.4	86	60	124	116
DCPC 98-23 (8400N Creek)	10	<0.2	74	44	112	94

The numbers have indicated to me that one should be cautious when interpreting results and look at all the "numbers " and not just the gold values. In the case of # 98-17 on Discovery Creek which is directly below the Main (South) Zone showing, the gold values are quite low for a pan con but the gold values are strongly supported by the base metal and the arsenic values. In this example there is a large zone of very high grade gold mineralization almost immediately above and upstream from the sample site. The sample 98-23 on 8400N Creek has low gold numbers but good support in base metal and arsenic values suggesting that this is also a target area. The samples 98-13 and 98-14 on 8000N Creek have good to excellent gold values with strong base metal and arsenic values indicating a possible source nearby. Arsenic constitutes a very minor part of the mineralization but is a good pathfinder on this property.

The results of the pan con survey have indicated that the gold mineralization is much more widely spread than just the area drilled by Noranda.

A pan con survey carried on earlier in the season while the water is still flowing in the intermittent streams would be very useful in better defining the gold mineralization.

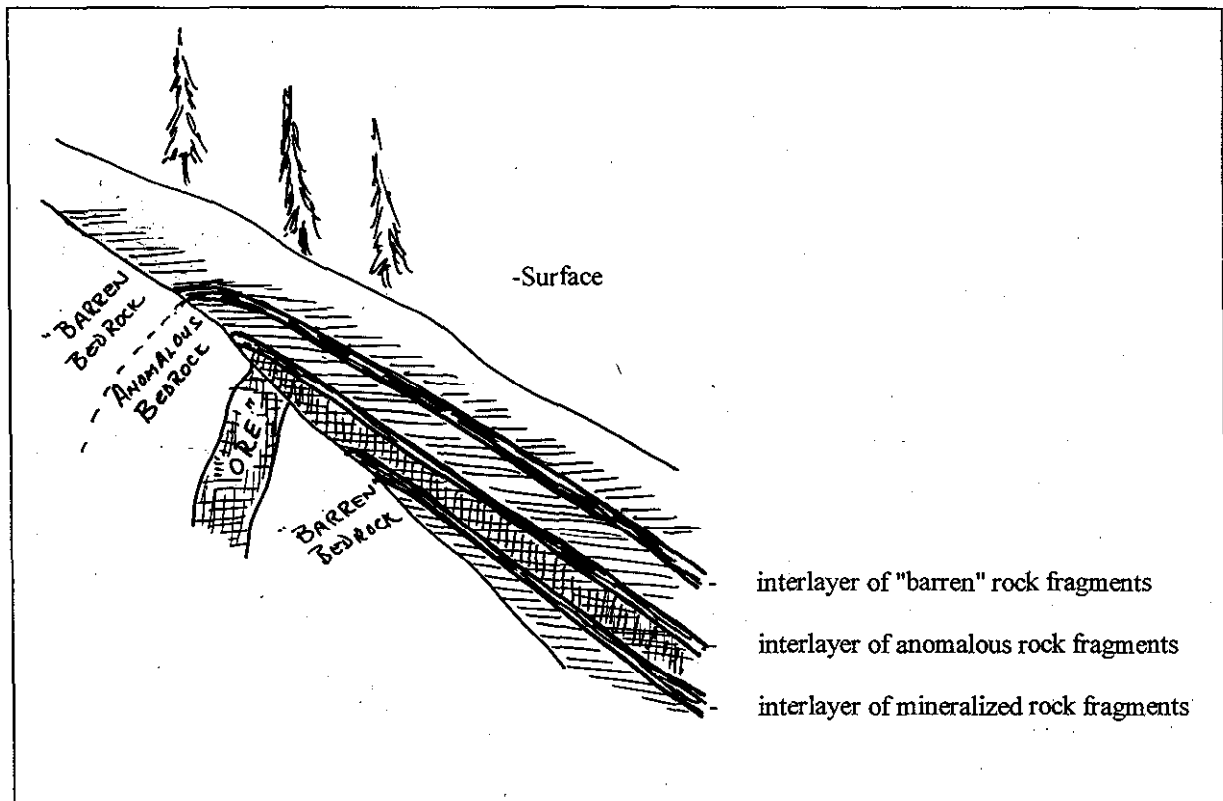
SOIL SURVEY

The main purposes of the soil survey was: to confirm the Noranda anomalies, to determine if there was a good way to "detail" survey the anomaly areas, to determine why there was an unusual sample to sample variation in the zinc values, and to examine the soil profile on the steeper slopes.

I concentrated on three Noranda lines 9600N, 9625N and 9650N which are located between the end of the drill roads and Dominion Creek as well as the anomaly at 8000N.

A number of soil profiles were done in the 9600 N anomaly area. These profiles showed how "interlayers" of platy rock fragments had developed with what appeared to be a "B" zone soil horizon between them.

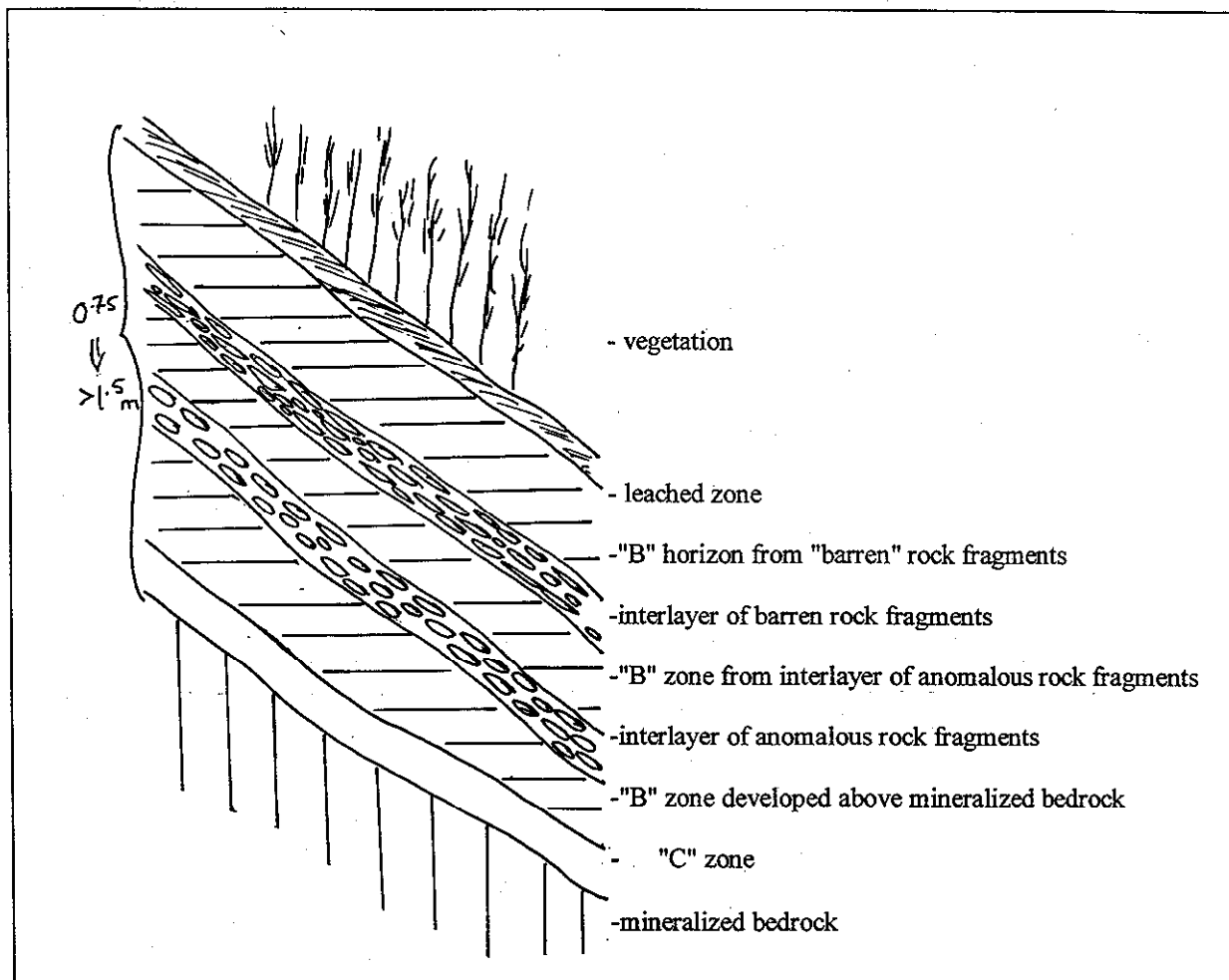
Sketch of the target area



The overburden is eroded by a series of sub-parallel gullies, bearing 070 , that have exposed various "B" horizons to the sampler. The exposure of these various "B" horizons was not apparent to the field personnel during the original survey, nor is it apparent now, and resulted in erratic sample to sample results. If the erosion was insufficient to penetrate to the necessary depth then the sampler collected soil from an interlayer "B" horizon that did not reflect the underlying bedrock. This sampling of an inconsistent soil horizon resulted in erratic sample to sample zinc values.

Soil profiles

Sketch of soil profiles



Note: This is a simplified sketch that ignores the complications of leaching and percolation of ground waters and uses simple soil zone designations in order to provide a practical explanation to the soil environment in the target area.

Some examples of the different "B" horizon values between interlayers of rock fragments
(Gold ppb, lead ppm, zinc ppm, arsenic, ppm)

9650N 10380E (upper slope)	A - barren "B" zone results 15/38/92/16
	B - anomalous "B" zone results 25/46/130/50
9600N 10525E (mid lower slope)	A - anomalous "B" zone results 30/36/52/18
	B - mineralized "B" zone results 45/146/164/36
9600N 10550E (lower slope)	A - anomalous "B" zone results 10/50/108/36
	B - barren "B" zone results <5/28/92/26

The best numerical results were obtained from samples taken from below interlayers of mineralized rock fragments and from "B" horizon soil taken above mineralized bedrock.

We endeavored to resample the exact Noranda location so it was slow going at times to relocate the flagged sites. In most cases the old flagging was in the debris immediately around the station. Samples were taken with a shovel so that a soil profile could be examined at each site.

By closely observing the soil development, soil creep and the enclosed "layering" of rock fragments, I came to the conclusion that:

- the steep slope created a soil environment that creates "layers" of soil and rock fragment concentrations that are sufficiently impervious to affect the metal concentrations in the soil.
- depending on which "soil" layer was sampled and of what the rock fragment layer consisted, would determine in a large part the values obtained regardless of the bedrock mineralization.
- in some cases the "barren" rock fragment layers from up-slope mask the bedrock response.

The results of the soil sampling program were positive in; confirming the Noranda anomalies in the 9600N and the 8000N areas are real, determining a sampling technique that would more decisively outline the anomalies and increasing my understanding of the particular mechanics of the soil dispersion on the steep slopes.

CONCLUSIONS AND RECOMMENDATIONS

The 1998 program was very successful in demonstrating that there are additional mineralized areas on the property beyond those drilled by Noranda. It is obvious that additional mapping, rock sampling, soil geochemistry and pan concentrate sampling should define even more mineralized zones.

The detailed examination of the soil profiles, the correlation of the Noranda data with the exact sample site and the re-sampling of a portion of the grid has explained the erratic sample to sample zinc values

I would recommend that a detail soil grid, 25 by 25 metre, be established in the high priority areas. The samples should be taken with a shovel and from as near bedrock as possible to mitigate the effects of "barren" soil and rock fragment layers. I realize this would be labour intensive but would be well worth the effort. This sampling technique, shoveling of deep sample pits, should be used on all the steep slopes of the property.

Additional pan concentrate sampling earlier in the season while water is still flowing in the intermittent streams would probably locate additional mineralized areas.

Detail mapping and rock sampling of quartz boulders in the area of the soil geochem anomalies should pinpoint the source. Trenching and drilling will ultimately be required to determine the extent of the mineralized zones

APPENDIX I
ANALYTICAL RESULTS



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

A9827702

Comments: ATTN: ALAN RAVEN

CERTIFICATE

A9827702

(LVI) - RAVEN, ALAN

Project:
P.O. #:

Samples submitted to our lab in Vancouver, BC.
This report was printed on 14-APR-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
208	9	Assay ring to approx 150 mesh
226	9	0-3 Kg crush and split
3202	9	Rock - save entire reject
233	9	Assay AQ ICP digestion charge

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	9	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
997	1	Au g/t: 1 assay ton, grav.	FA-GRAVIMETRIC	0.07	1000.0
301	9	Cu %: Conc. Nitric-HCL dig'n	AAS	0.01	100.0
312	9	Pb %: Conc. Nitric-HCL dig'n	AAS	0.01	100.0
316	9	Zn %: Conc. Nitric-HCL dig'n	AAS	0.01	100.0
4001	9	Ag ppm: A30 ICP package	ICP-AES	1	200
4002	9	Al %: A30 ICP package	ICP-AES	0.01	15.00
4003	9	As ppm: A30 ICP package	ICP-AES	10	50000
4004	9	Ba ppm: A30 ICP package	ICP-AES	20	20000
4005	9	Be ppm: A30 ICP package	ICP-AES	5	100
4006	9	Bi ppm: A30 ICP package	ICP-AES	10	50000
4007	9	Ca %: A30 ICP package	ICP-AES	0.01	30.0
4008	9	Cd ppm: A30 ICP package	ICP-AES	5	1000
4009	9	Co ppm: A30 ICP package	ICP-AES	5	50000
4010	9	Cr ppm: A30 ICP package	ICP-AES	10	20000
4011	9	Cu ppm: A30 ICP package	ICP-AES	5	50000
4012	9	Fe %: A30 ICP package	ICP-AES	0.01	30.0
4013	9	Hg ppm: A30 ICP package	ICP-AES	10	10000
4014	9	K %: A30 ICP package	ICP-AES	0.01	10.00
4015	9	Mg %: A30 ICP package	ICP-AES	0.01	30.0
4016	9	Mn ppm: A30 ICP package	ICP-AES	10	50000
4017	9	Mo ppm: A30 ICP package	ICP-AES	5	50000
4018	9	Na %: A30 ICP package	ICP-AES	0.01	20.0
4019	9	Ni ppm: A30 ICP package	ICP-AES	5	50000
4020	9	P ppm: A30 ICP package	ICP-AES	100	10000
4021	9	Pb ppm: A30 ICP package	ICP-AES	5	50000
4022	9	Sb ppm: A30 ICP package	ICP-AES	10	10000
4023	9	Sc ppm: A30 ICP package	ICP-AES	5	10000
4024	9	Sr ppm: A30 ICP package	ICP-AES	5	10000
4025	9	Ti %: A30 ICP package	ICP-AES	0.01	10.00
4026	9	Tl ppm: A30 ICP package	ICP-AES	20	10000
4027	9	U ppm: A30 ICP package	ICP-AES	20	10000
4028	9	V ppm: A30 ICP package	ICP-AES	20	50000
4029	9	W ppm: A30 ICP package	ICP-AES	20	10000
4030	9	Zn ppm: A30 ICP package	ICP-AES	5	50000



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

A9827700

Comments: ATTN: ALAN RAVEN

CERTIFICATE

A9827700

(LVI) - RAVEN, ALAN

Project:
P.O. #:

Samples submitted to our lab in Vancouver, BC.
This report was printed on 14-APR-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
299	7	Pulp; prepped on other workorder
285	7	ICP - HF digestion charge
287	7	Special dig'n with organic ext'n

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
13	7	As ppm: HNO3-aqua regia digest	AAS-HYDRIDE/EDL	1	10000
22	7	Sb ppm: HCl-KClO3 digest, extrac	AAS-BKGD CORR	0.2	1000
20	7	Hg ppb: HNO3-HCl digestion	AAS-FLAMELESS	10	100000
578	7	Ag ppm: 24 element, rock & core	AAS	0.2	100.0
573	7	Al %: 24 element, rock & core	ICP-AES	0.01	25.0
565	7	Ba ppm: 24 element, rock & core	ICP-AES	10	10000
575	7	Be ppm: 24 element, rock & core	ICP-AES	0.5	1000
561	7	Bi ppm: 24 element, rock & core	ICP-AES	2	10000
576	7	Ca %: 24 element, rock & core	ICP-AES	0.01	25.0
562	7	Cd ppm: 24 element, rock & core	ICP-AES	0.5	500
563	7	Co ppm: 24 element, rock & core	ICP-AES	1	10000
569	7	Cr ppm: 24 element, rock & core	ICP-AES	1	10000
577	7	Cu ppm: 24 element, rock & core	ICP-AES	1	10000
566	7	Fe %: 24 element, rock & core	ICP-AES	0.01	25.0
584	7	K %: 24 element, rock & core	ICP-AES	0.01	10.00
570	7	Mg %: 24 element, rock & core	ICP-AES	0.01	15.00
568	7	Mn ppm: 24 element, rock & core	ICP-AES	5	10000
554	7	Mo ppm: 24 element, rock & core	ICP-AES	1	10000
583	7	Na %: 24 element, rock & core	ICP-AES	0.01	10.00
564	7	Ni ppm: 24 element, rock & core	ICP-AES	1	10000
559	7	P ppm: 24 element, rock & core	ICP-AES	10	10000
560	7	Pb ppm: 24 element, rock & core	AAS	2	10000
582	7	Sr ppm: 24 element, rock & core	ICP-AES	1	10000
579	7	Ti %: 24 element, rock & core	ICP-AES	0.01	10.00
572	7	V ppm: 24 element, rock & core	ICP-AES	1	10000
556	7	W ppm: 24 element, rock & core	ICP-AES	10	10000
558	7	Zn ppm: 24 element, rock & core	ICP-AES	2	10000



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

A9827703

Comments: ATTN: ALAN RAVEN

CERTIFICATE

A9827703

(LVI) - RAVEN, ALAN

Project:
P.O. #:

Samples submitted to our lab in Vancouver, BC.
This report was printed on 14-APR-1999.

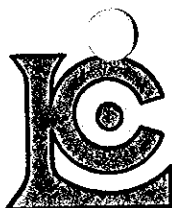
SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	40	Dry, sieve to -80 mesh save reject ICP - AQ Digestion charge
202	40	
229	40	
* NOTE	1.	

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	40	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2118	40	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
2119	40	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	40	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	40	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	40	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	40	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	40	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	40	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	500
2126	40	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	40	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	40	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	40	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	40	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	40	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	40	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	40	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	40	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	40	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	40	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	40	Na %: 32 element, soil & rock	ICP-AES	0.01	10.00
2138	40	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	40	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	40	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	40	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	40	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	40	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	40	Ti %: 32 element, soil & rock	ICP-AES	0.01	10.00
2145	40	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	40	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	40	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	40	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	40	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

A9827701

Comments: ATTN: ALAN RAVEN

CERTIFICATE

A9827701

(LVI) - RAVEN, ALAN

Project:
P.O. #:

Samples submitted to our lab in Vancouver, BC.
This report was printed on 14-APR-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	14	Geochem ring to approx 150 mesh
226	14	0-3 Kg crush and split
3202	14	Rock - save entire reject
229	14	ICP - AQ Digestion charge
* NOTE	1.	

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	14	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2118	14	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
2119	14	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	14	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	14	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	14	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	14	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	14	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	14	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	500
2126	14	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	14	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	14	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	14	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	14	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	14	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	14	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	14	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	14	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	14	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	14	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	14	Na %: 32 element, soil & rock	ICP-AES	0.01	10.00
2138	14	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	14	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	14	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	14	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	14	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	14	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	14	Ti %: 32 element, soil & rock	ICP-AES	0.01	10.00
2145	14	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	14	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	14	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	14	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	14	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

A9827699

Comments: ATTN: ALAN RAVEN

CERTIFICATE

A9827699

(LVI) - RAVEN, ALAN

Project:
P.O. #:

Samples submitted to our lab in Vancouver, BC.
This report was printed on 14-APR-1999.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
235	22	Pan con ring to approx 150 mesh
220	22	Transferring charge
222	22	Drying charge (0-3 Kg)
229	22	ICP - AQ Digestion charge

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	22	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2118	22	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
2119	22	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	22	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	22	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	22	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	22	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	22	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	22	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	500
2126	22	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	22	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	22	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	22	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	22	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	22	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	22	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	22	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	22	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	22	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	22	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	22	Na %: 32 element, soil & rock	ICP-AES	0.01	10.00
2138	22	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	22	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	22	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	22	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	22	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	22	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	22	Ti %: 32 element, soil & rock	ICP-AES	0.01	10.00
2145	22	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	22	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	22	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	22	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	22	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

##

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

Project :

Comments: ATTN: ALAN RAVEN

Page Number : 1-A
Total Pages : 1
Certificate Date: 19-AUG-1998
Invoice No. : 19827700
P.O. Number :
Account : LVI

CERTIFICATE OF ANALYSIS

A9827700

SAMPLE	PREP CODE	As ppm	Sb ppm	Hg ppb	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)
DCPC 98.01	299 285	54	3.8	< 10	< 0.2	5.36	330	2.0	2	2.00	< 0.5	71	100	67	11.75
DCPC 98.02	299 285	53	3.2	< 10	< 0.2	5.68	340	1.5	< 2	2.68	< 0.5	61	92	57	10.70
DCPC 98.03	299 285	37	2.4	< 10	0.2	5.91	360	2.0	6	2.14	< 0.5	49	92	51	8.15
DCPC 98.20	299 285	108	2.2	20	2.4	5.47	330	1.5	< 2	2.13	< 0.5	79	77	74	16.45
DCPC 98.21	299 285	104	3.0	< 10	< 0.2	6.50	420	2.0	< 2	0.75	< 0.5	64	88	65	11.65
DCPC 98.22	299 285	53	3.2	< 10	< 0.2	7.31	410	2.0	< 2	2.60	< 0.5	48	91	50	9.57
DCPC 98.23	299 285	94	7.4	< 10	< 0.2	5.97	360	2.0	< 2	1.56	< 0.5	70	80	66	13.20

CERTIFICATION



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

##

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

Project :

Comments: ATTN: ALAN RAVEN

Page 1 of 1-B
Total Pages : 1
Certificate Date: 19-AUG-1998
Invoice No. : 19827700
P.O. Number :
Account : LVI

CERTIFICATE OF ANALYSIS

A9827700

SAMPLE	PREP CODE	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)	
DCPC 98.01	299 285	1.85	0.52	385	< 1	0.50	119	400	76	177	0.34	54	< 10	98	
DCPC 98.02	299 285	1.99	0.56	370	< 1	0.53	103	360	62	204	0.17	54	< 10	102	
DCPC 98.03	299 285	2.04	0.56	365	< 1	0.57	89	380	48	176	0.33	59	20	90	
DCPC 98.20	299 285	1.96	0.39	345	< 1	0.28	161	480	68	215	0.17	54	< 10	100	
DCPC 98.21	299 285	2.30	0.39	390	< 1	0.50	118	510	56	144	0.17	71	< 10	96	
DCPC 98.22	299 285	2.51	0.55	410	< 1	0.49	100	430	50	244	0.17	66	< 10	96	
DCPC 98.23	299 285	2.09	0.46	490	2	0.47	138	410	66	175	0.17	57	< 10	104	

CERTIFICATION:



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN
BOX 2937
PRINCE GEORGE, BC
V2N 4T7

##

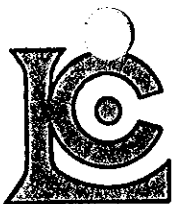
Page Number : 1-A
Total Pages : 1
Certificate Date: 18-AUG-1998
Invoice No. : I9827699
P.O. Number :
Account : LVI

Project :
Comments: ATTN: ALAN RAVEN

CERTIFICATE OF ANALYSIS A9827699

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
DCPC 98.01	235 220	30	0.2	0.97	54	50	< 0.5	< 2	1.77	< 0.5	60	48	65	11.05	< 10	< 1	0.25	10	0.29	340
DCPC 98.02	235 220	25	0.2	0.80	50	40	< 0.5	< 2	2.49	< 0.5	55	37	59	10.10	< 10	< 1	0.16	10	0.34	345
DCPC 98.03	235 220	10	0.2	1.12	32	60	< 0.5	< 2	2.07	< 0.5	46	39	51	8.02	< 10	< 1	0.28	20	0.35	340
DCPC 98.04	235 220	< 5	< 0.2	1.51	32	40	< 0.5	2	5.36	< 0.5	33	37	30	6.89	< 10	< 1	0.20	10	0.67	385
DCPC 98.05	235 220	< 5	< 0.2	1.66	34	50	< 0.5	2	7.27	< 0.5	29	38	27	6.89	< 10	< 1	0.26	10	0.66	370
DCPC 98.06	235 220	< 5	< 0.2	1.61	30	40	< 0.5	< 2	8.95	< 0.5	24	36	22	6.38	< 10	< 1	0.19	10	0.65	320
DCPC 98.08	235 220	< 5	< 0.2	1.21	8	60	< 0.5	< 2	0.20	< 0.5	19	95	13	4.89	< 10	< 1	0.22	50	0.37	365
DCPC 98.09	235 220	< 5	< 0.2	1.51	32	50	< 0.5	< 2	3.61	< 0.5	36	30	41	6.51	< 10	< 1	0.21	10	0.60	385
DCPC 98.10	235 220	< 5	0.2	1.74	56	70	< 0.5	< 2	3.21	< 0.5	71	49	102	11.35	< 10	< 1	0.35	60	0.56	390
DCPC 98.11	235 220	< 5	< 0.2	0.85	60	50	0.5	< 2	0.32	< 0.5	32	28	34	6.38	< 10	< 1	0.22	10	0.22	390
DCPC 98.12	235 220	< 5	< 0.2	1.75	24	50	< 0.5	< 2	5.78	< 0.5	36	32	36	6.26	< 10	< 1	0.30	10	0.60	280
DCPC 98.13	235 220	265	0.2	0.63	104	40	0.5	2	0.31	< 0.5	61	24	75	11.55	< 10	< 1	0.14	20	0.18	340
DCPC 98.14	235 220	1370	2.4	0.94	116	60	0.5	< 2	0.45	< 0.5	68	28	86	12.45	< 10	< 1	0.27	20	0.19	340
DCPC 98.15	235 220	30	< 0.2	0.74	86	40	0.5	< 2	0.78	< 0.5	57	22	71	10.80	< 10	< 1	0.14	20	0.23	340
DCPC 98.16	235 220	10	0.2	0.83	134	50	0.5	< 2	1.16	< 0.5	82	33	102	>15.00	< 10	< 1	0.19	10	0.23	500
DCPC 98.17	235 220	170	0.8	0.91	74	50	< 0.5	2	1.00	1.0	51	47	57	10.05	< 10	< 1	0.21	10	0.23	335
DCPC 98.18	235 220	10	0.2	0.81	88	50	< 0.5	< 2	1.22	< 0.5	63	26	73	12.75	< 10	< 1	0.19	10	0.22	370
DCPC 98.19	235 220	35	0.8	0.51	118	30	< 0.5	< 2	0.38	< 0.5	93	22	103	>15.00	< 10	< 1	0.09	10	0.14	355
DCPC 98.20	235 220	< 5	0.2	0.68	102	40	< 0.5	< 2	1.83	< 0.5	65	25	76	14.60	< 10	< 1	0.16	10	0.17	310
DCPC 98.21	235 220	< 5	0.2	0.65	102	40	< 0.5	< 2	0.65	< 0.5	55	28	65	11.05	< 10	< 1	0.12	10	0.18	365
DCPC 98.22	235 220	5	< 0.2	1.35	46	60	0.5	< 2	2.42	< 0.5	42	32	53	9.26	< 10	< 1	0.28	10	0.32	385
DCPC 98.23	235 220	10	< 0.2	0.77	94	40	0.5	2	1.38	< 0.5	61	31	74	12.55	< 10	< 1	0.15	10	0.24	455

CERTIFICATION



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

##

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

Project :

Comments: ATTN: ALAN RAVEN

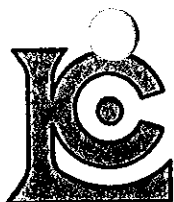
Page 1 of 1
Total Pages : 1
Certificate Date: 18-AUG-1998
Invoice No. : 19827699
P.O. Number :
Account : LVI

CERTIFICATE OF ANALYSIS

A9827699

SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
DCPC 98.01	235 220	< 1	0.03	95	270	44	2	3	113	< 0.01	< 10	< 10	6	< 10	98
DCPC 98.02	235 220	< 1	0.02	84	300	42	< 2	3	143	< 0.01	< 10	< 10	5	< 10	102
DCPC 98.03	235 220	1	0.03	73	300	32	< 2	3	117	< 0.01	< 10	< 10	8	< 10	94
DCPC 98.04	235 220	2	0.03	50	210	34	< 2	2	409	< 0.01	< 10	< 10	10	< 10	78
DCPC 98.05	235 220	1	0.03	45	220	26	< 2	2	547	< 0.01	< 10	< 10	11	< 10	68
DCPC 98.06	235 220	< 1	0.02	38	210	18	< 2	1	643	< 0.01	< 10	< 10	10	< 10	62
DCPC 98.08	235 220	< 1	0.03	31	260	14	< 2	1	33	0.01	< 10	< 10	13	< 10	54
DCPC 98.09	235 220	< 1	0.04	57	290	36	< 2	3	256	< 0.01	< 10	< 10	9	< 10	84
DCPC 98.10	235 220	1	0.04	116	260	62	< 2	2	262	< 0.01	< 10	< 10	11	< 10	78
DCPC 98.11	235 220	< 1	0.05	48	330	30	< 2	4	44	< 0.01	< 10	< 10	6	< 10	102
DCPC 98.12	235 220	1	0.04	59	180	36	< 2	3	384	< 0.01	< 10	< 10	9	< 10	78
DCPC 98.13	235 220	< 1	0.02	108	360	40	6	3	35	< 0.01	< 10	< 10	4	10	118
DCPC 98.14	235 220	< 1	0.04	116	380	60	< 2	4	46	< 0.01	< 10	< 10	7	< 10	124
DCPC 98.15	235 220	< 1	0.02	103	360	34	2	3	58	< 0.01	< 10	< 10	5	< 10	112
DCPC 98.16	235 220	1	0.02	146	360	60	8	3	113	< 0.01	< 10	< 10	5	< 10	128
DCPC 98.17	235 220	< 1	0.03	77	290	384	< 2	3	73	< 0.01	< 10	< 10	6	10	154
DCPC 98.18	235 220	< 1	0.03	101	340	46	< 2	3	109	< 0.01	< 10	< 10	5	< 10	100
DCPC 98.19	235 220	1	0.01	127	340	54	< 2	2	49	< 0.01	< 10	< 10	2	10	104
DCPC 98.20	235 220	4	0.02	123	350	40	< 2	3	119	< 0.01	< 10	< 10	5	< 10	104
DCPC 98.21	235 220	< 1	0.01	96	400	32	< 2	3	61	< 0.01	< 10	< 10	5	< 10	94
DCPC 98.22	235 220	< 1	0.04	81	340	34	4	3	152	< 0.01	< 10	< 10	8	< 10	98
DCPC 98.23	235 220	< 1	0.02	110	320	44	2	3	117	< 0.01	< 10	< 10	5	< 10	112

CERTIFICATION



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

##

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

Project :

Comments: ATTN: ALAN RAVEN

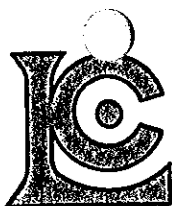
Page Number : 1-A
Total Pages : 1
Certificate Date: 18-AUG-1998
Invoice No. : 19827701
P.O. Number :
Account : LVI

CERTIFICATE OF ANALYSIS

A9827701

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
DCR 01	205 226	< 5	< 0.2	0.35	22	40	< 0.5	< 2	2.95	< 0.5	5	115	5	2.47	< 10	< 1	0.12	< 10	0.09	675
DCR 02	205 226	< 5	< 0.2	0.29	12	30	< 0.5	< 2	1.51	< 0.5	3	264	3	1.97	< 10	< 1	0.11	< 10	0.04	320
DCR 03	205 226	10	< 0.2	0.10	< 2	< 10	< 0.5	< 2	0.20	< 0.5	1	231	< 1	1.12	< 10	< 1	0.01	< 10	0.01	165
DCR 04	205 226	< 5	< 0.2	0.53	18	40	< 0.5	< 2	5.14	< 0.5	9	40	15	4.16	< 10	< 1	0.22	< 10	0.57	720
DCR 05	205 226	< 5	< 0.2	0.17	6	10	< 0.5	< 2	2.66	< 0.5	2	124	3	1.62	< 10	< 1	0.05	< 10	0.15	240
DCR 06	205 226	< 5	< 0.2	0.15	< 2	10	< 0.5	< 2	2.73	< 0.5	1	187	1	2.23	< 10	< 1	0.05	< 10	0.85	535
DCR 08	205 226	< 5	< 0.2	0.14	8	10	< 0.5	< 2	1.08	< 0.5	< 1	240	< 1	1.00	< 10	< 1	0.06	< 10	0.25	155
DCR 16	205 226	30	0.2	0.41	110	30	< 0.5	< 2	7.00	0.5	9	82	13	3.66	< 10	< 1	0.20	< 10	1.19	405
DCR 17	205 226	25	< 0.2	0.25	52	10	< 0.5	< 2	4.35	0.5	6	166	3	2.21	< 10	< 1	0.12	< 10	0.55	255
DCR 18	205 226	155	5.4	0.53	114	50	< 0.5	< 2	10.65	61.0	11	35	49	3.45	< 10	< 1	0.25	< 10	0.93	400
DCR 19	205 226	< 5	< 0.2	0.28	< 2	30	< 0.5	< 2	13.25	< 0.5	3	26	4	1.36	< 10	< 1	0.14	< 10	0.15	430
DCR 21	205 226	< 5	< 0.2	0.68	22	60	< 0.5	< 2	7.47	< 0.5	9	124	15	2.01	< 10	< 1	0.31	< 10	0.46	170
DCR 22	205 226	< 5	< 0.2	0.27	970	30	< 0.5	< 2	11.95	< 0.5	31	139	3	3.83	< 10	< 1	0.12	< 10	3.59	625
DCR 23	205 226	10	< 0.2	0.30	32	20	< 0.5	< 2	1.71	< 0.5	3	156	13	1.82	< 10	< 1	0.10	< 10	0.33	160

CERTIFICATION



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

##

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

Project :
Comments: ATTN: ALAN RAVEN

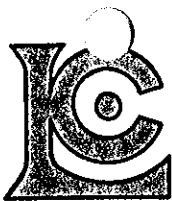
Page No. : 1-B
Total Pages : 1
Certificate Date: 18-AUG-1998
Invoice No. : 19827701
P.O. Number :
Account : LVI

CERTIFICATE OF ANALYSIS

A9827701

SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
DCR 01	205 226	< 1	0.04	15	50	6	< 2	3	38	< 0.01	< 10	< 10	5	< 10	26
DCR 02	205 226	< 1	0.03	16	130	30	< 2	2	19	< 0.01	< 10	< 10	4	< 10	26
DCR 03	205 226	1	0.03	6	70	< 2	< 2	1	5	< 0.01	< 10	< 10	3	< 10	8
DCR 04	205 226	2	0.04	20	50	32	< 2	4	159	< 0.01	< 10	< 10	4	< 10	44
DCR 05	205 226	3	0.03	6	310	38	< 2	2	84	< 0.01	< 10	< 10	4	< 10	24
DCR 06	205 226	3	0.05	9	80	10	< 2	2	200	< 0.01	< 10	< 10	4	< 10	18
DCR 08	205 226	3	0.01	4	130	< 2	< 2	< 1	54	< 0.01	< 10	< 10	1	< 10	6
DCR 16	205 226	< 1	0.02	19	360	112	2	5	517	< 0.01	< 10	< 10	3	< 10	120
DCR 17	205 226	3	0.01	11	300	96	< 2	2	294	< 0.01	< 10	< 10	2	520	86
DCR 18	205 226	< 1	0.03	21	460	5080	4	4	850	< 0.01	< 10	10	3	< 10	5170
DCR 19	205 226	< 1	0.02	6	100	12	< 2	1	903	< 0.01	< 10	< 10	2	< 10	28
DCR 21	205 226	3	0.04	19	200	6	6	3	938	< 0.01	< 10	< 10	6	< 10	60
DCR 22	205 226	< 1	0.01	386	510	16	6	7	1430	< 0.01	< 10	< 10	19	< 10	94
DCR 23	205 226	3	0.05	10	70	22	< 2	1	102	< 0.01	< 10	< 10	3	< 10	14

CERTIFICATION



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

Project:
Comments: ATTN: ALAN RAVEN

##

Page 1 of 1-A
Total Pages : 1
Certificate Date: 17-AUG-1998
Invoice No. : 19827703
P.O. Number :
Account : LVI

CERTIFICATE OF ANALYSIS

A9827703

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
9600N 10300E	201 202	10	< 0.2	0.77	36	30	0.5	< 2	0.21	< 0.5	22	10	44	5.47	< 10	< 1	0.05	30	0.15	560
9600N 10325E	201 202	40	< 0.2	0.80	26	30	< 0.5	< 2	0.35	< 0.5	12	10	23	4.89	< 10	< 1	0.06	20	0.11	285
9600N 10350E	201 202	125	0.6	1.71	62	60	2.0	< 2	0.61	0.5	34	12	64	7.45	< 10	< 1	0.02	50	0.03	1110
9600N 10375E	201 202	15	< 0.2	0.95	34	30	0.5	< 2	0.10	< 0.5	16	10	30	5.00	< 10	< 1	0.03	20	0.11	340
9600N 10400E	201 202	20	< 0.2	0.84	44	70	0.5	< 2	0.58	< 0.5	20	10	37	5.15	< 10	< 1	0.07	30	0.16	665
9600N 10425E	201 202	40	< 0.2	0.54	110	40	0.5	< 2	0.52	0.5	32	7	62	6.28	< 10	< 1	0.04	20	0.14	635
9600N 10450E	201 202	285	< 0.2	0.28	30	20	< 0.5	< 2	0.02	< 0.5	10	5	22	3.51	< 10	< 1	0.03	10	0.03	180
9600N 10475E	201 202	25	< 0.2	0.70	40	30	0.5	2	0.31	< 0.5	19	7	37	4.63	< 10	< 1	0.03	20	0.09	470
9600N 10500E	201 202	20	< 0.2	1.21	44	30	0.5	< 2	0.16	0.5	30	10	44	6.25	< 10	< 1	0.03	30	0.14	820
9600N 10525E	201 202	30	< 0.2	0.46	18	30	< 0.5	< 2	0.10	< 0.5	7	6	14	2.37	< 10	< 1	0.04	20	0.06	135
9600N 10525E(B)	201 202	45	< 0.2	1.44	36	40	1.0	< 2	0.16	< 0.5	21	11	35	5.45	< 10	< 1	0.04	30	0.14	400
9600N 10550E	201 202	10	< 0.2	1.02	26	30	0.5	< 2	0.36	< 0.5	18	13	33	4.38	< 10	< 1	0.05	40	0.27	425
9600N 10550E(B)	201 202	< 5	< 0.2	1.10	20	40	0.5	< 2	0.34	< 0.5	15	15	30	4.12	< 10	< 1	0.07	40	0.33	315
9625N 10340E	201 202	< 5	< 0.2	0.46	20	30	< 0.5	< 2	0.12	< 0.5	11	6	28	4.83	< 10	< 1	0.03	30	0.03	190
9625N 10360E	201 202	< 5	< 0.2	1.26	26	60	< 0.5	< 2	0.09	< 0.5	12	15	25	5.42	< 10	< 1	0.08	20	0.11	395
9625N 10380E	201 202	15	< 0.2	1.44	34	50	1.0	< 2	0.77	< 0.5	18	14	34	5.28	< 10	< 1	0.04	20	0.11	410
9625N 10400E	201 202	15	< 0.2	0.90	36	50	1.0	< 2	0.60	< 0.5	17	9	27	4.85	< 10	< 1	0.03	30	0.07	600
9625N 10440E	201 202	40	0.4	1.99	42	20	0.5	< 2	0.10	0.5	24	14	53	5.41	< 10	< 1	0.04	30	0.18	590
9625N 10460E	201 202	15	0.2	0.40	26	40	< 0.5	< 2	0.08	< 0.5	6	4	17	2.95	< 10	< 1	0.03	10	0.03	170
9625N 10480E	201 202	10	< 0.2	0.64	38	20	< 0.5	< 2	0.20	< 0.5	12	8	22	4.32	< 10	< 1	0.05	10	0.06	630
9625N 10500E	201 202	30	0.2	0.58	28	30	< 0.5	< 2	0.05	< 0.5	7	7	16	3.58	< 10	< 1	0.04	10	0.05	225
9625N 10525E	201 202	105	1.8	0.68	74	20	< 0.5	< 2	0.05	< 0.5	13	7	37	4.63	< 10	< 1	0.04	20	0.06	355
9625N 10550E	201 202	40	< 0.2	0.98	50	20	0.5	< 2	0.05	0.5	20	8	55	5.10	< 10	< 1	0.03	20	0.09	500
9650N 10320E	201 202	20	< 0.2	0.94	24	40	< 0.5	< 2	0.01	< 0.5	11	10	21	3.82	< 10	< 1	0.07	30	0.17	210
9650N 10340E	201 202	10	< 0.2	1.66	10	30	< 0.5	< 2	0.03	< 0.5	16	18	42	7.08	< 10	< 1	0.03	20	0.27	260
9650N 10360E	201 202	45	0.2	1.55	16	40	< 0.5	2	0.03	< 0.5	11	18	27	6.02	< 10	< 1	0.04	30	0.26	135
9650N 10380E	201 202	15	< 0.2	0.69	50	40	0.5	< 2	0.45	< 0.5	18	8	34	5.21	< 10	< 1	0.03	20	0.06	370
9650N 10380E(B)	201 202	25	< 0.2	1.11	48	90	1.5	< 2	1.80	< 0.5	21	12	50	6.37	< 10	< 1	0.05	30	0.08	1545
9650N 10440E	201 202	45	< 0.2	1.18	86	10	< 0.5	< 2	0.03	< 0.5	15	9	39	5.47	< 10	< 1	0.03	10	0.07	370
9650N 10460E	201 202	20	< 0.2	0.88	38	10	< 0.5	2	0.09	< 0.5	11	7	28	5.32	< 10	< 1	0.03	10	0.05	240
9650N 10480E	201 202	< 5	< 0.2	0.87	46	20	< 0.5	< 2	0.13	< 0.5	12	8	28	6.26	< 10	< 1	0.04	10	0.06	405
9650N 10500E	201 202	< 5	0.2	0.55	30	20	< 0.5	< 2	0.06	< 0.5	7	6	18	3.82	< 10	< 1	0.04	30	0.04	135
DCS 98.01	201 202	70	< 0.2	0.28	354	30	1.0	< 2	0.08	< 0.5	68	4	149	9.80	< 10	< 1	0.05	10	0.06	1315
DCS 98.02	201 202	75	< 0.2	0.23	216	10	0.5	2	0.12	< 0.5	55	3	120	8.19	< 10	< 1	0.03	10	0.06	655
DCS 98.03	201 202	220	< 0.2	0.18	84	10	0.5	2	0.09	0.5	29	2	63	6.13	< 10	< 1	0.03	< 10	0.04	575
DCS 98.04	201 202	820	0.4	0.20	120	10	0.5	< 2	0.20	2.5	40	3	69	7.46	< 10	< 1	0.03	10	0.05	700
DCS 98.05	201 202	90	0.2	0.23	84	20	0.5	< 2	0.35	1.5	37	3	75	7.87	< 10	< 1	0.04	< 10	0.05	555
DCS 98.06	201 202	65	0.2	0.33	48	20	0.5	< 2	0.37	< 0.5	34	3	64	6.74	< 10	< 1	0.04	10	0.07	480
DCS 98.07	201 202	225	< 0.2	0.23	80	30	0.5	< 2	0.63	1.0	33	3	72	8.11	< 10	< 1	0.05	10	0.04	655
DCS 98.08	201 202	250	0.2	0.40	104	30	1.0	2	0.36	0.5	42	4	75	7.58	< 10	< 1	0.06	10	0.07	600

CERTIFICATION



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

##

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

Project :
Comments: ATTN: ALAN RAVEN

Page 1 of 1-B
Total Pages : 1
Certificate Date: 17-AUG-1998
Invoice No. : 19827703
P.O. Number :
Account : LVI

CERTIFICATE OF ANALYSIS

A9827703

SAMPLE	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
9600N 10300E	201 202	< 1 < 0.01		43	570	42	< 2	5	33 < 0.01	< 10	< 10	10	< 10	100	
9600N 10325E	201 202	< 1 < 0.01		23	810	30	< 2	1	37 < 0.01	< 10	< 10	12	< 10	68	
9600N 10350E	201 202	< 1 < 0.01		94	1270	64	< 2	16	90 < 0.01	< 10	< 10	12	< 10	156	
9600N 10375E	201 202	< 1 < 0.01		30	710	36	< 2	4	19 < 0.01	< 10	< 10	10	< 10	74	
9600N 10400E	201 202	< 1 < 0.01		41	1320	38	< 2	7	83 < 0.01	< 10	< 10	12	< 10	106	
9600N 10425E	201 202	< 1 < 0.01		49	930	296	< 2	7	67 < 0.01	< 10	< 10	7	< 10	172	
9600N 10450E	201 202	< 1 < 0.01		20	1190	24	< 2	< 1	9 < 0.01	< 10	< 10	11	< 10	58	
9600N 10475E	201 202	< 1 < 0.01		36	1010	78	< 2	5	34 < 0.01	< 10	< 10	9	< 10	130	
9600N 10500E	201 202	< 1 < 0.01		40	850	114	< 2	6	26 < 0.01	< 10	< 10	9	< 10	132	
9600N 10525E	201 202	< 1 < 0.01		13	550	36	< 2	1	16 < 0.01	< 10	< 10	7	< 10	52	
9600N 10525E(B)	201 202	< 1 < 0.01		38	780	146	< 2	4	25 < 0.01	< 10	< 10	8	< 10	164	
9600N 10550E	201 202	< 1 < 0.01		35	950	50	< 2	5	43 < 0.01	< 10	< 10	12	< 10	108	
9600N 10550E(B)	201 202	< 1 < 0.01		36	1070	28	< 2	5	47 < 0.01	< 10	< 10	14	< 10	92	
9625N 10340E	201 202	< 1 < 0.01		22	1110	22	< 2	1	13 < 0.01	< 10	< 10	7	< 10	82	
9625N 10360E	201 202	< 1 < 0.01		26	760	32	< 2	2	12 < 0.01	< 10	< 10	18	< 10	86	
9625N 10380E	201 202	< 1 < 0.01		39	940	42	< 2	8	77 < 0.01	< 10	< 10	13	< 10	88	
9625N 10400E	201 202	< 1 < 0.01		31	1010	36	< 2	8	65 < 0.01	< 10	< 10	10	< 10	86	
9625N 10440E	201 202	< 1 < 0.01		41	800	270	< 2	6	16 < 0.01	< 10	< 10	11	< 10	198	
9625N 10460E	201 202	< 1 < 0.01		11	800	32	< 2	< 1	11 < 0.01	< 10	< 10	6	< 10	42	
9625N 10480E	201 202	< 1 < 0.01		20	1440	70	< 2	1	25 < 0.01	< 10	< 10	10	< 10	98	
9625N 10500E	201 202	< 1 < 0.01		14	1460	94	< 2	1	13 < 0.01	< 10	< 10	10	< 10	84	
9625N 10525E	201 202	< 1 < 0.01		28	1040	152	< 2	3	12 < 0.01	< 10	< 10	10	< 10	160	
9625N 10550E	201 202	< 1 < 0.01		31	780	386	< 2	4	11 < 0.01	< 10	< 10	8	< 10	224	
9650N 10320E	201 202	< 1 < 0.01		24	430	22	< 2	1	6 < 0.01	< 10	< 10	9	< 10	62	
9650N 10340E	201 202	< 1 < 0.01		36	820	44	< 2	2	6 < 0.01	< 10	< 10	15	< 10	88	
9650N 10360E	201 202	< 1 < 0.01		26	500	46	< 2	2	9 < 0.01	< 10	< 10	13	< 10	70	
9650N 10380E	201 202	< 1 < 0.01		39	740	38	6	6	59 < 0.01	< 10	< 10	11	< 10	92	
9650N 10380E(B)	201 202	< 1 < 0.01		51	2580	46	6	15	164 < 0.01	< 10	< 10	16	< 10	130	
9650N 10440E	201 202	< 1 < 0.01		28	940	126	< 2	3	10 < 0.01	< 10	< 10	9	< 10	142	
9650N 10460E	201 202	< 1 < 0.01		22	860	100	< 2	2	15 < 0.01	< 10	< 10	8	< 10	106	
9650N 10480E	201 202	< 1 < 0.01		20	870	58	< 2	1	18 < 0.01	< 10	< 10	10	< 10	78	
9650N 10500E	201 202	< 1 < 0.01		15	1170	30	< 2	1	12 < 0.01	< 10	< 10	8	< 10	48	
DCS 98.01	201 202	< 1 < 0.01		130	510	60	6	9	24 < 0.01	< 10	< 10	7	< 10	150	
DCS 98.02	201 202	< 1 < 0.01		98	410	96	6	8	22 < 0.01	< 10	< 10	6	< 10	204	
DCS 98.03	201 202	< 1 < 0.01		52	490	106	6	7	16 < 0.01	< 10	< 10	4	< 10	168	
DCS 98.04	201 202	< 1 < 0.01		66	470	220	< 2	8	24 < 0.01	< 10	< 10	4	< 10	300	
DCS 98.05	201 202	< 1 < 0.01		60	380	100	2	8	21 < 0.01	< 10	< 10	4	< 10	268	
DCS 98.06	201 202	< 1 < 0.01		52	540	66	< 2	9	33 < 0.01	< 10	< 10	5	< 10	148	
DCS 98.07	201 202	< 1 < 0.01		68	460	68	2	9	45 < 0.01	< 10	< 10	5	< 10	294	
DCS 98.08	201 202	< 1 < 0.01		64	500	70	2	8	40 < 0.01	< 10	< 10	6	< 10	170	

CERTIFICATION



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

##

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

Project :

Comments: ATTN: ALAN RAVEN

Page Number : 1-A
Total Pages : 1
Certificate Date: 21-AUG-1998
Invoice No. : 19827702
P.O. Number :
Account : LVI

CERTIFICATE OF ANALYSIS

A9827702

SAMPLE	PREP CODE	Au ppb FA+AA	Au FA g/t	Cu %	Pb %	Zn %	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppm	K %
DCR 07	208 226	580	-----	0.02	2.76	8.92	38	0.02	20	< 20	< 5	< 10	0.06	595	20	190	155	1.57	30	0.01
DCR 09	208 226	845	-----	0.55	4.45	4.54	57	0.20	30	20	< 5	< 10	0.54	475	15	120	5860	1.79	10	0.09
DCR 10	208 226	1310	-----	0.30	1.44	1.03	19	0.17	< 10	20	< 5	< 10	0.17	115	5	240	3070	1.21	10	0.08
DCR 11	208 226	45	-----	0.01	0.01	0.14	< 1	0.01	< 10	< 20	< 5	< 10	0.06	5	< 5	160	30	0.27	10	0.01
DCR 12	208 226	>10000	9.09	0.11	0.05	3.19	6	0.16	10	< 20	< 5	< 10	0.77	315	5	210	1105	2.33	20	0.07
DCR 13	208 226	2900	-----	0.02	0.24	1.29	4	0.06	< 10	< 20	< 5	< 10	0.06	85	5	160	215	1.37	10	0.03
DCR 14	208 226	45	-----	< 0.01	< 0.01	0.06	< 1	0.03	< 10	< 20	< 5	< 10	0.16	< 5	< 5	220	30	0.75	10	0.01
DCR 15	208 226	< 5	-----	< 0.01	< 0.01	0.03	< 1	0.03	< 10	< 20	< 5	< 10	0.05	< 5	< 5	130	15	0.40	10	0.02
DCR 20	208 226	790	-----	< 0.01	0.14	0.07	2	0.08	< 10	< 20	< 5	< 10	1.33	5	< 5	200	35	0.48	10	0.04

CERTIFICATION:



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: RAVEN, ALAN

##

BOX 2937
PRINCE GEORGE, BC
V2N 4T7

Project :

Comments: ATTN: ALAN RAVEN

Page 1 of 1
Total Pages : 1
Certificate Date: 21-AUG-1998
Invoice No. : 19827702
P.O. Number :
Account : LVI

CERTIFICATE OF ANALYSIS

A9827702

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
DCR 07	208 226	0.01	30	< 5	0.02	30	< 100	27900	20	< 5	5	< 0.01	20	< 20	< 20	< 20	>50000
DCR 09	208 226	0.04	40	< 5	0.03	20	700	46800	90	< 5	40	< 0.01	20	< 20	< 20	< 20	47200
DCR 10	208 226	< 0.01	40	5	0.03	10	600	14490	40	< 5	15	< 0.01	< 20	< 20	< 20	20	10290
DCR 11	208 226	< 0.01	10	< 5	0.03	< 5	< 100	175	< 10	< 5	< 5	< 0.01	20	< 20	< 20	< 20	1140
DCR 12	208 226	0.03	330	5	0.03	10	< 100	495	90	< 5	5	< 0.01	20	< 20	< 20	< 20	31500
DCR 13	208 226	0.01	180	< 5	0.03	10	< 100	2460	50	< 5	< 5	< 0.01	< 20	< 20	< 20	< 20	12680
DCR 14	208 226	< 0.01	80	< 5	0.03	5	< 100	70	< 10	< 5	5	< 0.01	< 20	< 20	< 20	< 20	505
DCR 15	208 226	< 0.01	60	< 5	0.03	< 5	< 100	45	< 10	< 5	< 5	< 0.01	20	< 20	< 20	< 20	225
DCR 20	208 226	0.03	50	5	0.03	5	< 100	1515	10	< 5	75	< 0.01	< 20	< 20	< 20	< 20	595

CERTIFICATION:

APPENDIX II
METHODOLOGY SOIL SURVEY AND HEAVY MINERAL CONCENTRATES

METHODOLOGY

Soil Sampling

A concerted effort was made to resample the exact horizon that the Noranda crew would have sampled (the first "B" horizon encountered at each site) in order to correlate the data from both surveys. A small pit was dug at each site in order to estimate the soil horizon that was previously sampled and to examine the layering if there was any exposed. The samples were taken with a steel bladed shovel at depths of 30 to 70 cm., put in high strength kraft sample bags and sent to Chemex Labs for analysis. There they were analyzed by I.C.P. for 32 elements and gold by fire assay with AA finish. The results are in the appendix and some, gold, lead and zinc, in the 9600N anomaly are plotted on a detail map in the pocket.

Heavy mineral panned concentrate samples

The sample was collected using a Barakso sieve and pan set. The set consists of three stacked pieces, two sieves and a fluted, baffled pan, which allows water to pass through the assembly without the loss of any heavy minerals. The sample site was selected as close to bedrock as possible in an area that would concentrate the heavy minerals (not a silt site). The sample was then shoveled from an active part of the stream into the stacked sieve set which was set in a quiet part of the stream to minimize uncontrolled water flow. Most of the time a small work area had to be made so that the whole pan set could be submerged while the gravel were shoveled into it. The sampler would shake and rotate the set as the material was shoveled into it while keeping the whole assembly submerged. We would continue processing material until the heavies filled the bottom pan to the sample size line was reached. The resulting sample would weigh about one kilogram. The sample was drained as much as possible, put in a plastic sample bag and taken to camp. In camp I would carefully hand pan the 1 kilo sample to about 100 grams which I would put in a Zip-lock freezer bag for shipment to Chemex Labs. Great care was taken to ensure that all the sample was removed from the pan set, the sample bag and the concentrating pan. The sample was shipped to Chemex Labs for 32 element I.C.P. analysis and gold fire assay with AA finish. The complete results are in the appendix and the values for gold, silver, lead, zinc and arsenic are tabulated on the compilation map in the pocket.

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

1969 - 73 ----- Mineral Exploration

-geochemical surveys, geophysics, prospecting in B.C.

1973 - 74 ----- Mineral Exploration

-geochemical surveys, geophysics, diamond drilling in Australia

1974 to Present -- Mineral Exploration

-geochem., geophysics, mapping, prospecting, project management in B.C. and the Western U.S.A. (Washington, California, Nevada, Arizona, Utah)

EDUCATION in GEOLOGY

1977 Prospector's Course - College of New Caledonia - Prince George B.C.

1977 Advanced Prospector's Course - Selkirk College - Castlegar B.C.

1986 Advanced Prospector's Course - Malaspina College - Nanaimo B.C.

1988 Exploration Geochemistry - NWFMA and Association of Exploration Geochemists
- Spokane Washington U.S.A.

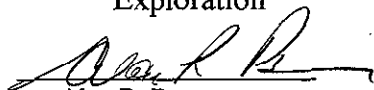
1990 Petrology for Prospectors - Dr. T. Richards - Smithers B.C.

1997 Tropical Geochemistry - MDRU Short Course - Vancouver B.C.

1998 MDRU Short Courses

- Mineral Exploration and Community Relations in Latin America

- Satellite and Topographical Images and Their Structural Analysis in Mineral
Exploration



Alan R. Raven

December 1999

STATEMENT OF COSTS

STATEMENT OF COSTS

Re: Mineral claim group: AK, DOM and DM claims (as detailed)

EXPLORATION SERVICES

ALAN RAVEN

29 days @ \$250/day \$7250.00
(July 23 to Aug.8, Aug 13 to17 and Aug28 to Sept.3 all dates are inclusive)

B. Kirby (assistant)

17 days @ \$150/day (July 23 to Aug. 8 inclusive) \$2550.00

Camp/Equipment/Supplies (all inclusive)

58 man/days @ \$42.00/man/day \$2436.00

Truck 4x4 (includes fuel and mileage)

29 days @ \$55.00/day \$1595.00

SUB TOTAL \$13831.00

GST \$968.17

R. MacArthur (geologist)

Exploration services 12 days @ \$425/day \$5100.00
(Aug. 12 to 17, Aug 29 to Sept 3, 1998 inclusive)

Travel expenses

Truck 1850 km. @ \$0.45/km. \$832.50

Meals 4 days/\$35/day \$140.00

Field supplies \$75.00

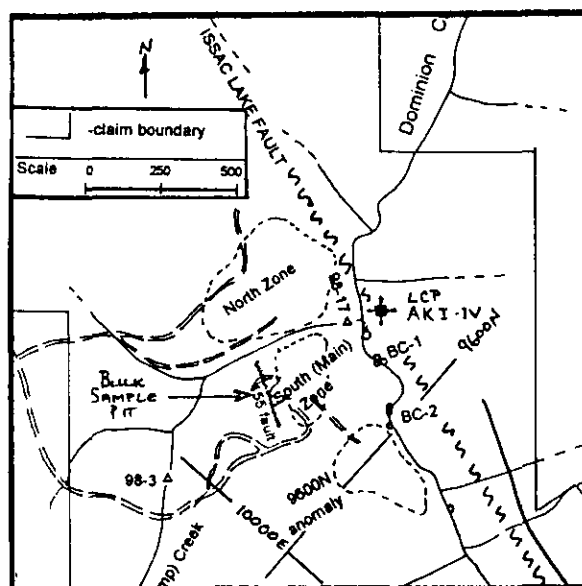
EXPENSES

Chemex Laboratories (analytical services) \$2288.46

TOTAL EXPENDITURES \$23,235.13



ALAN RAVEN



ROCK SAMPLES PIT AREA DCR - 09 - 20 inclusive

Sample #	Au (ppb)	Ag (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
DCR - 09	845	57	46800	47200	30
DCR - 10	1310	19	14490	10290	<10
DCR - 11	45	<1	175	1140	<10
DCR - 12	>10000	6	495	31500	10
DCR - 13	2900	4	2460	12680	<10
DCR - 14	45	<1	70	505	<10
DCR - 15	<5	<1	45	225	<10
DCR - 16*	30	0.2	112	120	110
DCR - 17*	25	<0.2	96	86	52
DCR - 18*	155	5.4	5080	5170	114
DCR - 19*	<5	<0.2	12	28	<2
DCR - 20	790	2	1515	595	<10

* - low detection limit analysis

19
40 LST

14
15

ARG
85 LST

13
12 LST

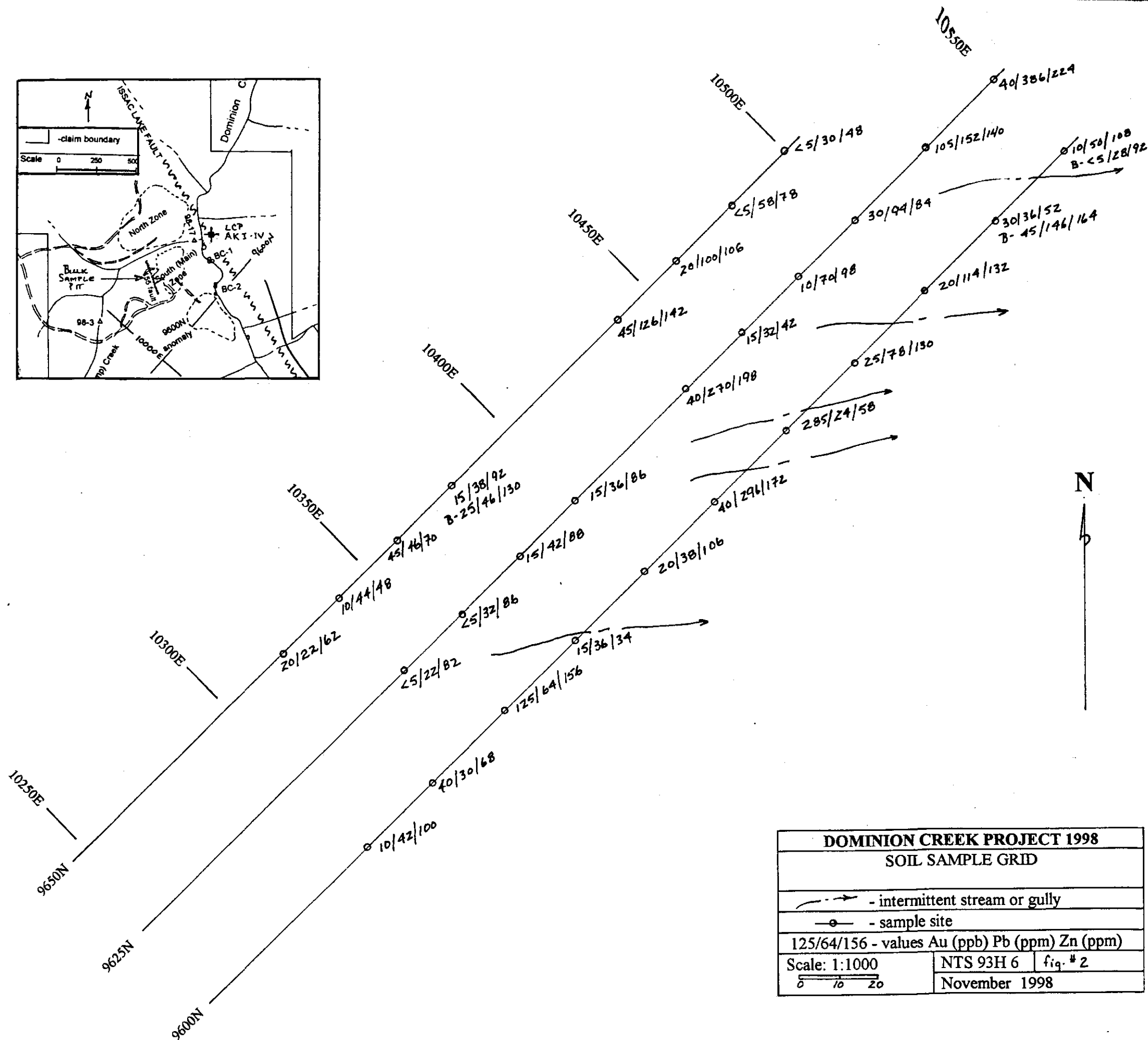
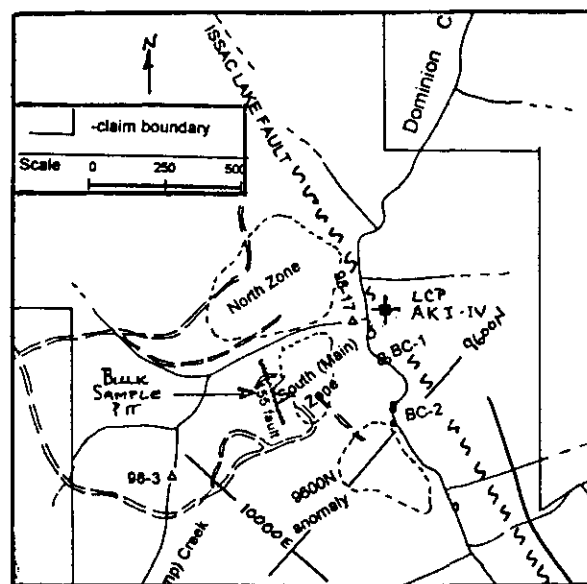
LST
LST
LST
20
10
9

18
ARG
17
ARG
16

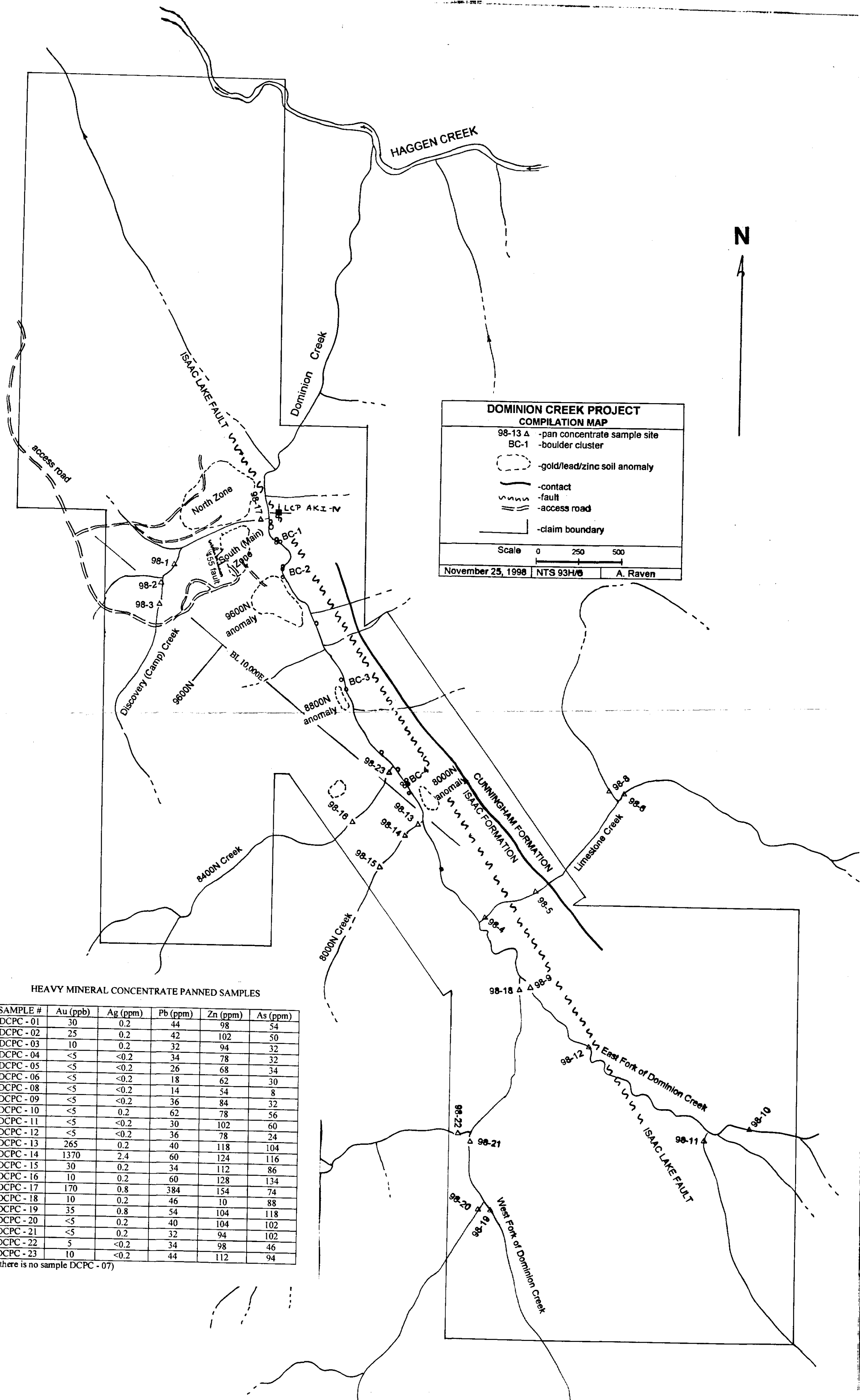
PIT
FLOOR

57
LST

DOMINION CREEK PROJECT 1998 ROCK SAMPLES PIT AREA	
lst - limestone	
qtz - quartz	
12 - sample site	
~ - fault	
○ - outline of quartz outcrop	
40 - bedding attitude	
Scale: 1:100	NTS 93H 6
0 1 2	November 1998



DOMINION CREEK PROJECT 1998		
SOIL SAMPLE GRID		
- intermittent stream or gully		
- sample site		
125/64/156 - values Au (ppb) Pb (ppm) Zn (ppm)		
Scale: 1:1000	NTS 93H 6	fig. # 2
0 10 20	November 1998	



HEAVY MINERAL CONCENTRATE PANNED SAMPLES

SAMPLE #	Au (ppb)	Ag (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)
DCPC - 01	30	0.2	44	98	54
DCPC - 02	25	0.2	42	102	50
DCPC - 03	10	0.2	32	94	32
DCPC - 04	<5	<0.2	34	78	32
DCPC - 05	<5	<0.2	26	68	34
DCPC - 06	<5	<0.2	18	62	30
DCPC - 08	<5	<0.2	14	54	8
DCPC - 09	<5	<0.2	36	84	32
DCPC - 10	<5	0.2	62	78	56
DCPC - 11	<5	<0.2	30	102	60
DCPC - 12	<5	<0.2	36	78	24
DCPC - 13	265	0.2	40	118	104
DCPC - 14	1370	2.4	60	124	116
DCPC - 15	30	0.2	34	112	86
DCPC - 16	10	0.2	60	128	134
DCPC - 17	170	0.8	384	154	74
DCPC - 18	10	0.2	46	10	88
DCPC - 19	35	0.8	54	104	118
DCPC - 20	<5	0.2	40	104	102
DCPC - 21	<5	0.2	32	94	102
DCPC - 22	5	<0.2	34	98	46
DCPC - 23	10	<0.2	44	112	94

(there is no sample DCPC - 07)