

MAP NO.: ASSESSMENT REPORT X  
116 B 03 PROSPECTUS  
115 O 14 CONFIDENTIAL X  
115 O 15 OPEN FILE

DOCUMENT NO: 093075  
MINING DISTRICT: Dawson  
TYPE OF WORK: Geological Mapping,  
Geological Sampling,  
Trenching.

REPORT FILED UNDER: Arbor Resources Inc.\Dawson Eldorado Mines Ltd.\Dawson Syndicate (1983)  
Faith Mines Ltd.\Rise Resources Inc.\Wealth Resources.

DATE PERFORMED: August 7 - October 31, 1992. DATE FILED: January 20, 1993.

LOCATION: LAT.: 63<sup>0</sup>54'N AREA: Dawson Property  
LONG.: 139<sup>0</sup>14'W VALUE \$: 34,890.00

CLAIM NAME & NO.: Sury Group Certificate #QA09142, Jody Group Certificate #QA09157 - 167,  
Moon Group Certificate #QA09163 - 168, Cab Group Certificate #QA09169 - 171,  
Top Group Certificate #QA09172, Win Group Certificate #QA09177 - 180.

\*Due to Size of Claim Block Refer to Ownership Card for most  
Accurate Description of Claim Names and Numbers.

WORK DONE BY: Phil D. van Angeren, P. Geol.

WORK DONE FOR: Arbor Resources Inc.\Dawson Eldorado Mines Ltd.\Dawson Syndicate (1983)  
Faith Mines Ltd.\Rise Resources Inc.\Wealth Resources Ltd.

DATE TO GOOD STANDING:

REMARKS: # 116 B & 115 O - Dawson Area Property  
The company's 1992 exploration program focused on areas near Adams Creek, Bear Creek, GoldBottom Creek and the head waters of Bonanza Creek, Last Chance Creek and Homestake Gulch. The company performed 1390 metres of trenching in 24 trenches, collected 96 rock and 48 soil samples, geological mapping and regional exploration. No significant gold or base metal mineralization was found. A detailed soil sampling program is proposed for areas historically inadequately tested. Property needs extensive grass roots exploration carried out to adequately evaluate the property.

YUKON ASSESSMENT REPORT

PROPERTY: DAWSON

NTS MAP SHEETS: 1150/14,15, 116B/3

LATITUDE: 63°54' N

LONGITUDE: 139°14' W

CLAIMS AND GRANT NUMBERS WORKED:

SYNDICATE 56,63	YA79253,260
TOP 4,5	YB31028,029
CAB 21-114	YB31980-38473
EAGLE, EAGLE 1	YA05169, YB31509
JODY 1-115	YB38491-600
HL 84, WIN 83	YB05391, YB30969
COMET 24,26	YA87857,859
REEF 81,82	YA88369,370

OWNERS OF PROPERTY:

Arbor Resources Inc.  
 Dawson Eldorado Mines Ltd.  
 Dawson Syndicate (1983)  
 Faith Mines Ltd.  
 Rise Resources Inc.  
 Wealth Resources Ltd.

ADDRESS: #1000 - 675 West Hastings Street  
 Vancouver, B.C.  
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TELEPHONE:  
 (604) 685-2222

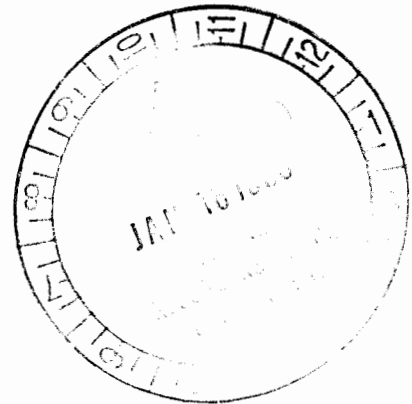
OPERATOR:  
 Hastings Management Corp.

TYPE OF WORK:  
 Geological mapping, sampling, and trenching.

DATES WORK WAS DONE:  
 August 7 - October 31, 1992.

AUTHOR OF REPORT:  
 Phil D.van Angeren P.Geol.

LIST OF PERSONNEL:  
 Scott Tomlinson, Hastings Management Corp.  
 Philip Van Angeren, Hastings Management Corp.  
 Colin Little, Hastings Management Corp.  
 Allen Whaley, Hastings Management Corp.



093075

This report has been examined by  
the Geological Evaluation Unit  
under Section 53 (4) Yukon Quartz  
Mining Act and is allowed as  
representation work in the amount  
of \$ 34,890.00.

*Robert Debluk*

for. Regional Manager, Exploration and  
Geological Services for Commissioner  
of Yukon Territory.



GEOLOGICAL, GEOCHEMICAL  
AND TRENCHING REPORT ON THE  
DAWSON PROPERTY

DAWSON MINING DISTRICT, YUKON

SUMMARY

The Dawson property is owned by Arbor Resources Inc., Dawson Eldorado Mines Ltd., Dawson Syndicate (1983), Faith Mines Ltd., Rise Resources Inc., and Wealth Resources Ltd. and is located southeast of Dawson City in northwestern Yukon Territory,. The claims encompass the drainages of the Klondike River and of Bonanza and Hunker Creeks. These creeks host some of the most productive placer deposits in the Klondike.

The claims are underlain by the Klondike Series, a group of quartzo-feldspathic mica schists. Graphitic schists, possibly related to thrust faulting, and sericitic schists, believed to represent fossil alteration zones, also occur on the property. All lithologies are cross-cut by Tertiary felsic dykes.

Mineral exploration in the Klondike has occurred since the late 1800's, but has concentrated on placer deposits and high grade vein structures. The most successful venture was the Lone Star Mine, which produced 7,650 tonnes grading 5.07 gm/T gold from disseminated ores in sericitic schist, between 1912 and 1914. Few recent programs have targeted bulk tonnage, disseminated ores.

In 1983, the Arbor group of companies began to acquire and explore properties in the Klondike for their lode gold potential. Work has included geological, geochemical, and ground & airborne geophysical surveys, as well as trenching with diamond & rotary drilling.

The 1992 program focused on areas near Adams Creek, Bear Creek, GoldBottom Creek and the heads of Bonanza Creek, Last Chance Creek and Homestake Gulch. A limited amount of "regional" exploration was also completed. The program targeted polymetallic soil geochemical anomalies detected prior to 1991. They were believed to be caused by high-grade quartz veins or low-grade, disseminated sources. The following work was performed for assessment purposes in 1992:  
i) 1390 metres of trenching in 24 trenches, ii) assay of 96 rocks and 48 soils, and iii) geological mapping.

The prospects for the existence of "fossil", epigenetic, precious metal ores within the Dawson property are considered excellent. Promising geology was uncovered at four sites (EAGLE, COMET, TOP & WIN claims), but no significant gold or base-metal mineralization was found. These areas have historically been inadequately tested; they have not benefitted from systematic soil sampling to aid in target definition. It is therefore recommended to complete detailed, grid-controlled soil sampling over these areas.

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GEOLOGICAL, GEOCHEMICAL  
AND TRENCHING REPORT ON THE  
DAWSON PROPERTY

DAWSON MINING DISTRICT, YUKON

1. INTRODUCTION

This report describes the field program completed between August 7 and October 31, 1992 under the supervision of Phil D. van Angeren P.Geol., for Hastings Management Corp. Sections 1.1, 1.2, 1.4, 1.5 and 2.1 to 2.3 of the report are adapted from Tomlinson, 1992.

1.1 LOCATION AND ACCESS

Dawson City is the principal population and supply centre of northwestern Yukon. It can be reached via the two-lane, all-weather, Klondike Highway from Whitehorse on the Alaska Highway, a distance of 535 km. Dawson City is presently served by scheduled flights from Whitehorse where connections to Vancouver or Edmonton are available.

The mineral claims are located east and southeast of Dawson City in the Klondike Mining District as shown in Figure 1. The claims overlie the valleys of Adams Creek, Bear Creek, GoldBottom Creek, Upper Bonanza Creek and Upper Last Chance Creek. They are plotted on Figure 2.

Relief on each claim block is on the order of 150 m (500 ft) with elevations ranging from 460 m (1500 ft) to 910 m (3000 ft). Terrestrial coordinates for the centre of the claim block are:  
63° 54' North Latitude, 139° 14' West Longitude.

Access to the property is provided by the Klondike Highway and the Bonanza, Hunker, and Dominion Creeks Roads. Several recently completed unimproved roads provide good access for 4x4 trucks within much of the claim group.

ARBOR RESOURCES INC.

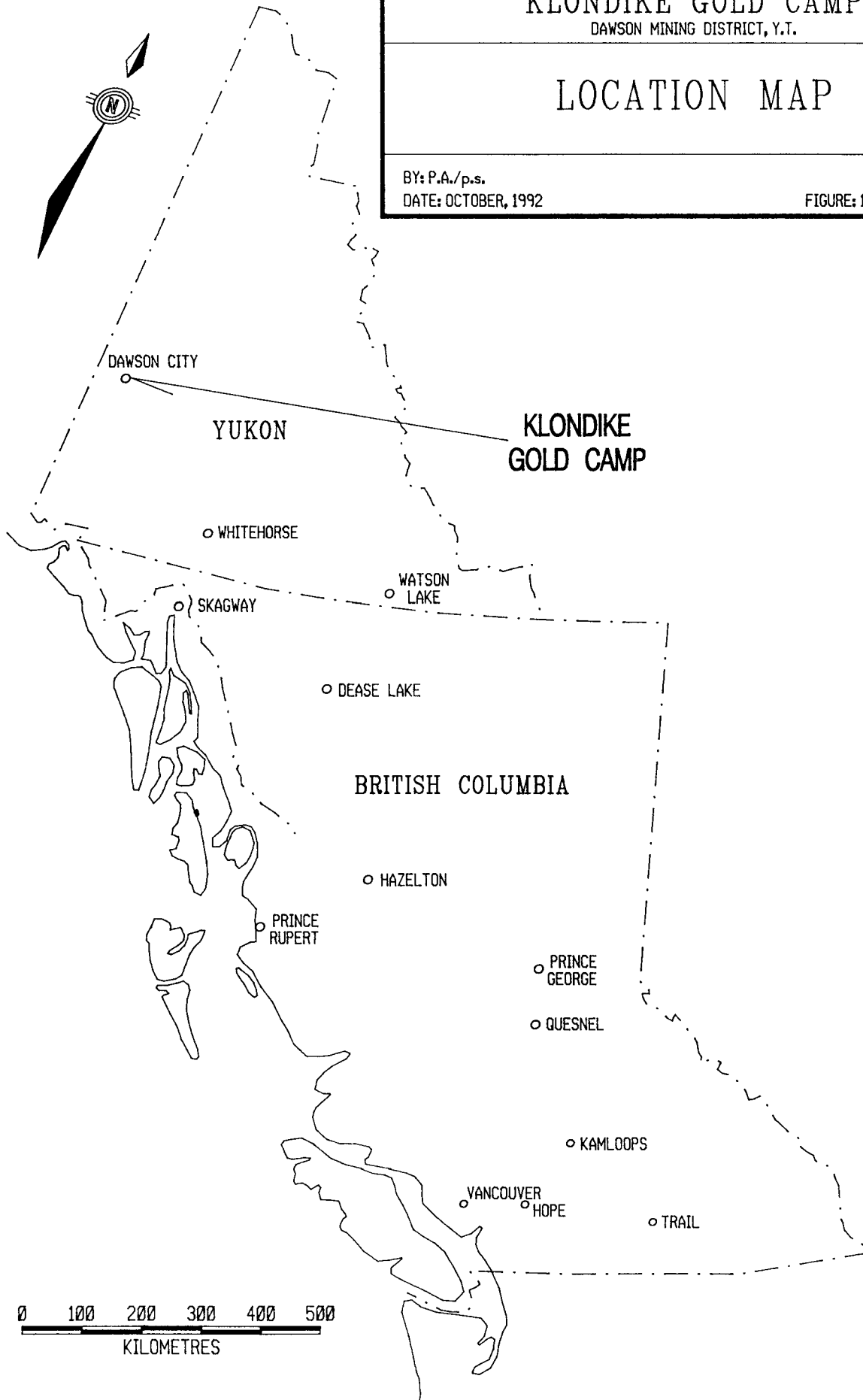
KLONDIKE GOLD CAMP

DAWSON MINING DISTRICT, Y.T.

LOCATION MAP

BY: P.A./p.s.  
DATE: OCTOBER, 1992

FIGURE: 1



## 1.2 PHYSIOGRAPHY AND CLIMATE

The Klondike region forms a part of the Yukon Plateau or upland surface which, locally, occupies an area between the Pacific and Alaskan Mountain Ranges to the west and northwest, the Ogilvie Mountains to the northeast and east, and the Dawson Range to the southwest and south.

The region is a thoroughly dissected upland which was elevated at one period into a high plateau. This plateau was subsequently deeply eroded by a multitude of small streams tributary to the main water courses. A secondary uplift resulted in further deepening of the valleys from 150 m to 200 m. Portions of the old valley-bottoms, still covered with thick accumulations of gravel forming terraces of varying width, border the newer valleys (McConnell, 1905; also, G.S.C. Mem.84, 1957). Today, the valleys are flat and wide in their lower reaches, but gradually narrow toward their head waters into steep-sided gulches ending in broad, amphitheatre-shaped bowls.

The Klondike proper occupies an area of approximately 30 by 60 km. The drainage is dominated by the northerly flowing Yukon River and its westerly flowing tributaries, the Klondike River to the north and the Indian River to the south. Elevations within the Klondike range from 320 m (1050 ft) at Dawson City to 1295 m (4048 ft) at the top of King Solomon Dome, a span of approximately 915 m (3000 ft). The principal gold-producing streams of the Klondike originate near, and radiate in a general way from, King Solomon Dome, flowing eventually into the Klondike River on the north and the Indian River on the south and thence into the Yukon River.

The Klondike region was not glaciated and, as a result, the deeply weathered, pre-glacial, gently rolling upland surface has been preserved. A thick covering of decomposed schist, usually intermingled with slide rock, mantles the side hills nearly everywhere. On the ridges the covering is less; the schists occasionally project above surface or crop out along the sides of the steeper hills.

The region has a northern continental climate, characterized by low precipitation and a wide temperature range. The winters are intensely cold and long, while the summers, although short, are pleasant with cool nights and warm days. Because of the land form there is a tendency for local micro-climates to develop at the bottom of steep valleys which involves higher summer maxima and lower winter minima than are recorded in Dawson City. Precipitation is only about 30 cm (12 inches) per year with more rain in summer than snow in winter. Most of the mountain ridges are free of snow by mid-July, but frost may occur at any time during the summer. As a rule, precipitation is so low that shortages of water for placer mining are sometimes experienced.

Vegetation is mixed boreal forest and tundra. Immature and stunted stands of aspen, balsam, poplar, and birch are present in the valley bottoms and are beginning to reclaim the older mining areas. Softwood timber consisting mainly of white and black spruce are limited to slopes and ridge tops.

## 1.3 CLAIM INFORMATION

The property is located southeast of Dawson City, in the Dawson Mining District of northwestern Yukon Territory (Figure 2). This is centered at 63°54' N latitude and 139°14' W longitude on NTS map sheets 1150/14,15, 116B/3.

This report covers Assessment Work applied to the claims tabulated in Table I. The legal status of these claims is unknown to the author.

TABLE I

## CLAIM INFORMATION

CLAIMS	GRANTS	ANNIVERSARY	OWNER
<u>A: SURY Group (Certificate #QA09142; figure 4)</u>			
SURY 1-31	YA88123-153	DEC 8	SYN
<u>B: JODY Group (Certificate #QA09157-162; figure 6)</u>			
JODY 1-22	YB38491-512	AUG 30	FHM/WLH
JODY 33-56	YB38518-541	AUG 30	FHM/WLH
JODY 76-84	YB38561-569	AUG 30	FHM/WLH
JODY 105-106	YB38590-591	AUG 30	FHM/WLH
JODY 23-27	YB38513-517	DEC 30	FHM/WLH
JODY 59-65	YB38544-550	DEC 30	FHM/WLH
JODY 85-94	YB38570-579	DEC 30	FHM/WLH
JODY 107-115	YB38592-600	DEC 30	FHM/WLH
BH 1-8	YA89946-953	NOV 30	FHM/WLH
TOP 70,72	YB31085,087	DEC 31	FHM
TOP 74-79	YB31089-094	DEC 31	FHM
<u>C: MOON Group (Certificate #QA09163-168; figure 7)</u>			
POD 1-8	YB30095-102	APR 17	AOR
SNAKE 34-46	YA84595-607	SEPT 4	SYN
1FORTHMONEY	YA84617	SEPT 4	SYN
2FORTHESHOW	YA84618	SEPT 4	SYN
3TOGETREADY	YA84619	SEPT 4	SYN
CLANCY 1-2	YA84615-616	SEPT 4	SYN
HENRY 1-8	YB23419-426	MAR 9	AOR/FHM
EHYOU 1-10	YA79870-879	MAY 22	SYN
MOON 1-40	YA79671-710	FEB 27	SYN

ctd.

TABLE I ctd.

CLAIMS	GRANTS	ANNIVERSARY	OWNER
<u>D</u> : CAB Group (Certificate #QA09169-171; figure 8)			
TOP 37-55	YB31052-070	DEC 31	FHM
TOP 60-69	YB31075-084	DEC 31	FHM
CAB 21,23,25	YB31980,982,984	DEC 31	FHM/RIS
CAB 27,29,31,33	YB31986,988,990,992	DEC 31	FHM/RIS
CAB 57,59,61,64	YB38416,418,420,422	DEC 31	FHM/RIS
CAB 41	YB32000	DEC 31	FHM/RIS
CAB 42-55	YB38401-414	DEC 31	FHM/RIS
CAB 82-102,104	YB38441-461,463	DEC 31	FHM/RIS
CAB 106-114	YB38465-473	DEC 31	FHM/RIS
<u>E</u> : TOP Group (Certificate #QA09172; figure 9)			
TOP 1-8	YB31025-032	DEC 31	FHM
TOP 16-34	YB31033-051	DEC 31	FHM
<u>F</u> : WIN Group (Certificate #QA09177-180; figure 10)			
CAB 1-4,6	YB31960-965	DEC 31	FHM/RIS
CAB 22,24,26	YB31981,983,985	DEC 31	FHM/RIS
CAB 28,30,32	YB31987,989,991	DEC 31	FHM/RIS
CAB 103,105	YB38462,464	DEC 31	FHM/RIS
TOP 71,73	YB31086,088	DEC 31	FHM
TOP 56-59	YB31071-074	DEC 31	FHM
WIN 1-56	YB30901-956	DEC 31	FHM
WIN 66,68,70	YB30957-959	DEC 31	FHM
WIN 72-76	YB30960-964	DEC 31	FHM
WIN 78,80-83	YB30965-969	DEC 31	FHM
WIN 85,87,89	YB30970-972	DEC 31	FHM
WIN 99-123	YB30973-997	DEC 31	FHM
WIN 126-135	YB30998-31007	DEC 31	FHM
WIN 137-153	YB31008-024	DEC 31	FHM
HL 77,79	YB05384,386	NOV 17	AOR/DEG
HL 57-60	YB05364-367	NOV 17	AOR/DEG
HL 84,86	YB05391,393	NOV 17	AOR/DEG

N.B.: AOR = Arbor Resources Inc.  
 DEG = Dawson Eldorado Mines Ltd.  
 FHM = Faith Mines Ltd.  
 RIS = Rise Resources Inc.  
 SYN = Dawson Syndicate (1983)  
 WLH = Wealth Resources Ltd.

#### 1.4 HISTORY AND PREVIOUS PRODUCTION

The Klondike region is well known for the 11 million ounces of placer gold recovered since 1896, over half of which has come from Bonanza and Eldorado Creeks.

The mining of the placer deposits has been accomplished by a succession of methods. Originally, hand miners would shaft down through frozen gravels to "pay zones" near bedrock in the winter and sluice the gravel in the summer; using these techniques over five million ounces of gold was recovered. Subsequently, from 1903 to 1966, dredges reworked the streams and recovered an additional five million ounces. Since the dredging ended, bulldozers have been used to push gravel through sluice boxes and have recovered approximately one million ounces of gold.

Exploration for lode gold in the Klondike has concentrated on testing quartz deposits at the head of auriferous placers. All of the claims worked are situated near placer deposits, but only one, the JODY group, is located adjacent to old lode workings (Bornite showing; see ECONOMIC GEOLOGY).

#### 1.5 RECENT EXPLORATION

Most of Bonanza, Eldorado, Bear, and Hunker Creeks have been covered by two airborne geophysical surveys flown for the Arbor Group of companies. In 1984, Questor Surveys Ltd. carried out a fixed-wing borne electromagnetic and magnetic survey. In 1987, Aerodat Ltd. completed a helicopter borne electromagnetic, magnetic, and very low frequency electromagnetic survey. In 1986, Arbor Resources Ltd carried out limited soil sampling along the Bear Ridge road (Comet claims) near the MOON Group. In 1988, Dawson Eldorado Mines Ltd performed reconnaissance soil sampling over the CAB, TOP and WIN Groups. In 1991, Arbor conducted a small VLF geophysical survey within the JODY Group of claims. No other significant exploration has occurred on any of the "Groups".

Most of the 1992 exploration was carried out on areas of soil and rock geochemical anomalies. Work comprised geological prospecting and trenching in six separate areas: SURY, JODY, MOON, CAB, TOP and WIN Groups (see Table I and figure 2). Each area is discussed in more detail under sections 3.1 to 3.6.

## 2. GEOLOGY

### 2.1 REGIONAL GEOLOGY

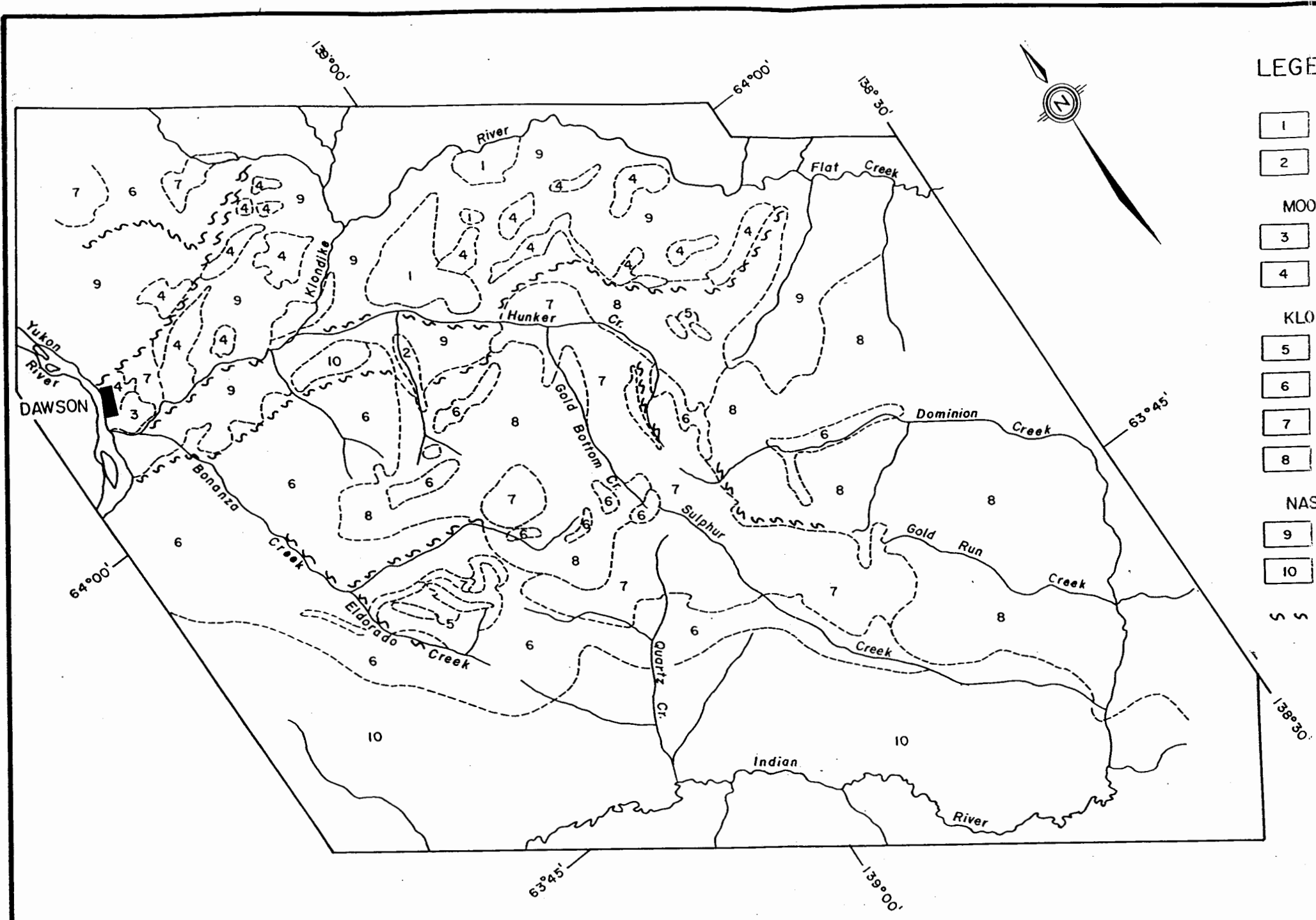
Bedrock exposures amount to less than one percent of the area and are generally confined to gulches, recent landslide areas, and road cuts. The Klondike district was first mapped by Bostock (1942), followed by Green and Roddick (1961), Metcalfe (1981), and Debicki (1984 and 1985), and most recently by Mortensen (1990). Bedrock in the Klondike area is generally grouped into five major units which are, from oldest to youngest, the Nasina Series, the Klondike Series, the Moosehide Assemblage, early Tertiary volcanics/volcanoclastics and Tertiary intrusives. An overview of the geology is shown in Figure 3.

Rocks of the Nasina Series consist of graphitic schists, graphitic quartzites and siliceous marbles with minor chlorite schists and muscovite schists. These rocks have been metamorphosed to grades ranging from upper greenschist to middle amphibolite facies, and appear to have been derived from marine offshore sedimentation similar to that found along continental shelves. Field studies indicate that the Nasina Series pre-dates the Klondike Series; thus, an age of formation in the late Carboniferous to mid-Permian is likely.

Most lithologies exposed in the Klondike district belong to the Klondike Series. These are quartzofeldspathic schists containing varying amounts of chlorite, muscovite and sericite. They have undergone upper greenschist to middle amphibolite grade metamorphism and at least four separate deformational events. This series appears to represent water laid arkosic sediments and rhyolitic to andesitic tuffs derived from a succession of stratovolcaniclastic venting. The minimum estimated age of formation of the Klondike Series lies within the middle Permian. Metcalfe claims that the Klondike formation has a conformable basal contact with the structurally underlying rocks of the Nasina Series, although field studies indicate a low angle thrust contact.

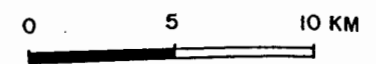
To the west the Klondike Schists are in contact with a blocky weathering, granitic textured, biotite-quartz-feldspar orthogneiss. Thin section studies of these rocks indicate that they were originally medium to coarse grained plutonic rocks of granodiorite to quartz diorite composition, and may represent the magmatic source for those tuffs now comprising the Klondike Series. Zircon dating of these rocks indicates an age of emplacement between Late Devonian and early Carboniferous (Mortensen).

The age of metamorphism of the Klondike and Nasina Series formations has been placed in the Late Triassic (Metcalfe).



**LEGEND**

- 1 QUARTZ FELDSPAR PORPHYRY
- 2 CLASTIC SEDIMENTS AND VOLCANICS
- MOOSEHIDE ASSEMBLAGE**
- 3 MASSIVE GREENSTONE AND DIABASE
- 4 SERPENTINITE AND ALTERED ULTRAMAFIC ROCKS
- KLONDIKE SERIES**
- 5 MUSCOVITIC QUARTZITE
- 6 MUSCOVITE AND QUARTZ MUSCOVITE SCHIST
- 7 CHLORITIC SCHIST
- 8 MUSCOVITIC AND CHLORITIC QUARTZITE AND FELDSPATIC QUARTZITE
- NASINA SERIES**
- 9 CARBONACEOUS PHYLLITE AND SCHIST
- 10 METAGRANODIORITE
- S S FAULT (NATURE UNCERTAIN)



NOTE: MODIFIED FROM MORTENSEN, 1985

ARBOR RESOURCES INC.
LONE STAR PROPERTY DAWSON MINING DISTRICT, Y.T.
<b>REGIONAL GEOLOGY OF THE KLONDIKE</b>
BY: S.T./p.s. DATE: MAY, 1991
FIGURE: 3

Structurally overlying the rocks of the Klondike and Nasina Series are occurrences of greenstone and altered ultramafics belonging to the Moosehide Assemblage. Included in the ultramafic unit are a variety of rock types including massive, partially serpentinized peridotite (harzburgite), massive to sheared serpentinite, silica-carbonate altered serpentinite, and talc-carbonate schist. Massive greenstone and strongly altered, fine to medium grained diabase are exposed in several steep bluffs in the vicinity of Dawson. These rocks are nonfoliated and form part of a slab of greenstone and serpentinite that underlies the southwestern slope of the Midnight Dome east of Dawson. Occurrences of greenstone and ultramafic rocks are commonly found along the sheared contact between the Klondike and Nasina Series rocks. They are thought to represent exotic slices of uncertain origin (ophiolite?), structurally emplaced during thrust faulting.

Gently folded andesitic volcanics and clastic sediments belonging to the Carmacks suite are present in the Last Chance Creek area. These rocks were considered to be early Tertiary in age; however, recent work on similar rocks in the Indian River area suggests that these rocks are middle Cretaceous in age (Mortensen, 1986).

Intrusive rocks are present as numerous dykes and sills ranging in nature from diabase to rhyolite. These have been dated as Tertiary to early Quaternary in age. Larger Tertiary intrusive bodies are rare in the Klondike except for a rhyolite porphyry stock that outcrops along Hunker Creek. Isotopic dating (Debicki) indicates that the porphyry is approximately 50 to 60 million years old.

The regional structure is dominated by the Tintina Thrust Fault, which is only 15 km away. Much of the faulting, deformation, and lithology trends to the northwest, parallel to the Tintina.

## 2.2 PROPERTY GEOLOGY

The geology of the property was chiefly determined from the examination of trenches and road cuts, as there are few outcrops. The property is dominantly underlain by facies of the Klondike Schist. Lithological and structural continuity has been disrupted by folding and faulting. Age relationships of the various lithologies are largely unknown since tops cannot be determined and contacts are either gradational, interlayered, or faulted.

Adams Creek (SURY Group) is underlain by quartz-eye schists belonging to the Klondike Series (figure 4). The JODY Group encompasses chlorite schist and quartzite of andesitic derivation (figure 6). The area also includes a belt of pyritic, quartz-rich, sericitic schist (meta-alteration?) as well as a NE-trending chloritic quartz breccia (Bornite occurrence). Bear Ridge (MOON Group) is underlain by interlayered graphitic and muscovite schists also belonging to the Klondike Series (figure 7). This area is also host to sequences of quartz-rich sericitic schists believed to represent metamorphosed alteration zones or rhyolites. The CAB claims have mostly quartzite of the Klondike Series. These are cut by a NW-trending silicified breccia zone (figure 8). No exposure was available for the TOP Group, however, the area is covered with float of quartzite (figure 9). The WIN claims have relatively good road exposure of various Klondike Schists, as shown in Figure 10. This area also includes a large zone of pyritic, quartz-rich, sericitic schist (meta-alteration?).

### 2.3 ECONOMIC GEOLOGY

With few exceptions, exploration of the area has always focused on the placer deposits. Since production began in 1896, the Klondike district southeast of Dawson City has produced over 11 million ounces of placer gold.

Previous hard rock exploration has concentrated on exploring quartz deposits. Quartz occurs in two forms: foliaform and discordant. The foliaform quartz forms pods and lenses ranging in thickness from 1 cm to over 1 m within the schists, and are probably the result of metamorphic segregation of the protolithologies. The discordant or vein quartz varies from less than 1 cm to over 2 m in thickness, has a general attitude of 140°/40NE, and is mesothermal in origin (as determined by fluid inclusion work). Very similar veins near King Solomons Dome have been age dated at 138 m.y.a. (Mortensen, 1990). Carbonate is a common constituent, galena may be present, and a pyrite selvage often forms. Pyrite may also form stringers and veinlets by itself. Although there has been exploration on both types of quartz, only the discordant veins carry gold; the gold is almost always associated with galena and/or pyrite. The pyrite stringers and veinlets also may have gold.

The Bornite showing (JODY Group) is located 5.5 kms upstream along GoldBottom Creek. Between 1905 and 1908, two tons of ore from two shafts was sent to a smelter. Samples from the underground workings appear to be a pyrite, chalcopyrite, and bornite bearing brecciated quartz vein. Although "highly selective" assays of 18% Cu and 618 g/t Ag have been reported (Debicki, 1985), drilling by Yukon Consolidated Gold Corp in the 1950's was not encouraging. No lode occurrences have yet been discovered in the other areas covered by this report.

### 3. TRENCHING and GEOCHEMISTRY; 1992

Field work completed by Hastings Management Corp. for Arbor Resources Inc., Dawson Eldorado Mines Ltd., Dawson Syndicate (1983), Faith Mines Ltd., Rise Resources Inc., and Wealth Resources Ltd. was carried out from August to October, 1992. This work included:

- (1) 5 backhoe trenches excavated and 8 rock analyses for the SURY Group of claims.
- (2) 8 backhoe trenches excavated and 27 rock analyses for the JODY Group of claims.
- (3) 4 bulldozer trenches excavated and 24 rock analyses for the MOON Group of claims.
- (4) 4 bulldozer trenches excavated and 13 rock analyses for the CAB Group of claims.
- (5) 48 soil samples analyzed for the TOP Group of claims.
- (6) 3 bulldozer trenches excavated and 10 rock analyses for the WIN Group of claims.
- (7) Several rock samples and short soil lines from "regional" investigations.

The rock samples were all taken as grab or chip samples. The soil samples were all taken from the "B" soil horizon, usually on 50 m spacings. All samples were sent to Chemex Labs Ltd in North Vancouver. Rocks were crushed, split, pulverised and screened to -150 mesh. Soils were oven dried and sieved to -80 mesh; the coarse fraction was then discarded and the fine fraction pulverised for analysis. Gold was analyzed using the FA-AA method, and 32 additional elements were analyzed using the ICP-AES technique. Sample descriptions and analytical results are given in Appendices I to III.

Rock samples from the WIN Group were treated by metallics assay techniques. In this scenario, a 300gm pulverised subsample is screened to -150 mesh and is fire-assayed. The +150 mesh fraction is analyzed as well. The two weighted analyses are combine to give a calculated "head" grade. This technique is particularly useful when nuggety gold is suspected to be present.

Trenches were excavated using a Caterpillar D8K bulldozer or a Bantam C366 backhoe. Dozer trenches tend to be shallow and wide, whereas backhoe trenches are narrow but deep. A list of trench particulars follows on the next page.

TABLE II  
TRENCH PARTICULARS

TRENCH#	SIZE (m)	n° of SAMPLES	LOCATION
<u>A</u> : SURY Group:			
63 92TR-01	20x10x 1	1	SYNDICATE
56 92TR-02	20x 1x 4	2	SYNDICATE
56 92TR-03	15x 1x 4	1	SYNDICATE
66 92TR-04	5x 2x 2	1	SYNDICATE
66 92TR-05	10x 3x 3	1	SYNDICATE
<u>B</u> : JODY Group:			
92TR-06	20x 1x 2	0	EAGLE
92TR-07	10x 2x 4	2	EAGLE
92TR-08	30x 3x 5	5	EAGLE
92TR-09	25x 2x 3	2	EAGLE
92TR-09A	10x 2x 3	1	EAGLE
92TR-09B	5x 2x 2	0	EAGLE
92TR-10	33x 3x 5	8	EAGLE
92TR-11	17x 2x 4	6	EAGLE 1
<u>C</u> : MOON Group:			
92TR-12	135x 5x 2	9	COMET 24
92TR-13	45x 5x 3	3	COMET 24
92TR-14	38x 5x 3	5	COMET 26
92TR-15	36x 5x 3	4	COMET 26
<u>D</u> : CAB Group:			
92TR-16	69x 5x 2	4	TOP 4
92TR-17	53x 5x 3	3	TOP 5
92TR-18	35x 5x 3	3	TOP 5
92TR-19	62x 5x 2	1	TOP 4
<u>E</u> : WIN Group:			
92TR-20	125x 5x 2	5	WIN 83
92TR-21	176x 5x 2	5	WIN 83
92TR-22	400x 4x 1	0	HL 84

NOTE: Trench size = length x width x depth  
Location = actual claim on which trench is located.

### 3.1 SURY Group (Certificate #QA09142).

A total of 5 backhoe trenches were excavated in the Adams Creek area in 1992 (Table II, figures 2 & 4). All trenches were completed on perceived Lone Star type geology prior to this authors arrival at the site. All trenches cut fresh, unaltered quartz-eye schist which do NOT represent Lone Star type geology. Trench 92TR05 was emplaced on a 115ppb Au rock chip anomaly but results from further assaying (#92TR05-01) did not reproduce the anomaly. It is believed that the original sample (#02715, Appendix II) may have been contaminated by placer gold derived from workings located a few metres upslope of the sample site. None of the SURY Group trench samples were found to be anomalous, although one piece of quartz float (#CLKL3) contains high Au, Ag, Pb and Zn (Appendix II).

### 3.2 JODY Group (Certificate #QA09157-162).

In 1992, a total of 24 rock samples were taken from 8 trenches in the vicinity of the Bornite showing on GoldBottom Creek (Table II, figures 2 & 6). The JODY claims were also briefly prospected (figure 5) with three additional samples taken. The trenches were emplaced on seemingly mineralized or altered geology. An attempt was made to recover the Bornite showing by trenching along a coinciding VLF conductor (Tomlinson, 1992).

Most trenches exposed chloritic quartzite/schist, except 92TR06 which did not reach bedrock due to permafrost. GoldBottom Creek is the locus of a recent shear zone, encased within a wider zone of pyritized schist which occasionally contains trace amounts of disseminated galena and sphalerite (eg:92TR08-02,03 & 92TR11-02,03). This sulphide-rich zone may represent weak stratiform mineralization. Trench 92TR08 intercepted the Bornite showing, a 2m wide zone of pyritic, chloritic and siliceous breccia (samples 92TR08-04,05). Trench 92TR10 was emplaced on a 15-20 m thick, NE-trending, "stratiform" horizon of sericitic meta-alteration very similar to that of the Lone Star mine site (samples 92TR10-02 to 08). The same horizon is noted some 620 m to the SW in trench 92TR11, where it is truncated by the GoldBottom shear zone (samples 92TR11-04,05).

All rock samples from this area were found to be barren. It should be noted that the Jody claims have never been soil sampled and that trenches were located on the basis of geophysics and geology, rather than on soil anomalies. Trench targets may therefore not have been optimized.

### 3.3 MOON Group (Certificate #QA09163-168).

A total of 21 rock samples were collected from 4 trenches along the Bear Ridge road near the MOON Group of claims in 1992 (Table II, figures 2 & 7). All four trenches were dug on soil anomalies to

550ppm Cu, 2100ppm Pb and 50ppb Au respectively (Comet soil line; Grunenberg and Troup, 1986). Three rocks were also taken from oxidized rhyolites on the POD claims (#39983-85).

Although the area comprises interlayered quartzofeldspathic and graphitic schist of sedimentary origins (eg: trench 92TR13), trenches 92TR12, 14 & 15 are located within strongly "altered", shallow-dipping rhyolite (eg: 92TR12-03 to 09). These pyritic, siliceous, sericitic schists resemble those of Lone Star, and appear to portray fossil phyllite alteration and/or disjointed stockworks. These units range from 5 to 25 m in thickness.

The "altered" schists in trenches 92TR12, 14, 15 are weakly anomalous in gold (to 145 ppb), and strongly enriched in Ag, Pb & Hg (to 10.2, 1440 & 8 ppm respectively, Appendix II). This unit is identical in all respects to mineralized horizons at 27Pup and at the WIN claims. The graphitic horizon of trench 92TR13 contains strongly anomalous concentrations of both base and precious-metals (eg: 175ppb Au, 46ppm Ag and 347ppm Cu; 92TR13-03). Trenching here may not have been optimized, since historical soil sampling has not been systematic. The trenches tested only a minute portion of the silica-sericite horizons.

#### 3.4 CAB Group (Certificate #QA09169-171).

The four trenches (12 rock samples) of the CAB Group were excavated on a ridge above placer deposits at the headwaters of Last Chance Creek (Table II, figures 2 & 8). Prior exploration had indicated the presence of a NW-trending fault structure and of possibly related, Au, Pb, As and Ba soil anomalies (VanAngeren, 1988). Subsequent prospecting (figure 5) also indicated the presence of several shear zones.

Trenches 92TR16 and 19 uncovered sheared, but barren, chloritic quartzite, whereas 92TR17/18 targeted a 5 m wide, silicified breccia. Hydrothermal activity, hence the potential for mineralization, is indicated by this alteration. Results show very mild gold enrichments within the silicified breccia zone (samples 92TR17-02,03,04 & 92TR18-02,03; 85ppb Au maximum). In common with the JODY & MOON areas, this region has never been soil sampled in the past, and there was little to base targets on.

#### 3.5 TOP Group (Certificate #QA09172).

A total of 48 soil samples were collected at 50 m intervals along a single line between the heads of Homestake and Gauvin Gulches in 1992 (figures 2 & 9). The sampling was completed in an effort to locate the source of the minor placer gold found at the heads of both gulches. Geology was determined to be unfavourable for the presence of vein and bulk mineralization. The maximum gold value obtained was 35ppb (Appendix III).

### 3.6 WIN Group (Certificate #QA09177-180).

Trenching on the WIN Group targeted precious-metal anomalies detected in outcrop near the Upper Bonanza road (VanAngeren, 1988 and Tomlinson, 1992; Table II, figures 2 & 10). Silica schist assayed up to 765ppb Au, 93ppm Ag, 4100ppb Hg and 6500ppm Ba. Minor prospecting was also completed in 1992.

Of the three trenches excavated in 1992, only two were examined briefly (92TR20/21; 10 samples). Additional work was precluded due to the untimely fall of heavy snows. The trenching was meant to expose "stratabound", "Lone Star type", pyritic, siliceous and sericitic schists believed to represent meta-alteration zones. The NE-trending horizons range from 5 to 35 m in thickness and are enclosed within weakly altered quartzites. Strong Ag soil anomalies, located 2.0 km to the WSW on strike, give an indication of the possible size potential of this horizon.

Results are generally negative. All rocks are mildly anomalous in Ag (to 8.4ppm) and Hg (to 1.4ppm; Appendix II). Results are a far cry from historical assays. As with the JODY, MOON & CAB areas, the WIN zone has never benefitted from a comprehensive soil sampling program. As it stands, trenching tested only a minuscule portion of the zone.

### 3.7 Regional Exploration.

Regional exploration was limited to eleven "representative" rocks and a few short soil lines (figure 2, Appendix III). Results are generally negative. Of the rocks, only those containing semi-massive pyrite from the dredge tails at the mouth of Hunker Creek, are mildly anomalous in gold (to 230ppb; #39995). There are very few soil samples worthy of mention. Sporadic Au-As anomalies to 130ppb and 328ppm respectively, are noted adjacent a porphyry dike at the head of Eldorado Creek (soil line AW2B). The gold - arsenic - porphyry dike association is common throughout the Klondike.

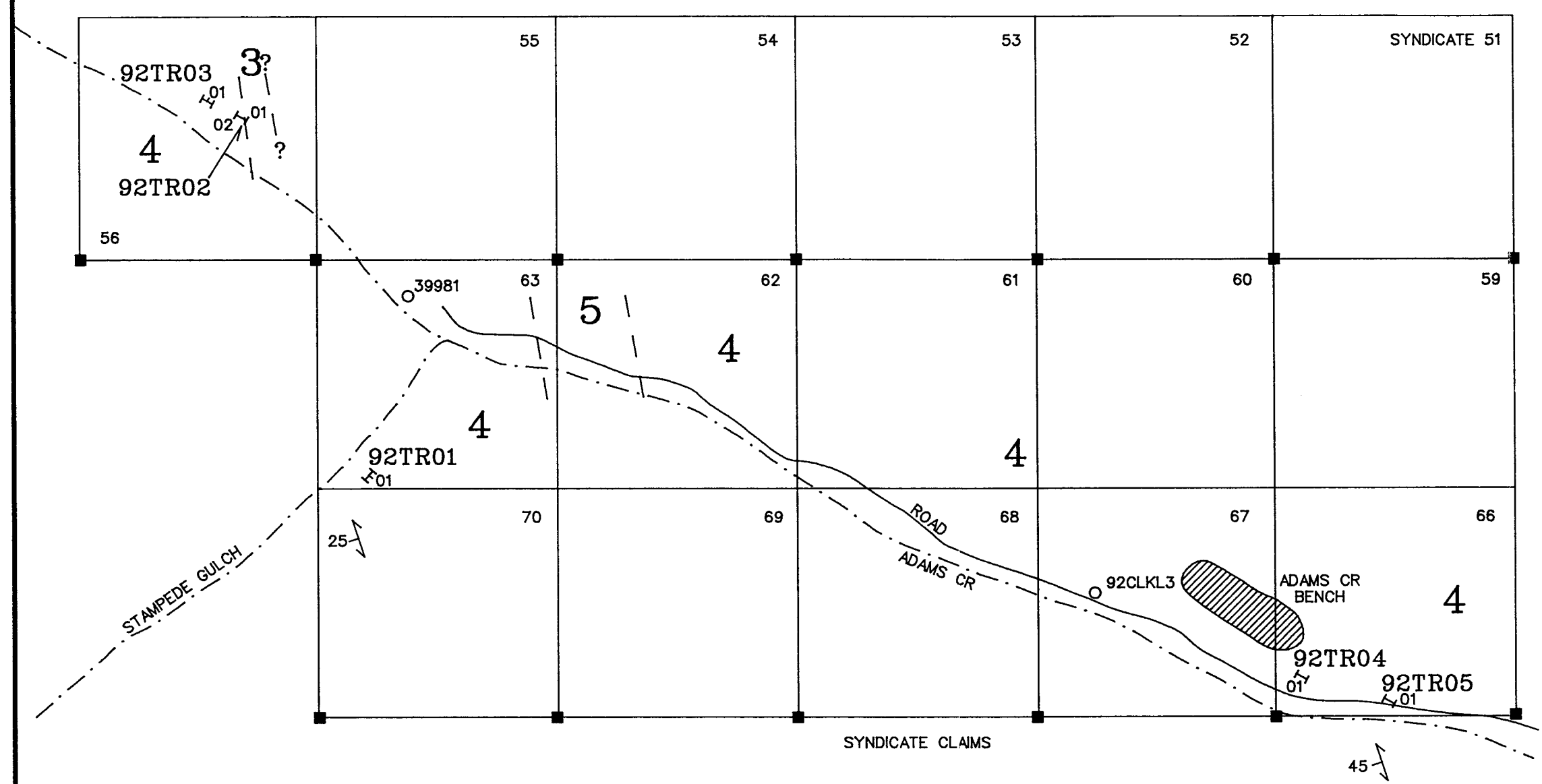


**LEGEND**

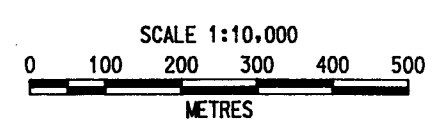
- PERMO-TRIASSIC
- 5 Graphitic Schist
  - 4 Quartz-eye Schist
  - 3 Sericite Schist

- SYMBOLS
- - - Geological Contact
  - ↗↘ Foliation
  - ▭ Trench
  - 01 Trench Sample Site
  - Float Sample

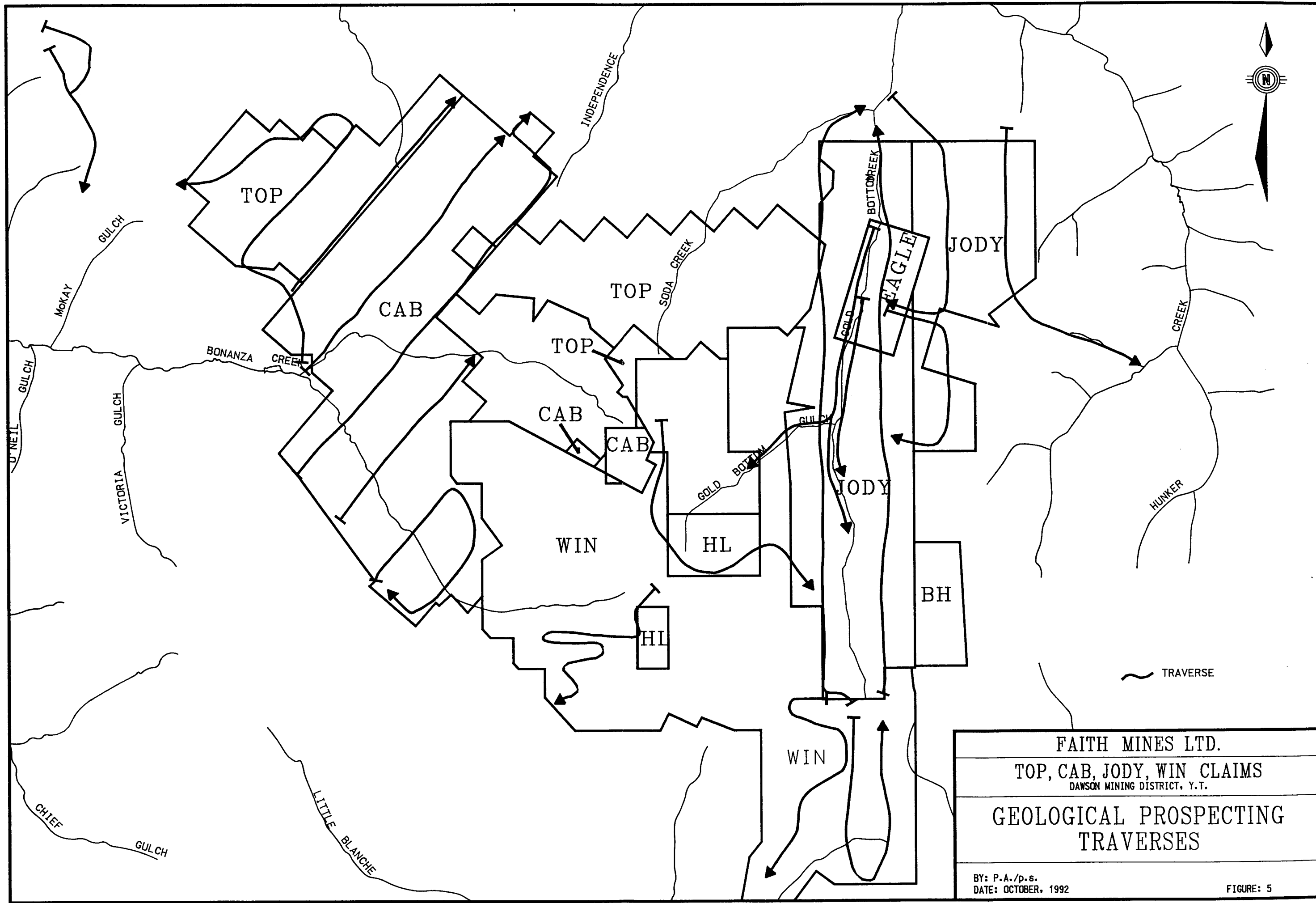
SEE TABLES II & III FOR PARTICULARS



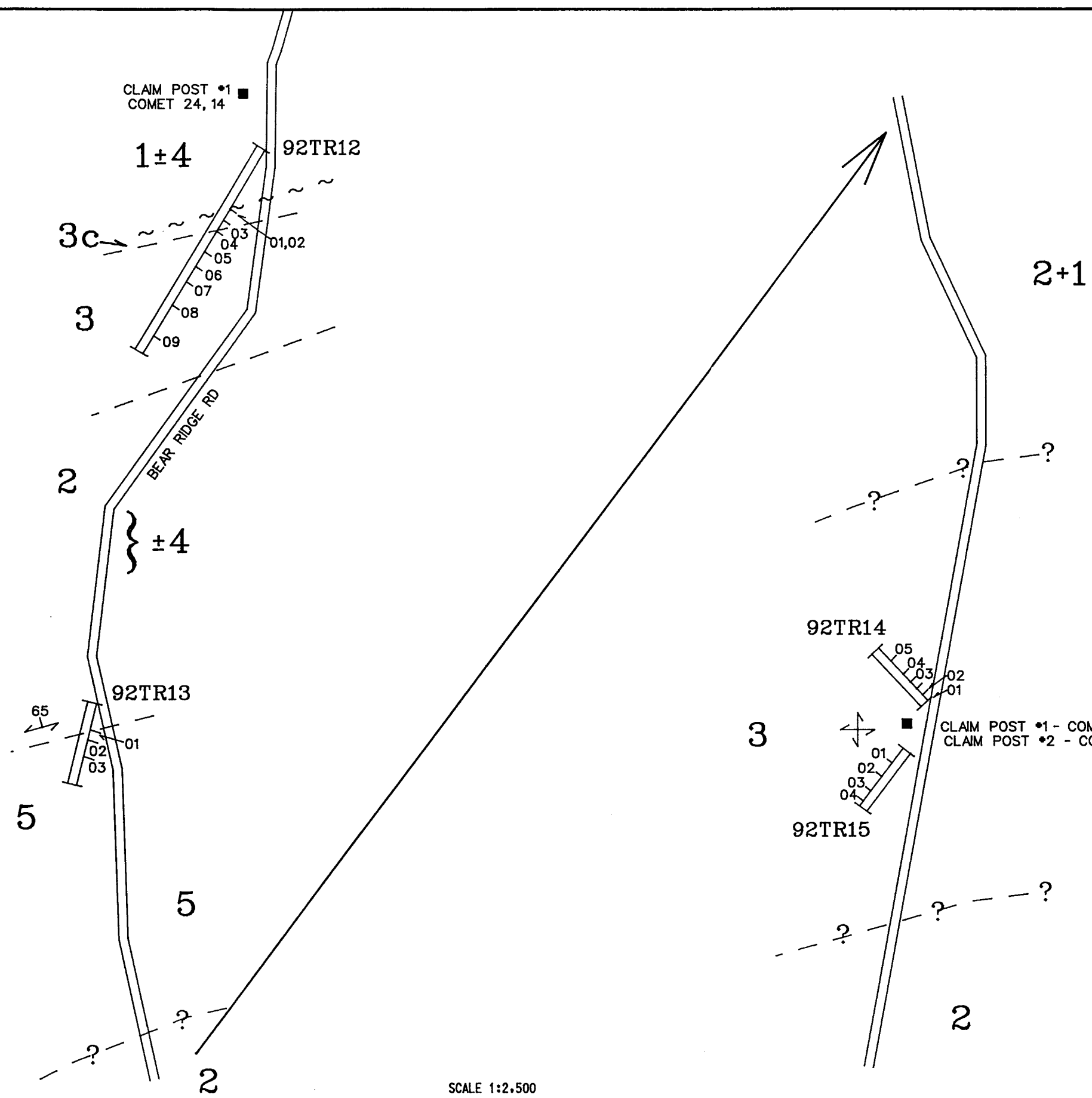
SYNDICATE CLAIMS



DAWSON SYNDICATE
SYNDICATE CLAIMS DAWSON MINING DISTRICT, Y.T.
TRENCH MAP FOR SURY GROUP
BY: P.A./p.s. DATE: OCTOBER, 1992
FIGURE: 4



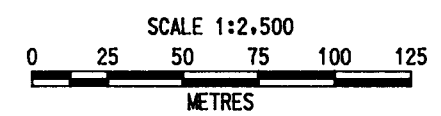




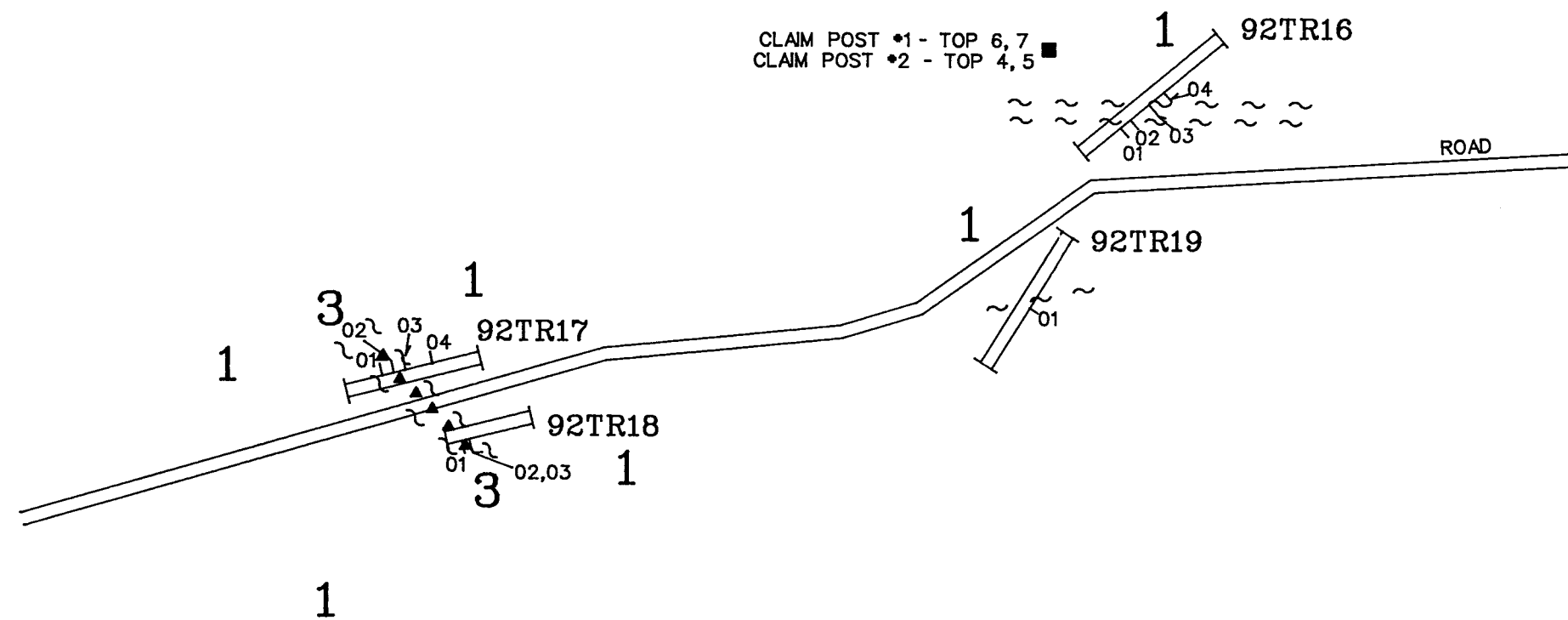
**LEGEND**

- PERMO-TRIASSIC
- 1** Quartzite
  - 2** Quartzite-feldspathic Schist
  - 3** Silica & Sericite Schist
  - 3c** Extremely Siliceous
  - 4** Quartz-eye Schist & meta pegmatite
  - 5** Graphite Schist

- SYMBOLS
- - - Inferred Geological Contact
  - ~ ~ Inferred Shear Zone
  - ← Foliation
  - ▭ Trench
  - 01 Trench Sample Site



DAWSON SYNDICATE
COMET CLAIMS DAWSON MINING DISTRICT, Y.T.
TRENCH MAP FOR MOON GROUP
BY: P.A./p.s. DATE: OCTOBER, 1992
FIGURE: 7



CLAIM POST \*1 - TOP 6, 7  
CLAIM POST \*2 - TOP 4, 5

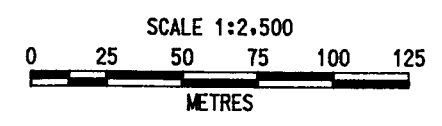
**LEGEND**

PERMO-TRIASSIC

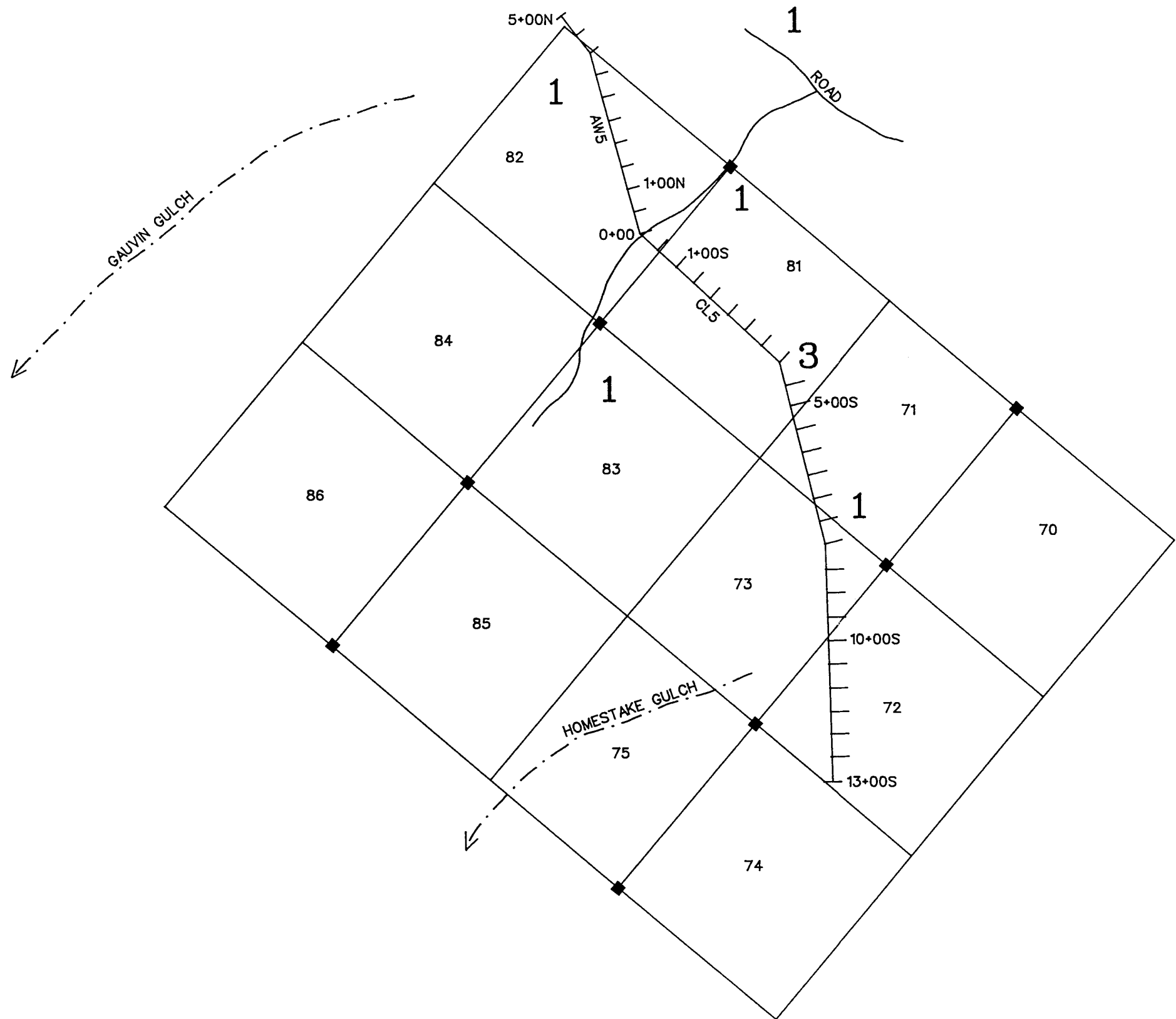
- 1** Chloritic Quartzite
- 3** Siliceous Breccia

SYMBOLS

- ~ ~ Shear Zone
- ▲ ▲ Breccia
- ▭ Trench
- 01 Trench Sample Site



FAITH MINES LTD.
TOP CLAIMS DAWSON MINING DISTRICT, Y.T.
TRENCH MAP FOR CAB GROUP
BY: P.A./p.s. DATE: OCTOBER, 1992
FIGURE: 8



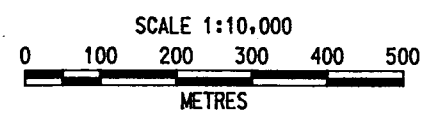
**LEGEND**

PERMO-TRIASSIC

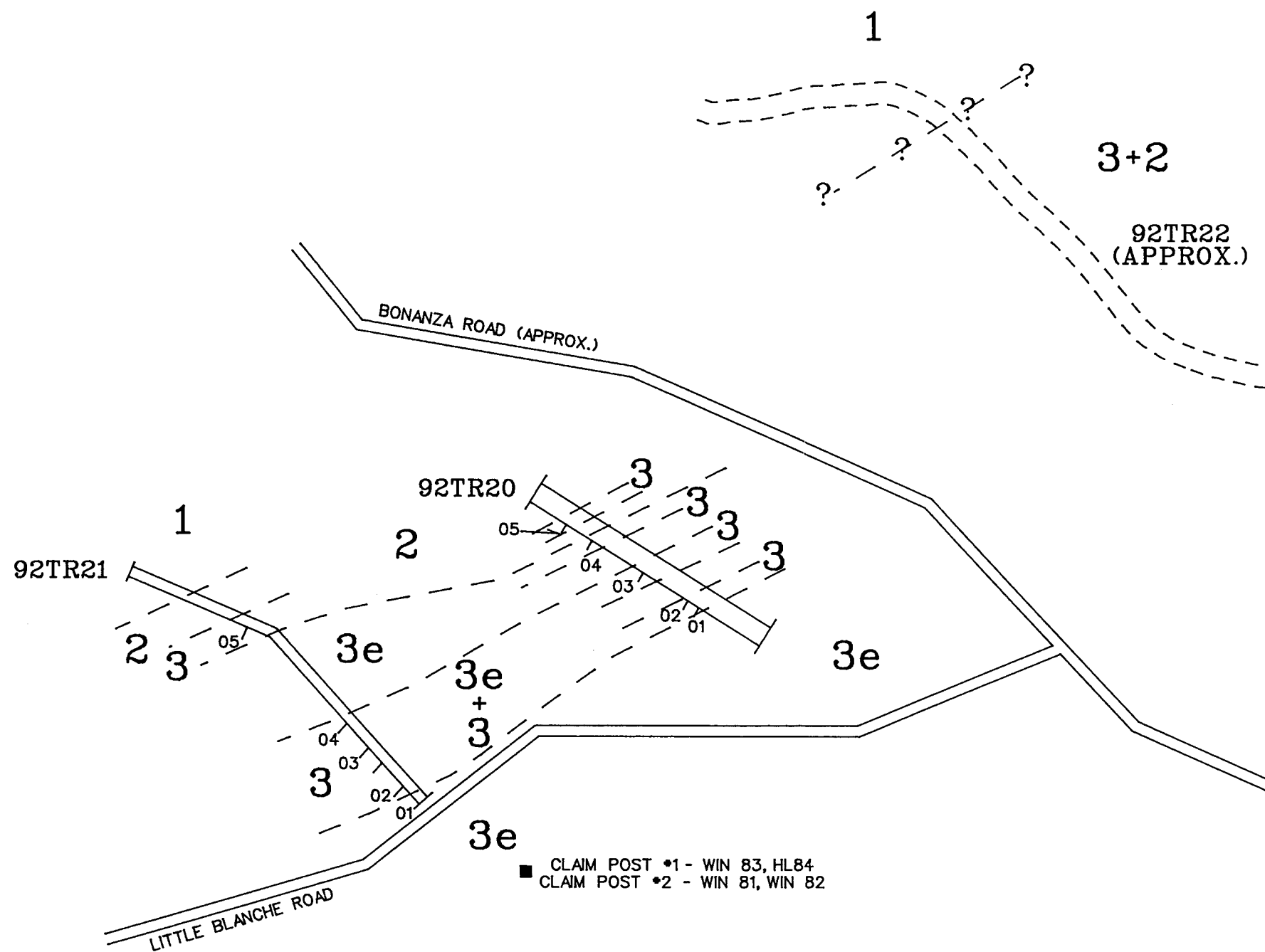
- 1** Quartz-feldspathic Quartzite
- 3** Sericite Schist

SYMBOLS

- Soil Line and Sample Sites (Soils @ 50m Intervals)



ARBOR RESOURCES INC.
REEF CLAIMS DAWSON MINING DISTRICT, Y.T.
<b>SOIL SAMPLING FOR TOP GROUP</b>
BY: P.A./p.s. DATE: OCTOBER, 1992
FIGURE: 9

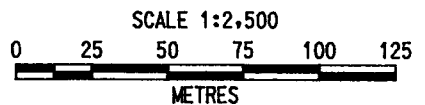


**LEGEND**

- PERMO-TRIASSIC
- 1** Chloritic Quartzite
  - 2** Quartzite-feldspathic Schist ± Quartz-eyes
  - 3** Silica Schist
  - 3e** Crystalline Quartzite

- SYMBOLS
- — Inferred Geological Contact
  - ~ ~ Inferred Shear Zone
  - ↔ Foliation
  - ▭ Trench
  - 01 Trench Sample Site

CLAIM POST \*1 - WIN 83, HL84  
 CLAIM POST \*2 - WIN 81, WIN 82



FAITH MINES LTD.
WIN CLAIMS DAWSON MINING DISTRICT, Y.T.
TRENCH MAP FOR WIN GROUP
BY: P.A./p.s. DATE: OCTOBER, 1992
FIGURE: 10

#### 4. CONCLUSIONS

The mineral claims owned by Arbor Resources Inc., Dawson Eldorado Gold Exploration Ltd., Dawson Syndicate (1983), Faith Mines Ltd., Rise Resources Inc., and Wealth Resources Ltd. are situated along some of the most productive placer creeks in the Klondike. The source of this gold is almost certainly covered by these claims.

##### 4.1 SURY Group

The Adams Creek target did not return any significant assays. The geology is unfavourable for the presence of disseminated, "Lone Star type" mineralization, hence, no further work is recommended.

##### 4.2 JODY Group

The Bornite showing on the Eagle claim is reported to have carried some copper and silver values. The host breccia zone is fairly narrow, and it coincides with a geophysical anomaly detected in 1991. Nonetheless, historical exploration, including this years results, do not replicate those reported assays. The Bornite showing does not warrant further exploration.

The sulphide-enriched horizon which trends along GoldBottom Cr represents a weakly mineralized sedimentary horizon. It may be proof of the existence of syngenetic exhalative processes within the Klondike camp in general. The strata trends south towards felsic schists and placer deposits at the headwaters of Soap Gulch (head of GoldBottom Cr). Detailed soil sampling should be carried out in the drainage basin of Soap Gulch.

The Lone Star type sericitic schist in trench 92TR10 proved to be unmineralized. The horizon may simply portray a weakly altered felsic tuff. Since other such horizons are mineralized elsewhere (eg: Lone Star, 27Pup-zone, Bear Ridge, WIN-zone), it would be prudent to continue exploration along the trend of this horizon with detailed, grid-controlled soil sampling. Note that the horizon has been sampled at only one site and that soil sampling has never been carried out over it.

##### 4.3 MOON Group

The Bear Ridge area is underlain by promising geology (Lone Star type siliceous/sericitic schist) which contains intriguing Ag, Hg, Cu, Pb and Au geochemistry. The significance of this correlation should not be overlooked. The siliceous schists probably embody fossil epithermal alteration zones within rhyolitic volcanics, whereas the graphitic horizon may have been contaminated by exhalative emanations. The potential for epigenetic precious-metal

ores in paleo-alteration zones and for syngenetic base-metal ores at volcano-sedimentary contacts is considered excellent.

There has been a paucity of exploration in the area, with the result that it has not been adequately tested. The siliceous zones are worthy of additional exploration and should be investigated in detail along strike. Similar horizons are mineralized elsewhere (eg: Lone Star, 27Pup-zone, WIN-zone). The graphitic facies should also be inspected in detail. It is recommended that geology should be further defined and grid-controlled soil sample surveys should be centered over the trench sites.

#### 4.4 CAB Group

This area should be further explored on the basis of sporadic soil anomalies, proximity to a small placer deposit and indications of a weakly mineralized, hydrothermally altered breccia zone. The focus of exploration should be on epithermal alteration and mineralization along the NW-trending breccia zone. Grid-controlled soil sampling, centered on the breccia, is the preferred approach.

#### 5.4 TOP Group

The Homestake Gulch soil line produced no geochemical anomalies. Since the bedrock is mostly quartzite and unfavourable for the presence of disseminated ores, no further work is recommended at this time. The Homestake and Gauvin placers are most likely derived from localized quartz veins. It is possible that the soil line was placed upslope of any causative sources.

#### 4.6 WIN Group

The 1992 program could not be satisfactorily completed due to an early and unusual amount of snowfall. The 10 samples cannot give an accurate indication of the mineral potential of the WIN-zone. Geological mapping, sampling and trenching will have to be concluded in 1993.

The WIN claims include a zone of "Lone Star type" siliceous and sericitic schist which have historically been found to be anomalous in Au-Ag-Hg-Ba (1988, 91, 92). The zone has all the markings of a paleo-alteration feature (epithermal connotation). It has been traced geologically and geochemically for more than 2.0 km to the WSW, but has never been studied ENE of 92TR20 and has never been systematically sampled. In view of the close similarities to Lone Star type mineralization in both "geology" and "size potential", it would appear judicious to carry out a grid-controlled soil sample survey along the trend of the WIN structure. The potential for "fossil", epigenetic, precious-metal ores is considered

excellent.

#### 4.7 REGIONAL Exploration

Although the regional sampling produced little of interest, such an exploration approach should be continued in the future.

#### 4.8 GENERAL CONSIDERATIONS

There has historically been no systematic soil sampling over the zones covered by this report. Target definition for the trenching program was therefore based on "sparse" geological, geochemical and geophysical data. Accordingly, trenches may not have been ideally located. Exploration should focus on siliceous schists and silicified breccias. Strong Ag, Hg and Pb enrichments in some of these units is a powerful indicator for the presence of precious-metal mineralization. Soil sampling has been very effective at the Lone Star mine site, and should be the favoured exploration tool in all of the above-mentioned areas.

Respectfully submitted;



Phil D. van Angeren P. Geol.

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## 6. STATEMENT OF QUALIFICATIONS

## CERTIFICATE

I, PHIL VAN ANGEREN, residing at 2123 Deerside Dr. S.E., Calgary, Alberta hereby certify that:

I am a geologist having practised my profession for the last 15 years.

I am a graduate of McGill University, Montreal, having graduated with a B.Sc. in Geology with Honours, in 1977.

I have been a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 1985.

I beneficially own 30,000 shares and options on another 25,000 shares of Arbor Resources Inc. I have no other interests, direct or indirect, in the properties or securities of Arbor Resources Inc. or of any of its affiliated companies nor do I expect any.

I am the author of this document, which is based on personal examination of the property and on study of historical data made available by the company.

Signed and dated at Calgary, Alberta, on the 31<sup>st</sup> of October, 1992.



Phil van Angeren P.Geol.

October 31, 1992

## 7. COST STATEMENT

CLAIM BLOCK	SURY	JODY	MOON	CAB	TOP	WIN
GEOLOGISTS @ \$240/day	\$1,440	\$1,680	\$1,680	\$1,440	\$240	\$2,880
PROSPECTORS @ \$150/day	600	1200	300	750	300	1,050
ASSAYING @ \$25/sample	150	600	525	300	1,200	450
TRUCK RENTAL @ \$50/day	500	750	450	550	250	850
ROOM & BOARD @ \$55/mday	550	825	495	605	275	935
MISC COSTS	200	300	180	220	100	340
HOE RENTAL @ \$140/hr	2,380	3,710	-	-	-	-
HAULING; HOE @ \$75/hr	300	300	-	-	-	-
CAT RENTAL @ \$165/hr	-	-	4,413	4,060	-	8,828
DRAFTING	100	100	100	100	100	200
REPORT PREPARATION	480	1,200	720	960	480	1,620
TOTALS.....	<u>\$6,700</u>	<u>\$10,665</u>	<u>\$8,863</u>	<u>\$8,985</u>	<u>\$2,945</u>	<u>\$17,153</u>

APPENDIX I  
ROCK SAMPLES; PARTICULARS

## ROCK SAMPLE PARTICULARS

NUMBER	LOCATION	SIZE	DESCRIPTION
<b>A: SURY Group</b>			
92TR01-01	Centre of trench	Grabs	Quartz-eye schist
92TR02-01	East end	"	Rusty quartz-eye schist
92TR02-02	West end	"	Rusty sericitic schist
92TR03-01	Centre of trench	"	Rusty quartz-eye schist
92TR04-01	"	"	Clay gouge
92TR05-01	"	"	Rusty quartz-eye schist
<b>B: JODY Group</b>			
92TR07-01	Centre of trench	Grabs	Chloritic quartzite
92TR07-02	"	"	Chloritic quartzite
92TR08-01	@ 05 m	"	Sericitic chlorite schist
92TR08-02	@ 15 m	"	Chloritic schist + tr py
92TR08-03	@ 20 m	"	Chloritic schist + tr py
92TR08-04	@ 25 m	"	Chloritic quartz breccia
92TR08-05	@ 25 m	"	Chloritic quartz breccia
92TR09-01	@ 10 m	"	Sericitic chlorite schist
92TR09-02	@ 18 m	"	Sericitic chlorite schist
92TR09-03	92TR09A	Float	Siliceous sericite schist
92TR10-01	@ 05 m	1.5 m	Massive sericite quartzite
92TR10-02	@ 08-10 m	2.0 m	Siliceous schist + tr py
92TR10-03	@ 11-14 m	2.0 m	Siliceous schist + tr py
92TR10-04	@ 17-19 m	1.5 m	Sericite quartzite + py
92TR10-05	@ 20-22 m	1.6 m	Sericite quartzite + py
92TR10-06	@ 23-25 m	1.5 m	Sericite schist + 10% py
92TR10-07	@ 25-28 m	2.0 m	Sericite schist + 10% py
92TR10-08	@ 28-31 m	2.0 m	Sericite schist + 10% py
92TR11-01	@ 03 m	Grabs	Sericitic chlorite schist
92TR11-02	@ 08 m	"	Chlorite schist + tr gal
92TR11-03	@ 08 m	"	Chlorite schist + tr gal
92TR11-04	@ 15 m	"	Sericitic schist + 10% py
92TR11-05	@ 15 m	"	Sericitic schist + 10% py
92TR11-06	@ 07 m	"	Clay gouge

ctd..

## APPENDIX I ctd.

NUMBER	LOCATION	SIZE	DESCRIPTION
<u>C: MOON Group</u>			
92TR12-01	@ 35 m	1.5 m	Clay shear
92TR12-02	@ 45 m	2.0 m	Graphitic shear
92TR12-03	@ 43-48 m	2.2 m	Hematitic silica schist
92TR12-04	@ 52 m	1.9 m	Siliceous schist + tr py
92TR12-05	@ 65 m	1.4 m	Hematitic sericitic schist
92TR12-06	@ 75 m	1.2 m	Hematitic sericitic schist
92TR12-07	@ 85 m	1.0 m	Hematitic sericitic schist
92TR12-08	@ 100 m	1.0 m	Hematitic sericitic schist
92TR12-09	@ 120 m	1.0 m	Hematitic sericitic schist
92TR13-01	@ 15-18 m	2.0 m	Mica schist + quartz
92TR13-02	@ 18-22 m	2.1 m	Graphite + Mica schist
92TR13-03	@ 28-31 m	1.9 m	Graphite + Mica schist
92TR14-01	@ 07 m	1.4 m	Hematitic sericitic schist
92TR14-02	@ 10 m	1.4 m	Siliceous schist + tr py
92TR14-03	@ 15 m	1.2 m	Siliceous schist + tr py
92TR14-04	@ 22 m	1.0 m	Siliceous schist + 5% py
92TR14-05	@ 30 m	1.8 m	Siliceous schist + 5% py
92TR15-01	@ 10 m	1.0 m	Hematitic sericitic schist
92TR15-02	@ 20 m	1.8 m	Siliceous schist + tr py
92TR15-03	@ 30 m	1.8 m	Siliceous schist + tr py
92TR15-04	@ 36 m	0.8 m	Siliceous schist + 10% py

D: CAB Group

92TR16-01	@ 14-17 m	1.8 m	Sheared chlorite quartzite
92TR16-02	@ 20 m	1.5 m	Sheared chlorite quartzite
92TR16-03	@ 30 m	2.0 m	Sheared chlorite quartzite
92TR16-04	@ 38 m	2.0 m	Sheared chlorite quartzite
92TR17-01	@ 14-18 m	2.2 m	Clay gouge
92TR17-02	@ 18-22 m	2.0 m	Kaolinitic breccia + tr py
92TR17-03	@ 22-26 m	2.0 m	Kaolinitic breccia + tr py
92TR17-04	@ 36 m	0.2 m	Siliceous breccia + tr py
92TR18-01	@ 04-07 m	1.6 m	Kaolinitic breccia + tr py
92TR18-02	@ 07-09 m	1.2 m	Siliceous breccia + tr py
92TR18-03	@ 09-11 m	1.2 m	Siliceous breccia + tr py
92TR19-01	@ 33 m	1.0 m	Clay gouge

E: TOP Group

No Rock Samples

ctd..

## APPENDIX I ctd.

NUMBER	LOCATION	SIZE	DESCRIPTION
<u>F: WIN Group</u>			
92TR20-01	@ 32 m	1.0 m	Siliceous schist + tr py
92TR20-02	@ 39 m	1.2 m	Siliceous schist + tr py
92TR20-03	@ 64 m	1.0 m	Siliceous schist + Ba mica
92TR20-04	@ 92 m	1.0 m	Siliceous schist + tr py
92TR20-05	@ 105 m	1.0 m	Siliceous schist + tr py
92TR21-01	@ 10 m	1.0 m	Siliceous schist + tr py
92TR21-02	@ 25 m	1.2 m	Siliceous schist + tr py
92TR21-03	@ 35 m	1.0 m	Siliceous schist + tr py
92TR21-04	@ 50 m	1.1 m	Siliceous schist + tr py
92TR21-05	@ 115 m	1.2 m	Siliceous schist + tr py
92TR22	N.S.		
<u>G: REGIONAL Samples</u>			
39980	Skookum Gulch	"	Quartz vein + galena
39981	Adams Creek	"	Quartz with galena
39982	French Gulch	0.1 m	Quartz veinlet in Shear
39983	POD 1 road cut	Grab	Metarhyolite
39984	"	"	Oxidized Metarhyolite
39985	"	"	Hematitic mica schist
39986	1km up Homestake	"	Boulder Lode type schist
39987	Bear Cr, BEA #2	"	Chlorite schist + lapilli?
39988	Upper Bonanza Dam	"	Kaolin breccia @ Dike
39989	500m past Victoria	"	Metaquartzite
39990	Bear Cr, BEA #1	"	Chlorite schist + lapilli?
39991	Below Ready Bullion	1.5 m	Pyritized sericite schist
39992	"	1.5 m	Pyritized chlorite schist
39993	Mouth Hunker Cr	Dredge	Semi-massive pyrite
39994	"	"	Semi-massive pyrite
39995	"	"	Disseminated pyrite
CLKL1	GoldBottom Pup	0.1 m	Quartz vein
CLKL2	"	Float	Sericite schist
CLKL3	1.4km up Adams	"	Breccia + galena/pyrite
CLKL4	REEF claims	2.0 m	Shear zone
CLKL5	Independence Cr	Float	Silicified breccia
CLKL6	GoldBottom Cr	"	Bedded pyrite in schist
CLKL7	Mouth of Irish	"	Metapyroclastics?

APPENDIX II

ROCK SAMPLES; CERTIFICATES OF ANALYSES



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9221331

Comments: ATTN: LARRY McLEAN

CERTIFICATE

A9221331

HASTINGS MANAGEMENT CORP.

Project: ADAMS  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 22-SEP-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	6	Geochem ring to approx 150 mesh
274	6	0-15 lb crush and split
229	6	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
100	6	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
2118	6	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	6	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	6	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	6	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	6	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	6	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	6	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	6	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	6	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	6	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	6	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	6	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	6	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	6	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	6	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	6	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	6	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	6	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	6	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	6	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	6	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	6	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	6	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	6	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	6	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	6	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	6	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	6	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	6	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	6	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	6	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	6	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
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PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project : ADAMS  
Comments: ATTN: LARRY McLEAN

Page Number :1-A  
Total Pages :1  
Certificate Date: 22-SEP-92  
Invoice No. :19221331  
P.O. Number :  
Account :JCL

## CERTIFICATE OF ANALYSIS

### A9221331

SAMPLE	PREP CODE		Au ppb	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
			FA+AA																		
92TR01-01	205	274	< 5	< 0.2	0.78	< 2	410	< 0.5	< 2	9.15	< 0.5	3	79	9	1.03	< 10	< 1	0.22	10	0.37	1100
92TR02-01	205	274	< 5	0.2	2.27	18	270	< 0.5	< 2	0.36	4.5	23	110	77	3.88	< 10	3	0.34	10	2.05	1560
92TR02-02	205	274	< 5	0.2	2.10	8	230	< 0.5	< 2	0.27	1.0	8	154	39	3.60	< 10	< 1	0.35	10	1.84	595
92TR03-01	205	274	< 5	0.2	1.23	20	300	< 0.5	< 2	0.28	< 0.5	14	100	42	3.04	< 10	1	0.23	10	0.72	545
92TR04-01	205	274	< 5	0.2	0.98	4	690	< 0.5	< 2	0.79	0.5	1	102	5	0.77	< 10	< 1	0.41	20	0.41	145
92TR05-01	205	274	< 5	0.2	1.53	4	570	< 0.5	< 2	0.10	0.5	1	78	5	1.67	< 10	< 1	0.31	20	1.14	190

CERTIFICATION:

*Yhai D Ma*



# Chemex Labs Ltd.

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Project : ADAMS  
Comments: ATTN: LARRY McLEAN

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Invoice No. : I9221331  
P.O. Number :  
Account : JCL

## CERTIFICATE OF ANALYSIS

### A9221331

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92TR01-01	205	274	< 1	0.01	2	300	4	< 2	4	342	0.01	< 10	< 10	7	10	32
92TR02-01	205	274	2	0.01	38	630	50	< 2	4	15	0.01	< 10	< 10	37	10	644
92TR02-02	205	274	1	0.02	20	610	16	< 2	4	59	< 0.01	< 10	< 10	40	10	198
92TR03-01	205	274	2	0.01	19	540	36	< 2	3	24	0.03	< 10	< 10	30	< 10	160
92TR04-01	205	274	< 1	0.01	3	90	8	< 2	2	63	< 0.01	< 10	< 10	2	< 10	46
92TR05-01	205	274	1	0.01	3	180	8	< 2	4	18	< 0.01	< 10	< 10	3	< 10	80

CERTIFICATION:

*Yhai J Ma*



# Chemex Labs Ltd.

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To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9221333

Comments: ATTN: LARRY McLEAN

CERTIFICATE

A9221333

HASTINGS MANAGEMENT CORP.

Project: JODY GP.  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 22-SEP-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	14	Geochem ring to approx 150 mesh
274	14	0-15 lb crush and split
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
100	14	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
6	14	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	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	100.0
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	5.00
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	5.00
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.

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To: HASTINGS MANAGEMENT CORP.

\*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6  
Project: JODY GP.  
Comments: ATTN: LARRY McLEAN

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Certificate Date: 22-SEP-92  
Invoice No. : 19221333  
P.O. Number :  
Account : JCL

## CERTIFICATE OF ANALYSIS A9221333

SAMPLE	PREP CODE	Au ppb		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
		FA	AA	Aqua R																	
92TR07-01	205 274	< 5	< 0.2	0.98	< 2	1420	< 0.5	< 2	0.28	< 0.5	3	294	7	0.79	10	< 1	0.52	30	0.37	140	
92TR07-02	205 274	< 5	< 0.2	0.90	< 2	1100	< 0.5	< 2	0.60	< 0.5	3	205	3	0.69	10	< 1	0.52	30	0.43	135	
92TR08-01	205 274	< 5	< 0.2	1.08	< 2	180	< 0.5	< 2	0.19	< 0.5	10	184	21	2.13	10	< 1	0.23	40	0.81	295	
92TR08-02	205 274	< 5	0.9	1.51	< 2	20	< 0.5	< 2	0.25	< 0.5	22	244	231	3.68	10	< 1	0.40	30	0.85	395	
92TR08-03	205 274	< 5	< 0.2	1.07	< 2	60	< 0.5	< 2	0.14	< 0.5	8	223	9	2.22	10	< 1	0.50	50	0.37	170	
92TR08-04	205 274	< 5	< 0.2	0.87	4	70	< 0.5	< 2	0.12	< 0.5	28	261	36	2.79	< 10	< 1	0.13	< 10	0.53	290	
92TR08-05	205 274	< 5	< 0.2	0.86	< 2	130	< 0.5	< 2	0.12	< 0.5	16	215	18	2.49	< 10	< 1	0.13	10	0.57	310	
92TR09-03	205 274	< 5	< 0.2	0.57	< 2	1230	< 0.5	< 2	< 0.01	< 0.5	1	216	4	0.59	< 10	< 1	0.51	10	0.11	35	
92TR11-01	205 274	< 5	0.3	0.88	< 2	270	< 0.5	< 2	0.24	< 0.5	3	261	10	0.62	< 10	< 1	0.51	20	0.40	100	
92TR11-02	205 274	< 5	< 0.2	0.75	< 2	610	< 0.5	< 2	0.08	< 0.5	2	224	6	0.45	10	< 1	0.52	30	0.28	60	
92TR11-03	205 274	< 5	0.3	0.77	< 2	240	< 0.5	< 2	0.08	2.0	4	211	8	1.15	10	< 1	0.48	30	0.34	145	
92TR11-04	205 274	< 5	0.7	0.69	< 2	300	< 0.5	< 2	0.02	0.5	2	185	6	1.28	< 10	< 1	0.56	< 10	0.12	30	
92TR11-05	205 274	< 5	2.0	0.68	< 2	70	< 0.5	6	0.02	< 0.5	3	195	5	1.45	< 10	< 1	0.49	< 10	0.15	35	
92TR11-06	205 274	< 5	0.8	2.56	< 2	100	< 0.5	< 2	0.55	2.0	7	327	46	2.97	10	< 1	0.62	20	2.22	590	

CERTIFICATION:

*Jody D. Mac*





# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

A9221332

Comments: ATTN: LARRY McLEAN

CERTIFICATE

A9221332

HASTINGS MANAGEMENT CORP.

Project: JODY GP.  
 P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 21-SEP-92.

### SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	2	Dry, sieve to -80 mesh
229	2	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
100	2	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
2118	2	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	2	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	2	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	2	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	2	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	2	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	2	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	2	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	2	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	2	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	2	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	2	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	2	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	2	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	2	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	2	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	2	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	2	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	2	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	2	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	2	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	2	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	2	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	2	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	2	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	2	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	2	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	2	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	2	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	2	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	2	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	2	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

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project: JODY GP.  
Comments: ATTN: LARRY McLEAN

Page Number : 1-A  
Total Pages : 1  
Certificate Date: 21-SEP-92  
Invoice No. : 19221332  
P.O. Number :  
Account : JCL

## CERTIFICATE OF ANALYSIS A9221332

SAMPLE	PREP CODE		Au ppb	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
			FA+AA																		
92TR09-01	201	229	< 5	0.2	1.52	< 2	380	< 0.5	< 2	0.39	1.0	5	8	12	1.75	10	1	0.57	60	1.76	485
92TR09-02	201	229	< 5	0.2	1.01	< 2	270	< 0.5	< 2	0.34	0.5	7	10	14	1.28	10	< 1	0.35	60	1.13	375

CERTIFICATION: Jhai D Ma



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PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project: JODY GP.  
Comments: ATTN: LARRY McLEAN

Page Number : 1-B  
Total Pages : 1  
Certificate Date: 21-SEP-92  
Invoice No. : I9221332  
P.O. Number :  
Account : JCL

## CERTIFICATE OF ANALYSIS

### A9221332

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92TR09-01	201	229	1	< 0.01	6	240	28	< 2	2	18	0.16	< 10	< 10	10	10	150
92TR09-02	201	229	< 1	< 0.01	6	330	22	< 2	2	15	0.12	< 10	< 10	9	< 10	96

CERTIFICATION: *Yhai D Ma*



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PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9221334

Comments: ATTN: LARRY McLEAN

CERTIFICATE

A9221334

HASTINGS MANAGEMENT CORP.

Project: JODY GP.  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 22-SEP-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	8	Geochem ring to approx 150 mesh
274	8	0-15 lb crush and split
229	8	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, Tl, Tl, W.

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	8	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
6	8	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0
2119	8	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	8	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	8	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	8	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	8	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	8	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	8	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	8	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	8	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	8	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	8	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	8	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	8	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	8	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	8	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	8	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	8	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	8	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	8	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	8	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	8	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	8	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	8	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	8	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	8	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	8	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	8	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	8	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	8	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	8	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	8	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



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PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project : JODY GP.  
Comments: ATTN: LARRY McLEAN

Page Number : 1-A  
Total Pages : 1  
Certificate Date : 22-SEP-92  
Invoice No. : I9221334  
P.O. Number :  
Account : JCL

## CERTIFICATE OF ANALYSIS

### A9221334

SAMPLE	PREP		Au ppb	Ag ppm	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
	CODE		FA+AA	Aqua R	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
92TR10-01	205	274	< 5	0.3	0.70	< 2	460	< 0.5	< 2	0.03	0.5	1	289	22	1.30	< 10	< 1	0.60	30	0.14	45
92TR10-02	205	274	< 5	0.7	0.69	< 2	340	< 0.5	4	0.01	< 0.5	1	224	3	1.68	< 10	< 1	0.61	10	0.10	20
92TR10-03	205	274	< 5	0.6	0.72	< 2	420	< 0.5	4	0.01	< 0.5	1	302	4	1.19	< 10	< 1	0.65	10	0.13	30
92TR10-04	205	274	< 5	0.8	0.61	2	530	< 0.5	2	0.03	< 0.5	1	206	19	1.95	< 10	< 1	0.65	30	0.13	35
92TR10-05	205	274	< 5	0.6	0.90	< 2	590	< 0.5	2	0.12	< 0.5	1	309	37	1.68	10	< 1	0.63	40	0.23	70
92TR10-06	205	274	< 5	0.4	0.85	< 2	620	< 0.5	2	0.03	< 0.5	1	240	14	1.89	10	< 1	0.71	30	0.18	40
92TR10-07	205	274	< 5	0.7	1.01	4	590	< 0.5	4	0.04	< 0.5	1	290	21	1.98	< 10	< 1	0.78	30	0.25	65
92TR10-08	205	274	< 5	0.8	0.82	4	620	< 0.5	4	0.03	< 0.5	1	197	22	1.91	< 10	< 1	0.66	10	0.20	40

CERTIFICATION:

*Phai D Ma*



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British Columbia, Canada V7J 2C1  
PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project: JODY GP.  
Comments: ATTN: LARRY McLEAN

Page Number :1-B  
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Certificate Date: 22-SEP-92  
Invoice No. :I9221334  
P.O. Number :  
Account :JCL

## CERTIFICATE OF ANALYSIS

### A9221334

SAMPLE	PREP		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
	CODE		ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92TR10-01	205	274	< 1	0.04	3	250	96	< 2	1	19	< 0.01	< 10	< 10	4	< 10	40
92TR10-02	205	274	1	0.07	2	190	54	< 2	1	12	< 0.01	< 10	< 10	4	< 10	10
92TR10-03	205	274	< 1	0.04	3	190	94	< 2	1	10	0.02	< 10	< 10	4	< 10	10
92TR10-04	205	274	< 1	0.04	2	300	156	< 2	1	24	0.04	< 10	< 10	5	< 10	38
92TR10-05	205	274	1	0.03	4	340	206	< 2	2	39	0.01	< 10	< 10	8	< 10	68
92TR10-06	205	274	1	0.03	3	360	48	< 2	1	39	0.09	< 10	< 10	6	< 10	46
92TR10-07	205	274	2	0.04	3	340	96	< 2	2	28	0.06	< 10	< 10	7	< 10	44
92TR10-08	205	274	2	0.05	2	280	120	< 2	1	21	0.11	< 10	< 10	6	< 10	22

CERTIFICATION:

*Jhai D Ma*



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To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

A9221328

Comments: ATTN: LARRY McLEAN

**CERTIFICATE**

**A9221328**

HASTINGS MANAGEMENT CORP.

Project: COMET CL.  
 P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 22-SEP-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	21	Geochem ring to approx 150 mesh
274	21	0-15 lb crush and split
229	21	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	21	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
6	21	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0
2119	21	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	21	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	21	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	21	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	21	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	21	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	21	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	21	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	21	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	21	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	21	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	21	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	21	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	21	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	21	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	21	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	21	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	21	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	21	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	21	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	21	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	21	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	21	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	21	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	21	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	21	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	21	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	21	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	21	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	21	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	21	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



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Analytical Chemists \* Geochemists \* Registered Assayers  
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 PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

Project : COMET CL.  
 Comments: ATTN: LARRY McLEAN

Page Number : 1-A  
 Total Pages : 1  
 Certificate Date: 22-SEP-92  
 Invoice No. : I9221328  
 P.O. Number :  
 Account : JCL

## CERTIFICATE OF ANALYSIS A9221328

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm Aqua R	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
92TR12-01	205 274	< 5	< 0.2	1.93	2	1970	< 0.5	< 2	0.67	< 0.5	6	81	8	0.91	10	< 1	0.71	10	0.85	275
92TR12-02	205 274	< 5	0.9	4.26	12	290	< 0.5	< 2	0.08	9.0	34	320	161	4.44	10	2	0.17	< 10	3.97	1835
92TR12-03	205 274	50	9.8	0.81	< 2	340	< 0.5	< 2	0.01	0.5	1	146	19	0.99	< 10	3	0.23	10	0.31	40
92TR12-04	205 274	10	3.6	1.36	< 2	420	< 0.5	< 2	0.03	< 0.5	2	179	36	1.42	10	1	0.25	30	0.48	35
92TR12-05	205 274	10	2.8	1.53	< 2	1470	< 0.5	< 2	0.06	< 0.5	2	109	37	1.17	10	2	0.21	30	0.85	30
92TR12-06	205 274	20	10.2	0.72	< 2	430	< 0.5	< 2	0.02	< 0.5	1	79	68	1.38	< 10	1	0.08	10	0.41	15
92TR12-07	205 274	5	5.0	1.51	< 2	790	< 0.5	< 2	0.01	< 0.5	1	163	29	1.19	10	2	0.28	20	0.36	15
92TR12-08	205 274	< 5	0.2	2.56	< 2	1670	< 0.5	< 2	0.06	< 0.5	2	94	3	1.02	10	< 1	0.10	40	2.31	90
92TR12-09	205 274	15	8.7	1.32	< 2	700	< 0.5	< 2	0.03	< 0.5	2	174	17	0.99	< 10	8	0.32	20	0.35	20
92TR13-01	205 274	< 5	0.5	1.89	18	800	< 0.5	< 2	0.10	< 0.5	4	227	51	1.92	10	< 1	0.35	30	0.97	90
92TR13-02	205 274	15	8.6	1.26	44	510	< 0.5	2	0.03	1.5	3	212	358	2.67	< 10	4	0.32	20	0.49	50
92TR13-03	205 274	175	46.0	1.12	42	380	< 0.5	< 2	0.03	3.5	4	192	347	2.57	< 10	1	0.18	20	0.81	70
92TR14-01	205 274	15	2.7	0.82	28	230	< 0.5	2	< 0.01	< 0.5	< 1	180	33	1.66	10	2	0.41	40	0.09	10
92TR14-02	205 274	10	4.3	1.09	12	320	< 0.5	< 2	< 0.01	< 0.5	< 1	208	5	0.39	< 10	4	0.63	30	0.11	10
92TR14-03	205 274	20	5.3	0.42	26	100	< 0.5	< 2	< 0.01	< 0.5	< 1	186	28	0.91	< 10	4	0.18	30	0.17	30
92TR14-04	205 274	< 5	1.2	1.40	< 2	230	< 0.5	< 2	< 0.01	< 0.5	1	159	21	1.05	< 10	< 1	0.38	30	1.24	150
92TR14-05	205 274	< 5	0.9	1.83	6	270	< 0.5	< 2	0.01	< 0.5	1	283	28	1.51	10	< 1	0.40	30	1.73	170
92TR15-01	205 274	< 5	7.4	1.31	8	330	< 0.5	< 2	0.02	< 0.5	1	263	59	1.90	< 10	2	0.42	30	0.76	70
92TR15-02	205 274	85	1.8	0.36	108	1170	< 0.5	< 2	0.01	< 0.5	< 1	178	31	0.57	< 10	6	0.16	20	0.04	5
92TR15-03	205 274	145	8.7	1.24	96	1110	< 0.5	< 2	0.01	< 0.5	1	225	81	1.52	< 10	7	0.45	10	0.64	65
92TR15-04	205 274	< 5	26.0	0.83	10	880	< 0.5	< 2	< 0.01	< 0.5	< 1	114	7	0.27	< 10	< 1	0.49	10	0.07	5

CERTIFICATION:

*Jhai D Ma*



# Chemex Labs Ltd.

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To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project : COMET CL.  
Comments: ATTN: LARRY McLEAN

Page Number :1-B  
Total Pages :1  
Certificate Date: 22-SEP-92  
Invoice No. :19221328  
P.O. Number :  
Account :JCL

## CERTIFICATE OF ANALYSIS

### A9221328

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92TR12-01	205	274	< 1	0.02	4	130	30	< 2	3	46	< 0.01	< 10	< 10	3	< 10	48
92TR12-02	205	274	< 1	< 0.01	82	110	374	2	18	10	< 0.01	< 10	< 10	93	10	856
92TR12-03	205	274	3	0.04	3	20	72	30	< 1	8	< 0.01	< 10	< 10	1	< 10	80
92TR12-04	205	274	2	0.03	4	20	38	16	1	8	< 0.01	< 10	< 10	1	< 10	72
92TR12-05	205	274	5	0.03	3	240	68	14	1	19	< 0.01	< 10	< 10	1	< 10	64
92TR12-06	205	274	4	0.01	2	40	98	28	< 1	6	< 0.01	< 10	< 10	< 1	< 10	54
92TR12-07	205	274	2	0.03	3	30	34	18	1	10	< 0.01	< 10	< 10	< 1	< 10	44
92TR12-08	205	274	3	0.01	2	140	22	< 2	1	17	< 0.01	< 10	< 10	< 1	< 10	122
92TR12-09	205	274	3	0.06	3	40	236	14	1	11	< 0.01	< 10	< 10	1	< 10	44
92TR13-01	205	274	2	0.02	24	450	46	2	2	17	< 0.01	< 10	< 10	17	< 10	156
92TR13-02	205	274	18	0.02	20	510	1545	46	1	18	< 0.01	< 10	< 10	17	< 10	686
92TR13-03	205	274	14	0.01	31	530	996	202	1	16	< 0.01	< 10	< 10	9	< 10	522
92TR14-01	205	274	4	0.02	1	240	1040	34	< 1	8	< 0.01	< 10	< 10	2	< 10	28
92TR14-02	205	274	4	0.02	2	90	652	20	< 1	7	< 0.01	< 10	< 10	2	< 10	8
92TR14-03	205	274	3	< 0.01	2	140	766	38	< 1	3	< 0.01	< 10	< 10	1	< 10	28
92TR14-04	205	274	4	0.01	2	140	594	< 2	< 1	5	< 0.01	< 10	< 10	2	< 10	106
92TR14-05	205	274	2	0.01	4	250	162	2	1	10	< 0.01	< 10	< 10	3	< 10	118
92TR15-01	205	274	7	0.02	3	120	406	8	< 1	8	< 0.01	< 10	< 10	3	< 10	74
92TR15-02	205	274	11	0.01	2	100	1350	108	< 1	15	< 0.01	< 10	< 10	1	< 10	8
92TR15-03	205	274	8	0.02	2	150	1440	140	1	10	< 0.01	< 10	< 10	3	< 10	54
92TR15-04	205	274	12	0.02	1	80	544	8	< 1	7	< 0.01	< 10	< 10	1	< 10	4

CERTIFICATION:

*Yhai J Ma*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
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 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

A9221329

Comments: ATTN: LARRY McLEAN

**CERTIFICATE** **A9221329**

HASTINGS MANAGEMENT CORP.

Project: TOPCAB  
 P.O. #:

Samples submitted to our lab in Vancouver, BC.  
 This report was printed on 24-SEP-92.

SAMPLE PREPARATION		
CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	12	Geochem ring to approx 150 mesh
274	12	0-15 lb crush and split
229	12	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	12	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2118	12	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	12	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	12	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	12	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	12	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	12	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	12	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	12	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	12	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	12	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	12	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	12	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	12	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	12	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	12	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	12	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	12	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	12	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	12	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	12	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	12	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	12	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	12	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	12	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	12	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	12	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	12	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	12	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	12	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	12	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	12	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	12	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

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

Project : TOPCAB  
 Comments: ATTN: LARRY McLEAN

Page Number : 1-A  
 Total Pages : 1  
 Certificate Date: 24-SEP-92  
 Invoice No. : I9221329  
 P.O. Number :  
 Account : JCL

## CERTIFICATE OF ANALYSIS

### A9221329

SAMPLE	PREP		Au ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
	CODE		FA+AA	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
92TR16-01	205	274	10	0.6	1.12	126	360	0.5	< 2	0.14	< 0.5	2	180	32	1.01	10	< 1	0.55	40	0.24	700
92TR16-02	205	274	< 5	0.4	0.48	74	180	< 0.5	< 2	0.10	< 0.5	1	104	3	0.64	< 10	< 1	0.25	30	0.15	545
92TR16-03	205	274	15	0.2	0.80	104	220	0.5	< 2	0.12	< 0.5	3	115	5	1.14	10	< 1	0.39	40	0.16	330
92TR16-04	205	274	< 5	0.2	0.59	68	140	0.5	< 2	0.12	< 0.5	2	113	6	0.76	< 10	< 1	0.26	40	0.18	320
92TR17-01	205	274	< 5	0.2	1.09	14	210	0.5	< 2	0.41	< 0.5	4	116	9	1.26	10	< 1	0.44	30	0.53	160
92TR17-02	205	274	85	0.4	0.79	100	250	0.5	< 2	0.98	< 0.5	4	113	10	1.22	< 10	< 1	0.40	30	0.26	255
92TR17-03	205	274	50	0.6	0.55	100	100	0.5	< 2	2.34	< 0.5	6	117	11	1.25	< 10	< 1	0.21	10	0.20	370
92TR17-04	205	274	55	1.4	0.63	258	280	0.5	< 2	0.10	< 0.5	3	89	5	1.87	< 10	< 1	0.33	40	0.19	290
92TR18-01	205	274	10	0.4	0.69	40	230	0.5	< 2	0.10	0.5	4	168	8	1.13	10	< 1	0.24	40	0.31	410
92TR18-02	205	274	60	1.6	0.69	158	1180	0.5	< 2	0.04	< 0.5	1	110	4	1.86	< 10	< 1	0.42	30	0.15	95
92TR18-03	205	274	50	1.2	0.67	244	410	< 0.5	< 2	0.03	< 0.5	1	140	5	2.42	< 10	< 1	0.46	30	0.11	45
92TR19-01	205	274	25	0.4	0.86	62	450	< 0.5	< 2	0.11	< 0.5	2	185	7	0.94	10	< 1	0.41	50	0.11	200

CERTIFICATION:

*Phai D Ma*



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project: TOPCAB  
Comments: ATTN: LARRY McLEAN

Page Number :1-B  
Total Pages :1  
Certificate Date: 24-SEP-92  
Invoice No. :I9221329  
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Account :JCL

## CERTIFICATE OF ANALYSIS

### A9221329

SAMPLE	PREP		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
	CODE		ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92TR16-01	205	274	< 1	0.01	4	270	122	< 2	1	12	< 0.01	< 10	< 10	4	< 10	90
92TR16-02	205	274	< 1	< 0.01	2	230	108	< 2	1	8	< 0.01	< 10	< 10	1	< 10	46
92TR16-03	205	274	< 1	0.03	3	280	44	< 2	2	11	< 0.01	< 10	< 10	4	< 10	38
92TR16-04	205	274	< 1	0.01	3	250	34	< 2	1	14	< 0.01	< 10	< 10	2	< 10	38
92TR17-01	205	274	< 1	0.01	4	260	28	< 2	1	39	< 0.01	< 10	< 10	4	< 10	40
92TR17-02	205	274	< 1	0.01	7	330	20	< 2	2	43	< 0.01	< 10	< 10	8	< 10	38
92TR17-03	205	274	1	< 0.01	10	420	18	< 2	2	64	< 0.01	< 10	< 10	7	< 10	28
92TR17-04	205	274	1	< 0.01	3	240	136	< 2	1	10	< 0.01	< 10	< 10	5	< 10	194
92TR18-01	205	274	< 1	0.01	8	260	60	< 2	1	8	< 0.01	< 10	< 10	3	< 10	152
92TR18-02	205	274	2	< 0.01	2	200	390	< 2	1	17	< 0.01	< 10	< 10	4	< 10	98
92TR18-03	205	274	1	< 0.01	3	330	356	< 2	1	12	< 0.01	< 10	< 10	4	< 10	84
92TR19-01	205	274	< 1	0.02	3	230	24	< 2	1	10	< 0.01	< 10	< 10	2	< 10	18

CERTIFICATION:

*Phai D Ma*



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PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9222406

Comments: ATTN: LARRY MCLEAN

**CERTIFICATE**

**A9222406**

HASTINGS MANAGEMENT CORP.

Project: WIN  
P.O.#:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 8-OCT-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
274	10	0-15 lb crush and split
238	10	Nitric-aqua-regia digestion
287	10	Special dig'n with organic ext'n

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
998	10	Au oz/T: 1 assay ton	FA-AAS	0.001	20.00
880	10	Au oz/T: Total, metallics calc.	FA-AAS/GRAV	0.001	20.000
884	10	Au- oz/T: Metallics calculation	FA-AAS/GRAV	0.001	20.000
887	10	Au+ mg: Metallics calculation	FA-AAS/GRAV	0.001	50.000
889	10	Weight- g: Metallics calculation	BALANCE	1	N/A
888	10	Weight+ g: Metallics calculation	BALANCE	0.01	N/A
6	10	Ag ppm: HNO3-aqua regia digest	AAS-BKGD CORR	0.2	100.0
13	10	As ppm: HNO3-aqua regia digest	AAS-HYDRIDE/EDL	1	10000
2	10	Cu ppm: HNO3-aqua regia digest	AAS	1	10000
10	10	Fe %: HNO3-aqua regia digest	AAS	0.05	20.0
20	10	Hg ppb: HNO3-HCl digestion	AAS-FLAMELESS	10	100000
4	10	Pb ppm: HNO3-aqua regia digest	AAS-BKGD CORR	1	10000
22	10	Sb ppm: HCl-KClO3 digest, extrac	AAS-BKGD CORR	0.2	1000
5	10	Zn ppm: HNO3-aqua regia digest	AAS	1	10000



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 Certificate Date: 08-OCT-92  
 Invoice No. : 19222406  
 P.O. Number :  
 Account : JCL

Project : WIN  
 Comments: ATTN: LARRY MCLEAN

## CERTIFICATE OF ANALYSIS A9222406

SAMPLE	PREP CODE	Au oz/T	Au tot oz/T	Au - oz/T	Au + mg	Wt. - grams	Wt. + grams	Ag ppm Aqua R	As ppm	Cu ppm	Fe %	Hg ppb	Pb ppm	Sb ppm	Zn ppm
92TR20-01	274 238	< 0.001	0.002	0.002	< 0.002	2820	14.70	0.7		7	2.20	180	24	1.6	6
92TR20-02	274 238	< 0.001	0.002	0.002	0.002	2973	10.00	0.8		7	2.00	210	25	2.8	4
92TR20-03	274 238	< 0.001	0.002	0.002	0.002	2538	8.49	1.6		2	0.80	1200	11	2.6	5
92TR20-04	274 238	< 0.001	0.002	0.002	< 0.002	2135	12.50	0.3		4	1.00	210	31	1.4	3
92TR20-05	274 238	< 0.001	0.002	0.002	< 0.002	2126	14.80	0.4		5	1.00	180	16	2.2	6
92TR21-01	274 238	< 0.001	0.002	0.002	< 0.002	2348	11.60	2.3		5	1.20	150	12	3.0	6
92TR21-02	274 238	< 0.001	0.002	0.002	0.002	2150	12.40	8.4		3	0.50	1400	16	8.2	6
92TR21-03	274 238	< 0.001	0.002	0.002	0.002	2167	14.50	1.1		2	1.60	460	26	5.8	3
92TR21-04	274 238	< 0.001	0.002	0.002	0.003	2580	8.86	0.9		6	1.10	390	20	3.0	4
92TR21-05	274 238	< 0.001	0.002	0.002	< 0.002	2709	9.49	1.6		7	1.90	100	20	1.2	8

CERTIFICATION:

*Stuart B. Snelson*



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9222407

Comments: ATTN: LARRY MCLEAN

CERTIFICATE

A9222407

HASTINGS MANAGEMENT CORP.

Project: REGIONAL  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 7-OCT-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	10	Geochem ring to approx 150 mesh
274	10	0-15 lb crush and split
229	10	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	10	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2118	10	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	10	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	10	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	10	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	10	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	10	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	10	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	10	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	10	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	10	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	10	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	10	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	10	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	10	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	10	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	10	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	10	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	10	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	10	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	10	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	10	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	10	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	10	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	10	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	10	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	10	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	10	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	10	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	10	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	10	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	10	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	10	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
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 PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP. \*\*  
 1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

Page Number :1-A  
 Total Pages :1  
 Certificate Date: 07-OCT-92  
 Invoice No. :19222407  
 P.O. Number :  
 Account :JCL

Project : REGIONAL  
 Comments: ATTN: LARRY MCLEAN

## CERTIFICATE OF ANALYSIS A9222407

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
92CLKLR-7	205 274	20	1.0	0.42	< 2	340	< 0.5	< 2	0.03	< 0.5	< 1	170	7	0.45	< 10	1	0.31	30	0.11	25
39987	205 274	< 5	0.2	0.97	6	350	< 0.5	< 2	0.49	< 0.5	1	127	5	1.03	10	1	0.62	30	0.18	155
39988	205 274	15	0.4	0.38	48	210	< 0.5	< 2	0.04	< 0.5	1	88	3	0.96	< 10	< 1	0.22	20	0.04	140
39989	205 274	< 5	1.4	1.05	6	1750	< 0.5	< 2	0.01	< 0.5	1	204	24	1.02	< 10	< 1	0.69	20	0.16	35
39990	205 274	< 5	< 0.2	0.58	< 2	280	< 0.5	< 2	0.03	< 0.5	< 1	89	6	0.59	10	< 1	0.24	30	0.11	125
39991	205 274	< 5	0.2	1.47	< 2	130	< 0.5	< 2	1.24	< 0.5	4	239	8	2.11	< 10	1	0.62	20	0.41	295
39992	205 274	< 5	0.2	0.88	< 2	130	< 0.5	< 2	2.64	< 0.5	2	146	6	1.56	< 10	< 1	0.27	20	0.67	510
39993	205 274	30	1.6	0.14	316	10	< 0.5	< 2	0.04	< 0.5	59	411	7	5.56	< 10	1	0.06	< 10	0.02	50
39994	205 274	25	1.0	0.04	332	< 10	< 0.5	< 2	0.04	< 0.5	31	197	11	9.70	< 10	< 1	< 0.01	< 10	0.01	35
39995	205 274	230	0.2	0.47	782	80	< 0.5	< 2	0.99	< 0.5	22	331	82	7.41	< 10	2	0.03	< 10	0.75	835

CERTIFICATION: *Yhai D Ma*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
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 PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

Project: REGIONAL  
 Comments: ATTN: LARRY MCLEAN

Page Number :1-B  
 Total Pages :1  
 Certificate Date: 07-OCT-92  
 Invoice No. : I9222407  
 P.O. Number :  
 Account : JCL

## CERTIFICATE OF ANALYSIS

### A9222407

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92CLKLR-7	205	274	< 1	0.01	3	150	20	< 2	< 1	4	< 0.01	< 10	< 10	2	< 10	26
39987	205	274	< 1	< 0.01	3	60	12	< 2	4	29	< 0.01	< 10	< 10	1	< 10	24
39988	205	274	2	0.02	3	160	20	< 2	1	7	< 0.01	< 10	< 10	5	< 10	42
39989	205	274	3	0.10	3	160	352	2	1	75	< 0.01	< 10	< 10	3	< 10	56
39990	205	274	< 1	< 0.01	< 1	60	14	< 2	3	6	< 0.01	< 10	< 10	1	< 10	20
39991	205	274	1	0.09	6	340	30	< 2	2	46	< 0.01	< 10	< 10	8	< 10	40
39992	205	274	1	0.02	2	210	28	2	1	91	< 0.01	< 10	< 10	3	< 10	44
39993	205	274	16	< 0.01	56	40	26	12	< 1	2	< 0.01	< 10	< 10	13	< 10	34
39994	205	274	10	< 0.01	29	40	30	8	< 1	2	< 0.01	< 10	< 10	4	< 10	2
39995	205	274	3	0.01	49	50	8	4	3	72	< 0.01	< 10	< 10	12	< 10	40

CERTIFICATION: \_\_\_\_\_

*Jhai D Ma*

APPENDIX III

SOIL SAMPLES; CERTIFICATES OF ANALYSES



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9220356

Comments: ATTN: LARRY MCLEAN

CERTIFICATE

A9220356

HASTINGS MANAGEMENT CORP.

Project: HOMESTAKE (TOP1-33)  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 1-SEP-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
241	48	RUSH: Dry, sieve to -80 mesh
229	48	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
990	48	Au ppb: RUSH, fuse 10 g sample	FA-AAS	5	10000
2118	48	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	48	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	48	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	48	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	48	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	48	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	48	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	48	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	48	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	48	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	48	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	48	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	48	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	48	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	48	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	48	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	48	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	48	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	48	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	48	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	48	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	48	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	48	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	48	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	48	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	48	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	48	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	48	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	48	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	48	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	48	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	48	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

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

Project: HOMESTAKE (TOP1-33)  
 Comments: ATTN: LARRY MCLEAN

Page Number : 1-A  
 Total Pages : 2  
 Certificate Date: 01-SEP-92  
 Invoice No. : 19220356  
 P.O. Number :  
 Account : JCL

## CERTIFICATE OF ANALYSIS

### A9220356

SAMPLE	PREP		Au ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
	CODE		RUSH	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
92AW5 0+00N	241	229	< 5	< 0.2	1.11	24	200	< 0.5	< 2	0.07	< 0.5	2	10	6	0.98	10	< 1	0.09	30	0.15	50
92AW5 0+25N	241	229	< 5	0.2	1.27	100	370	< 0.5	< 2	0.17	< 0.5	4	12	7	1.38	10	< 1	0.09	20	0.33	245
92AW5 0+50N	241	229	< 5	< 0.2	2.26	54	220	0.5	< 2	0.09	< 0.5	8	29	17	2.73	10	< 1	0.07	20	0.59	225
92AW5 0+75N	241	229	< 5	< 0.2	1.26	60	130	< 0.5	< 2	0.02	< 0.5	2	8	6	1.59	10	< 1	0.09	30	0.57	140
92AW5 1+00N	241	229	< 5	< 0.2	1.52	64	250	< 0.5	< 2	0.09	< 0.5	5	21	14	2.00	10	< 1	0.07	30	0.36	160
92AW5 1+25N	241	229	< 5	< 0.2	1.44	106	160	< 0.5	< 2	0.06	< 0.5	4	18	8	2.30	10	< 1	0.06	20	0.27	175
92AW5 1+50N	241	229	< 5	< 0.2	1.45	78	160	< 0.5	< 2	0.07	< 0.5	4	19	9	2.18	< 10	< 1	0.04	10	0.30	160
92AW5 1+75N	241	229	10	< 0.2	1.48	70	150	< 0.5	< 2	0.10	< 0.5	4	20	9	1.97	10	< 1	0.07	20	0.29	155
92AW5 2+00N	241	229	< 5	< 0.2	1.45	86	220	< 0.5	< 2	0.10	< 0.5	4	18	12	1.76	10	< 1	0.08	30	0.28	150
92AW5 2+25N	241	229	< 5	< 0.2	1.20	102	160	< 0.5	< 2	0.08	< 0.5	3	16	10	1.61	10	< 1	0.07	30	0.23	175
92AW5 2+50N	241	229	< 5	< 0.2	1.16	138	190	< 0.5	< 2	0.11	< 0.5	4	16	10	1.55	10	< 1	0.08	30	0.24	185
92AW5 2+75N	241	229	< 5	< 0.2	1.24	114	180	< 0.5	< 2	0.09	< 0.5	4	18	10	1.82	10	< 1	0.08	20	0.26	150
92AW5 3+00N	241	229	< 5	< 0.2	1.05	150	200	< 0.5	< 2	0.06	< 0.5	3	14	9	1.43	10	< 1	0.09	30	0.20	100
92AW5 3+25N	241	229	< 5	< 0.2	1.20	108	170	< 0.5	< 2	0.06	< 0.5	3	15	8	1.60	10	< 1	0.07	30	0.21	120
92AW5 3+50N	241	229	< 5	< 0.2	1.21	64	160	< 0.5	< 2	0.06	< 0.5	4	18	10	1.79	10	< 1	0.04	20	0.31	135
92AW5 3+75N	241	229	< 5	< 0.2	0.97	100	210	< 0.5	< 2	0.08	< 0.5	4	15	10	1.57	10	< 1	0.06	30	0.28	170
92AW5 4+00N	241	229	< 5	< 0.2	1.24	70	250	< 0.5	< 2	0.19	< 0.5	7	23	17	2.01	10	< 1	0.06	20	0.40	235
92AW5 4+25N	241	229	< 5	< 0.2	1.50	30	270	< 0.5	< 2	0.19	< 0.5	6	27	15	2.25	10	< 1	0.07	20	0.45	155
92AW5 4+50N	241	229	< 5	< 0.2	1.49	34	270	< 0.5	< 2	0.15	< 0.5	7	25	15	2.13	10	< 1	0.06	20	0.42	165
92AW5 4+75N	241	229	< 5	< 0.2	1.71	34	340	< 0.5	< 2	0.24	< 0.5	8	29	18	2.50	10	< 1	0.06	20	0.53	240
92AW5 5+00N	241	229	< 5	< 0.2	1.46	32	220	< 0.5	< 2	0.17	< 0.5	6	25	15	2.03	10	< 1	0.06	20	0.40	170
92CL5 0+00S	241	229	< 5	< 0.2	1.37	38	210	< 0.5	< 2	0.08	< 0.5	6	18	12	1.96	10	< 1	0.10	30	0.54	165
92CL5 0+50S	241	229	< 5	< 0.2	1.80	56	200	< 0.5	< 2	0.08	< 0.5	6	22	14	2.14	10	< 1	0.07	30	0.52	170
92CL5 1+00S	241	229	< 5	< 0.2	2.03	74	280	< 0.5	< 2	0.09	< 0.5	6	26	11	2.60	10	< 1	0.08	20	0.42	200
92CL5 1+50S	241	229	< 5	< 0.2	2.02	30	340	< 0.5	< 2	0.11	< 0.5	6	26	12	2.81	10	< 1	0.08	20	0.45	190
92CL5 2+00S	241	229	< 5	< 0.2	1.61	28	220	< 0.5	< 2	0.08	< 0.5	8	24	15	2.40	10	< 1	0.11	30	0.71	240
92CL5 2+50S	241	229	< 5	< 0.2	1.29	62	180	< 0.5	< 2	0.09	< 0.5	6	19	13	1.93	10	< 1	0.08	20	0.47	150
92CL5 3+00S	241	229	< 5	< 0.2	1.31	38	180	< 0.5	< 2	0.07	< 0.5	4	17	8	1.99	10	< 1	0.08	20	0.44	110
92CL5 3+50S	241	229	< 5	< 0.2	1.39	70	270	< 0.5	< 2	0.09	< 0.5	5	21	12	2.18	10	< 1	0.06	10	0.42	145
92CL5 4+00S	241	229	< 5	< 0.2	1.67	148	180	< 0.5	2	0.09	< 0.5	6	24	11	2.33	10	< 1	0.07	20	0.46	175
92CL5 4+50S	241	229	< 5	0.2	1.83	198	220	< 0.5	2	0.08	< 0.5	7	25	10	2.46	10	< 1	0.09	20	0.46	210
92CL5 5+00S	241	229	< 5	< 0.2	1.63	246	240	< 0.5	< 2	0.13	< 0.5	7	28	14	2.27	10	< 1	0.08	20	0.47	225
92CL5 5+50S	241	229	< 5	< 0.2	1.39	216	220	< 0.5	< 2	0.15	< 0.5	6	24	12	2.06	10	< 1	0.11	20	0.40	210
92CL5 6+00S	241	229	< 5	< 0.2	1.60	50	210	< 0.5	< 2	0.10	< 0.5	7	23	9	2.52	10	< 1	0.10	20	0.38	145
92CL5 6+50S	241	229	< 5	< 0.2	1.48	26	270	< 0.5	< 2	0.12	< 0.5	6	19	9	2.30	10	< 1	0.12	20	0.33	265
92CL5 7+00S	241	229	< 5	0.2	1.04	28	150	< 0.5	< 2	0.09	< 0.5	3	15	7	1.34	10	< 1	0.13	20	0.35	105
92CL5 7+50S	241	229	< 5	< 0.2	1.12	20	210	< 0.5	< 2	0.09	< 0.5	3	14	7	1.56	< 10	< 1	0.11	20	0.28	120
92CL5 8+00S	241	229	< 5	0.2	1.01	14	180	< 0.5	< 2	0.11	< 0.5	3	16	7	1.34	10	< 1	0.09	20	0.28	100
92CL5 8+50S	241	229	< 5	0.2	0.80	6	210	< 0.5	2	0.06	< 0.5	2	7	4	0.88	10	< 1	0.11	20	0.15	45
92CL5 9+00S	241	229	< 5	< 0.2	1.10	22	230	< 0.5	< 2	0.10	< 0.5	4	15	5	1.68	10	< 1	0.08	20	0.29	120

CERTIFICATION:

*Jhai D Ma*



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project: HOMESTAKE (TOP1-33)  
Comments: ATTN: LARRY MCLEAN

Page Number : 1-B  
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Certificate Date: 01-SEP-92  
Invoice No. : I9220356  
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Account : JCL

## CERTIFICATE OF ANALYSIS

### A9220356

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
92AW5 0+00N	241 229	< 1	< 0.01	3	330	12	< 2	1	10	0.01	< 10	< 10	18	< 10	20
92AW5 0+25N	241 229	< 1	< 0.01	6	200	12	2	2	18	0.02	< 10	< 10	21	< 10	32
92AW5 0+50N	241 229	< 1	< 0.01	15	110	20	2	4	12	0.04	< 10	< 10	44	< 10	58
92AW5 0+75N	241 229	< 1	< 0.01	2	100	20	< 2	3	4	< 0.01	< 10	< 10	7	< 10	50
92AW5 1+00N	241 229	< 1	< 0.01	11	110	12	< 2	3	11	0.03	< 10	< 10	33	< 10	42
92AW5 1+25N	241 229	< 1	< 0.01	7	160	20	< 2	2	7	0.03	< 10	< 10	36	< 10	36
92AW5 1+50N	241 229	< 1	< 0.01	9	120	14	< 2	2	8	0.03	< 10	< 10	37	< 10	36
92AW5 1+75N	241 229	< 1	< 0.01	9	130	12	< 2	2	11	0.05	< 10	< 10	37	< 10	34
92AW5 2+00N	241 229	< 1	< 0.01	9	110	16	< 2	3	13	0.04	< 10	< 10	31	< 10	34
92AW5 2+25N	241 229	< 1	< 0.01	8	240	18	< 2	1	10	0.02	< 10	< 10	29	< 10	30
92AW5 2+50N	241 229	< 1	< 0.01	7	170	18	< 2	3	12	0.03	< 10	< 10	29	< 10	32
92AW5 2+75N	241 229	< 1	< 0.01	8	270	18	< 2	2	10	0.03	< 10	< 10	33	< 10	36
92AW5 3+00N	241 229	< 1	< 0.01	6	200	18	< 2	2	8	0.02	< 10	< 10	25	< 10	34
92AW5 3+25N	241 229	< 1	< 0.01	5	230	20	< 2	2	8	0.02	< 10	< 10	28	< 10	36
92AW5 3+50N	241 229	< 1	< 0.01	8	140	12	< 2	2	8	0.03	< 10	< 10	31	< 10	36
92AW5 3+75N	241 229	< 1	< 0.01	8	150	18	< 2	2	9	0.02	< 10	< 10	26	< 10	36
92AW5 4+00N	241 229	< 1	< 0.01	13	360	12	< 2	3	17	0.04	< 10	< 10	38	< 10	48
92AW5 4+25N	241 229	< 1	< 0.01	15	390	12	< 2	3	17	0.04	< 10	< 10	45	< 10	54
92AW5 4+50N	241 229	< 1	< 0.01	13	210	14	< 2	4	14	0.04	< 10	< 10	41	< 10	44
92AW5 4+75N	241 229	< 1	0.01	17	270	18	< 2	4	23	0.06	< 10	< 10	52	< 10	54
92AW5 5+00N	241 229	< 1	0.01	14	180	14	< 2	3	17	0.06	< 10	< 10	40	< 10	42
92CLS 0+00S	241 229	< 1	< 0.01	9	130	16	< 2	3	10	0.03	< 10	< 10	28	< 10	46
92CLS 0+50S	241 229	< 1	< 0.01	11	90	16	2	3	10	0.03	< 10	< 10	34	< 10	60
92CLS 1+00S	241 229	< 1	< 0.01	12	220	14	< 2	3	11	0.04	< 10	< 10	47	< 10	60
92CLS 1+50S	241 229	< 1	< 0.01	11	330	18	2	3	13	0.04	< 10	< 10	52	< 10	64
92CLS 2+00S	241 229	< 1	< 0.01	11	190	18	2	5	11	0.03	< 10	< 10	32	< 10	68
92CLS 2+50S	241 229	< 1	< 0.01	11	150	16	2	2	10	0.04	< 10	< 10	28	< 10	52
92CLS 3+00S	241 229	< 1	< 0.01	8	190	12	< 2	2	9	0.03	< 10	< 10	31	< 10	52
92CLS 3+50S	241 229	< 1	< 0.01	10	290	20	2	2	11	0.02	< 10	< 10	43	< 10	62
92CLS 4+00S	241 229	< 1	< 0.01	12	160	16	< 2	2	10	0.04	< 10	< 10	40	< 10	58
92CLS 4+50S	241 229	< 1	< 0.01	12	160	20	2	3	10	0.04	< 10	< 10	45	< 10	66
92CLS 5+00S	241 229	< 1	< 0.01	13	150	14	2	3	14	0.04	< 10	< 10	42	< 10	62
92CLS 5+50S	241 229	< 1	< 0.01	13	220	18	2	3	16	0.04	< 10	< 10	39	< 10	58
92CLS 6+00S	241 229	< 1	< 0.01	13	350	20	2	2	10	0.03	< 10	< 10	41	< 10	64
92CLS 6+50S	241 229	< 1	< 0.01	10	320	24	< 2	2	12	0.03	< 10	< 10	44	< 10	46
92CLS 7+00S	241 229	< 1	< 0.01	6	180	16	< 2	2	9	0.03	< 10	< 10	22	< 10	42
92CLS 7+50S	241 229	< 1	< 0.01	8	160	12	2	2	10	0.02	< 10	< 10	27	< 10	34
92CLS 8+00S	241 229	< 1	< 0.01	7	250	8	< 2	2	11	0.03	< 10	< 10	26	< 10	34
92CLS 8+50S	241 229	< 1	< 0.01	2	140	14	< 2	1	7	0.01	< 10	< 10	15	< 10	28
92CLS 9+00S	241 229	< 1	< 0.01	6	200	14	< 2	2	10	0.03	< 10	< 10	32	< 10	44

CERTIFICATION:

*Jhai D Ma*



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To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project: HOMESTAKE (TOP1-33)  
Comments: ATTN: LARRY MCLEAN

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Certificate Date: 01-SEP-92  
Invoice No. : I9220356  
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## CERTIFICATE OF ANALYSIS

### A9220356

SAMPLE	PREP CODE	Au ppb RUSH	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
92CL5 9+50S	241 229	< 5	0.2	1.13	32	440	< 0.5	2	0.20	< 0.5	6	16	10	1.84	10	< 1	0.11	20	0.35	170
92CL5 10+00S	241 229	< 5	0.2	0.97	20	470	< 0.5	2	0.27	< 0.5	3	9	8	1.30	10	< 1	0.11	40	0.33	100
92CL5 10+50S	241 229	< 5	0.2	0.91	14	400	< 0.5	2	0.15	< 0.5	3	7	5	1.25	10	< 1	0.13	40	0.32	70
92CL5 11+00S	241 229	< 5	< 0.2	0.88	< 2	250	< 0.5	< 2	0.07	< 0.5	3	8	9	1.12	10	< 1	0.12	30	0.22	75
92CL5 11+50S	241 229	< 5	< 0.2	0.80	16	210	< 0.5	< 2	0.10	< 0.5	3	9	9	1.17	10	< 1	0.11	30	0.22	95
92CL5 12+00S	241 229	< 5	< 0.2	1.10	10	290	< 0.5	2	0.13	< 0.5	4	15	11	1.57	10	< 1	0.09	20	0.27	100
92CL5 12+50S	241 229	35	< 0.2	0.42	6	180	< 0.5	< 2	0.02	< 0.5	1	2	3	0.52	< 10	< 1	0.12	20	0.07	20
92CL5 13+00S	241 229	< 5	< 0.2	1.07	16	190	< 0.5	< 2	0.11	< 0.5	5	14	10	1.71	10	< 1	0.09	20	0.34	130

CERTIFICATION:

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## CERTIFICATE OF ANALYSIS

### A9220356

SAMPLE	PREP		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
	CODE		ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92CL5 9+50S	241	229	< 1	< 0.01	11	400	16	< 2	2	20	0.02	< 10	< 10	31	< 10	58
92CL5 10+00S	241	229	< 1	< 0.01	6	290	14	< 2	2	25	0.01	< 10	< 10	17	< 10	58
92CL5 10+50S	241	229	< 1	< 0.01	5	400	10	< 2	2	15	0.01	< 10	< 10	15	< 10	48
92CL5 11+00S	241	229	< 1	< 0.01	6	240	16	< 2	2	8	0.01	< 10	< 10	16	< 10	44
92CL5 11+50S	241	229	< 1	< 0.01	7	280	16	< 2	1	10	0.01	< 10	< 10	19	< 10	44
92CL5 12+00S	241	229	< 1	< 0.01	10	290	14	< 2	2	12	0.03	< 10	< 10	27	< 10	44
92CL5 12+50S	241	229	< 1	< 0.01	1	140	6	< 2	1	3	< 0.01	< 10	< 10	6	< 10	26
92CL5 13+00S	241	229	< 1	< 0.01	10	230	14	< 2	2	10	0.03	< 10	< 10	29	< 10	42

CERTIFICATION: Yhai J Ma



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PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9221151

Comments: ATTN: LARRY MCLEAN CC: PHIL VAN ANGEREW

CERTIFICATE

A9221151

HASTINGS MANAGEMENT CORP.

Project: DAWSON  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 16-SEP-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
241	42	RUSH: Dry, sieve to -80 mesh
229	42	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
990	42	Au ppb: RUSH, fuse 10 g sample	FA-AAS	5	10000
2118	42	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	42	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	42	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	42	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	42	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	42	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	42	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	42	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	42	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	42	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	42	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	42	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	42	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	42	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	42	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	42	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	42	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	42	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	42	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	42	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	42	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	42	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	42	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	42	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	42	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	42	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	42	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	42	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	42	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	42	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	42	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	42	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

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

Page Number : 1-A  
 Total Pages : 2  
 Certificate Date: 16-SEP-92  
 Invoice No. : 19221151  
 P.O. Number :  
 Account : JCL

Project : DAWSON  
 Comments : ATTN: LARRY MCLEAN CC: PHIL VAN ANGEREW

## CERTIFICATE OF ANALYSIS A9221151

SAMPLE	PREP CODE	Au ppb RUSH	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
92AW2B 0+00NNE	241 229	< 5	< 0.2	1.54	30	330	< 0.5	< 2	0.22	< 0.5	6	20	14	2.17	< 10	< 1	0.11	10	0.45	285
92AW2B 0+10NNE	241 229	< 5	0.2	1.59	18	310	< 0.5	< 2	0.23	< 0.5	6	29	13	2.24	< 10	< 1	0.07	10	0.51	225
92AW2B 0+30NNE	241 229	< 5	0.2	1.74	42	260	< 0.5	2	0.20	< 0.5	7	32	23	2.55	10	< 1	0.14	20	0.91	280
92AW2B 0+50NNE	241 229	< 5	0.4	2.23	328	360	< 0.5	2	0.18	< 0.5	11	33	67	3.34	10	< 1	0.19	30	0.83	435
92AW2B 0+70NNE	241 229	< 5	1.4	2.27	36	370	< 0.5	2	0.18	< 0.5	8	35	19	2.75	10	< 1	0.14	20	0.64	305
92AW2B 0+90NNE	241 229	130	0.2	1.11	2	210	< 0.5	< 2	0.16	< 0.5	3	17	12	1.52	< 10	< 1	0.12	30	0.36	115
92AW2B 1+10NNE	241 229	< 5	0.6	1.70	46	280	< 0.5	2	0.15	< 0.5	7	35	17	2.31	10	1	0.16	30	0.67	300
92AW2B 1+30NNE	241 229	< 5	0.2	1.41	18	320	< 0.5	2	0.17	< 0.5	4	24	16	1.92	< 10	< 1	0.12	20	0.49	160
92AW2B 0+00W	241 229	< 5	0.4	1.36	22	290	< 0.5	< 2	0.20	< 0.5	6	21	14	1.99	< 10	< 1	0.13	20	0.41	250
92AW2B 0+40W	241 229	< 5	0.6	1.23	10	260	< 0.5	< 2	0.14	< 0.5	3	19	13	1.81	< 10	< 1	0.11	20	0.34	125
92AW2B 0+70W	241 229	< 5	0.4	1.27	12	320	< 0.5	< 2	0.17	< 0.5	2	21	16	1.77	< 10	1	0.13	20	0.41	125
92AW2B 1+10W	241 229	< 5	0.4	1.89	34	440	< 0.5	< 2	0.33	< 0.5	7	32	17	2.35	10	< 1	0.18	30	0.66	530
92AW2B 1+20W	241 229	< 5	0.4	1.74	104	310	< 0.5	< 2	0.49	< 0.5	7	27	21	2.38	10	1	0.19	20	0.48	385
92AW2B 1+30W	241 229	20	0.4	1.99	232	300	< 0.5	< 2	0.30	< 0.5	6	40	42	3.03	10	< 1	0.15	40	1.25	335
92AW2B 1+40W	241 229	125	1.6	2.58	198	550	< 0.5	2	0.35	0.5	10	62	37	3.25	10	< 1	0.27	30	1.06	585
92AW2B 1+50W	241 229	80	0.2	2.73	54	320	< 0.5	< 2	0.24	< 0.5	11	48	43	3.69	10	< 1	0.10	20	1.15	275
92AW2B 1+60W	241 229	10	0.8	2.02	36	360	< 0.5	2	0.17	< 0.5	8	34	14	2.53	< 10	< 1	0.13	10	0.73	575
92AW2B 1+70W	241 229	15	1.0	2.05	86	410	< 0.5	< 2	0.25	< 0.5	7	34	26	2.75	10	< 1	0.13	20	0.75	325
92AW4B 0+00S	241 229	< 5	< 0.2	1.41	20	90	< 0.5	< 2	0.09	< 0.5	4	24	14	3.20	< 10	< 1	0.10	10	0.33	180
92AW4B 0+20S	241 229	< 5	0.2	2.39	6	260	< 0.5	2	0.13	< 0.5	6	39	17	3.41	10	< 1	0.06	20	0.48	265
92AW4B 0+40S	241 229	< 5	0.6	2.68	20	280	< 0.5	< 2	0.11	< 0.5	23	30	23	3.82	10	< 1	0.08	20	0.36	1095
92AW4B 0+60S	241 229	< 5	< 0.2	0.99	4	120	< 0.5	2	0.03	< 0.5	3	11	8	1.31	< 10	1	0.11	10	0.18	130
92AW4B 0+80S	241 229	< 5	< 0.2	2.09	12	230	< 0.5	< 2	0.12	< 0.5	6	28	16	2.62	< 10	< 1	0.10	10	0.44	205
LS 0+00N	241 229	< 5	< 0.2	0.64	8	160	< 0.5	< 2	0.09	< 0.5	1	7	4	0.72	< 10	2	0.12	20	0.10	55
LS 0+20N	241 229	< 5	< 0.2	1.02	14	200	< 0.5	2	0.12	< 0.5	2	12	7	1.12	< 10	< 1	0.12	30	0.17	75
LS 0+40N	241 229	< 5	0.2	0.46	10	130	< 0.5	< 2	0.12	< 0.5	< 1	3	4	0.49	< 10	< 1	0.10	20	0.04	15
LS 0+60N	241 229	5	< 0.2	0.53	14	120	< 0.5	< 2	0.12	< 0.5	1	3	4	0.64	< 10	< 1	0.11	20	0.09	30
LS 0+80N	241 229	< 5	< 0.2	0.57	6	130	< 0.5	< 2	0.12	< 0.5	1	5	5	0.67	< 10	< 1	0.10	20	0.09	40
LS 1+20N	241 229	< 5	< 0.2	0.47	8	130	< 0.5	< 2	0.11	< 0.5	1	4	4	0.53	< 10	< 1	0.08	20	0.06	25
LS 0+20E	241 229	< 5	0.2	1.28	< 2	240	< 0.5	< 2	0.17	< 0.5	3	18	8	1.49	< 10	< 1	0.08	10	0.30	85
LS 0+40E	241 229	55	< 0.2	1.42	6	230	< 0.5	< 2	0.13	< 0.5	3	18	9	1.62	< 10	< 1	0.09	10	0.31	95
LS 0+60E	241 229	< 5	< 0.2	1.29	18	250	< 0.5	< 2	0.11	< 0.5	1	16	7	1.61	< 10	< 1	0.07	10	0.25	105
LS 0+80E	241 229	< 5	< 0.2	0.51	10	150	< 0.5	< 2	0.05	< 0.5	< 1	6	3	0.57	< 10	< 1	0.15	40	0.10	25
LS 1+20E	241 229	< 5	< 0.2	1.09	6	220	< 0.5	< 2	0.19	< 0.5	2	14	8	1.34	< 10	< 1	0.07	10	0.28	75
LS 1+40E	241 229	< 5	< 0.2	1.08	< 2	220	< 0.5	< 2	0.21	< 0.5	1	16	8	1.28	< 10	1	0.09	20	0.29	75
LS 1+60E	241 229	< 5	< 0.2	1.31	10	260	< 0.5	< 2	0.24	< 0.5	1	17	12	1.45	< 10	< 1	0.09	20	0.28	75
LS 1+80E	241 229	< 5	< 0.2	1.61	8	390	< 0.5	< 2	0.38	< 0.5	4	28	24	2.17	10	1	0.11	20	0.43	170
LS 2+00E	241 229	< 5	0.2	1.87	28	390	< 0.5	< 2	0.41	< 0.5	3	29	25	2.28	10	< 1	0.12	20	0.43	140
LS 2+20E	241 229	< 5	0.2	1.78	16	490	< 0.5	< 2	0.40	< 0.5	7	28	28	2.29	< 10	< 1	0.12	20	0.45	235
LS 2+40E	241 229	< 5	< 0.2	1.58	6	310	< 0.5	< 2	0.44	< 0.5	6	27	18	2.06	< 10	1	0.09	20	0.46	145

CERTIFICATION: *Phai D Ma*



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Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

Page Number :1-B  
 Total Pages :2  
 Certificate Date: 16-SEP-92  
 Invoice No. :19221151  
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 Account :JCL

Project : DAWSON  
 Comments: ATTN: LARRY MCLEAN CC: PHIL VAN ANGEREW

## CERTIFICATE OF ANALYSIS A9221151

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
92AW2B 0+00NNE	241 229	1 < 0.01		15	190	26	< 2	2	16	0.03	< 10	< 10	38	10	60
92AW2B 0+10NNE	241 229	1 < 0.01		16	160	16	< 2	3	19	0.06	< 10	< 10	53	10	50
92AW2B 0+30NNE	241 229	< 1 < 0.01		18	250	26	< 2	4	18	0.03	< 10	< 10	44	10	68
92AW2B 0+50NNE	241 229	< 1 < 0.01		25	720	34	< 2	4	19	0.01	< 10	< 10	36	20	124
92AW2B 0+70NNE	241 229	1 < 0.01		14	320	24	< 2	4	16	0.06	< 10	< 10	60	10	66
92AW2B 0+90NNE	241 229	1 < 0.01		9	200	14	< 2	2	14	0.04	< 10	< 10	32	< 10	42
92AW2B 1+10NNE	241 229	1 < 0.01		11	400	26	< 2	4	13	0.04	< 10	< 10	45	10	90
92AW2B 1+30NNE	241 229	< 1 < 0.01		12	110	20	< 2	3	16	0.06	< 10	< 10	35	10	46
92AW2B 0+00W	241 229	< 1 < 0.01		11	350	12	< 2	2	17	0.07	< 10	< 10	41	10	50
92AW2B 0+40W	241 229	< 1 < 0.01		8	170	14	< 2	2	14	0.05	< 10	< 10	39	< 10	38
92AW2B 0+70W	241 229	< 1 < 0.01		8	210	30	< 2	2	16	0.05	< 10	< 10	39	< 10	50
92AW2B 1+10W	241 229	< 1 < 0.01		14	510	32	< 2	4	25	0.05	< 10	< 10	48	10	88
92AW2B 1+20W	241 229	2 < 0.01		17	410	28	< 2	4	33	0.07	< 10	< 10	50	10	82
92AW2B 1+30W	241 229	< 1 < 0.01		20	640	46	2	5	23	0.03	< 10	< 10	37	10	196
92AW2B 1+40W	241 229	3 < 0.01		28	530	38	< 2	7	29	0.02	< 10	< 10	57	20	228
92AW2B 1+50W	241 229	< 1 < 0.01		37	220	22	< 2	7	15	0.07	< 10	< 10	59	20	80
92AW2B 1+60W	241 229	< 1 < 0.01		15	220	30	< 2	4	13	0.03	< 10	< 10	57	10	68
92AW2B 1+70W	241 229	2 < 0.01		23	230	28	< 2	6	20	0.04	< 10	< 10	53	10	90
92AW4B 0+00S	241 229	2 < 0.01		12	320	22	< 2	4	9	0.06	< 10	< 10	64	10	44
92AW4B 0+20S	241 229	1 < 0.01		15	240	26	4	5	13	0.09	< 10	< 10	77	10	50
92AW4B 0+40S	241 229	1 < 0.01		17	290	70	< 2	5	11	0.07	< 10	< 10	63	10	90
92AW4B 0+60S	241 229	< 1 < 0.01		3	80	14	< 2	2	5	0.02	< 10	< 10	18	< 10	36
92AW4B 0+80S	241 229	< 1 < 0.01		15	130	28	< 2	4	12	0.06	< 10	< 10	48	10	60
LS 0+00N	241 229	< 1 < 0.01		3	90	12	< 2	3	15	0.01	< 10	< 10	10	< 10	24
LS 0+20N	241 229	< 1 < 0.01		5	100	12	< 2	4	17	0.02	< 10	< 10	19	< 10	34
LS 0+40N	241 229	< 1 < 0.01		1	60	16	< 2	3	20	0.01	< 10	< 10	3	< 10	14
LS 0+60N	241 229	< 1 < 0.01		1	60	18	< 2	3	19	0.01	< 10	< 10	5	< 10	24
LS 0+80N	241 229	< 1 < 0.01	< 1	70	12	< 2	3	3	17	0.01	< 10	< 10	8	< 10	22
LS 1+20N	241 229	< 1 < 0.01		1	70	14	< 2	3	21	0.01	< 10	< 10	4	< 10	18
LS 0+20E	241 229	< 1 < 0.01		6	150	14	< 2	3	16	0.06	< 10	< 10	33	< 10	34
LS 0+40E	241 229	1 < 0.01		8	120	20	< 2	3	14	0.04	< 10	< 10	32	< 10	36
LS 0+60E	241 229	< 1 < 0.01		6	170	14	< 2	3	13	0.03	< 10	< 10	33	< 10	38
LS 0+80E	241 229	< 1 < 0.01		3	120	6	< 2	2	6	0.01	< 10	< 10	9	< 10	24
LS 1+20E	241 229	< 1 < 0.01		8	350	12	< 2	2	16	0.04	< 10	< 10	28	< 10	36
LS 1+40E	241 229	< 1 < 0.01		7	290	16	< 2	3	17	0.05	< 10	< 10	28	< 10	36
LS 1+60E	241 229	1 < 0.01		9	380	10	< 2	3	21	0.05	< 10	< 10	30	< 10	40
LS 1+80E	241 229	< 1 < 0.01		17	480	20	< 2	6	30	0.07	< 10	< 10	43	10	62
LS 2+00E	241 229	1 < 0.01		16	440	20	< 2	6	31	0.08	< 10	< 10	46	10	58
LS 2+20E	241 229	1 < 0.01		16	450	20	< 2	6	32	0.07	< 10	< 10	46	10	56
LS 2+40E	241 229	< 1 < 0.01		13	550	8	2	4	30	0.08	< 10	< 10	45	10	48

CERTIFICATION: *Phai D Ma*



# Chemex Labs Ltd.

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To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Page Number :2-A  
Total Pages :2  
Certificate Date: 16-SEP-92  
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P.O. Number :  
Account : JCL

Project : DAWSON  
Comments: ATTN: LARRY MCLEAN CC: PHIL VAN ANGEREW

## CERTIFICATE OF ANALYSIS A9221151

SAMPLE	PREP CODE		Au ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
	RUSH		ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
LS 2+60E	241	229	< 5	< 0.2	1.83	24	450	0.5	2	0.51	< 0.5	9	30	31	2.51	10	1	0.11	20	0.51	300
92 CL5 SOIL2	241	229	25	0.2	1.91	100	280	0.5	4	0.34	< 0.5	7	50	29	3.10	< 10	< 1	0.11	10	1.03	470

CERTIFICATION:



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## CERTIFICATE OF ANALYSIS

### A9221151

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
LS 2+60E	241	229	1	0.01	21	510	22	< 2	6	36	0.08	< 10	< 10	52	10	60
92 CL5 SOIL2	241	229	2	< 0.01	36	580	22	< 2	5	22	0.04	< 10	< 10	63	10	84

CERTIFICATION:

*Phil Van Angerew*



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To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9218862

Comments: CC: SCOTT THOMLINSON

CERTIFICATE

A9218862

HASTINGS MANAGEMENT CORP.

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 9-AUG-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	62	Dry, sieve to -80 mesh
202	62	save reject
229	62	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
100	62	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
2118	62	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	62	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	62	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	62	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	62	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	62	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	62	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	62	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	62	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	62	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	62	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	62	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	62	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	62	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	62	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	62	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	62	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	62	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	62	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	62	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	62	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	62	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	62	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	62	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	62	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	62	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	62	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	62	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	62	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	62	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	62	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	62	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



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

To: HASTINGS MANAGEMENT CORP. ##

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

Page Number :1-A  
 Total Pages :2  
 Certificate Date: 09-AUG-92  
 Invoice No. :19218862  
 P.O. Number :  
 Account :JCL

Project :  
 Comments: CC: SCOTT THOMLINSON

## CERTIFICATE OF ANALYSIS A9218862

SAMPLE	PREP CODE		Au ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
	FA+AA		ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm	
92 AW2 0+00N	201	202	5	< 0.2	2.37	34	690	< 0.5	< 2	0.39	< 0.5	13	45	25	3.26	10	1	0.09	20	0.86	690
92 AW2 0+20N	201	202	< 5	0.2	1.89	56	340	< 0.5	6	0.25	< 0.5	8	39	29	2.90	< 10	< 1	0.08	20	0.90	270
92 AW2 0+40N	201	202	< 5	0.2	1.89	76	340	< 0.5	< 2	0.23	< 0.5	6	35	26	2.81	< 10	< 1	0.08	20	0.84	245
92 AW2 0+60N	201	202	< 5	0.2	1.68	18	470	< 0.5	< 2	0.25	< 0.5	7	28	14	2.44	< 10	2	0.06	10	0.60	275
92 AW2 0+80N	201	202	50	0.2	1.74	138	280	< 0.5	< 2	0.25	< 0.5	9	42	29	2.80	< 10	< 1	0.07	20	0.95	370
92 AW2 1+00N	201	202	10	0.2	1.54	178	410	< 0.5	< 2	0.24	< 0.5	10	30	23	2.57	< 10	1	0.12	10	0.67	490
92 AW2 1+20N	201	202	< 5	0.4	1.62	246	340	< 0.5	< 2	0.32	< 0.5	8	34	26	2.81	< 10	< 1	0.10	10	0.88	390
92 AW2 1+40N	201	202	< 5	0.2	1.65	26	540	< 0.5	< 2	0.28	< 0.5	9	31	19	2.55	< 10	< 1	0.09	10	0.71	640
92 AW2 1+60N	201	202	< 5	0.2	1.46	74	210	< 0.5	< 2	0.21	< 0.5	6	22	15	2.25	< 10	< 1	0.12	30	0.56	330
92 AW2 1+80N	201	202	< 5	< 0.2	1.82	62	380	< 0.5	< 2	0.33	< 0.5	7	24	13	2.49	10	< 1	0.12	10	0.51	370
92 AW2 2+00N	201	202	< 5	0.2	1.70	40	330	< 0.5	< 2	0.27	< 0.5	7	21	8	2.35	< 10	< 1	0.11	10	0.32	590
92 AW3 0+00N	201	202	< 5	< 0.2	1.51	6	390	< 0.5	< 2	0.57	< 0.5	7	32	14	2.38	< 10	< 1	0.06	10	0.63	320
92 AW3 0+10N	201	202	125	< 0.2	1.41	4	350	< 0.5	< 2	0.56	< 0.5	8	30	15	2.19	< 10	< 1	0.07	10	0.59	325
92 AW3 0+20N	201	202	< 5	< 0.2	1.51	< 2	370	< 0.5	< 2	0.53	< 0.5	5	32	13	2.11	< 10	< 1	0.06	10	0.61	220
92 AW3 0+30N	201	202	< 5	< 0.2	1.51	10	430	< 0.5	< 2	0.52	< 0.5	6	31	18	2.32	< 10	< 1	0.05	10	0.61	305
92 AW3 0+40N	201	202	< 5	< 0.2	1.42	< 2	330	< 0.5	< 2	0.53	< 0.5	9	31	16	2.37	< 10	< 1	0.07	10	0.60	405
92 AW3 0+50N	201	202	< 5	< 0.2	1.55	4	330	< 0.5	< 2	0.41	< 0.5	5	32	13	2.41	< 10	< 1	0.04	10	0.60	230
92 AW3 0+60N	201	202	< 5	< 0.2	1.39	< 2	320	< 0.5	< 2	0.42	< 0.5	6	28	13	2.34	< 10	1	0.05	10	0.56	345
92 AW3 0+70N	201	202	< 5	< 0.2	1.44	< 2	320	< 0.5	< 2	0.47	< 0.5	9	30	14	2.29	< 10	< 1	0.05	10	0.56	325
92 AW3 0+80N	201	202	< 5	< 0.2	1.67	10	350	< 0.5	< 2	0.45	< 0.5	7	33	14	2.49	< 10	1	0.06	10	0.65	285
92 AW3 0+90N	201	202	< 5	< 0.2	1.54	4	330	< 0.5	2	0.43	< 0.5	6	32	12	2.15	< 10	< 1	0.06	10	0.56	250
92 AW3 1+00N	201	202	< 5	< 0.2	1.73	< 2	470	< 0.5	< 2	0.64	< 0.5	8	34	18	2.44	10	1	0.07	10	0.60	620
92 AW3 0+00S	201	202	< 5	< 0.2	1.54	2	290	< 0.5	< 2	0.07	< 0.5	4	16	7	1.90	< 10	< 1	0.10	10	0.27	200
92 AW3 0+20S	201	202	< 5	0.2	1.89	8	240	< 0.5	< 2	0.11	< 0.5	5	25	13	2.34	10	< 1	0.10	10	0.37	210
92 AW3 0+40S	201	202	< 5	< 0.2	2.31	10	330	< 0.5	2	0.12	< 0.5	6	33	20	2.63	10	1	0.10	20	0.48	215
92 AW3 0+60S	201	202	< 5	0.2	1.62	4	260	< 0.5	< 2	0.07	< 0.5	5	21	12	2.12	< 10	< 1	0.06	10	0.32	150
92 AW3 0+80S	201	202	< 5	< 0.2	2.13	22	300	< 0.5	< 2	0.10	< 0.5	8	29	21	2.53	< 10	< 1	0.06	10	0.45	200
92 AW3 1+00S	201	202	< 5	< 0.2	1.94	6	380	< 0.5	< 2	0.08	< 0.5	4	27	16	2.89	< 10	< 1	0.06	20	0.40	165
92 AW3 1+20S	201	202	< 5	< 0.2	1.91	6	420	< 0.5	2	0.08	< 0.5	4	28	12	2.70	< 10	< 1	0.05	10	0.41	170
92 AW3 1+40S	201	202	< 5	< 0.2	1.26	6	510	< 0.5	< 2	0.08	< 0.5	4	18	9	1.82	< 10	< 1	0.06	10	0.27	170
92 AW3 1+60S	201	202	< 5	0.2	1.96	2	490	< 0.5	4	0.08	< 0.5	9	29	13	2.82	10	< 1	0.05	10	0.43	340
92 AW3 1+80S	201	202	< 5	0.4	1.84	2	480	< 0.5	< 2	0.11	< 0.5	8	27	13	2.56	< 10	< 1	0.05	10	0.42	365
92 AW3 2+00S	201	202	< 5	< 0.2	1.77	14	360	< 0.5	< 2	0.09	< 0.5	6	27	16	2.35	< 10	2	0.07	10	0.40	215
92 GB 0+00S	201	202	< 5	< 0.2	2.22	< 2	180	< 0.5	< 2	0.53	< 0.5	19	138	26	3.11	10	1	0.07	< 10	2.28	630
92 GB 0+20S	201	202	< 5	< 0.2	1.98	8	460	< 0.5	< 2	0.62	< 0.5	12	49	21	3.37	10	1	0.41	10	1.55	550
92 GB 0+40S	201	202	< 5	< 0.2	1.98	4	480	< 0.5	4	0.73	< 0.5	13	84	24	2.78	10	< 1	0.20	10	1.62	445
92 GB 0+60S	201	202	< 5	< 0.2	2.36	< 2	310	< 0.5	< 2	0.65	< 0.5	20	162	21	3.34	10	< 1	0.19	< 10	2.51	585
92 GB 0+80S	201	202	< 5	< 0.2	2.05	2	360	< 0.5	< 2	0.62	< 0.5	11	60	17	3.17	10	< 1	0.18	10	1.66	450
92 GB 1+00S	201	202	< 5	< 0.2	2.09	< 2	410	< 0.5	4	0.67	< 0.5	13	43	21	3.51	10	< 1	0.32	10	1.60	475
92 GB 1+40S	201	202	< 5	0.2	2.38	< 2	290	< 0.5	< 2	0.72	< 0.5	15	84	24	3.63	10	3	0.19	10	2.26	495

CERTIFICATION: *Phai D Ma*



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Comments: CC: SCOTT THOMLINSON

## CERTIFICATE OF ANALYSIS

### A9218862

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92 AW2 0+00N	201	202	1	0.01	27	250	12	< 2	6	31	0.08	< 10	< 10	64	< 10	62
92 AW2 0+20N	201	202	1	0.01	20	260	18	2	4	23	0.06	< 10	< 10	48	< 10	78
92 AW2 0+40N	201	202	1	< 0.01	18	290	14	< 2	3	21	0.04	< 10	< 10	44	< 10	68
92 AW2 0+60N	201	202	< 1	< 0.01	14	170	10	< 2	3	22	0.05	< 10	< 10	49	< 10	52
92 AW2 0+80N	201	202	1	< 0.01	21	530	8	< 2	5	20	0.03	< 10	< 10	44	< 10	64
92 AW2 1+00N	201	202	2	< 0.01	16	430	22	< 2	3	21	0.02	< 10	< 10	40	< 10	64
92 AW2 1+20N	201	202	< 1	< 0.01	20	470	24	< 2	3	25	0.03	< 10	< 10	40	< 10	76
92 AW2 1+40N	201	202	< 1	< 0.01	15	410	18	< 2	3	24	0.03	< 10	< 10	40	< 10	70
92 AW2 1+60N	201	202	1	< 0.01	12	490	26	< 2	3	17	0.03	< 10	< 10	36	< 10	74
92 AW2 1+80N	201	202	1	< 0.01	13	340	12	< 2	3	28	0.04	< 10	< 10	49	< 10	82
92 AW2 2+00N	201	202	< 1	0.01	10	660	16	< 2	2	21	0.03	< 10	< 10	47	< 10	80
92 AW3 0+00N	201	202	2	0.01	16	430	6	< 2	4	35	0.07	< 10	< 10	51	< 10	58
92 AW3 0+10N	201	202	< 1	0.01	14	650	2	< 2	4	34	0.06	< 10	< 10	48	< 10	56
92 AW3 0+20N	201	202	< 1	0.01	14	550	< 2	4	4	34	0.05	< 10	< 10	45	< 10	56
92 AW3 0+30N	201	202	1	0.01	18	490	6	2	4	34	0.05	< 10	< 10	48	< 10	58
92 AW3 0+40N	201	202	< 1	0.01	14	600	10	< 2	4	33	0.05	< 10	< 10	48	< 10	58
92 AW3 0+50N	201	202	1	0.01	14	490	< 2	< 2	4	26	0.06	< 10	< 10	51	< 10	56
92 AW3 0+60N	201	202	< 1	0.01	13	510	2	< 2	3	27	0.05	< 10	< 10	46	< 10	58
92 AW3 0+70N	201	202	1	0.01	15	640	< 2	2	4	30	0.06	< 10	< 10	47	< 10	56
92 AW3 0+80N	201	202	1	0.01	14	530	4	< 2	4	30	0.07	< 10	< 10	53	< 10	66
92 AW3 0+90N	201	202	1	0.01	12	580	8	< 2	4	29	0.07	< 10	< 10	49	< 10	54
92 AW3 1+00N	201	202	< 1	0.01	18	720	8	< 2	5	44	0.06	< 10	< 10	53	< 10	60
92 AW3 0+00S	201	202	2	< 0.01	9	150	6	< 2	3	8	0.04	< 10	< 10	36	< 10	38
92 AW3 0+20S	201	202	< 1	< 0.01	13	150	10	< 2	4	12	0.06	< 10	< 10	50	< 10	48
92 AW3 0+40S	201	202	1	0.01	16	110	18	6	5	13	0.07	< 10	< 10	55	< 10	54
92 AW3 0+60S	201	202	1	< 0.01	10	110	14	< 2	3	7	0.03	< 10	< 10	40	< 10	38
92 AW3 0+80S	201	202	2	< 0.01	18	100	20	2	4	10	0.04	< 10	< 10	46	< 10	50
92 AW3 1+00S	201	202	1	< 0.01	13	220	18	< 2	4	9	0.04	< 10	< 10	52	< 10	46
92 AW3 1+20S	201	202	< 1	< 0.01	12	210	16	< 2	3	9	0.05	< 10	< 10	62	< 10	42
92 AW3 1+40S	201	202	1	< 0.01	7	180	12	< 2	2	9	0.05	< 10	< 10	47	< 10	30
92 AW3 1+60S	201	202	1	< 0.01	13	220	8	2	3	10	0.06	< 10	< 10	62	< 10	48
92 AW3 1+80S	201	202	1	< 0.01	14	310	10	< 2	3	14	0.06	< 10	< 10	59	< 10	42
92 AW3 2+00S	201	202	< 1	< 0.01	15	230	8	< 2	3	11	0.06	< 10	< 10	51	< 10	44
92 GB 0+00S	201	202	1	< 0.01	42	840	106	< 2	4	19	0.15	< 10	< 10	69	< 10	294
92 GB 0+20S	201	202	< 1	0.01	16	1060	56	< 2	4	23	0.13	< 10	< 10	60	< 10	138
92 GB 0+40S	201	202	1	0.01	26	790	50	< 2	4	26	0.13	< 10	< 10	57	< 10	104
92 GB 0+60S	201	202	1	< 0.01	41	850	30	< 2	5	20	0.19	< 10	< 10	72	< 10	110
92 GB 0+80S	201	202	< 1	< 0.01	19	990	28	< 2	5	23	0.14	< 10	< 10	64	< 10	96
92 GB 1+00S	201	202	< 1	< 0.01	15	1680	16	< 2	5	21	0.11	< 10	< 10	70	< 10	92
92 GB 1+40S	201	202	1	< 0.01	24	1030	74	< 2	7	25	0.16	< 10	< 10	79	< 10	176

CERTIFICATION:

*Yhai D Ma*





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To: HASTINGS MANAGEMENT CORP.      ##

1000 - 675 W. HASTINGS  
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## CERTIFICATE OF ANALYSIS

## A9218862

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92 GB 1+60S	201	202	1 < 0.01		12	1760	80	2	5	21	0.08	< 10	< 10	53	< 10	186
92 GB 1+80S	201	202	1 < 0.01		20	1130	212	< 2	5	18	0.10	< 10	< 10	60	< 10	338
92 GB 2+00S	201	202	1 < 0.01		18	790	160	< 2	4	13	0.08	< 10	< 10	56	< 10	336
92 GB 2+20S	201	202	2 < 0.01		32	780	210	< 2	6	15	0.16	< 10	< 10	89	< 10	476
92 GB 2+40S	201	202	1 < 0.01		11	500	102	< 2	3	14	0.09	< 10	< 10	49	< 10	246
92 GB 2+60S	201	202	1 < 0.01		14	450	194	< 2	3	14	0.10	< 10	< 10	49	< 10	342
92 GB 2+80S	201	202	1 < 0.01		21	610	80	< 2	3	16	0.14	< 10	< 10	53	< 10	220
92 GB 3+00S	201	202	1 < 0.01		13	400	96	< 2	4	17	0.09	< 10	< 10	56	< 10	230
92 GB 3+20S	201	202	1 < 0.01		13	650	264	< 2	4	19	0.09	< 10	< 10	45	< 10	252
92 GB 3+40S	201	202	< 1 < 0.01		18	430	88	< 2	5	20	0.17	< 10	< 10	60	< 10	350
92 GB 3+60S	201	202	< 1 < 0.01		15	810	108	< 2	4	20	0.15	< 10	< 10	52	< 10	242
92 GB 3+80S	201	202	< 1 < 0.01		15	1200	104	< 2	5	19	0.19	< 10	< 10	67	< 10	298
92 GB 4+00S	201	202	1 < 0.01		18	1300	66	< 2	7	23	0.14	< 10	< 10	86	< 10	186
92 GB 4+20S	201	202	2 < 0.01		8	1280	48	< 2	4	27	0.08	< 10	< 10	48	< 10	128
92 51 UPPER ELDO	201	202	3	0.01	7	530	200	< 2	1	67	0.01	< 10	< 10	16	< 10	132
92 52 UPPER ELDO	201	202	4	0.01	9	650	222	2	2	69	0.01	< 10	< 10	14	< 10	178
92 53 UPPER ELDO	201	202	2 < 0.01		8	510	102	< 2	2	33	0.01	< 10	< 10	23	< 10	104
92 54 UPPER ELDO	201	202	10	0.03	18	1160	196	2	3	260	< 0.01	< 10	< 10	17	< 10	242
92 55 UPPER ELDO	201	202	7	0.02	11	840	310	< 2	2	210	< 0.01	< 10	< 10	10	< 10	210
HMS LOWER SOIL	201	202	1 < 0.01		15	700	16	6	12	56	< 0.01	< 10	< 10	44	< 10	136
HMS MID SOIL	201	202	1 < 0.01		14	460	18	2	14	18	< 0.01	< 10	< 10	45	< 10	116
HMS UPPER SOIL	201	202	1 < 0.01		32	500	22	< 2	9	25	< 0.01	< 10	< 10	36	< 10	96

CERTIFICATION:

*Yhai D Ma*



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1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9221150

Comments: ATTN: LARRY MCLEAN CC: PHIL VAN ANGEREW

**CERTIFICATE**

**A9221150**

HASTINGS MANAGEMENT CORP.

Project: DAWSON  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 16-SEP-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
255	10	RUSH Geo ring to approx 150 mesh
292	10	RUSH Crush and split (0-15 lbs)
229	10	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
990	10	Au ppb: RUSH, fuse 10 g sample	FA-AAS	5	10000
2118	10	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	10	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	10	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	10	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	10	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	10	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	10	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	10	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	10	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	10	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	10	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	10	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	10	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	10	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	10	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	10	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	10	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	10	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	10	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	10	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	10	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	10	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	10	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	10	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	10	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	10	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	10	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	10	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	10	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	10	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	10	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	10	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



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 VANCOUVER, BC  
 V6B 1N6

Page Number :1-A  
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 Certificate Date: 16-SEP-92  
 Invoice No. :19221150  
 P.O. Number :  
 Account :JCL

Project : DAWSON  
 Comments: ATTN: LARRY MCLEAN CC: PHIL VAN ANGEREW

## CERTIFICATE OF ANALYSIS A9221150

SAMPLE	PREP CODE		Au ppb	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
			RUSH																		
92 CL KL 1	255	292	< 5	0.6	0.40	30	40	< 0.5	2	0.26	0.5	4	117	98	1.96	< 10	< 1	0.01	20	0.11	270
92 CL KL 2	255	292	< 5	1.2	0.51	4	350	< 0.5	2	0.01	< 0.5	< 1	185	11	1.38	< 10	1	0.41	10	0.07	15
92 CL KL 3	255	292	185	9.6	1.31	102	30	< 0.5	< 2	3.04	23.5	2	265	107	2.72	< 10	< 1	0.01	< 10	1.15	660
92 CL KL 4	255	292	155	1.6	0.41	728	150	< 0.5	< 2	0.07	< 0.5	1	199	6	1.12	< 10	< 1	0.22	10	0.08	135
92 CL KL 5	255	292	< 5	0.2	0.09	50	60	< 0.5	2	0.01	< 0.5	< 1	230	10	0.79	< 10	< 1	0.04	< 10	< 0.01	110
92 CL KL 6	255	292	< 5	1.8	0.88	8	10	< 0.5	< 2	0.54	7.5	12	179	420	1.90	< 10	< 1	0.10	< 10	0.73	295
92 AW 3-1	255	292	< 5	0.4	0.45	12	300	< 0.5	< 2	10.60	1.0	17	54	18	7.96	< 10	1	0.08	< 10	2.11	3410
92 AW 3-2	255	292	45	< 0.2	0.88	16	630	< 0.5	4	0.65	< 0.5	6	126	12	1.91	< 10	< 1	0.51	10	0.20	585
92 AW 3-3	255	292	< 5	0.2	0.49	2	330	< 0.5	< 2	1.41	< 0.5	2	116	6	0.71	< 10	1	0.24	10	0.09	190
92 AW 3-4	255	292	10	0.2	0.04	6	160	< 0.5	< 2	9.81	< 0.5	6	249	6	4.58	< 10	< 1	< 0.01	< 10	0.17	1960

CERTIFICATION:

*Phai D Ma*



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Page Number :1-B  
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Certificate Date: 16-SEP-92  
Invoice No. :I9221150  
P.O. Number :  
Account :JCL

Project : DAWSON  
Comments: ATTN: LARRY MCLEAN CC: PHIL VAN ANGEREW

## CERTIFICATE OF ANALYSIS A9221150

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92 CL KL 1	255	292	2	0.16	3	580	710	< 2	1	21	0.08	< 10	< 10	9	< 10	162
92 CL KL 2	255	292	4	0.07	3	220	152	< 2	1	16	0.08	< 10	< 10	4	< 10	8
92 CL KL 3	255	292	11	< 0.01	3	40	3580	< 2	1	224	< 0.01	< 10	< 10	9	10	3160
92 CL KL 4	255	292	4	< 0.01	6	70	48	4	1	17	< 0.01	< 10	< 10	3	< 10	50
92 CL KL 5	255	292	2	< 0.01	5	60	6	< 2	< 1	2	< 0.01	< 10	< 10	10	< 10	12
92 CL KL 6	255	292	1	0.09	5	400	340	< 2	2	16	0.16	< 10	< 10	25	10	596
92 AW 3-1	255	292	3	0.01	10	110	34	< 2	23	624	< 0.01	< 10	< 10	17	130	230
92 AW 3-2	255	292	< 1	0.03	6	470	6	< 2	4	18	< 0.01	< 10	< 10	11	10	46
92 AW 3-3	255	292	1	0.10	1	1080	6	< 2	3	53	< 0.01	< 10	< 10	7	< 10	18
92 AW 3-4	255	292	3	< 0.01	5	10	16	< 2	11	54	< 0.01	< 10	< 10	6	20	132

CERTIFICATION:

*Yhai D Ma*



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9221330

Comments: ATTN: LARRY McLEAN

CERTIFICATE

A9221330

HASTINGS MANAGEMENT CORP.

Project: MOON GROUP  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 21-SEP-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	4	Geochem ring to approx 150 mesh
274	4	0-15 lb crush and split
229	4	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	4	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2118	4	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	4	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	4	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	4	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	4	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	4	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	4	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	4	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	4	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	4	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	4	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	4	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	4	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	4	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	4	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	4	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	4	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	4	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	4	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	4	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	4	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	4	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	4	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	4	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	4	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	4	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	4	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	4	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	4	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	4	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	4	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	4	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

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project : MOON GROUP  
Comments: ATTN: LARRY McLEAN

Page Number :1-A  
Total Pages :1  
Certificate Date: 21-SEP-92  
Invoice No. :I9221330  
P.O. Number :  
Account :JCL

## CERTIFICATE OF ANALYSIS A9221330

SAMPLE	PREP		Au ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
	CODE		FA+AA	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
39983	205	274	< 5	0.2	0.28	4	170	< 0.5	< 2	3.80	< 0.5	< 1	53	17	1.45	< 10	< 1	0.17	30	0.12	185
39984	205	274	< 5	< 0.2	0.51	2	170	< 0.5	< 2	0.15	< 0.5	< 1	115	9	0.59	< 10	< 1	0.22	20	0.03	40
39985	205	274	< 5	< 0.2	0.61	8	300	< 0.5	< 2	1.54	< 0.5	< 1	73	7	0.95	< 10	< 1	0.23	30	0.66	145
39986	205	274	< 5	0.2	0.73	< 2	1160	< 0.5	< 2	0.19	< 0.5	1	77	6	0.60	< 10	< 1	0.20	10	0.65	140

CERTIFICATION:

*Yhai D Ma*



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project: MOON GROUP  
Comments: ATTN: LARRY McLEAN

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## CERTIFICATE OF ANALYSIS

A9221330

SAMPLE	PREP		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
	CODE		ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
39983	205	274	6	< 0.01	< 1	40	18	2	1	111	< 0.01	< 10	< 10	3	< 10	16
39984	205	274	1	< 0.01	< 1	30	12	< 2	1	12	< 0.01	< 10	< 10	1	< 10	18
39985	205	274	< 1	0.01	1	< 10	12	< 2	5	86	< 0.01	< 10	< 10	1	< 10	52
39986	205	274	< 1	0.02	< 1	< 10	24	< 2	< 1	59	< 0.01	< 10	< 10	1	< 10	36

CERTIFICATION:

*Jhai D Ma*



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9221327

Comments: ATTN: LARRY McLEAN

CERTIFICATE

A9221327

HASTINGS MANAGEMENT CORP.

Project: REGIONAL  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 22-SEP-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	6	Geochem ring to approx 150 mesh
274	6	0-15 lb crush and split
229	6	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	6	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2118	6	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	6	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	6	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	6	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	6	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	6	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	6	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	6	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	6	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	6	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	6	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	6	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	6	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	6	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	6	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	6	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	6	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	6	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	6	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	6	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	6	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	6	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	6	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	6	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	6	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	6	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	6	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	6	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	6	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	6	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	6	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	6	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

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project : REGIONAL  
Comments: ATTN: LARRY McLEAN

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Invoice No. :19221327  
P.O. Number :  
Account :JCL

## CERTIFICATE OF ANALYSIS

### A9221327

SAMPLE	PREP CODE		Au ppb	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
	FA+AA																				
92AW-06	205	274	< 5	< 0.2	0.73	2	10	< 0.5	< 2	2.28	< 0.5	51	1780	15	3.54	< 10	< 1	< 0.01	< 10	12.05	565
92AW-07	205	274	75	0.2	2.71	8	70	0.5	< 2	1.17	< 0.5	23	520	321	3.15	10	< 1	0.10	60	3.32	690
92AW-08	205	274	< 5	< 0.2	0.72	170	60	< 0.5	2	3.01	< 0.5	55	2160	34	3.94	< 10	< 1	< 0.01	< 10	3.35	645
92AW-09	205	274	30	0.2	2.41	262	580	< 0.5	< 2	0.24	< 0.5	12	243	39	3.45	10	< 1	0.41	20	1.53	730
92AW-10	205	274	< 5	4.6	2.60	6	200	< 0.5	14	1.00	1.0	14	300	101	3.48	10	1	0.25	10	1.34	735
92AW-11	205	274	< 5	1.8	1.07	28	40	< 0.5	< 2	0.07	< 0.5	176	328	101	5.35	< 10	< 1	0.13	< 10	0.78	450

CERTIFICATION:

*Phai D Ma*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

212 Brooksbank Ave., North Vancouver

British Columbia, Canada V7J 2C1

PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project : REGIONAL  
Comments: ATTN: LARRY McLEAN

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P.O. Number :  
Account :JCL

## CERTIFICATE OF ANALYSIS

### A9221327

SAMPLE	PREP		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
	CODE		ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92AW-06	205	274	< 1	< 0.01	877	10	< 2	< 2	9	31	< 0.01	< 10	< 10	49	30	24
92AW-07	205	274	1	0.07	212	380	2	< 2	9	25	< 0.01	< 10	< 10	70	20	42
92AW-08	205	274	< 1	< 0.01	944	10	< 2	< 2	11	15	< 0.01	< 10	< 10	73	20	14
92AW-09	205	274	< 1	0.09	34	650	< 2	< 2	8	15	0.01	< 10	< 10	84	10	74
92AW-10	205	274	< 1	0.04	24	620	802	2	7	45	0.09	< 10	< 10	66	20	666
92AW-11	205	274	1	0.02	10	< 10	78	< 2	1	4	< 0.01	< 10	< 10	10	10	142

CERTIFICATION:

*Yhai D Ma*



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9222408

Comments: ATTN: LARRY MCLEAN

**CERTIFICATE**

**A9222408**

HASTINGS MANAGEMENT CORP.

Project: JOHNSON HWY SHOW  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 15-OCT-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	5	Geochem ring to approx 150 mesh
274	5	0-15 lb crush and split
229	5	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
101	5	Au ppb: Fuse 10 g sample	FA-NAA	1	10000
2118	5	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	5	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	5	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	5	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	5	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	5	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	5	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	5	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	5	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	5	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	5	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	5	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	5	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	5	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	5	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	5	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	5	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	5	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	5	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	5	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	5	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	5	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	5	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	5	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	5	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	5	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	5	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	5	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	5	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	5	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	5	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	5	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
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PHONE: 604-984-0221

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project : JOHNSON HWY SHOW  
Comments: ATTN: LARRY MCLEAN

Page Number : 1-A  
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Certificate Date: 15-OCT-92  
Invoice No. : 19222408  
P.O. Number :  
Account : JCL

## CERTIFICATE OF ANALYSIS A9222408

SAMPLE	PREP CODE		Au NAA	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
			ppb	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
39996	205	274	19	< 0.2	0.38	18	30	0.5	< 2	0.20	< 0.5	11	195	43	3.47	< 10	2	0.10	< 10	0.18	85
39997	205	274	49	108.0	0.59	52	60	0.5	458	3.12	< 0.5	8	199	215	10.70	< 10	< 1	0.30	< 10	0.07	245
39998	205	274	2	2.4	1.85	< 2	280	1.0	8	0.62	< 0.5	13	135	53	3.94	< 10	< 1	0.57	10	1.04	195
39999	205	274	< 1	< 0.2	0.38	6	30	< 0.5	< 2	0.27	< 0.5	1	130	7	0.39	< 10	< 1	0.16	< 10	0.03	15
40000	205	274	4	0.8	0.75	< 2	70	< 0.5	< 2	0.54	< 0.5	2	193	7	0.59	< 10	< 1	0.31	< 10	0.06	60

CERTIFICATION: Yhai D Ma



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP. \*\*

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Project : JOHNSON HWY SHOW  
Comments: ATTN: LARRY MCLEAN

Page Number :1-B  
Total Pages :1  
Certificate Date: 15-OCT-92  
Invoice No. :19222408  
P.O. Number :  
Account :JCL

## CERTIFICATE OF ANALYSIS

### A9222408

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
39996	205	274	< 1	< 0.01	10	190	6	2	1	15	< 0.01	< 10	< 10	9	< 10	10
39997	205	274	< 1	0.02	2	370	4020	14	2	86	< 0.01	< 10	< 10	9	< 10	26
39998	205	274	< 1	0.02	23	640	92	< 2	5	27	0.14	< 10	< 10	57	< 10	58
39999	205	274	< 1	0.09	3	970	16	< 2	2	22	< 0.01	< 10	< 10	1	< 10	2
40000	205	274	< 1	0.18	3	500	178	< 2	< 1	29	< 0.01	< 10	< 10	1	< 10	12

CERTIFICATION: Yhai D Ma



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## CERTIFICATE OF ANALYSIS

### A9222408

SAMPLE	PREP CODE	Au NAA ppb	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
39996	205 274	19	< 0.2	0.38	18	30	0.5	< 2	0.20	< 0.5	11	195	43	3.47	< 10	2	0.10	< 10	0.18	85
39997	205 274	49	108.0	0.59	52	60	0.5	458	3.12	< 0.5	8	199	215	10.70	< 10	< 1	0.30	< 10	0.07	245
39998	205 274	2	2.4	1.85	< 2	280	1.0	8	0.62	< 0.5	13	135	53	3.94	< 10	< 1	0.57	10	1.04	195
39999	205 274	< 1	< 0.2	0.38	6	30	< 0.5	< 2	0.27	< 0.5	1	130	7	0.39	< 10	< 1	0.16	< 10	0.03	15
40000	205 274	4	0.8	0.75	< 2	70	< 0.5	< 2	0.54	< 0.5	2	193	7	0.59	< 10	< 1	0.31	< 10	0.06	60

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## CERTIFICATE OF ANALYSIS

### A9222408

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
39996	205 274	< 1	< 0.01	10	190	6	2	1	15	< 0.01	< 10	< 10	9	< 10	10
39997	205 274	< 1	0.02	2	370	4020	14	2	86	< 0.01	< 10	< 10	9	< 10	26
39998	205 274	< 1	0.02	23	640	92	< 2	5	27	0.14	< 10	< 10	57	< 10	58
39999	205 274	< 1	0.09	3	970	16	< 2	2	22	< 0.01	< 10	< 10	1	< 10	2
40000	205 274	< 1	0.18	3	500	178	< 2	< 1	29	< 0.01	< 10	< 10	1	< 10	12

CERTIFICATION:

*Yhai D Ma*



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To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9218861

Comments: CC: SCOTT THOMLINSON

CERTIFICATE

A9218861

HASTINGS MANAGEMENT CORP.

Project:  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 9-AUG-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	44	Geochem ring to approx 150 mesh
274	44	0-15 lb crush and split
229	44	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
100	44	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
2118	44	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	44	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	44	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	44	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	44	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	44	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	44	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	44	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	44	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	44	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	44	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	44	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	44	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	44	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	44	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	44	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	44	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	44	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	44	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	44	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	44	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	44	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	44	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	44	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	44	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	44	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	44	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	44	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	44	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	44	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	44	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	44	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000
396	1	Au oz/T: 1/2 assay ton	FA-GRAVIMETRIC	0.003	20.000



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To: HASTINGS MANAGEMENT CORP. ##

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
 V6B 1N6

Page Number :1-A  
 Total Pages :2  
 Certificate Date: 08-AUG-92  
 Invoice No. : 19218861  
 P.O. Number :  
 Account : JCL

Project :  
 Comments: CC: SCOTT THOMLINSON

## CERTIFICATE OF ANALYSIS A9218861

SAMPLE	PREP CODE		Au ppb	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
	FA+AA																				
02710	205	274	20	0.2	0.63	6	280	< 0.5	< 2	0.05	< 0.5	2	240	23	1.45	< 10	< 1	0.33	10	0.04	155
02711	205	274	< 5	< 0.2	0.24	4	140	< 0.5	2	0.68	< 0.5	1	359	13	1.01	< 10	1	< 0.01	< 10	0.10	180
02712	205	274	< 5	0.2	0.10	8	150	< 0.5	4	14.80	0.5	3	72	17	0.70	< 10	< 1	0.02	< 10	5.00	1145
02713	205	274	< 5	0.2	0.32	10	160	< 0.5	< 2	0.19	< 0.5	3	87	45	0.89	< 10	1	0.18	20	0.15	75
02714	205	274	< 5	2.2	0.83	86	100	< 0.5	< 2	0.17	5.0	3	463	>10000	0.96	< 10	< 1	0.01	< 10	0.55	80
02715	205	274	115	1.8	0.41	62	240	< 0.5	< 2	0.12	< 0.5	1	138	104	0.72	< 10	< 1	0.31	10	0.06	30
02716	205	274	25	1.0	0.48	18	680	< 0.5	< 2	0.06	< 0.5	2	193	254	1.10	< 10	< 1	0.16	< 10	0.19	60
02717	205	274	< 5	< 0.2	0.11	4	350	< 0.5	< 2	0.02	< 0.5	1	345	38	0.99	< 10	< 1	0.04	< 10	0.02	25
02718	205	274	< 5	0.2	0.52	438	330	< 0.5	< 2	0.02	0.5	< 1	111	36	0.94	< 10	< 1	0.48	40	0.02	25
02719	205	274	< 5	< 0.2	0.41	136	200	< 0.5	4	0.04	< 0.5	2	49	60	2.43	< 10	< 1	0.20	40	0.02	120
02720	205	274	< 5	< 0.2	0.16	12	190	< 0.5	< 2	0.01	< 0.5	< 1	316	28	0.50	< 10	< 1	0.03	< 10	0.01	20
02721	205	274	< 5	0.2	1.63	< 2	470	< 0.5	6	0.38	< 0.5	17	200	44	2.68	10	< 1	0.41	10	1.03	320
02722	205	274	< 5	< 0.2	0.52	2	1390	< 0.5	< 2	0.01	< 0.5	1	86	19	0.59	< 10	< 1	0.40	20	0.08	25
02723	205	274	< 5	0.2	1.91	10	380	< 0.5	< 2	0.16	< 0.5	10	144	25	3.02	< 10	< 1	0.26	10	1.34	290
02724	205	274	< 5	< 0.2	0.79	< 2	610	< 0.5	< 2	0.33	< 0.5	2	284	32	1.04	< 10	< 1	0.19	< 10	0.08	55
02725	205	274	< 5	< 0.2	1.19	30	940	< 0.5	6	0.18	< 0.5	2	188	18	1.94	< 10	< 1	0.31	10	0.36	145
02726	205	274	< 5	0.2	0.37	< 2	450	< 0.5	< 2	0.03	< 0.5	< 1	214	21	0.85	< 10	< 1	0.20	< 10	0.02	15
02727	205	274	15	2.8	0.06	36	50	< 0.5	2	0.04	< 0.5	1	160	17	0.81	< 10	< 1	< 0.01	< 10	0.01	25
02728	205	274	< 5	16.8	0.86	< 2	290	< 0.5	8	0.05	< 0.5	1	256	15	5.92	10	3	0.19	< 10	0.39	70
02729	205	274	< 5	0.6	1.90	58	380	< 0.5	22	0.15	< 0.5	16	179	305	11.75	10	< 1	0.44	< 10	1.57	665
02730	205	274	< 5	2.0	1.03	10	670	< 0.5	8	0.19	< 0.5	6	224	77	1.87	< 10	< 1	0.48	< 10	0.40	160
02731	205	274	< 5	0.2	1.38	< 2	40	< 0.5	< 2	>15.00	< 0.5	5	134	29	1.20	< 10	< 1	0.03	< 10	1.72	1490
02732	205	274	15	0.8	0.78	24	50	< 0.5	4	11.40	< 0.5	11	178	26	2.44	< 10	< 1	0.05	< 10	0.90	1295
02733	205	274	< 5	< 0.2	0.64	< 2	330	< 0.5	< 2	0.08	< 0.5	< 1	162	8	0.59	< 10	1	0.36	20	0.10	95
02734	205	274	< 5	1.0	0.58	6	360	< 0.5	< 2	0.01	< 0.5	< 1	213	16	0.63	< 10	< 1	0.26	10	0.18	20
02735	205	274	< 5	3.4	1.13	86	270	< 0.5	< 2	0.01	< 0.5	< 1	337	24	2.06	< 10	< 1	0.27	20	0.79	105
02736	205	274	< 5	< 0.2	2.23	12	170	< 0.5	< 2	0.50	< 0.5	7	359	13	2.01	< 10	2	0.18	< 10	2.05	615
02737	205	274	30	29.0	0.73	148	520	< 0.5	4	0.01	< 0.5	1	293	264	2.04	< 10	< 1	0.34	20	0.15	15
02738	205	274	15	0.4	0.88	60	400	< 0.5	4	0.03	< 0.5	2	183	23	2.93	< 10	< 1	0.38	10	0.37	60
02739	205	274	15	0.4	1.63	< 2	150	< 0.5	2	3.37	4.0	24	227	34	3.56	< 10	< 1	0.43	10	1.34	2510
02740	205	274	< 5	< 0.2	1.82	4	1610	< 0.5	< 2	0.21	< 0.5	3	288	21	1.38	< 10	2	1.13	30	0.25	320
02741	205	274	< 5	0.6	0.88	68	450	< 0.5	< 2	0.08	< 0.5	4	238	93	3.01	< 10	< 1	0.34	10	0.39	100
02742	205	274	< 5	< 0.2	0.11	2	50	< 0.5	< 2	0.02	< 0.5	1	400	42	0.79	< 10	< 1	< 0.01	< 10	0.03	40
02743	205	274	< 5	< 0.2	0.07	4	910	< 0.5	< 2	< 0.01	< 0.5	< 1	383	30	0.64	< 10	< 1	< 0.01	< 10	0.01	25
02744	205	274	< 5	< 0.2	0.66	< 2	1510	< 0.5	< 2	0.02	< 0.5	2	253	15	2.05	< 10	< 1	0.40	< 10	0.17	65
02745	205	274	< 5	< 0.2	1.92	74	220	< 0.5	4	0.03	< 0.5	5	357	99	6.79	< 10	< 1	0.41	< 10	1.05	130
02746	205	274	< 5	< 0.2	1.30	6	220	< 0.5	< 2	0.60	3.0	28	273	29	2.96	< 10	< 1	0.31	< 10	0.22	655
02747	205	274	15	4.0	3.50	< 2	20	< 0.5	12	0.15	< 0.5	24	70	386	9.95	10	< 1	0.05	< 10	3.66	545
02748	205	274	10	< 0.2	0.68	50	1340	< 0.5	< 2	0.03	< 0.5	1	162	16	1.09	< 10	< 1	0.34	20	0.07	60
02749	205	274	< 5	0.4	0.30	4	390	< 0.5	2	0.60	< 0.5	1	130	16	0.71	< 10	< 1	0.17	10	0.11	125

CERTIFICATION:

*Yhai D Ma*



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To: HASTINGS MANAGEMENT CORP. ##

1000 - 675 W. HASTINGS  
 VANCOUVER, BC  
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Page Number :1-B  
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 Certificate Date: 08-AUG-92  
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Project :  
 Comments: CC: SCOTT THOMLINSON

## CERTIFICATE OF ANALYSIS A9218861

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	Au FA oz/T
02710	205 274	< 1	< 0.01	5	60	10	< 2	4	8	< 0.01	< 10	< 10	4	10	44	----
02711	205 274	2	< 0.01	11	< 10	4	2	1	17	< 0.01	< 10	< 10	9	10	24	----
02712	205 274	1	< 0.01	25	240	6	4	1	208	< 0.01	< 10	< 10	23	20	92	----
02713	205 274	2	0.02	3	110	16	< 2	< 1	9	< 0.01	< 10	< 10	2	< 10	12	----
02714	205 274	3	0.01	14	1100	1870	10	3	6	< 0.01	< 10	< 10	7	500	2180	----
02715	205 274	10	0.01	5	90	4	< 2	1	5	< 0.01	< 10	< 10	6	< 10	12	----
02716	205 274	6	0.01	9	170	52	< 2	1	14	< 0.01	< 10	< 10	14	< 10	66	----
02717	205 274	2	< 0.01	3	80	52	< 2	< 1	2	< 0.01	< 10	< 10	1	< 10	6	----
02718	205 274	1	< 0.01	3	90	12	< 2	2	6	< 0.01	< 10	< 10	4	< 10	38	----
02719	205 274	3	< 0.01	5	200	470	4	3	6	< 0.01	< 10	< 10	4	10	220	----
02720	205 274	1	< 0.01	4	40	< 2	< 2	< 1	1	< 0.01	< 10	< 10	2	< 10	4	----
02721	205 274	3	0.01	51	780	12	< 2	5	15	0.14	< 10	< 10	43	20	88	----
02722	205 274	< 1	0.06	3	60	16	< 2	2	33	< 0.01	< 10	< 10	1	< 10	12	----
02723	205 274	5	0.03	12	520	10	< 2	5	11	0.05	< 10	< 10	32	20	68	----
02724	205 274	2	0.05	4	180	2	2	3	90	< 0.01	< 10	< 10	5	< 10	30	----
02725	205 274	1	0.05	2	320	10	< 2	5	35	0.01	< 10	< 10	7	10	58	----
02726	205 274	1	0.08	4	40	14	< 2	1	6	< 0.01	< 10	< 10	1	< 10	24	----
02727	205 274	1	< 0.01	3	340	506	< 2	< 1	19	< 0.01	< 10	< 10	2	< 10	170	----
02728	205 274	6	0.08	4	120	366	2	2	143	0.02	< 10	< 10	5	< 10	136	----
02729	205 274	4	0.02	16	1280	226	< 2	8	17	0.13	< 10	< 10	104	20	242	----
02730	205 274	1	0.01	15	710	76	< 2	1	10	0.03	< 10	< 10	16	10	68	----
02731	205 274	< 1	< 0.01	25	200	22	2	12	364	< 0.01	< 10	< 10	30	30	18	----
02732	205 274	< 1	< 0.01	70	120	26	4	4	332	< 0.01	< 10	< 10	16	20	56	----
02733	205 274	< 1	0.01	2	30	6	< 2	3	7	< 0.01	< 10	< 10	1	< 10	12	----
02734	205 274	2	0.02	1	10	16	8	< 1	4	< 0.01	< 10	< 10	1	< 10	16	----
02735	205 274	2	0.01	9	480	114	16	1	6	< 0.01	< 10	< 10	14	< 10	88	----
02736	205 274	< 1	0.01	20	140	30	2	5	19	< 0.01	< 10	< 10	38	< 10	64	----
02737	205 274	4	0.01	6	60	848	176	1	3	< 0.01	< 10	< 10	2	< 10	106	----
02738	205 274	3	0.02	5	440	10	2	2	6	< 0.01	< 10	< 10	29	< 10	22	----
02739	205 274	2	0.03	34	530	16	2	4	94	0.01	< 10	< 10	34	< 10	110	----
02740	205 274	2	0.11	5	350	< 2	< 2	6	13	< 0.01	< 10	< 10	12	< 10	244	----
02741	205 274	7	0.01	23	540	80	< 2	1	30	< 0.01	< 10	< 10	12	< 10	112	----
02742	205 274	2	0.01	7	140	106	< 2	< 1	8	< 0.01	< 10	< 10	3	< 10	34	----
02743	205 274	2	< 0.01	3	20	2	< 2	< 1	24	< 0.01	< 10	< 10	1	< 10	14	----
02744	205 274	4	0.05	1	60	8	< 2	1	10	< 0.01	< 10	< 10	1	< 10	30	----
02745	205 274	4	0.03	20	1270	8	< 2	9	7	< 0.01	< 10	10	58	< 10	22	----
02746	205 274	2	0.04	5	550	14	< 2	5	34	< 0.01	< 10	< 10	15	< 10	110	----
02747	205 274	3	0.01	5	600	10	< 2	6	16	< 0.01	< 10	< 10	57	< 10	240	----
02748	205 274	1	0.01	3	120	22	< 2	3	5	< 0.01	< 10	< 10	2	< 10	28	----
02749	205 274	2	0.01	2	130	14	< 2	< 1	30	< 0.01	< 10	< 10	1	< 10	12	----

CERTIFICATION:

*Jhai D Ma*



# Chemex Labs Ltd.

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

To: HASTINGS MANAGEMENT CORP.      ##

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

Page Number :2-A  
Total Pages :2  
Certificate Date: 08-AUG-92  
Invoice No. : 19218861  
P.O. Number :  
Account : JCL

Project :  
Comments: CC: SCOTT THOMLINSON

## CERTIFICATE OF ANALYSIS

### A9218861

SAMPLE	PREP		Au ppb	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn
	CODE		FA+AA	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm
02750	205	274	5	< 0.2	0.35	4	50	< 0.5	< 2	0.03	< 0.5	< 1	416	15	0.94	< 10	< 1	< 0.01	< 10	0.28	205
39980	205	274	< 5	1.6	0.23	< 2	2700	< 0.5	< 2	0.17	< 0.5	< 1	404	15	0.49	< 10	< 1	0.07	< 10	0.02	40
39981	205	274	20	3.0	0.13	8	80	< 0.5	6	3.32	< 0.5	3	501	103	0.88	< 10	< 1	0.01	< 10	0.07	495
39982	205	274	>10000	4.0	1.62	34	60	< 0.5	< 2	>15.00	8.5	7	33	162	2.95	< 10	2	0.03	< 10	2.32	2750

CERTIFICATION:

*Yhai J Ma*



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## CERTIFICATE OF ANALYSIS A9218861

SAMPLE	PREP CODE		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn	Au FA
			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	oz/T
02750	205	274	1	< 0.01	8	30	< 2	< 2	2	2	< 0.01	< 10	< 10	5	< 10	10	-----
39980	205	274	1	0.01	3	< 10	380	< 2	< 1	36	< 0.01	< 10	< 10	2	< 10	10	-----
39981	205	274	7	0.01	11	100	382	< 2	1	138	< 0.01	< 10	< 10	5	10	8	-----
39982	205	274	1	< 0.01	19	70	40	2	14	1695	< 0.01	< 10	< 10	29	50	482	0.318

CERTIFICATION: *Yhai J Ma*



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To: HASTINGS MANAGEMENT CORP.

1000 - 675 W. HASTINGS  
VANCOUVER, BC  
V6B 1N6

A9221326

Comments: ATTN: LARRY McLEAN

CERTIFICATE

A9221326

HASTINGS MANAGEMENT CORP.

Project: REGIONAL  
P.O. #:

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 23-SEP-92.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	11	Dry, sieve to -80 mesh
229	11	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
100	11	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
2118	11	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	200
2119	11	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	11	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	11	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	11	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	11	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	11	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	11	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2126	11	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	11	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	11	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	11	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	11	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
2131	11	Hg ppm: 32 element, soil & rock	ICP-AES	1	10000
2132	11	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	11	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	11	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	11	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	11	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	11	Na %: 32 element, soil & rock	ICP-AES	0.01	5.00
2138	11	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	11	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	11	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	11	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	11	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	11	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	11	Ti %: 32 element, soil & rock	ICP-AES	0.01	5.00
2145	11	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	11	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	11	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	11	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	11	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000



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Page Number :1-A  
 Total Pages :1  
 Certificate Date: 23-SEP-92  
 Invoice No. : I9221326  
 P.O. Number :  
 Account : JCL

Project : REGIONAL  
 Comments: ATTN: LARRY McLEAN

## CERTIFICATE OF ANALYSIS

## A9221326

SAMPLE	PREP CODE		Au ppb	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
	FA+AA																				
92HMS 0+00S	201	229	< 5	< 0.2	1.06	114	770	< 0.5	< 2	0.28	< 0.5	12	13	56	4.16	< 10	< 1	0.11	< 10	0.14	1770
92HMS 0+10S	201	229	< 5	< 0.2	1.85	14	800	< 0.5	< 2	0.34	< 0.5	11	24	25	3.18	< 10	< 1	0.12	10	0.31	465
92HMS 0+20S	201	229	85	< 0.2	1.36	36	1030	0.5	< 2	0.39	< 0.5	15	18	82	5.05	< 10	< 1	0.09	10	0.19	740
92HMS 0+30S	201	229	< 5	0.4	0.70	128	970	< 0.5	< 2	0.23	< 0.5	12	52	50	2.35	< 10	< 1	0.13	10	0.09	260
92HMS 0+40S	201	229	< 5	< 0.2	1.64	112	1230	0.5	< 2	0.30	< 0.5	15	135	42	4.04	< 10	< 1	0.11	10	0.26	445
92HMS 0+50S	201	229	< 5	< 0.2	1.08	318	510	< 0.5	< 2	0.24	1.0	24	388	37	6.38	< 10	< 1	0.05	10	0.20	1050
92HMS 0+60S	201	229	< 5	< 0.2	1.90	54	1060	0.5	< 2	0.40	0.5	17	154	23	3.13	< 10	< 1	0.04	10	0.34	970
92HMS 0+70S	201	229	< 5	0.2	1.91	48	1130	< 0.5	< 2	0.50	0.5	16	159	35	3.86	< 10	< 1	0.06	10	0.36	745
92HMS 0+80S	201	229	< 5	0.4	2.02	18	1970	0.5	< 2	0.32	< 0.5	8	49	41	2.26	< 10	< 1	0.11	10	0.32	150
92HMS 0+90S	201	229	< 5	< 0.2	1.89	30	1210	0.5	< 2	0.27	< 0.5	7	41	19	2.34	< 10	3	0.09	10	0.41	190
92HMS 1+00S	201	229	< 5	0.2	1.38	8	590	< 0.5	< 2	0.22	< 0.5	2	14	4	1.22	< 10	< 1	0.10	10	0.23	85

CERTIFICATION:

*Yhai J Ma*



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Project : REGIONAL  
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## CERTIFICATE OF ANALYSIS

### A9221326

SAMPLE	PREP		Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
	CODE		ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
92HMS 0+00S	201	229	1 < 0.01		15	460	8	< 2	10	15 < 0.01	< 10	< 10	< 10	43	< 10	108
92HMS 0+10S	201	229	1 < 0.01		13	140	2	< 2	10	20 0.02	< 10	< 10	< 10	64	< 10	62
92HMS 0+20S	201	229	2 < 0.01		24	250	< 2	< 2	10	21 < 0.01	< 10	< 10	< 10	48	10	176
92HMS 0+30S	201	229	3 < 0.01		111	270	26	< 2	4	116 < 0.01	< 10	< 10	< 10	29	< 10	280
92HMS 0+40S	201	229	4 < 0.01		96	290	38	< 2	10	62 < 0.01	< 10	< 10	< 10	108	< 10	270
92HMS 0+50S	201	229	5 < 0.01		165	290	158	< 2	25	51 < 0.01	< 10	< 10	< 10	139	< 10	298
92HMS 0+60S	201	229	1 < 0.01		114	230	24	< 2	11	86 0.02	< 10	< 10	< 10	90	10	194
92HMS 0+70S	201	229	3 < 0.01		115	340	42	< 2	11	78 0.02	< 10	< 10	< 10	105	10	306
92HMS 0+80S	201	229	9 < 0.01		48	310	62	< 2	6	135 < 0.01	< 10	< 10	< 10	82	10	196
92HMS 0+90S	201	229	8 < 0.01		29	250	40	< 2	4	113 0.04	< 10	< 10	< 10	60	< 10	122
92HMS 1+00S	201	229	1 < 0.01		5	60	20	< 2	2	30 0.02	< 10	< 10	< 10	29	< 10	48

CERTIFICATION: *ghai J Ma*

DWG 110  
CLAIM MAP

DATE: OCTOBER, 1992  
BY: P.A./p.e. FIGURE: 2  
Prepared by DIGITAL GEOGRAPHICS CORP.

093075

LEGEND

- TRENCH
- ROCK SAMPLE
- SOIL LINE
- WORK CERTIFICATE NUMBER

SCALE 1:50,000  
KILOMETRES

