

**2001 Geological & Geochemical Report**

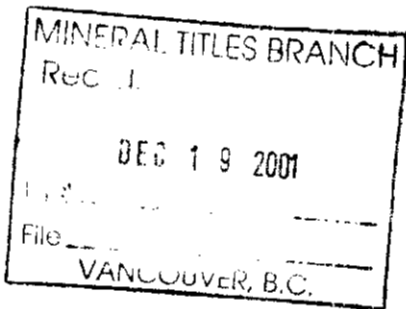
**on the Homestake Ridge Property**

**Skeena Mining Division**

**British Columbia**

**Lat. 54° 45" Long. 129° 35"**

**NTS 103P/12E & 13E**



**For-Teck Cominco Ltd.**

**December, 2001**

**By G.Evans, J.Lehtinen**

**GEOLOGICAL SURVEY BRANCH  
ASSESSMENT REPORT**

**26,719**

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## 1.0 – Introduction

This property has seen a prolonged period of exploration from 1914 to the present. The Homestake Ridge property is partially owned at present by Steve Coombes and optioned to Teck Cominco Ltd. who can earn a 100% interest in the property (2% NSR retained by Coombes). The balance of the property is owned 100% by Teck. Work in 2001 by Teck Cominco Ltd. was restricted to detailed mapping and rock sampling on the property. Work was focussed on determining the geological environment on the property and to examine the styles of the numerous mineralized occurrences. The property has in excess of 300 mineral showings hosted in lower Jurassic Hazelton volcanics and recently recognized lower Jurassic intrusives equated to Goldslide intrusives. There is potential for Eskay analogue VMS systems on the property and Red Mtn./Premier intrusive related high grade (Au-Ag) vein systems and a couple of bulk tonnage Au-Ag and Cu-Au-Ag targets on the property.

### Location and Access (Fig.1)

The Homestake Ridge property is located approximately 32 kilometres southeast of Stewart on NTS 103P/12E and 103P/13E centred near 55 degrees 45 minutes north, 129 degrees, 35 minutes east. The property is approximately 5 kilometres north of the Dolly Varden camp and is located 25 kilometres north of tidewater and the community of Kitsault along the Kitsault River. The property is accessed by helicopter from Stewart with an old cat trail previously accessing the south end of the property from the village of Kitsault.

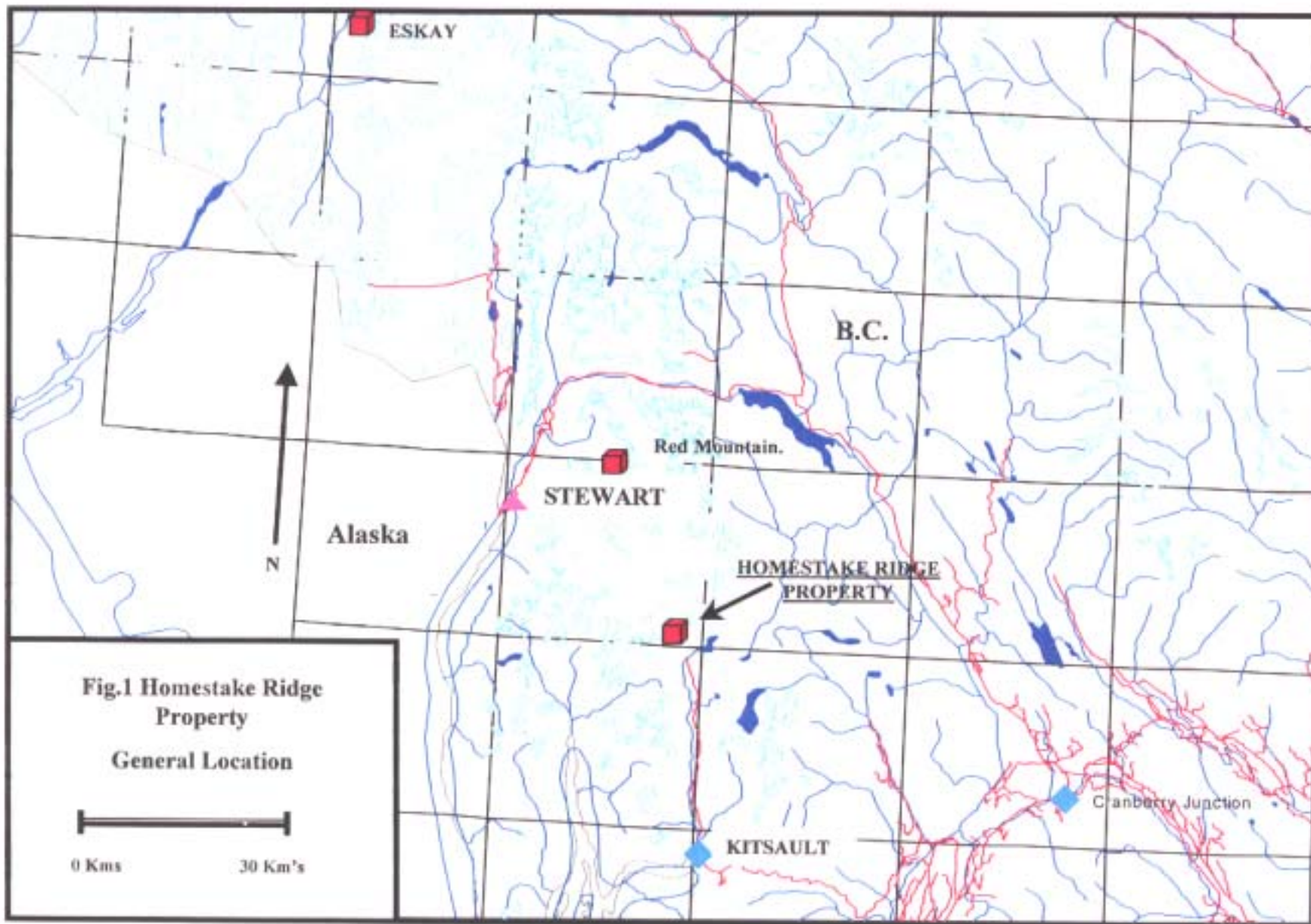
### 1.2 - Property Status (Fig.2)

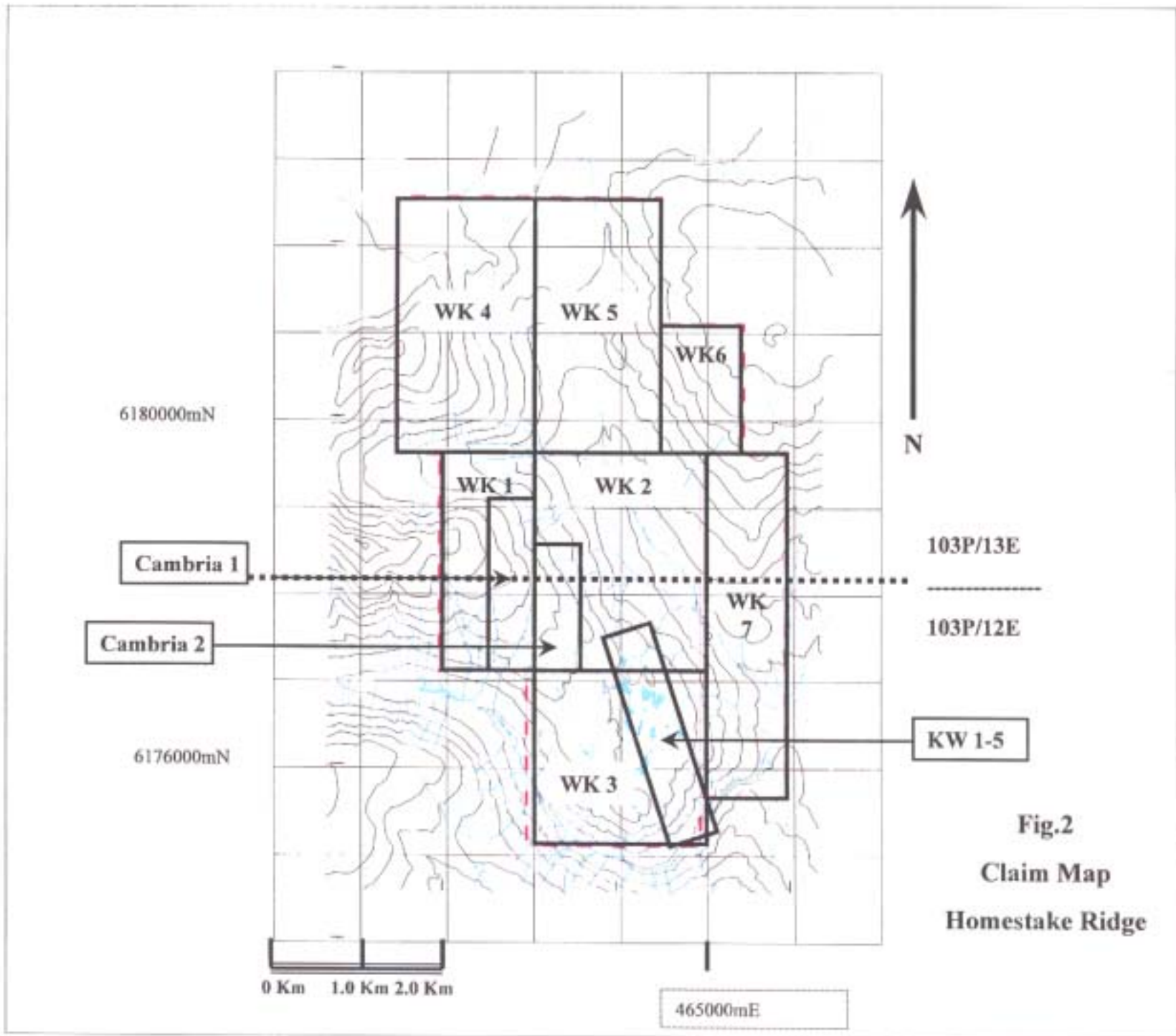
The Homestake Ridge property consists of the Cambria 1 and 2 claims optioned from Coombes and the KW and WK claims owned by Teck Corp, for a total of 116 units.

Claim Name	# of units	Record No.	Expiry Date
WK 1	10	377241	May 23, 2011 *
WK 2	20	377242	May 23, 2011 *
WK 3	16	377243	May 23, 2011 *
WK 4	18	380949	Sept. 20, 2011*
WK 5	18	380950	Sept. 20, 2011*
WK 6	6	383037	Nov. 28, 2011*
WK 7	16	383038	Nov. 28, 2011*
KW 1	1	380951	Sept. 20, 2011*
KW 2	1	380952	Sept. 20, 2011*
KW 3	1	380953	Sept. 20, 2011*
KW 4	1	383017	Nov. 28, 2011*
KW 5	1	383016	Nov. 28, 2011*
Cambria 1	4	251427	May 6, 2011 *
Cambria 2	3	251428	May 6, 2011 *

\* upon acceptance of the assessment report







**Fig.2**  
**Claim Map**  
**Homestake Ridge**

### **1.3 - Physiography and Climate**

The property lies within the Skeena coast physiographic unit and locally covers north-south alpine ridges cross cut by steeply incised valleys hosting E-W trending tributary creeks to the major creek valley (hosting the south flowing Kitsault River). Mountain topography of the property varies from moderate to extreme with elevations ranging from 900-1450 meters. Alpine style vegetation occurs above elevations of approximately 1000 metres while forest vegetation below this elevation consists of fir, hemlock, spruce and cedar with areas of thick brush comprised of alder, willow and devil's club in wet seeps and avalanche areas. Prolific seasonal plants are common forming a thick vegetable mass in some areas. Glaciers within the valleys extend down to lower elevations of 500 metres below the ridges. Valleys are commonly covered by extensive moraines and glacial-fluvial debris.

Precipitation within the coastal climatic zone is very high with winter precipitation resulting in heavy snowfalls of 5-12 meters. Snow covers the property from late September to late June and coastal weather strongly affects airborne access to the property during the summer exploration season.

### **1.4 - History**

The property has seen an extended exploration history including:

1914-1939 -Discovery of a number of gold showings on the Cambria claims as a spinoff from exploration on the adjacent Homestake, Vanguard and Vanguard Gold properties.

1964-1979 -Dwight Collison ( a local prospector) put in extensive time working a number of the showings and staked the entire area.

1979-1980 -Newmont Canada optioned the property from Collison and put in a grid, for mag and Max-Min geophysical surveys as well as geological mapping , with rock and soil collection.

1986-1988 -The open ground was staked by S. Coombes and D. Nelles and was optioned to Cambria Resources Ltd. They conducted geological mapping, rock sampling, blast trenching, and an I.P. and resistivity geophysical surveys.

1989-1991- Noranda optioned the property . They established a grid , and collected extensive silts, soil and rock samples. They also conducted geological mapping and magnetic, I.P. and resistivity surveys followed up by twelve diamond drill holes.

1994 - Property was to be optioned by Lac Minerals until Barrick took over the company.

2000 - The reduced Cambria claims held by S.Coombes were optioned by Teck Corp. and Teck staked the balance of the property. An orientation geological survey was conducted to examine numerous occurrences and to determine the geological environment.

## **2.0-2001 Program**

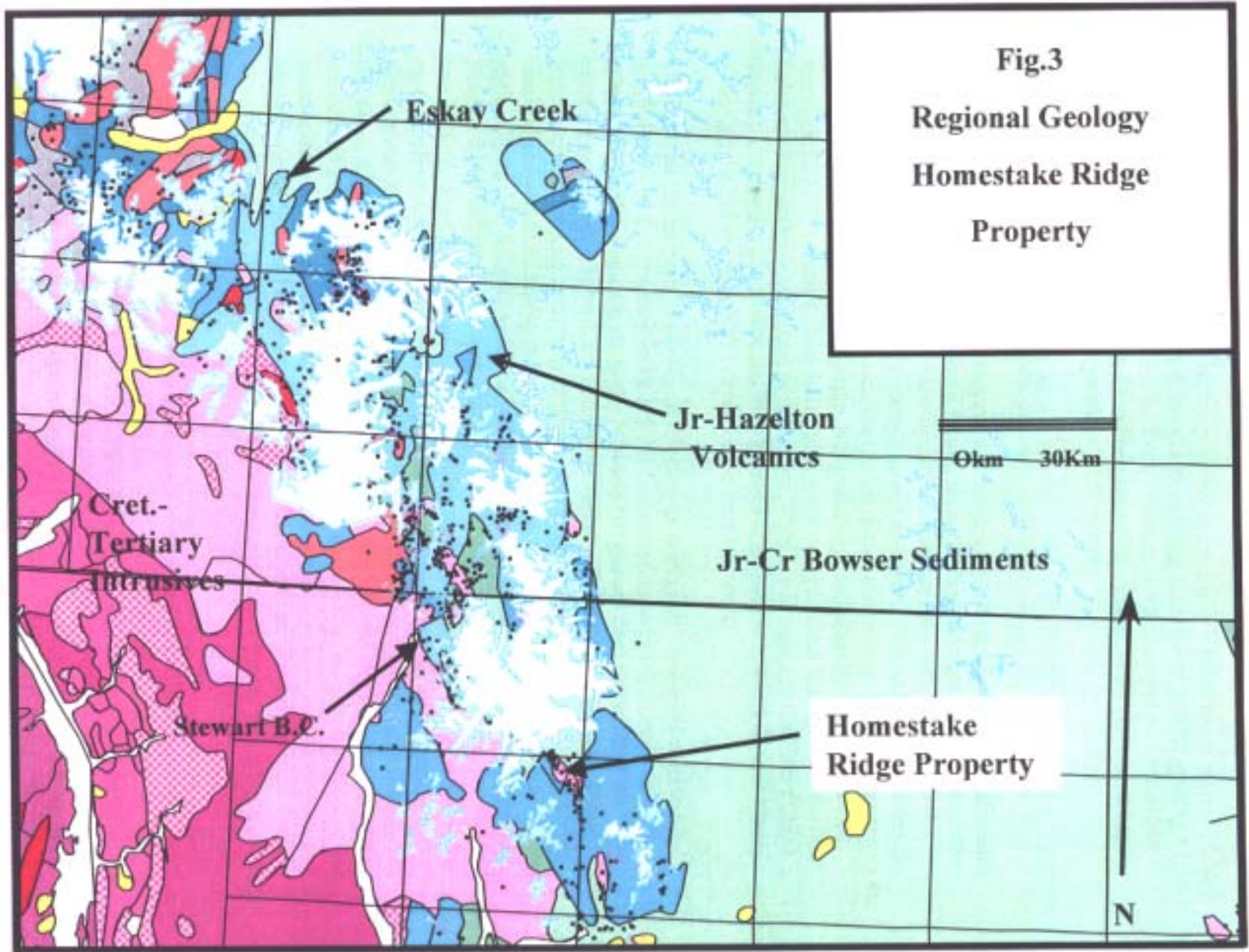
During a period from June 18 to September 26, 2001 an intermittent program of geological mapping at a scale of 1:5000 was carried out by a field crew consisting of up to five geologists and two student geologists. Geological mapping was conducted over the Homestake Ridge property in an area considered the primary focus of the current exploration. In addition, reconnaissance traverses were conducted over surrounding properties. A total of 686 rock samples were collected for analysis by ICP and gold geochem with an additional 31 samples analyzed for XRF major element wholerock analysis. A total of 326 man days were spent on the property examining a number of occurrences and conducting detailed mapping in an attempt to consolidate previous geological mapping and sampling data to further the geological understanding of this complex area. The total number of field mandays worked was negatively impacted due to poor weather as well as a late snow melt and inaccessibility by air.

## **3.0 – Regional Geology (Fig.3)**

The Homestake Ridge property is located over lower to middle Jurassic volcanics, intrusives and sediments deposited in a marine environment along the western margin of the Bowser basin. This sequence is collectively known as the “Hazelton Group” which consists of a well mineralized sequence formed in an island arc environment. This sequence in the Kitsault area is bounded by Tertiary intrusives to the west and the overlying marine-lacustrine Bowser basin to the east. The Hazelton Group in the Kitsault area has undergone west to east compression during the Cretaceous which has resulted in asymmetric folding and thrusting, and produced only low grade greenschist metamorphism of the rocks.

The Kitsault area is the southern limit of a continuous belt of the Hazelton group which hosts the highly profitable Eskay Creek VMS deposit, owned and operated by Barrick Resources and located 80 km northwest of the Homestake Ridge property. This unusual high precious metal content VMS system has a total resource of 2.558 MT grading 48.4 g/T Au, 2152 g/T Ag, 2.5% Pb, 4.16% Zn and 0.54% Cu. This high grade resource is within a substantially larger resource of lower grade material. The Eskay deposit occurs in sediments overlying felsic volcanics in a setting similar to that seen on the Homestake Ridge property. Another system that remains undeveloped is the Red Mountain deposit with a resource of 13.2 Mt @ 0.074 opt Au. Wheaton River Minerals is presently exploring the potential of developing a higher grade portion of this system. The system is related to ~190 mya Goldslide intrusions which are also present on the Homestake Ridge property.





Located 4 to 5 km south of the property is the Dolly Varden camp owned by New Dolly Varden Minerals Inc. where there is an existing resource of 515 Kt grading 11.04 opt Ag. Previous production from the Dolly Varden, North Star and Torbrit mines totalled 19.9 million oz. Ag, and 11 million lbs of Pb. Recent work (Devlin, 87 and others) suggests this system is a possible VMS system.

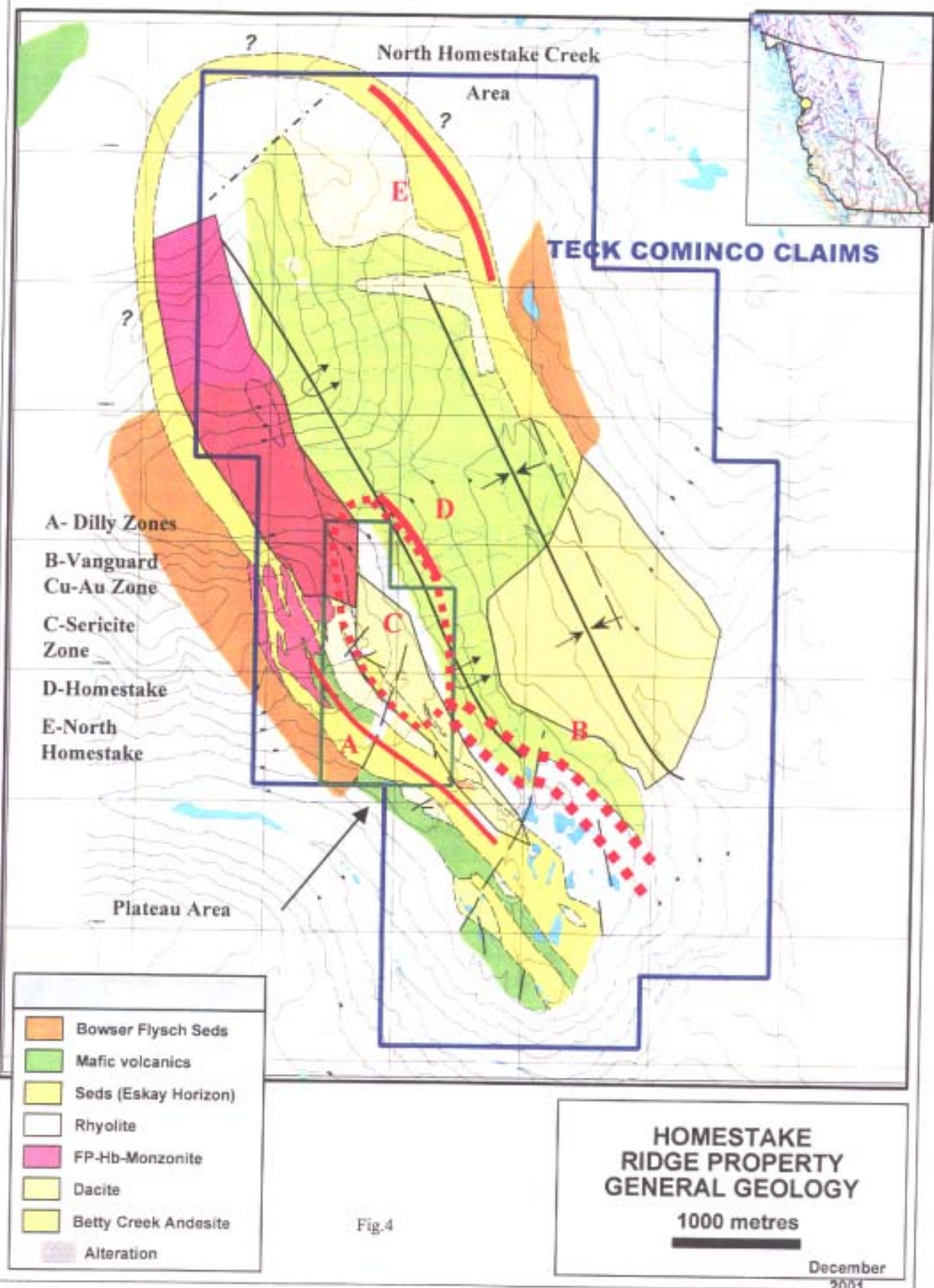
### **3.1 – Property Geology Figs. 4-20**

The property covers a complex sequence of lower Jurassic-middle Jurassic sediments, volcanics and intrusives collectively belonging to the Hazelton group. This sequence hosts in excess of 300 sulphide showings with extensive areas of alteration on the property, which are related to the early Jurassic sequence. This sequence contains the transition from lower Jurassic volcanism to the hiatus and sedimentation belonging to the Salmon River Fm. and Bowser group. Mineralization and alteration is focussed on subvolcanic HFP intrusions and their felsic volcanic equivalent belonging to the Mt. Dilworth Fm. at the culmination in volcanism. This is analogous to the Eskay Creek deposit and there is good potential for a number of economic mineral deposit types including the Eskay creek VMS deposit type on the property.

Structure on the property is slowly developing as stratigraphy becomes resolved. In general units on the property strike NW with common moderately to steep east dips. Early Jurassic basin development along the NW and NE growth faults controlled the emplacement of HFP subvolcanic intrusives and rhyolite dome complexes. These influenced Cretaceous compression directed in a SW-NE direction and developed an asymmetric overturned antiform cored by competent rocks and an open syncline known regionally as the “Kitsault synform” related to the top of the volcanics and overlying Salmon River sediments. Several east directed thrust faults were also observed related to this folding. Numerous small asymmetric folds were noted in the sediments where the main antiform displays steep east dipping west limbs with moderate to shallow east dipping east limbs, this is compatible with observed folds and thrusting in the region (Dawson, Alldrick and Greig). Topographic evidence seen in several locations supports this overturned model. Numerous large NE faults are apparent but no significant offset has been noted on these late (Tertiary) faults which are related to E-W extension resulting in block faulting. Some of these faults have ankeritic alteration along them and often coincide with dramatic facies changes and felsic dome development reflecting a primary structure (ie. graben faults).

As mentioned the primary Jurassic stratigraphic sequence is complex, a general stratigraphic sequence is listed here and the lower Jurassic environment will be outlined in two main areas namely the Plateau area and the northern Homestake creek area. The lowest stratigraphic sequence throughout the property consists of a maroon to green complex andesitic pyroclastic-epiclastic unit (rocktypes 2.1-2.3). This sequence varies markedly with rapid facies changes and contains discrete flows and tuffaceous interbeds. This unit is equated to the Betty Creek Formation and exposures on the property reflect only the top 200-300 meters of this sequence. Above the basal Betty Creek Fm the





sequence becomes complex with rapid changes in facies and rocktypes due to sub basin development.

### **Plateau Area Jurassic Geology and Stratigraphy (Fig. # 5&6)**

Through the plateau area of the property (SW portion) FHP subvolcanic intrusives are present along a NW trending sub basin. These clearly crosscut rhyolites and andesites in this area and appears similar in composition to Goldslide intrusions seen at Red Mtn. (~190 MYA) located 25 km's to the NW of the property. The HFP subvolcanic intrusives are multiphase and form QFP cryptodomes at the the paleosurface within the Salmon River sediments and debris flows. In many areas they actually breach the primary seafloor as demonstrated by the common presence of peperites and HFP fragments within the surrounding sediments. In the west-central portion of the property the HFP intrusive forms a large coarser grained multiphase core area intruding much of the sequence. The basin model is supported with a similar timing, from core intrusions by the FHP Monzonite at a volcanic centre to distal contemporaneous sedimentation.

A gradational transition to overlying sediments on the west side of the thickest portion of the FHP monzonite suggests this was a paleo topographic high with sediments thickening to the SE basinwards. This is also supported by an apparent thick proximal rhyolite dome thinning and developing lobate features to the SE. These all reflect the intrusive core occupied a volcanic edifice within a sub basin deepening to the SE. The HFP intrusives are multiphase and forms sills and dykes within rhyolites and overlying sediments but ultimately form distinctive QFP and HFP cryptodomes within debris flows (unit 2.4).

The main rhyolite dome in the plateau area is thickest south of a NE fault (possibly a primary growth fault) and thins markedly SE into a thicker sedimentary basin. This felsic dome is similar visually and chemically to the Homestake creek felsic dome with many similar textures including flow banding, hyaloclastites and pyroclastics. Stratigraphically overlying sediments consist of mudstones and siltstones with limited chert conglomerates in the thicker portion of the basin to the SE. Locally thin rhyolite fragmental units persist up into the sediments above the rhyolite dome. Overlying the entire mudstone/siltstone sequence is a complex debris flow unit (unit 2.4) with a variable tuffaceous/siltstone matrix containing fragments of rhyolite, andesite, HFP intrusives, sediments and locally basalt flows (unit 1.1). The QFP cryptodomes were emplaced into this unit which was also contains the basalt flows, all likely restricted to this sub basin.

Extensive alteration and mineralization are contained within this sequence and form a vertical sequence similar to the restored Jurassic stratigraphic sequence. The alteration is consistent with a large hydrothermal cell related to felsic volcanics and HFP subvolcanic intrusives and agrees well with the subaqueous hot spring VMS Au-Ag model. This hydrothermal cell is much larger, more diverse and contains higher precious and base metal values than elsewhere on the property. This is likely due to the high volume of material within the proximal magma chamber. The lower portions of the sequence are pervasively chlorite and sericite altered in the feeders and pipes below the paleosurface.

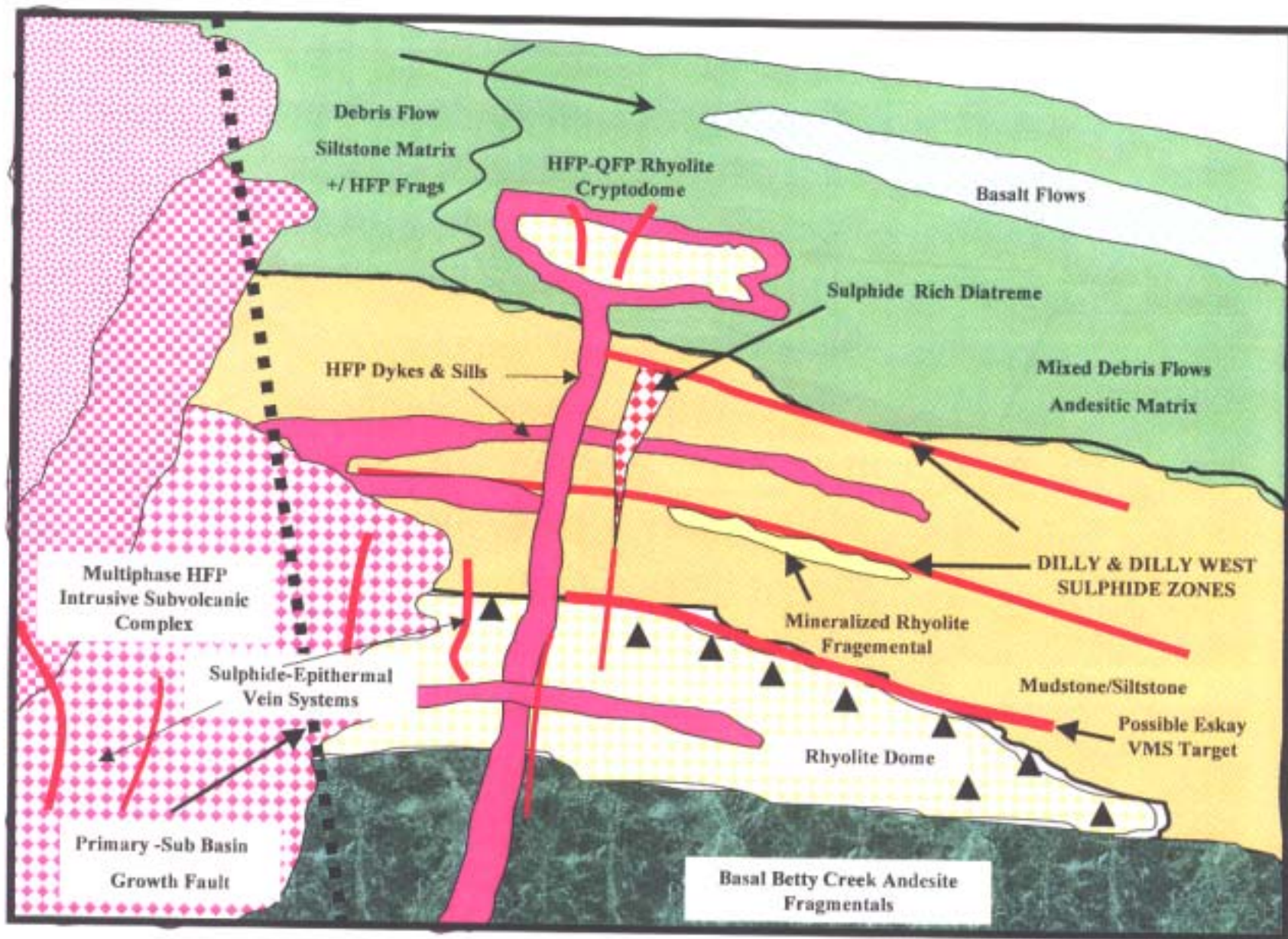


N

Fig.5

SCHEMATIC CROSS SECTION OF  
THE PLATEAU AREA

S



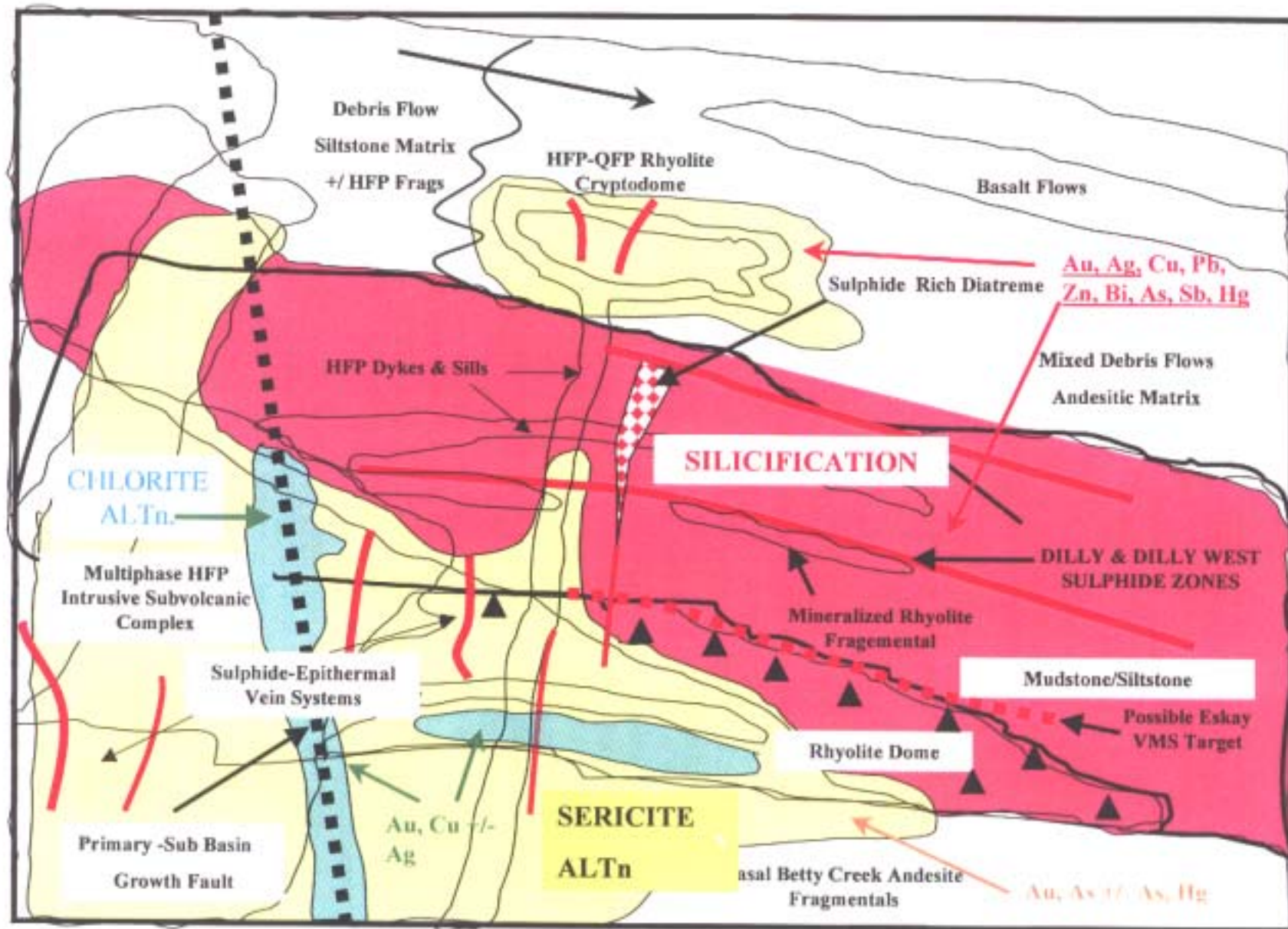


**SCHEMATIC CROSS SECTION OF  
THE PLATEAU AREA With  
ALTERATION**

N

Fig.6

S



Several styles of mineralization are associated with these zones of alteration and are discussed in detail in the alteration and mineralization sections. In general both high grade (Au +/- Ag, Cu) epithermal style targets and bulk tonnage targets exist in the sericite alteration. Bulk tonnage and high grade Cu, Au, Ag targets are present in the more discrete pipe like chlorite altered zones. The priority target areas are located in overlying sediments above the large rhyolite dome. Both the sediments and upper portion of the rhyolite domes are pervasively silicified at the upper portion of the hydrothermal system. Numerous styles of mineralization exist in this area including, sulphide veins, epithermal style veins, sulphide stockwork, sulphide rich diatremes and stratabound sulphides now known collectively as the "Dilly" and "Dilly West" zones. These are attractive targets with high values in Au, Ag, Pb and Zn. These VMS style showings have a distinctive metal suite highly anomalous in As, Bi, Cu, Hg and Sb and have numerous similarities to the Eskay Creek VMS system.

### **Homestake Creek Jurassic Geology and Stratigraphy (Fig#7)**

The stratigraphic sequence is somewhat different at the north end of the property in the Homestake creek area, largely reflecting differences in individual sub basins. The north end of the property has a well exposed moderately east dipping sequence with tops evidence clearly outlining an upright sequence on the eastern limb of the antiform and extending across the Kitsault synform. This sequence from W-E consists of a basal sequence of the green-maroon andesitic pyroclastics and epiclastics correlated to the Betty Creek formation. These are intruded and overlain by a high silica rhyolite dome in excess of one kilometer in surface area, which equates to the Mt. Dilworth formation. This dome commonly displays flow banding, hyaloclastites and margins which are often lobate with darker carapace type features. The dome indicates a flow direction to the south into the deeper portions of the basin away from the main NE conduit fault. A distinctive basal dacite pyroclastic unit forms an ideal marker horizon at the onset of felsic volcanism and is much more extensive than the felsic dome complex. It confirms the timing of felsic volcanism as developing at the break from underlying Betty Creek andesites to overlying Salmon River sediments in much of the Homestake valley. The dome has intruded into and is overlain by calcareous mudstones, grits and conglomerates of the Salmon River formation. Small rhyolite dykes and small rhyolite cryptodomes persist up into overlying mudstones again confirming that felsic volcanism and sediments are coeval. These sediments contain numerous belemnite, brachiopod fossil rich beds and coarser sections with angular rhyolite fragments and sulphide fragments reflecting proximal debris flows and pyroclastics. Sediments consist of mudstones, argillites, wackes and conglomerates all of a shallow marine origin. These show a general gradation from coarse felsic pyroclastic/epiclastic units through concretion rich mudstones to progressively finer laminated mudstones/siltstones often with marcasite rich beds. This reflects a fining upwards into the Bowser basin and large scale basin development at the end of Hazelton volcanism.

South of the main rhyolite dome numerous small ie.100 by 200 meter dacite domes crosscut Betty Creek andesites and form small localized domes. These form locally lobate

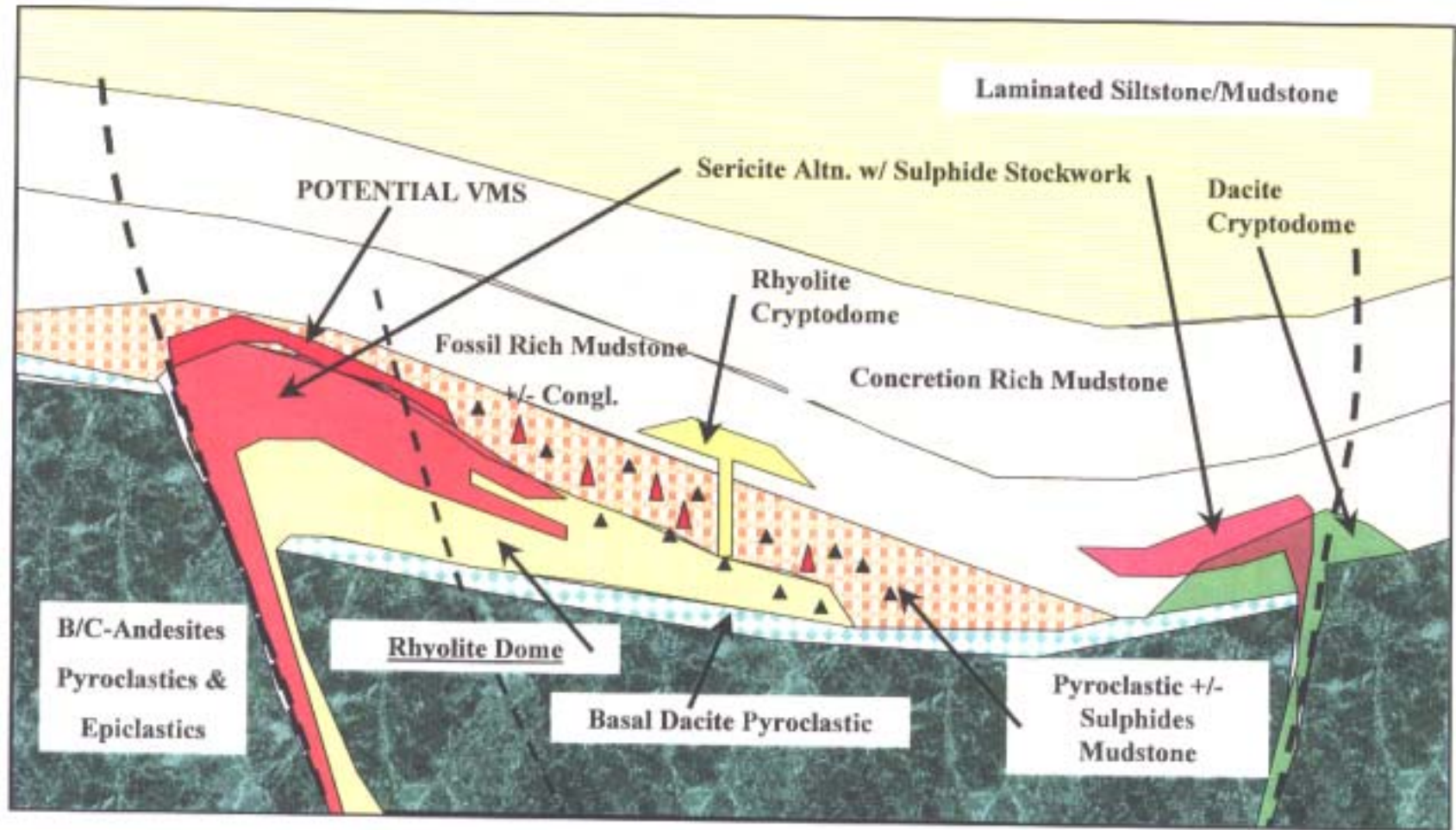
Fig.7

North Homestake Creek Zone

Schematic Section

NW

SE



features and have distinctive autobrecciated margins and maybe originally rhyolite in composition with significant contamination from the enveloping andesites. These small domes commonly have localized sericite alteration and pyrite veinlets and stockwork associated with them. The large rhyolite dome also has extensive pyrite veins and stockwork associated with sericite alteration. These altered and mineralized zones often form subvertical feeders and form much more lateral blanket like zones at the top of the felsic domes at the sediment contact. Overlying sediments contain high levels of disseminated pyrite 10-30% and occasional sulphide fragments up to 5 cm in diameter confirming the exhalative nature of mineralization. Base and precious metal values are generally lower than the plateau area but are often anomalous in Au, Ag, As, Hg, Pb, Sb and Zn over a large area and are potentially significant. It is also interesting to note the epidote/calcite altered structures and replacement zones are located within underlying Betty Creek andesites between the rhyolite dome and southern dacite dome complexes. This fits well, as the alteration is believed to have formed due to seawater recharge sites between the hydrothermal cells proximal to the felsic domes. The most promising Eskay analogue in this area is extensions of the rhyolite dome to the NE under the Kitsault glacier.

### **3.3 ROCKTYPES**

The following is a description of the individual rocktypes encountered on the property. A main decision was to map the geology based on lithologic units rather than mapping stratigraphically to allow the geologic picture to develop without too many biases.

**Unit 1.0** Mafic Basaltic Volcanics (Present both in Betty Creek Fm and the Salmon River Fm)

#### **1.1 Basalt Flows –**

These units are a distinctive package along the southwestern portion of the property and are easily distinguished in the field by the presence of pyroxene phenocrysts. The matrix is a fine grained mafic matrix with pervasive chlorite carbonate alteration which develops a distinctive brown coloration when weathered. These typically contain 10-50% 1-3mm pyroxene phenocrysts and a strong magnetite component which allows easy identification in the field. The discrete flows commonly contain 5-20mm amygdules and margins are commonly autobrecciated. Large amounts of reworked basalt fragments are common in the debris flows adjacent to basalt flows. Limited wholerock XRF supports a basalt protolith such as sample # 258969 being representative ie. 48.8% SiO<sub>2</sub>, 14.4% Al<sub>2</sub>O<sub>3</sub>, 7.7% MgO, 3.9% Na<sub>2</sub>O, 0.9% K<sub>2</sub>O, 0.67% TiO<sub>2</sub>.

#### **1.2 Flow Breccias –Autobreccia-**

These units are discussed above.



### 1.3 Flows -Resedimented/ w volc. wackes

### 1.4 Tuffs

Components of Basalt wackes and tuffs are present proximal to basalt flows but are lumped into unit 2.4 for mapping purposes.

## **LOWER JURASSIC**

### **Betty Creek Formation**

#### **Unit 2.0 Intermediate-Andesitic Volcanics**

##### **2.1 Andesite Flows**

Commonly green to maroon in colour and varying from aphanitic to feldspar phyric. Feldspars vary from euhedral to anhedral crystals. Rare amygdaloidal flows with quartz ?? or calcite infill. This unit represents a small percentage of the rocks mapped in the area.

##### **2.2 Maroon/Green Flow Breccias-volcanoclastics \***

Dominantly maroon with lesser green volcanoclastic rocks are the most prominent unit within the map area. The volcanoclastic rocks are generally subdivided into autoclastic breccias and pyroclastics. The flow breccias appear to be restricted to minor flow top or flow breccias with angular, monolithic fragments incorporated in a matrix of similar composition. The pyroclastic breccia deposits represent the largest proportion of rocks exposed in the mapped area. These rocks likely interfinger with debris flow deposits and in some cases are indistinguishable due to rapid facies changes. Breccias range from lapilli to block sized fragments commonly matrix supported in a fine maroon matrix. Fragments are commonly fine grained to feldspar phyric and can be either heterolithic or homolithic. These rocks comprise the majority of the Betty Creek Fm. seen on the property.

##### **2.3 Maroon/Green Epiclastics**

Maroon with lesser green epiclastics occur throughout the Upper Betty Creek formation in the map area. The epiclastics range in fragment/clast size from mudstone to conglomerate and are found at any level within the local stratigraphy, although they appear to be more prominent within the upper rock units. This unit is dominated by moderate to poorly bedded silty mudstone. Thickness and lateral continuity of these finer grained sediments appears to be restricted possibly due to deposition within restricted, minor basins.

**2.4 Debris Flow mixed tuffs/sediments w/ mafic, felsic , HFP intrusive and sediment fragments (N.B. this sequence is believed to be a local unit within the Salmon River sequence.)**

Debris flow and/or lahar deposits were recognized interfingering with volcanoclastic and flow deposits along the western portion of the map area. Lapilli to ash tuffs composed of lithic and crystal fragments as well as epiclastic and sedimentary rocks occur within the intermediate andesitic package. This unit contains both mudstones and pervasive sericite altered andesitic tuffaceous matrix with a complex variety of rock fragments. This sequence shows a large diversity reflecting rapid localized facies changes. In the central portion of the property the unit consists of a mudstone matrix dominated by subangular HFP and Felsic fragments with a gradation upsection to the west into sericite altered andesite tuffs. To the south this section becomes a more sericite altered andesitic matrix with mudstone fragments and lesser felsic and HFP fragmentals. Proximal to basalt flows this unit contains an abundance of Px rich basalt fragments and grades into basalt matrix lahars.

**Felsics are equivalent of Mt. Dilworth Fm.**

**Unit 3.0 Felsic Volcanics- Dacite/Rhyolite**

**3.1 FP Dacite Flows/Domes/Dykes**

Dacite flows and domes appear to be restricted to the uppermost interval of the Betty Creek formation as well as in the overlying Salmon River formation in the Homestake Creek area. The dacite is commonly darker weathering than the rhyolite, and generally is composed of a strong proportion of hyaloclastite. The dacite is aphanitic, medium to dark coloured and siliceous with some chlorite in the matrix and as cross cutting veinlets. Spherulites are common within the upper two metres of the flows. Flow domes encountered during the current mapping were restricted in lateral extent to a few hundred metres. The leading edge of the flows were commonly lobate and were very distinctive in mapping the front or leading edge of the unit. The dacites are likely Mt. Dilworth formation equivalents.

**3.2 FP Dacite Flow Breccias volcanoclastics**

Within the dacitic flows, flow top and flow breccias were commonly recognized. Near the top of the Betty Creek formation pyroclastic breccias were mapped as either dacitic or rhyolitic breccias. These pyroclastic deposits were difficult to classify as either dacitic or rhyolitic and a field determination based on the dominance of fragments of either dacite or rhyolite composition determined the classification of these units. A distinctive dacitic pyroclastic horizon forms an apron at the base of the rhyolite domes and in the contact area above Betty Creek andesites and below the Salmon River mudstones. This forms a distinctive marker horizon at the stratigraphic

equivalent of the base of the felsic domes with distinctive felsic and chlorite altered angular 1-10cm fragments in a fine grained dacitic matrix.

### 3.3 Dacite Tuff

Limited areas of very finely laminated dacitic tuffs were observed with a maximum of 10 meters thickness. These units display the typical aphanitic pale to dark green dacitic matrix but contain well laminated 2-3mm scale 0.5-1.0mm diameter ash beds.

### 3.4 Flow Banded Rhyolite domes/dykes

The rhyolite is typically pale cream to buff or variably pale green-grey. It is siliceous, aphanitic to weakly feldspar porphyritic with rare quartz eyes. Weak iron stain on the weathered surface is commonly associated with fine-grained pyrite. Features of the rhyolite include distinct flow banding which is commonly disrupted and irregular near the margins, and minor spherulites observed over narrow intervals near flow tops. Near the margins of the rhyolite occur distinct black hyaloclastites and peperites produced due to contamination from introduced material resulting in colour and possibly chemistry changes. The hyaloclastites typically form on the top and margin of the domes with contamination of generally mudstones. Owing to the viscous nature of the rhyolite flow domes the lateral continuity of the rhyolite is very limited. The distal portions of the domes typically display lobate structures and occasional pillows. These rhyolites have been interpreted to be Mt. Dilworth formation equivalents. Limited wholerock sampling ( only 6 samples) indicates an average of 77% SiO<sub>2</sub>, 10.6% Al<sub>2</sub>O<sub>3</sub>, 0.9% Na, 3.5% K and 0.21% TiO<sub>2</sub> which is similar to Eskay felsic volcanics. The only marked difference is a slightly higher , more typical TiO<sub>2</sub> content. The difficulty with the wholerock sampling is an attempt to collect a "least altered" suite shows a wide composition range reflecting significant alteration is present and this makes the protolith composition a difficult value to determine.

A distinctive feature along the southwest portion of the property is the transition of HFP dykes into distinctive QFP felsic cryptodomes. This discovery provides a tangible link from the subvolcanic HFP intrusives to the felsic volcanic extrusives. These siliceous domes form at the top of the mudstone/siltstone Salmon River Fm and into the overlying andesitic volcanoclastics of unit 2.4. This unit is commonly rimmed by siliceous HFP while the cores are a siliceous aphanitic matrix +/- 5-20% 1-2 mm plagioclase and quartz phenocrysts.

### 3.5 Mixed Rhyolite Hyaloclastites

(Included in rhyolite package)



### **3.6 Rhyolite Volcanoclastics\***

Rhyolite volcanoclastics can be subdivided into flow breccia, pyroclastic and epiclastic units. Flow top breccias and flow breccias appear to have limited areal distribution within the mapped area and are mapped as strictly a local feature. The breccias commonly have distinct fragments visible only on a weathered surface.

Rhyolite and dacite pyroclastic breccias are difficult to distinguish between each other in a field relationship. The fragments of these breccias are commonly white to light weathering ranging in size from mm to centimetres. Fragments are subrounded to angular and are variable in composition. These breccias are easily mapped as they have a greater lateral distribution relative to the felsic domes and are distinct in appearance with the predominance of light weathering fragments and in some cases are likely redeposited hyaloclastites.

Epiclastic rocks stratigraphically above the rhyolite are commonly light buff to orange brown in colour. The epiclastic rocks are coarse immature sand to poorly sorted conglomerate composed dominantly of rhyolite fragments. These units grade laterally into brecciated fragmental rocks of similar composition.

### **3.7 Tuffs**

Rhyolite tuffs were subdivided into lapilli, crystal and ash tuffs, or any combination of these fragments. The felsic tuffs are generally light weathering and are composed of fragments similar to the rhyolites described in unit 3.4. Crystal tuffs commonly display white, subhedral feldspar crystals ranging in size up to 2 mm. set in variably coloured matrix of ash.

## **Unit 4.0 Sediments-( Salmon River/Bowser Assemblage)**

### **4.1 Mudstone/Siltstone ( This sequence equates to the Lower Salmon River Fm.)**

The mudstone/siltstone is dark grey to black with fine bedding/laminae common on a millimetre scale. The sediments vary from well-sorted siltstone to massive featureless mudstone. Bedding features such as slumping, load casts, soft sediment deformation and rip-up clasts are common. The weathered surface commonly displays varying iron stain due to pyrite/marcasite content and coarser material forms a distinctive orange color likely due to carbonate content. Immediately above the interpreted Betty Creek formation lies a fossiliferous sedimentary package with belemnites and brachiopods. In the northern dome area the sequence consists of a basal mudstone, wacke and felsic conglomerate unit 20-30m's thick grading upwards into a fossil rich mudstone with 5-40 cm carbonate concretions with a thickness of 20-30 meters, and a final gradation into mudstones with increasing laminations from 5% 1-5cm siltstone

laminations to 50% 10-50cm siltstone laminations reflecting a gradation into a more quiescent basin over a 40-50 meter thickness.

#### **4.2 Shale/Argillite ( Generally equates to upper Salmon River Fm. And Lower Bowser Fm.)**

Dark grey to black shale/argillite displays varying degrees of shaley cleavage. Bedding varies between rhythmically bedded alternating dark and light coloured, thin beds/laminae to relatively massive featureless units. Rusty weathering surfaces are common resulting from weathering of diagenetic pyrite/marcasite. Within this unit carbonate/marcasite concretions from 1-10cm. in diameter are quite common. Interbeds of mudstone are quite common as thicker 0.5-1.0m beds. This unit according to C.Greig ( pers. Comm.) is probably part of the Salmon River Fm. rather than the Bowser Group.

#### **4.3 Wacke**

Wacke is medium to dark grey, moderate to poorly sorted, fine to coarse grained and rarely pebbly. Massive to well bedded. Clasts are commonly feldspar, volcanic and mudstone/siltstone fragments. Features within the wackes

#### **4.4 Chert**

At the south end of the property within the mudstone/siltstone sediments a distinctive chert breccia unit is present. This unit is 20-30 meters thick and consists of a siliceous matrix with polyolithic chert and possibly rhyolite fragmentals. The fragments are subrounded 0.5-3.0 cm brown, white and green siliceous and aphanitic fragments.

#### **4.5 Conglomerate**

Poorly sorted, relatively immature with variably sized clasts from pebble to boulder in size. Composition from felsic volcanic to andesitic in a wacke matrix. A restricted sequence as part of the Salmon River Fm.

#### **4.6 Limestone**

Not observed on the Homestake property.

### **Unit 5.0 Intrusives**

#### **5.1 Feldspar/Hornblende Porphyritic Monzonite (FHP) (Goldslide –Texas Creek Intrusive Equivalent)**

The intrusive is commonly medium grey-green on a fresh surface, but displays many variations of colour due to sericite, silica, carbonate and hematite alteration. This unit has been equated by Greig to be equivalent of the Goldslide intrusions dated at Red Mtn. at 190 Mya. The plagioclase phenocrysts vary from widely spaced to crowded and vary in size from less than 1mm. to 1 cm. Euhedral to subhedral crystals commonly make up 60-80% of the total composition. Hornblende phenocrysts are less than 10% of the total rock composition and are lath-shaped, commonly 1mm. x 3mm. Hornblende is commonly altered to biotite and it appears there may be a component of primary biotite. The matrix of the rock appears as a medium green, aphanitic mass of feldspar. The intrusion has been altered to a major degree over much of the property making differentiation between the FHP and porphyritic flows difficult.

This unit covers large portions of the central portion of the property and is clearly a subvolcanic intrusive which in areas breached the paleosurface as cryptodomes with numerous extrusive features. These include fragments of the intrusive within sedimentary debris flows redeposited from in-situ hyaloclastites and extensive areas of peperites. The intrusives display multiple pulses with cross cutting relationships and several styles of alteration superimposed. Some sills within the sediments appear quite passive while dykes appear to feed ultimately up into small high silica QFP cryptodomes within the debris flow sequence.

The diversity of HFP stocks, sills and dykes led mappers to collect a number of wholerock samples of the intrusive (total of 11 rock samples). The samples confirm a diorite-monzonite composition of calc-alkaline affinity compatible with Texas Creek and Goldslide intrusive rocks. Typical least altered rocks contain a range of 55-60% SiO<sub>2</sub>, 3.0-4.3% K<sub>2</sub>O, 2.6-4.0% Na<sub>2</sub>O, 14-17% Al<sub>2</sub>O<sub>3</sub>, 2-3.9% MgO, and .44-.58% TiO<sub>2</sub>.

## 5.2 Granodiorite

Not seen other than as glacial moraine material from outside the property.

## 5.3 Diorite

Not seen other than as glacial moraine material from outside the property.

## 5.4 Lamprophyre

Lamprophyres occur as minor dykes and intrusions which are dark brown-green, of poor competency, coarsely crystalline and commonly weakly iron stained. They appear to be composed dominantly of pyroxenes and biotite. The lamprophyres commonly react with weak acid solution suggesting alteration of the primary minerals. These dykes are generally adjacent NE trending faults and are believed to be Tertiary in age.

### 3.4- Structure

The property displays a relatively complex structural history which is being slowly unravelled. Initial early Jurassic structures appear to have consisted of NW and NE controlled rift basins which controlled the deposition of the early Jurassic sequence. These primary features localized the emplacement of HFP intrusives and felsic volcanic dome complexes which combined with primary faults, largely affected later structural development. The most significant structural event post deposition is large scale NE-SW directed Cretaceous compression. This has developed open to isoclinal disharmonic folds and thrusting. The last structural event was likely a Tertiary event, related to E-W extension and dextral faulting. This on the property has produced block faulting and minor lateral offsets on numerous highly visible NE trending fault structures.

Early Jurassic structures are often reactivated but primary lithologies appear strongly controlled by NW and NE structures. The basal sequence on the property consists of Betty Creek andesitic pyroclastics and epiclastics with few marker horizons which makes it difficult to separate stratigraphically. A more useful control on primary structures is the strong NW alignment of HFP intrusives and felsic dome development along a primary basinal feature with related alteration features. Another strong primary feature is rhyolite dome complexes which at the north end of the property which are clearly emplaced along a NE trending basinal faults. This is compatible with other NE structures which appear to control marked facies changes and control primary early Jurassic alteration patterns. These NE structures and NW trending growth faults are often reflected by marked facies changes in sediments and debris flows.

The major structural activity on the property occurred during the Cretaceous due to NE-SW directed compression. This event has produced open to isoclinal folding with shallow NW directed plunges. The western half of the property is controlled by a large overturned antiform. This large scale fold is focussed along the HFP intrusives and rhyolite dome complex which forms the core of the antiform due to their massive competent nature which would behave in a non ductile manner. This fold is disharmonic with a overturned steep east dipping western limb and a moderate east dipping east limb. The Kitsault syncline long recognized to the south in the Dolly Varden area has been extended to the NW through Homestake creek up to the Kitsault glacier. This synform remains quite open with much of the deformation taken up as east directed thrusts in the Salmon River and Bowser sediments. The Kitsault syncline also appears to plunge to the northwest becoming progressively more open. Sediments behave much more ductile than massive volcanic flows and HFP intrusives and sediments take up much of the strain in local open to isoclinal folds throughout the property often focussed along small scale east directed thrusts. Along the east side of the West Kitsault River at the SE corner of the property there is likely another large thrust developed adjacent to a synform bringing the upper Salmon River andesitic debris flows over Betty Creek pyroclastics but this feature is poorly exposed.

The latest event is NE trending (sometimes reactivated) faults which show as prominent airphoto linears and on a smaller scale show up as prominent gullies with extensive ankerite alteration. These are related to Tertiary E-W extension and generally only have minor lateral offsets ie. 20-100 meters. The apparent offsets appear to be largely a reflection of block faulting with numerous horst and graben features with an unknown amount of vertical offset.

### **3.5- Alteration and Mineralization**

There are a number of styles of alteration and mineralization on the property generally related to the early Jurassic sequence and these will be discussed individually with their genetic relationships. In general the region has seen regional metamorphic alteration of a sub-greenschist facies so much of the alteration on the property predates this Cretaceous metamorphism and is related to hydrothermal alteration associated with HFP intrusives and related felsic volcanism in a VMS style environment.

#### **Sericite Alteration**

Extensive areas of pervasive moderate to intense sericite alteration affects all rocktypes and masks primary textures in a area up to 2500 meters (NW) by 1000 meter (NE) in the central portion of the property. This feature is irregular and affects, andesites, rhyolites and several phases of HFP intrusives but in some locations can be cut by relatively unaltered HFP intrusives. A second large area of pervasive sericite alteration occurs within the HFP intrusives at the south central portion of the property and covers an area of up to 1000 meters NW by 600 meters NE. In general the sericite alteration develops a pervasive weak NW trending foliation with an average of 5-10% disseminated pyrite with a white to pale grey coloration and only rarely are primary textures visible. It is quite common to have 5% interstitial carbonate present within the pervasive sericite alteration which develops large gossanous areas. While generally widespread and amorphous many more intense sericite altered areas are structurally controlled ie. the Homestake showing area, and these zones are clearly structural following both NW and NE as well as E-W fault zones. This program and previous operators have noted it is common to have associated potassium flooding and localized chlorite development within the sericite alteration as well as larger areas of pervasive silicification. Silicification is commonly present both coincident with sericite alteration but most commonly slightly postdating. Sericite alteration has been seen postdating chlorite alteration ie. Vanguard areas and predating a number of smaller areas again supporting both styles of alteration are synchronous. Moderate sericite alteration is also seen related to early rhyolite domes at the north end of the property and related to high level QFP rhyolite cryptodomes along the SW portion of the property. This spectrum of sericite alteration indicates a relatively short period of alteration from the onset of felsic volcanism to the late phases of HFP and felsic cryptodome emplacement all within the Salmon River Fm.

Noranda's 1989,90 work concentrated on these areas which have extensive Au, Cu, Hg +/- As, Pb, Zn soil anomalies associated with them and widespread anomalous rock values over much of the area ie. 2001 sampling #258054 w/ 4.98 g/t Au/ 2.0 m's, #258067 w/ 1.48 g/t Au rep. Typically sampling of the sericite/pyrite alteration produces values of 100-1000 ppb Au, 1.0-4.0 ppm Ag, 100-4600ppm Cu, 40-200 ppm As and erratic elevated Hg, Sb, Pb and Zn. Numerous occurrences have been located in these alteration zones including Fox, Tip Top, Gold Reef, Matilda, Silver Tip and the Homestake occurrences. In areas related to the high level QFP cryptodomes a number of sulphide vein occurrences including Rambler were mapped and sampled but will be discussed separately. Many of these will be discussed individually but higher grade mineralized zones are generally related to structural zones containing quartz-calcite veins and breccias in sericite altered wallrock with values in Au, Ag, Cu, Pb and Zn. Typically the Au:Ag ratio is low in the 1:1 to 1:10 range. This area has a large resource of gold in a bulk tonnage target but the most prospective potential is believed to be the high grade potential along HFP/volcanic contacts ie. the Homestake showings. All this evidence supports the model that the widespread sericite alteration was produced during a short period in the early Jurassic associated with felsic volcanism and related HFP subvolcanic intrusions and extrusive equivalents. This alteration is related to a large hydrothermal cell related to these intrusives and volcanics and as at Eskay is generally best developed in the footwall sequence. This is similar to Alldrick's shallow subaqueous hot spring VMS model with quartz-muscovite-pyrite alteration associated with near-footwall stockwork zones. Field evidence supports this location with stratigraphic restoration indicating the sericite alteration formed only 100-400 meters below the paleosurface.

### **Main Occurrences Associated with Sericite Alteration**

#### **Homestake Showings**

The Homestake showing area was mapped at a scale of 1:5000 during the 2001 field season. Numerous trenches and adits excavated during the last century are a strong indicator of the locale of mineralization. Throughout the north Homestake Ridge area, bedding measurements indicate a sequence of volcanic and sedimentary rocks, which typically dip to the east-northeast and are right way up. The volcanic-sediment package has been intruded by a hornblende-feldspar porphyry (HFP) interpreted to be an equivalent member to the Jurassic age Goldslide Intrusions. This intrusion has been mapped along strike, north of the Homestake glacier and to the southeast extending to the limit of current mapping approximately 3.5 kilometres south of the Homestake Glacier. Highly gossanous outcrop extending beyond the limit of mapping to the southeast suggests the intrusion continues along strike. The HFP appears to follow major structural elements as defined by both large and small-scale structures. Varying degrees of exposure of the HFP along strike suggest either some degree of block faulting as well as plunging of the fold axis shallowly to the NW as evidenced by the lesser degree of HFP to the south of the map area (hence higher level of exposure). Large exposures of HFP to the north suggest a deeper erosional level of the HFP or a larger exposure of HFP related to

topographic effects. The HFP body appears to be composed of numerous phases as evidenced by grain size, compositional and textural characteristics. In addition there are large areas of intense to strongly altered HFP with varying intensity dominated by sericite alteration with more restricted silicification. This suggests emplacement and subsequent alteration by a later hydrothermal system. To complicate mapping the HFP may also have an extrusive equivalent, which is difficult to distinguish from the intrusive member without field relationships.

Mineralization appears to be controlled by a strong structural element as witnessed in the Smith adit entry and along the numerous trenches. On the northern limit of the mineralization, the Smith Adit was collared and driven along the strike of quartz-sulphide-barite mineralization hosted in vein/vein breccia mineralization, which parallels a major fault striking 130 degrees and dipping to the southwest at 32 degrees. This general trend can be followed to the southeast along strike to the area of the Myberg adit. At this point there appears to be a blowout of veining and mineralization as well as a flexure or deviation in the main fault structure. As noted on Noranda's 1989 plan map, the pattern of trenching follows two distinct trends, which intersect in the area of the Myberg adit and trenches 1, 2 and 3. This pattern suggests that the trends are fault splays. The best mineralization discovered in trenches and in waste dumps is variable and occurs as: 1<sup>st</sup>- barite veining with a strong percentage of galena and sphalerite (ie sample # 258009 w/ 1.94% Cu, 2.11% Pb, 10.65% Zn and 8.8 g/t Au, 2<sup>nd</sup>- relatively barren looking quartz with minor pyrite and chalcopyrite (ie sample # 258698 w/ 2.94% Cu, 19.09 g/t Au), 3<sup>rd</sup>- strong chalcopyrite and pyrite mineralization (ie. sample # 258009 w/ 15.8% Cu, 168 g/t Ag and 58.88 g/t Au). Strong secondary mineralization with intense malachite and some chalcocite was common in the trenched area between the Smith adit and trench 3.

The variation in mineralization, as well as brecciated mineralization, suggests multiple phases of mineralization. These styles are now recognized to have formed very shallow (ie. less than 100 meters) below the Salmon River sediments. This mineralization formed near the carapace of the HFP and the high grades reflect its epithermal multiphase nature.

The Homestake Ridge trenched area appears to lie at the contact between the andesite volcanics and the HFP and are hosted within the HFP intrusive. This contact is complex due to the faulting, multiple intrusive and mineralizing events, all which make interpretation difficult. In addition to veining parallel to the strike of the fault structures, veining in the trenches was observed at a high angle to the strike of the NW-SE fault structure and main lithological contact. This pattern of veining may indicate dilational features associated with the faulting which has produced a series of parallel veins, or ladder veins, along the contact of the intrusion and volcanics. Further field studies and trenching should be conducted to determine if this extends to the south. To the south the contact of the HFP extends under talus cover but extensive Au in soil samples are present along this arcuate contact, offering a high priority target along a 800 meters strike length.

### **Fox, Tip Top, Gold Reef, Matilda, Silver Tip showings**

These are a few of numerous showings located in a large area south of the Homestake showings. These showings have seen very limited work but are generally similar in style to the Homestake showings and are hosted in an extensive area of sericite altered HFP intrusives. More than 50 sulphide occurrences have been located in this general area which has pervasive and often intense sericite/pyrite alteration over a 2+ square kilometer area so specific locations of the old workings are difficult to locate. Matilda is the only vein occurrence with adit development, the balance consisting of numerous trenches. Much of the area consists of strong pervasive sericite with 10-15% pyrite and random sampling of this material in 2001 resulted in values of 100-1000 ppb Au w/ elevated Cu values. Most of the higher values in the area are from quartz/ calcite/barite veins from 30cm to greater than 6.0 meters in width with variable amounts of pyrite, chalcopyrite, galena and sphalerite .

These veins as with the Homestake showings have a number of trends including 090, 045, 330 strikes. As previously mentioned they typically have a low Au:Ag of 1:1 to 1:10. Previous sampling has resulted in high gold values such as 1.0 m of 21.5 g/t Au at the Fox showing, and 9.8 g/t over 3.2 m's in the Tip-Top area. The most prospective targets are the western Silver Tip-Matilda trend and the eastern Tip Top-Fox trend. These isolated showing are along N-S trending contacts of the HFP intrusives and volcanics.

### **Rambler, Iron Kitsault & Others associated with QFP Felsic Cryptodomes**

A number of sulphide vein occurrences are associated with HFP-QFP felsic cryptodomes within a debris flow unit. These veins contain a variety of sulphides within sericite altered selvages both within and peripheral to the cryptodomes. Immediate vein selvages can include a variety of sericite, chlorite, carbonate and silicification.

At Rambler at least three veins trend NW to E-W and samples range from #258982 with grades of 4.58 g/t Au, 179 g/t Ag, 4.56% Cu over 50 cm to #258974 with grades of 1.38 g/t Au, 25.8 g/t Ag and 7.6% Zn. These showings show a similar metal content to showings in silicified areas with high values in As, Bi, Hg, Sb and Pb.

Other vein showings at Iron Kitsault and other cryptodomes to the NW show similar styles of mineralization with values in Au, Ag, As, Cu, Bi, Hg, Pb, Sb, and Zn. The individual veins are of no particular interest but attention should be directed to the top (west) side of the QFP cryptodomes for proximal VMS development as the veins maybe VMS stringer zones.

### **Sulphide Zones in the Homestake Creek area**

Alteration and mineralization is widespread in the Homestake Creek area particularly near rhyolite and dacite dome complexes. These zones consist of diffuse pervasive



sericite, carbonate altered zones of moderate intensity. Typically sulphide stockwork is present within this alteration and consists dominantly of very fine grained pyrite with trace amounts of sphalerite, arsenopyrite. Alteration associated with sulphide veins includes more intense sericite selvages, vuggy silica gel, banded barite and a black sooty fine grained material (possibly pyrobitumen). These sulphide veinlets range from mm scale to veins up to 30 cm in width in discrete high angle structural zones and as blankets on the top of the felsic domes. The most intense and widespread sericite alteration with sulphide stockwork is associated with the main rhyolite dome complex at the north end of Homestake creek.

Float samples from 2000 returned values of up to 4.67% Zn from sphalerite stringers within flow banded rhyolite sourced from this area. While not as anomalous as the plateau region, values from pyrite stockwork in sericite alteration within felsic domes are strongly anomalous for the region with the following ranges Au (10-640ppb), Ag (2.0-43.8ppm), As (100-1300ppm), Hg (500-5860ppb), Pb (100-700ppm), Sb (40-230ppm), Zn (300-46,700ppm).

Sediments directly above and proximal to felsic domes contain fine grained disseminated sulphides in discrete beds ranging from 10-30% in content. Also several of the pyroclastic debris flows on top of the main rhyolite dome contain occasional angular 1-5 cm sulphide fragments. These all confirm the presence of exhalative sulphide activity in this area focussed above the main rhyolite dome. Sampling of these horizons results in similar values and ranges to those found in the sulphide stringers within the felsic dome in the following elements Au, Ag, As, Hg, Pb, Sb and Zn.

Proximal VMS targets in the Homestake valley if preserved would be located under the Kitsault Glacier along the thicker portion of the rhyolite dome. This will require testing by diamond drilling in this area.

### **Chlorite Alteration**

As mentioned in the sericite alteration description pervasive chlorite alteration appears closely spatially and temporally related to the sericite alteration. Pervasive chlorite alteration has been seen crosscutting earlier sericite alteration as well as superimposed by sericite alteration and in some areas co-exists over large broad areas. Pervasive chlorite alteration has been seen replacing large areas of HFP intrusives in the southern end of the property ( an area 300 by 300 meters), extensive structural zones in andesites (ie. Vanguard Gold-Vanguard Copper a 150 by 1800 meter zone) and as pyrite/chlorite altered zones within the main plateau rhyolite dome. Another form of chlorite alteration has been observed a number of times along the selvages of massive sulphide veins in a numerous locations. Typically this rock has a fine grained dark green appearance with an average of 10-20% disseminated pyrite and 10% interstitial carbonate. As with sericite alteration this alteration typically develops a moderate foliation. Chlorite alteration is commonly developed along NW trending structural zones and is not as widespread as sericite alteration.

Mineralization associated with chlorite alteration typically contains high values of Au, Ag, Cu with more erratic values of Pb, Zn. The noticeable differences in metal ratios from sericite alteration include generally higher copper values and a higher Au:Ag ratio ie. 1:10-1:100. The most significant occurrences related to chlorite alteration includes the Vanguard Gold-Vanguard Copper trend discussed later. As mentioned the chlorite alteration occurs synchronous with sericite alteration but appears more structurally focussed perhaps defining feeder pipes. This could reflect a more restricted focus near the structural conduits controlling the hydrothermal cell and is indicated with the high copper content typical of feeder systems in many VMS systems. These structures appear mainly NW striking but also can have NE structural trends. These stockwork and feeder zones are again from 400 meters to essentially the paleosurface when the area is reconstructed.

### **Vanguard Gold -Vanguard Copper Trend**

This area consists of an extensive NW trending structural zone within andesite pyroclastics of the Betty Creek Fm., 150 meters wide by 1800 meters long. To date 36 old trenches and adits have been located along this poorly exposed zone. Where exposed a moderate gossan has developed due to a high disseminated sulphide content in the chlorite alteration. Most of the showings are located on NW subvertical structural zones with diffuse sulphide veins, stockwork, and sulphide breccia zones. Noranda's soil sampling outlines this entire trend with a strongly anomalous Au, Ag, Cu trend. While NW structures are a dominant trend stockworks and several breccia zones also trend in N-S, NE and E-W orientations making this an attractive bulk tonnage target.

Examples of the various styles of mineralization include the Vanguard Gold trenches where a NW trending calcite/barite vein ranges from 1.0 – 2.0 meters in width has been traced along a strike length of 100 meters. This vein has a wide (up to 2.0+ meter) selvage of disseminated sulphides and carbonate which can carry significant Au values. Examples include 6.0 m's at 9.56 g/t Au, 10.5 g/t Ag with only 0.15% Cu. To the NE within 100 meters of the Vanguard showing a number of trenches and adits are developed on several sulphide breccia zones. These sulphide breccia zones consist of sulphide matrix py>cpy with chlorite altered angular to subangular andesite fragments 1.0-5.0 cm in diameter. Chip samples of this area are represented by a 4.0 meter chip @ 1.93 g/t Au, 22.4 g/t Ag and 3.45% Cu.

The Vanguard Copper workings consist of a number of trenches and adits located 1000-1400 meters SE of the Vanguard Gold workings and are of a similar style of mineralization. Numerous sulphide breccia and stockwork zones are present and a typical chip sample ie. #258044 run 3.88 g/t Au, 129 g/t Ag and 11.55% Cu over 4.0 m's. Previous work has outlined a tonnage of 11,800 T @ 2.4 g/t Au, 141 g/t Ag and 8.6% Cu between two levels in the main Vanguard Copper adit. These samples indicate a good grade and the entire zone requires additional work to assess both the potential for these high grade lenses and the bulk tonnage potential. To date the only possible metal zonation

indicates a possible increase in Ag and Cu content to the south. This structural zone possibly represents a pipe to potential overlying VMS systems and Salmon River sediments located directly east of the Vanguard Copper adits do contain a high sulphide content of 15-30% fine grained pyrite. This indicates the area east of the showings should be investigated for potential VMS targets. Unfortunately targets within sediments directly above and to the west of the showings have been eroded.

### **Epidote/Calcite Alteration**

Numerous areas in the north central portion of the property display pervasive epidote/calcite alteration. This alteration has a distinctive apple green color with an average of 5% disseminated pyrite and occurs in 10-20 meter wide NE trending structures and in 20-30 meter thick stratiform replacement zones. These zones of alteration are restricted to andesites of the Betty Creek Fm only and are spatially located in areas peripheral to sericite/chlorite alteration and felsic domes and HFP intrusives. When pointed out to people (ie. Dr. John Thompson) it was suggested these could be peripheral seawater recharge sites. In effect these are the distal end member of the hydrothermal cell and alteration is due to spilitization of the andesites by circulating seawater. Mineralization seen in these zones consists of veins of crudely laminated calcite and barite with up to 50 cm pyrite veins. Trace amounts of disseminated chalcopyrite are sometimes present. Limited sampling ie. # 258352 of these veins in 2001 suggest no elevated elements other than copper ( up to 1.35%) are present which maybe possible from seawater leaching of the Betty Creek andesites which contain a high average copper background.

### **Silicification**

Silicification again appears spatially and temporally related to the large areas of sericite and chlorite alteration. A large NW trending zone 2000 meters long by 300 meters wide has pervasively altered both the upper (western) portions of the rhyolite dome on the plateau and the overlying sediments. To the NW another 400 by 200 meter area of HFP intrusive and sediments at the same stratigraphic level show widespread pervasive silicification. Silicification is generally accompanied by 5-10% disseminated pyrite and develops a milky grey color to rocks which have a cherty appearance with diffuse primary textures. Many of these rocks develop a conchoidal fracture and sediments are difficult to separate from felsic volcanics, particularly where earlier sericite alteration has been overprinted by silicification. Late HFP sills and dykes are generally not affected by this alteration and bracket the timing of alteration, as developing during the late felsic dome development and persisting into the deposition of the sediments of the Salmon River Fm. Sulphide veins with sericite and chlorite selvages crosscut this alteration again reflecting multiple alteration pulses. It is interesting to note silicification is capped by unit 2.4 (andesitic and sedimentary) debris flows again effectively restricting the timing of alteration.

When stratigraphically restored this alteration formed at the highest stratigraphic level and is likely the top end of a coherent hydrothermal system, which includes the sericite and chlorite feeders. This system is areally and stratigraphically restricted but conforms to a large hydrothermal system consistent with a VMS model. In excess of 40 showings are within silicified zones and will be discussed in greater detail later. These showings show greater diversity in styles and sulphide content than generally seen elsewhere on the property. They include stratabound laminated sulphide zones, sulphide veins, disseminated stockwork sulphides and diatremes. Previous documented occurrences include the Camp zone, Cascade Falls, Lucky Strike, and Silver Crown zones. These are now collectively called the "Dilly" and "Dilly West" zones that form stratabound linear trends with strike lengths of 1500 and 600 meters respectively. As well as diverse styles of sulphide occurrences these zones also display unusual metal contents including high values of Au, Ag, As, Bi, Pb, Zn, Hg and Sb. This again is consistent with the alteration zonation and supports this is the top of a subaqueous hot spring VMS system with many of the features of a shallow Au-Ag rich VMS.

### **Main Occurrences Associated with Silicification**

#### **Dilly and Dilly West Zones**

These newly named zones comprise a number of isolated historic occurrences including the Cascade Falls, Camp, Iron Kitsault, Lucky Strike, Silver Crown and Lucky Strike North showings. These areas show diverse styles of mineralization within silicified felsic volcanics and sediments over a strike length of approximately 1.5 kilometers. To date the diverse showings show a strong alignment along stratigraphy with a number of showings being stratabound. In excess of 40 pits, trenches and adits have been located in the area which is poorly exposed. To date the rhyolite-sediment contact is poorly exposed in this area and no mineralization has been seen. Any future trenching of this area should take care to also test the contact as a priority VMS target.

The Dilly West zone has been traced on surface for 600 meters in strike length to date. The Dilly West stratigraphy consists of well laminated silicified mudstones and siltstones directly below the debris flow unit. Showings include massive sulphides stratabound within silicified mudstones, massive arsenopyrite lenses also stratabound and sedimentary diatremes feeding into this stratigraphy.

Massive sulphide showings are located at both the north and south end of this zone and grades are of the the following range 1.0-5.6 g/t Au, 28-195 g/t Ag, 0.2-2.3% Cu, 0.2-0.5% Pb, 0.8-3.8% Zn. These showings contain highly anomalous As, Bi, Hg, Sb over widths ranging from 0.3 to 1.5 meters.

Semi massive to massive zones of arsenopyrite lie along this stratigraphy between the the base metal showing. Arsenopyrite zones can be within HFP sills at this stratigraphic horizon and could be due to either a)-related to intrusives or b)- passive emplacement by HFP sills into the package. These showings have a range of values of 6.1-17.5 g/t Au,

20.4-222.0 g/t Ag, 0.19-0.77% Cu with elevated As, Bi, Hg, Pb, Sb and Zn similar to the base metal sulphides over average widths of 1.0 meters.

A very distinctive sedimentary diatreme crosscuts the underlying stratigraphy and feed into the stratigraphic horizon hosting the Dilly West zone. It is interesting to note the diatreme is crosscut by a HFP sill effectively restricting the timing of this mineralization. Very angular 1-10 cm silicified fragments of siltstone, mudstone and possibly rhyolite are supported in a chlorite matrix with 5-8% pyrite. Margins of this diatreme with surrounding sediments are knife edge contacts and the diatreme appears to widen to the west from 1-5 meters in width. A single grab (#257968) of this style of mineralization produced surprising values of 11.2 g/t Au, and 0.19% Cu reflecting a high gold content. This style of mineralization appears to be a feeder for the Dilly West zone and other feeder areas should be located.

The Dilly zone to date has a longer indicated strike length of 1.5 kilometers and also remains open in both directions. Again a diverse range of mineralization occurs along a discrete horizon which is stratigraphically located 50-100 meters below the Dilly West zone. Host rocks are again silicified mudstones and siltstones. Styles of mineralization include massive sulphide base metal showings, semi massive to massive arsenopyrite showings, massive laminated ga/sp showings and sulphide stockworks within felsic volcanic pyroclastics. At the northern end of the zone silicification decreases in the sediments and the showings become base metals associated with massive to semi massive barite. This may reflect some primary zonation in the system.

Massive sulphides consist of pyrite or pyrrhotite dominant matrix with variable amounts of Cpy, Aspy, Sp, Ga present and the altered margins include gangue varying from silicification, carbonate, chlorite and sericite in several combinations. Sulphides range from 0.5-1.8 g/t Au, 35-595 g/t Ag, 0.8-0.9% Cu, 0.3-1.6% Pb, 0.4-3.8% Zn with highly anomalous As, Bi, Hg, Sb over widths of 1.0 to 3.0 meters.

Arsenopyrite has similar appearances to zones in the Dilly West trend, with massive pyrite and arsenopyrite lenses and areas of arsenopyrite stockwork in silicified mudstone and siltstone. Disseminated and stockwork zones contain up to 2.1 g/t Au, 161 g/t Ag over 4.0 meters with highly anomalous Cu, As, Bi, Hg, Pb, Zn and Sb. Massive 1.0 meter sections of pyrite and arsenopyrite grade up to 7.9 g/t Au and 34.6 g/t Ag with the above mentioned anomalous elements. Additional work is required in some of the stockwork areas as they develop large areas and require additional sampling.

An unusual style of mineralization has been located in three showings at the SE end of the Dilly zone. It consists of finely laminated massive sphalerite and galena with minor amounts of pyrite. This style of mineralization has only been traced for 110 meters of strike length to date and is narrow from 10-30 cm in width. It is extremely finely laminated and combined with its stratiform mode offers the best evidence for VMS style mineralization on the property to date. Sampling to date of this mineralization has produced some impressive values ranging from 20.5-39.1 g/t Au, 208-578 g/t Ag, 7.3-

22.5% Pb and 24.6-36.9% Zn with highly anomalous As, Cu, Bi, Hg, and Sb. This horizon is a priority target to determine if economic widths can be located.

Immediately above the laminated sp/ga mineralization is a thin rhyolite pyroclastic unit. This unit is pervasively silicified and contains 10-20% sulphide disseminations and stockwork including pyrite, sphalerite, galena and arsenopyrite. Values obtained to date are up to 23.3 g/t Au, 52.6 g/t Ag, 1.5% Pb and 5.2% Zn over a 2.8 meter width. This unit also contains highly anomalous values in As, Cu, Bi, Hg, and Sb and is likely directly related to the VMS style mineralization.

The northern end of the Dilly zone has several noticeable changes in alteration and styles of mineralization. The most obvious visual change is a noticeable decrease in pervasive silicification to the mudstones and siltstones. There is also a marked increase in the amount of HFP intrusives and cross cutting intrusive textures indicate a higher energy level including brecciation and peperites. These reflect a closer proximity to the intrusive center in this area. Mineralization still appears stratabound but the matrix is typically composed of a barite matrix with variable sulphide content. This may reflect a transition from sulphides to oxides if this mineralization is of an exhalative origin. Values obtained are still quite impressive ie. sample # 258776 with 14.15 g/t Au, 5740 g/t Ag, 11.55% Pb and 3.3% Zn over 2.0 meters. These showings also contain highly anomalous values in As, Bi, Hg and Sb.

Several sulphide veins crosscut the upper silicified rhyolite and maybe sulphide feeders into the overlying sediments. These range in width from 1-10 meters and consist of variable sulphides including pyrite, galena, sphalerite, chalcopyrite, arsenopyrite and tetrahedrite. Vein selvages contain the usual variety of sericite, chlorite, carbonate and quartz (often vuggy and crudely banded). Values in these veins are up to 1.4 g/t Au, 563 g/t Ag, 0.5% Cu, 1.85% Pb and 6.22% Zn. These veins have strongly anomalous values in As, Bi, Hg and Sb which supports they are part of the overlying mineralizing sequence.

### **Carbonate Alteration**

As mentioned previously disseminated carbonate is widespread in sericite, chlorite and epidote alteration and is also common as selvages on many of the sulphide veins. This alteration is ubiquitous throughout the property and is generally related to the other forms of lower Jurassic alteration styles.

Distinctive pervasive orange ankeritic alteration is present along many of the late NE striking fault zones for up to 600 meter strike lengths and widths of 10-20 meters. Tertiary lamprophyre dykes following these same structures are altered by this ankerite alteration which is believed to also be Tertiary in age. These ankerite zones can have bladed and laminated calcite veins up to 1 meter in width and often contain 1-5% disseminated pyrite. Limited sampling to date indicates no elevated base or precious metal values.

#### **4.-CONCLUSIONS & RECOMMENDATIONS**

The Homestake Ridge property has a early to middle Jurassic sequence of volcanics, intrusives and sediments very similar to the setting at the Eskay Creek deposit with comparable styles of alteration and mineralization. The property has preserved the transition from early Jurassic volcanism to overlying sediments and at this transition contains favorable felsic volcanics and related intrusives with large areas of hydrothermal alteration and mineralization. Extensive areas of HFP monzonite believed to be equivalent to the Goldslide intrusions at Red Mtn. form centres in NW trending sub basins. On the property these subvolcanic intrusives are co-eval to slightly post felsic domes and have a complex multiphase history culminating as extrusive QFP cryptodomes in mixed Salmon River sediments. There is extensive areas of precious and base metal mineralization associated with a complex large hydrothermal cell associated with these HFP intrusives and felsic dome complexes. These zones form a complex multiple phase history but a coherent alteration and mineralization pattern is developing spatially related to the intrusives and felsic volcanics. The property has a very high chance of containing a Eskay VMS styles deposit as well as good potential for several styles of bulk tonnage targets and high grade structural Au-Ag vein systems.

The alteration and mineralized styles indicate a general transition from extensive subsurface sericite and chlorite altered stockwork zones and discrete feeder pipes to the upper pervasive silicified areas developed at or near the paleosurface. These silicified sediments above felsic volcanic domes offer the best VMS targets (ie. Dilly Zones) but several other VMS target areas exist as well, in areas of mineralized sediments above felsic domes and sulphide feeders ( Homestake Creek , QFP cryptodomes and areas east of Vanguard Copper). Numerous constraints on timing of alteration and mineralization bracket the timing of mineralization clearly to late Felsic volcanism and related HFP subvolcanic intrusives. Chlorite altered pipes offer high grade Cu-Au-Ag targets as well as bulk tonnage targets along the Vanguard Au-Cu structure. Large areas of sericite alteration may offer large bulk tonnage Au targets, but contact areas (ie. intrusive/ volcanic contacts) offer high grade- high sulphide epithermal. These targets such as the Homestake showings (High Au,Ag,Cu +/- Zn) and are a more attractive target and have similarities to Red Mtn. and epithermal systems at Premier

Detailed geological mapping and sampling with hand or mechanical trenching will be required prior to drill testing in several of the areas. As emphasized the geology, alteration and mineralization on the property are very complex and will require perseverance and a strong commitment to properly assess.

The following work is recommended in order of priority for each deposit type:

##### **1/ VMS Targets**

1)- Dilly Zones- require systematic hand or mechanical trenching with detailed mapping and sampling prior to selecting drill targets. Both horizons remain open on strike and the

rhyolite/sediment contact should be tested at the same time. Pending additional results this area stands out as a priority drill target but will require numerous drill holes to adequately test.

2)-North Homestake Creek- the thickest portion of the rhyolite dome in this area is located under the Kitsault Glacier. Testing will require somewhat blind collaring of drill holes from the glacier or from sediments on the east side of the valley.

3)-Detailed trenching is required to assess the VMS potential above the QFP felsic cryptodomes along the SW side of the property. These domes form the top of the intrusive cycle and are altered and mineralized but VMS potential has not been assessed.

4)- Mapping and sampling is required to the east of Vanguard Copper to determine the VMS potential in overlying mineralized Salmon River sediments.

### **High Grade Precious Metal Epithermal Vein Targets**

1)- Drill testing of the Homestake showing area (drilling should be directed N-S to test ladder veins). Mapping and sampling in detail along the N-S extensions of the contact and the Silver Tip contact trend is needed prior to any additional drilling.

### **Bulk Tonnage Targets**

1)- The most obvious target is the Vanguard Gold-Copper structure for a bulk Cu-Au-Ag target. Prior to drill testing this area will require detailed mapping and channel sampling with some hand trenching to assess the overall potential.

2)- The large 2.0+ square kilometer area of sericite alteration also offers a bulk Au target, but a thorough review of historic work particularly Noranda's 89-90 work would be required. This could be followed up with detailed mapping and channel sampling prior to any drilling.



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**APPENDIX 1**  
**ROCK DESCRIPTION TABLE**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
1	Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn
2								g/tonne	g/tonne	%	%	%	ppb	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm
3	256701	Homestake ridge			Nick Mitchell	Andesite flow	Grab. Strong to intense Chl alteration. No primary textures, possibly some relic Fb replaced by Chl. Veins of Py 1mm wide bound by silicified, 2mm on either side. Minor Qtz veinlets, chaotic. Cp and Py veinlets 1mm wide as well as fine grained and disseminated, 5% total.						115	2.6	16	2	48	50 <2		4	112
4	256702	Homestake ridge			Nick Mitchell	Andesite flow	vein orientation 80/120. 5% Py and 3% Cp mineralization in massive bands. Sample taken						1795	2.4	4 <2		279	90	18	6	106
5	256703	Homestake ridge			Nick Mitchell	Andesite flow	Select. Moderate Sil/Chl alteration with fine grain disseminated Py, Cp 8% combined. Sample is taken of host rock for sample 256702.						615	2.4	26	10	20	60	46	6	142
6	256704	Homestake ridge			Nick Mitchell	Andesite flow	Select. Mod Chl, with strong Sil alteration. Massive, 30% Py, 20% Cp/bomite. Sample of high grade of old workings in 256702.						330	98.8	34	36	>10000	1480	138	54	272
7	256705	Homestake ridge			Nick Mitchell	Andesite flow	Grab. Strong Ser alteration. 1% Py, %Cp, very fine grain disseminated. Oc is 1m squared terminated by overburden.			2.7			15	0.8	16 <2		10 <1		5	2	74
8	256706	Homestake ridge			Nick Mitchell	Fb porphyry	Grab. Might be the intrusive(?). Very strong Ser alteration with minor Qtz veinlets, 1mm and minor Ba veinlets 1mm. Both are discontinuous. Oc is 2m squared terminated due to overburden.						5	1.4	12 <2		16	1	20	6	94
9	256707	Homestake ridge			Nick Mitchell	Mudstone	Grab. 3m interbeds of ash. Fine grained Py strata 4mm. Oc is 3m square terminates due to overburden.						<5	0.8	32 <2		82 <1		16 <2		160
10	256708	Homestake ridge			Nick Mitchell	Mudstone	Select. Minor Sil. 1cm thick layer of Py concordant with bedding 20m along strike. Vein terminated due to overburden.						<5	4.4	118 <2		83 <1		30	8	88
11	256709	Homestake ridge			Nick Mitchell	Mudstone	of Py 1% with minor stringers 2mm which are conformable to bedding. OC is 10m along strike and 80m wide in a stream bed. Terminates due to overburden.						<5	0.2	52	10	29 <1		18	2	95
12	256710	Homestake ridge			Nick Mitchell	Fb/Hb monzonite	Select. Strong Chl alteration. 3mm Fb xstals, porphyry texture, some Chl alteration of the Fb, Minor >1% Py in cubes. Sample is of Qtz vein 2cm wide by 30m along strike. OC terminated due to overburden.						<5	<2	8	2	18	1	6	2	52
13	256711	ridge			Nick Mitchell	Soil Sample	Brown, sand/pebbles, arg/shale.						10 <2		72 <2		34 <1		28	14	114
14	256712	ridge			Nick Mitchell	Soil Sample	Brown, sand/pebbles, arg/shale.						<5	<2	38 <2		58 <1		22	18	128
15	256713	ridge			Nick Mitchell	Soil Sample	Brown, sand/pebbles, arg/shale.						<5	<2	32 <2		59 <1		28	8	174
16	256714	ridge			Nick Mitchell	Soil Sample	Brown, sand/pebbles, arg/shale.						<5	<2	38 <2		55 <1		62	8	704
17	256715	ridge			Nick Mitchell	Soil Sample	Brown, sand/pebbles, arg/shale.						15 <2		18 <2		126 <1		34	8	146
18	256716	ridge			Nick Mitchell	Soil Sample	Brown, sand/pebbles, arg/shale.						10 <2		40 <2		111 <1		48	12	108
19	256717	ridge			Nick Mitchell	Mudstone	With very strong iron oxidation, 3% Py. Sample is from subcrop 20m by 70m						5 <2		8 <2		22 <1		14	4	318
20	256718	Homestake ridge			Nick Mitchell	Fb/Hb monzonite	Mod Chl alteration, minor carb alteration. >1% Py, >1% Ga. OC 20m by 30m bound by snow.						20	0.2	208 <2		19 <1		44	14	68
21	256719	Homestake ridge			Nick Mitchell	Mudstone	Select. Calcite veined mudstone. Strong carb alteration. 1m wide vein 318/60 with massive Py 30% vein is 700m along strike. OC terminates in snow.						10	0.8	172 <2		49 <1		44	14	40
22	256720	Homestake ridge			Nick Mitchell	Mudstone breccia	Grab. With Andesite tuff clasts 1-2cm, clast supported. 1% Py in Andesite tuff clasts. OC is 10m by 80m along strike bound by snow.						<5	<2	4 <2		68 <1		6	2	148
23	256721	Homestake ridge			Nick Mitchell	Fb/Hb monzonite	gossen and limerization. OC is 15m square bound in less altered Fb/Hb monzonite of 526722						<5	<2	10 <2		5 <1		16	2	2
24	256722	Homestake ridge			Nick Mitchell	Fb/Hb monzonite	Grab. Mod/weak ser alteration, mod carb alteration. >1% Py in cubes representative sample of unaltered OC.						<5	<2	<2	<2	1 <1		28	2	66
25	256723	Homestake ridge			Nick Mitchell	Fb/Hb monzonite	Grab. Moderate Ser/carb alteration. >1% py disseminated, fine grained. Oc as shown on map.						40 <2		10 <2		16 <1	<2		6	54
26	256724	Homestake ridge			Nick Mitchell	Rhyolite Hyaloclastic	Grab. Some andicite clasts which have been strongly ser altered. Rhyolite frags are angular, 5mm in a massive, 60%, Py matrix. The OC is 4m wide and 20m long. OC terminates due to snow and volcanoclastics.						<5	0.8	24 <2		25 <1		42	2	6
27	256725	Homestake ridge			Nick Mitchell	Fb/Hb monzonite	Mod/strong ser/carb alteration. 3% Py, >1% Cp(?). OC is 30m wide and 80m long as shown on map						<5	<2	8 <2		24 <1		8	2	45
28	256726	Homestake ridge			Nick Mitchell	Fb/Hb monzonite	Grab. Strong Ser alteration. 15% Py and 5% Cp. OC is 2m square, terminates due to a lake and overburden as shown on the map.						65 <2		10 <2		16 <1	<2		6	54
29	256727	Homestake ridge			Nick Mitchell	Andicite	Grab. Mod/strong ser, mod chl. Py 3% in blebs and disseminated throughout. OC covered by overburden.						105	0.8	24 <2		25 <1		42	2	6
30	256728	Homestake ridge			Nick Mitchell	Andicite/monzonite?	Grab. Very strong ser alteration. Massive with 3% Py and 1% Cp(?), fine grained disseminated. OC 1m square bound by overburden.						10 <2		8 <2		24 <1		8	2	48
31	257501	HR-F6	463140	6178556	J. Lehtinen	Grab-5.1	Grab along 25 m strike of 1-2 m wide silicified feldspar-hornblende porphyry. Pyrite 1-7%, avg. 5%. Trend of silicification 120.						145	14.8	96 <2		194	1030	194	22	146
32	257502	HR-	463701	6177852	J. Lehtinen	Float	fill Sx		340				675	>100.0	162 <2		5410	2430	966	384	838
33	257503	HR	463382	6177898	J. Lehtinen	Grab-5.1	Grab from small trench following pyrite shear @G9030. Weak Si, strong Se. Diss. Py 5-7%, strongly oxidized, trace Gn, Sp, Cp. Hosted in altered 5.1						225	2	28 <2		122 <1		876	4	300
34	257504	HR	463343	6178565	J. Lehtinen	Grab	Rusty siliceous/Se pyritic knob. Grab sample over 1.5m.						<5	0.2	110 <2		5 <1		18	14	10
35	257505	HR	462757	6178504	J. Lehtinen	Grab-5.1	Very strong Se-Si altered zone x-cut with fine, <2mm qz stringers. Pyrite 10-15%. Alteration apparent strike 015/50						465	0.9	28	2	4 <1		8	2	2
36	257506	HR	462794	6178413	J. Lehtinen	Grab	Grab over 7m of strong S/Se alt'n. Minor, <5 cm. baryte veining. Py diss. and fracture fill - 15%, tr Cp.						5	0.8	12 <2		28 <1		22 <2		20

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn		
37	257507	HR	462821	6178148	J.Lehtinen	Grab-5.1	Grab over 2.0 m, limonitic, fractured, clay alteration. Py 3%. Heavy boxwork. Strong foliation 340/60						20	1	8	2	20	<1		76	2	74
38	257508	HR	462805	6178167	J.Lehtinen	Grab-5.1	Grab over 7.0m. Py 7-10% as dias and fracture fill. Si/Se alteration, clay alt'n. Two fracture sets @335/60(strong) and 180/45(weak)						35	0.2	8	<2	5	<1	<2		4	30
39	257509	HR	462886	6178210	J.Lehtinen	Grab-5.1	Grab across 5m of gossanous, strong Si/Se altered 5.1. Pyrite 5-10% as dias. and fracture fill.						60	1	10	<2	34	<1		30	2	76
40	257510	HR	462926	6178241	J.Lehtinen	Grab-5.1	Grab over 10m of gossanous 5.1. Weak Se alt'n. Strong Pyrite, 10-15%. X-cut with <1mm qz stringers with trace galena.						120	<2	8	<2	36	<1		12	2	226
41	257511	HR	462964	6178175	J.Lehtinen	Grab-5.1	Grab over 10 m of gossanous and non-gossanous 5.1 Pyrite avg. 10%. strong fracturing @105/80.						50	0.2	12	<2	9	<1		6	2	34
42	257512	HR	462972	6178289	J.Lehtinen	Grab-5.1	Grab over 5m of gossanous and non-gossanous 5.1. Py 5-7%. Strongly fractured @110/50. Chloritized +/- carbonate.						60	<2	8	<2	19	<1	<2		2	74
43	257513	HR	462779	6181536	J.Lehtinen	Grab-rhyolite	Flow banded rhyolite. Grab over 3.0 m, weak Fe stain, <1%Py as fracture fill and dias.						<5	<2	14	<2	5	<1		24	10	14
44	257514	HR	462165	6181595	J.Lehtinen	Grab-3.1	Grab over 3.0m of silicified and non-silicified 3.1. <1% Py.						<5	<2	24	<2	7	<1		18	12	20
45	257515	HR	462233	6181730	J.Lehtinen	Grab-3.2	Grab over 3.0 m width and 8.0m strike of weak ch stringers @ 028/45, <5mm. Minor Si zones in dacite fragmental. Py as dias. and clusters < 1%.						<5	0.2	18	<2	7	<1		24	8	90
46	257516	HR	462245	6181773	J.Lehtinen	Grab-3.2/3.3	Grab over 1.0 m of dacite lapilli tuff, trace Py.						<5	<2	26	<2	6	<1		14	4	264
47	257517	HR	462247	6181717	J.Lehtinen	Grab3.3	Silicified and fractured 3.3 along weak fault @140/80. Py along fractures 3%.						<5	0.2	26	<2	2	<1		36	20	8
48	257519	HR	463823	6177375	J.Lehtinen	Carbonate vein	Vanguard gold trench. Brittle fault, average 280/85. Vein breccia with 5-7% CP, 2-3% combined SP,GN. SE altered wall rock.	0.425oz/t					>10000	18	40	6	2990	640	1255	8	722	
49	257520	HR	463823	6177377	J.Lehtinen	Chlorite alt. wallrock	Chloritized and quartz stringered wall rock. <1% CP in quartz stringers. Pyrite 3%						4560	1.8	70	4	29	80	18	2	178	
50	257521	HR	463905	6177411	J.Lehtinen	Andesite Bx	Vanguard copper-upper adit. Hanging wall sample (1.5m) of semi-massive sx. CP 15%, PY 35%. CP associated with veining with lesser amounts dias. in wallrock. HW fault @104/78.			3.48			2650	46.8	182	2	>10000		360	12	<2	154
51	257522	HR	463932	6177401	J.Lehtinen	2.2	Small trench in sidehill. All dias PY-10% in Strong CH alteration.						750	1.4	28	6	324	60	18	6	144	
52	257523	HR	463930	6177345	J.Lehtinen	Si/SE alt'n	Grab in old pit of strong Si/SE alteration. PY 7% as dias and fracture fill.						80	1	20	<2	188	30	6	8	44	
53	257524	HR	463908	6177370	J.Lehtinen	CH alt,d	Grab over 4.0 m of 8m old trench. Strong Si/SE +/- CH alteration. 7% disseminated PY. Weak faulting @ 140/80.						80	0.2	22	2	20	20	12	<2		74
54	257851	HR cell C14	464610	6175997	B. Kay	FHP	py						65	8.8	110	8	885	150	2	332	12	
55	257852	HR cell C14	464670	6175970	B. Kay	FHP	QS alt FHP gossanous, 10x3m zone on creek wall. rep chips, 5% dissem py mild QS alt FHP gossanous, 6x2m zone, select grab 20% blebs py						80	0.2	18	<2	25	10	6	6	16	
56	257853	HR cell C14	464640	6175775	B. Kay	FHP	3.0m representative chip; ser-alt fp with locally pervas to strgr chl alt with 9% py, 2% chal, tr gal, tr sphal						55	0.6	10	<2	206	380	2	6	34	
57	257901	HR cell C12			D. Baker	sericitic fp							160	2	20	<2	755	1860	690	6	2090	
58	257902	HR cell C12			D. Baker	pyritic sandstone	grab from sluff pile at adit "2559", v.c. s.s. with fossils and 15% dissem py						<5	0.8	48	<2	15	410	34	18	56	
59	257903	HR cell C12			D. Baker	pyritic sandstone	grab from near adit "2559" entrance, c. s.s. with carb-py vns, ass chl alt, 15% v.f.gr py blebs						<5	0.8	38	<2	13	370	28	16	50	
60	257904	HR cell C12			D. Baker	chloritic fp	grab of pervas chl alt fp with 15% c. py, 1% sphal, 1% gal, tr chal						65	1.8	52	6	18	1160	384	6	1285	
61	257951	H.R.			G.E.	silic rhyolite	1.5 m chip of silic rhyolite w/ 10% sp, 10%py, tr ga, cp, aspy trend 280/80						<5	0.8	38	<2	4	<1		28	14	46
62	257952	H.R.			G.E.	Rhyolite WR	py						30	0.6	52	<2	6	<1		48	20	86
63	257953	H.R.			G.E.	py stringers	rep of a 10x10 meter area of 5% dissem and stringer py in Fl-Bx rhyolite						<5	1.6	40	<2	8	<1		50	26	82
64	257954	H.R.			G.E.	py stringers	aphanitic rhyolite w/ 8-10% vgr py dissem over a 10x10 m area						<5	0.8	42	<2	5	<1		36	26	40
65	257955	H.R.			G.E.	py rhyolite	rep of 3.0 m's						20	4.6	50	<2	9	<1		34	32	8
66	257956	H.R.			G.E.	py rhyolite	rep of 30 cm zone py stringer w/ 6-8% vgr py in Fl-banded rhyolite						100	1.4	248	6	34	30	78	<2		60
67	257962	HR Dily			G.E.	silt/mud	3.0m chip of siltstone/mud 5%py, tr aspy bedding 085/30						2110	>100.0	>10000	22	896	10500	6480	200	644	
68	257963	HR Dily			G.E.	silt/mud	4.0 m chip of silt/mud in an antiform avg. 5-7% py, 2-3% aspy veinlets			161			1555	10.4	>10000	12	239	350	618	38	380	
69	257964	HR Dily			G.E.	silt/mud	1.0 m chip of silicid. zone 050/45 10% py 1-2% aspy w/ qtz veinlets to 20cm						2730	34.6	>10000	54	2750	110	352	106	176	
70	257965	HR Dily			G.E.	silt/mud	1.0 m chip of silicid. silt/mudstone w/ 15-20% py and 10% aspy up to 10cm-minor qtz vnls						6140	20.4	>10000	64	1590	140	558	460	34	
71	257966	HR Dily			G.E.	silt/mud	2%sp						490	37.8	>10000	38	8270	500	430	3480	1830	
72	257967	HR Dily			G.E.	MS	rep. of mineralization in mudstone diatreme w/ and 1-10cm mudstone frags in mud/chl matrix w/ 10% py, tr aspy dissem	0.328oz/t					>10000	9	258	8	1890	100	6	18	44	
73	257968	HR Dily			G.E.	Mudstone Di	exposed in creek 20cm mass sulph hosted in mudstone mass py w/ 2-3% cpy tr ga, aspy, sp						5640	>100.0	2400	92	>10000	5420	5390	186	>10000	
74	257969	HR Dily			G.E.	MS	2.8 m chip of rhyolite fragmental in FW of Dilly Zone @ 485 site 3-5% py, 2-3%sp, 1%gs, 1% aspy			195	2.3		2.21	1870	26	7250	12	1725	7740	5140	82	>10000
75	257970	HR Dily			G.E.	Rhy Fragmer	35cm chip of rhyolite fragmental on HW side of Dilly Zone very silic. w/ 3-4% sp, 2% ga, 5% py tr aspy						2990	21.8	>10000	16	5710	1780	3210	108	>10000	
76	257971	HR Dily			G.E.	Rhy Fragmer	Chip sample taken over 110cm. Samples contin fine disseminated Py. that range from 5-20%.						335	3	1520	2	16	2220	52	64	102	
77	258005	Cell G7 with Jim -TR.#2			P.G.	Ser. alt. FHP	Chip sample taken over 32cm Fine disseminated Py. approx. 30%.						525	2.2	1480	<2	<1	2160	38	14	52	
78	258006	Cell G7 with Jim -TP.#2			P.G.	Ser. alt. FHP	Chip sample taken over 110cm. Samples contin fine disseminated Py. that range from 5-20%.						3260	3.8	474	2	1100	800	44	28	222	
79	258007	Cell G7 with Jim -TR.#2			P.G.	Ser. alt. FHP	Chip sample taken over 110cm. Samples contin fine disseminated Py. that range from 5-20%.						335	3	1520	2	16	2220	52	64	102	

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U		
1	Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn	
80	258008	Cell G7 with Jim -TR.#2			P.G.	Ser.altr.FHP	Py.2%. Barite vein about 2cm. and calcite and stringers found throughout distance. Barite crystals also noted. Secondary mineralization of malachite also seen.						4490	19	198	2	8140	3430	2140	20	3970	
81	258009	Cell G7 with Jim -TR.#2			P.G.		Float sample taken from trench #2 rock dump. Sulfides contained with crystals of barite. Sp.20%, Cp.10%, Ga.2%, and Py.<1%.															
82	258010	Cell G7 with Jim -TR.#2			P.G.		Float sample taken from trench #2 rock dump. Semi-massive Cp.25%.	1.893oz/t	168	15.8	---	3.33	84896	>100.0	68	42	>10000	16330	4330	64	>10000	
83	258011	Cell G7 with Jim-TR.#4			P.G.	Ser.altr.FHP	Chip sample taken over 0.7m. Barite and quartz stringers throughout samples. sample contains fine disseminated Py.5% and trace Cp.						8220	9.8	166	<2	3770	1510	116	18	1290	
84	258012	Cell G7 with Jim-TR.#4			P.G.	Ser.altr.FHP	Chip sample taken over 1.5m. Barite and quartz stringers present in samples. Fine disseminated and blebs of Py.range from 1-5%, Cp. <1-3%, trace Ga. present in samples. Fine disseminated and blebs of Py.range from 3-7%, Cp. <1-3%.						3290	18.6	146	<2	7010	2780	1730	480	2080	
85	258013	Cell G7 with Jim-TR.#4			P.G.	Ser.altr.FHP	Chip sample taken over 1.5m. Fine disseminated Py. range from 3-5%, and trace Sp. found in calcite and quartz stringers.						1700	12.8	268	<2	3330	850	110	16	836	
86	258014	Cell G7 with Jim-TR.#4			P.G.	Ser.altr.FHP	Chip sample taken over 2m. Fine disseminated Py. range from 3-5%.						635	5.8	460	<2	259	4390	200	66	7360	
87	258015	Cell G7 with Jim-TR.#4			P.G.	Ser.altr.FHP	Chip sample taken over 2m. Massive as well as fine disseminated, veinlets, and blebs of Py. range from 10-30%.						465	3.6	620	<2	51	430	74	18	370	
88	258018	Cell G7 with Jim-TR.#6			P.G.	Carb. Ser. al	Chip sample taken over 1.3m. Massive, fine disseminated, and blebs of Py. range from 10-70%, Cp.1%.						2170	18.6	490	8	651	1700	92	28	398	
89	258019	Cell G7 with Jim-TR.#6			P.G.	Ser.altr.FHP	Chip sample taken over 1.5m. Calcite possibly barite(?) stringers throughout. Py.10-15%, Cp. 1%.	0.299OZ/t		1.37	---		>10000	26.6	476	4	>10000	2830	78	32	266	
90	258020	Cell G7 with Jim-TR.#6			P.G.	Ser.altr.FHP	Chip sample taken over 1.5m. Py. range from 3-7%.						1315	9.6	394	<2	1925	580	42	24	48	
91	258021	Cell G7 with Jim-TR.#6			P.G.	Ser.altr.FHP	Cp.1%.						1360	12.4	178	<2	2390	2410	120	20	952	
92	258022	Cell G7 with Jim-TR.#6			P.G.	Ser.altr.FHP	15%						805	2.8	228	6	40	420	34	4	48	
93	258023	Cell G7 with Jim-TR.#6			P.G.	Ser.altr.FHP	Chip sample taken over 1.5m. Py. range from 3-7%.						615	5	612	6	17	950	48	18	40	
94	258024	Cell G7 with Jim-TR.#6			P.G.	Ser.altr.FHP	Chip sample taken over 1.5m. Py. <1%.						105	1	210	6	9	180	34	<2	70	
95	258025	Cell G7 with Jim-TR.#6			P.G.	Ser.altr.FHP	Chip sample taken over 1.4m. Fine disseminated Py. 2%.						255	1.8	198	<2	20	370	64	2	120	
96	258026	Cell G7 with Jim-TR.#20			P.G.	Ser.altr.FHP	Chip sample taken over 1.7m. Sulfides in samples range from, Py. 1-5%, Sp. 0-3%, Ga. 0-2%, Cp. 0-1%. Fracture noted in zone as well as quartz stringers.						505	24.2	588	4	8710	7900	4270	30	>10000	
97	258027	Cell G7 with Jim-TR.#20			P.G.	Ser.altr.FHP	Chip sample taken over 1m. Cp. <1%, Py.<1%, Sp.<1%.						275	25	410	<2	2380	2320	644	32	2820	
98	258028	Cell G7 with Jim-TR.#20			P.G.	Ser.altr.FHP	Chip sample taken over 1.8m. Quartz stringers as well as crystals noted in zone. Sulfides range from, Py.3-7%, Sp.3-5%, Ga.<1%, Cp.<1%.					1.94	555	14.4	758	<2	118	4930	844	38	2420	
99	258029	Cell G7 with Jim-TR.#20			P.G.	Ser.altr.FHP	Chip sample taken over 2.5m. Massive sulfide Py. vein in zone approx. 1.3m wide. Py. 3-70%.						225	12.8	884	8	58	3820	78	44	124	
100	258030	Homestake Creek			P.G.	Rhyolite	and can be followed on outcrop for 80cm. Quartz and calcite stringers also present.						<5	0.8	88	8	8	320	14	26	80	
101	258031	Homestake Creek			P.G.	Rhyolite	Chip sample taken from Py. stringers in rhyolite. Stringer can be traced for 50cm. and then lost due to overburden.						5	0.2	50	<2	4	290	18	10	52	
102	258032	Homestake Creek			P.G.	Rhyolite	Chip sample taken from Py. stringers which can be traced in a circle with a diameter of 2m. Stringers range in size from 1-10cm. Sample also contains small amounts of pariblumine.						<5	0.6	40	<2	5	150	14	4	24	
103	258033	Homestake Creek			P.G.	Rhyolite	Chip sample taken from Py. vein approx. 1-2cm. wide, and can be traced for approx. 70cm.						<5	1.4	58	6	10	690	20	8	36	
104	258034	Cell F12			P.G.	Mudstone	(Dilly vein) varies in size from 3-10cm. contains massive sulfide. Sulfides, Sp. 40%, Ga. 30%, Py. 5%, Cp. 2%. Sample is approx. 20cm. long and 3cm. wide creek on East and overburden on West side. Sulfides, Sp. 40%, Ga. 30%, Py. 5%, Cp.3%.	1.14OZ/t	206		7.25	24.8	>10000	>100.0	8340	110	4870	56200	>10000	198	>10000	
105	258035	Cell F12			P.G.	Mudstone	Chip sample taken from beside Dilly vein is a mudstone breccia with mudstone (rhyolite) fragments. Sulfides are finely disseminated, Py. 15%, Cp. 2%, Sp. <1%, Arseno, <1%.	3.64OZ/t			3.28	17.7	delay	71.6	>10000	76	9230	19010	>10000	848	>10000	
106	258036	Cell F12			P.G.	Ser.altr. Mud	Sample appears to be a dacite taken from small outcrop. Outcrop is lost due to overburden and could be a float boulder. Sample is 7 by 5cm. and contains fine disseminated as well as blebs of Py. 5%.			1.24		1.52	480	39.2	1030	28	>10000	1820	1545	32	>10000	
107	258037	Cell E14			P.G.	Dacite	Chip sample taken from barite blast zone within andesite that is approx. 25m. wide. Barite stringers throughout as well as veins that range in size from 5-10 cm. inside adit. Cp.within barite 5%.						260	2.8	24	<2	83	40	102	54	1145	
108	258038	Cell E14			P.G.	Andesite	Float sample taken from outside of adit. Cp. 5%.						50	9.8	16	<2	8060	30	224	24	262	
109	258039	Cell E14			P.G.	Andesite	Chip sample taken along strike line of Dilly vein to the East at some old workings. Vein is approx. 4mm. wide traced for 2m and lost due to overburden. Ga. 15%, Cp. 3%, Py. trace.						120	9.4	<2	<2	7030	<10	178	2	50	
110	258040	Cell F12			P.G.	Mudstone	Chip sample taken over m. along strike line of Dilly vein to the West at some old workings. Sp. 10%, Py. 10%, Cp. 5%, Ga. <1%.		339	2.12	12.2	15.7	8870	>100.0	1060	70	>10000	17540	>10000	254	>10000	
111	258041	Cell F12			P.G.	Mudstone	Chip sample from barite stringer zone which also has intense chlorite alter. Zone is approx. 4 by 4m. Sample contains fine diss.Py. 3%, unknown green mineral fuchsite(?).				1.55	3.78	45	49.2	8960	52	3590	6530	>10000	3820	>10000	
112	258042	Cell C12 with Darcy			P.G.	Ser.alter.	Chip sample taken over 90cm. Chip zone has mod. chl. and ser. altr. Cp. massive 70%, and fine diss. Py. 5%. Cp. zone traced for 2m. and is approx. 70cm. wide and is lost due to overburden.						95	0.6	12	<2	2	<1	44	2	36	
113	258043	Cell C12 with Darcy			P.G.				245	4.43			1155	>100.0	274	<2	>10000	<1	44	28	374	

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
1	Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn
114	258044	Cell C12 with Darcy			P.G.		Chip sample from upper level of Vanguard workings, Mod. ser. alt. and Cp. is in stringers and massive blebs. Zone is about 7m. wide and 4m. long and Cp. shows foliation within. Cp. massive 80% and fine dis. Py. 5%.		129	11.55			3880	>100.0	410	2	>10000	<1	108	22	520
115	258045	Cell C12 with Darcy			P.G.		Whole rock taken of the host rock in the upper Vanguard area.						195	4.8	68	6	452	<1	200	8	288
116	258046	Cell C12 with Darcy			P.G.		Float sample taken from the rock dump at the Vanguard adit. Cp. massive 80%, Py. trace.		296	13.4			1965	>100.0	364	4	>10000	<1	158	38	360
117	258047	Cell C12 with Darcy			P.G.	sericitic fbp	grab of light grey, strgly ser alt feld por rock (no hb visible) with 9%, mm-scale blebs of v. f. gr. py						20	2	32	<2	228	<1	82	2	184
118	258048	Cell C12 with Darcy			P.G.	barite vein	grab of 7cm, discontinuous bar vein with 10% chal, tr sphal, tr gal; chloritic selvages; oriented 116/40		119	5.91			200	>100.0	128	<2	>10000	<1	298	88	782
119	258049	Cell C12 with Darcy			P.G.	sericitic fbp	2.5m representative chip samp of light grey, strgly ser alt feld por rock (no hb visible) with 5-9% dissem py						<5	1.6	22	<2	219	<1	122	6	90
120	258050	Cell C12 with Darcy			P.G.	sericitic and	327/63						80	10.4	178	<2	268	10	698	124	1290
121	258051	HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	V. strg to ints ser-chl-sil+-carb alt'd fragmental rhy-flow or FP-ande flow brx?--alt'n intensity obliterates prim text's; fo/n/clvge ~70/090 degs. Grab rep sample over ~40m of goss o/c; ~8-15% fr py (incl <2% mixed cpy) dissem/ff.						235	1.6	210	2	63	60	138	8	514
122	258052	HS Ridge/Cell F10			R.J. Whiteaker	FP Andesite	Chip sample over ~3m of goss showing; strg perv chl-sil-carb-ser w/ 10-15% fr-med grmd sx (incl ~3% bo, 3-5% cpy (+ tr arapy?)) massea/ff.						20	0.8	28	12	40	100	40	10	216
123	258053	HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP/F	Alt'n overprint of prim text's--difficult to distinguish protolith. Chip across ~3m (rep of large o/c); v. strg-ints ser-carb-chl (after hnb)+/-sil alt'n; 5-8% fr-gmd py hairline-ff/disse.						45	0.8	16	10	11	80	20	2	70
124	258054	HS Ridge/Cell F10			R.J. Whiteaker	FP Andesite	Sample collected across 1-2m in old pit; v. strg chl-ser-sil alt'd volc wallrock w/ 10-20% fr-gmd sx (py>>cpy-arapy); central ints chl-ser-sil zone/veining w/ ~30-40% total sx: 20-30% py and ~10% cpy, both as coarse blebs and mixed f.gmd massea; ~12m W of #258055.						4980	2	46	6	18	190	20	6	98
125	258055	HS Ridge/Cell F10			R.J. Whiteaker	FP Andesite	Chip sample across ~2m of intslly chl-carb-ser-sil alt'd ands, footwall to wide vein at #258054; 10-20% fr-gmd sx (py>>cpy-arapy)						3290	2.4	36	10	59	80	22	<2	104
126	258056	HS Ridge/Cell F10			R.J. Whiteaker	FP Andesite	Approx 25cm chip sample across 6cm wide ba-sil-carb-py>cpy vn (~80/300, sheared, total sx~8-15%) and volc wallrock (ser-chl-sil+-carb alt'd, w/ finely-dissem sx: ~3-5% cpy, 5-10% py, <3% gal).				2.43		1260	9.8	10	2	1295	9730	2400	26	>10000
127	258057	HS Ridge/Cell F10			R.J. Whiteaker	FP Andesite	Chip sample across ~20cm of mod to strgly chl-ser (+/-sil+-carb) alt'd intern flow brx; fr-gmd py (5-8%), cpy (<1%). Local ang-subrounded flow brx frags.						175	0.4	68	10	4	20	20	12	162
128	258058	HS Ridge/Cell F10			R.J. Whiteaker	FP Andesite	Chip sample of ba-carb-qtz-sx vein, 40/130 degs, ~20cm wide, local angular volc rip-up brx frags within; ~8-12% py, 2-4% cpy, tr sphal-arapy; sx as fr-gmd dissem and clustered masses.						6220	4.6	74	18	807	200	282	14	90
129	258059	HS Ridge/Cell F10			R.J. Whiteaker	FP Andesite	Chip sample of wallrock to #258058; collected over 20-25cm. Ands chl-ser-sil+-carb alt'd, w/ finely-dissem sx ~2-3% cpy, 5-10% py, <1% gal-sphal?; massive qtz-py(30-40% in core, 20-30% ave.); 60/110 shearing and fo/n through zone						275	0.6	38	<2	10	20	20	10	104
130	258060	HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	Pale to med-gm strongly chl-ser alt'd FHP x-cut by ~50/340 deg shear.						235	3.8	38	<2	12	100	16	<2	14
131	258061	HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	Sample collected across ~25cm of goss o/c; ~3-8% fr-gmd py w/ <1% cpy.						65	0.2	12	8	277	50	2	10	34
132	258062	HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	Chip sample from ~2X2m goss o/c along creek. V. strg-ints chl-ser>sil-be-carb alt'n, sheared ~340 degs; 10-20% fine to coarse py>>cpy-arapy? Locally up to 30% sx in strongest ba-sil-chl-carb alt'n.						270	6.6	46	2	6810	130	10	2	54
133	258063	HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	Goss E-W trending ints chl-ser alt'n zones ~30-40cm wide (common across area o/c's) in perv mod-strg chl-ser alt'd FHP; 8-10% py, 1-3% cpy-tr arapy dissem/ff. Chip sample across ~40cm.						175	2.2	20	14	17	30	20	2	40
134	258064	HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	Chip sample (~30-40cm wide) across goss sil-py-ser vein (~3cm wide, 80/020 degs, 15-20% coarse py), and rhyolite wallrock (ints ser>chl-sil alt'n).						50	0.8	14	6	77	20	2	12	16
135	258065	HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	Chip sample of typical vein along steep creek exposure; 70/090 degs, 10cm wide, ints chl>ser-sil w/ med-crs gmd py>>cpy-arapy (total sx~10-20%); strg perv chl-ser alt'n in rhy; flow banding~45/110.						160	1.2	22	10	22	20	12	8	12
136	258066	HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	Grab sample across 15-20m goss showing along steep creek; v. strg ser-sil-chl alt'n w/ fine-coarse dissem/ff py(8-12%)<cpy(1-3%); sx in qtz-ser vnt's locally. evenly dissem v. fine to fine/med gmd py>>cpy+-arapy; o/c alt'n/minz typical for hillside area.						100	1	22	6	83	40	12	6	24
137	258067	HS Ridge/Cell E10			R.J. Whiteaker	FP Andesite	Rep chip sample across ~2.5m of v. strg-ints chl (-ser-carb) alt'd ands; 10-15% v. fr dissem/ff py>>cpy-arapy(?); sample typical of showings across ~30X20m cliff exposure; strg clvge (~schist) 70/240 where goss/minz strongest.						1475	1.2	42	2	45	<10	24	10	136
138	258068	HS Ridge/Cell E10			R.J. Whiteaker	FP Andesite	Chip sample across ~1m of wallrock to 0.5-0.8m wide ints minz vn/alt'n zone (see #258070); strg-ints perv chl>ser-carb-bar alt'n; approx 8-12% fr-med gmd sx (py>cpy-arapy); zone w/ fo/n/clvge 85/285. Vanguard-Cu showing?						165	0.8	98	6	16	20	12	12	88
139	258069	HS Ridge/Cell E10			R.J. Whiteaker	FP Andesite	Approx 50cm wide chip sample across 'cors' of mineralized v. strg ser-sil-chl-bar+-carb alt'n (sheared/brx veining?); ~65/285 degs, 0.5-0.8m wide, x-cuts ands (see #258066); fine-coarse 'cluster'/blebs of py (10-15%), cpy (3-8%); goss v. fr arapy mixed w/ py Vanguard showing?						3390	12	100	<2	4670	1840	54	138	108
140	258070	HS Ridge/Cell E10			R.J. Whiteaker	FP Andesite	Grab sample across steep creek o/c of lim/goss ands; chl-ser+-carb alt'n, 2-5% fine py commonly->lim.						500	0.6	24	12	61	40	10	6	90
141	258071	HS Ridge/Cell E10			R.J. Whiteaker	FP Andesite	Grab sample across steep creek o/c of lim/goss ands; chl-ser+-carb alt'n, 2-5% fine py commonly->lim.						60	2.2	44	<2	30	660	232	8	320

1	A	B	C	D	E	F	G					H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Sample No	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn					
142	258072	HS Ridge/Cell G10		R.J. Whiteaker	Siltstone/Mud	Approx 15cm wide chip sample of bar-carb-qtz-py-cpy vein (~5 cm wide, 2-3% fr-grnd sx disse) x-cutting brxd mudstone/siltstone wallrock; weak mal stain on surface.						15	2.8	38	8	1820	30	54	<2					60	
143	258073	HS Ridge/Cell H10		R.J. Whiteaker	FH Porphyry	Whole rock sample of FHP; intermediate composition? Wk to mod ser-carb-ely+chl alt'n; tr km specs after py.	<5	<2						6	<2	18	50	6	2					60	
144	258107	Homestake ridge		Nick Mitchell	Andicite flow	Whole rock. Clasts of both mudstone and dacite ranging in size from 1-3cm, angular to sub-angular. Minor Pyand Cp, >1%.	<5	<2						14	4	101	10	<2					8	66	
145	258108	Homestake ridge		Nick Mitchell	Andicite flow	This either an andicite flow breccia or the edge of a granodiorite intrusive. It is composed of "fine grained" (?) Qtz feldspar xstals, 3mm and minor Cp/Py, 1%, disseminated.						15	0.2	18	<2	113	30	10	14					56	
146	258109	Homestake ridge		Nick Mitchell	pyroxene, Fb	Whole rock. phono of feldspar 1mm fine grained mafic crystalline rock with very little alteration.	<5	<2						10	18	58	<10		2	10				90	
147	258151	Homestake ridge		Nick Mitchell	Fb/Hb monzonite	Grab Whole rock. Fb ferric with carb alteration, kaolinite and other associated clay products of Fb weathering.	<5	<2						4	<2	13	100	8	<2					58	
148	258152	Homestake ridge		Nick Mitchell	Fb/Hb monzonite	Grab Fine grained on the rim of the intrusive, mafic and xstaline with Py, Cp 1% combined	1315	7.2	42	2	489	200	48	6	300										
149	258153	Homestake ridge		Nick Mitchell	Fb/Hb monzonite	Grab.Porphy. limonized sulfide calcite vein 30 cm wide, 2m along strike, lost in overburden. Contains 1% Py and >1% Cp.	1240	1.6	108	<2	80	20	48	6	118										
150	258154	Homestake ridge		Nick Mitchell	Fb/Hb monzonite	Grab Whole rock. Looks like a diorite.	<5	<2						8	6	10	<10	<2		12				126	
151	258155	Homestake ridge		Nick Mitchell	Fb/Hb monzonite	Grab.Calcite vein with 1% Py, Cp combined. Carb alteration and minor silicification.	2190	4	230	4	171	910	134	<2										836	
152	258156	Homestake ridge		Nick Mitchell	Fb/Hb monzonite	3% combined. Zone is 30cm wide and 3m along strike, terminated by overburden.	635	1.2	322	12	748	30	34	8	218										
153	258157	Homestake ridge		Nick Mitchell	Mudstone	Grab.Breccia, mudstone with a calcite matrix with "blebs" and veins of Cp, 2%. Grab.Disseminated Py, Cp <1% combined. Carb alteration, sulfide bearing zone is 20m squared and hematite stained. Sulfides seem to decrease with decreasing carb alteration.	135	0.8	38	<2	4	10	12	<2	<2										
154	258158	Homestake ridge		Nick Mitchell	Dacite flow breccia	buff. The sample is of a calcite vein with Cp malachite and azurite staining ~5% total.	305	1	58	<2	3	10	10	6	52										
155	258159	Homestake ridge		Nick Mitchell	Dacite	Grab.Strong sericite alteration, the sample is from a calcite vein with 5% Cp, 1% Py, 60 cm wide and 3m along strike	3440	0.8	78	<2	603	340	176	62	140										
156	258160	Homestake ridge		Nick Mitchell	Fb/Hb monzonite	Grab.Fb/Hb monzonite or part of the Betty Creek andicite volcanics	15	0.8	<2		8	403	50	12	70										
157	258161	Homestake ridge		Nick Mitchell	Whole rock	Grab.Strong chl and carb alteration. The sample is from a calcite vein which are throughout the OC 1% Cp, 1% Py.	5	<2			8	8	3	10	6	<2								34	
158	258162	Homestake ridge		Nick Mitchell	Fb/Hb monzonite	Grab.Strong Ser, chl alteration. The sample is from a limeonized and sericitized vein with 1% Py and .5% Cp.	170	0.8	12	<2	108	40	8	<2	46										
159	258163	Homestake ridge		Nick Mitchell	Dacite flow	calcite veins, 2% Py and Cp combined, which is disseminated throughout the sample. The gossen is 15m wide and 6m along strike and cut off by snow on both sides.	15	0.2	52	6	16	70	2	6	56										
160	258164	Homestake ridge		Nick Mitchell	Dacite Tuff	Select. Moderate Chl and carb alteration, mineralization is in the calcite veins, density, 1-2cm vein, 1 per 1 meter square, 6cm vein 1 per 10 meters square. The sample contains massive bornite, cp. Veins are stained with malachite. Note 10% of the sample is Cp or bornite.	105	2.8	14	8	32	50	16	<2	102										
161	258165	Homestake ridge		Nick Mitchell	Dacite lapilli	Grab. Minor sericite Chl alteration. Sericite alteration and Limeonization occur at and near gossen. Calcite and Barite veins are dense, 1-5ccm, 1 per 3 meters square. The sample contains fine grain disseminated Cp, 2%. OC is 15m square terminated by snow	75	11.2	22	2	>10000	220	12	<2	54										
162	258166	Homestake ridge		Nick Mitchell	Dacite flow	Grab. 3% Cp, 1% Ga and 1% Sp Found in a calcite vein/breccia. Strong carb alteration. Breccia area is 20m square.	5	0.4	64	2	39	130	2	6	156										
163	258167	Homestake ridge		Nick Mitchell	Dacite Auto breccia or monzonite	Py. The vein is 30 cm wide and 15m along strike. The vein is terminated by snow.	160	4.8	16	2	2170	<1	922	2	2250										
164	258168	Homestake ridge		Nick Mitchell	Dacite flow breccia	Grab. Moderate carb and silica alteration. Qtz, Ba and calcite veins which conform to foliation. Mineralization is "spotty" and is 1% Py. Mineralization seems to accompany carb alteration.	140	8.4	<2	<2	5640	21	1700	18	>10000										
165	258169	Homestake ridge		Nick Mitchell	Dacite flow breccia	Grab.Minor carb and Chl alteration of relic pyroxene. Mineralization is "spotty" and consists of 1-2% Cp and Py combined, fine grained, disseminated. OC is 25m squared surrounded by snow.	10	0.6	62	12	27	130	28	4	112										
166	258170	Homestake ridge		Nick Mitchell	Granodiorite	Grab. Whole rock. Strong Chl alteration of relic pyroxene and hornblende. The diorite contains xenoliths of dacite flow(?) 10-50cm, sub-angular to rounded. OC also contains calcite veins discordant with foliation	<5		0.2	2	8	1	10	8	<2	22									
167	258171	Homestake ridge		Nick Mitchell	Diorite	Grab. Whole rock. Feldspars feric, Hb/pyroxene porphy with strong Chl alteration.	5	<2			8	<2	23	30	6	4	34								
168	258172	Homestake ridge		Nick Mitchell	?		<5	<2			16	8	23	40	<2	4	54								

A	B	C	D	E	F	G					H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Sample No	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn			
166	258173	Homestake ridge			Nick Mitchell	Dacite flow	select. Strong silification. With sulfide veins of 2% Py and 1% Cp, 30m wide and 40m along strike cross cutting foliation which is 100/80. The gossen is bound by a fault on the west and snow/overburden on the eastern edge.						140	0.6	40	2	10	10	12	<2				42
170	258174	Homestake ridge			Nick Mitchell	Granodiorite	Grab. Minor Chl alteration. The sample is from a Py vein 30cm wide and 20m along strike, 50/80 which is strongly iron stained.						40	0.2	100	10	1	<10	<2		2			48
171	258175	Homestake ridge			Nick Mitchell	Granodiorite	Grab. Minor Chl alteration. The sample is from a Py vein 30cm wide and 20m along strike, 50/80 which is strongly iron stained.						525	15.6	350	16	134	2320	2050	270				332
172	258176	Homestake ridge			Nick Mitchell	Dacite flow	Grab. Strong sericite alteration, primary textures are non-existent. >1% Py. OC weathers buff, 3m square terminates due to overburden.						25	2.2	114	<2	122	100	426	40				572
173	258177	Homestake ridge			Nick Mitchell	Dacite Flow(?)	Grab. Very strong sericite alteration, foliation is 180/80. OC is limeonized. The OC is along a stream drainage and terminates by overburden						<5	0.4	28	<2	31	110	58	14				150
174	258178	Homestake ridge			Nick Mitchell	Dacite	Grab. Porphyry (2.1 ?). Moderate to weak sericite alteration. 1% Py and 1% Cp (?). Fine grain disseminated throughout the OC, which is 10m square terminates due to overburden.						<5	<2	6	<2	17	170	24	4				70
175	258179	Homestake ridge			Nick Mitchell	Dacite	Grab. Porphyry (2.1?). Fb crystals are 3-5mm with diffuse edges. Disseminated Py, 2%, Cp, 1%.						<5	<2	6	<2	18	270	14	2				100
176	258180	Homestake ridge			Nick Mitchell	Dacite flow	Select. Sil alteration, 15%Py, 5% Cp, 3% Sp. Sample taken from adite wall, which is a Qtz vein stock work.						110	10.2	38	26	4900	6410	310	8				7790
177	258181	Homestake ridge			Nick Mitchell	Fb/Hb monzonite	Grab. Strong Sil with gossen weathering. 1% Py and 1% Cp, both are fine grain and disseminated throughout the sample. The OC is 20m square and terminates due to overburden.						45	<2	6	<2	44	80	14	2				78
178	258182	Homestake ridge			Nick Mitchell	Fb/Hb monzonite	Grab. Mod Chl alteration, very hard with near chonocoidal fracture. 1% py no crystal growth. OC is 10m square.						10	<2	2	<2	14	40	8	<2				44
179	258183	Homestake ridge			Nick Mitchell	Fb/Hb monzonite or 2.1?	Grab. Fuzzy Fb xstals 1-4mm in a dark grey fine grained matrix. Fine gain Py moderate to strong ser alteration of Fb. Matrix is still very hard.						<5	<2	6	<2	19	380	14	2				62
180	258184	Homestake ridge			Nick Mitchell	Fb/Hb monzonite or 2.1?	Grab. Massive xstaline, fairly hard with minor ser alteration. 3% Py. The Oc is 50m square and terminates in overburden						15	<2	<2	<2	12	40	<2	<2				16
181	258185	Homestake ridge			Nick Mitchell	Dacite	Select from a Ba/Ca vein. 15% Cp taken from an old adite dump.			1.5			1200	21.2	120	12	>10000	370	164	14				328
182	258186	Homestake ridge			Nick Mitchell	Dacite (2.1 or 2.4)	Select. Strong Silica alteration with weak to moderate Chl. 3% fine grain disseminated Cp with minor Ca/Ba veins. Sample is from an old waste dump.						160	0.6	24	8	25	30	8	<2				78
183	258187	Homestake ridge			Nick Mitchell	Dacite, Rhyolite (?)	Select. Fine grained possible Fb relic phenos 1mm ? Altered to Chl. Minor Py 2% disseminated throughout. Sample is from an old trench.						90	0.2	22	8	48	140	16	6				92
184	258188	Homestake ridge			Nick Mitchell	Andecite Flow	Grab. Moderate Chl alteration with secondary Ser alteration of Fb relic. The sample contains 2% Py/Cp combined fine grained and disseminated throughout. Oc is 1m square, terminates due to overburden.						35	<2	6	<2	10	10	6	2				54
185	258189	Homestake ridge			Nick Mitchell	Dacite flow	Grab. Qtz blebs with moderate Chl alteration. Bblebs of Py, 3% (1cm square). The Oc is 20m by 3m and terminates due to overburden						335	0.8	2	4	<1	<10	<2	<2				58
186	258190	Homestake ridge			Nick Mitchell	Dacite flow	Grab. Qtz blebs with moderate Chl alteration. Bblebs of Py, 3% (1cm square). The Oc is 20m by 3m and terminates due to overburden						90	<2	6	<2	<1	<10	<2	2				34
187	258191	Homestake ridge			Nick Mitchell	Andecite flow	Grab. Moderate silica/Chl alteration with minor Qtz veins and veinlets. The sample contains 3% Py. Oc is 2m squared terminates due to overburden.						470	1	4	8	<1	30	<2	<2				18
188	258192	Homestake ridge			Nick Mitchell	Andecite flow	sample contains 3% Py and 2% Cp. Oc is 2m squared terminates due to overburden.						110	0.2	12	<2	<1	<10	<2	<2				20
189	258193	Homestake ridge			Nick Mitchell	Andecite flow	veins 4mm, one per 40cm. The sample contains 4% y and 2% Cp(?) very fine grained and disseminated throughout. The OC is 20m square terminates due to overburden.						95	<2	12	<2	8	10	<2					52
190	258194	Homestake ridge			Nick Mitchell	Decir Flow	Grab. Minor Ser alteration, crystalline with sub chonocoidal fracture, very hard, no internal structures. 3% Py fine grain and disseminated. Oc is 2m square, found under the root ball of a blow down.						45	<2	<2	<2	28	10	<2					10
191	258195	Homestake ridge			Nick Mitchell	Andecite flow	Grab. Strong Chl alteration and Qtz veins and veinlets, chaotic. 55% Py in cubes and blebs. The OC is 3m square, bound by overburden.						325	1	12	18	<1	20	<2	<2				14
192	258196	Homestake ridge			Nick Mitchell	Andecite flow	Grab. Chunks are strongly Chl altered with relic phenos of Fb, other parts are milky with strong Ser alteration. Still other areas are Sil altered and/or veined with Qtz. 8% Py and 3% Cp. The Oc is 30m square bound by overburden						50	<2	6	4	<1	20	<2	<2				8
193	258197	Homestake ridge			Nick Mitchell	Dacite flow (?)	Grab. Intensely Hydrothermally altered, strong ser alteration. Vugs with Qtz and Py infilling, 5% Pyy. OC is 20m squared terminated due to overburden.						60	<2	8	<2	<1	250	<2		2	<2		
194	258198	Homestake ridge			Nick Mitchell	Andecite flow	Grab. Strong to intense Chl alteration. No primary texture, Py 3% Cp 1%, fine grain. Oc is 2m square, bound by overburden						70	<2	2	10	<1	<10	<2	<2				62
195	258199	Homestake ridge			Nick Mitchell	Andecite flow	Grab. Strong to intense Chl alteration. No primary texture, Py 3% Cp 1%, fine grain. Oc is 2m square, bound by overburden						30	<2	14	2	<1	<10	<2		2			64
198	258200	Homestake ridge			Nick Mitchell	Andecite flow	Grab. Strong to intense Chl alteration. No primary textures, possibly some relic Fb replaced by Chl. Veins of Py 1mm wide bound by silicified, 2mm on either side. Minor Qtz veinlets, chaotic. Co and Pv veinlets 1mm wide as well as fine grained and disseminated, 5% total.						645	3.4	30	16	43	120	50	6				352



A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
Sample #	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn	
197	258201	SW HS Ridge/Cell G10		R.J. Whiteaker	Felsic FHP Dyke/Siltstone	seeds; med to crs-grnd sx, 5-10%py, 2-4%cpy, <1%sphal (?); dyke contains angular brxd siltstone frags; dyke x-cuts @ 60/030 degs; seeds laminated, 70/340 degs bed.						310	1.6	32	<2	1860	120	104	12	664	
198	258202	SW HS Ridge/Cell G10		R.J. Whiteaker	Rhyolite Flow/Felsic FHP	Ints goss/lim cliff o/c of intslly ser-carb+/-chl alt'd felsics; sample across 20cm wide qtz-carb-py-cpy+/-arspy vn(?)alt'n zone; (total sx-5-12%).						215	3.4	46	50	600	20	58	4	314	
199	258203	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow	Rep sample of approx 100 m of goss cliff o/c, collected over 15m; intsl ser-carb-silic alt'd flow; approx 5-12% dissem/ff py->cpy-arspy.						20	0.4	18	<2	104	10	12	8	186	
200	258204	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow/Felsic FHP	Collected across ~20cm intslly goss contact between sx-bearing vn, 80D85 deg w/ approx 8-12% py w/ minor (<2%) cpy-arspy (?).						50	1.8	32	2	43	30	26	2	202	
201	258205	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow/Felsic FHP	Contact zone between Felsic FHP and flow; strg-ints ser-py alt'n (crusty lim/sulphur goss o/c); sample over ~10m and repa cliff o/c. Approx 8-12% finely dissem py.						65	<2	8	2	44	10	6	4	100	
202	258206	SW HS Ridge/Cell F10		R.J. Whiteaker	Felsic FHP	Whole rock sample; mod pervasive ser alt'n; hnb locally alt'd to epidot+/-carb; locally ~2-5% py along fracta/dissem.						<5	<2	<2	<2	30	10		2	<2	134
203	258207	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow	Ints goss o/c approx 3-4m from contact w/ felsic FHP. Rep grab sample across ~3m; intsl alt'n: ~5-12% visible py.						20	0.2	2	2	16	<10		2	6	94
204	258208	SW HS Ridge/Cell G10		R.J. Whiteaker	Rhyolite Flow/Felsic FHP	Chip sample collected across strgly goss o/c, ~2m of intsl (-strg) ser-py alt'd felsic FHP and flow wedge; ~8-12% py dissem w/ tr visible cpy.						40	1.8	82	6	24	10	22	4	114	
205	258209	SW HS Ridge/Cell G10		R.J. Whiteaker	Siltstone- Mudstone	Folded laminated seeds (silicified) and flow-banded rhyolite, (due to adjacent FHP intrusion?); 3-5% ff/dissem py-cpy. Chip sample across ~1.5-2m.						205	1	52	<2	118	20	6	6	98	
206	258210	SW HS Ridge/Cell G10		R.J. Whiteaker	Felsic- Intermediate FHP	Whole rock sample; wk-mod ser-carb+/-chl alt'n.						<5	<2		2	<2	11	<10	4	6	122
207	258211	SW HS Ridge/Cell G10		R.J. Whiteaker	Felsic FHP/Rhyolite Flow	silic-siltstone. Ints ser-sil-chl alt'n, text's obliterated locally, py-replac of mafics; ~16-25% interstitial blebs and dissem py (goss arspy?). Chip sample collected over ~1.5-2m.						<5	1	20	2	98	10	8	6	258	
208	258212	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow/Siltstone	Chip sample across ~40cm near contact between units (note: seeds silicified); 8-10% py, 2-5% cpy-sx as med-coarse grains and masses.						15	1	20	<2	150	<10	<2	4	168	
209	258213	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow/Siltstone	Chip sample across ~2-3m at contact between units (note: sed footwall silicified); 10-15% py, 2-3% cpy-sx as med-coarse grains and masses. Seeds folded at o/c (bedd: 40-50/300-320).						50	3.4	288	<2	142	70	76	16	350	
210	258214	SW HS Ridge/Cell F10		R.J. Whiteaker	Felsic FHP	Ints ser-py schist alt'n w/ clvge/fo'n 78/035 degs; chip across ~1m of intsl patchy goss o/c. Fr-med grnd py->cpy dissem through 'schist' fabric and as ff -total py ~8-12%, cpy <1%.						100	0.4	4	2	8	10	6	6	22	
211	258215	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow/Felsic FHP	Typical rep sample of goss o/c across area collected ~3m; ~8-12% sx, py->cpy-arspy dissem/ff. Clvge 70/130 along 'relic' flow banding.						25	<2	14	<2	4	10	8	6	8	
212	258216	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow/Felsic FHP	Chip sample of 10cm wide coarse-bar sx vein, intsl lim, x-cuts intsl ser-sil+/-carb-bar alt'd wallrock ~70/130 degs. Sample at #258215 location.						30	<2	8	<2	12	350	<2	<2	2	
213	258217	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow	dissem py as fr-md grains and clusters. Rock text's obliterated at contact of units.						10	<2	<2	<2	1	30	<2	6	2	
214	258218	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow/Felsic FHP	Chip/grab across ~3m of goss intsl ser-py (-sil-carb) alt'd felsics. Approx 10% py. 'Crusty' goss py-boxwork common.						40	<2	<2	<2	2	20	6	<2	2	
215	258219	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow	Approx 1m grab/chip sample across intsl ser-sil alt'n zone in rhy (~25-35cm wide, steep dip->NE?); central bar sil+/-carb voining/intsl alt'n w/ 'bands' of med to crs-grnd py (25-30%), incl ~5% cpy mixed w/ py masses/blebs.						35	0.8	8	6	10	10	<2	<2	2	
216	258220	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow/FHP(?)	Sample o/c in zone of 'unclear' lithology. Ints ser-carb>chl alt'n-prim text's obliterated; ~10-15% dissem/ff py->cpy. Grab sample collected across 4-5m of a 10X10m goss o/c.						10	0.6	48	6	15	340	12	6	40	
217	258221	SW HS Ridge/Cell F10		R.J. Whiteaker	FP-Andesite	V.strg-ints ser-chl-carb alt'd pale-med gm interm volc flow; ~8-12% fr dissem py (incl 2-3% cpy) and ff. Sample collected over 1-1.5m approx 5-8m from felsic contact; fo'n ~70/340 degs.						100	2	88	<2	7	10	2	4	48	
218	258222	SW HS Ridge/Cell F10		R.J. Whiteaker	FP-Andesite	Approx 20cm wide chip sample of a 5-10cm wide bar-carb-sil vein (2-3% fine py->cpy dissem) and footwall FP ends (~schist fo'n, intsl chl-sil-ser alt'n, 20-30% med-grnd sx as dissem/blebs (py-10-20%, cpy-5-10%).						145	3.6	34	<2	115	1420	238	78	310	
219	258223	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow/Felsic FHP	Sample of felsic hanging wall ~10m west of #258221. V.strg-ints ser-carb-chl-py alt'n, 8-12% fr-md grnd py (>cpy).						350	6.2	10	<2	19	260	12	6	18	
220	258224	SW HS Ridge/Cell F10		R.J. Whiteaker	Rhyolite Flow	Chip sample across ~20cm of strg goss py-boxwork o/c (~70-80/270 degs, bar-carb vein/alt'n zone?) and intsl ser alt'd wallrock rhyolite (flow banded) w/ silvery py (30-35% md-crs grnd).						335	2.2	99	10	17	120	28	14	4	

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn	
221	258225	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	Chip sample across ~40cm at contact between FHP (inta ser-carb-py alt'd) and an E-W trending, steeply dipping, 80-80cm wide ba-carb-sil vein w/ finely disseminated: 5-8%py, <1%cpy, <1%gal-sphal. Note: FHP wallrock o/c strgly goss and vein buff grey.						80	1.6	<2	<2	16	780	606	8	530
222	258226	SW HS Ridge/Cell F10			R.J. Whiteaker	FP Andesite/(FHP?)	veining in ands (poss FHP?—prim text's obliterated), w/ 10-15% py (locally up to 30%), and 1-3% cpy; py as med-crs blebs and interstitial masses, cpy f gm mix in py.						210	3.2	34	8	22	20	4	8	50
223	258227	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	Grab sample over ~2.3m of v strg-inta ser-chl alt'd FHP; 10-18% f.gmd py (incl 2-3% cpy) as disseminated and med gmd masses.						155	1.4	36	10	21	50	4	8	14
224	258228	SW HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	Rep sample of goss cliffs. Chip sample across ~5m of ser+/carb alt'd flow carrying ~8-12% scattered fn-md>crs gmd py (locally up to 20%).						65	0.8	20	2	17	10	2	2	12
225	258229	SW HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow/Felsic FHP	Inta goss o/c through ser-sil+/carb alt'd FHP/ry flow contact zone. Central massive qtz-py (med-crs grains/masses ~25-35%)-ser-jaep veining/bands-E-W trending. Sample over ~1.2m.						1405	3.6	68	8	362	420	<2	28	6
226	258234	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	Whole rock sample; mod ser-ca-chl alt'n, buff weathered/wk lim on surface. Tr py.						<5	<2	8	<2	18	10	6	8	32
227	258235	SW HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	Inta ser-carb-sil alt'n; inta goss o/c and py-boxwork. Chip sample over ~0.5m.						250	0.2	16	<2	3	30	16	8	2
228	258236	SW HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	Chip sample over ~1m. Bar-vn 75-280, 10cm wide, 2-5% py. Goss showing.						435	2	42	6	4	620	82	<2	118
228	258237	SW HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow/FHP	Approx 40cm wide chip sample of mass bar vein w/ 3-8% py>>cpy-arspy; wallrock bxd in bar.						35	1.8	14	12	187	3000	110	14	5190
230	258238	SW HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow/FHP	Inta ser-carb-sil. Grab ~8-10m across contact zone of units; 5-8% py+/cpy dissemin.						10	0.2	34	<2	21	10	8	6	10
231	258239	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	Whole rock sample; mod pervasive ser alt'n; hnbj locally alt'd to chl+/epid; locally ~1-2% py along fracts/dissemin.						<5	<2	4	4	<1	20	<2	6	74
232	258240	SW HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	Grab across 5m of goss o/c. Inta ser-py (sil-carb?) alt'n, 5-8% py, ~1%cpy. obliterated; massive bar-sil+/carb vn, ~70/330 degs, w/ 30-40% coarse py blebs and fine-gmd masses. Note: sx greatest in core of vn/alt'n zone~1m wide(?)						100	0.4	6	<2	111	30	<2	10	12
233	258241	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	cuts goss rhyolite flows at 70/85 degs. Note: unit not typical FHP on property.						6040	1.6	42	<2	12	370	10	16	6
234	258242	SW HS Ridge/Cell F10			R.J. Whiteaker	Monzonite Dyke							<5	<2	2	<2	8	<10	<2	4	32
235	258243	SW HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	Chip across 3m of goss cliff o/c; ser-sil-py alt'n inta w/ 2-3cm wide goss/py-boxwork-ser-sil-chl vns, 80/270. Approx 8-12% py incl 1-3% cpy.						80	0.2	8	6	24	<10	2	16	12
236	258244	SW HS Ridge/Cell F10			R.J. Whiteaker	FP Andesite	Grab sample across ~1m o/c in old pit; inta chl-carb-sil-ser alt'n of FP andesite flow; 15-20% v.fine-fine py (w/ arspy?) evenly disseminated throughout; x-cutting bar carb-sil brx vns (ang chl-ser-py alt'd and frags), ~1-30 cm wide, carrying med-coarse blebs/dissemin of py (~8-12%), gal (1-3%), cpy (1-2%).						270	4.8	150	16	3650	80	10	16	54
237	258245	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	Chip sample across 2m of 'typical' goss o/c in area. V.strg perv ser+/sil alt'n; f.gmd gmd ax: ~5-8% py, <1-2% cpy.						35	<2	6	<2	13	10	<2	2	8
238	258246	SW HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	Goss showing. Grab over ~3m. Inta ser-sil+/chl+/carb alt'd felsic w/ 5-10% py and <1-2%cpy dissemin.						80	0.2	4	<2	22	10	8	2	6
239	258247	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	wide). Chip sample ~2m. Ave 8-12% py (incl 1-2%cpy) as fine gr dissemin and masses.						125	0.6	38	<2	44	70	26	2	16
240	258248	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	Chip ~1m wide; v.strg-inta ser-sil carb+/chl perv alt'n, 5-8% dissemin py. Shear 5cm wide, 70/280 w/ints goss-py-sx cone.						405	2	44	<2	89	330	54	16	32
241	258249	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP/Ande Flow Bx?	Approx 1m chip sample, 8-12% py, <1% cpy, inta ser-chl-sil alt'n; goss o/c. Possible FP-Ande flow brx contact zone?—alt'n overprints prim text's. Clasts(?) stand-out on weathered o/c.						10	0.2	10	6	<1	30	6	2	28
242	258250	SW HS Ridge/Cell F10			R.J. Whiteaker	Andesite Flow Breccia	Possible felsic porphyry or flow?—alt'n overprints prim text's. Sample across ~1.5m of o/c; unit pale-med grey, v.strg chl-sil-ser alt'n zone; ~10-15% fn-gmd py (+/arspy?) dissemin w/ local 'clusters' of med-coarse gmd py blebs and fn-gmd masses of mixed py/cpy (total cpy~1-3%) in strg chl alt'd sections.						115	1.8	40	<2	1	100	118	4	52
243	258293	Hmatke Prop/Cell D8			R.J. Whiteaker	Argillite/Shale	Approx 10mX10m boulder/float w/ thin layers (<1-2cm thick) of ser-py-cpy-gal(?). Strong lim.						<5	1.2	102	<2	5	340	14	20	20
244	258294	Hmatke Prop/Cell D8			R.J. Whiteaker	Intrmd. Volc Epicalastica	Zone of inta ser-py+/chl alt'd voic bx/epicalastica. V. friable, strg lim/goss. Approx 280-300 degree trend/65-70 dip to py-sx-lim zones.						<5	1.2	808	<2	37	850	8	48	46
245	258295	Hmatke Prop/Cell D8			R.J. Whiteaker	Intrmd. Volc Epicalastica	Zone of inta ser-py+/chl alt'd voic bx/epicalastica. V. friable, strg lim/goss. Approx 280-300 degree trend/65-70 dip to py-sx-lim zones.						<5	6.6	1070	<2	95	10270	14	348	18
246	258296	Hmatke Prop/Cell D8			R.J. Whiteaker	Dacite Flow/Tuff(?)	Ser-py-other sx(?) fract fill, up to 1cm wide w/ ser-ciy bleached seing to 10-15 cm.						<5	2.4	338	<2	25	2000	10	58	50
247	258297	Hmatke Prop/Cell D7			R.J. Whiteaker	Dacite Flow	Py-carb vnit's 80/180, 45/265. V. strong lim-ser-py-other sx(?) in gossan showing.						<5	0.2	60	<2	6	100	6	2	12
248	258298	Hmatke Prop/Cell D7			R.J. Whiteaker	Dacite Flow	Py-carb vnit's. V. strong lim-ser-py-other sx(?) in gossan showing.						<5	0.2	138	<2	14	90	8	4	10
249	258299	Hmatke Prop/Cell D7			R.J. Whiteaker	Intrmd. Flow Bxa/Clastica	Gossan showing. Strong lim-ser; py-carb-finer sx(?) in alt'd voics.						470	3.8	958	<2	10	3440	54	108	12

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn
250	258300	Himstke Prop/Cell D7			R.J. Whiteaker	Intrmd. Flow Bxs/Clastics	Gossan showing. Strong ilm-ser; py-carb-finer sx(?) in alt'd voids.						15	3.2	1380	<2	20	1840	88	74	18
251	258310	HR cell D7			G.E.	Carb alt'd And	rep of py/carb fracture zone 1-3m's @ 020/90 w/ avg. of 5-7% vfg py veinlets	<5		0.2	34	<2	24	960			4	24	48		
252	258311	HR cell D7			G.E.	pyritic SR	2.0 m chip near FW of pyritic muddy SR unit w/ 10-15%py in sooty matrix, also py veinlets and 1-2 cm py fragments 20-40% 0.5-5cm rhyolite lapilli	<5		0.4	158	<2	8	2150			22	28	38		
253	258312	HR cell D7			G.E.	pyritic SR	3m chip of pyritic SR unit in silic/sooty fgr matrix w/ py veinlets and fragments 15-20% vfg py	60	2.8	270	<2	10	820			54	42	42			
254	258313	HR cell D7			G.E.	pyritic dacite	rep of 30% 1-10cm Qtz/Py stringers at top of dacite dome in contact w/ andesite muddy sat unit 40-50% vfg py in qtz veins	<5	<2	32	<2	23	940			4	24	50			
255	258314	HR cell D7			G.E.	pyritic dacite	rep of 15% qtz/py stkw veins in dacite, sample from 10X10 m area -sample	<5		1.8	262	<2	13	1300			158	38	28		
256	258315	HR cell D7			G.E.	pyritic dacite	30% py, 30% qtz some ser alt	185	4.2	216	<2	7	1940			48	20	2			
257	258316	HR cell E5			G.E.	pyritic dacite	2.0 m chip of upper dacite contact w/ SR mudstone, contact very brecciated w/ qtz/carb and 10% vfg py dissem and 1cm fragments	<5		0.8	36	<2	36	1290			78	32	408		
258	258317	HR cell E5			G.E.	veins in Salmon River	2.0 m chip of SR mudstone @ contact w/ pervas mod ser alt and 2-5% dissem py, tr cpy	<5		0.2	22	<2	12	180			14	16	80		
259	258318	HR cell E5			G.E.	py/Qtz stringers	massive py/Qtz stringers in dacite-rhyolite 20 cm veinlet w/ 80% py, 40%Qtz	<5		1.8	212	<2	7	2350	<2		24	<2			
260	258319	HR cell E5			G.E.	rhyolite	rep of 2X2 m area of rhyolite w/ 5% dissem vfg py and vuggy py/pyrobitumen? Fill-in central part of flow	<5		0.2	14	<2	5	70			10	6	46		
261	258320	HR cell E5			G.E.	veins in Salmon River	rep of graphitic mudstone SR w/ 15% vfg py laminations parallel w/ bedding	<5		3.4	28	<2	112	290			4	8	104		
262	258326	HR cell E5			G.E.	rhyolite	rhyolite hyaloclastite w/ 20-25% vfg py stringers w/ 1-3% carb, ba veins within 1m of SR contact	<5		1.4	88	10	14	750			58	18	366		
263	258327	HR cell E5			G.E.	float	rhyolite float but appears hornfelsed w/ 50-60% po, 0.5-1.0% Cpy, chl	15	3.8	6	8	1575	<10			8	<2	198			
264	258328	HR cell E5			G.E.	float	float of tremolite/actinolite w/ 2-3% dissem cpy, 3% po as dissem and blebs			1.45			375	24.8	6	<2	>10000	40	4	12	390
265	258329	HR cell E5			G.E.	veins in Salmon River	sulphide fracture zone in crse salmon river mudstone crse ep, sb? in a pyrobitumen rich fragment? very crystalline	5	2.6	956	2	183	280	36	32	394					
266	258330	HR cell E5			G.E.	rhyolite float	float-rhyolite w/ 30-35% vfg py, stringers tr sp?	5	43.8	884	2	81	4850	688	228	182					
267	258331	HR cell E5			G.E.	mudstone	SR mudstone @ rhyolite contact fgr wacke w/ 20% vfg pyrite	<5		1	358	<2	24	530			32	28	128		
268	258332	HR cell E5			G.E.	rhyolite	within 1m of SR contact rhyolite hyaloclastite w/ 15-20% vfg py dissem and blebs	15	8.8	748	<2	26	1760	100	90	174					
269	258333	HR cell E5			G.E.	hyaloclastite	float-graphitic mudstone w/ 20-25% po, lam and dissem vfg	10	0.8	<2	<2	207	10	8	4	98					
270	258334	HR cell E5			G.E.	graphitic mudstone	10cm bed of graphitic mudstone w/ 30% vfg py lams in a coarser siltstone	<5		0.2	42	<2	45	70			20	10	242		
271	258335	HR cell E5			G.E.	graphitic shale	float from cliffs of graphitic shale w/ 20% 0.5-3.0cm py concretions	15	0.4	50	<2	128	210	42	6	108					
272	258336	HR cell E5			G.E.	graphitic shale	float from cliffs of graphitic shale w/ 40% 0.5-3.0cm py concretions	15	0.2	28	<2	118	180	58	14	70					
273	258337	HR cell E5			G.E.	graphitic	graphitic fault gouge w/ 10-15% py, very oxidized and highly sheared	10	3.2	56	<2	58	120	14	42	578					
274	258338	HR cell E4			G.E.	mudstone	1m bed in SR w/ 10-15% vfg pyrite frags and vfg dissem py	<5	<2	68	<2	22	350	44	12	88					
275	258339	HR cell E4			G.E.	rhyolite	black hyaloclastite w/ 5% py stringers 2X2m area sample 15% vfg py	<5		0.2	110	<2	5	420			16	12	14		
276	258340	HR cell E4			G.E.	hyaloclastite	rep of 10 m area of py stringers in black hyaloclastites avg 50-60% vfg py in sample	<5		1.6	1035	<2	14	1330			84	84	18		
277	258341	HR cell E4			G.E.	py stringer in rhyolite	30 cm silicd py stringer in rhyolite 070/70N 30% vfg py	<5		2.8	118	<2	6	1190			68	50	22		
278	258342	HR cell E4			G.E.	py stringer in rhyolite	Qtz/Ba/Py stringer 30 cm in rhyolite w/ 40% rodde py	30	16.4	968	<2	38	700	114	722	290					
279	258351	HR cell E6			D. Baker	carb-py veins	chip of carb-py veins in brittle fractures hosted by maroon andesitic pyroclastic breccia	<5	<2	18	<2	3	50	<2		12	86				
280	258352	HR cell E6			D. Baker	carb-py veins	chip of carb-py veins in brittle fractures hosted by andesitic pyroclastic breccia			1.35			<5	14	4	<2	>10000	660	12	10	106
281	258353	HR cell E6			D. Baker	carb-barite(?) py veins	chip of goassencous carb-barite(?) pyrite veins hosted by andesitic pyroclastic breccia	<5	<2	68	<2	51	50	<2		12	72				
282	258354	HR cell E6			D. Baker	qtz-carb-py veins	chip from a 70cm-wide fractured zone (260/78) with qtz-carb-py veins hosted by maroon andesitic pyroclastic breccia	10	<2	264	<2	16	70	<2		6	50				
283	258355	SSW of Illiance Mtn			D. Baker	carb-fuch alt andesite (183/70)	chip of intensely carb-fuch altered andesite flow within regional-scale fault	15	0.8	18	4	46	110	8	2	128					
284	258356	HR cell E6			D. Baker	carb-Qtz-py stockwork	grab of carb-Qtz-py stockwork within andesite flow top breccia	20	1	294	6	49	280	6	2	144					

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
1	Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn
285	258357	HR cell G4			D. Baker	rhyolite	dark grey flow-banded rhyolite with 3% dissemin. and fract-controlled py, chip						10	1.2	28	6	614	40	32	8	42
286	258358	HR cell G4			D. Baker	rhyolite							<5	0.2	784	<2	15	170	170	230	84
287	258359	HR cell G4			D. Baker	rhyolite	disseminated py						<5	0.8	48	<2	13	80	32	34	12
288	258360	HR cell G4			D. Baker	rhyolite	flow-banded rhyolite with 10% dissemin. py						<5	<2	48	<2	9	70	22	44	12
289	258361	HR cell G4			D. Baker	rhyolite	light grey rhyolite with abundant irreg. 2-5cm (up to 30cm) wide veins/pods of carb-sulfide; rhyolite wallrock adjacent to one large pod containing 5% disseminated sulfide chip sampled						10	0.2	250	<2	28	710	28	44	44
290	258362	HR cell G4			D. Baker	mass. sulfide pod	1.0m x 30cm pod of 80% dull brass-coloured sulfide with radiating crystal habit (marcasite?) and vlg dark grey sulfide which is parallel to fine layering (flow banding?) in rhyolite; grab						10	1.8	1305	<2	7	3950	48	350	8
291	258379	HR cell G8			D. Baker								<5	1	180	<2	40	5770	12	10	26
292	258380	HR cell H8			D. Baker	ser-py schist	5% py						<5	0.2	12	<2	15	880	<2	2	26
293	258381	HR cell H8			D. Baker	porphyritic andesite	grab sample of least-deformed andesite from same gossan as samp 258380, patchy py up to 15%						<5	0.4	14	<2	16	1610	<2	2	86
294	258382	HR cell H8			D. Baker	sericitized andesitic tuff	intensely sericitized, honey yellow, f. to c. andesite tuff, alteration decreases westward away from ser-py schist zone						<5	<2	2	4	4	1060	2	<2	6
295	258383	HR cell H8			D. Baker	ser-py schist	gossanous ser-py schist with 5% dissemin. py; chip sample						<5	0.2	8	<2	9	2570	<2	<2	2
296	258384	HR cell G8			D. Baker	ser-py schist	gossanous ser-py schist with patches of up to 15% dissemin. py; grab sample						<5	0.8	474	<2	31	5050	<2	8	78
297	258385	HR cell G8			D. Baker	barite-chl-carb vein	barite-chl-carb vein with 10% dissemin. py in andesitic tuff wallrock; grab sample						<5	0.4	878	<2	9	800	<2	10	26
298	258386	HR cell F12			D. Baker	feld-hb porphyry	chip sample of por with abundant (25 vol %) quartz stringers trending 340, trace py						<5	<2	<2	2	3	<10	2	<2	8
299	258387	HR cell F12			D. Baker	andesite vol breccia	gm to (rarely) maroon, med-grained vol breccia with frags 1-8cm; whole rock analysis						<5	0.2	8	<2	147	<10	<2	4	74
300	258388	HR cell F12			D. Baker	bar-carb-sphal-gal vein	grab sample from small trench, 4cm-wide bar-carb +/- sphal vein with abundant gal-sphal-carb selvage, 20% gal, 30% sphal		310	9.17	17.45		20	>100.0	22	40	594	20500	>10000	280	>10000
301	258389	HR cell F12			D. Baker	bar-carb-sphal-gal vein	chip sample (5 chips along 3m) of carb-bar vein with 10% sphal and 5% gal, vein @ 245/86, same vein as samp 258388 but in a second trench about 30m SW			2.92	5.21		50	35.6	18	<2	124	23600	>10000	52	>10000
302	258390	HR cell F12			D. Baker	feld-hb porphyry	feld phenos; GE sampled most silicious equivalent, this sample represents the most mafic						<5	1.4	12	<2	24	590	648	12	1170
303	258391	HR cell F12			D. Baker	arse-py vein	grab sample of 4cm arse-py vein cutting silicified feld-hb por						6910	30	9580	128	4350	120	180	32	508
304	258392	HR cell F12			D. Baker	arse-py vein	grab sample of 5cm qtz-py-arse vein within a fault @ 240/82						520	10.4	>10000	14	538	220	48	246	132
305	258393	HR cell F12			D. Baker	mass. sphal-gal	chip sample from rubble pile at old digging consisting of "layered", massive reddish brown sphal-gal with trace py-bom	20.5	578	22.5	36.5		>10000	>100.0	1870	122	2880	16100	>10000	464	>10000
306	258394	HR cell F12			D. Baker	andesite pyroclastic brecc	typical light gm pyroclastic breccia with pyritic frags up to 3cm						60	4	44	<2	470	90	892	28	2390
307	258395	HR cell F12			D. Baker	quartz-carb breccia	at least 3m-wide breccia/stringer zone cutting feldspar porphyry. 20cm, open-space textured q.v. at 133/82. Rare sulfides						10	<2	66	<2	32	<10	8	<2	56
308	258396	HR cell F12			D. Baker	feld-qtz porphyry	light gm-brn, feldspar-quartz phyrlic porphyry (no hb), locally 4% diss py, whole rock sample						<5	<2	14	<2	15	<10	6	<2	64
309	258415	HR EF-11			G.E.	QV in mudstone	1.2 m chip @ adit milky 1-3cm qtz veins in silic mudstone w/ 10-15% py, 1-2% aspy						880	28.8	1400	20	343	2290	6930	52	8310
310	258416	HR EF-11			G.E.	QV in mudstone	rep of float 30% fgr py in silic mudstone w/ 10% milky QV's 5% sp, tr ga, tetrahedrite?				3.84		1655	43.8	2030	34	2390	4360	9090	56	>10000
311	258417	HR EF-11			G.E.	py/asp veins	rep sample of several 10-30cm py/asp veins strong ferrocrete within silic mud/silt 20% fgr py, 10% fgr aspy						1190	14.6	>10000	10	508	460	1180	76	968
312	258418	HR EF-11			G.E.	py/asp veins	1.0 m chip of silic siltstone w/ 10% vuggy QV's w/ 25% py, 5% aspy, tr-5% cpy 310/70E						7940	22.4	>10000	50	2680	70	78	140	134
313	258419	HR EF-11			G.E.	rhyolite	Flow banded rhyolite -WR- silic w/ 2-3% py						40	0.8	302	4	48	<10	20	12	126
314	258420	HR EF-11			G.E.	rhyolite	Flow banded rhyolite -WR- silic w/ 2-3% py conspicuous fgr tp phenos						10	0.2	58	<2	7	<10	10	4	104
315	258421	HR EF-11			G.E.	qtz/py vein	"coombes trench" 3.0 m chip across a 340/70E trend vuggy QV in silic rhyolite w/ sed lam 30-40% crse py, tr aspy, cpy						65	1.8	132	<2	3	<10	<2	12	114
316	258422	HR EF-11			G.E.	qtz rich rhyolite	grab of qtz rich rhyolite w/ 25% py, tr aspy +/- chl alt fractures						40	5	390	6	341	30	38	8	132
317	258423	HR EF-11			G.E.	qtz/carb vein	1.2 m chip of a qtz/carb vein trending 030/70NW within wk chl alt rhyolite, vein has 15% crse py, 10% crse sp, 2-3% ga tr tetrahedrite		563	1.85	5.36		1395	>100.0	822	212	5280	10780	>10000	4990	>10000
318	258424	HR EF-11			G.E.	minzld rhyolite	float from old trench of chl alt rhyolite w/ 3-4% py, 3-4% ga and 5% sp in fractures and veinlets			1.84	8.22		50	79.6	42	8	495	13180	>10000	328	>10000
319	258425	HR EF-11			G.E.	minzld rhyolite	rep of old dump pile of chl alt rhyolite w/ 25% mgr pyrite						50	3.4	184	14	28	50	58	58	504
320	258426	HR EF-11			G.E.	rhyolite py	blast float from branch of 50-60% aspy, 20% py in qtz/calc veins within siltstone						15	1	12	<2	9	60	72	14	318
321	258427	HR EF-11			G.E.	py/asp veins	QP rich siliceous rhyolite dome w/ wk seric @ occas hb (HFP border phase) need WR	10.5					>10000	79.8	>10000	252	7720	210	664	304	144
322	258428	HR EF-11			G.E.	QP rhyolite							45	1.2	1595	6	79	10	78	18	118

1	A	B	C	D	E	F	G					H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
Sample N	General Location				Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn					
328	258429	HR EF-11			G.E.	FP andesite debris flow	chl altd andesite debris flow w/ wk pervas. carb altn, 10-20% 1 mm plag phenos 20+% 1-2 cm mudstone fragments						10	0.6	216	<2	12	<10	4	12	168					
329	258430	HR EF-11			G.E.	qtz/py veins in siltstone	grab from pit 10% 0.5-1.0cm qtz/py veinlets w/ tr aspy in siltstone						260	15	1770	4	253	3770	3800	38	4700					
329	258431	HR EF-11			G.E.	sulphide veins	1.2 m chip of sulphide veins cutting mud/siltstone @ 075/90 10%py,5%sp,1%ga tr,5% cpy,aspy		595			4.81	885	>100.0	>10000	34	9350	7950	7150	5320	>10000					
329	258433	HR EF-11			G.E.	Mass Sulphides	float at trenches of mass sulphides in seric and chl altd siltstone-appears brecciated 50% fgr py, 10%aspy?, 5% sp tr cp,ga crudely laminated						815	35.2	>10000	48	8520	870	2000	5480	9390					
327	258434	HR EF-11			G.E.	Mass Sulphides fl band	float at trenches of mass sulphides in seric and chl altd siltstone-appears brecciated 60% fgr py, 10%aspy?, 5% sp tr cp,ga crudely laminated						1790	12.4	>10000	18	3190	500	832	1920	3720					
328	258450	HR EF-11			G.E.	rhyolite	Flow banded rhyolite WR, well lam w/ seric and silic lams, 6-8% dissem py, tr chl fract						10	8.8	44	<2	140	310	618	260	826					
328	258453	HR cell F5 with Brian			P.G.	Andesite/Tuff	Fine grained pyrite disseminated through andesite or tuff.						<5	<2	72	<2	30	14440	30	14	420					
330	258454	HR cell F5 with Brian			P.G.	Dacite	Pyrite found in clumps and in what may be fracture cracks, is fine grained and mixed with calcite.						<5	<2	6	<2	13	70	2	8	72					
331	258455	HR cell D8 NW corner			P.G.	Dacite	Pyrite disseminated through what I think is dacite.						<5	4	818	<2	50	5980	76	60	58					
332	258456	HR cell D8 NW corner			P.G.	Dacite	Gossan outcrop shows fine pyrite disseminated through dacite. Sample piece also shows small veinlets and accumulations of fine pyrite.						<5	0.8	284	<2	70	2600	102	28	126					
333	258457	HR cell D8 NW corner			P.G.		Pyrite disseminated through quartz and calcite.						<5	<2	184	<2	8	60	16	6	84					
334	258458	HR cell D6 with Nick			P.G.	Andesite	Pyrite finely disseminated through sample which also contains calcite and quartz veins. Small blebs of pyrite are gathered near these veins. This sample is located within the Salmon River.						<5	<2	56	<2	14	540	14	22	10					
335	258459	HR cell D6 with Nick			P.G.	Andesite	Pyrite disseminated through sample which also contains some small veinlets. Sample also contains fossils.						<5	<2	50	<2	14	1000	10	26	54					
335	258460	HR cell D6 with Nick			P.G.	Andesite	Sample appears to have a veinlet of graphite running through with pyrite in blebs along veinlet. No pyrite is disseminated through sample.						<5	<2	44	<2	11	890	8	20	6					
337	258461	HR cell D6 with Nick			P.G.	Andesite	Pyrite disseminated throughout sample and is also found in larger clumps approx. 15%. Pyrite vein in NE direction goes from 7-12cm. in width for about 2m. Sample taken from edge of vein.						<5	0.4	144	<2	14	3930	18	48	6					
338	258462	HR cell D6 with Nick			P.G.	Andesite	Fine grained pyrite disseminated through sample which also contains some small veinlets.						<5	<2	268	<2	24	2640	6	36	42					
338	258463	HR cell D6 with Nick			P.G.	Andesite	Fine grained pyrite disseminated throughout sample. Pyrite also found in blebs.						30	1.2	810	<2	14	680	6	16	12					
340	258464	HR cell C7 with Rob			P.G.	Argillite/Siltstone	Pyrite is very fine grained and disseminated throughout sample. Some veinlets and blebs can also be seen.						10	0.2	56	<2	50	80	6	2	92					
341	258465	HR cell C7 with Rob			P.G.	Argillite/Siltstone	Sample taken from beside intermittent creek. Pyrite is about 1% as it is barely seen, however area is very gossanous.						<5	0.2	26	<2	20	140	8	6	188					
342	258466	HR cell C7 with Rob			P.G.	Argillite/Siltstone	Pyrite found in gossanous outcrop is finely disseminated and collected in fair sized blebs.						<5	0.8	68	<2	45	140	12	10	574					
343	258467	HR cell G2 with Nick			P.G.	Rhyolite	sample with small veinlets as well, Py-5%. Sample shows quartz laminations run through.						10	1.6	28	<2	11	130	60	16	66					
344	258468	HR cell G2 with Nick			P.G.	Rhyolite	Pyrite found disseminated throughout at about 7%, no flow banding present						<5	8.6	30	<2	9	440	80	16	26					
345	258469	West side Kitsault River			P.G.	Argillite/Siltstone	Sample is black with bands of siltstone, pyrite is about 1% but sample taken from slightly gossanous area.						<5	1	10	<2	51	50	12	<2	162					
346	258470	West side Kitsault River			P.G.	Andesite	Sample is green in color with angular black particles. Fine pyrite disseminated through at about 2%.						<5	<2	4	2	54	30	<2	<2	98					
347	258471	Upper West Kitsault River			P.G.		Sample appears to be a mixture of calcite and quartz with variable sized angular pieces of argillite ranging in size from 0.2-2 cm. Pyrite is finely disseminated through the sample about 2%.						5	<2	8	6	16	30	8	<2	246					
348	258481	Upper West Kitsault with Rob			P.G.	Mudstone	contains fine disseminated pyrite and pyrite veins about 2mm. and veinlets. Pyrite approx. 35%.						170	1.6	416	<2	243	10	20	28	134					
348	258482	Upper West Kitsault with Rob			P.G.	Andesite Breccia	Grab sample taken from small rock outcrop which was slightly gossanous. Sample contains fine disseminated pyrite at approx. 3%. Slightly sericite and carbonate altered.						<5	1	62	<2	97	130	2	18	168					
350	258483	Upper West Kitsault with Rob			P.G.	FHP	and was approx. 10 by 5m. Zone was a FHP dyke bounded by mudstone. Pyrite is finely disseminated and is collected in veinlets at approx. 20%.						10	4.8	50	<2	143	120	234	24	640					
351	258484	Cell 16 with Darcy			P.G.	Andesite Breccia	Grab sample taken from gossanous area which was located beside a localized sheer zone. Sample contains medium sericite alteration and pyrite is disseminated throughout at approx. 5%.						<5	0.4	14	<2	14	150	24	4	60					



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
1	Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn	
		Valley of Home stake ridge			Nick Mitchell	andecite	Possible a dacite clast in the Betty Creek conglomerate. Fairly dense calcite/barite veins which see to be genetically associated to the mineralization. Gossen and buff weathering pattern is 10m along strike and contains minor pyrite and lesser chalc. (Grab)						<5	0.2	30 <2		25	340 <2		16	16	
383	258559	Valley of Home stake ridge			Nick Mitchell	M/G breccia	Minor calcite/barite vein, 1-4 cm. Both gossen and buff coloured weathering. Disseminated pyrite and minor chalc (1%)						<5	0.6	102 <2		36	5880 <2		36	6	
384	258560	Valley of Home stake ridge			Nick Mitchell	andecite	Massive weathered pyrite veins in Samon River XLT/mud stone.						<5	0.2	240 <2		20	4600	16	52	92	
385	258561	Valley of Home stake ridge			Nick Mitchell	andecite x-stal lithic tuff	Massive weathered pyrite veins in Samon River XLT/mud stone.						5	0.2	48 <2		60	250	14	10	66	
386	258562	Valley of Home stake ridge			Nick Mitchell	andecite x-stal lithic tuff	Massive weathered pyrite veins in Samon River XLT/mud stone.						<5	<2	70 <2		10	1500	14	26	4	
387	258563	Valley of Home stake ridge			Nick Mitchell	andecite x-stal lithic tuff	Massive weathered pyrite veins in Samon River XLT/mud stone.						<5	<2	50 <2		6	1330	4	20	18	
388	258564	Valley of Home stake ridge			Nick Mitchell	andecite	Very little calcite/barite vein, >1 cm. Both gossen and buff coloured weathering. Disseminated pyrite (3%) and minor chalc (1%)						<5	0.2	64 <2		12	690	12	36	32	
389	258565	Valley of Home stake ridge			Nick Mitchell	M/G breccia	Andecite clast with disseminated pyrite. Located 15 cm away from a 6cm wide vein of weathered fine grained pyrite.						<5	0.6	16 <2		18	230 <2		2	42	
400	258566	Valley of Home stake ridge			Nick Mitchell	andecite	Massive pyrite in chaotic vein system, strong gossen weathering pattern. Sample location is in the Upper Salmon River/ Lower Bowser Basin contact.						<5	0.2	940 <2		10	4560 <2		138	62	
401	258567	Valley of Home stake ridge			Nick Mitchell	shale	Fine grain pyrite vein, 3cm in Arg/mud stone.						<5	0.4	98 <2		4	2470 <2		48	2	
402	258568	Valley of Home stake ridge			Nick Mitchell	mud stone	Disseminated pyrite in upper Salmon River.						<5	0.8	98 <2		10	1360	12	48	16	
403	258569	Valley of Home stake ridge			Nick Mitchell	mud stone	This sample is composed of vein and host rock approx. 5 cm either side of the vein						<5	<2	62 <2		35	980	2	16	48	
404	258570	Valley of Home stake ridge			Nick Mitchell	mud stone	Chaotic pyrite vein in the upper Salmon River, 1-15 cm wide and 7 m along strike. Intense gossen weathering.						<5	0.6	106 <2		9	790	16	20	24	
405	258571	Valley of Home stake ridge			Nick Mitchell	mud stone	Disseminated pyrite and arsenopyrite (?). Buff weathering and minor calcite veins. Float sample but the source is 100m to the N. east up the cliff.						640	1	28 <2		95	<10	<2	<2	100	
406	258574	Valley of Home stake ridge			Nick Mitchell	rhyolite	Finely laminated argillite with massive pyrite in discrete strata						5	1.4	66	2	50	370 <2		8	150	
407	258575	Valley of Home stake ridge			Nick Mitchell	argillite	The argillite has been silicified with disseminated pyrite.						10	0.2	10	2	49	80	2 <2		174	
408	258576	Valley of Home stake ridge			Nick Mitchell	argillite	strong iron staining with disseminated pyrite through out. Salom River (?) XLT						10	1	48 <2		17	580	16	50	246	
409	258577	Valley of Home stake ridge			Nick Mitchell	mud stone	strong iron staining with disseminated pyrite through out. Salom River (?) XLT						5	0.2	40 <2		15	1370	10	26	106	
410	258578	Valley of Home stake ridge			Nick Mitchell	mud stone	Silicified mudstone with disseminated pyrite and minor qtz veins.						<5	0.8	116	2	35	270	6	44	256	
411	258579	Valley of Home stake ridge			Nick Mitchell	mud stone	Silicified mudstone with disseminated pyrite and minor qtz veins. strong gossen staining.						<5	0.2	28	2	25	240 <2		6	100	
412	258580	Valley of Home stake ridge			Nick Mitchell	andecite or dacite flow	10% pyrite with 1% chalcopyrite.						<5	0.6	32 <2		43	340	14	10	248	
413	258581	Valley of Home stake ridge			Nick Mitchell	rhyolite, dacite (?)	Minor pyrite in micro veins and veinlets. No visible structures in the rock. Clasts are >1-1mm clasts, volcanoclastics (?). The weathering is a distinctive "bleach" out rind with sporadic gossen staining.						10	7	46 <2		13	650	58	18	14	
414	258582	Valley of Home stake ridge			Nick Mitchell	rhyolite	>1% chalc associated with "blebs" of pyrite 1% no internal structure.						25	0.8	30 <2		19	230	32	22	24	
415	258583	Valley of Home stake ridge			Nick Mitchell	rhyolite	>1% chalc associated with "blebs" of pyrite 1% no internal structure.						10	0.4	16 <2		10	180	38	18	8	
416	258584	Valley of Home stake ridge			Nick Mitchell	rhyolite	Minor pyrite 1%, 1mm crystals of pyrite with diffuse edges						5	0.4	20 <2		6	30	44	10	6	
417	258585	Valley of Home stake ridge			Nick Mitchell	rhyolite	Minor pyrite 1%, 1mm crystals of pyrite, feldspar crystals with diffuse edges.						<5	1.6	24 <2		5	120	26	24	10	
418	258586	Valley of Home stake ridge			Nick Mitchell	rhyolite	Minor pyrite 1%, 1mm crystals of pyrite, feldspar crystals with diffuse edges.						10	0.6	52 <2		7	320	38	20	6	
419	258587	Valley of Home stake ridge			Nick Mitchell	rhyolite	Minor pyrite 1%, 1mm crystals of pyrite. Black grains, clasts or crystals(?) possibly sphalerite(?). No internal structures, choncodial fracture						35	6.6	10 <2		17	30	26	6	76	
420	258588	Valley of Home stake ridge			Nick Mitchell	rhyolite	Massive fine grained pyrite throughout. Feldspar crystals are found with diffuse edges, no internal structures. The outcrop weathering is "bleached", very little gossen or hematite staining.						5	6.6	36 <2		12	250	86	44	40	
421	258589	Valley of Home stake ridge			Nick Mitchell	rhyolite	Fine pyrite, 2mm feldspar crystals, minor chlorite alteration along a fractures with qtz flooding along the same fractures.						5	1.8	40 <2		12	60	124	12	38	
422	258590	Valley of Home stake ridge			Nick Mitchell	rhyolite	Fine pyrite throughout with veins (1mm) and veinlets of pyrite. Very fresh rock no alteration well preserved feldspar crystals.						5	3.6	16 <2		11	80	68	16	66	
423	258591	Valley of Home stake ridge			Nick Mitchell	rhyolite	Fine pyrite throughout with veins (1mm) and veinlets of pyrite. Very fresh rock no alteration well preserved feldspar crystals.						5	6.6	28 <2		27	150	172	18	92	
424	258592	Valley of Home stake ridge			Nick Mitchell	rhyolite																

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1	Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn
425	258593	Valley of Home stake ridge			Nick Mitchell	rhyolite	Fine pyrite throughout with veins (1mm) and veinlets of pyrite. No crystals of pyrite or internal structures.						10	5.6	16	<2	15	120	92	8	54
426	258594	Valley of Home stake ridge			Nick Mitchell	rhyolite	Disseminated pyrite throughout the O/C with 1-3 mm "blebs" and veinlets. Feldspar crystals which in some areas have been replaced by pyrite (secondary pulse?). No internal structures.						5	3	32	<2	15	570	96	36	52
427	258595	Valley of Home stake ridge			Nick Mitchell	rhyolite	Disseminated pyrite throughout the O/C with 1-3 mm "blebs" and veinlets. Feldspar crystals which in some areas have been replaced by pyrite (secondary pulse?). No internal structures.						5	3.2	30	<2	15	660	78	24	78
428	258596	Valley of Home stake ridge			Nick Mitchell	rhyolite	Disseminated pyrite throughout the O/C with 1-3 mm "blebs" and veinlets. Feldspar crystals which in some areas have been replaced by pyrite (secondary pulse?). No internal structures.						<5	5.8	58	<2	8	1890	204	28	56
429	258597	Valley of Home stake ridge			Nick Mitchell	rhyolite	Disseminated pyrite throughout the O/C with 1-3 mm "blebs". There is veinlet zoning 10 cm wide and 6 m along strike, with is sericite altered and rotted out, approx 5cm from sample site. Very strong gossen.						<5	1.4	68	<2	7	530	98	28	22
430	258598	Valley of Home stake ridge			Nick Mitchell	rhyolite	Fine pyrite throughout with veins (1mm) and veinlets of pyrite. Minor sericite alteration with intense gossen.						<5	14.2	50	<2	5	270	52	28	12
431	258599	Valley of Home stake ridge			Nick Mitchell	rhyolite	Arg with 6cm calcite veins with minor pyrite and sphalerite >1%.						<5	0.4	128	<2	8	170	<2	10	24
432	258601	Hmstke Prop/Cell D8			R.J. Whiteaker	Intrmd Lap Tuff/Volc-Clast	Chip sample across ~1-2m, lim stain qtz-carb-py ff.						<5	<2	2	<2	5	50	6	6	38
433	258602	Hmstke Prop/Cell D7			R.J. Whiteaker	Intrmd Flow Bx/Clastics	Chip sample across ~1m, lim stain qtz-carb-py ff.						35	2.2	488	<2	18	5330	44	84	90
434	258603	Hmstke Prop/Cell C8			R.J. Whiteaker	Intermediate Flow Bx	Py-ser-+/-ep vnita/ff w/ lim stain. Chip ~30cm.						5	2	18	<2	27	280	60	4	150
435	258604	Hmstke Prop/Cell C7			R.J. Whiteaker	Mudstone/Felsic Dyke	Grab across 5m of limonitic silts/mudst near intrusion. Tr py dissem/ff.						<5	0.2	14	<2	24	100	12	4	78
436	258605	Hmstke Prop/Cell C7			R.J. Whiteaker	Mudstone/Siltstone	Grab across 3m of limonitic silts/mudst. Tr py visible.						<5	<2	36	<2	40	210	10	22	88
437	258606	Hmstke Prop/Cell C7			R.J. Whiteaker	Mudstone/Siltstone	Grab across 5m of limonitic silts/mudst. Tr py visible.						<5	0.2	32	<2	18	80	6	14	48
438	258607	Hmstke Prop/Cell C7			R.J. Whiteaker	Siltstone/Argillite	Grab across 5m of limonitic rotted silts/mudst o/c.						<5	0.2	18	<2	26	90	8	6	54
439	258608	Hmstke Prop/Cell C7			R.J. Whiteaker	Siltstone/Argillite	Grab across 10m of limonitic silts/mudst. Tr py visible.						5	0.8	60	<2	27	90	14	10	94
440	258609	Hmstke Prop/Cell D7			R.J. Whiteaker	Peb/Cobl Congl w/ Foss.	Mod goss o/c w/ 1-3% dissem py. Chip across ~2m.						<5	<2	24	<2	21	150	8	6	56
441	258614	Hmstke Prop/Cell D6			R.J. Whiteaker	Peb/Cobl Congl w/ Foss.	Grab across 1-2m of limonitic. Tr py visible on goss o/c.						15	0.8	42	4	<1	40	48	<2	402
442	258615	Hmstke Prop/Cell D6			R.J. Whiteaker	Siltstone	Grab across 5m of limonitic silts/mudst. Tr py visible.						<5	0.6	44	<2	20	440	28	8	116
443	258616	Hmstke Prop/Cell D6			R.J. Whiteaker	Siltstone Bx	Grab across 4m of limonitic silts/mudst bx. Tr py visible.						<5	0.6	202	2	6	1550	20	34	36
444	258617	Hmstke Prop/Cell D6			R.J. Whiteaker	Siltstone Bx w/ Rhy Frags	Grab across 2m of limonitic silts/mudst bx. Tr py visible.						20	0.2	52	<2	25	450	10	8	72
445	258618	Hmstke Prop/Cell D6			R.J. Whiteaker	Siltstone Bx w/ Rhy Frags	Inta lim o/c w/ 2-4% py as fine-grained dissem/fract fill.						<5	1	54	2	62	390	18	12	412
446	258619	Hmstke Prop/Cell G3			R.J. Whiteaker	Rhyolite	Approx <1-2 cm wide ser-carb-py (v.fine gr masses) vn, 72/230; ser-py alt'd wallrk to 20-40cm. Locally flow banding.						5	1	198	<2	22	240	22	4	122
447	258620	Hmstke Prop/Cell G3			R.J. Whiteaker	Rhyolite	Approx 3cm wide ser-carb-py (v.fine gr masses) vn, 70/220; ser-py alt'd wallrk to 20-40cm.						<5	1.8	32	<2	14	90	42	20	82
448	258621	Hmstke Prop/Cell G3			R.J. Whiteaker	Rhyolite	Approx 1 cm wide ser-carb-py (v.fine gr masses) vn; 60/210; ser-py alt'd wallrk~10-40cm; stockwork 1-10m spacing.						<5	0.8	82	<2	15	260	58	10	36
449	258622	Hmstke Prop/Cell G3			R.J. Whiteaker	Rhyolite	Approx 1cm wide qtz-ser-py (<1%) stockwrk vn; 55/200; ser-py alt'd wallrk to 20cm.						5	4	104	<2	11	290	68	58	32
450	258623	Hmstke Prop/Cell G3			R.J. Whiteaker	Rhyolite	Approx 1.5 cm wide qtz-ser-py (+/-cpy) stockwrk vn zone; 70/230. Flow-banded locally.						<5	9.2	52	<2	27	80	34	50	20
451	258624	Hmstke Prop/Cell G3			R.J. Whiteaker	Rhyolite Breccia	Brocciated rhyolite, ang frags, well-healed w/ carb-py(3-5%)-ber matrix; limonitic.						<5	<2	28	<2	6	170	38	48	64
452	258625	Hmstke Prop/Cell G3			R.J. Whiteaker	Rhyolite Breccia	Inta limonitic brxd rhyolite zone (sheared NE-SW, steep-dip). Chip sample across shear.						5	0.8	28	<2	19	170	22	18	45
453	258626	Hmstke Prop/Cell G3			R.J. Whiteaker	Hyaloclastic	Py-ser-(lim) stockwork vnita/ff in autobx'd rhyolite; dissem py in wallrock; 65/340 deg stockwork. Intense goss o/c.						<5	0.8	98	<2	21	600	36	32	72



1	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn	
454	258627	Homstake Prop/Cell G3			R.J. Whiteaker	Hyaloclastic s	Approx 2-3cm wide py-ser-(lim) stockwork vnts/ff in autob'd rhyolite; dissem py in wallrock; 60/340 deg stockwork. Intense goss o/c.						10	0.2	64 <2		23	760	86	24	158
455	258628	Homstake Prop/Cell G3			R.J. Whiteaker	Rhyolite	Py-ser-(lim) stockwork vnts and wallrock alt'n in a locally flow-banded rhyolite unit; dissem py into wallrock to 4%; 70/330 deg stockwork.						10	0.8	666 <2		8	120	38	18	60
456	258629	Homstake Prop/Cell G3			R.J. Whiteaker	Rhyolite	Approx 1cm wide py vn w/ pale-grey/green ser-ax in wallrock to 10cm; vein 70/240 deg.						15	4.4	134 <2		6	160	312	74	24
457	258630	Homstake Prop/Cell G3			R.J. Whiteaker	Rhyolite	Sample of 8cm wide fault bx; 80/250 deg; angular rhyolite frags in well-heated matrix of py-ser-cty-other sx (?).						5	29	44 <2		42	220	54	70	106
458	258631	Homstake Prop/Cell G3			R.J. Whiteaker	Rhyolite	Sample of fault bx; 84/255 deg; angular rhyolite frags in well-heated matrix of py-ser-cty-other sx (?). Strong lim throughout.						10	8.6	230 <2		18	1160	112	56	78
459	258632	Homstake Prop/Cell G3			R.J. Whiteaker	Rhyolite	Approx 5-10cm wide py-ser-ax(?) vein; ax fine-grained; ser alt'd rhy wallrock; 70/250 deg stockwork.						<5	4.8	100 <2		7	4390	58	42	34
460	258633	Homstake Prop/Cell G3			R.J. Whiteaker	Rhyolite	Approx 5-10cm wide py-ser-ax(?) vein; ax fine-grained; ser alt'd rhy wallrock; 70/250 deg stockwork; adjacent shear/fault 45/025.						<5	1	54 <2		12	1480	30	42	14
461	258641	SE HS Crk-SW Kitsault R.			R.J. Whiteaker	Argill/Limst Breccia	Sub-ang to sub-round limst frags in dark-grey gritty argill. Approx 3-5% fine-med grain py in carb-chl vn, 1cm wide. Tree rip-up, similar o/c adjacent.						<5	<2	2 <2		5	10	8 <2		56
462	258642	SE HS Crk-SW Kitsault R.			R.J. Whiteaker	Argill-Siltstne	Bowser seds; finely laminated and thinly bedded (30/165), dark to pale-grey; fine py/lim along fracta and locally dissem.						<5	0.2	66 <2		74	110	20	18	130
463	258643	SE HS Crk-SW Kitsault R.			R.J. Whiteaker	Siltstne-Wacke	Wldy limonitic o/c of gritty siltstne-wacke (Salmon River unit?); tr py visible on fracta.						<5	<2	22 <2		23	60	16 <2		122
464	258644	Kitsault R./HS Cell H10			R.J. Whiteaker	Flow/Dyke(?)	Fidspr-hnbl porphyritic dacite w/ dissem f-grained py to 0.5%						5 <2	<2	<2		80	40	4 <2		78
465	258645	Upper W. Kitsault R./HS Cell H10			R.J. Whiteaker	Sedimentary Breccia	Salmon R. unit. Clasts of felsic and intermd-mafic volc's (commonly w/ dissem py and limonitic), argill, wacke and limestone; ang to sub-ang frags 3-20mm in diam ave., up to cobble size locally; drk-grey to black gritty siltst/mst matrix.						<5	<2	<2	<2	78	40	12	8	54
466	258646	Upper W. Kitsault R./HS Cell H10			R.J. Whiteaker	Sedimentary Breccia	Carb-lim-sphal(?) py vns, 5cm wide, intersecting 80/330 and 80/040. X-cut Salmon R. unit. Clasts of felsic and intermd-mafic volc's (commonly w/ dissem py and limonitic), argill, wacke and limestone; ang to sub-ang frags 3-20mm in diam ave., up to cobble size locally; drk-grey to black gritty siltst/mst matrix.						<5	0.2 <2	<2	<2	22	70	8 <2		94
467	258647	Kitsault R./HS Cell H10			R.J. Whiteaker	Sedimentary Breccia	(as described in 258646) bed/chlve (75/130). Local minor limonite across cliff face.					5.14	30	4.2 <2	<2	<2	28	20700	1315 <2		>10000
468	258648	Kitsault R./HS Cell H10			R.J. Whiteaker	Sedimentary Breccia	Strongly limonitic carb-ser-v. fine py shear-vn, (5-8cm wide, 80/320) in Salmon R. unit (as described in 258646/47).						10	0.2	18 <2		33	70	8	2	352
469	258649	Kitsault R./HS Cell H10			R.J. Whiteaker	Sedimentary Breccia	Limonitic carb-ser-py+sphal vn, 85/320, 3-6cm wide; adjacent to shears/ffs w/ similar attitude.						<5	0.2	8 <2		64	50	10	8	264
470	258650	Kitsault R./HS Cell H10			R.J. Whiteaker	Siltstne/mudstone	Limonitic ser-carb-py-sx vn, 85/320, 5-10cm wide; adjacent to shears/ffs w/ similar attitude.						75	5.8	108 <2		40	320	78	16	94
471	258651	HR cell F8	463410	6179607	J. Lehtinen	Grab in dacite intrusion	Zones of massive pyrite, heavy limonite/ferrosite stain. Hosted at boundary between epidote/quartz/calcite alteration zone and green 2.2. Homatic block flow breccia.						5	0.8	150 <2		32	4080	32	12	12
472	258654	HR cell F4	463477	6180640	J. Lehtinen	Grab in rhyolite	Irregular, discontinuous fractures with pyrite infill. Crudely oriented @ 070/90. Hosted in flow banded rhyolite. Py irregular along fractures and as massive, grainy aggregates.						10	46	34 <2		118	1100	268	300	1140
473	258655	HR cell F4	463484	6180712	J. Lehtinen	Grab in rhyolite	Stringers 170/80, <5mm. Py in rhyolite 1%. Trace galena and sphalerite in stringers.						<5	9.4	18 <2		28	450	382	74	450
474	258656	HR cell F4	463487	6180719	J. Lehtinen	Grab in rhyolite	carb stringers. Sulphides along fractures @ 172/50. Hosted in stringered rhyolite.						5	2.4	678 <2		16	830	148	34	620
475	258657	HR cell F4	463425	6180907	J. Lehtinen	Grab - sediments	grab of rusty sediments in Salmon River Fm. Py as fracture fill and as replacement. Sample taken over 2m. Bedding 360/35						<5	<2	36 <2		12	380	18	16	78
476	258658	HR cell F4	463439	6180838	J. Lehtinen	Grab felsic-sediment contact	grab over 20 cm zone=fault contact? Located at top of felsic pile/ bottom of seds. Weakly to strongly pyritic, up to 10%. Weak fracture foliation. Fracture fill=sphalerite, variably mineralized						<5	1	196 <2		23	1230	38	48	1085
477	258659	HR cell F4	463251	6180739	J. Lehtinen	Grab-rhyolite	Grab along 2.0 m strike of fracture/breccia zone. 110/90. Py in fractures and pods up to 7%. Host n=flow banded rhyolite.						<5	0.4	92 <2		10	70	34	10	56
478	258665	Homestake Ridge (east)	465397	6178654	J. Lehtinen	Grab-greywacke	grab of small outcrop of med. grained grey wacke. Disseminated pyrite up to 7%. minor argillite chips. O/C in recessive gully.						25 <2		84 <2		5	160	18	18	122
479	258666	Homestake Ridge (east)	465420	6178640	J. Lehtinen	Grab felsic fragmental	Small O/C of felsic fragmental. Ash and crystal lapilli tuff. Fragments up to 4 cm., angular. Discrete ash and breccia beds. Pale green sericite and carbonate alteration. Trace pyrite.						<5	<2	20	4	16	70	2	2	162
480	258675	HR-6F	463450	6180023	J. Lehtinen	Grab andesite breccia	Sample taken over 30 cm across ductile shear zone @318/90. Trace pyrite. Calcite stringers +/- quartz.						10 <2		12 <2		16	90	4	6	62
481	258676	HR-6F	463332	6179942	J. Lehtinen	Grab-dacite intrusive	Epidote-Calcite-quartz veining in BC 2.2. Green epidote/chlorite altered. No visible sulfides. Epidote zone = dacite intrusive?						<5	<2	2 <2		51	10	2	2	44
482	258677	HR-6F	463190	6180005	J. Lehtinen	Grab andesite breccia	Narrow, <0.5 m marcasite gossanous zone. Fracture zone @ 320/90.						<5	0.8	188 <2		30	2670	32	18	20

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
1	Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn	
483	258678	HR-6F	462970	6179824	J. Lehtinen	Floot andesite breccia	At bottom of chute below a bedding parallel fault. Strongly pyritized, up to 25%, average 10%.						<5	1	3540	<2	23	6270	26	40	30	
484	258679	HR-E9	463542	6178216	J. Lehtinen	Floot andesite breccia	Numerous angular float blocks with strong limonite-jarosite stain. Blocks all with Qz stringers. Py and Cp variable, commonly with chlorite. Py20%, cp trace to 5%. Numerous other sample flags.						2650	18	180	<2	8490	230	<2	8	90	
485	258680	HR-E9	463938	6178355	J. Lehtinen	Grab lapilli ash tuff	Strongly silicified with 5 to 7% disseminated pyrite. Protolith = ash, fine lapilli tuff.						<5	0.8	24	<2	54	610	<2	12	78	
486	258681	HR-E9	463965	6178364	J. Lehtinen	Grab wacke/siltstone	Dark grey wacke and siltstone. Bedding 340/75. Py along fractures, disseminated and very fine disseminated.						<5	0.4	26	<2	42	650	<2	2	122	
487	258680	HR-G-7	463171	6179078	J. Lehtinen	Grab-Hbl-Fs porphyry	Grab over 30 cm. Variably veined and silicified, +/- sericite, +/- carbonate alteration. All strong alteration. North side of creek, veining 050/88. Jasperitic/silicified fault breccia in creek. Host rock = 5.1 hbl-fs diorite intrusive.						190	5	124	<2	256	5490	2940	82	4630	
488	258696	HR-G7	463095	6179423	J. Lehtinen	Intrusive-Whole Rock	Light to med. green weathering intrusive. Med. to fine grained, crowded FS hornblende crystals all squat/incomplete. Epidote altered, uniform texture. Epidote veins near margins.						<5	<2	26	<2	27	130	8	2	64	
489	258697	HR-G7	462845	6179430	J. Lehtinen	Rhyolite agglomerate ? W.R.	Agglomerate-bombs of FS porphyry with chill margins.						135	0.8	172	<2	8	60	20	8	22	
490	258698	HR-G7	462835	6179395	J. Lehtinen	Select-Vein in Rhyolite	Select sample of Py,Cp, +/- Gn in quartz veining in rhyolite agglomerate. 2-10 cm. veins variably silicified. Veins trend 080-095/50-80. Rhyolite with bombs and fragments up to 50 cm.	19.09		2.94			>10000	63	462	<2	>10000	1640	5330	94	1420	
491	258699	HR-G7	462865	6179392	J. Lehtinen	Grab-Mdst/Fragm ental	Grab of black mudstone with sericite altered fragments of dacite? Lapilli rich mudstone or debris flow. Pyrite 5% as disseminations, fracture fill. Graphitic zones due to faulting/carbonate veining.						60	4	184	<2	62	360	46	12	72	
492	258700	HR-G7	462863	6179333	J. Lehtinen	siliceous unit	stained, 7-10% Cp, 1% combined Gn/Sp. Zones of 10% Chalcoite. Strike 130/82.	0.322oz/t		6.18		1.26	>10000	98	172	8	>10000	5090	6590	68	>10000	
493	258701	HR			NM	soil							<5	<2	58	<2	58	<1	16	12	202	
494	258702	HR			NM	Argillite	argillite w/ wacke beds						10	0.2	20	2	60	110	14	<2	110	
495	258703	HR			NM	Soil							<10	<2	60	<2	41	<1	28	10	204	
496	258704	HR			Nick Mitchell	Argillite	argillite w/ qtz veinlets and 1% py						135	1.4	18	<2	14	10	2	14	30	
497	258724	Homestake valley			Nick Mitchell	Andicite Flow	Minor py, 2% with QTZ veins.						160	1.2	402	<2	27	100	26	6	210	
498	258725	valley			Nick Mitchell	Ryolite	20% py, 10 cp strong sericite alteration with "rotted" appearance.						1705	8.4	298	4	2080	980	190	34	544	
499	258726	valley			Nick Mitchell	Andicite XLT	7% py, 1% sphaerite. Sericite and chlorite alteration.						5	2.8	188	<2	47	50	<2	10	82	
500	258727	Homestake valley			Nick Mitchell	Dacite flow, ryolite(?)	Altered all to hell! Sericite, Chlorite 20% py trace cp (?).						315	3.2	128	<2	22	510	62	14	118	
501	258728	valley			Nick Mitchell	Dacite XLT	Py 15% cp 2%. Chlorite and sericite alteration.						10	1.2	130	<2	18	90	<2	12	84	
502	258729	Homestake valley			Nick Mitchell	Dacite tuff	Sericite alteration with 4% py, 2% cp/Bornite and 1% sphaerite. O/C is blocky and has "rotted" appearance.						30	12.2	368	<2	19	2640	108	42	80	
503	258730	Homestake valley			Nick Mitchell	Andicite tuff	Sericite altered where mineralized. Outlying areas have chlorite alteration. Sample contains 8% fine grained py, (cp?).						15	16.2	544	<2	39	5800	1625	130	518	
504	258731	valley			Nick Mitchell	Andicite flow	Massive fine grained pyrite and cp, 5% combined.						15	9.2	458	<2	31	2430	182	78	564	
505	258732	valley			Nick Mitchell	Andicite flow	Massive fine grained pyrite, 10% and 3% cp disseminated throughout.						<5	3	110	<2	25	1090	60	64	130	
506	258733	Homestake valley			Nick Mitchell	Andicite tuff	Minor Ep and CHL alteration, chaotic QTZ veins, very hard! Sample contains massive fine grained py 15%, 5% cp and 1% sp.						<5	2	60	<2	27	1680	118	28	318	
507	258734	valley			Nick Mitchell	Wacke	2% Py.						<5	0.8	22	<2	20	120	10	2	56	
508	258735	ridge			Nick Mitchell	Chert	Minor py >1%, possibly rhyolite.						5	0.2	14	<2	62	30	28	8	62	
509	258736	Homestake ridge			Nick Mitchell	Conglomerate	Conglomerate with mudstone and andicite clasts minor calcite "blebs" and veinlets 1% Py, Cp combined found with calcite. Possible sphaerite.						<5	0.2	6	<2	164	30	30	4	110	
510	258737	Homestake ridge			Nick Mitchell	Wacke	Fine grained wacke with dark clasts, mudstone (?) 1mm. 1% Cp and Py disseminated throughout possibly some sphaerite.						<5	0.2	22	<2	207	50	8	10	120	
511	258760	SW HS Ridge/Cell H10			R. J. Whiteaker	Feldsp-Hbl Porphyry	Med-grained FHP, wk ser-carb alt'n w/ goss vns/fract-fill of carb-py-ser; dip 70-80 -> North.						1990	7.2	434	2	361	3490	326	18	1200	
512	258761	SW HS Ridge/Cell H10			R. J. Whiteaker	Argillite/Mudstone	Dk-gr, v. fine-grained clastic, laminated, friable. Approx 2-4cm wide carb vn w/ core and envelope of irts lim-v. fine py; 65-70/335 deg.						15	0.8	12	<2	49	40	8	<2	76	
513	258762	SW HS Ridge/Cell H10			R. J. Whiteaker	Argil-Mdst/Bx Mash	Dk-gr, v. fine-grained clastic and gritty Salmon R. Bx mash (angular frags of argil +/- felsic). Approx 2 cm wide carb-lim vn w/ ~3% med to crs-grained apl (?) and fine-grained py.						4.48	10	0.8	<2	<2	31	4980	<2	<2	>10000
514	258763	SW HS Ridge/Cell H10			R. J. Whiteaker	Argil-Mdst/Felsic Dyke	Sample collected across 20-30 cm wide 'contact' zone between SR argil and felsic dyke w/ <1-2% finely dissem. py; Argil ser-chl alt'd, dyke chilled.						<5	0.4	28	<2	61	40	14	2	312	
515	258764	SW HS Ridge/Cell H10			R. J. Whiteaker	Felsic Dyke	Dacite (?) dyke, feldspar phenos, med ser-carb alt'n; <1% finely dissem py; lim; across surface fract and o/c.						<5	<2	<2	<2	27	10	16	<2	168	
516	258765	SW HS Ridge/Cell H10			R. J. Whiteaker	Felsic Dyke	Dacite-rhyolite dyke, chilled; irts goss o/c (spongy-lim/sulphur, pock-mrkd, w/ sx boxwork); fine sx (py observed); pervasive ser-carb alt'n.						<5	<2	328	2	27	3630	14	6	102	

A	B	C	D	E	F	G					H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
Sample N°	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn					
517	258766	SW HS Ridge/Cell H10		R.J. Whiteaker	Mudstone-Siltstone	Salmon R. unit; dk-gry to black, f.gmd, beds 60/025 deg; x-cutting vn, 70/330 deg. 2-4 cm wide lim py(10%)-ser+/gal+sphal (?).						720	1.8	408	14	65	20	84	14	68					
518	258767	SW HS Ridge/Cell H10		R.J. Whiteaker	Mudstone-Siltstone	Salmon R. unit; dk-gry to black, f.gmd, beds 60/025 deg; x-cutting vn, 70/330 deg. 3-8 cm wide lim py-ser+/gal+sphal (?).						4530	20	9400	42	1635	100	694	48	116					
519	258768	SW HS Ridge/Cell H10		R.J. Whiteaker	Salm R. Bx/Felsic Dyke(?)	Py(1-3%)-ser-ax (gal-sphal?) vna/ff in SR Bx-felsic dyke (poss FHP w/ inta ser-carb alt'n) contact zone.						400	21.8	1125	2	272	510	284	32	584					
520	258769	SW HS Ridge/Cell H10		R.J. Whiteaker	Argillite-Siltstone	Sample collected approx 1m from contact between SR argill/siltst and FHP; Fract fill/vn, ~1-3% finely disseminated py w/ steel-grey metallic ax (gal-sphal?).						30	0.6	92	<2	68	10	28	4	70					
521	258770	SW HS Ridge/Cell H10		R.J. Whiteaker	Feldsp-Hnbl Porphyry	8% equally disseminated py throughout. Inta lim/goss 'patches' (sample) trending~340 deg.						15	0.2	40	2	3	10	6	2	94					
522	258771	SW HS Ridge/Cell H10		R.J. Whiteaker	Feldsp-Hnbl Porphyry	Intaly goss/lim o/c. Unit w/ v. strong pervasive ser-carb-chl alt'n, pale gm-gry (poss felsic composition); approx 2-3 mm wide py-sphal(?) vnits throughout, trending~330-340 deg.						15	3	160	6	237	<10	86	10	206					
523	258772	SW HS Ridge/Cell H10		R.J. Whiteaker	Feldsp-Hnbl Porphyry	Approx 3 X 5m intaly goss o/c (spongy and crumbly lim/sulphur, pock-mrkd/ax bxwrk); intaly ser-carb-chl alt'd FHP; py-bearing vnits/ff, 1-2 cm wide w/-040 deg trend (?). Local SR argill/siltst o/c w/ py-lim near goss.						9880	52	9040	52	1210	11960	1350	138	2550					
524	258773	SW HS Ridge/Cell H10		R.J. Whiteaker	Salmon R. Bx (Mesh)	SR Bx unit gritty w/ sand to silt sized matrix, local angular argill/mdst frags. Approx 1m wide goss fract fill-shear~75/060. Inta lim/goss py vnits; fine py disseminated into wallrock w/ 5-10% v. fine metallics—poss gal (+/-Bar?) as rock samples heavy (high s.g.).						140	3.2	322	4	471	180	36	12	686					
525	258774	SW HS Ridge/Cell H10		R.J. Whiteaker	Salm R. Bx-Siltstn/Mdstone	unit (hanging wall) and drk-gry laminated to thickly-bedded SR siltstone/mudstone (foot wall). Approx 2-5% fine py-sx (gal?); visible, minor mal/azur staining locally.						340	3	462	2	438	430	120	16	294					
526	258775	SW HS Ridge/Cell G10		R.J. Whiteaker	F-H Porphyry/Mudstone	Med-grained FHP, v. strg-inta ser alt'd, cloudy pale gm-gry; adjacent to/on(?) mds/siltstn contact intaly goss/lim massive sx showing—gal>>py-cpy-arspy(?)±sphal(?); approx 50-80% total ax.						135	7.6	536	10	467	260	140	16	2390					
527	258776	SW HS Ridge/Cell G10		R.J. Whiteaker	Feldsp-Hnbl Porphyry	Med-grained FHP, v. strg-inta ser alt'd, cloudy pale gm-gry; adjacent (~2-3m) to mds/argill contact; intaly goss/lim massive sx showing (py-gal>>cpy-sphal); approx 30-40% total ax. Rock v. heavy (gal)	14.15	5739.5		11.55	3.3	>10000	>100.0	>10000	34	8110	7120	>10000	6580	>10000					
528	258777	SW HS Ridge/Cell G10		R.J. Whiteaker	Feldsp-Hnbl Porphyry	ser-ca>chl>clt alt'd w/ limonitic frags; f.grained py-sphal>>cpy vnits/ff; (total ax~2-5%).						35	9.8	862	2	133	7900	1455	138	4380					
529	258778	SW HS Ridge/Cell G10		R.J. Whiteaker	Mudstone-Siltstone	Silicified-mineralized mds/argill to siltst; dk-gry fresh and pale-gry to chalky, buff-gry weathered; goss-lim bxwrk; locally well-lam/bedded. Strg ser-carb-chl alt'n and silicification, w/ fract/vnit-controlled fine-med gmd py>>cpy-sphal±gal(?); local drusy-qtz on frags.						365	28	762	6	190	460	1725	58	916					
530	258779	SW HS Ridge/Cell G9		R.J. Whiteaker	Feldsp-Hnbl Porphyry	Med-grained FHP, v. strg-inta ser alt'd, cloudy pale gm-gry w/ o/c protruding from intaly goss soil. Dk-black sxfim drusy-qtz vein (sheared?) w/ py-cpy (+/-arspy±gal); minor mal stain. Approx 5-10% total ax.		224			3.57	330	>100.0	2710	10	1225	2560	216	562	>10000					
531	258780	SW HS Ridge/Cell G10		R.J. Whiteaker	F-H Porphyry/Mudstone	mudstone/siltstone contact zone(?); open-space qtz-carb fill and py-bkwrk; v. fine-fine py-sphal-arspy(?) visible, total ax~3-8%. Note: silic/Qtz-druse post be-carb(?).						185	17.6	332	2	75	360	1180	124	656					
532	258781	SW HS Ridge/Cell G10		R.J. Whiteaker	Mds-Argill/F-H Porphyry	Contact between black-mdst/argill and FHP. Med-crs gmd py (+/- med-gmd tetra-arspy?), f.gmd cpy in limonitic frags (total ax~8-15%); locally qtz-drusy. Adjacent shear, 2cm wide, 48/340 degs.						175	14.8	680	10	3340	120	152	28	1045					
533	258782	SW HS Ridge/Cell G10		R.J. Whiteaker	Mudstone-Argillite	goss shear zone, 70-80/330-340 degs foliat/cleave; brxd w/ fine-med gmd masses of py-arspy-sphal (~3-8% total ax); abundant v. fine black oxide masses.						45	7.2	102	<2	608	3090	626	10	6700					
534	258783	SW HS Ridge/Cell G10		R.J. Whiteaker	Mudstone-Argillite	Approx 50-80cm wide brxd/sheared (85/060 deg) mds/argill; ang mds/lin frags <1cm diam in brx w/ alt'd matrix of ser-carb-py-arspy (?) and milled mds/lin; inta gossan/lim, o/c crumbly w/ bxwrk locally.						7520	51.6	>10000	62	2610	250	466	694	332					
535	258784	SW HS Ridge/Cell G10		R.J. Whiteaker	Feldsp-Hnbl Porphyry	py-arspy-sphal(?) masses; inta ser (-chl-carb) alt'n of FHP~20-40cm into wallrock.						780	11.2	5140	8	157	20	54	60	104					
536	258785	SW HS Ridge/Cell G10		R.J. Whiteaker	Mudstone-Argillite	V. fine-gmd py-arspy(?)—black ax in medial core (s) of ~1m wide qtz (>>carb) vein (75/180deg), x-cutting brxd and silicified mds/argill, coarse qtz open-space druse/vugs. Mds/lin x-cut by numerous carb-qtz vna/vnits, locally w/ v. fine 'sooty' black envelopes (sx?).						500	3.2	774	<2	19	10	18	22	64					
537	258786	SW HS Ridge/Cell G10		R.J. Whiteaker	Mudstone-Argillite	Brxd/sheared, silicified goss/lim mds/argill adiac to #258785; x-cut by carb-qtz fl/vnits w/ fine py(-arspy-sphal?), locally disseminated into mds/lin wallrock; some v. fine 'sooty' black envelopes (sx?).						100	13.2	318	<2	35	10	26	18	62					
538	258787	SW HS Ridge/Cell G10		R.J. Whiteaker	Mudstone-Argillite	Brxd/sheared (~1-3m wide, 70/150 deg), silicified, goss/lim mds/lin (similar to #258786); x-cut by carb-qtz fl/vnits w/ fine py(-arspy-sphal?), locally disseminated into mds/lin wallrock; some v. fine 'sooty' black envelopes (sx?). Strg foliation/cleavage—>140-160 degs.						495	3.4	720	<2	31	10	42	14	46					
539	258788	SW HS Ridge/Cell G10		R.J. Whiteaker	Mds-Argill/F-H Porphyry	Approx 20cm wide goss sheared py-arspy(?) vein (75/050 deg) @ contact between black mds/argill and FHP (pale gm, v. strg ser carb (chl ch) alt'n; sx as fine-gmd masses and thin beads.						2870	7.4	438	18	142	10	192	10	144					

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
1	Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn
540	258789	SW HS Ridge/Cell G10			R.J. Whiteaker	Mudstone-Argillite	Ints goss showings ~50X50cm diam (note: commonly up to 1X1m). V. fine-grnd irregular showings of py-arspy(?) other sx(?) 'bleeding' rusty-lim at o/c, fract-controlled ~75/090 deg. Mds/argil bed/fam 30/300 deg. Sample location typical of those across 20X40m cliff o/c.						275	5.6	602	6	400	70	182	22	240
541	258790	SW HS Ridge/Cell G10			R.J. Whiteaker	Feldsp-Hnbl Porphyry	Intaly ser alt'd FHP (approx 30cm wide alt'n zone into fresher FHP), w/ v. fine to fine-grnd py-arspy-sphal(?) fl/vn-70-80/085 deg, 1-3cm wide; showing approx 5m from mds/argil contact; crumbly limonitic py-bwbrk.						205	0.8	358	<2	25	<10	12	12	62
542	258791	SW HS Ridge/Cell G10			R.J. Whiteaker	Feldsp-Hnbl Porphyry	Whole rock sample. wk (-mod) ser-ca-chl-cty alt'n. Weathered surface w/ v. minor oxid.						<5	<2	10	<2	4	<10	<2	4	74
543	258792	SW HS Ridge/Cell G10			R.J. Whiteaker	Feldsp-Hnbl Porphyry	Whole rock sample. Mod-strong ser-ca-chl-cty alt'n; approx 1-2% fine-grnd py dissem (replacing hnbl); cloudy, pale-gry appearance.						<5	<2	8	<2	31	10	6	2	82
544	258793	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Rhyolite Flow	Approx 8X10m goss o/c. Pale gm-gry, strg-ints ser-carb-sil alt'd w/ 3-8% py (+/-arspy) dissem/ff as fine-grnd masses. Rock v. dense/tough. Sample collected across ~50cm contact between flow (note: poss silicified silt-/mdstine component) and felsic FHP.					1.25	45	3.4	108	<2	522	10520	368	70	>10000
545	258794	SW HS Ridge/Cell G10			R.J. Whiteaker	FH-Porphyry (Felsic?)	Sample across 5-10cm of (Rhyolite?) FHP wallrock and 2cm wide Qtz-carb-py+/-arspy (total sx-3-5%) vn, 80/045 deg. V. strg pervas ser-carb alt'n.						10	1.2	44	<2	218	1040	40	8	1290
546	258795	SW HS Ridge/Cell G10			R.J. Whiteaker	FH-Porphyry (Felsic?)	Sample across ~40cm of Qtz-carb-coarse gal>cpy-py-sphl vn (75/120 deg, 10/20cm wide) x-cutting strgly ser-carb alt'd intrusion				11.45	1.11	25	60.2	26	2	504	4650	>10000	46	>10000
547	258796	SW HS Ridge/Cell G10			R.J. Whiteaker	Feldsp-Hnbl Porphyry (FHP)	Whole rock sample. Moderate ser-ca-chl-cty alt'n; approx 1-3% fine-grnd py dissem; local hsub-mm py-lim fract fill cloudy, pale-gry appearance.						<5	1.8	20	<2	18	110	2340	6	386
548	258797	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP	Goss/lim on surface. X-cuts rhy flows in o/c area. Approx 2-5% fine-med grnd py dissem/ff, strong pervasive ser-carb(-chl) alt'n. Sample rep of o/c.						10	0.6	28	2	22	30	164	4	238
549	258798	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Rhyolite Flow	Sample across ~80cm of ints goss o/c. Ints ser-carb alt'd to pale-gry; 2-5% v. fine py in masses along fracta+/-dissem; angular shards/frags of black siltstone-0.5-1cm diam. Rock x-cut by carb vnl's.						65	10.8	238	8	515	130	390	58	408
550	258799	SW HS Ridge/Cell G10			R.J. Whiteaker	Rhyolite Flow	Sample collected across 20cm of pale-grey ser-carb alt'd flow-banded rhy (note: possibly an intensely silicified siltstone?) approx 1m from #258800 (rhy porph), <1-3mm wide carb-Qtz-py+/-arspy vnl's (total sx-3%).						25	2.6	234	<2	156	140	52	34	298
551	258800	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP	Ints goss o/c; Qtz-carb-bar(?) healed bx vn/shear(?); fine-grnd masses of py-cpy>arspy-sphal in bx matrix (milled Rhy-FHP/flow) and along envelope. Sample across ~10cm bx vn/sevillage. Total sx-10-15%.						40	14	64	<2	461	390	334	384	422
552	258801	SW HS Ridge/Cell G10			R.J. Whiteaker	Rhyolite Flow	Sample collected across 25cm of pale-grey ser-carb alt'd flow-banded rhy (note: possibly an intensely silicified siltstone?); <1cm wide carb-Qtz-py+/-arspy vnl's (total sx-10%).						330	61.6	166	<2	211	50	66	36	166
553	258802	SW HS Ridge/Cell G10			R.J. Whiteaker	Rhyolite Flow/Felsic FHP	intrusion and flows (note: primary textures commonly obliterated--poss siltstones locally); mod-strg (-ints) pervasive ser-carb(-chl) alt'n w/ 1-3% dissem py; unit pale gry-gm						25	0.2	28	2	10	20	8	10	34
554	258803	SW HS Ridge/Cell G10			R.J. Whiteaker	Siltstone/Mudstone	Med to dark-grey seds w/ 8-12cm wide carb-Qtz-ser-py (>>arspy) vn (total sx-30%), chl alt'n; bed and vn attitude 80/170 degs. Chip sample across vn.						255	3.6	202	4	300	40	144	36	80
555	258804	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Siltstn-Mdsin	Chip sample across 3-4m. Contact between felsic FHP and ser-silicified siltstone (poss flow?); goss o/c; ~8-10% med-coarse py (v. fine arscopy mixed) dissem/ff.						40	1.8	118	10	203	10	24	10	36
556	258805	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Siltstn-Mdsine	Chip sample across 1m contact between felsic FHP and ser-alt'd/silicified siltstone (poss rhyolite flow?); goss o/c; ~5-10% f-med grnd py (v. fine arscopy mixed) dissem/ff.						15	0.8	20	<2	<1	<10	8	6	46
557	258806	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP	Whole rock sample. wk (-mod) ser-ca-chl-cty alt'n. Approx 1-3% dissem py. Weathered surface w/ very minor oxid.						<5	<2	6	<2	8	10	2	<2	80
558	258807	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Rhyolite Flow	Ints pervasive ser-carb-py alt'n; pale-grey fresh, ints lim/goss weathered; ~8-15% evenly dissem f-grnd py+/-arspy. Sample across 2m typical o/c of contact between rhy flow (silicified siltst?); prim text locally obliterated by ints ser-carb-py alt'n; Locally 10-20% silver py (arspy?) on fracta-dissem into wallrock.						35	1.4	32	4	<1	40	34	4	46
559	258824	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP	Chip sample across ~1X1m goss o/c of intaly ser-carb-chl (mafica) alt'd intrusion; relic limonitic sx-grain 'sities' throughout (~3-8%). Mainly py?						<5	2.4	154	<2	50	10	24	6	30
560	258825	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Siltstn-Mdsin	Sample collected across ~1m of goss contact between FHP and sed wedge; purple-blue oxid sx along fracta/perv dissem. Trace fine py grains visible, ints oxide overprinting at o/c.						55	1.8	20	<2	133	80	398	<2	364
561	258826	SW HS Ridge/Cell G10			R.J. Whiteaker	Siltstone/Mudstone	Blk to dk-gry silicified seds, chl alt'n; goss o/c; sample taken from ~4X4m rep area; approx 5-10% f-med grnd py+/-cpy blebs+dissem (w/ v. fn arscopy asoc?); locally as aggregate masses along fracta						205	1.8	266	<2	<1	10	4	2	84
562	258827	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP	Approx 30X50m v. ints goss FHP o/c; ints ser-py alt'n, ~3-5% 'visible' py>cpy; sample collected ~2m from FHP contact w/ silicified siltstone.						10	0.2	6	<2	<1	<10	<2	2	<2
563	258828	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Rhyolite Flow	Ints goss o/c; sample collected across ~4m of intaly ser-chl-carb alt'd and brxd contact zone between rhy flow and felsic FHP; ~10-20% fine-med grnd py>cpy-arspy dissem/ff. Local mal staining on fracta and in goss bowrk Qtz-carb-py>cpy>arspy vns, 2-4 cm wide.						10	5	254	<2	155	30	18	22	12

	A	B	C	D	E	F	G							H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Tl	Zn					
564	258829	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Rhyolite Flow	Sample collected across ~6-8m of intaly ser-chl-carb alt'd and brxd contact zone between rhy flow and felsic FHP; ~10-20% fine-med grmd py>>cpy-arasy dissem/ff. Local mal staining on fracta and in goss bxwrk qtz-carb-py>cpy-arasy vns, 4-6 cm wide.						820	21.4	3790	36	877	520	1165	90	274						
565	258830	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP	Grab sample collected from ~3X3m goss o/c; inta pervasive ser-carb(-chl) alt'n; ~8-15% fine-med grmd py>cpy+-arasy dissem/ff. Local lim bxwrk qtz-carb-py>cpy-arasy vns, 2-4cm wide.						85	7.8	586	18	578	160	24	72	86						
566	258831	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Siltstn-Mdstn	Sample collected across ~30X40cm contact zone between felsic(?) FHP and intaly ser-chl alt'd/silt laminated siltst/mdstn. Approx 10% ax (py>>cpy-arasy) as med-coarse grana/masses along fracta/vnl'ts in seds. Sample-representative of showings across hillside o/c's.			1.57			125	50.2	118	20	>10000	430	116	12	444						
567	258832	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP	Whole rock sample; wk-mod pervasive ser-carb-chl (hrbl) alt'n; 2-4% fine py dissem, commonly as lim spots.						315	6.4	1610	16	<1	10	54	14	2						
568	258833	SW HS Ridge/Cell G10			R.J. Whiteaker	Rhyolite Flow	Approx 2m wide chip sample of intaly ser alt'd flow w/ ~5-10% v.fr-grmd py (+/- arasy); o/c deep orange-black oxide/colour.						<5	0.8	28	<2	35	10	<2	6	66						
569	258834	SW HS Ridge/Cell G10			R.J. Whiteaker	Rhyolite Flow	py-ax vein (65/050) and intaly ser alt'd flow wallrock (w/ ~3-5% v.fr-grmd py +/- arasy?); o/c deep orange-black oxide/colour; local thin wedges of silicified siltstone at o/c.						50	4.8	138	<2	40	160	540	8	70						
570	258835	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP	Sample collected across ~2m of typical goss/lim ravine/cliff showing; fr-med/+ coarse grmd py>cpy+-arasy (total ax~8-15%) ff/dissem; inta ser alt'n locally obliterating prim text; poss rhy flow component.						1820	7.2	172	2	2940	60	<2	8	48						
571	258836	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Rhyolite Flow	Strg goss cliff/ravine o/c; chip sample across approx 2-3m wide inta ser-chl-carb-silic alt'd rhy flow/FHP; local ba-qtz-carb-py+-cpy+-gal+-arasy vnl'ts across o/c area, 40-50/345 degs.						20	0.2	14	<2	<1	<10	<2	2	<2						
572	258837	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Rhyolite Flow	ax med-coarse and fr grmd; 48/355 degs; <1-2cm long ang shards/frags of black seds, rhy flow +/- felsic FHP. Inta ser-chl-carb-silic alt'd rhy wallrock w/ ax.						40	2	14	<2	144	10	<2	<2	2						
573	258838	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Rhyolite Flow	Strg goss cliff/ravine o/c; representative chip sample of cliff across approx 10m; inta ser-chl-carb-silic alt'd rhy flow/FHP, dissem py+-cpy+-gal (total ax ~5-8%).						320	5.2	132	18	249	540	132	10	178						
574	258839	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Rhyolite Flow	Goss o/c as #258837/838. Approx 3-8% (py visible in goss) ff/dissem; chip/grab across ~8m of typical o/c.						125	2	96	10	<1	10	<2	8	12						
575	258840	SW HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	Yellow-orange-brown goss o/c; sample collected across ~3X10m o/c of intaly ser-py (-carb-sil-cl) alt'd felsica; fine-med grmd py+-cpy along fracta w/ strg lim boxwork-total py ~8-10%. Area of stg-inta 'ser-py schist' alt'n/fo'n, prim text's diff to distinguish-poss felsic FHP.						1415	0.8	12	<2	<1	30	<2	6	<2						
576	258841	SW HS Ridge/Cell F10			R.J. Whiteaker	Rhyolite Flow	Yellow-orange-brown goss o/c; grab sample collected across ~10X15m o/c of intaly ser-py (-carb-sil-cl) alt'd felsica; fine-med grmd py+-cpy+-arasy(?) along fracta w/ strg lim boxwork-total py ~8-10%. Area of stg-inta 'ser-py schist' alt'n/fo'n, prim text's diff to distinguish-poss felsic FHP.						45	2	22	<2	<1	20	20	2	<2						
577	258842	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	V.strg goss o/c; inta pervasive ser-carb-py+-chl alt'n, pale-gry/gm to chalky-gry colour; 8-12% f-grmd py evenly dissem and ff w/ v.fine arasy+-cpy mixed in fine-grmd masses.						25	1.8	18	<2	<1	100	<2	2	6						
578	258843	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	V.strg goss o/c; inta pervasive ser-carb-py+-chl alt'n, pale-gry/gm to chalky-gry colour; 8-12% f-grmd py evenly dissem and ff w/ v.fine arasy+-cpy mixed in fine-grmd masses.						70	1.6	134	<2	<1	1430	<2	<2	10						
579	258844	SW HS Ridge/Cell F10			R.J. Whiteaker	Felsic FHP	V.strg goss o/c; inta pervasive ser-carb-py+-chl alt'n, pale-gry/gm to chalky-gry colour; 8-12% f-grmd py evenly dissem and ff w/ v.fine arasy+-cpy mixed in fine-grmd masses.						20	0.6	40	<2	<1	260	<2	<2	<2						
580	258845	SW HS Ridge/Cell G10			R.J. Whiteaker	Felsic FHP/Rhyolite Flow	Inta goss o/c. Sample collected across 2-3m of intaly ser-chl-carb alt'd brxd contact zone (?) between rhy flow and felsic FHP; ~15-25% med-coarse py>>arasy and finer-grmd py-cpy-arasy masses.						505	2.4	94	16	<1	<10	<2	6	6						
581	258850	SW HS Ridge/Cell F10			R.J. Whiteaker	Siltstone/FHP	Grab sample from goss showing near siltan/FHP contact (veining?); massive py-cpy-gal (total ax~20-30%)			7.12			710	86	224	30	>10000	9370	<2	32	8280						
582	258860	HR cell F12			D. Baker	carb-bar-arse-py vein alt mudst w/ dis arse-py	grab sample from 10cm-wide carb-bar-arse-py stringer zone @ 250/85 cutting sil andesite pyroclastic						70	1.8	592	2	342	<10	20	16	68						
583	258861	HR cell E12			D. Baker	feld-hb por	grab sample of ser+sil mudst with dissem arse (30%) and py (5%) proximal to fracture zone						10	1.2	86	12	329	20	<2	12	22						
584	258862	HR cell E12			D. Baker	bar-carb vein	chip sample of med-gr feld-hb porphyry with 8-10% dissem py						<5	<2	10	2	52	<10	<2	4	94						
585	258863	HR cell E12			D. Baker	bar-carb vein	chip sample from 40cm barite carb vn @ 290/75 in sil seds, 6% chal, locally 5% gal, abundant py; sampled last yr #223601		169	1.71	1.5	4.07	3000	>100.0	420	42	>10000	4370	>10000	120	>10000						
586	258864	HR cell E12			D. Baker	sil mudst	chip of intensely sil mudst with 8% dissem py blebs, gossanous						10	<2	6	2	25	<10	10	10	6						
587	258865	HR cell E12			D. Baker	bar-carb-sphal-chel-gal vn	grab from 10cm bar-carb vn @ 290/73 with 15% sphal, 2% chal, <1% gal, hosted by sil mudst			1.48	8.74		15	13.9	116	<2	127	3980	>10000	16	>10000						
588	258866	HR cell E12			D. Baker	sil siltst	gossanous						10	0.2	8	2	10	<10	18	4	58						

1	A	B	C	D	E	F	G										H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Sample #	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn	
580	258867	HR cell E12			D. Baker	andesite-pyroclastic						2.8	1025	27	330	36	2630	990	3980	40	>10000									
580	258868	HR cell D12			D. Baker	rhyolite							5	<2	10	<2	17	50	24	4	96									
580	258869	HR cell D12			D. Baker	massive andesite							105	0.8	10	<2	3	20	14	8	58									
580	258870	HR cell D12			D. Baker	sericitized fthbp							85	0.2	8	<2	31	<10	8	10	54									
580	258871	HR cell D12			D. Baker	sil+ser fthbp							305	1	62	2	9	60	8	12	88									
580	258872	HR cell D12			D. Baker	altered fthbp							770	6	68	4	12	10	8	8	48									
580	258873	HR cell D12			D. Baker	rhyolite							10	<2	6	<2	14	<10	2	10	20									
580	258874	HR cell D12			D. Baker	sericitized fthbp							110	0.8	26	2	1	20	8	8	84									
580	258875	HR cell D12			D. Baker	feld-phyrnc andesite							55	0.8	16	6	<1	10	8	4	106									
580	258876	HR cell D12			D. Baker	chloritic rhyolite fragmental							325	1.2	10	<2	393	70	46	2	86									
580	258877	HR cell D12			D. Baker	breccia							155	0.8	18	12	42	10	14	6	96									
580	258878	HR cell D12			D. Baker	chloritic fthbp							125	0.4	16	6	<1	30	<2	2	60									
580	258879	HR cell D12			D. Baker	teclonic breccia							130	1.2	14	14	47	30	2	4	78									
580	258880	HR cell D12			D. Baker	breccia							320	0.4	14	14	<1	10	<2	6	64									
580	258881	HR cell D12			D. Baker	chloritic fthbp							50	<2	6	2	<1	40	<2	2	40									
580	258882	HR cell D12			D. Baker	chloritic fthbp							90	0.2	14	<2	<1	60	<2	2	24									
580	258883	HR cell D12			D. Baker	sericitic fthbp							350	2	16	<2	115	70	6	2	10									
580	258884	HR cell D12			D. Baker	sericitic fthbp							155	1.2	8	<2	<1	80	10	2	24									
580	258885	HR cell C12			D. Baker	sericitic fthbp							15	0.2	6	2	<1	80	34	2	98									
580	258886	HR cell C12			D. Baker	sericitic fthbp							20	1	6	<2	4	290	98	2	380									
580	258887	HR cell C12			D. Baker	sericitic fthbp							<5	1	4	<2	<1	60	338	2	80									
580	258888	HR cell C12			D. Baker	chloritic fthbp							75	0.6	14	8	<1	40	14	2	48									
580	258889	HR cell C12			D. Baker	sericitic fthbp							450	1	14	<2	58	270	<2	2	30									
580	258890	HR cell D12			D. Baker	sericitic fthbp							140	0.8	10	14	<1	80	2	6	50									
580	258891	HR cell D12			D. Baker	ser + chl fthbp							150	0.8	8	14	<1	80	2	6	50									
580	258892	HR cell D12			D. Baker	chloritic fthbp							560	1	6	4	396	40	<2	2	50									
580	258893	HR cell D12			D. Baker	qtz-bar-py-chal stringers							175	0.2	8	10	6	40	6	2	38									
580	258894	HR cell C12			D. Baker	sericitic andesite							70	2.4	24	<2	27	<1	90	2	174									
580	258895	HR cell C12			D. Baker	fthbp							25	0.8	14	<2	26	<1	22	6	312									
580	258896	HR cell C12			D. Baker	sericitic fthbp							20	0.2	4	<2	9	<1	20	2	22									
580	258897	HR cell C12			D. Baker	andesite-pyroclastic							130	1.6	12	<2	25	<1	18	4	124									
580	258898	HR cell C12			D. Baker	sericitic andesite							30	2.2	22	<2	17	<1	260	6	540									
580	258899	HR cell C12			D. Baker	chl-chal fract zone							50	29.2	30	<2	>10000	<1	296	10	286									
580	258900	HR cell C12			D. Baker	ser-alt feld por							70	14.8	10	<2	>10000	<1	144	10	674									
580	258901	HR grid G9	482658	6178160	B. Kay	Hbl ppy monzonite							<5	<2	2	<2	4	10	6	2	108									
580	258902	HR grid G9	482643	6178121	B. Kay	Hbl ppy monzonite							<5	<2	6	<2	6	<10	<2	6	74									
580	258903	HR grid G9	482707	6178137	B. Kay	Mudstone							180	6	282	<2	168	80	66	6	86									
580	258913	HR grid G9	482790	6178165	B. Kay	Hbl ppy monzonite							15	0.2	2	<2	14	40	10	2	24									
580	258914	HR grid G9	482738	6178111	B. Kay	Hbl ppy monzonite							<5	<2	18	<2	36	50	8	<2	98									
580	250910	HR grid G9	482857	6178136	B. Kay	Hbl ppy monzonite							25	<2	6	<2	<1	10	10	<2	40									
580	258918	HR grid G9	482853	6178243	B. Kay	Hbl ppy monzonite							75	0.4	<2	<2	6	180	80	<2	32									

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	
Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn	
630	258917	HR grid G9	462909	8178214	B. Kay	Andesite	Dark grey vfg sil'd andesite, 10% cg dissem py					75	<2		6	<2	103	20	<2	<2	116
631	258918	HR grid G9	462966	8178150	B. Kay	Andesite	QSS uncertain protolith, 8%fg dissem py					150	0.2		8	<2	84	20	20	<2	10
632	258919	HR grid F9	463087	8178011	B. Kay	Andesite	QSS uncertain protolith, 5%fg dissem py					60	0.8		12	<2	31	40	14	<2	42
633	258920	HR grid F9	463202	8178064	B. Kay	Py-cpy chl vein	rep from 80cm x 20m semi-massive py cpy(minor) vein, intense chlorite stain, host in QS andesite					4070	3.2		110	<2	122	80	48	<2	40
634	258928	HR grid F9	463146	8178112	B. Kay	Andesite	QSS possible andesite protolith, chlorite stain, 5-8% dissem + blebs py 3x5m					70	2.6		42	4	57	180	18	6	52
635	258929	HR grid F9	463048	8178161	B. Kay	Hbl ppy monzonite	QSS possible ppy protolith, 5-8% dissem + blebs py					35	0.8		16	2	15	30	2	2	34
636	258930	HR grid G9	462966	8178292	B. Kay	Hbl ppy monzonite	QSS HFP protolith, chlorite stain, 8% dissem + fracture fills py					420	0.4		36	<2	15	10	8	12	114
637	258931	HR grid G9	462991	8178368	B. Kay	Hbl ppy monzonite	QSS HFP protolith, chlorite stain, 8% dissem + fracture fills py, 5x5m cliff face					135	0.2		16	12	7	10	<2	4	86
638	258932	HR grid F9	463100	8178260	B. Kay	Andesite	QSS probable andesite protolith, chl stain 10% py 1x10m W trending zone					105	1.2		94	4	13	30	10	10	72
639	258933	HR grid F9	463265	8176509	B. Kay	Dacite	Light green-gray rhyolitic matrix w. cg mafic phenos to 10%					<5	0.8		18	<2	228	<1	10	4	50
640	258934	HR grid I5	461545	8160490	B. Kay	FHP	med grey- purple hem stained feldspar hbl ppy					<5	<2	<2	<2		48	<1	<2	<2	76
641	258935	HR grid I5	461675	8160468	B. Kay	Andesite flow	Dark grey-purple hem stained fsp phenic flow bx, frags FHP					<5	<2		10	2	25	<1	16	2	94
642	258936	HR grid I5	461542	8160462	B. Kay	FHP	med grey- purple hem stained feldspar hbl ppy					<5	<2		4	<2	13	<1	4	2	60
643	258937	HR grid H5	462063	8160452	B. Kay	Hbl ppy monzonite	Ser chl alt stringers up to 1m width 2% sg dissem py, 50x30m gossanous zone in hbl ppy					<5	<2		134	<2	27	<1	174	18	226
644	258938	HR grid H3	462409	8181478	B. Kay	Rhyolite	light grey-green fg flow banded rhyolite, 1% fg dissem py 2x5m					<5	<2		28	<2	9	<1	26	14	26
645	258939	HR grid H3	462429	8181432	B. Kay	Rhyolite	trace py					<5	<2		26	<2	9	<1	10	2	26
646	258940	HR grid H3	462430	8181353	B. Kay	Rhyolite	light grey-green fg flow banded rhyolite, 2x10m pale yellow mid alt, trace py					<5	<2		36	<2	9	<1	24	24	26
647	258941	HR grid H3	462381	8181360	B. Kay	Rhyolite	light grey-green fg flow banded rhyolite, 10x25m pale yellow mid alt, trace py					<5	<2		42	<2	8	<1	38	12	34
648	258942	HR grid H3	462298	8181371	B. Kay	Rhyolite	chips along x-cutting Qtz carb graph stringer bx, frags of fg flow banded rhyolite, matrix 20% vfg py, 40cm-2m x 25m					<5	0.2		18	<2	6	<1	12	8	12
649	258943	HR grid H3	462393	8181300	B. Kay	Rhyolite	light grey-green fg flow banded rhyolite, strong carb, graph alt, 5x5m, on strike w/258942					<5	0.8		40	<2	8	<1	88	30	12
650	258944	HR grid G3	462543	8181187	B. Kay	Dacite	med grey-green massive dacite, fg mafic phenos					<5	<2		12	<2	6	<1	18	4	54
651	258947	HR grid D13	464462	8176205	B. Kay	Rhyolite	Pale green aphanitic massive rhyolite 5x2m. 5-10% py dissem, fractures					90	0.8		10	<2	112	10	464	2	506
652	258948	HR grid D13	464465	8176200	B. Kay	Fsp ppy	Pale grey-green m-cg fsp porphyritic intrusive eq. + gradational w/258947 rhyolite, 10% py blebs, fractures					80	0.2		4	<2	92	20	164	<2	186
653	258949	HR grid C13	465570	8176135	B. Kay	Rhyolite	Rhyolite pebbles (angular) in siliceous matrix, possible fault bx. 10% py dissem, fractures					50	<2		6	<2	53	10	20	<2	74
654	258950	HR grid C13	464615	8176040	B. Kay	Hbl ppy monzonite	Intense QS alt probable Hbl intrusive zone 10x 5m. 5mm stringers py + 10-15% dissem					340	1.6		52	<2	794	30	22	<2	62
655	258951	HR EF11			G.E.	sulphide zone	1.0 m chip of sulphide zone @ 320/50NE chl rich rhyolite? w/ 25% mgr py w/ subrounded rhy frags 1-2cm					95	0.6		94	<2	9	30	40	2	58
656	258952	HR EF11			G.E.	sulphide zone	1.0 m chip of sulphide zone @ 320/50NE chl rich rhyolite? w/ 25% mgr py w/ subrounded rhy frags 1-2cm					645	4.4		268	<2	40	40	130	<2	82
657	258953	HR EF11			G.E.	fl banded rhyolite	very silic flow banded rhyolite WR w/ moderate seric alt and 15-20% dissem py, some rhy lapilli					535	<2		16	<2	5	170	22	<2	6
658	258955	HR EF11			G.E.	sulphide zone	rep of sulphides from a silicid shear in rhyolite w/ 50% fgr and mgr py, minor Qtz veins					495	1		18	<2	12	100	48	6	<2
659	258956	HR EF11			G.E.	barite cpy vein	1.0 m chip across a barite vein in chl alt'd FP andesite avg. 30% barite, 10% py, 3% cpy trend 110/80N					8340	14		26	<2	>10000	560	164	<2	454
660	258957	HR EF11			G.E.	barite cpy vein	Vanguard Gold trench 2.0 m chip of the widest vein portion ba vein w/ seric selvages avg. 7-8% cpy, 5%py, 5%sp, tr ga trend 085/80S					9590	28.2		12	<2	8300	4450	8010	10	8380
661	258963	HR cell EF11			G.E.	Rhyolite	30 cm py vein w/ 40% py in chl alt'd QFP Rhyolite					195	1.8		152	10	51	10	8	14	132
662	258964	HR cell EF11			G.E.	py-seric-silic structure	3.0 m chip of heavy seric/silicid structure w/ ba blebs & 15-20%py, tr. 5% cpy py veins in chl alt'd andesite					470	2.8		50	<2	23	190	26	12	82
663	258965	HR cell EF11			G.E.	silic carb-py structure	4.0 m section w/ 20% 10-20 cm py vna w/ 5-8% cpy w/ some Qtz stkwk- trend 290/80					1930	32.4		212	10	>10000	50	<2	24	102
664	258966	HR cell EF11			G.E.	sulphide zone	2.0 m chip of silicid, carb alt'd structure w/ seric lama avg. 15% py-trend 300/80S			3.45		385	1.4		44	<2	323	380	24	16	98
665	258967	HR cell EF11			G.E.	sulphide zone	reps from dump pile of a 10 m adit on a 2m structure trend 090/80S 40-50% py tr cpy in chl alt'd FP andesite			3.94		3680	1.8		50	2	35	570	30	16	148
666	258968	HR cell EF11			G.E.	sulphide zone	rep of edit dump pile carb/seric alt'd zone in chl andesite w/ 15%py, 1-3% cpy					1230	51		316	<2	>10000	270	<2	18	102
667	258969	HR cell ED13			G.E.	Olivine-Px Basalt	Olivine-Px Basalt Flow-WR aphan matrix w/ 20% plag 1mm phenos, 30 2mm phenos and 10% px phenos- non magnetic					<5	<2		<2	16	104	<10	<2	8	72
668	258970	HR cell ED13			G.E.	QFP Rhyolite	QFP Rhyolite Dome-WR very silic 10% 1mm QP's, 15% 1mm FP's, Mn on fract, 1% dissem py					<5	<2		<2	<2	<1	720	<2	<2	6
669	258971	HR cell ED13			G.F.	sulphides in chl andesite	float grab-chl alt'd tuft w/ 30%py, 2% cpy					880	21.6		494	38	6630	130	72	14	92
670	258972	HR cell ED13			G.E.	carb/py zone	old pit-1.5m chip chl/carb/py vein in seric alt'd FP andesite tuft w/ 30% 2-6cm siltstone frags, avg 20%py, tr cpy					170	7.6		1055	18	1115	90	134	22	168



1	A	B	C	D	E	F	G															
	Sample N	General Location	E	N	Sampler	R Type	Description	Au	Ag	Cu	Pb	Zn	Au	Ag	As	Bi	Cu	Hg	Pb	Sb	Zn	
673	258973	HR cell ED13			G.E.	qtz/carb/sulp hide vein	grab from dump of 30-40cm qtz/carb vein w/ 30%py, 15%aspy, tr sp,cpy vein in HFP @ 080/80S						3530	60.8	>10000	114	2030	260	578	204	214	
672	258974	HR cell ED13			G.E.	sulphide vein	same dump as #973 20%py, 15%sp, 5%aspy sulphide frags and lams in qtz/carb matrix					7.63	1375	25.8	>10000	30	812	25900	940	658	>10000	
673	258975	HR cell ED13			G.E.	sulphide zone	35%py, 10%aspy, 10%sp crudely banded in a tuffaceous matrix w/ 1-3 cm siltstone frags			153			1.9	3770	>100.0	>10000	584	7590	3890	6280	222	>10000
674	258980	HR cell ED13			G.E.	qtz/carb/sulp hide vein	1.7 m chip of qtz/carb/sulphide vein @ 010/90 parallel bedding 30% 10-20cm veins w/ 5%py, 5%aspy, tr ga,sp in chl altd siltstone?				1.88		385	32.2	>10000	<2	1130	2670	>10000	78	8880	
675	258981	HR cell ED13			G.E.	seric altd HFP	grab of seric altd HFP w/ 25% dissem py						90	1.2	232	<2	16	30	100	8	176	
676	258982	HR cell ED13			G.E.	qtz/carb/sulp hide vein	50 cm chip of a qtz/carb/sulphide vein w/ 25%py, 8-10%cpy, 5-8%aspy hosted in HFP in a 2m wide chl altd structure @ 080/90			179	4.56		4580	>100.0	>10000	272	>10000	790	1030	282	1220	
677	258983	HR cell ED13			G.E.	and debris flow	1.0 m chip of seric altd and debris flow w/ 15% dissem py and a 20 cm py vein @ 030/80S						20	0.8	90	<2	52	100	18	10	34	
678	258989	HR cell ED13			G.E.	HFP seric altd	rep of mod-strong seric altd HFP w/ 5-8% dissem py, occas chl and silic fract.						5	<2	<2	<2	<1	<10	<2	<2		2
679	258990	HR cell ED13			G.E.	HFP seric altd	rep of ser altd HFP 10-12% py dissem, no primary textures visible						<5	<2	<2	<2	<1	<10	<2		2	8
680	258991	HR cell ED13			G.E.	pyritic mudstone	rep from dump pile of pyritic mudstone w/ occas vuggy QV avg. 60% py						515	2.8	84	36	<1	80	24	2	62	
681	258992	HR cell ED13			G.E.	barite cpy vein	reps from dump pile of a massive coarse grained barite vein w/ 5-6% ga, 10% py, tr-1%cpy tr sp 40cm vein very irregular @ 090/90			360		6.8	70	>100.0	28	4	888	2560	>10000	388	2700	
682	258993	HR cell ED13			G.E.	Rhyolite py	20cm chl/py vein in mud/chert conglomerate vein @ 330/60W avg. 30% py in chl matrix						10	0.2	<2	<2	<1	90	168	6	118	
683	258994	HR cell ED13			G.E.	chl/py vein mudstone/s ulphides	1m chip of silicd mudstone w/ seric altn along a structure 15% py, tr-1.0% cpy @ 080/80S						150	2.8	80	36	98	20	68	6	44	
684	258995	HR cell ED13			G.E.	HFP seric altd	rep of a 5x5 meter area of seric altd HFP w/ 10-14% py & py veinlets tr cpy rep of zone						60	9.2	84	18	3270	150	48	4	84	
685	258996	HR cell ED13			G.E.	HFP seric altd	apan silic HFP 12-15% py dissem w/ wk chl fract						25	1.2	40	12	42	210	58	4	298	
686	258997	HR cell ED13			G.E.	MS	blebby						35	<2	12	<2	<1	10	8	2	12	
687	258998	HR cell ED13			G.E.	Sulphides in siltstone	20 cm chip of sulphides in siltstone 5-10% qtz vnits 25% fgr py vnits, blebs, dissem						110	0.8	248	32	<1	10	14	<2	12	
688	258999	HR cell ED13			G.E.	Aapy in HFP	rep of dump pile of py,aspy vein in seric altd HFP 40% py, 30% aapy	0.512oz/l	222				170	2.4	384	12	17	420	614	12	588	
689	259000	HR cell ED13			G.E.								>10000	>100.0	>10000	618	2410	1890	6110	906	2110	

**APPENDIX 2**  
**CERTIFICATES OF ANALYSIS - ROCKS**



# ALS Chemex

Aurora Laboratory Services Ltd.  
 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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To: TECH EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 177000  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number : 1-A  
 Total Pages : 2  
 Certificate Date: 17-JUL-2001  
 Invoice No. : IO120047  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS A0120047

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
258293	9400 267	1.42	< 5	1.2	0.22	102	< 10	80	< 0.5	< 2	0.56	< 0.5	9	48	5	3.45	< 10	340	0.21	10
258294	9400 267	1.54	< 5	1.2	1.13	806	< 10	70	0.5	< 2	1.95	< 0.5	14	11	37	4.32	< 10	850	0.41	< 10
258295	9400 267	1.26	< 5	6.6	0.59	1070	< 10	10	0.5	< 2	4.79	< 0.5	19	17	95	10.55	< 10	10270	0.29	10
258296	9400 267	1.76	< 5	2.4	0.76	336	< 10	120	< 0.5	< 2	0.39	< 0.5	6	17	25	3.68	< 10	2000	0.39	10
258297	9400 267	1.10	< 5	0.2	0.58	60	< 10	80	< 0.5	< 2	1.77	< 0.5	8	32	6	1.77	< 10	100	0.34	10
258298	9400 267	1.22	< 5	0.2	0.43	136	< 10	70	< 0.5	< 2	0.38	< 0.5	3	40	14	1.30	< 10	90	0.31	10
258299	9400 267	1.30	470	3.8	0.33	958	< 10	< 10	0.5	< 2	0.01	< 0.5	11	43	10	12.80	< 10	3440	0.27	< 10
258300	9400 267	1.40	15	3.2	0.49	1380	< 10	< 10	0.5	< 2	0.18	< 0.5	20	45	20	14.80	< 10	1640	0.27	< 10
258310	9400 267	0.90	< 5	0.2	1.41	34	< 10	90	< 0.5	< 2	0.54	< 0.5	10	23	24	3.05	< 10	960	0.24	< 10
258311	9400 267	1.30	< 5	0.4	0.32	158	< 10	40	< 0.5	< 2	0.70	< 0.5	3	39	8	3.16	< 10	2150	0.29	< 10
258312	9400 267	1.12	60	2.6	0.26	270	< 10	10	< 0.5	< 2	0.55	< 0.5	12	38	10	6.69	< 10	820	0.25	< 10
258313	9400 267	1.22	< 5	< 0.2	1.52	32	< 10	90	< 0.5	< 2	0.56	< 0.5	10	21	23	3.11	< 10	940	0.27	< 10
258314	9400 267	1.44	< 5	1.6	0.78	262	< 10	20	0.5	< 2	0.65	< 0.5	104	17	13	7.50	< 10	1300	0.35	< 10
258315	9400 267	1.04	185	4.2	0.27	216	< 10	10	< 0.5	< 2	0.02	< 0.5	10	44	7	4.64	< 10	1940	0.30	< 10
258316	9400 267	1.08	< 5	0.8	1.25	36	< 10	90	< 0.5	< 2	10.55	< 0.5	12	11	36	4.16	< 10	1290	0.16	< 10
258317	9400 267	1.00	< 5	0.2	1.15	22	< 10	50	0.5	< 2	1.96	< 0.5	12	15	12	4.06	< 10	180	0.30	< 10
258318	9400 267	1.56	< 5	1.6	0.01	212	< 10	< 10	0.5	< 2	0.03	< 0.5	6	47	7	>15.00	< 10	2350	0.01	< 10
258319	9400 267	1.38	< 5	0.2	0.40	14	< 10	80	< 0.5	< 2	1.00	< 0.5	2	44	5	1.81	< 10	70	0.21	10
258320	9400 267	0.98	< 5	3.4	1.11	28	< 10	30	0.5	< 2	1.32	0.5	10	58	112	5.00	< 10	290	0.14	< 10
258351	9400 267	1.02	< 5	< 0.2	3.09	18	< 10	100	< 0.5	< 2	1.53	< 0.5	18	9	3	3.65	< 10	50	0.17	< 10
258352	9400 267	0.50	< 5	14.0	2.02	4	< 10	110	0.5	< 2	4.01	16.5	21	13	>10000	4.35	< 10	660	0.28	< 10
258353	9400 267	1.78	< 5	< 0.2	3.10	66	< 10	100	0.5	< 2	0.94	< 0.5	24	6	51	4.51	< 10	50	0.20	< 10
258354	9400 267	1.06	10	< 0.2	2.42	264	< 10	50	0.5	< 2	1.94	< 0.5	16	17	16	3.91	< 10	70	0.18	< 10
258453	9400 267	1.60	< 5	< 0.2	1.29	72	< 10	90	0.5	< 2	1.05	9.5	20	10	30	3.00	< 10	14440	0.36	< 10
258454	9400 267	1.00	< 5	< 0.2	1.41	6	< 10	100	0.5	< 2	1.65	< 0.5	8	8	13	2.96	< 10	70	0.30	10
258455	9400 267	1.70	< 5	4.0	1.03	818	< 10	20	0.5	< 2	0.48	< 0.5	52	17	50	6.76	< 10	5960	0.33	< 10
258456	9400 267	1.90	< 5	0.8	0.89	284	< 10	20	0.5	< 2	0.78	< 0.5	22	13	70	4.91	< 10	2600	0.38	< 10
258457	9400 267	1.64	< 5	< 0.2	0.96	184	< 10	70	< 0.5	< 2	1.66	0.5	9	20	8	2.28	< 10	60	0.27	10
258458	9400 267	1.28	< 5	< 0.2	0.41	56	< 10	50	< 0.5	< 2	0.33	< 0.5	16	23	14	3.15	< 10	540	0.26	< 10
258459	9400 267	2.00	< 5	< 0.2	0.54	50	< 10	30	0.5	< 2	1.81	< 0.5	9	14	14	3.45	< 10	1000	0.36	< 10
258460	9400 267	2.16	< 5	< 0.2	0.27	44	< 10	50	< 0.5	< 2	2.27	< 0.5	8	21	11	2.53	< 10	890	0.16	< 10
258461	9400 267	1.72	< 5	0.4	0.35	144	< 10	20	< 0.5	< 2	0.43	< 0.5	9	30	14	5.50	< 10	3930	0.28	< 10
258462	9400 267	1.78	< 5	< 0.2	0.37	268	< 10	20	0.5	< 2	4.59	< 0.5	18	14	24	6.02	< 10	2640	0.31	< 10
258463	9400 267	2.14	30	1.2	0.23	810	< 10	50	< 0.5	< 2	2.61	< 0.5	15	63	14	3.09	< 10	680	0.19	< 10
258464	9400 267	1.16	10	0.2	2.38	56	< 10	140	0.5	< 2	0.39	< 0.5	18	61	50	4.50	< 10	80	0.16	< 10
258465	9400 267	1.12	< 5	0.2	0.59	26	< 10	130	0.5	< 2	0.81	1.5	3	24	20	1.99	< 10	140	0.24	10
258466	9400 267	0.94	< 5	0.6	0.88	68	< 10	80	< 0.5	< 2	0.14	7.0	4	47	45	2.81	< 10	140	0.09	< 10
258507	9400 267	1.76	< 5	< 0.2	2.22	2	< 10	90	0.5	< 2	2.18	< 0.5	19	11	10	5.84	< 10	10	0.17	10
258508	9400 267	2.22	< 5	0.4	1.31	12	< 10	80	< 0.5	< 2	1.83	0.5	8	19	17	3.09	< 10	90	0.22	< 10
258509	9400 267	1.16	< 5	1.2	0.66	2990	< 10	< 10	0.5	< 2	0.24	< 0.5	31	33	38	14.20	< 10	9160	0.13	< 10

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number : 1-B  
 Total Pages : 2  
 Certificate Date: 17-JUL-2001  
 Invoice No. : I0120047  
 P.O. Number :  
 Account : HPQ

Project : 177000  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0120047

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258293	9400 267	0.01	205	9	0.02	3	210	14	1.72	20	< 1	34	< 0.01	< 10	< 10	1	< 10	20
258294	9400 267	0.47	445	1	< 0.01	2	1460	8	2.14	46	5	45	< 0.01	< 10	< 10	34	< 10	46
258295	9400 267	0.16	815	4	< 0.01	3	940	14	9.58	346	4	116	< 0.01	160	< 10	17	10	16
258296	9400 267	0.12	90	1	0.03	1	1610	10	1.16	58	2	24	< 0.01	20	< 10	31	< 10	50
258297	9400 267	0.05	310	5	< 0.01	< 1	2030	6	0.86	2	1	71	< 0.01	< 10	< 10	8	< 10	12
258298	9400 267	0.03	40	5	< 0.01	< 1	1420	8	0.56	4	< 1	24	< 0.01	< 10	< 10	6	< 10	10
258299	9400 267	0.07	20	6	< 0.01	3	150	54	>10.00	106	1	6	< 0.01	30	< 10	17	20	12
258300	9400 267	0.11	65	75	< 0.01	4	360	88	>10.00	74	3	9	< 0.01	< 10	< 10	18	20	18
258310	9400 267	1.35	385	8	< 0.01	4	580	4	1.35	24	4	14	< 0.01	< 10	< 10	35	< 10	48
258311	9400 267	0.03	45	9	< 0.01	5	360	22	3.04	28	1	70	< 0.01	10	< 10	8	< 10	38
258312	9400 267	0.04	175	60	< 0.01	1	360	54	5.26	42	1	26	< 0.01	< 10	< 10	16	< 10	42
258313	9400 267	1.39	390	7	< 0.01	5	610	4	1.35	24	4	14	< 0.01	< 10	< 10	38	< 10	50
258314	9400 267	0.25	175	12	< 0.01	8	1440	158	5.50	38	2	23	< 0.01	< 10	< 10	21	< 10	26
258315	9400 267	0.01	15	16	< 0.01	1	290	46	4.63	20	< 1	5	< 0.01	< 10	< 10	7	< 10	2
258316	9400 267	0.56	1650	1	< 0.01	4	600	76	1.86	32	3	155	< 0.01	< 10	< 10	49	< 10	408
258317	9400 267	0.61	325	4	0.01	8	970	14	2.41	16	4	42	< 0.01	< 10	< 10	32	< 10	80
258318	9400 267	< 0.01	420	40	< 0.01	1	110	< 2	>10.00	24	< 1	5	< 0.01	< 10	< 10	3	30	< 2
258319	9400 267	0.09	305	3	0.01	3	170	10	1.31	6	< 1	55	< 0.01	< 10	< 10	7	< 10	46
258320	9400 267	0.67	435	17	0.02	32	420	4	4.20	8	3	44	< 0.01	< 10	< 10	43	< 10	104
258351	9400 267	3.38	785	2	< 0.01	4	1040	< 2	0.48	12	5	23	0.13	< 10	< 10	94	< 10	66
258352	9400 267	1.12	915	2	< 0.01	3	970	12	1.44	10	4	71	< 0.01	< 10	< 10	37	< 10	104
258353	9400 267	3.25	1100	1	0.01	6	930	< 2	0.93	12	7	31	0.07	< 10	< 10	133	< 10	72
258354	9400 267	2.58	845	< 1	0.01	5	720	< 2	1.11	6	7	38	< 0.01	< 10	< 10	99	< 10	50
258453	9400 267	0.57	445	< 1	0.01	2	1210	30	1.39	14	4	28	< 0.01	< 10	< 10	29	< 10	420
258454	9400 267	0.86	665	< 1	0.04	< 1	1660	2	1.09	8	2	59	< 0.01	< 10	< 10	36	< 10	72
258455	9400 267	0.43	340	13	< 0.01	7	910	76	5.05	60	6	13	< 0.01	< 10	< 10	53	< 10	58
258456	9400 267	0.26	150	3	< 0.01	4	1330	102	4.08	28	3	32	< 0.01	< 10	< 10	27	< 10	128
258457	9400 267	0.37	610	< 1	< 0.01	< 1	1370	16	0.58	6	3	79	< 0.01	< 10	< 10	18	< 10	64
258458	9400 267	0.11	70	1	< 0.01	5	770	14	2.46	22	2	15	< 0.01	< 10	< 10	15	< 10	10
258459	9400 267	0.07	245	2	< 0.01	8	1060	10	3.16	26	3	47	< 0.01	< 10	< 10	16	< 10	54
258460	9400 267	0.05	100	2	< 0.01	10	600	8	2.15	20	1	115	< 0.01	< 10	< 10	8	< 10	6
258461	9400 267	0.04	50	7	< 0.01	6	600	18	5.47	48	1	24	< 0.01	10	< 10	9	10	6
258462	9400 267	0.17	855	< 1	< 0.01	5	660	6	5.90	36	4	88	< 0.01	< 10	< 10	19	< 10	42
258463	9400 267	0.05	185	8	< 0.01	6	520	6	3.00	16	3	55	< 0.01	< 10	< 10	15	< 10	12
258464	9400 267	1.40	1175	3	0.02	84	380	6	0.66	2	4	15	< 0.01	< 10	< 10	41	< 10	92
258465	9400 267	0.34	470	8	0.01	18	410	8	1.08	6	3	40	< 0.01	< 10	< 10	13	< 10	188
258466	9400 267	0.34	140	14	0.04	45	510	12	0.93	10	4	13	< 0.01	< 10	< 10	88	< 10	574
258507	9400 267	1.21	555	< 1	0.05	5	1260	2	1.21	2	11	109	< 0.01	< 10	< 10	72	< 10	74
258508	9400 267	0.61	415	4	0.03	19	860	12	1.34	4	3	63	< 0.01	< 10	< 10	20	< 10	118
258509	9400 267	0.31	105	7	0.02	3	610	24	>10.00	524	3	13	< 0.01	140	< 10	29	20	22

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



# ALS Chemex

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

TO: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number : 2-A  
 Total Pages : 2  
 Certificate Date: 17-JUL-2001  
 Invoice No. : I0120047  
 P.O. Number :  
 Account : HPQ

Project : 177000  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0120047

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
258510	9400 267	1.26	< 5	1.8	1.17	662	< 10	< 10	1.0	< 2	1.33	< 0.5	13	18	21	>15.00	< 10	3540	0.08	< 10
258558	9400 267	0.56	< 5	0.2	2.17	24	< 10	20	< 0.5	< 2	1.17	< 0.5	38	7	58	5.60	< 10	490	0.16	< 10
258559	9400 267	0.60	< 5	0.2	0.37	30	< 10	30	< 0.5	< 2	9.18	< 0.5	23	5	25	4.22	< 10	340	0.13	< 10
258560	9400 267	0.54	< 5	0.6	0.06	102	< 10	< 10	0.5	< 2	0.06	< 0.5	21	19	36	>15.00	< 10	5860	0.03	< 10
258561	9400 267	0.92	< 5	0.2	0.48	240	< 10	20	0.5	< 2	0.26	< 0.5	27	16	20	4.67	< 10	4600	0.26	< 10
258562	9400 267	0.34	5	0.2	1.12	48	< 10	40	< 0.5	< 2	2.08	< 0.5	25	6	60	5.22	< 10	250	0.26	< 10
258563	9400 267	0.88	< 5	< 0.2	0.25	70	< 10	30	< 0.5	< 2	0.15	< 0.5	5	22	10	3.93	< 10	1500	0.23	< 10
258564	9400 267	0.54	< 5	< 0.2	0.81	50	< 10	30	< 0.5	< 2	0.17	< 0.5	12	26	6	4.03	< 10	1330	0.49	< 10
258565	9400 267	1.06	< 5	0.2	0.32	64	< 10	50	< 0.5	< 2	2.51	< 0.5	34	18	12	3.15	< 10	690	0.22	< 10
258566	9400 267	0.72	< 5	0.6	0.49	16	< 10	30	< 0.5	< 2	>15.00	< 0.5	10	5	18	2.37	< 10	230	0.01	< 10
258567	9400 267	0.40	< 5	0.2	2.20	940	< 10	30	0.5	< 2	1.86	< 0.5	16	9	10	7.90	< 10	4560	0.14	< 10
258568	9400 267	0.80	< 5	0.4	0.12	98	< 10	< 10	< 0.5	< 2	0.06	< 0.5	3	79	4	6.98	< 10	2470	0.13	< 10
258569	9400 267	0.90	< 5	0.6	0.22	98	< 10	40	< 0.5	< 2	2.74	< 0.5	19	23	10	3.36	< 10	1360	0.18	< 10
258570	9400 267	0.78	< 5	< 0.2	0.51	62	< 10	30	< 0.5	< 2	0.12	< 0.5	19	23	35	4.22	< 10	980	0.30	< 10
258571	9400 267	0.72	< 5	0.6	0.23	106	< 10	30	< 0.5	< 2	0.68	< 0.5	5	33	9	3.03	< 10	790	0.23	< 10
258601	9400 267	1.34	< 5	< 0.2	0.58	2	< 10	110	< 0.5	< 2	0.73	< 0.5	6	12	5	2.17	< 10	50	0.35	10
258602	9400 267	1.24	35	2.2	0.60	488	< 10	< 10	0.5	< 2	1.75	< 0.5	14	24	16	6.97	< 10	5330	0.27	< 10
258603	9400 267	0.60	5	2.0	2.39	18	< 10	170	< 0.5	< 2	0.33	< 0.5	18	14	27	6.50	< 10	280	0.19	< 10
258604	9400 267	0.96	< 5	0.2	2.08	14	< 10	210	0.5	< 2	1.32	< 0.5	11	14	24	5.00	< 10	100	0.17	10
258605	9400 267	1.36	< 5	< 0.2	1.08	36	< 10	50	< 0.5	< 2	0.23	< 0.5	10	16	40	4.46	< 10	210	0.21	< 10
258606	9400 267	1.40	< 5	0.2	0.38	32	< 10	210	< 0.5	< 2	0.08	< 0.5	3	47	18	1.81	< 10	80	0.08	< 10
258607	9400 267	0.68	< 5	0.2	1.95	18	< 10	90	< 0.5	< 2	0.05	< 0.5	12	61	26	4.82	< 10	90	0.11	< 10
258608	9400 267	1.06	5	0.6	0.68	60	< 10	90	0.5	< 2	0.06	< 0.5	19	25	27	3.97	< 10	90	0.14	< 10
258609	9400 267	1.54	< 5	< 0.2	0.79	24	< 10	60	< 0.5	< 2	5.79	< 0.5	11	5	21	3.30	< 10	150	0.22	< 10
258651	9400 267	1.72	5	0.8	0.43	150	< 10	< 10	< 0.5	< 2	0.21	< 0.5	21	21	32	8.60	< 10	4080	0.16	< 10

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



# ALS Chemtux

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

TECHNICAL EXPLOSION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :2-B  
 Total Pages :2  
 Certificate Date: 17-JUL-2001  
 Invoice No. : I0120047  
 P.O. Number :  
 Account : HPQ

Project : 177000  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS

### A0120047

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258510	9400 267	0.97	730	21 < 0.01	4	420	20 >10.00	202	2	21 < 0.01	< 10	< 10	< 10	< 10	30	30	30	30
258558	9400 267	1.85	525	15 < 0.01	7	650	16 3.00	8	6	18 < 0.01	< 10	< 10	< 10	< 10	68	< 10	60	60
258559	9400 267	0.15	1425	3 < 0.01	5	510	< 2 3.79	16	4	141 < 0.01	< 10	< 10	< 10	< 10	11	< 10	16	16
258560	9400 267	0.02	35	39 0.01	6	100	< 2 >10.00	36	< 1	8 < 0.01	< 10	< 10	< 10	< 10	4	30	6	6
258561	9400 267	0.12	65	4 < 0.01	12	730	16 4.39	52	2	11 < 0.01	< 10	< 10	< 10	< 10	12	< 10	92	92
258562	9400 267	0.53	475	5 0.02	8	990	14 3.06	10	4	90 < 0.01	< 10	< 10	< 10	< 10	34	< 10	68	68
258563	9400 267	0.03	30	1 < 0.01	3	560	14 3.65	26	1	8 < 0.01	< 10	< 10	< 10	< 10	11	< 10	4	4
258564	9400 267	0.44	180	2 0.03	3	500	4 3.15	20	3	16 0.06	< 10	< 10	< 10	< 10	44	< 10	18	18
258565	9400 267	0.08	245	2 < 0.01	8	880	12 2.91	36	2	92 < 0.01	< 10	< 10	< 10	< 10	13	< 10	32	32
258566	9400 267	0.54	1280	4 0.01	3	410	< 2 2.30	2	6	181 0.07	< 10	< 10	< 10	< 10	78	< 10	42	42
258567	9400 267	1.66	425	3 0.01	4	920	< 2 4.46	138	6	22 0.05	40	< 10	< 10	< 10	77	< 10	62	62
258568	9400 267	0.01	85	10 < 0.01	3	50	< 2 7.62	48	< 1	3 < 0.01	< 10	< 10	< 10	< 10	1	10	2	2
258569	9400 267	0.05	275	3 < 0.01	6	560	12 3.20	48	2	169 < 0.01	10	< 10	< 10	< 10	11	< 10	18	18
258570	9400 267	0.13	105	7 0.01	8	490	2 3.59	16	1	8 0.01	< 10	< 10	< 10	< 10	23	< 10	48	48
258571	9400 267	0.01	45	11 < 0.01	12	370	16 3.03	20	1	46 < 0.01	< 10	< 10	< 10	< 10	6	< 10	24	24
258601	9400 267	0.12	135	1 0.03	< 1	1670	6 1.12	6	2	23 < 0.01	< 10	< 10	< 10	< 10	8	< 10	38	38
258602	9400 267	0.21	330	8 < 0.01	3	670	44 5.99	84	3	34 < 0.01	40	< 10	< 10	< 10	24	10	90	90
258603	9400 267	1.03	365	3 0.03	7	1130	60 0.65	4	7	16 0.08	< 10	< 10	< 10	< 10	114	< 10	150	150
258604	9400 267	0.60	765	1 0.02	4	740	12 0.07	4	5	54 < 0.01	< 10	< 10	< 10	< 10	87	< 10	78	78
258605	9400 267	0.52	175	7 0.03	9	1460	10 2.19	22	5	15 < 0.01	< 10	< 10	< 10	< 10	24	< 10	88	88
258606	9400 267	0.08	135	5 0.03	12	490	6 0.38	14	3	10 < 0.01	< 10	< 10	< 10	< 10	26	< 10	48	48
258607	9400 267	0.47	1405	4 < 0.01	29	780	8 0.05	6	2	7 0.01	< 10	< 10	< 10	< 10	57	< 10	54	54
258608	9400 267	0.18	545	3 0.03	43	600	14 0.51	10	6	11 < 0.01	< 10	< 10	< 10	< 10	42	< 10	94	94
258609	9400 267	0.24	1315	4 0.01	3	880	8 1.94	6	6	68 < 0.01	< 10	< 10	< 10	< 10	21	< 10	56	56
258651	9400 267	0.14	175	16 0.02	3	680	32 9.29	12	< 1	6 0.13	< 10	< 10	< 10	< 10	26	10	12	12

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



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 British Columbia, Canada V7J 2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number : 1  
 Total Pages : 1  
 Certificate Date: 12-JUL-2001  
 Invoice No. : 10120204  
 P.O. Number :  
 Account : HPQ

Project : 177100  
 Comments: ATTN: G. EVANS FAX: R. FARMER

<b>CERTIFICATE OF ANALYSIS</b>	<b>A0120204</b>
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SAMPLE	PREP CODE	Ag g/t	Cu %	Pb %	Zn %						
258267	212 --	-----	1.45	-----	-----						
258269	212 --	-----	-----	3.21	3.08						
258275	212 --	113	-----	3.11	3.80						
258452	212 --	143	-----	-----	1.65						
258555	212 --	129	-----	-----	-----						

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





# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number : 1-A  
 Total Pages : 1  
 Certificate Date: 23-JUL-2001  
 Invoice No. : 10120277  
 P.O. Number :  
 Account : HPO

Project : 1771/1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A0120277

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Au FA g/t	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	
258321	9400 267	1.60	315	-----	>100.0	0.06	544	< 10	10	0.5	84	0.40	>500	6	5	3370	4.98	30	35500	0.03	
258322	9400 267	1.20	80	-----	49.6	0.41	520	< 10	10	0.5	24	1.43	>500	8	44	483	4.59	10	9170	0.21	
258323	9400 267	1.38	200	-----	>100.0	0.32	616	< 10	< 10	< 0.5	12	0.38	488	9	30	2560	4.81	< 10	7390	0.20	
258324	9400 267	1.40	10	-----	11.0	1.14	234	< 10	40	0.5	8	2.08	48.5	14	9	101	6.43	< 10	560	0.22	
258325	9400 267	1.80	10	-----	8.2	0.79	660	< 10	< 10	0.5	2	1.21	50.0	19	19	87	8.12	< 10	360	0.21	
258326	9400 267	1.76	< 5	-----	1.4	0.48	68	< 10	30	0.5	10	7.29	1.5	7	23	14	6.87	< 10	750	0.17	
258327	9400 267	1.42	15	-----	3.6	1.37	6	< 10	< 10	0.5	8	2.22	4.0	249	9	1575	>15.00	10	< 10	0.01	
258328	-- --	0.00	NotRed	-----	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258329	9400 267	0.78	5	-----	2.6	1.36	956	< 10	40	0.5	2	3.72	1.0	239	1	193	11.05	< 10	290	0.16	
258330	9400 267	0.98	5	-----	43.8	0.15	884	< 10	< 10	0.5	2	0.80	< 0.5	34	28	81	11.10	< 10	4850	0.12	
258355	9400 267	0.90	15	-----	0.6	0.32	16	< 10	810	< 0.5	4	10.45	1.0	26	19	46	3.42	< 10	110	0.20	
258356	9400 267	1.36	20	-----	1.0	1.22	294	< 10	20	< 0.5	6	4.14	0.5	19	15	49	4.39	< 10	280	0.23	
258511	9400 267	1.28	< 5	-----	0.2	0.69	4	< 10	1850	< 0.5	2	4.36	0.5	13	6	9	3.18	< 10	50	0.32	
258512	9400 267	1.64	< 5	-----	1.0	0.33	2	< 10	1180	< 0.5	6	5.51	1.5	13	14	186	3.08	< 10	450	0.16	
258513	9400 267	1.58	40	-----	0.2	2.37	154	< 10	110	0.5	< 2	1.30	0.5	18	10	7	4.26	< 10	80	0.25	
258572	9400 267	0.98	< 5	-----	< 0.2	2.27	14	< 10	80	0.5	2	0.97	1.5	11	7	7	3.41	< 10	< 10	0.12	
258573	9400 267	1.38	< 5	-----	0.2	2.09	10	< 10	70	0.5	2	1.31	0.5	11	3	25	2.77	< 10	< 10	0.11	
258574	9400 267	0.90	640	-----	1.0	1.32	28	< 10	80	< 0.5	< 2	0.69	0.5	8	26	95	3.30	< 10	< 10	0.42	
258575	9400 267	0.84	5	-----	1.4	1.11	66	< 10	< 10	< 0.5	2	5.29	< 0.5	6	15	50	7.62	< 10	370	0.11	
258576	9400 267	1.04	10	-----	0.2	2.08	10	< 10	120	< 0.5	2	0.28	< 0.5	25	24	49	4.17	< 10	80	0.17	
258577	9400 267	0.76	10	-----	1.0	0.48	48	< 10	40	< 0.5	< 2	0.69	< 0.5	22	15	17	3.78	< 10	580	0.32	
258578	9400 267	0.70	5	-----	0.2	0.56	40	< 10	40	< 0.5	< 2	0.30	< 0.5	12	13	15	3.01	< 10	1370	0.32	
258579	9400 267	0.70	< 5	-----	0.8	0.62	116	< 10	10	0.5	2	3.88	< 0.5	15	12	35	7.39	< 10	270	0.32	
258580	9400 267	0.80	< 5	-----	0.2	1.08	28	< 10	40	< 0.5	2	0.27	< 0.5	5	37	25	3.63	< 10	240	0.14	
258581	9400 267	0.80	< 5	-----	0.6	1.93	32	< 10	40	< 0.5	< 2	1.13	< 0.5	19	6	43	6.03	< 10	340	0.24	
258610	9400 267	0.38	15	-----	0.6	1.42	34	< 10	50	< 0.5	2	0.41	< 0.5	10	25	4	5.17	< 10	130	0.22	
258611	9400 267	2.26	< 5	-----	18.4	0.43	2500	< 10	10	0.5	6	0.43	62.5	22	25	68	9.94	< 10	1070	0.25	
258612	9400 267	1.36	< 5	-----	28.2	0.37	640	< 10	100	< 0.5	2	0.07	24.0	4	23	35	3.73	< 10	2890	0.23	
258613	9400 267	1.22	20	-----	12.4	0.48	892	< 10	30	0.5	< 2	0.67	91.0	9	21	55	6.04	< 10	2650	0.28	
258614	9400 267	1.44	15	-----	0.8	4.73	42	< 10	60	0.5	4	2.17	3.5	35	48	< 1	8.35	10	40	0.12	
258615	9400 267	0.66	< 5	-----	0.6	1.42	44	< 10	50	< 0.5	< 2	0.36	< 0.5	7	11	20	4.47	< 10	440	0.30	
258616	9400 267	1.18	< 5	-----	0.6	0.40	202	< 10	40	< 0.5	2	0.07	< 0.5	3	24	6	3.25	< 10	1550	0.27	
258617	9400 267	1.08	20	-----	0.2	1.45	52	< 10	40	< 0.5	< 2	0.22	< 0.5	6	18	25	4.52	< 10	450	0.27	
258618	9400 267	1.40	< 5	-----	1.0	0.90	54	< 10	90	< 0.5	2	0.09	< 0.5	2	51	62	3.50	< 10	390	0.09	
258652	9400 267	3.30	95	-----	>100.0	0.16	256	< 10	30	< 0.5	16	2.59	275	8	30	2450	4.65	< 10	52100	0.08	
258653	9400 267	1.94	-----	0.34	>100.0	0.04	1800	< 10	< 10	< 0.5	68	2.80	>500	10	42	>10000	2.45	< 10	>100000	0.02	
258654	9400 267	0.76	10	-----	46.0	0.30	34	< 10	60	< 0.5	< 2	0.23	9.0	5	43	118	2.89	< 10	1100	0.19	
258655	9400 267	1.14	< 5	-----	9.4	0.33	18	< 10	100	< 0.5	< 2	2.33	3.5	4	36	28	1.64	< 10	450	0.22	
258656	9400 267	0.92	5	-----	2.4	0.51	676	< 10	10	0.5	< 2	1.51	7.5	5	32	16	11.45	< 10	830	0.25	

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

\* SAMPLE "258653" CONTAINED HIGH Ag, Au ANALYSED BY GRAVIMETRIC FINISH.



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number : 1-B  
 Total Pages : 1  
 Certificate Date : 23-JUL-2001  
 Invoice No. : 10120277  
 P.O. Number :  
 Account : HPQ

Project : 1771/1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A0120277

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	
258321	9400 267	< 10	0.10	1120	3	< 0.01	16	690	>10000	9.21	2190	< 1	9	< 0.01	< 10	< 10	< 1	70	>10000	
258322	9400 267	< 10	0.41	2690	2	0.02	12	1320	8860	7.50	250	3	38	< 0.01	< 10	10	6	10	>10000	
258323	9400 267	< 10	0.13	2010	47	0.01	4	630	2430	7.44	1305	1	15	< 0.01	< 10	< 10	5	10	>10000	
258324	9400 267	< 10	1.49	>10000	1	0.01	5	1280	416	3.01	32	10	85	< 0.01	< 10	30	33	< 10	6630	
258325	9400 267	< 10	0.63	4380	3	0.01	5	1630	804	6.55	14	7	59	< 0.01	< 10	10	16	10	5060	
258326	9400 267	< 10	0.16	1095	8	0.01	3	250	56	7.48	18	1	373	< 0.01	< 10	10	5	< 10	366	
258327	9400 267	< 10	0.18	215	2	< 0.01	96	440	8	5.63	< 2	1	7	0.03	< 10	30	35	< 10	196	
258328	-- --	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258329	9400 267	< 10	0.63	650	16	0.01	79	680	36	9.16	32	4	71	< 0.01	< 10	30	28	< 10	394	
258330	9400 267	< 10	0.02	225	6	< 0.01	40	220	688	>10.00	228	< 1	36	< 0.01	20	10	27	10	192	
258355	9400 267	< 10	4.63	1135	< 1	0.01	20	950	8	0.16	2	13	471	< 0.01	< 10	10	38	< 10	126	
258356	9400 267	< 10	0.86	740	4	< 0.01	5	650	6	3.06	2	4	89	< 0.01	< 10	< 10	32	< 10	144	
258511	9400 267	< 10	0.15	950	< 1	0.01	3	1280	6	0.07	< 2	9	106	< 0.01	< 10	< 10	32	< 10	146	
258512	9400 267	< 10	1.76	1270	1	0.03	3	580	6	0.08	10	5	272	< 0.01	< 10	10	29	< 10	170	
258513	9400 267	< 10	1.79	670	3	0.01	10	910	2	1.15	2	3	34	< 0.01	< 10	< 10	70	< 10	140	
258572	9400 267	10	2.32	1690	< 1	0.04	2	2000	14	0.02	< 2	4	95	0.13	< 10	< 10	63	< 10	174	
258573	9400 267	10	2.54	3030	< 1	0.04	2	2090	10	0.01	< 2	8	39	0.04	< 10	< 10	62	< 10	314	
258574	9400 267	< 10	0.70	240	5	0.15	2	1350	< 2	1.65	< 2	1	72	0.16	< 10	< 10	49	< 10	100	
258575	9400 267	< 10	0.81	1375	53	0.03	25	800	< 2	7.85	8	4	138	< 0.01	< 10	10	24	< 10	150	
258576	9400 267	< 10	1.30	915	3	0.04	67	340	2	1.45	< 2	3	18	< 0.01	< 10	< 10	33	< 10	174	
258577	9400 267	< 10	0.09	155	2	0.01	10	1030	18	3.23	50	3	31	< 0.01	< 10	< 10	22	< 10	246	
258578	9400 267	< 10	0.11	35	1	0.01	10	1030	10	2.61	26	2	16	< 0.01	< 10	< 10	16	10	106	
258579	9400 267	< 10	0.26	755	2	0.01	7	1020	6	7.37	44	5	60	< 0.01	< 10	10	22	< 10	256	
258580	9400 267	< 10	0.74	260	6	0.01	10	530	< 2	2.71	6	1	15	< 0.01	< 10	< 10	23	< 10	100	
258581	9400 267	< 10	0.87	760	3	0.06	5	1250	14	3.65	10	6	37	0.15	< 10	< 10	68	< 10	248	
258610	9400 267	< 10	0.32	135	3	0.02	2	2230	20	1.38	< 2	4	32	< 0.01	< 10	< 10	24	< 10	112	
258611	9400 267	< 10	0.50	3600	1	0.01	13	1090	9160	8.42	32	10	157	< 0.01	< 10	20	33	30	6050	
258612	9400 267	< 10	0.01	>10000	4	< 0.01	1	1190	>10000	0.61	38	8	20	< 0.01	< 10	30	24	< 10	2740	
258613	9400 267	< 10	0.19	2990	1	0.01	2	1460	5300	5.70	14	2	22	< 0.01	< 10	10	8	< 10	9560	
258614	9400 267	< 10	3.19	1255	< 1	0.04	6	780	48	0.34	< 2	30	68	< 0.01	< 10	10	193	< 10	402	
258615	9400 267	< 10	0.52	145	8	0.01	20	1260	28	2.50	8	3	15	< 0.01	< 10	< 10	12	< 10	116	
258616	9400 267	< 10	0.05	35	8	0.03	3	390	20	2.66	34	1	12	< 0.01	< 10	< 10	13	< 10	36	
258617	9400 267	< 10	0.77	200	7	0.02	12	1230	10	2.77	8	3	13	< 0.01	< 10	< 10	26	< 10	72	
258618	9400 267	< 10	0.18	95	53	0.04	21	900	16	0.16	12	4	12	< 0.01	< 10	< 10	148	< 10	412	
258652	9400 267	< 10	0.59	>10000	14	0.01	1	420	>10000	2.57	1640	3	56	< 0.01	< 10	20	10	30	>10000	
258653	9400 267	< 10	0.56	>10000	20	< 0.01	11	390	>10000	6.32	>10000	< 1	33	< 0.01	< 10	20	1	20	>10000	
258654	9400 267	10	0.04	415	3	0.02	3	160	268	2.49	300	< 1	16	< 0.01	< 10	< 10	2	< 10	1140	
258655	9400 267	10	0.04	950	2	0.03	1	600	392	0.95	74	1	129	< 0.01	< 10	< 10	1	< 10	450	
258656	9400 267	< 10	0.12	380	21	0.01	5	250	146	>10.00	34	1	53	< 0.01	< 10	10	4	10	620	

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

\* SAMPLE "258653" CONTAINED HIGH Ag, Au ANALYSED BY GRAVIMETRIC FINISH.



# ALS Chemex

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TO: YOUR EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 177100  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1-A  
 Total Pages :2  
 Certificate Date: 11-JUL-2001  
 Invoice No. :I0119454  
 P.O. Number :  
 Account :HPQ

## CERTIFICATE OF ANALYSIS A0119454

SAMPLE	PREP CODE		Weight	Au ppb	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La
			Kg	FA+AA	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm
258251	9400	267	1.00	< 5	< 0.2	1.61	2	< 10	200	0.5	< 2	3.71	< 0.5	8	10	14	3.86	< 10	60	0.27	10
258252	9400	267	0.98	< 5	< 0.2	1.07	14	< 10	170	0.5	< 2	0.47	< 0.5	6	13	32	2.18	< 10	190	0.34	< 10
258253	9400	267	0.68	< 5	< 0.2	0.77	6	< 10	210	0.5	< 2	0.49	< 0.5	6	15	32	1.94	< 10	60	0.19	20
258254	9400	267	1.00	< 5	< 0.2	2.15	4	< 10	100	< 0.5	< 2	1.83	< 0.5	6	19	14	3.78	< 10	90	0.08	< 10
258255	9400	267	0.90	< 5	< 0.2	1.84	8	< 10	130	0.5	2	3.98	< 0.5	6	11	17	3.21	< 10	100	0.17	10
258256	9400	267	1.18	< 5	< 0.2	0.71	12	< 10	130	0.5	< 2	2.49	< 0.5	6	11	13	3.15	< 10	320	0.15	< 10
258257	9400	267	1.08	< 5	< 0.2	2.59	16	< 10	70	0.5	< 2	0.59	< 0.5	35	83	110	7.80	< 10	190	0.13	< 10
258258	9400	267	0.58	< 5	< 0.2	5.47	20	< 10	120	0.5	< 2	2.03	< 0.5	37	181	85	6.54	< 10	20	0.05	< 10
258259	9400	267	0.92	10	0.4	2.64	58	< 10	10	0.5	< 2	7.57	4.5	25	20	128	7.69	< 10	30	0.03	< 10
258260	9400	267	1.02	30	1.0	3.32	278	< 10	60	0.5	6	1.86	1.0	23	15	216	8.37	10	120	0.04	< 10
258261	9400	267	1.00	< 5	< 0.2	0.81	< 2	< 10	100	< 0.5	< 2	12.60	0.5	4	26	4	1.51	< 10	30	0.05	10
258262	9400	267	3.28	20	0.8	1.72	30	< 10	40	< 0.5	< 2	9.16	1.0	14	11	85	3.95	< 10	30	0.13	< 10
258263	9400	267	1.86	< 5	0.2	1.35	< 2	< 10	130	< 0.5	2	1.67	< 0.5	9	20	139	2.24	< 10	< 10	0.08	< 10
258264	9400	267	1.98	35	5.0	0.92	94	< 10	20	0.5	10	5.57	2.0	19	13	152	3.54	< 10	130	0.17	< 10
258265	9400	267	2.20	< 5	2.4	0.54	28	< 10	30	< 0.5	< 2	1.62	< 0.5	18	13	47	3.18	< 10	180	0.20	< 10
258266	9400	267	1.38	40	2.6	2.19	18	< 10	30	< 0.5	12	6.51	0.5	26	21	696	6.88	< 10	190	0.08	< 10
258267	9400	267	1.18	20	8.2	1.74	24	< 10	220	< 0.5	6	4.33	1.5	7	15	>10000	7.12	< 10	1300	0.06	< 10
258268	9400	267	0.80	35	0.4	2.48	4	< 10	60	< 0.5	2	1.46	1.5	8	13	4880	6.37	< 10	150	0.21	< 10
258269	9400	267	1.76	30	16.2	0.72	506	< 10	10	< 0.5	< 2	1.30	402	68	20	206	5.34	< 10	20200	0.14	< 10
258272	9400	267	1.70	< 5	1.4	0.82	14	< 10	540	0.5	6	0.23	1.5	8	18	29	8.70	< 10	690	0.17	< 10
258273	9400	267	0.88	< 5	1.0	0.47	64	< 10	200	< 0.5	< 2	5.70	1.0	11	17	40	2.48	< 10	290	0.18	< 10
258274	9400	267	1.34	< 5	13.4	0.30	148	< 10	40	0.5	12	0.64	54.0	5	18	309	7.63	< 10	3640	0.19	< 10
258275	9400	267	1.26	10	>100.0	0.39	80	< 10	20	0.5	12	2.33	308	8	10	530	10.20	< 10	50800	0.12	< 10
258276	9400	267	1.40	10	3.4	0.35	50	< 10	50	0.5	8	0.25	5.5	9	15	44	5.33	< 10	2270	0.18	< 10
258277	9400	267	0.84	< 5	2.2	0.28	94	< 10	40	0.5	6	0.38	1.5	9	17	36	8.87	< 10	260	0.20	< 10
258280	9400	267	1.88	10	4.8	0.97	270	< 10	10	0.5	12	1.28	12.5	7	23	132	11.50	< 10	2590	0.11	< 10
258281	9400	267	0.90	< 5	4.8	0.30	44	< 10	40	< 0.5	2	0.15	28.0	4	23	38	3.32	< 10	8110	0.14	< 10
258282	9400	267	0.48	< 5	5.8	0.24	224	< 10	40	0.5	12	0.34	6.5	4	16	23	9.75	< 10	630	0.16	< 10
258286	9400	267	1.32	< 5	2.8	3.47	< 2	< 10	50	< 0.5	6	0.62	2.0	26	34	3010	6.97	< 10	40	< 0.01	< 10
258287	9400	267	1.04	< 5	< 0.2	0.67	< 2	< 10	1430	< 0.5	< 2	4.44	0.5	15	17	131	4.05	< 10	80	0.07	< 10
258288	9400	267	1.86	50	6.0	1.29	878	< 10	10	0.5	8	0.19	2.5	47	32	366	8.02	< 10	680	0.08	< 10
258289	9400	267	1.68	65	1.2	0.96	212	< 10	50	< 0.5	< 2	0.32	0.5	51	17	50	2.82	< 10	380	0.12	< 10
258290	9400	267	1.40	15	0.2	1.44	130	< 10	90	< 0.5	< 2	0.52	2.0	39	13	49	3.02	< 10	130	0.10	< 10
258291	9400	267	1.88	25	0.4	0.90	354	< 10	40	< 0.5	< 2	0.43	< 0.5	46	13	35	3.31	< 10	320	0.11	< 10
258292	9400	267	1.44	215	5.8	1.35	662	< 10	30	< 0.5	2	0.10	< 0.5	39	39	448	6.18	< 10	590	0.04	< 10
258301	9400	267	0.72	< 5	25.4	0.24	304	< 10	< 10	0.5	< 2	0.24	< 0.5	21	73	376	10.20	< 10	9550	< 0.01	< 10
258302	9400	267	0.44	< 5	9.0	0.22	154	< 10	< 10	< 0.5	< 2	0.17	< 0.5	31	73	2800	8.97	< 10	3480	0.03	< 10
258303	9400	267	2.18	< 5	27.4	0.03	556	< 10	< 10	0.5	16	0.11	2.5	40	47	391	>15.00	< 10	12280	< 0.01	< 10
258304	9400	267	1.40	< 5	< 0.2	1.63	6	< 10	10	< 0.5	6	0.15	< 0.5	5	39	21	5.25	< 10	530	0.06	< 10
258305	9400	267	2.00	< 5	0.8	0.26	22	< 10	< 10	< 0.5	< 2	0.02	< 0.5	39	30	52	7.24	< 10	840	0.09	< 10

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



# ALS Chemtex

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

EXPLOSION  
 MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number : 1-B  
 Total Pages : 2  
 Certificate Date: 11-JUL-2001  
 Invoice No. : I0119454  
 P.O. Number :  
 Account : HPQ

Project: 177100  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0119454

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258251	9400 267	1.14	2370	< 1	0.02	1	1140	6	0.06	< 2	8	378	< 0.01	< 10	< 10	32	< 10	60
258252	9400 267	0.14	945	1	0.01	2	1380	8	< 0.01	6	6	39	< 0.01	< 10	< 10	22	< 10	54
258253	9400 267	0.17	1045	< 1	0.01	2	740	12	0.04	< 2	3	33	< 0.01	< 10	< 10	4	< 10	78
258254	9400 267	1.10	1275	1	0.08	4	1050	2	0.28	2	6	91	< 0.01	< 10	< 10	65	< 10	110
258255	9400 267	0.53	1235	1	0.03	4	960	8	0.09	2	5	405	< 0.01	< 10	< 10	22	< 10	110
258256	9400 267	0.14	1350	2	0.04	4	1070	8	0.14	< 2	6	116	< 0.01	< 10	< 10	13	< 10	108
258257	9400 267	0.79	2530	1	0.01	51	910	8	0.05	< 2	25	14	< 0.01	< 10	< 10	87	< 10	142
258258	9400 267	5.91	1135	1	0.01	56	610	< 2	0.04	8	38	270	< 0.01	< 10	< 10	187	< 10	66
258259	9400 267	1.44	3990	7	0.03	14	440	28	0.35	8	9	174	< 0.01	< 10	< 10	47	< 10	466
258260	9400 267	1.80	2070	9	0.03	5	970	122	1.36	12	16	83	0.01	< 10	< 10	215	< 10	150
258261	9400 267	0.50	3740	< 1	0.02	3	290	8	0.02	< 2	1	520	< 0.01	< 10	< 10	13	< 10	44
258262	9400 267	0.69	3340	3	0.03	8	740	106	1.01	4	3	428	< 0.01	< 10	< 10	40	< 10	126
258263	9400 267	0.45	815	3	0.05	7	730	86	0.04	< 2	1	66	< 0.01	< 10	< 10	14	< 10	52
258264	9400 267	0.53	2560	15	0.01	6	1130	516	2.25	34	1	230	< 0.01	< 10	< 10	46	< 10	154
258265	9400 267	0.22	695	3	< 0.01	7	160	500	2.12	2	< 1	55	< 0.01	< 10	< 10	7	< 10	72
258266	9400 267	1.71	1925	5	0.03	5	1020	150	3.82	6	11	411	0.02	< 10	< 10	162	< 10	76
258267	9400 267	1.01	1550	31	< 0.01	6	430	832	0.36	10	1	178	< 0.01	< 10	< 10	39	30	104
258268	9400 267	1.04	1210	2	0.01	5	1280	18	0.36	4	1	54	0.01	< 10	< 10	43	< 10	100
258269	9400 267	0.36	1760	17	0.01	15	1150	>10000	5.68	8	< 1	100	< 0.01	< 10	< 10	9	< 10	>10000
258272	9400 267	0.15	5870	4	0.01	6	1190	192	0.01	18	8	87	0.05	< 10	10	90	< 10	546
258273	9400 267	0.21	4490	< 1	0.01	2	1110	196	0.43	6	4	200	< 0.01	< 10	< 10	14	< 10	136
258274	9400 267	0.32	3340	1	0.01	4	1090	1030	2.71	56	2	24	< 0.01	< 10	< 10	7	< 10	5550
258275	9400 267	1.39	8010	2	0.01	5	830	>10000	3.06	198	2	45	< 0.01	< 10	< 10	14	< 10	>10000
258276	9400 267	0.31	2320	2	0.01	4	990	278	0.55	6	4	12	< 0.01	< 10	< 10	10	< 10	922
258277	9400 267	0.26	2620	2	0.01	3	1230	170	2.52	12	4	18	< 0.01	< 10	< 10	11	10	252
258280	9400 267	0.40	3440	4	0.01	6	980	358	5.90	26	< 1	44	< 0.01	< 10	< 10	10	< 10	948
258281	9400 267	0.11	460	2	0.01	3	940	1245	1.40	8	1	11	< 0.01	< 10	< 10	6	< 10	3510
258282	9400 267	0.14	4690	5	0.01	3	1130	1755	1.07	20	< 1	17	< 0.01	< 10	< 10	8	10	960
258286	9400 267	1.76	1175	1	0.04	15	960	18	0.44	8	13	21	< 0.01	< 10	< 10	182	< 10	188
258287	9400 267	0.31	815	< 1	0.04	15	870	8	0.04	6	3	129	< 0.01	< 10	< 10	35	< 10	116
258288	9400 267	0.36	280	65	0.04	42	830	518	4.23	24	1	15	< 0.01	< 10	10	57	10	64
258289	9400 267	0.23	195	11	0.04	24	1330	76	1.42	2	1	22	< 0.01	< 10	20	22	< 10	22
258290	9400 267	0.38	1980	7	0.05	19	1880	40	0.34	8	2	31	< 0.01	< 10	< 10	40	< 10	76
258291	9400 267	0.16	405	39	0.05	21	2480	54	1.72	10	1	24	< 0.01	< 10	< 10	29	< 10	36
258292	9400 267	0.36	185	67	0.03	24	500	224	2.34	16	1	14	< 0.01	< 10	10	43	< 10	40
258301	9400 267	0.04	75	8	0.01	5	1460	596	>10.00	94	< 1	44	< 0.01	< 10	< 10	12	20	276
258302	9400 267	0.04	105	6	0.01	9	1010	148	9.03	50	< 1	1045	< 0.01	< 10	< 10	21	10	50
258303	9400 267	< 0.01	20	8	0.01	10	720	1540	>10.00	100	< 1	55	< 0.01	< 10	< 10	2	< 10	226
258304	9400 267	0.85	3130	1	0.03	6	990	22	2.24	6	3	56	< 0.01	< 10	< 10	34	10	186
258305	9400 267	< 0.01	75	< 1	0.05	17	170	138	7.62	6	< 1	21	< 0.01	< 10	< 10	5	10	< 2

CERTIFICATION: *[Signature]*



# ALS Chemex

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

TO: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :2-A  
 Total Pages :2  
 Certificate Date: 11-JUL-2001  
 Invoice No. :10119454  
 P.O. Number :  
 Account :HPQ

Project : 177100  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0119454

SAMPLE	PREP CODE		Weight	Au ppb	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La
			Kg	FA+AA	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%	ppm
258306	9400	267	1.18	< 5	< 0.2	0.15	426	< 10	60	< 0.5	< 2	1.38	< 0.5	6	83	8	1.31	< 10	50	0.12	< 10
258307	9400	267	1.34	50	3.0	0.08	224	< 10	10	0.5	< 2	1.19	< 0.5	22	69	52	12.70	< 10	3890	0.07	< 10
258308	9400	267	1.90	5	0.4	0.16	52	< 10	30	< 0.5	< 2	0.14	< 0.5	12	71	30	4.33	< 10	280	0.12	< 10
258309	9400	267	1.24	< 5	0.6	0.11	44	< 10	30	< 0.5	2	0.02	< 0.5	4	95	60	2.89	< 10	210	0.09	< 10
258451	9400	267	1.20	< 5	< 0.2	0.15	36	< 10	110	< 0.5	< 2	0.04	< 0.5	< 1	76	14	0.84	< 10	1300	0.05	< 10
258452	9400	267	1.74	< 5	>100.0	0.25	234	< 10	40	< 0.5	< 2	0.29	83.0	4	39	451	4.99	< 10	53100	0.25	< 10
258501	9400	267	1.92	< 5	0.6	0.31	24	< 10	20	< 0.5	< 2	0.07	< 0.5	21	30	48	4.37	< 10	660	0.10	< 10
258502	9400	267	2.10	115	0.6	1.80	38	< 10	20	0.5	< 2	5.51	4.0	32	23	927	5.18	< 10	620	0.10	< 10
258503	9400	267	0.32	< 5	12.8	0.04	194	< 10	< 10	0.5	< 2	0.02	< 0.5	6	89	48	13.00	< 10	2010	0.01	< 10
258504	9400	267	1.22	< 5	0.6	0.38	20	< 10	30	< 0.5	6	1.15	< 0.5	24	23	14	3.68	< 10	70	0.16	< 10
258505	9400	267	0.96	40	0.4	0.16	40	< 10	10	< 0.5	< 2	9.35	1.0	20	37	39	7.84	< 10	40	0.06	< 10
258506	9400	267	2.28	< 5	< 0.2	0.68	< 2	< 10	100	< 0.5	< 2	>15.00	< 0.5	15	26	29	4.27	< 10	130	0.07	< 10
258551	9400	267	1.96	< 5	0.8	0.96	336	< 10	10	0.5	< 2	0.70	< 0.5	80	30	175	5.27	< 10	2220	0.10	< 10
258552	9400	267	0.36	< 5	1.0	1.42	138	< 10	10	0.5	< 2	0.82	< 0.5	81	19	115	6.07	< 10	1150	0.11	< 10
258553	9400	267	0.66	10	0.6	2.06	1155	< 10	20	0.5	< 2	1.30	< 0.5	30	35	209	8.59	< 10	1880	0.05	< 10
258554	9400	267	0.74	5	2.8	0.93	32	< 10	10	0.5	< 2	0.27	< 0.5	46	28	98	7.69	< 10	4020	0.08	< 10
258555	9400	267	0.36	< 5	>100.0	0.54	568	< 10	20	< 0.5	6	0.32	7.5	39	141	1490	3.91	< 10	16700	< 0.01	< 10
258556	9400	267	0.80	565	0.6	0.32	48	< 10	50	0.5	< 2	7.07	< 0.5	37	14	34	4.84	< 10	50	0.26	< 10
258557	9400	267	1.06	< 5	< 0.2	0.41	< 2	< 10	70	0.5	< 2	8.98	< 0.5	21	14	129	3.68	< 10	30	0.18	< 10

CERTIFICATION: *[Signature]*



# ALS Chemex

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

TO: TELUK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :2-B  
 Total Pages :2  
 Certificate Date: 11-JUL-2001  
 Invoice No. :I0119454  
 P.O. Number :  
 Account :HPQ

Project : 177100  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS

A0119454

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258306	9400 267	0.21	1160	< 1	0.01	6	380	< 2	0.18	12	5	22	< 0.01	< 10	< 10	9	< 10	8
258307	9400 267	0.34	400	5	< 0.01	23	370	38	>10.00	86	3	28	< 0.01	< 10	< 10	12	< 10	24
258308	9400 267	0.02	40	< 1	< 0.01	19	560	6	3.50	6	< 1	7	< 0.01	< 10	< 10	8	< 10	8
258309	9400 267	< 0.01	20	1	< 0.01	8	230	< 2	2.61	12	< 1	3	< 0.01	< 10	< 10	5	< 10	4
258451	9400 267	< 0.01	5	< 1	0.02	1	490	2	0.58	< 2	< 1	73	< 0.01	< 10	< 10	2	< 10	< 2
258452	9400 267	< 0.01	70	6	0.02	3	1320	1200	3.20	268	< 1	102	< 0.01	< 10	< 10	5	< 10	>10000
258501	9400 267	< 0.01	40	2	0.06	9	380	84	4.28	< 2	< 1	90	< 0.01	< 10	< 10	10	< 10	24
258502	9400 267	0.66	1885	< 1	0.04	5	1170	82	2.41	6	4	168	< 0.01	< 10	< 10	32	< 10	180
258503	9400 267	< 0.01	20	8	0.01	7	190	594	>10.00	18	< 1	128	< 0.01	< 10	< 10	5	< 10	10
258504	9400 267	0.11	215	3	0.06	3	1570	12	3.35	< 2	< 1	49	< 0.01	< 10	< 10	6	< 10	60
258505	9400 267	2.27	4180	4	0.02	4	390	10	2.82	< 2	< 1	378	< 0.01	< 10	< 10	8	< 10	96
258506	9400 267	1.90	3350	< 1	0.03	15	1040	16	1.15	6	21	953	< 0.01	< 10	< 10	74	< 10	42
258551	9400 267	0.32	275	10	0.05	13	1190	14	3.05	4	9	29	< 0.01	10	< 10	35	< 10	98
258552	9400 267	0.42	320	13	0.05	14	1840	16	3.10	2	9	58	< 0.01	< 10	< 10	49	< 10	142
258553	9400 267	0.60	955	21	0.02	5	890	58	2.19	< 2	4	50	< 0.01	10	< 10	80	< 10	198
258554	9400 267	0.24	160	1	0.03	18	1350	54	4.30	2	7	28	< 0.01	< 10	< 10	79	< 10	104
258555	9400 267	0.09	370	13	< 0.01	8	1510	2200	2.68	798	2	126	< 0.01	< 10	< 10	26	< 10	618
258556	9400 267	2.51	1210	< 1	0.01	37	810	4	1.52	8	12	322	< 0.01	< 10	< 10	10	< 10	52
258557	9400 267	3.38	2010	< 1	0.01	15	1520	6	0.05	6	14	240	< 0.01	< 10	< 10	37	< 10	44

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-A  
 Total Pages :1  
 Certificate Date: 17-JUL-2001  
 Invoice No. : I0119939  
 P.O. Number :  
 Account : RFV

Project : NAPOLEON 51800  
 Comments : ATTN: RANDY FARMER

## CERTIFICATE OF ANALYSIS A0119939

SAMPLE	PREP CODE		Au ppb	Au FA	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La
			FA+AA	oz/ton	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
311434	205	226	10	-----	< 0.2	0.76	4	< 10	1080	1.5	< 2	3.68	< 0.5	5	13	29	2.20	< 10	< 1	0.19	10
311435	205	226	< 5	-----	< 0.2	0.90	4	< 10	70	1.5	2	2.05	< 0.5	5	13	5	2.08	< 10	< 1	0.15	10
311436	205	226	15	-----	< 0.2	0.64	2	< 10	1300	1.0	6	3.13	< 0.5	5	15	11	2.11	< 10	3	0.17	10
311437	205	226	< 5	-----	< 0.2	0.65	< 2	< 10	580	1.0	< 2	3.24	< 0.5	5	23	7	2.16	< 10	< 1	0.25	< 10
311438	205	226	5	-----	< 0.2	0.82	2	< 10	180	1.5	< 2	2.78	< 0.5	5	15	6	2.10	< 10	< 1	0.21	10
311439	205	226	695	-----	0.8	0.88	2	< 10	640	1.0	2	3.78	< 0.5	7	24	12	2.31	< 10	< 1	0.19	10
311440	205	226	40	-----	< 0.2	0.84	< 2	< 10	40	0.5	2	1.92	< 0.5	7	20	7	2.57	< 10	< 1	0.11	20
311441	205	226	< 5	-----	< 0.2	0.51	< 2	< 10	210	0.5	< 2	2.50	< 0.5	6	9	9	2.29	< 10	< 1	0.13	10
311442	205	226	< 5	-----	< 0.2	0.54	2	< 10	600	0.5	2	3.21	< 0.5	5	11	6	2.05	< 10	< 1	0.16	10
311443	205	226	5	-----	< 0.2	0.82	< 2	< 10	560	1.0	2	3.58	< 0.5	6	15	11	2.34	< 10	< 1	0.23	< 10
311444	205	226	< 5	-----	< 0.2	0.58	< 2	< 10	1800	1.5	< 2	3.81	< 0.5	7	12	10	2.38	< 10	< 1	0.25	10
311445	205	226	10	-----	< 0.2	1.28	< 2	< 10	520	1.0	2	2.51	< 0.5	7	23	15	2.74	< 10	1	0.19	10
311446	205	226	5	-----	< 0.2	1.08	< 2	< 10	580	1.0	6	3.16	< 0.5	7	13	8	2.56	< 10	< 1	0.16	< 10
311451	205	226	415	-----	0.6	1.25	< 2	< 10	80	1.0	4	3.60	< 0.5	8	21	35	2.98	< 10	1	0.10	10
311452	205	226	>10000	0.457	12.8	0.91	< 2	< 10	140	0.5	< 2	0.48	< 0.5	23	55	33	4.29	< 10	< 1	0.07	10
311453	205	226	2830	-----	3.0	1.03	< 2	< 10	350	0.5	8	1.92	< 0.5	10	28	12	3.41	< 10	< 1	0.10	20
311454	205	226	25	-----	< 0.2	1.01	< 2	< 10	100	1.5	< 2	3.74	< 0.5	7	20	80	2.59	< 10	< 1	0.15	< 10
311455	205	226	35	-----	< 0.2	1.07	2	< 10	110	1.5	< 2	3.05	< 0.5	9	18	65	2.99	< 10	< 1	0.17	10
311456	205	226	280	-----	< 0.2	1.00	< 2	< 10	120	1.0	< 2	2.99	< 0.5	8	13	18	2.77	< 10	< 1	0.17	10
311457	205	226	500	-----	< 0.2	1.61	< 2	< 10	470	1.5	2	3.81	< 0.5	9	12	13	3.51	< 10	1	0.20	< 10
311458	205	226	5	-----	< 0.2	1.32	< 2	< 10	190	1.0	2	2.64	< 0.5	7	9	< 1	3.27	< 10	< 1	0.18	< 10
311459	205	226	< 5	-----	< 0.2	1.29	< 2	< 10	110	1.5	< 2	2.75	< 0.5	8	9	7	3.12	< 10	< 1	0.21	< 10
311460	205	226	10	-----	< 0.2	0.87	< 2	< 10	260	1.5	< 2	2.66	< 0.5	9	7	4	3.08	< 10	< 1	0.26	< 10
311461	205	226	210	-----	< 0.2	0.56	< 2	< 10	180	1.5	< 2	3.36	< 0.5	6	8	< 1	2.36	< 10	< 1	0.25	< 10
311462	205	226	515	-----	0.2	0.55	< 2	< 10	1330	1.5	< 2	4.08	< 0.5	4	13	17	1.80	< 10	< 1	0.32	< 10
311463	205	226	35	-----	< 0.2	0.63	4	< 10	70	1.5	< 2	3.93	< 0.5	5	4	113	2.29	< 10	< 1	0.26	< 10
311464	205	226	< 5	-----	< 0.2	0.89	< 2	< 10	380	1.5	10	2.74	< 0.5	5	8	127	2.79	< 10	< 1	0.31	< 10
311465	205	226	10	-----	< 0.2	0.93	< 2	< 10	540	1.5	4	3.70	< 0.5	7	8	91	3.02	< 10	< 1	0.24	< 10
311466	205	226	895	-----	0.4	0.62	18	< 10	880	1.0	< 2	4.26	< 0.5	8	12	11	2.73	< 10	< 1	0.28	< 10
311467	205	226	515	-----	0.4	0.41	< 2	< 10	790	1.0	2	2.98	< 0.5	4	12	5	2.07	< 10	< 1	0.20	< 10
311468	205	226	390	-----	0.6	0.51	2	< 10	270	1.0	< 2	2.59	< 0.5	5	40	57	2.07	< 10	< 1	0.27	< 10
311469	205	226	145	-----	< 0.2	0.41	< 2	< 10	1010	1.5	< 2	4.12	< 0.5	6	7	7	3.00	< 10	< 1	0.26	< 10
311470	205	226	< 5	-----	< 0.2	0.55	< 2	< 10	1150	1.5	< 2	3.16	< 0.5	8	13	12	2.69	< 10	< 1	0.29	10
311471	205	226	< 5	-----	< 0.2	0.63	< 2	< 10	90	1.0	< 2	2.19	< 0.5	8	17	4	2.95	< 10	< 1	0.18	10

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





# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number : 1-B  
 Total Pages : 1  
 Certificate Date: 17-JUL-2001  
 Invoice No. : 10119939  
 P.O. Number :  
 Account : RFV

Project : NAPOLEON 51800  
 Comments: ATTN: RANDY FARMER

## CERTIFICATE OF ANALYSIS A0119939

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
311434	205 226	0.78	765	1	0.01	1	1060	2	0.04	2	4	485	< 0.01	< 10	< 10	32	< 10	38
311435	205 226	0.65	615	1	0.03	< 1	1100	< 2	< 0.01	2	5	375	< 0.01	< 10	< 10	41	< 10	42
311436	205 226	0.64	845	1	0.01	1	1150	< 2	0.04	2	4	336	< 0.01	< 10	< 10	36	< 10	38
311437	205 226	0.74	950	1	0.02	1	1120	< 2	0.01	4	4	281	< 0.01	< 10	< 10	34	< 10	38
311438	205 226	0.57	710	1	0.01	1	1100	< 2	0.04	< 2	3	346	< 0.01	< 10	< 10	35	< 10	40
311439	205 226	0.73	970	4	0.04	2	1040	2	0.25	2	3	332	< 0.01	< 10	< 10	42	< 10	34
311440	205 226	0.68	750	1	0.05	1	1120	4	< 0.01	< 2	4	119	0.02	< 10	< 10	63	< 10	50
311441	205 226	0.64	835	1	0.03	< 1	1140	2	0.01	< 2	4	279	< 0.01	< 10	< 10	42	< 10	44
311442	205 226	0.91	850	3	0.01	< 1	1060	< 2	0.05	2	4	431	< 0.01	< 10	< 10	34	< 10	40
311443	205 226	0.89	875	1	< 0.01	1	1050	< 2	0.02	2	4	438	< 0.01	< 10	< 10	29	< 10	44
311444	205 226	1.08	1060	< 1	< 0.01	< 1	1170	< 2	0.05	6	3	503	< 0.01	< 10	< 10	25	< 10	42
311445	205 226	0.79	825	2	0.05	3	1290	6	0.01	8	3	212	< 0.01	< 10	< 10	50	< 10	62
311446	205 226	0.70	865	1	0.02	2	1150	4	0.01	< 2	4	252	< 0.01	< 10	< 10	49	< 10	58
311451	205 226	0.99	865	1	0.04	7	1830	< 2	< 0.01	2	3	59	< 0.01	< 10	< 10	81	< 10	44
311452	205 226	0.81	725	2	0.04	6	1500	6	< 0.01	2	2	21	< 0.01	< 10	< 10	90	< 10	32
311453	205 226	0.98	665	5	0.05	7	1780	12	0.31	8	4	48	0.01	< 10	< 10	86	< 10	44
311454	205 226	0.62	825	1	0.03	6	1620	2	< 0.01	6	5	157	< 0.01	< 10	< 10	62	< 10	42
311455	205 226	0.74	690	3	0.04	5	1730	4	0.01	2	5	125	< 0.01	< 10	< 10	72	< 10	50
311456	205 226	0.63	665	1	0.01	4	1670	< 2	< 0.01	< 2	4	150	< 0.01	< 10	< 10	56	< 10	40
311457	205 226	0.86	1985	3	0.01	3	1480	6	< 0.01	4	3	263	< 0.01	< 10	< 10	75	< 10	42
311458	205 226	0.83	745	3	0.03	3	1510	< 2	< 0.01	4	4	172	< 0.01	< 10	< 10	60	< 10	50
311459	205 226	0.72	750	1	0.03	3	1550	< 2	< 0.01	2	4	161	< 0.01	< 10	< 10	53	< 10	50
311460	205 226	0.25	835	1	0.02	2	1250	10	< 0.01	< 2	5	324	< 0.01	< 10	< 10	44	< 10	50
311461	205 226	0.76	610	2	< 0.01	1	1020	4	< 0.01	2	4	186	< 0.01	< 10	< 10	26	< 10	34
311462	205 226	0.70	825	1	< 0.01	< 1	1000	8	0.07	6	3	177	< 0.01	< 10	< 10	21	< 10	28
311463	205 226	0.81	815	1	< 0.01	1	1250	6	< 0.01	< 2	4	159	< 0.01	< 10	< 10	24	< 10	42
311464	205 226	0.73	655	3	0.01	1	1370	< 2	0.01	6	5	157	< 0.01	< 10	< 10	43	< 10	38
311465	205 226	0.75	905	1	0.01	1	1520	2	0.02	22	6	127	< 0.01	< 10	< 10	45	< 10	44
311466	205 226	0.96	835	4	< 0.01	2	1040	6	0.11	10	5	224	< 0.01	< 10	< 10	30	< 10	30
311467	205 226	0.69	650	2	< 0.01	1	900	< 2	0.11	6	5	269	< 0.01	< 10	< 10	18	< 10	20
311468	205 226	0.77	525	3	< 0.01	1	700	26	0.22	20	3	223	< 0.01	< 10	< 10	14	< 10	24
311469	205 226	1.11	935	2	< 0.01	2	1120	< 2	0.09	6	5	222	< 0.01	< 10	< 10	27	< 10	36
311470	205 226	0.85	850	1	0.02	3	1310	4	0.05	2	6	200	< 0.01	< 10	< 10	39	< 10	50
311471	205 226	0.79	810	1	0.04	2	1330	6	< 0.01	< 2	6	96	< 0.01	< 10	< 10	58	< 10	58

CERTIFICATION:



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1771/1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1  
 Total Pages :1  
 Certificate Date: 23-JUL-2001  
 Invoice No. : I0120893  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS A0120893

SAMPLE	PREP CODE	Ag g/t	Cu %	Pb %	Zn %						
258321	212 --	671	-----	5.91	37.0						
258322	212 --	-----	-----	-----	8.85						
258323	212 --	239	-----	-----	5.60						
258612	212 --	-----	-----	1.13	-----						
258652	212 --	1125	-----	4.36	3.05						
258653	212 --	>1500	2.43	5.34	24.6						

CERTIFICATION:



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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1771  
 Comments: ATTN: G. EVANS

Page Number : 1  
 Total Pages : 1  
 Certificate Date: 07-AUG-2001  
 Invoice No. : 10121805  
 P.O. Number :  
 Account : HPQ

**CERTIFICATE OF ANALYSIS**      **A0121805**

SAMPLE	PREP CODE	Ag g/t	Cu %	Pb %	Zn %						
258328	212 ---	-----	1.45	-----	-----						
258366	212 ---	134	9.29	-----	-----						
258403	212 ---	-----	-----	3.23	8.15						
258404	212 ---	-----	2.96	-----	-----						
258414	212 ---	-----	1.01	-----	-----						
258472	212 ---	-----	-----	-----	1.82						
258473	212 ---	-----	1.63	-----	-----						
258474	212 ---	-----	2.41	-----	-----						
258475	212 ---	-----	1.06	-----	-----						
258647	212 ---	-----	-----	-----	5.14						
258714	212 ---	-----	1.25	-----	-----						
258718	212 ---	-----	-----	-----	1.58						
258752	212 ---	-----	1.30	-----	-----						
258757	212 ---	-----	1.84	-----	-----						

*Said / [Signature]*

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



# ALS Chemex

Aurora Laboratory Services Ltd.  
 Analytical Chemists \* Geochemists \* Registered Assayers  
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 PHONE: 604-984-0221 FAX: 604-984-0218

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1771  
 Comments: ATTN: G. EVANS

Page Number :1-A  
 Total Pages :3  
 Certificate Date: 06-AUG-2001  
 Invoice No. :1012106  
 P.O. Number :  
 Account :HPQ

## CERTIFICATE OF ANALYSIS A012106

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
258328	94139402	1.20	375	24.6	1.17	6	< 10	40	< 0.5	< 2	8.04	4.5	51	8	>10000	3.46	< 10	40	0.08	< 10
258350	94139402	1.00	< 5	0.2	1.55	6	< 10	30	< 0.5	4	2.01	< 0.5	10	19	135	3.89	< 10	< 10	0.15	< 10
258357	94139402	1.36	10	1.2	0.41	28	< 10	120	< 0.5	6	0.58	< 0.5	3	47	614	1.56	< 10	40	0.26	< 10
258358	94139402	0.98	< 5	0.2	0.34	764	< 10	90	< 0.5	< 2	0.04	< 0.5	1	43	15	3.64	< 10	170	0.38	< 10
258359	94139402	1.02	< 5	0.6	0.29	46	< 10	220	< 0.5	< 2	0.01	< 0.5	< 1	45	13	1.79	< 10	80	0.30	10
258360	94139402	1.20	< 5	< 0.2	0.34	46	< 10	30	< 0.5	< 2	0.01	< 0.5	1	49	9	2.77	< 10	70	0.31	10
258361	94139402	0.96	10	0.2	0.39	250	< 10	10	0.5	< 2	0.06	< 0.5	23	67	28	5.37	< 10	710	0.31	< 10
258362	94139402	1.22	10	1.8	0.18	1305	< 10	< 10	< 0.5	< 2	< 0.01	< 0.5	15	84	7	13.05	< 10	3950	0.21	< 10
258363	94139402	0.92	10	0.2	1.79	20	< 10	90	0.5	< 2	0.07	< 0.5	7	86	48	2.46	< 10	50	0.23	< 10
258364	94139402	1.46	< 5	< 0.2	2.18	6	< 10	280	0.5	12	2.48	< 0.5	18	51	56	4.48	< 10	10	0.26	10
258365	94139402	1.14	< 5	< 0.2	2.99	26	< 10	410	0.5	6	5.30	< 0.5	34	74	99	5.72	< 10	10	0.14	< 10
258366	94139402	0.84	405	>100.0	0.61	170	< 10	< 10	1.0	< 2	1.66	< 0.5	12	37	>10000	12.00	< 10	14380	0.24	< 10
258367	94139402	0.90	100	0.8	0.29	8	< 10	50	< 0.5	6	1.10	< 0.5	6	137	1085	0.92	< 10	70	0.22	< 10
258368	94139402	1.42	410	0.8	1.51	2	< 10	40	1.0	< 2	0.99	2.0	30	11	5440	>15.00	10	230	0.11	< 10
258369	94139402	1.20	15	< 0.2	0.39	8	< 10	40	< 0.5	8	2.44	< 0.5	13	47	78	2.42	< 10	260	0.26	< 10
258370	94139402	0.88	20	< 0.2	0.26	6	< 10	10	< 0.5	2	0.51	< 0.5	23	56	54	5.75	< 10	400	0.20	< 10
258371	94139402	0.48	5	2.6	0.38	14	< 10	60	< 0.5	2	0.52	< 0.5	7	30	30	3.63	< 10	260	0.26	< 10
258372	94139402	0.96	< 5	4.0	0.34	38	< 10	90	< 0.5	< 2	0.07	0.5	4	34	52	3.80	< 10	1140	0.23	< 10
258373	94139402	1.02	< 5	6.2	0.20	112	< 10	< 10	0.5	< 2	0.12	< 0.5	14	70	117	>15.00	< 10	630	0.19	< 10
258401	94139402	1.12	10	0.2	1.11	44	< 10	< 10	< 0.5	2	3.48	< 0.5	20	48	156	4.81	< 10	140	0.22	< 10
258402	94139402	1.24	350	1.8	0.48	48	< 10	< 10	< 0.5	8	0.91	< 0.5	15	61	133	4.61	< 10	1470	0.28	< 10
258403	94139402	1.64	1595	37.8	0.01	906	< 10	< 10	< 0.5	18	1.62	292	2	57	2090	10.10	< 10	>100000	0.05	< 10
258404	94139402	0.98	1880	58.2	< 0.01	402	< 10	< 10	0.5	2	0.02	< 0.5	< 1	66	>10000	>15.00	< 10	3670	0.07	< 10
258405	94139402	1.20	1690	5.4	0.43	636	< 10	< 10	0.5	2	2.43	0.5	11	102	2690	>15.00	< 10	1360	0.14	< 10
258406	94139402	1.42	1545	8.6	0.05	824	< 10	< 10	0.5	< 2	0.17	< 0.5	11	123	182	>15.00	< 10	430	0.15	< 10
258407	94139402	1.16	2100	11.6	1.12	654	< 10	< 10	0.5	6	3.48	5.0	21	90	1925	>15.00	< 10	1030	0.26	< 10
258408	94139402	1.04	10	< 0.2	2.27	6	< 10	140	0.5	8	0.76	< 0.5	9	53	25	3.12	< 10	40	0.19	< 10
258409	94139402	1.04	270	0.4	0.45	98	< 10	40	< 0.5	2	0.01	< 0.5	32	112	406	12.25	< 10	30	0.01	< 10
258410	94139402	1.56	< 5	1.0	0.58	96	< 10	60	< 0.5	< 2	>15.00	0.5	3	26	27	1.53	< 10	90	0.09	< 10
258411	94139402	1.18	25	0.8	0.34	70	< 10	80	< 0.5	6	0.16	< 0.5	5	138	48	0.82	< 10	1700	0.15	< 10
258412	94139402	1.02	< 5	0.6	0.35	< 2	< 10	520	< 0.5	< 2	>15.00	2.0	4	8	214	1.09	< 10	40	0.01	< 10
258413	94139402	1.10	< 5	0.6	0.23	8	< 10	20	< 0.5	< 2	>15.00	< 0.5	1	4	21	0.55	< 10	30	0.04	< 10
258414	94139402	1.30	270	5.6	1.62	18	< 10	20	0.5	< 2	0.25	< 0.5	27	120	>10000	9.74	< 10	630	0.10	< 10
258469	94139402	1.70	< 5	1.0	2.32	10	< 10	20	< 0.5	< 2	0.14	3.0	9	68	51	4.42	< 10	50	0.02	< 10
258470	94139402	1.34	< 5	< 0.2	4.46	4	< 10	160	0.5	2	3.08	< 0.5	25	11	54	6.65	< 10	30	0.12	< 10
258471	94139402	1.54	5	< 0.2	0.62	8	< 10	30	< 0.5	6	0.33	4.0	3	140	15	1.18	< 10	30	0.04	< 10
258472	94139402	1.60	10	5.8	0.40	72	< 10	30	< 0.5	< 2	6.97	229	31	54	320	8.17	< 10	64200	0.11	< 10
258473	94139402	1.66	865	7.0	2.28	64	< 10	10	0.5	8	2.00	< 0.5	32	35	>10000	6.59	< 10	220	0.28	< 10
258474	94139402	0.72	1235	8.4	2.58	106	< 10	< 10	0.5	4	1.35	< 0.5	40	49	>10000	9.05	< 10	340	0.23	< 10
258475	94139402	0.98	610	3.8	1.96	64	< 10	30	0.5	6	4.08	< 0.5	29	38	>10000	6.31	< 10	120	0.27	< 10

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1771  
 Comments: ATTN: G. EVANS

Page Number :1-B  
 Total Pages :3  
 Certificate Date: 08-AUG-2001  
 Invoice No. : I0121206  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS A0121206

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF	BaO % XRF
258328	94139402	0.33	590	3	0.08	37	200	4	2.28	12	1	130	< 0.01	< 10	< 10	11	< 10	390	-----	-----
258350	94139402	1.31	710	2	0.05	4	720	16	1.77	4	3	73	< 0.01	< 10	< 10	25	< 10	84	-----	-----
258357	94139402	0.07	295	5	0.01	3	220	32	0.70	8	< 1	15	< 0.01	< 10	< 10	5	< 10	42	-----	-----
258358	94139402	0.03	20	13	< 0.01	1	360	170	1.03	230	< 1	10	< 0.01	< 10	< 10	4	< 10	64	-----	-----
258359	94139402	0.01	35	2	0.01	< 1	360	32	0.32	34	< 1	5	< 0.01	< 10	< 10	14	< 10	12	-----	-----
258360	94139402	0.01	10	6	< 0.01	1	70	22	1.83	44	< 1	7	< 0.01	< 10	< 10	2	< 10	12	-----	-----
258361	94139402	0.11	140	37	0.01	4	330	28	4.93	44	4	7	< 0.01	< 10	< 10	15	10	44	-----	-----
258362	94139402	0.02	150	202	0.01	1	120	48	>10.00	350	< 1	10	< 0.01	40	< 10	5	30	8	-----	-----
258363	94139402	1.04	380	3	0.02	23	490	16	0.75	< 2	3	10	0.01	< 10	< 10	34	< 10	42	-----	-----
258364	94139402	1.92	1455	1	0.05	24	1820	6	0.29	< 2	12	309	0.02	< 10	< 10	79	< 10	114	14.41	0.37
258365	94139402	3.39	1365	< 1	0.03	29	1050	2	0.15	< 2	33	237	< 0.01	< 10	< 10	128	< 10	62	-----	-----
258366	94139402	0.30	705	12	< 0.01	6	690	10	6.71	108	3	76	< 0.01	< 10	< 10	17	40	58	-----	-----
258367	94139402	0.07	130	5	< 0.01	4	410	< 2	0.62	12	1	20	< 0.01	< 10	< 10	7	< 10	2	-----	-----
258368	94139402	1.23	360	5	0.01	11	490	< 2	1.33	6	9	63	0.04	< 10	< 10	387	< 10	20	-----	-----
258369	94139402	0.07	205	7	0.01	4	1160	10	2.23	< 2	4	53	< 0.01	< 10	< 10	11	< 10	4	-----	-----
258370	94139402	0.04	45	18	< 0.01	5	430	16	5.91	< 2	1	15	< 0.01	< 10	< 10	8	10	< 2	-----	-----
258371	94139402	0.09	910	17	< 0.01	1	980	82	1.63	8	2	38	< 0.01	< 10	< 10	5	< 10	98	-----	-----
258372	94139402	< 0.01	635	1	< 0.01	1	1030	34	0.48	18	1	11	< 0.01	< 10	< 10	6	< 10	134	-----	-----
258373	94139402	0.02	90	22	< 0.01	5	250	332	>10.00	12	3	11	< 0.01	< 10	< 10	7	40	66	-----	-----
258401	94139402	1.24	1170	7	0.02	6	1190	54	4.91	16	7	80	< 0.01	< 10	< 10	42	10	98	15.11	0.21
258402	94139402	0.19	410	7	< 0.01	5	1090	52	4.71	8	3	21	< 0.01	< 10	< 10	14	10	60	-----	-----
258403	94139402	0.04	520	13	< 0.01	2	370	>10000	>10.00	56	2	47	< 0.01	< 10	< 10	1	380	>10000	-----	-----
258404	94139402	0.01	30	23	< 0.01	< 1	250	294	>10.00	4	< 1	7	< 0.01	< 10	< 10	3	50	178	-----	-----
258405	94139402	0.39	1275	24	< 0.01	6	380	212	>10.00	8	1	85	< 0.01	< 10	< 10	12	40	426	-----	-----
258406	94139402	0.02	30	27	< 0.01	2	200	140	>10.00	8	< 1	9	< 0.01	< 10	< 10	5	50	32	-----	-----
258407	94139402	0.61	1230	22	< 0.01	1	690	224	>10.00	4	3	75	< 0.01	< 10	< 10	31	30	1180	-----	-----
258408	94139402	1.16	1020	< 1	0.07	3	1210	10	0.07	< 2	3	85	0.04	< 10	< 10	50	< 10	112	17.90	0.19
258409	94139402	0.12	280	21	< 0.01	4	50	4	1.36	< 2	1	4	< 0.01	< 10	< 10	32	320	22	-----	-----
258410	94139402	0.24	2450	11	0.01	3	480	96	0.36	2	5	452	< 0.01	< 10	< 10	14	< 10	66	-----	-----
258411	94139402	< 0.01	60	1	0.01	3	910	10	0.11	46	< 1	11	< 0.01	< 10	< 10	5	< 10	12	-----	-----
258412	94139402	0.46	6150	< 1	< 0.01	1	670	4	0.11	< 2	3	510	< 0.01	< 10	< 10	16	< 10	18	-----	-----
258413	94139402	0.21	2730	< 1	< 0.01	1	640	10	0.12	< 2	3	898	< 0.01	< 10	< 10	6	< 10	8	-----	-----
258414	94139402	0.55	825	4	< 0.01	7	250	< 2	0.56	< 2	3	11	< 0.01	< 10	< 10	33	110	66	-----	-----
258469	94139402	1.16	280	33	0.09	34	650	12	0.46	< 2	13	18	< 0.01	< 10	< 10	221	< 10	162	-----	-----
258470	94139402	2.49	1075	< 1	0.08	4	940	< 2	0.29	< 2	7	85	0.18	< 10	< 10	193	< 10	98	-----	-----
258471	94139402	0.28	170	7	0.06	14	380	8	0.11	< 2	4	37	< 0.01	< 10	< 10	48	< 10	246	-----	-----
258472	94139402	2.27	4740	11	0.05	46	1080	1615	7.57	< 2	21	153	< 0.01	< 10	< 10	41	< 10	>10000	-----	-----
258473	94139402	1.78	1480	9	0.01	9	1300	14	4.55	< 2	8	66	0.01	< 10	< 10	94	10	132	-----	-----
258474	94139402	2.26	1735	20	0.01	12	1870	20	6.46	8	10	54	0.01	< 10	< 10	131	20	118	-----	-----
258475	94139402	1.54	1510	24	0.03	7	1300	10	4.01	2	10	69	< 0.01	< 10	< 10	91	10	72	-----	-----

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



# ALS Chemex

Aurora Laboratory Services Ltd.  
 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1771  
 Comments: ATTN: G. EVANS

Page Number :1-C  
 Total Pages :3  
 Certificate Date: 06-AUG-2001  
 Invoice No. : 10121206  
 P.O. Number :  
 Account :HPQ

## CERTIFICATE OF ANALYSIS A0121206

SAMPLE	PREP CODE	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	SrO	TiO2	LOI	TOTAL
		% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF
258328	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258350	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258357	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258358	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258359	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258360	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258361	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258362	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258363	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258364	94139402	5.08	0.01	7.86	2.69	3.60	0.23	2.44	0.52	52.60	0.11	1.55	7.11	98.58
258365	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258366	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258367	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258368	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258369	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258370	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258371	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258372	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258373	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258401	94139402	5.02	< 0.01	7.58	3.64	2.88	0.18	1.27	0.28	52.99	0.01	0.45	9.97	99.59
258402	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258403	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258404	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258405	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258406	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258407	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258408	94139402	2.62	< 0.01	5.50	2.48	1.88	0.15	4.85	0.26	59.74	0.08	0.62	2.36	98.63
258409	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258410	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258411	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258412	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258413	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258414	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258469	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258470	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258471	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258472	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258473	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258474	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258475	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----

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



# ALS Chemex

Aurora Laboratory Services Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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British Columbia, Canada V7J 2C1

PHONE: 604-984-0221 FAX: 604-984-0218

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Page Number :2-A  
Total Pages :3  
Certificate Date: 06-AUG-2001  
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Account : HPQ

## CERTIFICATE OF ANALYSIS A0121206

SAMPLE	PREP CODE	Weight Au ppb		Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
		Kg	FA+AA																	
258476	94139402	1.22	670	4.0	0.51	98	< 10	< 10	0.5	< 2	13.65	22.0	11	34	1480	13.85	< 10	23400	0.10	< 10
258477	94139402	1.14	2460	2.4	0.03	160	< 10	< 10	< 0.5	< 2	0.78	37.5	6	102	114	14.10	< 10	8530	0.10	< 10
258478	94139402	2.08	20	1.0	0.41	4	< 10	50	< 0.5	2	0.13	< 0.5	3	47	22	4.00	< 10	150	0.19	< 10
258479	94139402	2.12	55	0.4	0.41	6	< 10	70	< 0.5	< 2	0.11	< 0.5	5	39	17	2.94	< 10	200	0.18	< 10
258480	94139402	1.30	185	0.4	0.48	10	< 10	60	< 0.5	< 2	0.08	< 0.5	7	43	121	5.18	< 10	110	0.18	< 10
258519	94139402	2.46	40	1.6	4.02	144	< 10	40	1.5	< 2	0.25	0.5	17	74	118	5.25	< 10	10	2.81	< 10
258520	94139402	1.30	5	< 0.2	3.72	8	< 10	180	0.5	4	1.93	< 0.5	25	14	54	6.13	< 10	< 10	0.06	< 10
258521	94139402	1.70	< 5	< 0.2	2.65	6	< 10	10	0.5	< 2	0.36	< 0.5	6	33	11	3.23	< 10	< 10	0.04	< 10
258522	94139402	1.88	< 5	< 0.2	1.26	26	< 10	80	0.5	< 2	3.68	0.5	11	22	34	3.17	< 10	30	0.26	< 10
258523	94139402	1.74	< 5	< 0.2	2.08	2	< 10	100	< 0.5	< 2	0.63	< 0.5	10	19	9	4.13	< 10	20	0.15	< 10
258524	94139402	2.02	10	< 0.2	3.17	8	< 10	30	< 0.5	2	0.48	< 0.5	12	5	4	5.62	< 10	30	0.07	< 10
258525	94139402	1.08	10	< 0.2	1.60	42	< 10	< 10	< 0.5	< 2	9.99	< 0.5	9	16	80	5.25	< 10	810	0.12	< 10
258526	94139402	1.84	10	0.2	1.74	8	< 10	40	< 0.5	8	1.55	< 0.5	8	21	749	3.71	< 10	810	0.20	< 10
258527	94139402	1.26	15	< 0.2	2.58	6	< 10	60	0.5	< 2	0.53	< 0.5	17	17	136	6.16	< 10	160	0.24	< 10
258528	94139402	1.52	< 5	< 0.2	2.30	6	< 10	10	< 0.5	8	0.62	< 0.5	14	35	31	4.28	< 10	250	0.15	< 10
258529	94139402	1.52	< 5	0.4	0.11	16	< 10	120	< 0.5	< 2	13.40	0.5	3	4	88	4.69	< 10	120	0.03	< 10
258530	94139402	0.86	60	0.2	1.56	6	< 10	370	< 0.5	< 2	0.12	< 0.5	10	6	48	3.47	< 10	250	0.07	< 10
258531	94139402	1.46	110	0.2	0.79	< 2	< 10	30	< 0.5	2	3.26	< 0.5	7	14	12	3.96	< 10	100	0.11	< 10
258641	94139402	1.20	< 5	< 0.2	0.50	2	< 10	90	< 0.5	< 2	0.07	< 0.5	4	37	5	1.00	< 10	10	0.06	10
258642	94139402	1.50	< 5	0.2	0.63	66	< 10	40	< 0.5	< 2	0.09	0.5	11	19	74	3.24	< 10	110	0.06	< 10
258643	94139402	1.18	< 5	< 0.2	2.18	22	< 10	200	< 0.5	< 2	0.16	< 0.5	12	42	23	5.17	< 10	60	0.01	< 10
258644	94139402	0.90	5	< 0.2	3.60	< 2	< 10	140	0.5	< 2	5.49	< 0.5	27	151	80	5.63	< 10	40	0.28	< 10
258645	94139402	1.20	< 5	< 0.2	1.62	< 2	< 10	90	0.5	< 2	11.00	< 0.5	26	80	78	5.31	< 10	40	0.23	< 10
258646	94139402	0.90	< 5	0.2	0.23	< 2	< 10	60	< 0.5	< 2	>15.00	0.5	6	6	22	3.75	< 10	70	0.04	< 10
258647	94139402	1.36	30	4.2	0.12	< 2	< 10	60	< 0.5	< 2	>15.00	>500	11	4	28	1.80	< 10	20700	0.05	< 10
258648	94139402	1.02	10	0.2	0.30	16	< 10	230	< 0.5	< 2	13.40	2.5	10	18	33	5.80	< 10	70	0.11	< 10
258649	94139402	1.50	< 5	0.2	0.62	8	< 10	850	0.5	< 2	>15.00	1.5	18	27	64	5.11	< 10	50	0.17	< 10
258650	94139402	0.76	75	5.8	0.30	106	< 10	10	< 0.5	< 2	0.21	< 0.5	19	26	40	7.82	< 10	320	0.20	< 10
258665	94139402	0.96	25	< 0.2	0.25	84	< 10	40	< 0.5	< 2	12.20	< 0.5	9	9	5	3.01	< 10	160	0.13	< 10
258666	94139402	1.86	< 5	< 0.2	1.16	20	< 10	310	< 0.5	4	3.58	< 0.5	18	8	16	5.03	< 10	70	0.19	10
258667	94139402	1.58	50	0.2	2.03	12	< 10	30	< 0.5	10	1.22	< 0.5	23	25	549	4.70	< 10	80	0.18	< 10
258668	94139402	1.16	40	0.6	2.81	20	< 10	30	< 0.5	< 2	2.42	0.5	15	47	444	5.55	< 10	70	0.07	< 10
258669	94139402	1.32	1355	0.8	2.61	< 2	< 10	70	< 0.5	< 2	5.44	< 0.5	21	37	9820	7.29	< 10	20	0.10	< 10
258670	94139402	1.12	5	0.6	0.97	4	< 10	< 10	0.5	< 2	0.70	< 0.5	24	13	74	6.02	< 10	100	0.23	< 10
258671	94139402	1.06	< 5	0.2	2.12	12	< 10	10	0.5	< 2	1.27	0.5	18	20	94	7.04	< 10	210	0.12	< 10
258701	-- --	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd
258702	94139402	0.92	10	0.2	2.08	20	< 10	110	0.5	2	0.09	< 0.5	15	89	60	4.23	< 10	110	0.15	< 10
258703	-- --	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd
258704	94139402	1.14	135	1.4	0.60	16	< 10	130	< 0.5	< 2	0.01	< 0.5	1	94	14	1.07	< 10	10	0.13	< 10
258705	94139402	0.64	10	< 0.2	2.30	8	< 10	50	0.5	< 2	2.55	< 0.5	15	52	75	4.81	< 10	30	0.14	< 10

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





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## CERTIFICATE OF ANALYSIS A0121206

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF	BaO % XRF
258476	94139402	0.46	5630	18	< 0.01	< 1	600	314	>10.00	6	2	328	< 0.01	< 10	< 10	16	10	3540	-----	-----
258477	94139402	0.01	120	19	< 0.01	< 1	140	498	>10.00	2	< 1	23	< 0.01	< 10	< 10	3	30	2140	-----	-----
258478	94139402	0.02	215	7	0.04	1	1000	30	1.72	< 2	2	26	< 0.01	< 10	< 10	6	< 10	56	-----	-----
258479	94139402	0.01	100	6	0.02	1	1250	30	1.61	< 2	1	11	< 0.01	< 10	< 10	5	< 10	78	-----	-----
258480	94139402	0.10	65	18	0.04	1	1450	30	1.51	< 2	4	30	< 0.01	< 10	< 10	17	< 10	76	-----	-----
258519	94139402	3.44	885	49	0.05	60	1100	20	2.13	2	14	5	0.26	< 10	< 10	395	< 10	224	-----	-----
258520	94139402	2.39	1025	4	0.12	6	1250	4	1.11	2	11	88	0.21	< 10	< 10	195	< 10	74	-----	-----
258521	94139402	2.01	795	< 1	0.08	< 1	700	8	0.04	< 2	1	32	0.09	< 10	< 10	48	< 10	68	-----	-----
258522	94139402	0.70	870	5	0.03	9	740	14	1.28	2	2	102	0.01	< 10	< 10	20	< 10	118	-----	-----
258523	94139402	1.03	555	< 1	0.03	2	1080	4	0.76	2	4	23	< 0.01	< 10	< 10	62	< 10	48	-----	-----
258524	94139402	1.93	1250	< 1	0.05	1	1330	2	0.70	< 2	6	16	< 0.01	< 10	< 10	121	< 10	86	-----	-----
258525	94139402	1.13	1865	6	0.01	4	820	18	4.14	< 2	9	170	< 0.01	< 10	< 10	44	< 10	106	-----	-----
258526	94139402	1.39	1070	2	0.01	3	1470	10	2.44	< 2	8	33	< 0.01	< 10	< 10	57	< 10	158	-----	-----
258527	94139402	1.26	645	3	< 0.01	8	1420	6	1.68	< 2	14	12	< 0.01	< 10	< 10	66	< 10	298	-----	-----
258528	94139402	2.23	810	3	0.05	6	1430	18	2.74	2	7	61	0.04	< 10	< 10	113	< 10	106	-----	-----
258529	94139402	4.21	4040	3	0.02	1	580	10	0.93	< 2	3	242	< 0.01	< 10	< 10	13	< 10	126	-----	-----
258530	94139402	0.88	480	< 1	0.03	< 1	1100	16	0.17	< 2	2	16	< 0.01	< 10	< 10	35	< 10	268	-----	-----
258531	94139402	1.00	580	6	0.02	1	1500	24	3.29	< 2	4	137	< 0.01	< 10	< 10	22	< 10	56	-----	-----
258641	94139402	0.16	1230	< 1	0.05	8	110	8	0.01	< 2	1	9	< 0.01	< 10	< 10	5	< 10	56	-----	-----
258642	94139402	0.19	280	10	0.04	16	450	20	1.49	16	5	11	< 0.01	< 10	< 10	46	< 10	130	-----	-----
258643	94139402	0.85	350	10	0.12	23	850	16	0.38	< 2	19	24	< 0.01	< 10	< 10	280	< 10	122	-----	-----
258644	94139402	1.70	2320	< 1	0.14	29	1700	4	0.31	< 2	35	332	0.01	< 10	< 10	198	< 10	76	-----	-----
258645	94139402	1.79	2490	2	0.03	21	1530	12	1.62	8	25	416	< 0.01	< 10	< 10	98	< 10	54	-----	-----
258646	94139402	2.10	3370	< 1	< 0.01	6	500	6	0.34	< 2	4	824	< 0.01	< 10	< 10	24	< 10	94	-----	-----
258647	94139402	0.48	4750	2	< 0.01	5	590	1315	2.00	< 2	4	791	< 0.01	< 10	< 10	8	50	>10000	-----	-----
258648	94139402	1.79	1970	1	< 0.01	8	1020	8	0.12	2	13	446	< 0.01	< 10	< 10	48	< 10	352	-----	-----
258649	94139402	3.71	2910	< 1	< 0.01	15	1120	10	0.19	8	23	1040	< 0.01	< 10	< 10	91	< 10	264	-----	-----
258650	94139402	0.04	95	21	< 0.01	23	880	76	6.53	16	1	18	< 0.01	< 10	< 10	15	10	94	-----	-----
258665	94139402	0.34	1300	6	0.01	4	1100	18	2.80	18	7	398	< 0.01	< 10	< 10	26	< 10	122	-----	-----
258666	94139402	0.75	1515	< 1	0.03	3	1250	2	0.07	2	11	146	< 0.01	< 10	< 10	45	< 10	162	-----	-----
258667	94139402	1.75	1160	7	0.02	4	1180	10	2.81	2	8	32	0.01	< 10	< 10	117	< 10	114	16.81	0.27
258668	94139402	2.52	1585	4	0.02	8	1450	16	2.02	< 2	22	66	0.05	< 10	< 10	197	< 10	132	15.58	0.24
258669	94139402	1.04	2300	2	< 0.01	6	710	28	1.15	< 2	4	95	0.01	< 10	< 10	40	10	96	-----	-----
258670	94139402	0.57	370	8	0.01	2	1570	40	5.50	< 2	2	80	< 0.01	< 10	< 10	19	10	56	-----	-----
258671	94139402	1.93	1025	12	0.03	3	1630	38	4.87	< 2	10	37	0.08	< 10	< 10	108	10	140	-----	-----
258701	-- --	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258702	94139402	0.97	250	2	0.01	76	820	14	0.48	< 2	5	12	< 0.01	< 10	< 10	40	< 10	110	-----	-----
258703	-- --	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258704	94139402	0.23	120	< 1	< 0.01	14	140	2	0.07	14	4	8	< 0.01	< 10	< 10	21	< 10	30	-----	-----
258705	94139402	1.49	600	2	< 0.01	90	1470	14	0.60	2	3	100	< 0.01	< 10	< 10	33	< 10	88	-----	-----

CERTIFICATION:



# ALS Chemex

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

To: TECK EXPLORATION LTD.

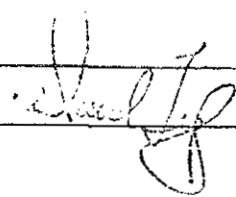
MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1771  
 Comments: ATTN: G. EVANS

Page Number :2-C  
 Total Pages :3  
 Certificate Date: 06-AUG-2001  
 Invoice No. : I0121206  
 P.O. Number :  
 Account : HPQ

**CERTIFICATE OF ANALYSIS**      **A0121206**

SAMPLE	PREP CODE	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	SrO	TiO2	LOI	TOTAL
		% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF
258476	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258477	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258478	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258479	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258480	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258519	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258520	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258521	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258522	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258523	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258524	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258525	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258526	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258527	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258528	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258529	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258530	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258531	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258641	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258642	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258643	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258644	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258645	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258646	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258647	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258648	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258649	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258650	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258665	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258666	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258667	94139402	2.61	< 0.01	7.77	5.79	3.11	0.16	2.27	0.27	54.52	0.05	0.44	5.00	99.07
258668	94139402	5.42	< 0.01	10.08	2.90	4.43	0.25	2.97	0.37	51.28	0.06	0.56	5.04	99.19
258669	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258670	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258671	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258701	-- --	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd
258702	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258703	-- --	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd
258704	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258705	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----

CERTIFICATION: 



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :3-A  
 Total Pages :3  
 Certificate Date: 06-AUG-2001  
 Invoice No. : I0121206  
 P.O. Number :  
 Account : HPQ

Project : 1771  
 Comments: ATTN: G. EVANS

## CERTIFICATE OF ANALYSIS A0121206

SAMPLE	PREP CODE	Weight Au ppb Kg FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
258706	94139402	0.78 85	3.4	1.14	54	< 10	40	< 0.5	< 2	0.14	< 0.5	3	102	26	2.42	< 10	30	0.15	< 10
258707	94139402	0.82 < 5	< 0.2	3.60	< 2	< 10	100	0.5	< 2	4.95	< 0.5	13	24	107	4.68	< 10	50	0.15	< 10
258708	94139402	0.50 < 5	< 0.2	1.86	< 2	< 10	50	< 0.5	8	0.98	< 0.5	19	12	95	6.34	< 10	20	0.19	< 10
258709	94139402	1.04 < 5	< 0.2	3.23	< 2	< 10	90	0.5	< 2	4.62	< 0.5	17	11	76	5.70	< 10	10	0.11	< 10
258710	94139402	1.08 < 5	0.4	2.86	< 2	< 10	160	0.5	< 2	>15.00	< 0.5	13	< 1	40	4.05	< 10	190	0.02	< 10
258711	94139402	0.74 < 5	0.2	1.56	38	< 10	40	0.5	< 2	0.29	< 0.5	6	13	58	5.11	< 10	180	0.02	< 10
258712	94139402	0.76 95	0.4	1.15	18	< 10	10	< 0.5	< 2	3.95	< 0.5	19	20	1115	5.23	< 10	60	0.24	< 10
258713	94139402	1.04 185	1.4	1.79	80	< 10	30	0.5	< 2	4.65	< 0.5	10	14	2570	5.58	< 10	130	0.26	< 10
258714	94139402	0.94 1020	3.8	2.03	< 2	< 10	70	0.5	< 2	2.83	< 0.5	14	32	>10000	5.13	< 10	370	0.25	< 10
258715	94139402	0.78 50	0.6	1.08	8	< 10	< 10	< 0.5	2	4.46	3.5	24	28	703	5.37	< 10	660	0.24	< 10
258716	94139402	1.08 20	< 0.2	2.59	2	< 10	400	0.5	2	1.65	< 0.5	13	16	5110	7.71	< 10	20	0.26	< 10
258717	94139402	0.94 < 5	< 0.2	0.51	2	< 10	1430	0.5	4	1.76	< 0.5	4	13	26	2.28	< 10	< 10	0.32	10
258718	94139402	0.86 25	2.4	2.48	408	< 10	< 10	0.5	< 2	11.15	205	26	8	128	9.10	< 10	>100000	0.10	< 10
258719	94139402	0.82 < 5	0.8	2.12	16	< 10	30	0.5	< 2	0.74	< 0.5	15	15	88	5.89	< 10	270	0.10	< 10
258720	94139402	0.76 < 5	< 0.2	2.34	8	< 10	50	0.5	2	2.20	< 0.5	30	30	198	5.77	< 10	140	0.15	< 10
258751	94139402	1.08 90	1.6	1.26	8	< 10	90	0.5	< 2	6.12	2.5	16	14	3940	6.55	< 10	1360	0.16	< 10
258752	94139402	0.94 60	1.6	2.67	6	< 10	70	0.5	< 2	3.34	< 0.5	11	28	>10000	8.04	< 10	1260	0.15	< 10
258753	94139402	1.22 10	< 0.2	0.21	< 2	< 10	640	< 0.5	< 2	>15.00	< 0.5	8	16	107	3.21	< 10	20	0.07	< 10
258754	94139402	1.34 15	< 0.2	0.49	14	< 10	40	< 0.5	4	0.19	< 0.5	9	19	253	3.29	< 10	680	0.24	< 10
258755	94139402	1.18 5	< 0.2	0.61	4	< 10	10	< 0.5	< 2	0.40	< 0.5	10	21	183	4.02	< 10	630	0.28	< 10
258756	94139402	1.64 315	0.8	2.56	< 2	< 10	330	0.5	< 2	1.71	< 0.5	16	19	8200	6.94	< 10	560	0.23	< 10
258757	94139402	2.04 7320	4.6	0.70	< 2	< 10	10	0.5	< 2	0.52	< 0.5	6	72	>10000	8.21	< 10	880	0.13	< 10
258758	94139402	1.24 30	< 0.2	2.27	10	< 10	90	0.5	< 2	0.35	< 0.5	11	29	455	5.79	< 10	230	0.13	< 10
258759	94139402	1.10 255	1.0	2.48	36	< 10	30	< 0.5	2	0.68	< 0.5	21	25	2540	6.93	< 10	1360	0.13	< 10

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1771  
 Comments: ATTN: G. EVANS

Page Number :3-B  
 Total Pages :3  
 Certificate Date: 06-AUG-2001  
 Invoice No. :10121206  
 P.O. Number :  
 Account :HPQ

## CERTIFICATE OF ANALYSIS A0121206

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF	BaO % XRF
258706	94139402	0.66	85	2 < 0.01		11	740	14	0.92	32	1	8 < 0.01	< 10	< 10	< 10	19	< 10	34	-----	-----
258707	94139402	2.60	945	< 1 0.03		67	1450	2	0.16	< 2	7	210 < 0.01	< 10	< 10	< 10	95	< 10	104	-----	-----
258708	94139402	0.77	420	5 0.03		9	1350	12	2.10	< 2	11	37 < 0.01	< 10	< 10	< 10	57	< 10	110	-----	-----
258709	94139402	1.31	1255	< 1 0.01		6	1340	2	0.06	< 2	17	163 < 0.01	< 10	< 10	< 10	123	< 10	102	-----	-----
258710	94139402	2.43	4660	< 1 < 0.01		2	780	12	0.77	2	5	516 < 0.01	< 10	< 10	< 10	51	< 10	16	-----	-----
258711	94139402	1.23	665	7 0.06		1	1060	38	1.71	6	10	13 0.11	< 10	< 10	< 10	156	< 10	82	-----	-----
258712	94139402	0.83	1670	5 < 0.01		4	1390	20	4.61	4	4	67 < 0.01	< 10	< 10	< 10	34	< 10	88	-----	-----
258713	94139402	1.01	1130	4 < 0.01		4	1400	32	4.14	8	6	93 < 0.01	< 10	< 10	< 10	41	< 10	264	-----	-----
258714	94139402	1.08	1020	4 < 0.01		5	880	6	1.28	< 2	4	61 < 0.01	< 10	< 10	< 10	72	< 10	178	-----	-----
258715	94139402	0.87	1650	8 < 0.01		5	1070	152	5.21	6	5	89 < 0.01	< 10	< 10	< 10	35	< 10	460	-----	-----
258716	94139402	1.25	1405	< 1 < 0.01		7	1450	< 2	0.19	< 2	5	69 0.02	< 10	< 10	< 10	81	< 10	72	-----	-----
258717	94139402	0.07	650	< 1 0.01	< 1	1710	2	0.04	< 2	3	172 0.03	< 10	< 10	< 10	< 10	32	< 10	28	-----	-----
258718	94139402	1.59	3670	11 0.01		4	880	816	8.59	< 2	4	320 < 0.01	< 10	< 10	< 10	35	< 10	>10000	-----	-----
258719	94139402	2.40	1380	3 0.05		2	1840	116	4.13	2	10	23 0.10	< 10	< 10	< 10	157	< 10	166	-----	-----
258720	94139402	1.87	1175	5 0.08		7	1810	30	3.16	2	14	110 0.14	< 10	< 10	< 10	194	< 10	78	-----	-----
258751	94139402	1.46	2180	6 0.01		7	1350	42	1.10	4	15	99 < 0.01	< 10	< 10	< 10	90	< 10	384	-----	-----
258752	94139402	1.38	1920	4 0.01		5	1170	6	1.75	4	18	71 < 0.01	< 10	< 10	< 10	103	< 10	150	-----	-----
258753	94139402	0.33	2620	< 1 0.02		3	510	2	0.04	< 2	9	294 < 0.01	< 10	< 10	< 10	15	< 10	42	-----	-----
258754	94139402	0.09	30	6 0.03		2	1180	18	2.29	4	3	13 < 0.01	< 10	< 10	< 10	14	< 10	10	-----	-----
258755	94139402	0.15	120	5 0.03		3	1450	18	3.63	2	3	17 < 0.01	< 10	< 10	< 10	26	< 10	16	-----	-----
258756	94139402	1.91	470	1 0.01		7	1170	12	0.30	2	6	42 < 0.01	< 10	< 10	< 10	113	< 10	80	-----	-----
258757	94139402	0.44	190	6 0.01		3	410	236	2.27	2	3	20 < 0.01	< 10	< 10	< 10	81	< 10	16	-----	-----
258758	94139402	1.94	420	7 0.05		5	1610	10	1.22	< 2	13	14 0.15	< 10	< 10	< 10	149	< 10	34	-----	-----
258759	94139402	1.94	655	5 0.03		5	1560	30	1.74	8	6	28 < 0.01	< 10	< 10	< 10	120	< 10	212	-----	-----

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



# ALS Chemex

Aurora Laboratory Services Ltd.  
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To: TECK EXPLORATION LTD.

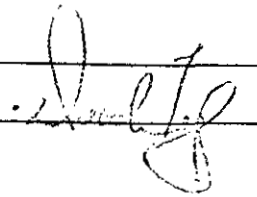
MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1771  
 Comments: ATTN: G. EVANS

Page Number :3-C  
 Total Pages :3  
 Certificate Date: 06-AUG-2001  
 Invoice No. : I0121206  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS A0121206

SAMPLE	PREP CODE	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	SrO	TiO2	LOI	TOTAL
		% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF
258706	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258707	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258708	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258709	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258710	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258711	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258712	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258713	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258714	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258715	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258716	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258717	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258718	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258719	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258720	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258751	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258752	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258753	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258754	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258755	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258756	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258757	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258758	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258759	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----

CERTIFICATION: 



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-A  
 Total Pages :2  
 Certificate Date: 13-AUG-2001  
 Invoice No. : I0121701  
 P.O. Number :  
 Account : HPQ

Project : 1771/1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0121701

SAMPLE	PREP CODE	Weight Au ppb		Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La
		Kg	FA+AA	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppb	%
258374	94139402	0.54	< 5	0.2	0.65	4	< 10	40	0.5	< 2	1.43	< 0.5	19	64	79	4.19	< 10	420	0.20	< 10
258375	94139402	1.22	15	0.8	2.02	44	< 10	40	0.5	6	2.96	< 0.5	12	36	1615	4.21	< 10	270	0.23	< 10
258376	94139402	0.82	450	4.4	4.18	>10000	< 10	< 10	0.5	< 2	0.18	2.0	113	37	956	>15.00	10	100	0.09	< 10
258377	94139402	1.26	70	24.2	0.23	126	< 10	60	< 0.5	< 2	0.02	< 0.5	9	84	584	2.65	< 10	670	0.11	< 10
258378	94139402	0.84	20	5.8	0.28	1325	< 10	30	< 0.5	< 2	0.01	30.5	27	80	57	3.25	< 10	13780	0.19	< 10
258379	94139402	2.40	< 5	1.0	0.81	160	< 10	40	0.5	< 2	>15.00	0.5	15	9	40	3.99	< 10	5770	0.08	< 10
258380	94139402	1.00	< 5	0.2	0.91	12	< 10	40	< 0.5	< 2	0.52	< 0.5	15	25	15	4.35	< 10	880	0.11	< 10
258381	94139402	1.76	< 5	0.4	0.78	14	< 10	30	0.5	< 2	0.05	< 0.5	15	19	16	5.50	< 10	1610	0.14	< 10
258382	94139402	1.86	< 5	< 0.2	0.14	2	< 10	630	< 0.5	4	0.25	< 0.5	1	4	4	0.09	< 10	1060	0.01	< 10
258383	94139402	0.80	< 5	0.2	0.22	6	< 10	40	< 0.5	< 2	< 0.01	< 0.5	8	25	9	2.92	< 10	2570	0.15	< 10
258384	94139402	1.10	< 5	0.6	2.14	474	< 10	20	0.5	< 2	1.20	< 0.5	27	37	31	6.27	< 10	5050	0.41	< 10
258385	94139402	1.72	< 5	0.4	1.47	876	< 10	70	< 0.5	< 2	12.95	< 0.5	7	38	9	2.61	< 10	800	0.16	< 10
258532	94139402	2.08	< 5	0.4	0.85	20	< 10	230	< 0.5	6	1.46	< 0.5	2	14	95	1.02	< 10	40	0.35	10
258533	94139402	0.98	5	0.2	2.90	22	< 10	150	< 0.5	< 2	1.48	< 0.5	17	25	170	4.19	< 10	120	0.28	< 10
258534	94139402	1.50	< 5	0.2	2.66	20	< 10	220	< 0.5	2	2.53	0.5	11	27	8	3.48	< 10	30	0.31	< 10
258535	94139402	1.66	< 5	0.2	2.71	16	< 10	240	0.5	< 2	2.19	0.5	12	21	103	5.04	< 10	80	0.20	< 10
258536	94139402	1.08	< 5	1.0	2.76	6	< 10	340	0.5	< 2	4.45	1.0	16	15	390	3.60	< 10	260	0.18	< 10
258537	94139402	1.66	< 5	0.4	1.50	694	< 10	50	0.5	< 2	1.12	< 0.5	23	14	48	5.27	< 10	1060	0.23	< 10
258538	94139402	1.54	< 5	0.8	0.28	< 2	< 10	690	< 0.5	< 2	12.55	2.5	16	8	89	6.13	< 10	70	0.04	< 10
258539	94139402	1.46	90	35.8	0.21	1300	< 10	< 10	0.5	< 2	0.07	< 0.5	22	21	41	9.52	< 10	6100	0.30	< 10
258540	94139402	0.96	15	4.2	0.10	284	< 10	10	< 0.5	< 2	0.09	< 0.5	9	63	20	5.14	< 10	6130	0.13	< 10
258541	94139402	1.48	< 5	0.2	0.40	22	< 10	90	< 0.5	< 2	1.46	< 0.5	1	58	6	1.96	< 10	70	0.22	10
258542	94139402	0.66	< 5	0.8	0.39	14	< 10	140	< 0.5	2	0.26	0.5	1	22	7	1.52	< 10	50	0.38	< 10
258672	94139402	1.26	25	2.6	0.26	18	< 10	520	< 0.5	2	0.07	45.5	6	83	64	1.41	< 10	4680	0.10	< 10
258673	94139402	1.14	< 5	3.4	0.54	376	< 10	140	< 0.5	< 2	0.17	0.5	5	39	54	2.63	< 10	2730	0.15	< 10
258674	94139402	1.00	10	12.8	0.79	172	< 10	150	< 0.5	2	0.20	1.5	10	63	334	2.83	< 10	330	0.10	< 10
258675	94139402	1.36	10	< 0.2	1.80	12	< 10	160	< 0.5	< 2	5.48	< 0.5	16	15	16	3.14	< 10	90	0.20	< 10
258676	94139402	0.96	< 5	< 0.2	1.94	2	< 10	140	< 0.5	< 2	7.09	< 0.5	11	21	51	2.16	< 10	10	0.05	< 10
258677	94139402	0.72	< 5	0.8	0.58	186	< 10	< 10	< 0.5	< 2	0.14	< 0.5	20	36	30	8.56	< 10	2670	0.08	< 10
258678	94139402	0.94	< 5	1.0	0.57	3540	< 10	10	< 0.5	< 2	0.11	< 0.5	13	36	23	8.43	< 10	6270	0.18	< 10
258679	94139402	1.78	2650	18.0	2.29	180	< 10	< 10	1.0	< 2	0.06	1.0	1	34	8490	>15.00	10	230	0.06	< 10
258680	94139402	1.30	< 5	0.6	0.68	24	< 10	10	< 0.5	< 2	0.36	< 0.5	10	37	54	4.52	< 10	610	0.30	< 10
258681	94139402	0.98	< 5	0.4	0.79	26	< 10	40	< 0.5	< 2	0.18	< 0.5	8	26	42	3.96	< 10	650	0.18	< 10
258682	94139402	1.32	10	1.0	0.23	608	< 10	10	< 0.5	< 2	4.41	< 0.5	15	14	175	4.29	< 10	330	0.13	< 10
258721	94139402	1.08	10	>100.0	0.13	2220	< 10	20	0.5	48	4.08	>500	57	8	1890	6.18	10	36500	0.19	< 10
258722	94139402	0.68	5	5.4	0.35	10	< 10	210	0.5	< 2	3.46	0.5	13	< 1	>10000	4.37	< 10	170	0.26	< 10
258723	94139402	0.96	< 5	0.2	0.40	6	< 10	150	< 0.5	2	4.31	0.5	12	18	68	3.47	< 10	50	0.24	< 10
258724	94139402	0.64	160	1.2	2.27	402	< 10	80	< 0.5	< 2	0.17	< 0.5	6	25	27	5.77	< 10	100	0.12	< 10
258725	94139402	0.78	1705	8.4	0.27	296	< 10	< 10	0.5	4	0.05	0.5	6	82	2080	9.01	< 10	960	0.11	< 10
258726	94139402	0.68	5	2.8	1.49	186	< 10	20	0.5	< 2	2.67	< 0.5	25	15	47	6.68	< 10	50	0.18	< 10

CERTIFICATION: *[Signature]*



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-B  
 Total Pages :2  
 Certificate Date: 13-AUG-2001  
 Invoice No. :10121701  
 P.O. Number :  
 Account :HPQ

Project : 1771/1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0121701

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258374	94139402	0.09	315	< 1	0.04	5	1460	4	3.52	4	4	35	< 0.01	< 10	< 10	14	< 10	12
258375	94139402	1.29	820	4	0.01	4	1220	16	2.68	2	5	54	< 0.01	< 10	< 10	58	< 10	100
258376	94139402	2.12	1445	6	0.01	5	930	94	7.64	72	18	17	< 0.01	< 10	< 10	175	< 10	196
258377	94139402	< 0.01	45	6	0.12	3	630	2260	1.40	16	< 1	25	< 0.01	< 10	< 10	6	< 10	8
258378	94139402	0.01	15	7	0.09	4	270	70	2.79	24	1	16	< 0.01	< 10	< 10	16	< 10	1785
258379	94139402	3.48	4340	41	0.01	24	610	12	3.88	10	13	1370	< 0.01	< 10	< 10	41	< 10	26
258380	94139402	0.57	680	2	0.01	5	890	< 2	4.07	2	2	31	< 0.01	< 10	< 10	13	< 10	26
258381	94139402	0.39	130	3	0.01	5	790	< 2	4.37	2	1	150	< 0.01	< 10	< 10	11	< 10	86
258382	94139402	< 0.01	5	1	< 0.01	1	1190	2	0.03	< 2	< 1	32	< 0.01	< 10	< 10	4	< 10	6
258383	94139402	< 0.01	5	3	0.01	2	310	< 2	2.78	< 2	< 1	8	< 0.01	< 10	< 10	4	< 10	2
258384	94139402	0.82	335	130	0.06	7	580	< 2	5.01	8	7	63	< 0.01	< 10	< 10	60	< 10	78
258385	94139402	0.81	2650	11	< 0.01	3	280	< 2	0.57	10	4	819	< 0.01	< 10	< 10	26	< 10	26
258532	94139402	0.40	465	1	0.04	1	150	10	0.08	8	1	50	< 0.01	< 10	< 10	12	< 10	22
258533	94139402	1.66	1240	5	0.19	6	1130	10	0.41	6	17	102	0.14	< 10	< 10	154	< 10	82
258534	94139402	1.52	2010	2	0.11	6	1200	6	0.49	2	10	124	0.06	< 10	< 10	134	< 10	158
258535	94139402	1.34	575	< 1	0.03	7	810	< 2	0.32	2	5	143	< 0.01	< 10	< 10	66	< 10	76
258536	94139402	1.93	1220	3	0.01	4	580	< 2	0.32	4	4	68	0.01	< 10	< 10	54	< 10	72
258537	94139402	0.61	900	15	0.01	6	1670	90	2.58	24	5	26	0.04	< 10	< 10	32	< 10	72
258538	94139402	3.87	2870	< 1	< 0.01	4	230	< 2	0.10	2	2	953	< 0.01	< 10	< 10	31	< 10	194
258539	94139402	0.03	90	16	< 0.01	4	400	150	9.62	186	2	14	< 0.01	< 10	< 10	18	< 10	70
258540	94139402	< 0.01	55	3	< 0.01	3	510	42	5.04	98	< 1	13	< 0.01	< 10	< 10	3	< 10	72
258541	94139402	0.15	605	< 1	0.01	1	320	14	1.15	16	< 1	93	< 0.01	< 10	< 10	10	< 10	28
258542	94139402	0.02	55	12	< 0.01	1	1390	106	0.53	2	1	18	< 0.01	< 10	< 10	8	< 10	108
258672	94139402	0.01	430	4	< 0.01	3	410	1080	0.17	4	3	182	< 0.01	< 10	< 10	14	< 10	510
258673	94139402	0.03	50	3	0.06	1	1190	54	0.82	10	1	41	< 0.01	< 10	< 10	17	< 10	68
258674	94139402	0.21	405	3	0.05	3	1060	1200	0.47	20	3	417	< 0.01	< 10	< 10	33	< 10	108
258675	94139402	1.33	805	< 1	< 0.01	6	940	4	0.35	6	2	101	0.01	< 10	< 10	44	< 10	62
258676	94139402	0.94	475	1	0.04	3	850	2	0.01	2	3	125	0.13	< 10	< 10	64	< 10	44
258677	94139402	0.33	190	64	0.05	1	640	32	6.94	18	5	12	0.10	< 10	< 10	98	< 10	20
258678	94139402	0.25	105	175	0.01	1	640	26	8.31	40	2	11	< 0.01	< 10	< 10	15	< 10	30
258679	94139402	1.28	1445	3	< 0.01	1	640	< 2	>10.00	8	2	17	< 0.01	< 10	< 10	53	< 10	90
258680	94139402	0.27	130	5	0.04	13	850	< 2	4.00	12	7	29	< 0.01	< 10	< 10	22	< 10	78
258681	94139402	0.33	280	5	0.03	9	750	< 2	2.89	2	3	14	< 0.01	< 10	< 10	13	< 10	122
258682	94139402	0.93	1950	7	0.06	4	1170	80	2.58	10	10	216	< 0.01	< 10	< 10	16	< 10	86
258721	94139402	0.02	3390	10	< 0.01	8	1500	>10000	7.06	200	6	211	< 0.01	< 10	< 10	9	< 10	>10000
258722	94139402	1.21	1500	< 1	0.03	4	1930	16	0.44	8	11	181	0.03	< 10	< 10	50	< 10	104
258723	94139402	1.20	725	< 1	0.03	3	1400	22	0.12	2	5	288	< 0.01	< 10	< 10	7	< 10	120
258724	94139402	1.44	2140	2	< 0.01	3	930	26	1.26	6	6	10	< 0.01	< 10	< 10	131	< 10	210
258725	94139402	0.14	135	7	< 0.01	3	360	190	7.79	34	1	13	< 0.01	< 10	< 10	16	< 10	544
258726	94139402	1.25	4580	1	< 0.01	3	920	< 2	4.67	10	9	61	< 0.01	< 10	< 10	116	< 10	82

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

*[Handwritten Signature]*



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :2-A  
 Total Pages :2  
 Certificate Date: 13-AUG-2001  
 Invoice No. : 10121701  
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 Account :HPQ

Project : 1771/1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS

A0121701

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
258727	94139402	0.62	315	3.2	0.66	129	< 10	30	< 0.5	< 2	0.66	< 0.5	7	38	22	5.22	< 10	510	0.19	< 10
258728	94139402	0.88	10	1.2	0.30	130	< 10	30	0.5	< 2	7.15	0.5	20	6	18	5.97	< 10	90	0.24	< 10
258729	94139402	0.60	30	12.2	0.11	366	< 10	30	< 0.5	< 2	0.02	< 0.5	6	20	19	5.17	< 10	2640	0.48	< 10
258730	94139402	0.60	15	16.2	0.07	544	< 10	< 10	< 0.5	< 2	1.77	3.5	15	29	39	5.26	< 10	5800	0.19	< 10
258731	94139402	0.72	15	9.2	0.19	456	< 10	10	0.5	< 2	0.33	4.0	18	45	31	4.97	< 10	2430	0.19	< 10
258732	94139402	0.70	< 5	3.0	0.33	110	< 10	10	1.0	< 2	0.30	< 0.5	23	22	25	6.45	< 10	1090	0.29	< 10
258733	94139402	1.00	< 5	2.0	0.76	60	< 10	10	0.5	< 2	7.24	0.5	16	12	27	5.86	< 10	1680	0.17	< 10
258734	94139402	0.66	< 5	0.8	1.32	22	< 10	80	< 0.5	< 2	0.26	< 0.5	4	18	20	4.19	< 10	120	0.18	< 10

CERTIFICATION:





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## CERTIFICATE OF ANALYSIS A0121701

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258727	94139402	0.37	125	1 < 0.01	3	590	62	3.68	14	2	13 < 0.01	< 10	< 10	< 10	37	< 10	118	
258728	94139402	2.10	2320	< 1 < 0.01	3	1040	< 2	3.46	12	8	189 < 0.01	< 10	< 10	< 10	17	< 10	84	
258729	94139402	0.01	50	5 < 0.01	< 1	600	108	2.49	42	< 1	43 < 0.01	< 10	< 10	< 10	21	< 10	80	
258730	94139402	0.01	605	4 < 0.01	2	600	1625	4.39	130	1	99 < 0.01	10	< 10	< 10	7	< 10	518	
258731	94139402	0.01	185	4 < 0.01	3	840	182	5.23	76	3	22 < 0.01	< 10	< 10	< 10	14	< 10	564	
258732	94139402	0.03	115	< 1 < 0.01	4	1210	60	6.91	64	4	15 < 0.01	< 10	< 10	< 10	21	< 10	130	
258733	94139402	2.31	6640	< 1 < 0.01	3	760	116	3.98	26	10	296 < 0.01	< 10	< 10	< 10	43	< 10	318	
258734	94139402	1.01	230	3 0.01	3	1700	10	1.58	2	1	24 0.08	< 10	< 10	< 10	15	< 10	56	

CERTIFICATION:



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 V2C 6H1

Page Number : 1  
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 Account : HPQ

Project : 1771/1770

Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS

A0122419

SAMPLE	PREP CODE	Ag g/t	Cu %	Pb %	Zn %						
258721	212 ---	111	-----	1.62	4.93						
258722	212 ---	-----	1.61	-----	-----						

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



# ALS Chemex

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To: TECK EXPLORATION LTD.

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 KAMLOOPS, BC  
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Page Number :1-A  
 Total Pages :2  
 Certificate Date: 25-JUL-2001  
 Invoice No. : I0120605  
 P.O. Number :  
 Account : HPO

Project : 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0120605

SAMPLE	PREP CODE	Weight Au ppb Kg FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
258331	94139402	1.30 < 5	1.0	1.45	356	< 10	30	1.5	< 2	0.22	< 0.5	76	17	24	6.03	< 10	530	0.34	< 10
258332	94139402	1.30 15	8.6	0.79	748	< 10	10	0.5	< 2	0.36	2.5	386	33	26	6.50	< 10	1760	0.26	< 10
258333	94139402	0.82 10	0.6	4.62	< 2	< 10	40	0.5	< 2	4.70	0.5	26	56	207	6.78	10	10	1.16	< 10
258334	94139402	1.30 < 5	0.2	1.34	42	< 10	30	0.5	< 2	1.12	1.0	6	24	45	5.92	< 10	70	0.22	< 10
258335	94139402	1.22 15	0.4	1.52	50	< 10	< 10	0.5	< 2	0.99	< 0.5	29	41	126	11.25	10	210	0.13	< 10
258336	94139402	1.54 15	0.2	1.92	28	< 10	10	0.5	< 2	4.70	1.5	25	26	118	14.40	20	180	0.11	< 10
258337	94139402	1.38 10	3.2	0.60	56	< 10	40	< 0.5	< 2	5.18	10.5	6	53	58	3.21	< 10	120	0.12	< 10
258338	94139402	1.44 < 5	< 0.2	0.54	68	< 10	10	0.5	< 2	1.34	< 0.5	17	32	22	8.83	< 10	350	0.31	< 10
258339	94139402	0.94 < 5	0.2	0.20	110	< 10	50	< 0.5	< 2	0.17	< 0.5	3	46	5	2.36	< 10	420	0.21	10
258340	94139402	0.86 < 5	1.6	0.10	1035	< 10	< 10	0.5	< 2	0.02	< 0.5	10	55	14	>15.00	< 10	1330	0.17	< 10
258341	94139402	1.06 < 5	2.8	0.21	118	< 10	20	< 0.5	< 2	0.05	< 0.5	3	39	6	3.69	< 10	1190	0.27	< 10
258342	94139402	1.24 30	16.4	0.10	968	< 10	10	0.5	< 2	2.86	2.0	62	30	38	>15.00	< 10	700	0.06	< 10
258343	94139402	1.20 < 5	0.2	2.43	< 2	< 10	290	< 0.5	< 2	5.31	< 0.5	12	18	9	3.78	10	< 10	0.16	< 10
258344	94139402	1.46 < 5	< 0.2	3.14	14	< 10	50	0.5	< 2	3.36	< 0.5	16	9	17	5.37	10	30	0.19	< 10
258345	94139402	1.48 < 5	< 0.2	2.45	< 2	< 10	120	< 0.5	< 2	0.55	< 0.5	10	23	20	3.56	10	30	0.19	10
258346	94139402	1.00 < 5	0.6	1.24	352	< 10	70	0.5	< 2	2.63	1.0	15	15	22	3.87	< 10	130	0.19	< 10
258347	94139402	1.34 10	9.6	1.45	246	< 10	80	< 0.5	< 2	2.95	31.0	40	10	46	3.77	10	550	0.21	< 10
258348	94139402	1.86 5	< 0.2	2.63	< 2	< 10	90	< 0.5	< 2	2.94	< 0.5	14	5	1	4.01	10	< 10	0.10	< 10
258349	94139402	1.12 < 5	< 0.2	3.69	2	< 10	50	0.5	< 2	5.19	0.5	14	8	21	5.58	10	< 10	0.14	< 10
258467	94139402	1.24 10	1.6	0.46	28	< 10	80	< 0.5	< 2	0.16	< 0.5	3	43	11	2.44	< 10	130	0.30	10
258468	94139402	1.38 < 5	8.6	0.21	30	< 10	80	< 0.5	< 2	0.04	< 0.5	2	46	9	1.96	< 10	440	0.28	10
258514	94139402	1.08 < 5	< 0.2	1.56	< 2	< 10	280	0.5	< 2	3.49	0.5	22	14	47	5.58	10	40	0.26	< 10
258515	94139402	2.12 < 5	< 0.2	0.86	14	< 10	40	< 0.5	< 2	2.35	< 0.5	19	19	19	5.51	< 10	310	0.25	< 10
258516	94139402	1.16 5	4.0	1.77	174	< 10	40	< 0.5	< 2	4.13	1.5	51	13	4120	5.68	10	1410	0.21	< 10
258517	94139402	1.18 5	< 0.2	4.17	< 2	< 10	150	< 0.5	< 2	2.82	< 0.5	20	10	67	4.83	20	110	0.10	10
258518	94139402	1.74 5	0.2	1.04	50	< 10	70	< 0.5	< 2	12.55	< 0.5	27	6	36	3.03	10	290	0.13	< 10
258582	94139402	1.18 10	7.0	0.23	46	< 10	80	< 0.5	< 2	0.14	< 0.5	1	29	13	2.39	< 10	650	0.30	10
258583	94139402	1.22 25	0.8	0.21	30	< 10	30	< 0.5	< 2	0.41	< 0.5	3	56	19	3.58	< 10	230	0.27	< 10
258584	94139402	0.90 10	0.4	0.21	16	< 10	170	< 0.5	< 2	0.04	< 0.5	< 1	43	10	1.90	< 10	180	0.31	10
258585	94139402	1.02 5	0.4	0.20	20	< 10	100	< 0.5	< 2	0.01	< 0.5	1	33	6	1.84	< 10	30	0.31	< 10
258586	94139402	0.60 < 5	1.6	0.26	24	< 10	220	< 0.5	< 2	0.01	< 0.5	< 1	37	5	2.73	< 10	120	0.36	10
258587	94139402	0.66 10	0.6	0.20	52	< 10	240	< 0.5	< 2	0.01	< 0.5	< 1	29	7	3.17	< 10	320	0.29	10
258588	94139402	0.76 35	6.6	1.06	10	< 10	100	< 0.5	< 2	1.13	< 0.5	2	32	17	2.54	10	30	0.23	10
258589	94139402	0.72 5	8.8	0.28	36	< 10	140	< 0.5	< 2	0.04	< 0.5	1	40	12	1.91	< 10	250	0.29	10
258590	94139402	0.88 5	1.8	0.30	40	< 10	110	< 0.5	< 2	0.06	< 0.5	1	40	12	1.68	< 10	60	0.26	< 10
258591	94139402	0.96 5	3.8	0.31	16	< 10	60	< 0.5	< 2	0.11	< 0.5	3	40	11	2.25	< 10	80	0.25	< 10
258592	94139402	1.22 5	6.6	0.26	28	< 10	60	< 0.5	< 2	0.08	< 0.5	1	33	27	2.05	< 10	150	0.26	< 10
258593	94139402	1.48 10	5.6	0.29	16	< 10	120	< 0.5	< 2	0.12	< 0.5	< 1	46	15	0.92	< 10	120	0.28	10
258594	94139402	1.32 5	3.0	0.22	32	< 10	80	< 0.5	< 2	0.19	< 0.5	3	47	15	2.02	< 10	570	0.27	10
258595	94139402	1.16 5	3.2	0.24	30	< 10	80	< 0.5	< 2	0.23	< 0.5	3	47	15	1.93	< 10	660	0.29	10

CERTIFICATION:



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-B  
 Total Pages :2  
 Certificate Date: 25-JUL-2001  
 Invoice No. : I0120605  
 P.O. Number :  
 Account : HPQ

Project : 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0120605

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF	BaO % XRF
258331	94139402	0.74	200	3	< 0.01	38	330	32	4.44	26	4	15	< 0.01	< 10	< 10	30	10	128	-----	-----
258332	94139402	0.34	230	5	0.01	116	1050	100	6.63	90	2	23	< 0.01	< 10	< 10	28	10	174	-----	-----
258333	94139402	1.23	810	7	0.51	42	1550	8	3.71	4	10	219	0.12	< 10	< 10	130	< 10	98	-----	-----
258334	94139402	0.89	395	25	0.01	20	1770	20	6.08	10	1	61	< 0.01	< 10	< 10	20	10	242	-----	-----
258335	94139402	0.94	1270	4	0.02	134	910	42	>10.00	6	3	44	< 0.01	< 10	< 10	26	30	108	-----	-----
258336	94139402	0.92	5870	6	0.02	117	>10000	58	>10.00	14	5	245	< 0.01	< 10	< 10	27	30	70	-----	-----
258337	94139402	0.46	880	21	0.01	41	1570	14	3.43	42	3	243	< 0.01	< 10	< 10	43	< 10	578	-----	-----
258338	94139402	0.19	410	5	0.01	7	970	44	8.86	12	5	36	< 0.01	< 10	< 10	27	10	88	-----	-----
258339	94139402	0.01	70	9	0.02	1	70	16	2.17	12	< 1	11	< 0.01	< 10	< 10	2	< 10	14	-----	-----
258340	94139402	0.01	60	41	0.02	4	130	84	>10.00	64	< 1	8	< 0.01	< 10	< 10	3	50	18	-----	-----
258341	94139402	< 0.01	60	4	0.01	< 1	130	68	4.33	50	< 1	7	< 0.01	< 10	< 10	3	< 10	22	-----	-----
258342	94139402	0.07	1020	14	< 0.01	15	330	114	>10.00	722	1	192	< 0.01	< 10	< 10	5	50	290	-----	-----
258343	94139402	1.16	965	1	0.01	7	810	< 2	0.31	8	4	866	< 0.01	< 10	< 10	38	< 10	76	15.71	0.17
258344	94139402	1.64	950	< 1	0.01	2	980	< 2	0.17	4	5	682	< 0.01	< 10	< 10	72	< 10	168	17.19	0.06
258345	94139402	1.25	200	< 1	0.01	3	130	4	0.04	2	3	125	< 0.01	< 10	< 10	27	< 10	58	12.96	0.14
258346	94139402	0.53	995	1	0.04	4	1010	108	2.50	30	3	314	< 0.01	< 10	< 10	27	< 10	292	16.91	0.21
258347	94139402	0.62	1400	4	0.04	7	1330	1150	1.99	26	3	296	< 0.01	< 10	< 10	28	< 10	1885	17.70	0.38
258348	94139402	2.03	1190	< 1	0.04	< 1	1170	< 2	0.02	2	4	250	0.02	< 10	< 10	68	< 10	100	17.09	0.13
258349	94139402	1.68	1290	3	0.04	1	1070	< 2	0.16	2	7	432	< 0.01	< 10	< 10	86	< 10	104	17.14	0.05
258467	94139402	0.06	80	< 1	0.01	1	720	60	1.80	16	1	12	< 0.01	< 10	< 10	10	< 10	88	-----	-----
258468	94139402	< 0.01	85	1	0.02	1	400	80	1.62	16	< 1	22	< 0.01	< 10	< 10	3	< 10	26	-----	-----
258514	94139402	1.58	1165	< 1	0.01	3	940	< 2	0.05	6	8	195	< 0.01	< 10	< 10	44	< 10	78	-----	-----
258515	94139402	0.94	745	8	0.03	3	840	22	3.16	6	5	118	< 0.01	< 10	< 10	26	< 10	58	-----	-----
258516	94139402	1.10	780	11	0.01	6	760	34	4.33	8	4	51	0.10	< 10	< 10	39	10	84	-----	-----
258517	94139402	1.84	885	2	0.22	3	1420	< 2	0.25	2	4	212	0.12	< 10	< 10	145	< 10	86	-----	-----
258518	94139402	0.55	2350	< 1	0.02	3	660	10	1.81	6	4	170	< 0.01	< 10	< 10	35	< 10	60	-----	-----
258582	94139402	0.01	90	1	0.01	< 1	500	58	1.23	18	1	9	< 0.01	< 10	< 10	15	< 10	14	-----	-----
258583	94139402	0.01	140	< 1	< 0.01	1	560	32	3.49	22	1	14	< 0.01	< 10	< 10	3	< 10	24	-----	-----
258584	94139402	< 0.01	25	< 1	0.01	1	640	38	0.63	18	1	9	< 0.01	< 10	< 10	5	< 10	8	-----	-----
258585	94139402	< 0.01	20	1	0.03	< 1	610	44	1.15	10	1	10	< 0.01	< 10	< 10	4	< 10	6	-----	-----
258586	94139402	< 0.01	25	< 1	0.02	1	500	26	0.37	24	1	12	< 0.01	< 10	< 10	6	< 10	10	-----	-----
258587	94139402	< 0.01	15	4	< 0.01	< 1	390	36	0.28	20	< 1	15	< 0.01	< 10	< 10	4	< 10	6	-----	-----
258588	94139402	0.36	455	< 1	< 0.01	1	570	26	0.06	8	4	58	< 0.01	< 10	< 10	21	< 10	76	-----	-----
258589	94139402	0.02	40	1	0.01	1	390	86	0.92	44	< 1	13	< 0.01	< 10	< 10	6	< 10	40	-----	-----
258590	94139402	0.03	20	< 1	0.01	< 1	450	124	1.00	12	< 1	13	< 0.01	< 10	< 10	4	< 10	38	-----	-----
258591	94139402	0.03	65	< 1	0.01	< 1	540	68	1.98	16	< 1	9	< 0.01	< 10	< 10	5	< 10	68	-----	-----
258592	94139402	0.01	30	< 1	0.01	< 1	380	172	1.83	18	< 1	10	< 0.01	< 10	< 10	6	< 10	92	-----	-----
258593	94139402	0.01	35	< 1	0.01	1	610	92	0.70	8	< 1	16	< 0.01	< 10	< 10	6	< 10	54	-----	-----
258594	94139402	0.01	85	< 1	0.01	1	750	86	1.89	36	1	19	< 0.01	< 10	< 10	7	< 10	52	-----	-----
258595	94139402	< 0.01	115	< 1	0.01	< 1	500	78	1.93	24	< 1	14	< 0.01	< 10	< 10	6	< 10	78	-----	-----

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



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Project : 1770/1771  
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## CERTIFICATE OF ANALYSIS A0120605

SAMPLE	PREP CODE	Weight Au ppb Kg FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
258596	94139402	0.94 < 5	5.8	0.18	58	< 10	130	< 0.5	< 2	0.01	< 0.5	1	40	8	1.76	< 10	1890	0.27	10
258597	94139402	0.92 < 5	1.4	0.22	68	< 10	140	< 0.5	< 2	0.01	< 0.5	1	33	7	2.13	< 10	530	0.29	10
258598	94139402	1.12 < 5	14.2	0.15	50	< 10	110	< 0.5	< 2	< 0.01	< 0.5	1	30	5	1.51	< 10	270	0.24	10
258599	94139402	1.00 < 5	0.4	0.09	128	< 10	150	< 0.5	< 2	>15.00	< 0.5	2	7	8	1.02	< 10	170	0.06	< 10
258619	94139402	0.82 < 5	1.0	0.52	198	< 10	50	< 0.5	< 2	0.22	< 0.5	1	50	22	4.05	< 10	240	0.22	< 10
258620	94139402	1.10 < 5	1.8	0.44	32	< 10	90	< 0.5	< 2	0.13	< 0.5	4	51	14	2.00	< 10	90	0.24	< 10
258621	94139402	1.38 < 5	0.8	0.33	82	< 10	140	< 0.5	< 2	0.08	< 0.5	< 1	50	15	1.11	< 10	260	0.24	10
258622	94139402	0.74 < 5	4.0	0.19	104	< 10	100	< 0.5	< 2	0.01	< 0.5	4	49	11	2.18	< 10	290	0.25	10
258623	94139402	0.24 < 5	9.2	0.24	52	< 10	70	< 0.5	< 2	0.09	< 0.5	1	64	27	2.58	< 10	80	0.22	< 10
258624	94139402	1.56 < 5	< 0.2	0.22	26	< 10	40	< 0.5	< 2	4.21	< 0.5	1	19	6	3.69	< 10	170	0.21	< 10
258625	94139402	0.54 < 5	0.8	0.80	28	< 10	80	< 0.5	< 2	0.15	< 0.5	4	18	19	10.85	< 10	170	0.14	< 10
258626	94139402	1.52 < 5	0.8	0.40	98	< 10	50	< 0.5	< 2	0.25	< 0.5	5	40	21	3.83	< 10	600	0.23	< 10
258627	94139402	1.02 < 10	0.2	0.28	64	< 10	40	< 0.5	< 2	0.44	< 0.5	4	38	23	3.55	< 10	760	0.23	< 10
258628	94139402	0.78 < 10	0.8	0.44	666	< 10	170	< 0.5	< 2	0.04	< 0.5	< 1	44	6	3.00	< 10	120	0.27	< 10
258629	94139402	1.14 < 15	4.4	0.19	134	< 10	50	< 0.5	< 2	< 0.01	< 0.5	2	30	6	4.54	< 10	160	0.26	< 10
258630	94139402	1.30 < 5	29.0	0.19	44	< 10	70	< 0.5	< 2	1.92	< 0.5	1	60	42	2.47	< 10	220	0.22	< 10
258631	94139402	0.74 < 10	6.6	0.24	230	< 10	10	< 0.5	< 2	0.03	< 0.5	4	50	18	6.92	< 10	1160	0.28	< 10
258632	94139402	1.00 < 5	4.8	0.20	100	< 10	30	< 0.5	< 2	< 0.01	< 0.5	4	38	7	2.86	< 10	4390	0.29	10
258633	94139402	1.48 < 5	1.0	0.23	54	< 10	30	< 0.5	< 2	< 0.01	< 0.5	6	47	12	3.57	< 10	1460	0.27	< 10
258634	94139402	1.34 < 5	< 0.2	1.44	52	< 10	140	< 0.5	< 2	10.00	2.0	8	11	13	2.76	10	120	0.12	10
258635	94139402	1.20 < 5	< 0.2	4.01	< 2	< 10	80	0.5	< 2	2.28	0.5	27	8	28	6.94	20	40	0.17	< 10
258636	94139402	1.70 < 5	< 0.2	0.57	88	< 10	110	< 0.5	< 2	0.19	< 0.5	2	22	6	3.96	< 10	20	0.18	< 10
258637	94139402	1.42 < 5	0.4	0.01	294	< 10	60	< 0.5	< 2	0.11	22.5	3	7	3	0.92	< 10	80	0.01	< 10
258638	94139402	1.80 < 5	0.4	0.05	382	< 10	20	< 0.5	< 2	3.84	28.0	12	11	10	1.85	< 10	500	0.02	< 10
258639	94139402	1.56 < 5	0.2	0.37	196	< 10	100	< 0.5	< 2	1.40	< 0.5	9	27	10	2.62	< 10	80	0.11	< 10
258640	94139402	1.02 < 5	< 0.2	3.25	8	< 10	120	0.5	< 2	4.54	0.5	15	12	16	5.64	10	< 10	0.15	10
258657	94139402	2.04 < 5	< 0.2	0.46	36	< 10	50	0.5	< 2	1.24	< 0.5	14	21	12	4.19	< 10	380	0.28	< 10
258658	94139402	1.58 < 5	1.0	0.94	196	< 10	30	2.0	< 2	5.79	5.0	192	12	23	4.54	< 10	1230	0.29	< 10
258659	94139402	1.04 < 5	0.4	0.56	92	< 10	100	< 0.5	< 2	0.15	< 0.5	6	37	10	2.31	< 10	70	0.24	10
258660	94139402	1.64 < 5	< 0.2	2.53	46	< 10	90	0.5	< 2	3.96	0.5	18	13	23	5.28	10	50	0.24	< 10
258661	94139402	1.46 < 5	< 0.2	0.78	< 2	< 10	470	0.5	< 2	3.26	< 0.5	7	20	12	2.90	< 10	< 10	0.26	10
258662	94139402	0.68 < 5	< 0.2	0.35	< 2	< 10	90	0.5	< 2	4.27	< 0.5	< 1	22	3	0.17	< 10	< 10	0.29	30
258663	94139402	0.44 < 5	< 0.2	0.65	< 2	< 10	60	0.5	< 2	3.98	< 0.5	4	12	15	1.56	< 10	40	0.21	10
258664	94139402	0.68 < 10	< 0.2	0.41	< 2	< 10	70	0.5	< 2	4.61	< 0.5	< 1	24	4	0.38	< 10	< 10	0.21	30

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

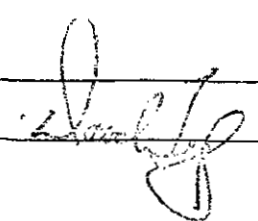
MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-C  
 Total Pages :2  
 Certificate Date: 25-JUL-2001  
 Invoice No. :I0120605  
 P.O. Number :  
 Account :HPQ

Project: 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0120605

SAMPLE	PREP CODE	CaO % XRF	Cr2O3 % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	SrO % XRF	TiO2 % XRF	LOI % XRF	TOTAL %
258331	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258332	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258333	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258334	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258335	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258336	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258337	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258338	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258339	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258340	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258341	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258342	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258343	94139402	8.63	< 0.01	7.02	2.93	2.26	0.15	1.08	0.20	51.02	0.13	0.63	8.65	98.58
258344	94139402	5.49	< 0.01	9.67	2.99	3.51	0.15	1.53	0.24	49.91	0.10	0.77	7.70	99.31
258345	94139402	0.81	< 0.01	5.70	2.25	2.38	0.03	0.41	0.04	70.46	0.03	0.51	4.00	99.72
258346	94139402	3.85	< 0.01	6.20	2.98	1.19	0.14	3.54	0.22	56.55	0.07	0.58	6.44	98.88
258347	94139402	4.48	< 0.01	6.58	2.79	1.46	0.21	4.08	0.31	54.02	0.12	0.61	6.31	99.05
258348	94139402	4.93	< 0.01	8.97	1.76	3.83	0.19	3.77	0.30	51.10	0.13	0.73	5.95	98.88
258349	94139402	8.23	< 0.01	9.48	2.24	3.17	0.19	1.13	0.28	45.08	0.09	0.76	9.66	97.50
258467	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258468	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258514	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258515	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258516	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258517	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258518	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258582	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258583	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258584	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258585	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258586	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258587	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258588	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258589	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258590	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258591	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258592	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258593	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258594	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258595	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----

CERTIFICATION: 



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 Account : HPQ

Project: 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS

A0120605

SAMPLE	PREP CODE	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	SrO	TiO2	LOI	TOTAL
		% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF
258596	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258597	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258598	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258599	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258619	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258620	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258621	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258622	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258623	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258624	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258625	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258626	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258627	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258628	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258629	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258630	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258631	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258632	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258633	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258634	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258635	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258636	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258637	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258638	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258639	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258640	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258657	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258658	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258659	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258660	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258661	94139402	4.43	< 0.01	7.50	4.01	0.84	0.19	2.17	0.25	57.17	0.06	0.64	5.67	99.40
258662	94139402	5.72	< 0.01	1.10	4.47	0.75	0.25	0.38	0.04	67.43	0.05	0.13	6.50	99.58
258663	94139402	5.30	< 0.01	2.60	3.17	0.55	0.11	1.34	0.29	63.29	0.04	0.36	6.95	98.99
258664	94139402	6.49	0.01	1.19	3.66	0.70	0.23	0.02	0.06	66.66	0.08	0.14	7.44	98.99

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
KAMLOOPS, BC  
V2C 6H1

Project: 17700/17701  
Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1  
Total Pages :1  
Certificate Date: 24-AUG-2001  
Invoice No. : I0123180  
P.O. Number :  
Account : HPQ

## CERTIFICATE OF ANALYSIS

A0123180

SAMPLE	PREP CODE	Ag FA g/t										
258444	212	3280										

CERTIFICATION: 





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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
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Page Number : 1  
 Total Pages : 1  
 Certificate Date: 23-AUG-2001  
 Invoice No. : 10123045  
 P.O. Number :  
 Account : HPQ

Project : 17700/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0123045

SAMPLE	PREP CODE	Ag g/t	Cu %	Pb %	Zn %						
258444	212 --	>1500	----	6.42	17.55						
258445	212 --	1225	----	3.09	2.36						
258446	212 --	162	----	3.17	19.90						
258447	212 --	436	----	2.85	49.2						
258904	212 --	146	3.84	----	----						
258905	212 --	170	6.65	----	----						
258906	212 --	----	----	----	1.31						



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To: TECK EXPLORATION LTD.

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Project: 17770/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1  
 Total Pages :1  
 Certificate Date: 24-AUG-2001  
 Invoice No. : I0123046  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS

### A0123046

SAMPLE	PREP CODE	Ag con g/t									
258776	212	5739.5									

CERTIFICATION:



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MAIN STATION, BOX 938  
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Project: 17770/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1-A  
 Total Pages :3  
 Certificate Date: 22-AUG-2001  
 Invoice No. : I0122350  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS

### A0122350

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Au FA g/t	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %
258386	94139402	0.58	< 5	----	< 0.2	0.33	< 2	< 10	70	< 0.5	2	0.02	< 0.5	1	153	3	0.53	< 10	< 10	0.17
258387	94139402	1.02	< 5	----	0.2	3.71	8	< 10	40	< 0.5	< 2	2.86	2.5	28	41	147	6.16	< 10	< 10	0.06
258388	94139402	1.16	20	----	>100.0	0.15	22	< 10	< 10	< 0.5	40	2.51	>500	5	7	594	1.34	10	20500	0.03
258389	94139402	0.86	50	----	35.6	0.05	18	< 10	20	< 0.5	< 2	13.00	346	3	6	124	2.14	< 10	23600	0.01
258390	94139402	0.72	< 5	----	1.4	3.02	12	< 10	400	< 0.5	< 2	0.72	11.5	15	25	24	4.82	< 10	590	0.20
258391	94139402	1.18	6910	----	30.0	0.38	9590	< 10	< 10	0.5	126	0.08	3.5	104	65	4350	13.30	< 10	120	0.22
258392	94139402	1.60	520	----	10.4	0.05	>10000	< 10	< 10	0.5	14	0.02	< 0.5	115	149	536	>15.00	< 10	220	0.07
258393	94139402	1.02	>10000	20.5	>100.0	0.01	1870	< 10	< 10	< 0.5	122	0.19	>500	8	8	2880	4.71	30	16100	< 0.01
258394	94139402	0.70	60	----	4.0	5.02	44	< 10	30	0.5	< 2	0.20	15.5	8	102	470	9.56	< 10	90	0.01
258415	94139402	1.46	880	----	28.6	0.57	1400	< 10	40	< 0.5	20	0.05	80.5	6	130	343	6.87	< 10	2290	0.17
258416	94139402	1.74	1655	----	43.8	0.34	2030	< 10	< 10	0.5	34	0.05	274	23	102	2390	>15.00	10	4360	0.08
258417	94139402	1.08	1190	----	14.6	1.19	>10000	< 10	10	0.5	10	0.07	7.5	106	67	506	11.60	< 10	460	0.08
258418	94139402	1.32	7940	----	22.4	0.12	>10000	< 10	< 10	0.5	50	0.01	< 0.5	177	92	2660	12.35	< 10	70	0.10
258419	94139402	1.24	40	----	0.6	0.83	302	< 10	70	< 0.5	4	0.30	< 0.5	10	78	48	2.38	< 10	< 10	0.13
258420	94139402	1.22	10	----	0.2	0.33	56	< 10	50	< 0.5	< 2	0.01	< 0.5	8	120	7	2.56	< 10	< 10	0.09
258421	94139402	1.12	65	----	1.8	1.37	132	< 10	< 10	0.5	< 2	0.17	< 0.5	214	110	3	14.30	< 10	< 10	0.06
258422	94139402	1.12	40	----	5.0	1.99	390	< 10	10	0.5	6	0.12	0.5	91	58	341	9.19	< 10	30	0.14
258423	94139402	0.96	1395	----	>100.0	0.02	822	< 10	10	0.5	212	5.03	437	41	28	5280	8.12	< 10	10780	0.03
258424	94139402	1.38	50	----	79.6	0.21	42	< 10	10	< 0.5	8	10.85	486	13	7	495	3.54	< 10	13180	0.06
258425	94139402	0.88	50	----	3.4	5.46	184	< 10	< 10	1.0	14	0.96	9.5	22	27	26	>15.00	10	50	0.01
258426	94139402	1.10	15	----	1.0	0.92	12	< 10	20	< 0.5	< 2	0.51	2.5	18	37	9	3.89	< 10	60	0.34
258427	94139402	1.14	>10000	10.50	79.6	< 0.01	>10000	< 10	< 10	1.0	252	< 0.01	7.0	331	15	7720	>15.00	10	210	0.04
258428	94139402	1.12	45	----	1.2	0.50	1595	< 10	120	< 0.5	6	0.70	< 0.5	7	84	79	1.03	< 10	10	0.23
258429	94139402	1.02	10	----	0.6	2.68	216	< 10	670	0.5	< 2	3.59	1.0	16	14	12	4.57	< 10	< 10	0.18
258430	94139402	1.20	260	----	15.0	0.54	1770	< 10	10	0.5	4	0.05	50.0	7	100	253	9.22	< 10	3770	0.19
258431	94139402	1.48	895	----	>100.0	0.08	>10000	< 10	< 10	0.5	34	2.98	364	93	21	9350	>15.00	10	7950	0.07
258432	94139402	1.18	< 5	----	1.4	0.50	166	< 10	< 10	< 0.5	< 2	9.68	2.0	1	12	72	0.45	< 10	10	< 0.01
258433	94139402	1.42	815	----	35.2	0.08	>10000	< 10	< 10	1.0	48	1.84	87.0	87	28	9520	>15.00	10	870	0.05
258434	94139402	1.24	1790	----	12.4	< 0.01	>10000	< 10	< 10	0.5	18	3.06	35.5	422	13	3190	>15.00	10	500	0.01
258435	94139402	0.58	25	----	0.8	2.71	832	< 10	80	0.5	< 2	0.11	1.5	19	33	155	5.25	< 10	< 10	0.37
258436	94139402	0.64	< 5	----	0.2	1.13	132	< 10	90	< 0.5	< 2	0.30	0.5	10	92	16	2.02	< 10	< 10	0.20
258481	94139402	1.34	170	----	1.6	4.35	416	< 10	30	0.5	< 2	0.44	3.5	18	27	243	10.30	10	10	0.10
258482	94139402	0.88	< 5	----	1.0	1.79	62	< 10	260	< 0.5	< 2	5.15	2.0	23	62	97	5.46	< 10	130	0.26
258483	94139402	1.10	10	----	4.6	3.14	80	< 10	30	< 0.5	< 2	0.26	11.0	21	22	143	7.30	< 10	120	0.13
258484	94139402	1.36	< 5	----	0.4	0.83	14	< 10	40	< 0.5	< 2	2.50	< 0.5	8	74	14	2.83	< 10	150	0.26
258485	94139402	1.68	>10000	23.3	52.6	0.66	6390	< 10	10	< 0.5	14	0.12	437	8	53	2770	5.18	10	17420	0.14
258486	94139402	1.36	170	----	4.6	1.25	882	< 10	30	< 0.5	4	0.14	34.5	8	71	335	5.81	< 10	970	0.18
258487	94139402	1.28	20	----	1.6	2.77	106	< 10	40	0.5	< 2	0.56	11.0	17	54	298	6.68	< 10	220	0.11
258488	94139402	1.88	1155	----	38.0	0.85	>10000	< 10	< 10	0.5	30	0.79	25.5	65	58	1620	13.95	< 10	2240	0.08
258489	94139402	1.28	740	----	2.4	4.41	468	< 10	60	0.5	8	0.16	2.0	8	101	316	16.55	10	40	0.01

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



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 Account : HPQ

Project : 17770/17701  
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## CERTIFICATE OF ANALYSIS A0122350

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258386	94139402	10	0.07	55	< 1	0.06	3	100	2	< 0.01	< 2	< 1	4	< 0.01	< 10	< 10	5	< 10	8
258387	94139402	< 10	3.49	980	1	0.05	19	1590	< 2	0.16	4	25	88	0.17	< 10	< 10	245	< 10	74
258388	94139402	< 10	1.30	1955	< 1	< 0.01	12	320	>10000	6.26	280	1	80	< 0.01	< 10	< 10	3	40	>10000
258389	94139402	< 10	6.55	5490	1	< 0.01	5	130	>10000	2.17	52	1	181	< 0.01	< 10	< 10	1	< 10	>10000
258390	94139402	< 10	2.21	1155	3	0.06	7	1060	648	0.11	12	11	27	0.11	< 10	< 10	169	< 10	1170
258391	94139402	< 10	0.13	60	2	0.01	< 1	490	160	>10.00	32	< 1	13	< 0.01	< 10	< 10	8	10	508
258392	94139402	< 10	0.04	40	< 1	< 0.01	71	330	48	>10.00	246	< 1	14	< 0.01	< 10	< 10	8	< 10	132
258393	94139402	< 10	< 0.01	460	< 1	< 0.01	13	330	>10000	5.90	464	< 1	31	< 0.01	< 10	< 10	< 1	60	>10000
258394	94139402	< 10	3.54	1020	4	0.01	14	1050	892	1.18	28	21	30	< 0.01	< 10	< 10	218	< 10	2390
258415	94139402	< 10	0.24	120	108	< 0.01	12	620	6930	3.14	52	1	10	< 0.01	< 10	< 10	69	< 10	8310
258416	94139402	< 10	0.14	145	9	0.01	24	430	9090	>10.00	56	< 1	27	< 0.01	< 10	< 10	17	40	>10000
258417	94139402	< 10	0.43	270	7	< 0.01	6	330	1180	2.33	76	2	15	< 0.01	< 10	< 10	74	10	968
258418	94139402	< 10	0.06	25	6	< 0.01	13	290	78	>10.00	140	< 1	11	< 0.01	< 10	< 10	10	< 10	134
258419	94139402	< 10	0.75	110	2	0.11	19	440	20	1.55	12	2	15	0.02	< 10	< 10	32	< 10	126
258420	94139402	< 10	0.27	40	1	0.01	13	180	10	1.19	4	1	8	< 0.01	< 10	< 10	18	< 10	104
258421	94139402	< 10	0.78	225	9	0.06	52	760	< 2	>10.00	12	3	19	< 0.01	< 10	< 10	50	< 10	114
258422	94139402	< 10	0.78	375	14	0.04	14	820	38	4.44	8	4	10	< 0.01	< 10	< 10	65	< 10	132
258423	94139402	< 10	1.65	5620	8	< 0.01	20	210	>10000	7.85	4990	1	428	< 0.01	< 10	< 10	1	20	>10000
258424	94139402	10	3.05	>10000	11	< 0.01	8	170	>10000	3.31	328	1	189	< 0.01	< 10	< 10	2	< 10	>10000
258425	94139402	< 10	2.64	2770	9	< 0.01	9	1550	56	8.59	58	20	47	< 0.01	< 10	< 10	174	10	504
258426	94139402	< 10	0.68	350	1	0.03	31	1760	72	3.12	14	1	15	< 0.01	< 10	< 10	18	< 10	318
258427	94139402	< 10	0.01	25	3	< 0.01	< 1	210	664	9.33	304	< 1	17	< 0.01	< 10	< 10	< 1	10	144
258428	94139402	10	0.28	535	1	0.06	2	140	76	0.09	16	< 1	17	< 0.01	< 10	< 10	4	< 10	118
258429	94139402	10	1.74	1650	3	0.01	2	1450	4	0.03	12	4	69	< 0.01	< 10	< 10	40	< 10	168
258430	94139402	< 10	0.18	95	3	< 0.01	15	420	3600	7.12	38	1	10	< 0.01	< 10	< 10	17	< 10	4700
258431	94139402	< 10	0.23	1165	1	< 0.01	21	420	7150	>10.00	5320	1	105	< 0.01	< 10	< 10	5	30	>10000
258432	94139402	< 10	1.22	450	4	< 0.01	4	90	44	0.07	218	< 1	322	< 0.01	< 10	< 10	6	< 10	334
258433	94139402	< 10	0.67	840	3	< 0.01	22	470	2000	>10.00	5460	< 1	141	< 0.01	< 10	< 10	7	40	9390
258434	94139402	< 10	0.82	1610	4	0.01	29	250	932	>10.00	1920	< 1	193	< 0.01	< 10	< 10	5	30	3720
258435	94139402	< 10	1.91	295	5	0.02	20	280	28	1.54	168	4	12	0.03	< 10	< 10	55	< 10	248
258436	94139402	< 10	0.66	235	1	0.10	4	520	14	0.06	46	2	36	0.09	< 10	< 10	41	< 10	98
258481	94139402	< 10	1.53	585	2	0.01	12	1520	20	1.72	28	9	23	< 0.01	< 10	< 10	161	< 10	134
258482	94139402	< 10	1.69	1305	1	0.02	24	1410	2	0.48	18	18	231	< 0.01	< 10	< 10	101	< 10	168
258483	94139402	< 10	1.53	400	3	0.02	4	1080	234	1.36	24	5	12	< 0.01	< 10	< 10	124	< 10	640
258484	94139402	< 10	0.39	610	3	0.04	6	810	24	2.28	4	1	84	< 0.01	< 10	< 10	15	< 10	60
258485	94139402	< 10	0.27	245	< 1	< 0.01	17	650	>10000	5.97	88	1	12	< 0.01	< 10	< 10	14	< 10	>10000
258486	94139402	< 10	0.61	370	2	< 0.01	22	600	706	4.02	18	1	13	< 0.01	< 10	< 10	26	< 10	3820
258487	94139402	< 10	2.11	575	< 1	0.01	33	1150	30	2.61	24	8	30	< 0.01	< 10	< 10	113	< 10	1425
258488	94139402	< 10	0.47	375	< 1	< 0.01	12	450	1340	>10.00	70	1	53	< 0.01	< 10	< 10	22	< 10	2830
258489	94139402	< 10	2.45	710	< 1	0.01	15	1140	30	1.30	18	25	17	< 0.01	< 10	< 10	233	< 10	56

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 17770/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :2-A  
 Total Pages :3  
 Certificate Date: 22-AUG-2001  
 Invoice No. : I0122350  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS A0122350

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Au FA g/t	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	
258543	94139402	1.36	< 5	-----	0.2	4.01	14	< 10	110	0.5	< 2	5.90	2.5	25	91	68	7.12	< 10	140	0.11	
258544	94139402	2.44	100	-----	1.6	0.54	54	< 10	90	< 0.5	< 2	10.10	0.5	7	25	959	2.23	< 10	20	0.17	
258545	94139402	1.34	45	-----	0.6	1.00	26	< 10	20	< 0.5	< 2	0.43	< 0.5	14	25	13	5.51	< 10	90	0.17	
258546	94139402	1.30	45	-----	2.8	1.99	16	< 10	40	0.5	< 2	>15.00	1.5	4	11	427	4.14	< 10	120	0.06	
258547	94139402	2.38	2710	-----	1.2	0.13	52	< 10	30	< 0.5	2	0.97	26.0	4	82	211	3.69	< 10	3220	0.09	
258548	94139402	1.38	1190	-----	2.6	0.40	324	< 10	10	0.5	10	0.92	1.5	8	50	489	10.75	< 10	30	0.13	
258549	94139402	2.18	< 5	-----	0.2	2.46	10	< 10	140	< 0.5	< 2	2.14	2.5	7	28	96	3.38	< 10	30	0.33	
258550	94139402	0.76	< 5	-----	< 0.2	1.17	< 2	< 10	860	< 0.5	< 2	3.55	< 0.5	8	27	10	2.63	< 10	< 10	0.27	
258760	94139402	1.20	1990	-----	7.2	1.66	434	< 10	480	< 0.5	2	1.68	13.0	10	28	361	8.10	< 10	3490	0.19	
258761	94139402	1.06	15	-----	0.6	0.26	12	< 10	70	< 0.5	< 2	12.55	2.0	6	4	49	4.44	< 10	40	0.13	
258762	94139402	0.54	10	-----	0.8	0.11	< 2	< 10	60	< 0.5	< 2	9.28	203	14	29	31	5.13	< 10	4980	0.08	
258763	94139402	1.46	< 5	-----	0.4	2.22	28	< 10	160	0.5	< 2	4.41	2.0	17	45	61	4.50	< 10	40	0.22	
258764	94139402	1.46	< 5	-----	< 0.2	1.59	< 2	< 10	130	0.5	< 2	2.50	0.5	13	43	27	3.21	< 10	10	0.25	
258765	94139402	1.32	< 5	-----	< 0.2	0.91	326	< 10	100	< 0.5	2	0.55	< 0.5	12	30	27	6.30	< 10	3630	0.19	
258766	94139402	1.66	720	-----	1.8	2.42	408	< 10	60	0.5	14	0.12	0.5	8	47	65	9.34	< 10	20	0.14	
258767	94139402	1.48	4530	-----	20.0	1.24	9400	< 10	10	0.5	42	0.03	1.5	32	56	1635	12.90	< 10	100	0.09	
258768	94139402	1.64	400	-----	21.6	1.26	1125	< 10	40	< 0.5	2	0.05	3.0	17	82	272	7.87	< 10	510	0.07	
258769	94139402	1.52	30	-----	0.6	1.85	92	< 10	440	0.5	< 2	0.14	< 0.5	9	25	68	4.45	< 10	10	0.25	
258770	94139402	1.52	15	-----	0.2	1.30	40	< 10	30	< 0.5	2	0.26	< 0.5	13	30	3	5.62	< 10	10	0.16	
258771	94139402	1.76	15	-----	3.0	5.80	160	< 10	20	0.5	6	0.30	4.5	22	97	237	12.40	< 10	< 10	0.03	
258772	94139402	1.60	9880	-----	52.0	1.20	9040	< 10	70	0.5	52	0.06	36.5	191	51	1210	>15.00	< 10	11960	0.03	
258773	94139402	2.12	140	-----	3.2	4.65	322	< 10	40	0.5	4	6.01	9.5	26	56	471	10.25	< 10	180	0.02	
258774	94139402	1.66	340	-----	3.0	1.38	462	< 10	70	< 0.5	2	0.22	2.0	14	51	438	5.40	< 10	430	0.15	
258775	94139402	1.66	135	-----	7.6	2.20	536	< 10	70	< 0.5	10	0.34	24.0	15	33	467	8.06	< 10	260	0.15	
258776	94139402	2.14	>10000	-----	14.15	>100.0	< 0.01	>10000	< 10	< 10	0.5	34	0.01	458	< 1	11	8110	14.20	10	7120	0.08
258777	94139402	1.96	35	-----	9.8	3.98	862	< 10	90	0.5	2	0.19	52.5	9	22	133	7.87	10	7900	0.16	
258778	94139402	1.90	365	-----	28.0	1.90	762	< 10	50	< 0.5	6	0.11	9.5	8	79	190	6.45	< 10	460	0.11	
258779	94139402	1.70	330	-----	>100.0	0.57	2710	< 10	70	< 0.5	10	2.54	426	8	32	1225	4.35	< 10	2560	0.25	
258780	94139402	1.86	185	-----	17.6	0.50	332	< 10	420	< 0.5	2	0.05	3.0	1	85	75	2.91	< 10	360	0.13	
258781	94139402	1.68	175	-----	14.8	1.83	680	< 10	10	0.5	10	0.08	7.5	38	85	3340	9.37	< 10	120	0.05	
258782	94139402	1.76	45	-----	7.2	3.62	102	< 10	80	0.5	< 2	0.13	62.5	15	52	606	8.29	< 10	3090	0.11	
258783	94139402	3.30	7520	-----	51.8	0.22	>10000	< 10	20	< 0.5	82	0.03	0.5	106	66	2810	8.09	< 10	250	0.16	
258784	94139402	1.76	780	-----	11.2	1.81	5140	< 10	90	0.5	8	0.11	1.5	11	36	157	9.24	< 10	20	0.20	
258785	94139402	2.96	500	-----	3.2	0.14	774	< 10	90	< 0.5	< 2	0.01	< 0.5	3	152	19	3.11	< 10	10	0.08	
258786	94139402	1.46	100	-----	13.2	0.38	318	< 10	50	< 0.5	< 2	0.08	< 0.5	8	71	35	2.71	< 10	10	0.18	
258787	94139402	1.66	495	-----	3.4	0.21	720	< 10	40	< 0.5	< 2	0.07	< 0.5	4	149	31	3.45	< 10	10	0.13	
258788	94139402	1.42	2870	-----	7.4	1.64	438	< 10	30	< 0.5	18	0.10	0.5	20	85	142	7.32	< 10	10	0.08	
258789	94139402	2.16	275	-----	5.6	1.79	602	< 10	130	< 0.5	6	0.10	1.0	12	84	400	9.04	< 10	70	0.06	
258790	94139402	2.04	205	-----	0.8	2.96	356	< 10	50	< 0.5	< 2	0.08	0.5	6	43	25	8.84	< 10	< 10	0.16	
258791	94139402	3.28	< 5	-----	< 0.2	1.81	10	< 10	130	0.5	< 2	2.02	< 0.5	10	33	4	3.14	< 10	< 10	0.22	

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



# ALS Chemex

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 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J2C1  
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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 17770/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :2-B  
 Total Pages :3  
 Certificate Date: 22-AUG-2001  
 Invoice No. :10122350  
 P.O. Number :  
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## CERTIFICATE OF ANALYSIS A0122350

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258543	94139402	< 10	2.28	1635	< 1	0.01	29	1240	6	0.51	< 2	22	188	< 0.01	< 10	< 10	184	< 10	68
258544	94139402	< 10	0.31	5290	< 1	< 0.01	13	590	30	1.36	2	4	280	< 0.01	< 10	< 10	16	< 10	62
258545	94139402	< 10	0.77	560	< 1	0.04	6	1640	< 2	3.81	2	4	14	< 0.01	< 10	< 10	48	< 10	54
258546	94139402	< 10	1.99	>10000	< 1	< 0.01	10	510	8	1.08	< 2	5	885	< 0.01	20	< 10	35	< 10	122
258547	94139402	< 10	0.15	2270	< 1	< 0.01	4	220	16	2.47	34	1	46	< 0.01	< 10	< 10	5	< 10	2260
258548	94139402	< 10	0.33	1310	< 1	< 0.01	9	330	36	5.29	10	1	27	< 0.01	< 10	< 10	12	< 10	126
258549	94139402	< 10	1.28	845	< 1	0.03	22	1670	28	0.04	4	4	62	< 0.01	< 10	< 10	60	< 10	224
258550	94139402	10	0.67	1185	1	0.01	5	960	< 2	0.10	< 2	3	78	< 0.01	< 10	< 10	26	< 10	52
258760	94139402	< 10	0.72	1015	< 1	0.01	9	870	326	0.25	16	4	61	< 0.01	< 10	< 10	52	< 10	1200
258761	94139402	< 10	3.14	1785	1	0.01	14	610	8	0.05	< 2	4	874	< 0.01	10	< 10	13	< 10	76
258762	94139402	< 10	1.08	2280	< 1	< 0.01	8	390	< 2	1.64	< 2	4	248	< 0.01	< 10	< 10	10	< 10	>10000
258763	94139402	< 10	1.49	1300	< 1	< 0.01	45	1210	14	0.44	2	8	192	< 0.01	< 10	< 10	56	< 10	312
258764	94139402	10	1.42	805	< 1	0.03	26	770	16	0.09	< 2	5	119	< 0.01	< 10	< 10	29	< 10	166
258765	94139402	< 10	0.48	405	5	0.01	7	1210	14	1.24	6	3	22	0.01	< 10	< 10	26	< 10	102
258766	94139402	< 10	0.86	520	< 1	< 0.01	27	880	84	0.87	14	5	14	< 0.01	< 10	< 10	68	< 10	68
258767	94139402	< 10	0.41	430	< 1	< 0.01	14	380	694	2.48	48	3	60	< 0.01	< 10	< 10	40	< 10	116
258768	94139402	< 10	0.65	215	< 1	< 0.01	15	470	284	1.30	32	4	108	< 0.01	< 10	< 10	67	< 10	584
258769	94139402	< 10	0.55	385	3	< 0.01	25	1450	28	0.08	4	4	17	< 0.01	< 10	< 10	33	< 10	70
258770	94139402	< 10	1.12	780	< 1	0.04	5	1710	6	3.07	2	3	14	< 0.01	< 10	< 10	75	< 10	94
258771	94139402	< 10	2.61	955	< 1	0.01	33	1260	86	0.90	10	27	18	< 0.01	< 10	< 10	259	< 10	206
258772	94139402	< 10	0.28	1005	< 1	< 0.01	22	410	1350	1.12	136	9	18	< 0.01	< 10	< 10	92	< 10	2550
258773	94139402	< 10	1.92	3960	< 1	< 0.01	24	900	36	0.55	12	21	125	< 0.01	< 10	< 10	181	< 10	686
258774	94139402	< 10	0.36	1000	3	< 0.01	24	500	120	0.22	16	3	12	< 0.01	< 10	< 10	40	< 10	294
258775	94139402	< 10	0.76	615	< 1	0.01	9	1250	140	1.30	16	3	17	< 0.01	< 10	< 10	62	< 10	2390
258776	94139402	< 10	< 0.01	80	< 1	< 0.01	4	390	>10000	9.79	6580	< 1	24	< 0.01	< 10	< 10	< 1	10	>10000
258777	94139402	< 10	1.67	660	1	0.01	8	1140	1455	0.34	136	6	12	< 0.01	< 10	< 10	126	< 10	4380
258778	94139402	< 10	0.77	340	< 1	< 0.01	18	580	1725	1.61	58	3	10	< 0.01	< 10	< 10	56	< 10	918
258779	94139402	< 10	0.73	2500	< 1	0.01	8	930	216	1.70	562	2	129	< 0.01	< 10	< 10	15	10	>10000
258780	94139402	< 10	0.21	175	1	< 0.01	5	350	1180	0.21	124	< 1	95	< 0.01	< 10	< 10	10	< 10	658
258781	94139402	< 10	0.62	460	< 1	< 0.01	27	510	152	5.02	28	3	13	< 0.01	< 10	< 10	50	< 10	1045
258782	94139402	< 10	1.35	840	8	< 0.01	30	750	626	0.84	10	5	14	< 0.01	< 10	< 10	93	< 10	6700
258783	94139402	< 10	0.02	345	< 1	< 0.01	15	410	488	4.00	694	1	8	< 0.01	< 10	< 10	8	< 10	332
258784	94139402	< 10	0.72	635	< 1	< 0.01	10	890	54	0.64	60	3	11	< 0.01	< 10	< 10	62	< 10	104
258785	94139402	< 10	0.01	45	3	< 0.01	9	60	18	0.61	22	< 1	5	< 0.01	< 10	< 10	6	< 10	64
258786	94139402	< 10	0.05	235	2	0.01	21	440	26	0.52	18	3	10	< 0.01	< 10	< 10	12	< 10	62
258787	94139402	< 10	0.04	135	8	< 0.01	11	300	42	0.51	14	1	6	< 0.01	< 10	< 10	23	< 10	46
258788	94139402	< 10	0.57	355	< 1	< 0.01	26	600	192	2.33	10	3	12	< 0.01	< 10	< 10	55	< 10	144
258789	94139402	< 10	0.71	605	26	< 0.01	28	1130	182	0.71	22	3	17	< 0.01	< 10	< 10	271	< 10	240
258790	94139402	< 10	0.91	955	3	< 0.01	13	530	12	0.68	12	1	9	< 0.01	< 10	< 10	40	< 10	62
258791	94139402	10	1.00	915	1	0.03	6	920	< 2	0.05	4	4	52	< 0.01	< 10	< 10	65	< 10	74

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 Account :HPQ

## CERTIFICATE OF ANALYSIS A0122350

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Au FA g/t	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %
258792	94139402	2.00	< 5	-----	< 0.2	2.71	8	< 10	60	0.5	< 2	2.42	1.5	13	59	31	4.05	< 10	10	
258793	94139402	1.34	45	-----	3.4	1.91	108	< 10	50	< 0.5	< 2	1.14	105.0	10	39	522	4.67	< 10	10520	0.13
258794	94139402	1.22	10	-----	1.2	1.54	44	< 10	220	< 0.5	< 2	0.31	11.5	9	31	218	3.26	< 10	1040	0.21
258795	94139402	1.20	25	-----	60.2	0.98	26	< 10	60	< 0.5	2	0.68	89.0	8	60	504	2.22	< 10	4650	0.23
258796	94139402	1.88	< 5	-----	1.6	1.07	20	< 10	90	< 0.5	< 2	2.23	2.5	10	32	18	3.69	< 10	110	0.22
258797	94139402	1.56	10	-----	0.6	1.59	28	< 10	80	< 0.5	2	1.69	1.5	10	40	22	4.25	< 10	30	0.27
258798	94139402	2.62	65	-----	10.8	0.34	238	< 10	50	0.5	8	2.15	3.5	14	34	515	5.90	< 10	130	0.25
258799	94139402	1.92	25	-----	2.6	0.69	234	< 10	150	< 0.5	< 2	3.91	3.0	7	21	156	3.40	< 10	140	0.33
258800	94139402	2.02	40	-----	14.0	0.02	64	< 10	140	< 0.5	< 2	12.35	5.0	3	27	461	5.48	< 10	390	0.04
258801	94139402	2.00	330	-----	61.6	1.84	156	< 10	70	< 0.5	< 2	0.23	1.0	11	72	211	5.99	< 10	50	0.28
258802	94139402	3.98	25	-----	0.2	1.13	28	< 10	170	< 0.5	2	0.08	< 0.5	3	54	10	5.40	< 10	20	0.20
258803	94139402	2.22	255	-----	3.6	3.81	202	< 10	10	0.5	4	0.87	6.0	36	104	300	>15.00	< 10	40	0.09
258804	94139402	1.78	40	-----	1.6	0.42	118	< 10	80	< 0.5	10	0.03	< 0.5	2	60	203	10.50	< 10	10	0.13
258805	94139402	2.74	15	-----	0.6	2.28	20	< 10	90	< 0.5	< 2	0.16	0.5	5	84	< 1	5.65	< 10	< 10	0.11
258806	94139402	2.34	< 5	-----	< 0.2	2.26	6	< 10	170	< 0.5	< 2	1.45	1.0	11	39	8	3.81	< 10	10	0.10
258807	94139402	3.06	35	-----	1.4	0.64	32	< 10	40	< 0.5	4	0.15	< 0.5	6	62	< 1	5.21	< 10	40	0.31
258901	94139402	2.72	< 5	-----	< 0.2	2.13	2	< 10	50	< 0.5	< 2	1.71	0.5	13	40	4	3.65	< 10	10	0.09
258902	94139402	1.96	< 5	-----	< 0.2	1.62	8	< 10	160	< 0.5	< 2	2.12	0.5	11	40	8	3.62	< 10	< 10	0.33
258903	94139402	1.76	180	-----	6.0	1.84	262	< 10	10	< 0.5	< 2	0.15	< 0.5	15	60	168	7.15	< 10	60	0.16

CERTIFICATION: *[Signature]*



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number : 3-B  
 Total Pages : 3  
 Certificate Date: 22-AUG-2001  
 Invoice No. : I0122350  
 P.O. Number :  
 Account : HPQ

Project : 17770/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0122350

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258792	94139402	10	2.11	1145	1	0.02	19	1290	6	0.08	2	5	108	< 0.01	< 10	< 10	110	< 10	82
258793	94139402	< 10	1.37	1345	2	0.03	18	1210	366	1.38	70	4	77	< 0.01	< 10	< 10	65	< 10	>10000
258794	94139402	< 10	0.84	640	4	0.01	6	1100	40	0.49	8	1	10	< 0.01	< 10	< 10	49	< 10	1290
258795	94139402	< 10	0.63	2320	3	< 0.01	6	740	>10000	1.98	46	1	17	< 0.01	< 10	< 10	14	< 10	>10000
258796	94139402	< 10	1.06	1120	1	0.03	6	1080	2340	1.46	6	4	89	< 0.01	< 10	< 10	33	< 10	386
258797	94139402	< 10	1.12	1040	1	0.04	6	1090	164	1.43	4	4	74	< 0.01	< 10	< 10	57	< 10	238
258798	94139402	< 10	0.95	1655	2	< 0.01	19	1320	390	2.78	58	4	154	< 0.01	< 10	< 10	26	< 10	408
258799	94139402	< 10	1.39	3010	< 1	< 0.01	20	1450	52	0.80	34	5	231	< 0.01	< 10	< 10	23	< 10	298
258800	94139402	< 10	4.03	9130	4	< 0.01	7	310	334	0.69	384	1	1055	< 0.01	< 10	< 10	12	< 10	422
258801	94139402	< 10	0.93	700	2	0.03	15	1150	66	1.72	36	4	16	< 0.01	< 10	< 10	80	< 10	166
258802	94139402	< 10	0.95	175	1	0.04	10	990	8	0.74	10	4	20	< 0.01	< 10	< 10	83	< 10	34
258803	94139402	< 10	2.25	1120	< 1	< 0.01	26	5850	144	9.63	36	13	35	0.01	< 10	< 10	1530	< 10	80
258804	94139402	< 10	0.20	130	2	0.01	8	700	24	1.38	10	1	13	< 0.01	< 10	< 10	50	< 10	36
258805	94139402	< 10	2.12	390	1	0.06	21	1250	8	1.16	6	6	12	< 0.01	< 10	< 10	113	< 10	46
258806	94139402	< 10	1.75	1045	< 1	0.04	10	1070	2	0.25	< 2	8	50	< 0.01	< 10	< 10	101	< 10	80
258807	94139402	< 10	0.21	70	6	0.07	13	820	34	2.77	4	1	21	< 0.01	< 10	< 10	22	< 10	48
258901	94139402	< 10	1.54	1035	< 1	0.04	10	1070	6	0.21	2	5	57	0.06	< 10	< 10	83	< 10	108
258902	94139402	< 10	1.16	1160	1	0.04	7	1140	< 2	0.40	8	7	140	< 0.01	< 10	< 10	63	< 10	74
258903	94139402	< 10	1.13	465	1	0.01	35	1220	66	3.29	6	3	13	< 0.01	< 10	< 10	80	< 10	66

CERTIFICATION: 





# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number : 1  
 Total Pages : 1  
 Certificate Date: 22-AUG-2001  
 Invoice No. : I0122900  
 P.O. Number :  
 Account : HPQ

Project : 17770/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

<b>CERTIFICATE OF ANALYSIS</b>	<b>A0122900</b>
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SAMPLE	PREP CODE	Ag g/t	Pb %	Zn %						
258388	212 --	310	9.17	17.45						
258389	212 --	-----	2.92	5.21						
258393	212 --	578	22.5	36.9						
258416	212 --	-----	-----	3.84						
258423	212 --	563	1.85	5.36						
258424	212 --	-----	1.84	6.22						
258431	212 --	595	-----	4.81						
258485	212 --	-----	1.51	5.20						
258762	212 --	-----	-----	4.46						
258776	212 --	>1500	11.55	3.30						
258779	212 --	224	-----	3.57						
258793	212 --	-----	-----	1.25						
258795	212 --	-----	11.45	1.11						

CERTIFICATION:



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Project : 17770/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number : 1  
 Total Pages : 1  
 Certificate Date: 23-AUG-2001  
 Invoice No. : 10122352  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS A0122352

SAMPLE	PREP CODE	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	SrO	TiO2	LOI	TOTAL
		% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF
258387	299 --	15.17	0.10	5.33	< 0.01	10.24	1.78	6.30	0.16	3.54	0.37	48.99	0.07	0.64	6.29	98.98
258390	299 --	17.10	0.36	1.30	< 0.01	7.51	3.91	3.75	0.17	3.26	0.24	56.92	0.95	0.66	3.89	99.12
258419	299 --	15.54	0.28	0.77	< 0.01	3.58	2.57	1.65	0.02	5.84	0.11	64.93	0.04	0.44	2.59	98.36
258420	299 --	3.62	0.15	0.05	< 0.01	3.66	0.65	0.63	< 0.01	0.37	0.03	87.64	0.01	0.23	2.03	99.07
258426	299 --	17.41	0.16	0.69	< 0.01	6.00	4.43	2.62	0.05	1.48	0.39	58.60	< 0.01	0.83	5.68	98.34
258429	299 --	17.96	0.20	5.12	< 0.01	8.47	3.09	3.35	0.26	3.30	0.38	48.00	0.04	0.67	7.22	98.06
258436	299 --	14.90	0.14	1.91	< 0.01	3.24	3.83	1.19	0.05	3.61	0.13	68.08	0.07	0.44	1.31	98.90
258549	299 --	15.82	0.07	2.87	< 0.01	5.24	3.29	2.52	0.11	1.69	0.34	60.75	0.02	0.53	5.08	98.33
258550	299 --	15.30	0.22	5.04	< 0.01	4.99	4.10	1.59	0.17	0.98	0.23	58.39	0.01	0.45	7.10	98.57
258791	299 --	15.99	0.23	2.79	< 0.01	5.11	4.20	1.89	0.13	2.81	0.20	60.61	0.03	0.44	4.31	98.74
258792	299 --	16.19	0.25	3.60	< 0.01	6.47	3.94	3.88	0.16	2.62	0.29	55.05	0.05	0.58	5.25	98.33
258796	299 --	15.69	0.21	3.17	< 0.01	5.94	3.73	1.97	0.16	3.35	0.24	58.39	0.03	0.50	5.23	98.61
258806	299 --	16.13	0.31	2.21	< 0.01	5.96	3.64	2.95	0.15	4.36	0.24	58.20	0.04	0.55	3.38	98.12

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



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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-A  
 Total Pages :3  
 Certificate Date: 27-AUG-2001  
 Invoice No. :10122526  
 P.O. Number :  
 Account :HPO

Project : 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A0122526

SAMPLE	PREP CODE	Weight Au ppb Kg FA+AA oz/ton	Au FA oz/ton	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	
258001	94139402	1.22	1325	11.6	0.69	40	< 10	90	< 0.5	< 2	1.29	104.0	3	47	193	1.49	< 10	13910	0.17	
258002	94139402	0.94	155	36.8	2.09	1850	< 10	30	1.0	26	0.65	4.5	84	40	>10000	7.99	< 10	170	0.25	
258003	94139402	1.14	< 5	0.2	3.19	14	< 10	100	< 0.5	< 2	4.91	7.5	27	38	48	6.79	< 10	50	0.11	
258004	94139402	1.04	90	1.6	1.78	60	< 10	30	0.5	< 2	2.18	3.5	403	21	114	6.51	< 10	10	0.25	
258005	94139402	1.22	335	3.0	0.44	1520	< 10	30	0.5	2	0.04	3.5	< 1	35	16	10.45	< 10	2220	0.30	
258006	94139402	1.18	525	3.2	0.66	1480	< 10	< 10	0.5	< 2	0.05	1.5	6	59	< 1	9.28	< 10	2160	0.19	
258007	94139402	2.12	3260	3.8	2.05	474	< 10	< 10	0.5	2	0.07	3.5	7	42	1100	8.00	< 10	800	0.11	
258008	94139402	2.22	4490	19.0	1.38	198	< 10	< 10	0.5	2	0.12	34.5	3	56	8140	7.45	10	3430	0.03	
258009	94139402	1.28	8800	51.2	0.06	24	< 10	< 10	0.5	24	7.70	>500	< 1	10	>10000	2.43	10	32000	0.03	
258010	94139402	1.28	>10000	1.893	>100.0	0.58	68	< 10	10	2.0	42	1.70	302	< 1	53	>10000	>15.00	10	16330	0.04
258201	94139402	1.60	310	1.6	1.67	32	< 10	10	0.5	< 2	1.32	8.0	15	44	1860	5.72	< 10	120	0.12	
258202	94139402	1.60	215	3.4	0.56	46	< 10	70	0.5	50	0.11	4.5	5	102	600	6.25	< 10	20	0.03	
258203	94139402	1.80	20	0.4	1.41	18	< 10	30	0.5	< 2	0.25	2.5	8	52	104	4.43	< 10	10	0.08	
258204	94139402	1.68	50	1.8	1.93	32	< 10	< 10	0.5	2	0.13	6.5	30	64	43	12.25	10	30	0.04	
258205	94139402	1.82	65	< 0.2	0.23	8	< 10	60	< 0.5	2	0.01	2.0	< 1	83	44	4.03	< 10	10	0.14	
258206	94139402	1.42	< 5	< 0.2	1.95	< 2	< 10	370	0.5	< 2	1.81	2.0	9	25	30	3.45	< 10	10	0.15	
258207	94139402	1.32	20	0.2	0.37	2	< 10	40	0.5	2	0.06	2.0	3	41	16	5.16	< 10	< 10	0.22	
258208	94139402	1.44	40	1.8	0.84	82	< 10	30	0.5	6	0.05	5.0	6	40	24	11.00	< 10	10	0.11	
258209	94139402	1.50	205	1.0	1.34	52	< 10	40	0.5	< 2	0.05	1.5	4	86	118	3.54	< 10	20	0.11	
258210	94139402	1.56	< 5	< 0.2	2.60	2	< 10	130	0.5	< 2	1.42	3.0	9	21	11	3.93	< 10	< 10	0.16	
258211	94139402	2.16	< 5	1.0	1.27	20	< 10	< 10	0.5	2	0.09	4.0	17	95	98	8.09	< 10	10	0.09	
258212	94139402	1.62	15	1.0	2.73	20	< 10	30	0.5	< 2	0.22	3.5	8	44	150	7.19	10	< 10	0.09	
258213	94139402	1.84	50	3.4	1.83	298	< 10	80	0.5	< 2	0.38	5.0	15	55	142	5.53	< 10	70	0.14	
258397	94139402	1.14	5	6.2	2.42	12	< 10	190	0.5	2	0.98	3.0	10	107	>10000	3.55	< 10	1020	0.03	
258398	94139402	0.86	0.015	>100.0	0.11	590	< 10	20	0.5	36	2.89	>500	4	27	3160	3.03	20>100000	0.05		
258399	94139402	0.88	475	>100.0	0.11	1020	< 10	10	0.5	16	5.13	>500	12	26	7510	2.93	< 10	92200	0.03	
258400	94139402	1.06	450	>100.0	< 0.01	1980	< 10	10	0.5	16	9.40	>500	16	< 1	>10000	3.87	< 10	72300	< 0.01	
258450	94139402	1.20	10	8.8	1.22	44	< 10	< 10	0.5	< 2	0.35	11.5	36	104	140	6.90	< 10	310	0.03	
258497	94139402	1.08	< 5	9.0	0.71	186	< 10	120	0.5	2	0.41	6.0	14	44	354	2.62	< 10	5530	0.14	
258498	94139402	0.78	< 5	1.4	0.82	24	< 10	30	< 0.5	< 2	5.03	4.0	< 1	66	366	0.69	< 10	2780	< 0.01	
258499	94139402	1.68	< 5	70.4	0.90	3860	< 10	90	0.5	18	0.47	246	144	54	>10000	3.31	< 10>100000	0.12		
258500	94139402	0.86	< 5	0.8	2.20	58	< 10	320	< 0.5	< 2	1.94	4.5	31	65	300	2.16	< 10	440	< 0.01	
258683	94139402	1.08	1435	3.4	0.13	462	< 10	30	< 0.5	< 2	0.10	3.0	8	120	75	4.39	< 10	860	0.11	
258684	94139402	1.06	265	3.6	0.26	774	< 10	< 10	0.5	2	3.23	5.0	15	53	301	4.80	< 10	270	0.21	
258685	94139402	0.88	5	0.6	2.31	14	< 10	60	< 0.5	< 2	2.47	3.5	17	46	110	4.13	< 10	60	0.10	
258686	94139402	1.74	15	27.6	3.34	126	< 10	90	0.5	6	0.97	13.0	11	39	3770	8.67	< 10	360	0.21	
258687	94139402	1.26	10	>100.0	0.23	56	< 10	50	0.5	2	6.35	80.0	18	10	122	8.12	< 10	4820	0.22	
258688	94139402	0.90	10	1.4	0.34	86	< 10	50	0.5	< 2	0.30	0.5	3	23	19	3.25	< 10	80	0.23	
258738	94139402	1.36	15	1.4	0.27	8	< 10	190	0.5	< 2	8.42	4.0	35	47	36	4.75	< 10	80	0.17	
258739	94139402	0.76	< 5	0.6	0.41	42	< 10	50	0.5	< 2	5.44	4.5	47	35	79	6.42	< 10	30	0.23	

\* SAMPLE "258398" CONTAINED HIGH Ag, Au ANALYZED BY GRAVIMETRIC FINISH.

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1-B  
 Total Pages :3  
 Certificate Date: 27-AUG-2001  
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 Account :HPQ

\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A0122526

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Ti ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF
258001	94139402	< 10	0.20	1085	< 1	< 0.01	< 1	490	7640	1.52	8	2	28	< 0.01	< 10	< 10	10	< 10	>10000	-----
258002	94139402	< 10	0.63	2090	6	< 0.01	6	870	170	3.28	16	4	18	< 0.01	< 10	< 10	40	20	366	-----
258003	94139402	< 10	2.14	2080	1	0.21	22	3480	4	0.15	10	12	262	0.49	< 10	< 10	190	10	168	16.00
258004	94139402	< 10	0.96	1145	5	< 0.03	11	1390	< 2	3.33	6	5	61	< 0.01	< 10	< 10	65	10	88	-----
258005	94139402	< 10	0.08	130	4	< 0.01	3	500	52	1.66	64	1	29	< 0.01	< 10	< 10	39	20	102	-----
258006	94139402	< 10	0.38	190	13	< 0.01	< 1	440	38	8.31	44	2	11	< 0.01	< 10	< 10	23	20	62	-----
258007	94139402	< 10	1.41	1105	7	< 0.01	1	550	44	4.37	28	5	8	< 0.01	< 10	< 10	88	10	222	-----
258008	94139402	< 10	0.88	1055	8	< 0.01	1	320	2140	4.52	20	2	48	< 0.01	< 10	< 10	52	10	3970	-----
258009	94139402	< 10	0.21	3450	5	< 0.01	3	150	>10000	3.44	122	4	77	< 0.01	< 10	< 10	1	20	>10000	-----
258010	94139402	< 10	0.48	1560	12	< 0.01	7	220	4330	7.11	54	1	43	< 0.01	< 10	10	17	100	>10000	-----
258201	94139402	< 10	1.05	865	7	0.03	9	1030	104	2.74	12	6	41	< 0.01	< 10	< 10	78	< 10	664	-----
258202	94139402	< 10	0.35	140	5	< 0.01	31	250	58	1.23	4	< 1	9	< 0.01	< 10	< 10	44	10	314	-----
258203	94139402	< 10	1.34	230	6	0.04	17	1060	12	2.69	8	4	14	< 0.01	< 10	< 10	65	< 10	186	-----
258204	94139402	< 10	1.19	330	18	0.03	20	900	26	6.95	2	3	22	< 0.01	< 10	< 10	84	20	202	-----
258205	94139402	< 10	0.07	30	8	0.01	< 1	400	6	0.38	4	< 1	9	< 0.01	< 10	< 10	5	< 10	100	-----
258206	94139402	< 10	1.51	800	< 1	0.04	2	950	2	0.02	< 2	5	55	0.01	< 10	< 10	85	< 10	134	-----
258207	94139402	< 10	0.12	25	6	0.01	6	920	2	2.35	6	< 1	9	< 0.01	< 10	< 10	7	< 10	94	-----
258208	94139402	< 10	0.41	210	7	0.03	4	820	22	0.70	4	3	10	< 0.01	< 10	< 10	55	20	114	-----
258209	94139402	< 10	0.88	185	9	< 0.01	32	410	6	0.70	6	3	8	< 0.01	< 10	< 10	121	< 10	98	-----
258210	94139402	< 10	1.60	1060	< 1	0.03	4	1180	4	0.09	6	5	31	< 0.01	< 10	< 10	89	< 10	122	-----
258211	94139402	< 10	0.73	170	7	0.03	22	580	8	5.85	8	3	8	< 0.01	< 10	< 10	49	10	258	-----
258212	94139402	< 10	1.86	620	5	0.03	15	1240	< 2	2.84	4	6	10	< 0.01	< 10	< 10	117	10	168	-----
258213	94139402	< 10	1.22	480	3	0.02	16	1140	76	1.91	16	5	14	< 0.01	< 10	< 10	89	< 10	350	-----
258397	94139402	< 10	1.28	835	1	< 0.01	1	250	< 2	0.23	4	1	49	< 0.01	< 10	< 10	35	< 10	222	-----
258398	94139402	< 10	0.75	7730	11	< 0.01	5	480	>10000	5.68	1790	1	56	< 0.01	< 10	< 10	< 1	40	>10000	-----
258399	94139402	< 10	0.65	5530	18	< 0.01	1	270	>10000	4.13	2870	1	90	< 0.01	< 10	< 10	8	20	>10000	-----
258400	94139402	< 10	2.48	>10000	40	< 0.01	3	140	>10000	2.26	4910	1	407	< 0.01	< 10	< 10	3	40	>10000	-----
258450	94139402	< 10	1.12	415	8	< 0.01	32	1140	618	5.42	260	3	14	< 0.01	< 10	< 10	33	10	926	4.41
258497	94139402	< 10	0.08	155	3	0.01	< 1	1850	466	0.95	216	4	56	< 0.01	< 10	< 10	10	< 10	572	-----
258498	94139402	< 10	0.14	365	< 1	< 0.01	< 1	650	78	< 0.01	172	1	385	0.04	< 10	< 10	38	< 10	284	-----
258499	94139402	< 10	0.14	455	3	< 0.01	19	840	102	0.90	>10000	9	61	< 0.01	< 10	< 10	30	10	3570	-----
258500	94139402	< 10	1.88	665	< 1	< 0.01	7	1930	38	< 0.01	996	5	322	0.18	< 10	< 10	93	< 10	274	-----
258683	94139402	< 10	< 0.01	60	6	< 0.01	1	120	74	3.99	100	1	6	< 0.01	< 10	< 10	6	< 10	258	-----
258684	94139402	< 10	0.05	1045	7	< 0.01	3	620	190	4.94	60	2	64	< 0.01	< 10	< 10	7	< 10	834	-----
258685	94139402	< 10	1.67	980	6	0.11	6	1280	12	2.77	30	13	93	0.07	< 10	< 10	155	< 10	204	-----
258686	94139402	< 10	0.83	1905	1	< 0.01	2	550	220	0.54	44	3	120	< 0.01	< 10	< 10	65	10	950	-----
258687	94139402	< 10	0.45	>10000	30	< 0.01	2	680	9560	2.94	122	5	379	< 0.01	< 10	< 10	21	20	9800	-----
258688	94139402	< 10	0.03	665	4	0.03	< 1	1070	74	2.31	26	1	47	< 0.01	< 10	< 10	12	< 10	236	-----
258738	94139402	< 10	1.99	1230	1	0.01	29	610	56	0.80	14	16	245	< 0.01	< 10	< 10	33	< 10	190	-----
258739	94139402	< 10	2.29	790	< 1	0.03	56	1290	18	0.03	20	24	272	< 0.01	< 10	< 10	21	< 10	194	-----

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

\* SAMPLE "258398" CONTAINED HIGH Ag, Au ANALYZED BY GRAVIMETRIC FINISH.



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-C  
 Total Pages :3  
 Certificate Date: 27-AUG-2001  
 Invoice No. :10122526  
 P.O. Number :  
 Account :HPQ

Project : 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A0122526

SAMPLE	PREP CODE	BaO % XRF	CaO % XRF	Cr2O3 % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	SrO % XRF	TiO2 % XRF	LOI % XRF	TOTAL %
258001	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258002	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258003	94139402	0.08	10.73	< 0.01	11.81	1.12	3.94	0.30	2.92	0.94	41.43	0.10	2.21	6.94	98.52
258004	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258005	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258006	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258007	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258008	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258009	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258010	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258201	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258202	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258203	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258204	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258205	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258206	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258207	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258208	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258209	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258210	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258211	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258212	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258213	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258397	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258398	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258399	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258400	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258450	94139402	< 0.01	0.36	< 0.01	10.28	0.33	2.08	0.04	0.40	0.23	75.48	< 0.01	0.25	5.22	99.08
258497	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258498	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258499	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258500	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258683	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258684	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258685	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258686	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258687	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258688	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258738	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258739	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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

\* SAMPLE "258398" CONTAINED HIGH Ag, Au ANALYZED BY GRAVIMETRIC FINISH.



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :2-A  
 Total Pages :3  
 Certificate Date: 27-AUG-2001  
 Invoice No. : I0122526  
 P.O. Number :  
 Account : HPQ

\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A0122526

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Au FA oz/ton	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %
258740	94139402	0.66	20	-----	1.4	0.04	438	< 10	< 10	0.5	< 2	0.30	0.5	15	74	< 1	10.30	< 10	2260	0.08
258741	94139402	1.06	< 5	-----	< 0.2	1.26	18	< 10	120	0.5	< 2	0.21	1.0	5	22	< 1	3.13	< 10	30	0.23
258742	94139402	0.52	< 5	-----	1.8	0.98	34	< 10	< 10	0.5	< 2	2.59	3.5	18	53	< 1	5.19	< 10	130	0.26
258743	94139402	1.26	10	-----	0.2	0.89	6	< 10	10	0.5	< 2	1.82	2.0	10	16	54	4.30	< 10	140	0.25
258744	94139402	0.80	55	-----	2.4	2.21	28	< 10	10	0.5	< 2	2.92	2.5	14	35	700	5.45	< 10	50	0.20
258745	94139402	0.70	200	-----	3.6	0.91	66	< 10	< 10	0.5	< 2	0.39	2.0	20	69	625	6.94	< 10	140	0.47
258746	94139402	0.64	25	-----	1.4	0.74	58	< 10	< 10	0.5	< 2	0.51	2.0	15	56	< 1	5.57	< 10	210	0.19
258747	94139402	1.06	10	-----	1.0	0.91	14	< 10	< 10	0.5	< 2	2.14	2.5	16	30	590	5.89	< 10	100	0.22
258748	94139402	1.16	165	-----	2.2	0.43	32	< 10	< 10	0.5	< 2	0.52	1.5	18	58	789	8.49	< 10	470	0.26
258824	94139402	2.06	< 5	-----	2.4	2.79	154	< 10	20	0.5	< 2	0.13	2.5	< 1	17	50	7.32	< 10	10	0.10
258825	94139402	2.06	55	-----	1.8	3.33	20	< 10	40	0.5	< 2	0.22	5.0	9	33	133	6.91	< 10	80	0.11
258826	94139402	2.12	205	-----	1.6	5.04	266	< 10	< 10	0.5	< 2	0.19	7.0	47	43	< 1	13.15	10	10	0.03
258827	94139402	1.56	10	-----	0.2	1.36	6	< 10	90	0.5	< 2	0.05	0.5	< 1	32	< 1	6.11	< 10	< 10	0.13
258828	94139402	1.30	10	-----	5.0	0.58	254	< 10	< 10	0.5	< 2	0.01	1.0	55	72	155	8.15	< 10	30	0.08
258829	94139402	1.54	820	-----	21.4	0.67	3790	< 10	< 10	1.0	36	0.01	14.5	17	45	877	>15.00	< 10	520	0.10
258830	94139402	1.38	85	-----	7.6	0.47	586	< 10	< 10	0.5	16	< 0.01	8.0	59	71	576	15.00	< 10	160	0.03
258831	94139402	1.66	125	-----	50.2	4.24	116	< 10	< 10	1.5	20	0.06	17.0	113	58	>10000	>15.00	20	430	0.04
258832	94139402	1.92	315	-----	6.4	0.49	1610	< 10	200	1.0	16	< 0.01	11.0	< 1	21	< 1	>15.00	< 10	10	0.16
258833	94139402	1.80	< 5	-----	0.8	3.32	26	< 10	70	0.5	< 2	0.61	4.0	9	7	35	5.53	< 10	10	0.17
258834	94139402	1.00	50	-----	4.6	2.33	138	< 10	30	0.5	< 2	0.12	4.5	3	56	40	8.22	< 10	160	0.14
258835	94139402	2.24	1820	-----	7.2	3.80	172	< 10	< 10	1.0	2	0.11	10.5	84	58	2940	13.80	10	60	0.08
258836	94139402	1.82	20	-----	0.2	0.51	14	< 10	80	0.5	< 2	0.07	1.5	< 1	26	< 1	4.56	< 10	< 10	0.21
258837	94139402	1.60	40	-----	2.0	0.58	14	< 10	< 10	0.5	< 2	13.30	9.0	15	14	144	8.35	< 10	10	0.12
258838	94139402	1.66	320	-----	5.2	0.33	132	< 10	20	0.5	18	0.20	7.5	< 1	38	249	13.80	< 10	540	0.15
258839	94139402	1.48	125	-----	2.0	1.69	96	< 10	< 10	1.0	10	0.10	12.0	137	63	< 1	>15.00	10	10	0.05
258840	94139402	1.84	1415	-----	0.8	0.66	12	< 10	260	0.5	< 2	< 0.01	2.0	< 1	39	< 1	7.99	< 10	30	0.19
258841	94139402	1.78	45	-----	2.0	1.00	22	< 10	30	0.5	< 2	0.18	1.5	6	41	< 1	4.72	< 10	20	0.20
258842	94139402	1.96	25	-----	1.8	1.44	18	< 10	10	0.5	< 2	0.42	3.0	10	21	< 1	6.39	< 10	100	0.17
258843	94139402	1.90	70	-----	1.6	2.11	134	< 10	< 10	0.5	< 2	0.32	3.0	9	27	< 1	5.30	< 10	1430	0.11
258844	94139402	1.96	20	-----	0.6	0.72	40	< 10	< 10	0.5	< 2	0.29	1.5	8	42	< 1	5.05	< 10	260	0.19
258845	94139402	1.52	505	-----	2.4	2.03	94	< 10	< 10	1.0	16	0.04	10.0	363	42	< 1	>15.00	20	< 10	0.02
258846	94139402	1.78	15	-----	0.8	0.36	2	< 10	140	0.5	< 2	2.81	1.0	4	43	63	2.68	< 10	40	0.16
258847	94139402	1.50	< 5	-----	< 0.2	0.42	10	< 10	80	0.5	< 2	3.02	2.0	4	14	< 1	3.30	< 10	10	0.21
258848	94139402	1.36	< 5	-----	< 0.2	0.76	18	< 10	40	0.5	< 2	3.94	3.0	6	5	< 1	3.77	< 10	20	0.20
259949	94139402	1.14	< 5	-----	< 0.2	0.62	2	< 10	20	< 0.5	< 2	0.13	0.5	< 1	103	< 1	1.41	< 10	< 10	0.05
258850	94139402	1.28	710	-----	36.0	1.45	224	< 10	< 10	2.0	30	2.12	40.0	504	55	>10000	>15.00	30	9370	0.05
258851	94139402	1.14	50	-----	35.2	0.13	2960	< 10	< 10	0.5	8	4.19	113.5	43	50	>10000	9.92	< 10	15180	0.05
258852	94139402	1.02	55	-----	0.6	1.96	16	< 10	140	0.5	< 2	2.06	2.5	39	41	359	3.44	< 10	110	0.10
258853	94139402	0.94	>10000	0.570	67.6	2.84	258	< 10	< 10	1.5	22	0.36	17.5	239	39	>10000	>15.00	10	1450	0.16
258854	94139402	1.46	135	-----	0.2	2.02	< 2	< 10	100	0.5	< 2	2.67	2.5	14	24	745	2.55	< 10	30	0.08

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\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A0122526

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF
258740	94139402	< 10	0.04	270	12 < 0.01		15	310	< 2	8.66	56	1	16 < 0.01	< 10	< 10	6	10	< 2		
258741	94139402	< 10	0.56	475	< 1 0.03		< 1	1100	6	0.22	6	3	16 < 0.01	< 10	< 10	19	< 10	74		
258742	94139402	< 10	0.66	955	10 < 0.01		7	1100	76	4.82	8	6	50 < 0.01	< 10	< 10	38	< 10	234		
258743	94139402	< 10	0.95	1030	6 0.02		4	1320	< 2	3.87	2	6	42 < 0.01	< 10	< 10	33	< 10	48		
258744	94139402	< 10	1.75	1820	7 < 0.01		5	1160	< 2	4.19	4	8	45 < 0.01	< 10	< 10	103	< 10	124		
258745	94139402	< 10	0.14	185	15 0.01		2	1090	48	6.41	4	3	13 < 0.01	< 10	< 10	19	< 10	96		
258746	94139402	< 10	0.48	395	7 < 0.01		4	1130	190	4.99	6	5	11 < 0.01	< 10	< 10	32	< 10	148		
258747	94139402	< 10	1.03	1000	20 0.01		6	1420	< 2	5.47	6	8	49 < 0.01	< 10	< 10	36	< 10	94		
258748	94139402	< 10	0.15	205	16 < 0.01		3	1480	< 2	9.21	6	2	13 < 0.01	< 10	< 10	8	< 10	20		
258824	94139402	< 10	1.67	630	2 0.02		< 1	1150	24	0.31	6	4	8 < 0.01	< 10	< 10	90	< 10	30		
258825	94139402	< 10	1.65	665	1 0.01		9	1000	398	0.13	< 2	5	11 < 0.01	< 10	< 10	102	< 10	364		
258826	94139402	< 10	2.55	1090	18 0.01		29	1160	4	3.26	2	7	15 < 0.01	< 10	< 10	112	10	84		
258827	94139402	< 10	0.98	190	4 0.04		< 1	1250	< 2	0.83	2	3	25 < 0.01	< 10	< 10	78	< 10	< 2		
258828	94139402	< 10	0.17	50	21 0.01		5	450	18	1.67	22	1	7 < 0.01	< 10	< 10	35	< 10	12		
258829	94139402	< 10	0.10	160	40 < 0.01		5	390	1165	0.87	90	1	12 < 0.01	< 10	< 10	14	50	274		
258830	94139402	< 10	0.04	90	32 < 0.01		6	430	24	0.21	72	1	8 < 0.01	< 10	< 10	48	40	86		
258831	94139402	< 10	1.43	655	33 < 0.01		23	460	116	5.17	12	3	13 < 0.01	< 10	< 10	65	60	444		
258832	94139402	< 10	0.14	165	5 0.01		5	570	54	0.52	14	1	16 < 0.01	< 10	< 10	62	50	2		
258833	94139402	< 10	2.10	1245	1 0.04		2	1300	< 2	0.32	6	5	34 < 0.01	< 10	< 10	101	10	66		
258834	94139402	< 10	1.57	605	4 0.03		9	1280	540	1.80	8	5	20 < 0.01	< 10	< 10	110	20	70		
258835	94139402	< 10	1.85	750	28 0.01		14	620	< 2	6.28	6	4	14 < 0.01	< 10	< 10	73	40	48		
258836	94139402	< 10	0.29	50	7 0.03		< 1	610	< 2	1.35	2	1	18 < 0.01	< 10	< 10	29	< 10	< 2		
258837	94139402	< 10	4.77	6010	6 0.01		7	590	< 2	3.28	< 2	1	519 < 0.01	< 10	< 10	11	10	2		
258838	94139402	< 10	0.21	105	11 0.01		12	740	132	1.66	10	1	25 < 0.01	< 10	< 10	25	30	178		
258839	94139402	< 10	0.99	320	21 0.02		7	770	< 2	5.85	8	3	13 < 0.01	< 10	< 10	96	50	12		
258840	94139402	< 10	0.14	40	7 0.03		< 1	470	< 2	0.41	6	1	26 < 0.01	< 10	< 10	38	10	< 2		
258841	94139402	< 10	0.78	165	4 0.03		< 1	1320	20	2.32	2	1	9 < 0.01	< 10	< 10	30	< 10	< 2		
258842	94139402	< 10	1.42	220	4 0.03		< 1	1650	< 2	3.98	2	4	12 < 0.01	< 10	< 10	59	< 10	6		
258843	94139402	< 10	2.33	365	6 0.06		1	1520	< 2	3.03	< 2	5	22 < 0.01	< 10	< 10	130	< 10	10		
258844	94139402	< 10	0.56	125	6 0.03		< 1	1330	< 2	3.54	< 2	1	16 < 0.01	< 10	< 10	24	< 10	< 2		
258845	94139402	< 10	1.15	330	84 0.02		9	490	< 2	>10.00	6	4	12 < 0.01	< 10	< 10	117	50	6		
258846	94139402	< 10	0.29	1280	2 0.04		< 1	1040	6	0.11	8	5	113 < 0.01	< 10	< 10	9	< 10	12		
258847	94139402	< 10	0.81	1500	< 1 0.03		1	1030	< 2	0.08	2	7	226 < 0.01	< 10	< 10	9	< 10	42		
258848	94139402	< 10	0.86	1255	1 0.01		< 1	1380	< 2	0.09	2	7	296 < 0.01	< 10	< 10	9	< 10	22		
258849	94139402	< 10	0.18	410	< 1 0.02		< 1	500	< 2	0.01	< 2	< 1	24 < 0.01	< 10	< 10	10	< 10	< 2		
258850	94139402	< 10	0.12	510	24 0.03		29	710	< 2	>10.00	32	< 1	60 < 0.01	< 10	20	14	100	8260		
258851	94139402	< 10	1.19	3580	82 0.01		7	440	298	7.40	1420	5	51 < 0.01	< 10	< 10	10	30	4060		
258852	94139402	< 10	1.57	935	1 0.05		4	1120	< 2	0.81	68	11	40 0.01	< 10	< 10	118	< 10	64		
258853	94139402	< 10	1.05	1285	73 < 0.01		17	610	164	>10.00	14	9	17 < 0.01	< 10	< 10	78	70	436		
258854	94139402	< 10	1.89	630	1 0.07		2	1290	< 2	0.51	2	22	59 < 0.01	< 10	< 10	160	< 10	< 2		

\* SAMPLE "258398" CONTAINED HIGH Ag, Au ANALYZED BY GRAVIMETRIC FINISH.

CERTIFICATION:



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :2-C  
 Total Pages :3  
 Certificate Date: 27-AUG-2001  
 Invoice No. : I0122526  
 P.O. Number :  
 Account : HPC

\* PLEASE NOTE

<b>CERTIFICATE OF ANALYSIS</b>	<b>A0122526</b>
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SAMPLE	PREP CODE	BaO	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	SrO	TiO2	LOI	TOTAL	
		% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	%
258740	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258741	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258742	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258743	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258744	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258745	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258746	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258747	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258748	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258824	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258825	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258826	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258827	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258828	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258829	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258830	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258831	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258832	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258833	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258834	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258835	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258836	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258837	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258838	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258839	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258840	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258841	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258842	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258843	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258844	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258845	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258846	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258847	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258848	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258849	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258850	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258851	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258852	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258853	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258854	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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

\* SAMPLE "258398" CONTAINED HIGH Ag, Au ANALYZED BY GRAVIMETRIC FINISH.





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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :3-A  
 Total Pages :3  
 Certificate Date: 27-AUG-2001  
 Invoice No. : I0122526  
 P.O. Number :  
 Account : HPQ

\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A0122526

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Au FA oz/ton	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	
258855	94139402	1.08	7530	-----	19.8	1.73	254	< 10	< 10	0.5	8	9.94	< 0.5	77	13	>10000	10.05	< 10	160	0.01	
258856	94139402	0.80	830	-----	20.6	1.85	72	< 10	< 10	0.5	20	10.50	>500	23	8	1920	7.00	10	97900	0.07	
258857	94139402	1.12	165	-----	0.6	1.95	20	< 10	30	0.5	< 2	1.82	9.0	10	33	465	3.06	< 10	520	0.10	
258858	94139402	1.86	55	-----	1.4	0.31	728	< 10	40	0.5	< 2	0.53	6.5	1	46	27	2.82	< 10	470	0.27	
258859	94139402	1.08	< 5	-----	1.6	0.23	8	< 10	80	0.5	< 2	0.37	4.0	6	22	< 1	4.48	< 10	140	0.29	
258907	94139402	0.92	85	-----	0.6	0.45	258	< 10	40	0.5	< 2	0.89	2.5	24	66	239	2.95	< 10	80	0.19	
258908	94139402	1.56	415	-----	0.6	1.63	26	< 10	10	< 0.5	< 2	3.57	< 0.5	15	29	945	5.82	< 10	460	0.23	
258909	94139402	1.74	315	-----	2.2	0.48	80	< 10	130	< 0.5	< 2	3.61	7.5	16	19	4740	3.61	< 10	1270	0.21	
258910	94139402	1.84	55	-----	0.2	0.63	14	< 10	30	< 0.5	< 2	3.26	< 0.5	25	38	160	5.87	< 10	60	0.28	
258911	94139402	1.16	415	-----	2.6	0.31	212	< 10	30	< 0.5	< 2	0.34	< 0.5	20	73	939	4.84	< 10	200	0.21	
258912	94139402	1.24	1675	-----	19.4	0.15	796	< 10	< 10	< 0.5	8	2.10	18.5	23	78	5690	10.65	< 10	3840	0.11	
258913	94139402	1.16	15	-----	0.2	1.14	2	< 10	60	< 0.5	< 2	0.65	< 0.5	12	42	14	3.26	< 10	40	0.25	
258914	94139402	1.54	< 5	-----	< 0.2	2.20	18	< 10	160	0.5	< 2	1.14	< 0.5	11	39	36	4.10	< 10	50	0.13	
258915	94139402	1.26	25	-----	< 0.2	2.23	6	< 10	30	< 0.5	< 2	0.24	< 0.5	12	28	< 1	6.62	< 10	10	0.17	
258916	94139402	1.40	75	-----	0.4	0.36	< 2	< 10	90	< 0.5	< 2	0.02	< 0.5	4	36	8	3.13	< 10	180	0.27	
258917	94139402	1.12	75	-----	< 0.2	2.76	6	< 10	80	< 0.5	< 2	0.43	< 0.5	13	14	103	5.51	< 10	20	0.08	
258918	94139402	1.16	150	-----	0.2	0.47	8	< 10	< 10	< 0.5	< 2	0.26	< 0.5	14	40	64	6.06	< 10	20	0.28	
258919	94139402	1.32	60	-----	0.8	2.08	12	< 10	< 10	< 0.5	< 2	0.17	< 0.5	11	40	31	11.00	< 10	40	0.16	
258920	94139402	2.70	4070	-----	3.2	1.37	110	< 10	< 10	0.5	< 2	0.02	< 0.5	6	48	122	>15.00	10	80	0.04	
258921	94139402	1.42	< 5	-----	< 0.2	0.35	< 2	< 10	90	< 0.5	< 2	0.03	< 0.5	7	56	11	3.26	< 10	290	0.18	
258922	94139402	1.48	5	-----	< 0.2	0.91	4	< 10	40	0.5	< 2	1.18	< 0.5	10	51	8	3.79	< 10	10	0.14	
258923	94139402	1.54	10	-----	< 0.2	0.02	18	< 10	90	< 0.5	< 2	0.26	< 0.5	4	129	44	1.84	< 10	860	0.01	
258924	94139402	1.26	30	-----	30.8	0.32	98	< 10	70	< 0.5	< 2	0.26	9.5	17	40	43	3.75	< 10	1990	0.27	
258950	-- --	0.00	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258951	94139402	1.30	95	-----	0.6	2.39	94	< 10	< 10	0.5	< 2	1.28	< 0.5	116	127	9	14.30	< 10	30	0.14	
258952	94139402	1.16	645	-----	4.4	1.90	268	< 10	< 10	0.5	< 2	0.02	< 0.5	145	60	40	>15.00	< 10	40	0.03	
258953	94139402	1.14	535	-----	< 0.2	0.52	18	< 10	< 10	< 0.5	< 2	0.16	< 0.5	9	75	5	8.05	< 10	170	0.18	
258954	94139402	0.88	25	-----	0.6	0.43	16	< 10	20	< 0.5	< 2	0.52	< 0.5	15	55	139	4.55	< 10	850	0.22	
258955	94139402	1.08	495	-----	1.0	0.02	18	< 10	< 10	< 0.5	< 2	< 0.01	< 0.5	30	85	12	>15.00	< 10	100	0.07	
258956	94139402	1.18	8340	-----	14.0	0.73	26	< 10	10	0.5	< 2	9.13	2.5	4	16	>10000	8.61	< 10	560	0.06	
258957	94139402	1.26	9590	-----	28.2	0.31	12	< 10	20	< 0.5	< 2	10.65	92.5	3	4	8300	7.52	< 10	4450	0.08	

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

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\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A0122526

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF
258955	94139402	< 10	1.58	3530	23	< 0.01	12	270	< 2	6.85	8	7	269	< 0.01	< 10	< 10	48	50	58	-----
258856	94139402	< 10	1.04	3000	10	< 0.01	9	570	300	6.71	24	5	94	0.01	< 10	< 10	59	30	>10000	-----
258857	94139402	< 10	1.79	875	3	0.05	1	850	< 2	1.15	< 2	8	56	0.01	< 10	< 10	92	< 10	698	-----
258858	94139402	< 10	0.04	440	4	0.01	< 1	680	26	2.49	10	1	32	< 0.01	< 10	< 10	10	< 10	450	-----
258859	94139402	< 10	0.14	2490	1	< 0.01	< 1	1010	502	0.05	< 2	4	31	< 0.01	< 10	< 10	22	< 10	726	-----
258907	94139402	< 10	0.11	230	3	0.02	< 1	930	104	1.77	6	3	22	< 0.01	< 10	< 10	16	< 10	74	-----
258908	94139402	< 10	0.94	895	8	0.01	5	1380	20	4.75	2	6	115	< 0.01	< 10	< 10	46	< 10	38	-----
258909	94139402	< 10	0.92	1110	7	0.04	5	1350	12	1.29	290	18	153	< 0.01	< 10	< 10	32	< 10	1675	-----
258910	94139402	< 10	0.89	860	14	0.01	5	1210	20	4.32	< 2	10	108	< 0.01	< 10	< 10	26	10	32	-----
258911	94139402	< 10	0.03	110	23	< 0.01	4	830	24	3.77	24	3	19	< 0.01	< 10	< 10	8	10	10	-----
258912	94139402	< 10	0.32	1510	14	< 0.01	4	380	592	>10.00	852	4	57	< 0.01	< 10	< 10	8	10	3550	-----
258913	94139402	< 10	0.82	450	5	0.03	4	1030	10	2.44	2	2	14	< 0.01	< 10	< 10	36	< 10	24	-----
258914	94139402	< 10	1.52	995	4	0.05	6	930	8	1.05	< 2	8	43	< 0.01	< 10	< 10	105	< 10	98	-----
258915	94139402	< 10	1.36	330	14	0.04	2	1240	10	3.67	< 2	2	8	< 0.01	< 10	< 10	67	< 10	40	-----
258916	94139402	< 10	0.03	20	5	0.01	1	580	80	1.18	< 2	1	60	< 0.01	< 10	< 10	8	< 10	32	-----
258917	94139402	< 10	1.80	1765	4	0.05	1	1350	< 2	1.35	< 2	6	25	< 0.01	< 10	< 10	155	< 10	118	-----
258918	94139402	< 10	0.11	180	9	< 0.01	1	1240	20	5.51	< 2	< 1	27	< 0.01	< 10	< 10	6	10	10	-----
258919	94139402	< 10	1.14	385	7	0.03	< 1	1270	14	5.73	< 2	3	19	< 0.01	< 10	< 10	63	10	42	-----
258920	94139402	< 10	0.79	820	24	< 0.01	< 1	320	48	>10.00	< 2	1	17	< 0.01	< 10	< 10	38	40	40	-----
258921	94139402	< 10	0.05	105	3	0.01	7	830	12	1.99	2	1	930	< 0.01	< 10	< 10	5	< 10	6	-----
258922	94139402	10	0.50	285	5	0.01	13	1300	12	3.01	< 2	3	56	< 0.01	< 10	< 10	8	< 10	14	-----
258923	94139402	< 10	< 0.01	40	3	< 0.01	3	20	16	2.06	14	< 1	6350	< 0.01	< 10	< 10	< 1	< 10	12	-----
258924	94139402	< 10	0.03	1475	6	< 0.01	1	1080	1045	1.87	26	2	50	< 0.01	< 10	< 10	9	< 10	1440	-----
258950	-- --	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	-----
258951	94139402	< 10	1.64	2090	15	< 0.01	21	560	40	>10.00	2	5	55	< 0.01	< 10	< 10	48	30	58	-----
258952	94139402	< 10	0.73	555	23	< 0.01	< 1	210	130	>10.00	< 2	1	20	< 0.01	< 10	< 10	32	40	82	-----
258953	94139402	< 10	0.31	60	12	0.02	8	540	22	7.97	< 2	< 1	14	< 0.01	< 10	< 10	13	10	6	13.70
258954	94139402	< 10	0.10	325	6	< 0.01	6	1080	30	3.46	< 2	5	14	< 0.01	< 10	< 10	14	< 10	68	-----
258955	94139402	< 10	0.01	5	28	< 0.01	< 1	170	48	>10.00	6	< 1	15	< 0.01	< 10	< 10	1	40	< 2	-----
258956	94139402	10	4.20	>10000	8	< 0.01	< 1	330	164	5.80	< 2	3	132	< 0.01	< 10	< 10	40	20	10	454
258957	94139402	10	3.98	>10000	7	< 0.01	< 1	370	8010	4.02	10	3	118	< 0.01	< 10	70	28	< 10	8380	-----

\* SAMPLE "258939" CONTAINED HIGH Ag, Au ANALYZED BY GRAVIMETRIC FINISH.

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project : 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :3-C  
 Total Pages :3  
 Certificate Date: 27-AUG-2001  
 Invoice No. : I0122526  
 P.O. Number :  
 Account : HPQ

\* PLEASE NOTE

## CERTIFICATE OF ANALYSIS A0122526

SAMPLE	PREP CODE	BaO	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	SrO	TiO2	LOI	TOTAL
		% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF
258855	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258856	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258857	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258858	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258859	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258907	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258908	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258909	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258910	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258911	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258912	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258913	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258914	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258915	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258916	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258917	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258918	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258919	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258920	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258921	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258922	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258923	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258924	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258950	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258951	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258952	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258953	94139402	0.18	0.27	< 0.01	12.12	3.06	1.38	0.01	1.67	0.17	57.06	0.01	0.54	7.90	98.07
258954	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258955	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258956	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258957	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CERTIFICATION:  \*

\* SAMPLE "258398" CONTAINED HIGH Ag, Au ANALYZED BY GRAVIMETRIC FINISH.



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1-A  
 Total Pages :2  
 Certificate Date: 29-AUG-2001  
 Invoice No. : I0122789  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS A0122789

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
258011	94139402	1.52	8220	9.6	0.40	166	< 10	30	< 0.5	< 2	0.49	11.5	5	52	3770	4.68	< 10	1510	0.12	< 10
258012	94139402	1.60	3290	18.6	0.11	146	< 10	< 10	< 0.5	< 2	1.90	14.5	< 1	52	7010	7.16	< 10	2780	0.01	< 10
258013	94139402	1.66	1700	12.8	2.02	288	< 10	10	0.5	< 2	2.91	5.0	6	34	3330	9.31	10	850	0.05	< 10
258014	94139402	1.10	635	5.8	1.41	460	< 10	40	< 0.5	< 2	3.42	59.0	12	29	259	6.06	10	4390	0.12	< 10
258101	94139402	0.82	65	0.2	0.24	16	< 10	10	< 0.5	< 2	3.80	< 0.5	16	27	906	4.79	< 10	130	0.19	< 10
258102	94139402	1.14	80	2.2	0.15	104	< 10	30	< 0.5	< 2	4.26	13.5	9	55	230	3.49	< 10	650	0.09	< 10
258103	94139402	1.14	10	< 0.2	1.40	12	< 10	30	< 0.5	< 2	2.50	< 0.5	14	28	66	4.31	< 10	80	0.14	< 10
258104	94139402	1.28	170	4.4	0.86	92	< 10	20	< 0.5	< 2	1.89	2.5	15	32	944	8.14	< 10	150	0.18	< 10
258105	94139402	0.78	905	6.8	0.04	136	< 10	< 10	0.5	< 2	0.04	3.0	3	57	239	>15.00	10	2240	0.03	< 10
258106	94139402	0.76	25	0.6	1.39	12	< 10	10	< 0.5	6	2.51	< 0.5	24	34	846	6.18	< 10	90	0.20	< 10
258214	94139402	1.58	100	0.4	1.01	4	< 10	20	< 0.5	2	0.14	< 0.5	11	43	8	6.60	< 10	10	0.11	< 10
258215	94139402	1.30	25	< 0.2	0.55	14	< 10	60	< 0.5	< 2	0.07	< 0.5	4	34	4	3.70	< 10	10	0.17	< 10
258216	94139402	1.20	30	< 0.2	0.10	8	< 10	320	< 0.5	< 2	< 0.01	< 0.5	1	10	12	9.68	< 10	350	0.04	< 10
258217	94139402	1.26	10	< 0.2	0.49	< 2	< 10	40	< 0.5	< 2	0.09	< 0.5	3	35	1	3.16	< 10	30	0.17	< 10
258218	94139402	1.54	40	< 0.2	0.31	< 2	< 10	140	< 0.5	< 2	< 0.01	< 0.5	2	29	2	2.84	< 10	20	0.13	< 10
258219	94139402	1.52	35	0.6	0.20	8	< 10	< 10	< 0.5	6	0.60	< 0.5	11	32	10	6.78	< 10	10	0.12	< 10
258220	94139402	1.22	10	0.6	1.08	48	< 10	10	< 0.5	6	0.11	< 0.5	7	18	15	5.60	< 10	340	0.12	< 10
258221	94139402	1.46	100	2.0	1.63	88	< 10	10	< 0.5	< 2	0.20	0.5	10	26	7	8.39	< 10	10	0.12	< 10
258222	94139402	1.66	145	3.6	0.08	34	< 10	10	< 0.5	< 2	13.35	4.0	3	24	115	8.07	< 10	1420	0.05	< 10
258223	94139402	1.32	350	6.2	0.66	10	< 10	10	< 0.5	< 2	0.26	< 0.5	16	30	19	6.30	< 10	260	0.17	< 10
258224	94139402	1.26	335	2.2	0.11	98	< 10	< 10	< 0.5	10	0.02	< 0.5	42	65	17	9.93	< 10	120	0.12	< 10
258225	94139402	1.66	60	1.6	0.08	< 2	< 10	80	< 0.5	< 2	12.65	6.0	3	16	16	1.14	< 10	780	0.06	< 10
258226	94139402	1.62	210	3.2	1.81	34	< 10	10	0.5	8	0.18	< 0.5	14	38	22	>15.00	10	20	0.14	< 10
258227	94139402	1.40	155	1.4	0.54	36	< 10	10	< 0.5	10	0.27	< 0.5	11	32	21	8.30	< 10	50	0.15	< 10
258228	94139402	1.52	65	0.8	0.56	20	< 10	< 10	< 0.5	2	0.30	< 0.5	11	42	17	7.21	< 10	10	0.15	< 10
258229	94139402	2.12	1405	3.6	0.10	68	< 10	< 10	0.5	8	0.53	< 0.5	46	50	362	14.45	< 10	420	0.08	< 10
258230	94139402	1.58	< 5	< 0.2	2.24	2	< 10	40	< 0.5	2	0.35	< 0.5	15	80	23	4.16	< 10	< 10	0.03	< 10
258231	94139402	1.22	10	1.2	1.33	14	< 10	1280	< 0.5	< 2	0.24	< 0.5	6	18	5010	4.03	< 10	250	0.08	< 10
258232	94139402	1.48	< 5	2.0	0.18	44	< 10	280	< 0.5	< 2	0.04	0.5	3	21	48	8.12	< 10	940	0.09	< 10
258233	94139402	1.58	5	4.4	0.22	22	< 10	60	< 0.5	< 2	1.54	4.5	4	56	115	3.25	< 10	3210	0.11	< 10
258749	94139402	1.06	1010	11.6	0.18	150	< 10	20	< 0.5	< 2	0.11	2.0	10	68	1765	4.54	< 10	980	0.12	< 10
258750	94139402	0.68	45	1.0	1.88	26	< 10	20	< 0.5	< 2	4.73	0.5	19	31	3530	6.83	< 10	50	0.22	< 10
258860	94139402	0.90	70	1.8	3.54	592	< 10	50	0.5	2	0.20	0.5	19	85	342	8.52	< 10	< 10	0.09	< 10
258861	94139402	1.50	10	1.2	1.36	86	< 10	10	0.5	12	0.19	< 0.5	29	79	329	11.45	10	20	0.01	< 10
258862	94139402	1.00	< 5	< 0.2	1.82	10	< 10	50	< 0.5	2	0.89	0.5	14	33	52	3.72	< 10	< 10	0.10	< 10
258863	94139402	0.92	3000	>100.0	1.14	420	< 10	10	< 0.5	42	0.20	352	8	36	>10000	6.40	< 10	4370	0.08	< 10
258925	94139402	0.98	285	4.4	0.32	12	< 10	30	< 0.5	< 2	2.11	< 0.5	75	18	>10000	3.56	< 10	30	0.11	< 10
258926	94139402	1.60	30	0.2	0.46	270	< 10	120	< 0.5	< 2	4.56	< 0.5	7	25	362	1.64	< 10	10	0.11	< 10
258927	94139402	0.62	245	4.0	0.67	206	< 10	40	< 0.5	< 2	5.99	0.5	17	26	9700	5.00	< 10	80	0.18	< 10
258928	94139402	1.08	70	2.6	1.14	42	< 10	10	< 0.5	4	0.28	0.5	10	16	57	6.39	< 10	180	0.09	< 10

CERTIFICATION:



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## CERTIFICATE OF ANALYSIS

A0122789

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258011	94139402	0.25	590	5 < 0.01	2	610	116	3.24	18	1	17 < 0.01	< 10	< 10	22	10	1290		
258012	94139402	0.18	1505	10 < 0.01	< 1	200	1730	6.39	480	1	39 < 0.01	< 10	< 10	8	10	2080		
258013	94139402	1.43	1775	27 < 0.01	< 1	640	110	5.70	16	4	57 < 0.01	< 10	< 10	72	20	836		
258014	94139402	0.96	2360	10 < 0.01	1	850	200	3.90	66	5	82 < 0.01	< 10	< 10	78	< 10	7360		
258101	94139402	0.12	905	9 < 0.01	5	1250	24	5.14	2	4	96 < 0.01	< 10	< 10	7	10	86		
258102	94139402	0.35	1780	6 < 0.01	4	560	728	3.58	32	4	90 < 0.01	< 10	< 10	6	< 10	2410		
258103	94139402	1.39	1210	6 0.01	4	1230	22	3.65	< 2	7	57 < 0.01	< 10	< 10	62	< 10	110		
258104	94139402	0.69	1745	9 0.01	4	1070	306	6.71	6	7	43 < 0.01	< 10	< 10	23	10	660		
258105	94139402	< 0.01	25	1 < 0.01	3	110	986	>10.00	8	< 1	5 < 0.01	< 10	< 10	1	30	944		
258106	94139402	1.11	745	11 < 0.01	6	1540	8	5.66	4	3	44 < 0.01	< 10	< 10	53	10	38		
258214	94139402	0.70	125	1 0.02	4	1070	6	3.92	6	2	5 < 0.01	< 10	< 10	60	< 10	22		
258215	94139402	0.37	45	5 0.03	3	1090	8	1.55	6	1	14 < 0.01	< 10	< 10	24	< 10	8		
258216	94139402	< 0.01	345	5 < 0.01	1	440	< 2	0.26	< 2	< 1	269 < 0.01	< 10	< 10	2	< 10	2		
258217	94139402	0.36	25	1 0.01	4	910	< 2	1.94	8	< 1	9 < 0.01	< 10	< 10	5	< 10	2		
258218	94139402	0.06	10	4 0.01	2	410	6	0.66	< 2	< 1	13 < 0.01	< 10	< 10	3	< 10	2		
258219	94139402	0.24	255	8 < 0.01	21	600	< 2	6.98	< 2	< 1	48 < 0.01	< 10	< 10	3	10	2		
258220	94139402	1.20	305	7 0.02	1	1880	12	2.66	6	1	25 < 0.01	< 10	< 10	72	< 10	40		
258221	94139402	1.18	475	< 1 0.01	2	1530	2	5.46	4	< 1	5 < 0.01	< 10	< 10	24	< 10	48		
258222	94139402	4.71	7400	< 1 < 0.01	< 1	300	238	4.68	78	< 1	318 < 0.01	< 10	10	7	< 10	310		
258223	94139402	0.59	150	6 0.01	3	1230	12	5.46	6	< 1	9 < 0.01	< 10	< 10	32	10	18		
258224	94139402	0.01	25	51 < 0.01	4	260	28	7.50	14	< 1	14 < 0.01	< 10	< 10	5	10	4		
258225	94139402	0.52	3590	< 1 < 0.01	1	200	606	0.95	6	< 1	258 < 0.01	< 10	< 10	< 1	< 10	530		
258226	94139402	0.78	390	27 < 0.01	3	710	4	>10.00	8	< 1	9 < 0.01	< 10	< 10	35	10	50		
258227	94139402	0.26	245	27 < 0.01	1	900	4	6.04	6	< 1	8 < 0.01	< 10	< 10	17	< 10	14		
258228	94139402	0.39	115	7 < 0.01	7	1180	2	6.57	2	< 1	18 < 0.01	< 10	< 10	12	10	12		
258229	94139402	0.23	380	12 < 0.01	3	230	< 2	>10.00	26	< 1	11 < 0.01	< 10	< 10	2	30	6		
258230	94139402	0.75	945	1 < 0.01	13	240	< 2	0.03	6	1	10 < 0.01	< 10	< 10	34	< 10	94		
258231	94139402	0.23	195	28 0.04	2	2200	50	0.06	2	2	519 < 0.01	< 10	< 10	33	< 10	52		
258232	94139402	< 0.01	630	1 < 0.01	2	1840	206	0.38	6	3	16 < 0.01	< 10	< 10	20	< 10	316		
258233	94139402	0.27	2790	< 1 < 0.01	1	2190	244	1.55	26	4	68 < 0.01	< 10	< 10	6	< 10	960		
258749	94139402	0.01	45	3 < 0.01	3	530	606	3.93	16	< 1	5 < 0.01	< 10	< 10	5	< 10	578		
258750	94139402	1.71	2210	42 < 0.01	6	1500	8	4.34	2	7	82 < 0.01	< 10	< 10	69	< 10	72		
258860	94139402	1.85	515	< 1 < 0.01	12	970	20	1.53	16	11	9 < 0.01	< 10	< 10	105	< 10	68		
258861	94139402	1.43	325	< 1 0.03	36	980	< 2	9.08	12	1	8 0.01	< 10	< 10	78	10	22		
258862	94139402	1.71	440	1 0.03	8	1260	< 2	1.59	4	5	25 < 0.01	< 10	< 10	88	< 10	94		
258863	94139402	0.54	965	10 < 0.01	20	580	>10000	5.15	120	< 1	31 < 0.01	< 10	< 10	33	10	>10000		
258925	94139402	0.24	160	< 1 0.02	26	290	36	3.49	6	1	35 < 0.01	< 10	< 10	32	< 10	82		
258926	94139402	1.00	645	4 0.03	4	1200	12	0.33	8	10	109 < 0.01	< 10	< 10	38	< 10	58		
258927	94139402	0.61	940	< 1 < 0.01	34	1490	22	3.36	14	9	159 < 0.01	< 10	< 10	37	< 10	38		
258928	94139402	1.23	225	3 0.03	1	2040	18	3.49	6	1	11 < 0.01	< 10	< 10	67	< 10	52		

CERTIFICATION:



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258929	94139402	1.26	35	0.6	0.97	16	< 10	30	< 0.5	2	0.19	< 0.5	9	29	15	5.33	< 10	30	0.15	< 10
258930	94139402	1.00	420	0.4	2.17	36	< 10	30	< 0.5	< 2	0.10	0.5	4	25	15	8.69	< 10	10	0.11	< 10
258931	94139402	0.74	135	0.2	2.30	16	< 10	30	< 0.5	12	0.25	0.5	5	18	7	6.85	< 10	10	0.04	< 10
258932	94139402	1.18	105	1.2	2.10	94	< 10	10	< 0.5	4	0.19	< 0.5	10	27	13	11.15	10	30	0.07	< 10
258958	94139402	1.10	85	0.2	2.16	6	< 10	20	< 0.5	6	0.87	< 0.5	19	13	240	5.81	< 10	10	0.05	< 10
258959	94139402	1.32	35	0.2	1.53	2	< 10	20	< 0.5	2	0.85	< 0.5	26	18	1215	5.52	< 10	< 10	0.05	< 10
258960	94139402	0.88	5660	12.0	0.47	1815	< 10	10	< 0.5	< 2	0.16	< 0.5	3	76	284	1.21	< 10	2650	0.03	< 10
258961	94139402	0.96	95	0.6	1.99	6	< 10	< 10	0.5	< 2	1.99	0.5	21	15	262	6.18	< 10	10	0.03	< 10
258962	94139402	1.34	175	3.6	0.76	8	< 10	< 10	0.5	12	0.27	0.5	137	20	4060	>15.00	10	< 10	< 0.01	< 10
258963	94139402	1.32	195	1.8	4.27	152	< 10	< 10	1.0	10	0.14	1.0	11	28	51	>15.00	20	10	0.05	< 10
258964	94139402	1.26	470	2.8	0.47	50	< 10	10	< 0.5	< 2	2.12	< 0.5	8	29	23	6.09	< 10	190	0.12	< 10
258965	94139402	1.04	1930	32.4	2.28	212	< 10	< 10	0.5	10	0.04	1.0	11	27	>10000	>15.00	10	50	0.01	< 10
258966	94139402	1.14	385	1.4	0.23	44	< 10	30	< 0.5	< 2	9.16	2.5	3	20	323	6.37	< 10	380	0.06	< 10
258967	94139402	1.60	3660	1.8	0.53	50	< 10	10	< 0.5	2	5.80	1.5	7	17	35	4.86	< 10	570	0.11	< 10
258968	94139402	1.44	1230	51.0	2.39	316	< 10	< 10	0.5	< 2	0.13	2.5	12	19	>10000	>15.00	20	270	< 0.01	< 10

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :2-B  
 Total Pages :2  
 Certificate Date: 29-AUG-2001  
 Invoice No. : I0122789  
 P.O. Number :  
 Account : HPC

Project : 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS

A0122789

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258929	94139402	0.87	240	3	0.01	5	1440	2	2.94	2	< 1	12	< 0.01	< 10	< 10	29	< 10	34
258930	94139402	1.45	1170	5	0.01	1	920	8	2.27	12	1	3	< 0.01	< 10	< 10	75	< 10	114
258931	94139402	1.99	705	< 1	0.04	1	1510	< 2	2.06	4	5	9	< 0.01	< 10	< 10	169	< 10	86
258932	94139402	1.48	1080	1	0.01	1	1090	10	6.63	10	< 1	5	< 0.01	< 10	< 10	65	< 10	72
258958	94139402	1.35	800	< 1	0.02	5	1900	4	1.61	12	3	33	0.05	< 10	< 10	127	< 10	36
258959	94139402	1.07	565	14	0.05	5	2010	< 2	2.94	6	3	27	0.07	< 10	< 10	119	< 10	30
258960	94139402	0.35	245	19	< 0.01	< 1	190	8	0.29	9350	2	5	< 0.01	< 10	< 10	37	< 10	22
258961	94139402	0.75	790	< 1	0.02	4	1840	8	2.94	40	3	21	0.03	< 10	< 10	82	< 10	110
258962	94139402	0.52	330	< 1	< 0.01	18	670	8	9.25	16	< 1	3	< 0.01	< 10	< 10	46	10	32
258963	94139402	2.32	1185	< 1	< 0.01	4	540	6	>10.00	14	< 1	7	< 0.01	< 10	< 10	65	30	132
258964	94139402	0.87	2850	10	< 0.01	1	800	26	4.21	12	1	48	< 0.01	< 10	< 10	13	< 10	82
258965	94139402	1.12	875	< 1	< 0.01	1	440	< 2	>10.00	24	< 1	4	< 0.01	< 10	< 10	46	20	102
258966	94139402	3.70	7630	< 1	< 0.01	< 1	310	24	4.79	16	1	136	< 0.01	< 10	20	10	< 10	98
258967	94139402	2.67	4690	< 1	< 0.01	< 1	760	30	3.00	16	2	66	< 0.01	< 10	< 10	12	< 10	148
258968	94139402	1.28	1365	< 1	< 0.01	< 1	390	< 2	>10.00	18	< 1	5	< 0.01	< 10	< 10	42	20	102

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



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 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1  
 Total Pages :1  
 Certificate Date: 27-AUG-2001  
 Invoice No. : I0123261  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS

A0123261

SAMPLE	PREP CODE	Ag g/t	Cu %	Pb %	Zn %						
258001	212	---	---	---	2.83						
258002	212	---	1.45	---	---						
258009	212	---	1.94	2.11	10.65						
258010	212	168	15.80	---	3.33						
258397	212	---	1.13	---	---						
258398	212	>1500	---	7.63	17.00						
258399	212	945	---	16.50	4.46						
258400	212	>1500	1.30	4.58	5.74						
258499	212	---	2.61	---	---						
258687	212	246	---	---	---						
258831	212	---	1.57	---	---						
258850	212	---	7.12	---	---						
258851	212	---	1.62	---	---						
258853	212	---	1.30	---	---						
258855	212	---	1.55	---	---						
258856	212	---	---	---	10.20						

CERTIFICATION:

*[Handwritten signature]*





# ALS Chemex

Aurora Laboratory Services Ltd.  
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 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-A  
 Total Pages :2  
 Certificate Date: 24-AUG-2001  
 Invoice No. : I0122399  
 P.O. Number :  
 Account : HPQ

Project : 17700/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0122399

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
258395	94139402	1.22	10	< 0.2	0.87	66	< 10	40	< 0.5	< 2	0.19	< 0.5	4	110	32	1.64	< 10	< 10	0.04	< 10
258396	94139402	0.94	< 5	< 0.2	2.16	14	< 10	110	0.5	< 2	2.25	< 0.5	11	24	15	4.14	< 10	< 10	0.23	10
258437	94139402	1.08	< 5	< 0.2	1.60	4	< 10	90	< 0.5	< 2	4.57	< 0.5	5	16	49	2.65	< 10	< 10	0.19	10
258438	94139402	1.22	< 5	< 0.2	0.32	68	< 10	90	< 0.5	< 2	0.34	< 0.5	3	30	5	2.68	< 10	130	0.18	< 10
258439	94139402	1.22	< 5	< 0.2	0.49	32	< 10	60	< 0.5	< 2	1.00	< 0.5	20	20	12	3.21	< 10	40	0.32	10
258440	94139402	1.00	20	0.2	0.39	998	< 10	80	< 0.5	< 2	1.27	< 0.5	8	23	8	3.05	< 10	80	0.31	< 10
258441	94139402	1.06	< 5	< 0.2	0.79	22	< 10	90	< 0.5	< 2	1.29	< 0.5	6	23	29	2.96	< 10	60	0.37	< 10
258442	94139402	1.04	< 5	< 0.2	1.77	6	< 10	170	< 0.5	< 2	3.08	< 0.5	7	20	11	3.30	< 10	10	0.22	10
258443	94139402	0.98	< 5	1.6	0.49	22	< 10	60	< 0.5	< 2	0.51	18.0	5	76	46	2.83	< 10	240	0.09	< 10
258444	94139402	1.30	2010	>100.0	0.10	1240	< 10	10	< 0.5	< 2	4.11	>500	20	15	6810	3.45	30>100000	0.05	< 10	
258445	94139402	1.38	445	>100.0	0.35	736	< 10	20	< 0.5	< 2	6.01	311	22	39	2830	4.84	30	39800	0.09	< 10
258446	94139402	1.08	1105	>100.0	0.19	772	< 10	10	0.5	28	2.43	>500	16	30	638	5.01	40	77900	0.10	< 10
258447	94139402	1.30	180	>100.0	< 0.01	444	< 10	10	0.5	72	0.72	>500	10	< 1	1930	5.28	60	24000	0.02	< 10
258448	94139402	1.18	< 5	1.2	0.35	86	< 10	50	0.5	< 2	4.38	13.5	7	17	21	2.99	10	190	0.22	< 10
258449	94139402	1.52	< 5	1.0	0.37	90	< 10	70	0.5	< 2	4.00	7.5	6	18	38	2.74	10	210	0.23	< 10
258490	94139402	1.12	< 5	1.2	1.72	32	< 10	220	< 0.5	< 2	0.10	7.5	14	38	39	3.91	< 10	90	0.32	< 10
258491	94139402	1.28	< 5	1.0	1.81	36	< 10	80	< 0.5	< 2	0.13	0.5	7	43	36	3.14	< 10	270	0.10	< 10
258492	94139402	1.58	< 5	0.2	1.97	42	< 10	90	< 0.5	< 2	0.45	< 0.5	16	46	31	5.15	< 10	90	0.16	< 10
258493	94139402	1.78	< 5	0.2	1.17	22	< 10	110	< 0.5	< 2	0.99	< 0.5	25	52	35	3.01	< 10	40	0.15	< 10
258494	94139402	1.22	< 5	0.2	3.17	4	< 10	420	0.5	< 2	3.95	< 0.5	32	96	111	5.80	10	10	0.09	< 10
258495	94139402	1.04	< 5	< 0.2	2.20	< 2	< 10	870	< 0.5	< 2	2.72	< 0.5	13	46	8	3.94	< 10	10	0.24	10
258496	94139402	1.80	15	41.0	3.54	102	< 10	60	0.5	< 2	1.86	70.5	9	20	184	6.37	< 10	4790	0.15	< 10
258735	94139402	1.16	5	0.2	2.29	14	< 10	340	< 0.5	< 2	0.31	< 0.5	12	69	62	4.92	< 10	30	0.03	< 10
258736	94139402	0.74	< 5	0.2	3.35	6	< 10	580	0.5	< 2	3.89	0.5	23	42	164	5.60	10	30	0.05	< 10
258737	94139402	0.80	< 5	0.2	4.07	22	< 10	180	0.5	< 2	3.00	< 0.5	47	95	207	6.06	10	50	0.12	< 10
258808	94139402	1.94	< 5	< 0.2	0.51	2	< 10	280	0.5	< 2	12.85	1.0	32	22	56	5.69	< 10	70	0.15	< 10
258809	94139402	1.78	< 5	< 0.2	0.38	< 2	< 10	110	0.5	< 2	13.00	0.5	18	11	24	5.60	10	10	0.14	< 10
258810	94139402	1.22	< 5	< 0.2	0.35	< 2	< 10	430	1.0	< 2	12.45	0.5	20	13	78	4.51	< 10	10	0.24	< 10
258811	94139402	1.50	< 5	< 0.2	0.27	2	< 10	50	< 0.5	< 2	0.54	< 0.5	8	116	16	1.16	< 10	10	0.02	< 10
258812	94139402	1.44	< 5	< 0.2	0.10	2	< 10	720	< 0.5	< 2	1.26	< 0.5	6	102	58	1.65	< 10	50	0.03	< 10
258813	94139402	1.60	< 5	< 0.2	0.86	8	< 10	830	< 0.5	< 2	3.45	< 0.5	7	19	21	2.63	< 10	20	0.31	< 10
258814	94139402	1.62	< 5	< 0.2	0.68	2	< 10	270	0.5	< 2	11.10	0.5	15	7	91	4.48	< 10	20	0.16	< 10
258815	94139402	1.60	< 5	< 0.2	2.12	12	< 10	170	< 0.5	< 2	0.35	< 0.5	16	30	40	4.34	10	60	0.21	< 10
258816	94139402	1.16	10	4.4	2.22	22	< 10	760	0.5	< 2	0.34	< 0.5	34	18	3840	6.40	< 10	100	0.08	< 10
258817	94139402	1.92	< 5	< 0.2	0.80	< 2	< 10	570	< 0.5	< 2	6.66	0.5	8	149	17	1.47	< 10	< 10	0.04	< 10
258818	94139402	1.98	< 5	3.4	0.38	8	< 10	1210	< 0.5	< 2	9.73	1.0	24	16	2960	5.37	< 10	230	0.10	< 10
258819	94139402	1.46	< 5	0.6	0.44	16	< 10	990	< 0.5	< 2	10.85	1.0	20	23	629	4.53	< 10	50	0.08	< 10
258820	94139402	1.68	< 5	< 0.2	1.70	< 2	< 10	2300	< 0.5	< 2	0.75	< 0.5	18	79	54	2.73	< 10	10	0.03	< 10
258821	94139402	2.18	< 5	< 0.2	1.00	4	< 10	620	< 0.5	< 2	3.14	< 0.5	16	114	30	3.17	< 10	< 10	0.08	< 10
258822	94139402	2.06	60	6.8	0.52	< 2	< 10	380	< 0.5	< 2	2.32	0.5	7	84	2330	2.29	< 10	60	0.03	< 10

CERTIFICATION:



# ALS Chemex

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MAIN STATION, BOX 938  
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Page Number : 1-B  
 Total Pages : 2  
 Certificate Date: 24-AUG-2001  
 Invoice No. : I0122399  
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 Account : HPQ

Project: 17700/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0122399

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF	BaO % XRF
258395	94139402	0.73	450	1	0.06	7	560	6	0.10	< 2	3	11	< 0.01	< 10	< 10	15	< 10	56	8.97	< 0.01
258396	94139402	1.27	915	4	0.03	5	970	6	0.57	< 2	4	43	< 0.01	< 10	< 10	53	< 10	64	16.04	0.11
258437	94139402	0.68	780	1	0.04	1	1080	8	0.01	2	4	288	< 0.01	< 10	< 10	23	< 10	50	16.45	0.07
258438	94139402	0.05	70	1	0.05	1	1240	8	1.79	18	1	26	< 0.01	< 10	< 10	11	< 10	26	-----	-----
258439	94139402	0.07	255	3	0.05	3	1650	14	2.47	6	1	58	< 0.01	< 10	< 10	10	< 10	54	-----	-----
258440	94139402	0.04	240	5	0.04	1	1260	14	2.51	6	1	111	< 0.01	< 10	< 10	10	< 10	32	-----	-----
258441	94139402	0.23	390	9	0.03	3	1270	18	1.91	2	1	52	< 0.01	< 10	< 10	13	< 10	46	-----	-----
258442	94139402	0.78	725	2	0.04	1	1280	4	0.06	2	4	173	< 0.01	< 10	< 10	38	< 10	58	15.57	0.15
258443	94139402	0.25	475	7	0.05	34	360	12	1.43	8	2	36	< 0.01	< 10	< 10	52	< 10	1050	-----	-----
258444	94139402	1.03	8680	15	0.01	10	400	>10000	7.15	4000	< 1	68	< 0.01	< 10	< 10	2	50	>10000	-----	-----
258445	94139402	1.50	>10000	293	0.01	3	540	>10000	3.95	1750	3	76	< 0.01	< 10	< 10	14	10	>10000	-----	-----
258446	94139402	0.41	>10000	9	0.01	12	760	>10000	9.23	104	2	41	< 0.01	< 10	< 10	3	40	>10000	-----	-----
258447	94139402	0.18	2440	2	< 0.01	23	520	>10000	9.77	1390	< 1	8	< 0.01	< 10	< 10	< 1	100	>10000	-----	-----
258448	94139402	1.08	>10000	< 1	0.02	1	1160	246	1.46	8	5	88	< 0.01	< 10	< 10	9	< 10	1535	-----	-----
258449	94139402	0.94	8080	1	0.02	1	1500	94	1.45	14	5	79	< 0.01	< 10	< 10	7	< 10	1020	15.40	0.09
258490	94139402	0.77	900	31	0.03	35	480	82	0.53	18	3	8	0.04	< 10	< 10	26	< 10	888	-----	-----
258491	94139402	1.49	235	37	0.03	48	500	22	0.96	8	4	13	< 0.01	< 10	< 10	101	< 10	200	-----	-----
258492	94139402	0.84	1285	6	0.05	23	2120	24	1.79	12	5	32	< 0.01	< 10	< 10	59	< 10	146	-----	-----
258493	94139402	0.54	1600	3	0.04	48	240	18	0.96	8	2	27	0.04	< 10	< 10	27	< 10	166	-----	-----
258494	94139402	3.78	1265	2	0.05	28	1360	2	0.03	4	30	118	0.05	< 10	< 10	213	< 10	86	-----	-----
258495	94139402	2.00	720	1	0.05	6	1250	4	0.03	< 2	5	108	< 0.01	< 10	< 10	102	< 10	124	-----	-----
258496	94139402	3.12	1570	4	< 0.01	7	830	5920	1.01	12	4	203	< 0.01	< 10	< 10	68	< 10	7530	-----	-----
258735	94139402	1.53	465	1	0.02	23	430	26	0.38	6	5	21	< 0.01	< 10	< 10	55	< 10	62	-----	-----
258736	94139402	3.24	1560	3	0.03	15	1830	30	0.10	4	28	73	0.12	< 10	< 10	255	< 10	110	-----	-----
258737	94139402	4.16	1620	3	0.02	28	1400	8	0.85	10	36	40	0.21	< 10	< 10	289	< 10	120	-----	-----
258808	94139402	4.35	2880	1	0.05	24	660	6	0.36	2	15	446	< 0.01	< 10	< 10	52	< 10	66	-----	-----
258809	94139402	3.79	>10000	< 1	0.04	6	460	< 2	0.04	2	8	430	< 0.01	< 10	< 10	42	< 10	54	-----	-----
258810	94139402	3.98	5310	< 1	0.08	4	850	4	0.04	2	10	541	< 0.01	< 10	< 10	51	< 10	86	-----	-----
258811	94139402	0.13	550	< 1	0.03	4	370	8	< 0.01	< 2	5	34	< 0.01	< 10	< 10	30	< 10	36	-----	-----
258812	94139402	0.20	1205	1	0.01	4	180	12	0.12	2	3	227	< 0.01	< 10	< 10	10	< 10	54	-----	-----
258813	94139402	0.19	1485	< 1	< 0.01	5	1330	2	0.03	< 2	4	61	< 0.01	< 10	< 10	15	< 10	46	-----	-----
258814	94139402	4.03	5190	< 1	0.03	6	1870	8	0.01	2	7	534	< 0.01	< 10	< 10	18	< 10	94	-----	-----
258815	94139402	0.92	3150	5	0.03	29	600	8	0.34	2	3	11	0.16	< 10	< 10	29	< 10	118	-----	-----
258816	94139402	0.51	1405	5	0.04	9	1150	< 2	0.01	10	8	40	< 0.01	< 10	< 10	72	< 10	286	-----	-----
258817	94139402	0.47	2210	< 1	0.02	10	240	12	0.01	< 2	3	352	< 0.01	< 10	< 10	14	< 10	44	-----	-----
258818	94139402	1.88	3600	1	0.02	4	760	2	0.07	10	13	193	0.01	< 10	< 10	64	< 10	106	-----	-----
258819	94139402	2.43	3380	< 1	0.02	4	490	6	0.08	6	9	416	< 0.01	< 10	< 10	52	< 10	68	-----	-----
258820	94139402	1.18	870	1	0.01	16	170	10	0.06	2	3	109	< 0.01	< 10	< 10	20	< 10	128	-----	-----
258821	94139402	1.06	1585	1	0.04	9	800	< 2	0.01	< 2	10	89	< 0.01	< 10	< 10	48	< 10	64	-----	-----
258822	94139402	0.73	1865	< 1	0.01	5	280	< 2	0.05	< 2	7	64	< 0.01	< 10	< 10	19	< 10	40	-----	-----

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



# ALS Chemex

Aurora Laboratory Services Ltd.  
 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J2C1  
 PHONE: 604-984-0221 FAX: 604-984-0218

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-C  
 Total Pages :2  
 Certificate Date: 24-AUG-2001  
 Invoice No. :10122399  
 P.O. Number :  
 Account :HPQ

Project : 17700/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS

A0122399

SAMPLE	PREP CODE	CaO % XRF	Cr2O3 % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	SrO % XRF	TiO2 % XRF	LOI % XRF	TOTAL %
258395	94139402	0.24	< 0.01	2.62	0.34	1.24	0.06	2.67	0.13	81.00	< 0.01	0.23	1.51	99.01
258396	94139402	3.28	< 0.01	6.91	3.37	2.54	0.14	2.14	0.22	58.39	0.01	0.49	5.00	98.64
258437	94139402	6.72	< 0.01	4.62	2.38	1.42	0.11	3.88	0.26	55.46	0.05	0.49	7.15	99.06
258438	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258439	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258440	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258441	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258442	94139402	4.52	< 0.01	5.85	2.21	1.73	0.11	3.81	0.30	58.27	0.05	0.50	5.33	98.40
258443	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258444	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258445	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258446	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258447	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258448	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258449	94139402	5.29	< 0.01	4.31	4.18	1.68	1.05	0.22	0.32	53.03	0.01	0.42	8.20	94.20
258490	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258491	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258492	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258493	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258494	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258495	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258496	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258735	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258736	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258737	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258808	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258809	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258810	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258811	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258812	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258813	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258814	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258815	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258816	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258817	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258818	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258819	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258820	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258821	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
258822	94139402	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

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



# ALS Chemex

Aurora Laboratory Services Ltd.  
 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :2-A  
 Total Pages :2  
 Certificate Date: 24-AUG-2001  
 Invoice No. : I0122399  
 P.O. Number :  
 Account : HPQ

Project : 17700/17701  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0122399

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
258823	94139402	2.24	10	0.4	1.16	2	< 10	260	< 0.5	< 2	1.58	< 0.5	14	122	189	3.57	< 10	< 10	0.08	< 10
258904	94139402	1.64	10	>100.0	0.17	8940	< 10	40	0.5	< 2	8.91	44.0	69	8	>10000	6.10	10	34800	0.05	< 10
258905	94139402	1.60	10	>100.0	0.46	>10000	< 10	30	0.5	< 2	8.87	79.5	71	11	>10000	8.47	10	45900	0.05	< 10
258906	94139402	1.16	< 5	23.2	0.69	2100	< 10	10	0.5	< 2	1.15	137.5	60	26	6690	6.87	< 10	15430	0.13	< 10

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Page Number :2-B  
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 Certificate Date: 24-AUG-2001  
 Invoice No. : I0122399  
 P.O. Number :  
 Account : HPG

## CERTIFICATE OF ANALYSIS A0122399

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF	BaO % XRF
258823	94139402	0.75	1325	1	0.06	9	950	2	< 0.01	< 2	10	50	0.01	< 10	< 10	70	< 10	66	----	----
258904	94139402	2.78	6950	37	0.02	10	330	224	2.01	1190	5	121	< 0.01	< 10	< 10	16	< 10	2180	----	----
258905	94139402	2.48	8550	51	0.03	11	420	184	4.32	7000	9	133	< 0.01	< 10	10	32	< 10	4190	----	----
258906	94139402	0.30	640	22	0.04	17	1420	790	7.14	264	5	38	< 0.01	< 10	< 10	18	10	>10000	----	----

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



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<b>CERTIFICATE OF ANALYSIS</b>	<b>A0122399</b>
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SAMPLE	PREP CODE	CaO % XRF	Cr2O3 % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	SrO % XRF	TiO2 % XRF	LOI % XRF	TOTAL %
258923	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258904	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258905	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----
258906	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----

CERTIFICATION:



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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1  
 Total Pages :1  
 Certificate Date: 10-SEP-2001  
 Invoice No. : I0124093  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS A0124093

SAMPLE	PREP CODE	Ag g/t	Cu %	Pb %	Zn %						
256704	212		2.70								
257502	212	340									
257957	212	452		4.14	16.85						
258040	212	339	2.12	12.20	15.70						
258041	212			1.55	3.78						
258185	212		1.50								
258700	212		6.18		1.26						
258992	212	360		6.60							
259000	212	222									

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



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To: TECK EXPLORATION LTD.

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Page Number :1-A  
 Total Pages :2  
 Certificate Date: 07-SEP-2001  
 Invoice No. :I0123459  
 P.O. Number :  
 Account :HPQ

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0123459

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Au FA oz/ton	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %
256701	94139402	0.68	115	-----	2.6	0.85	16	< 10	10	0.5	2	12.28	0.5	29	14	48	6.12	< 10	50	0.23
256702	94139402	0.72	1795	-----	2.4	0.93	4	< 10	10	< 0.5	< 2	12.85	< 0.5	1	29	279	4.15	30	90	0.05
256703	94139402	0.94	615	-----	2.4	2.25	26	< 10	< 10	0.5	10	0.83	< 0.5	10	22	20	8.58	10	60	0.15
256704	94139402	0.84	330	-----	98.8	2.18	34	< 10	< 10	1.0	36	1.41	2.5	9	18	>10000	>15.00	30	1480	0.07
257501	94139402	0.86	145	-----	14.6	0.28	96	< 10	90	< 0.5	< 2	0.05	< 0.5	4	29	194	3.32	< 10	1030	0.26
257502	94139402	1.72	675	-----	>100.0	0.29	162	< 10	30	0.5	< 2	3.74	11.0	17	19	5410	5.30	10	2430	0.22
257957	94139402	1.56	250	-----	>100.0	0.36	4550	< 10	10	0.5	70	0.83	>500	78	10	2980	10.55	30	24700	0.05
258037	94139402	1.50	260	-----	2.8	0.84	24	< 10	30	< 0.5	< 2	0.46	4.0	10	34	93	4.72	< 10	40	0.25
258038	94139402	1.32	50	-----	9.8	0.29	16	< 10	40	< 0.5	< 2	5.76	2.0	1	16	8060	3.67	10	30	0.05
258039	94139402	1.04	120	-----	9.4	0.24	< 2	< 10	50	< 0.5	< 2	12.30	< 0.5	2	19	7030	1.45	10	< 10	0.09
258040	94139402	0.80	8870	-----	>100.0	0.23	1060	< 10	< 10	< 0.5	70	0.72	>500	4	39	>10000	4.12	20	17540	0.04
258041	94139402	1.12	45	-----	49.2	0.24	8960	< 10	< 10	0.5	52	1.97	311	57	37	3590	>15.00	20	6530	0.14
258176	94139402	1.10	25	-----	2.2	0.81	114	< 10	10	< 0.5	< 2	2.63	3.5	12	36	122	3.70	< 10	100	0.16
258177	94139402	1.36	< 5	-----	0.4	0.81	28	< 10	80	< 0.5	< 2	0.08	< 0.5	5	31	31	3.61	< 10	110	0.18
258178	94139402	0.78	< 5	-----	< 0.2	0.82	6	< 10	30	0.5	< 2	3.15	< 0.5	12	22	17	3.58	< 10	170	0.19
258179	94139402	0.84	< 5	-----	< 0.2	0.84	6	< 10	20	0.5	< 2	1.34	< 0.5	12	27	18	3.77	< 10	270	0.18
258180	94139402	0.64	110	-----	10.2	0.06	38	< 10	< 10	0.5	26	0.19	64.0	< 1	27	4900	13.20	10	6410	0.07
258181	94139402	0.60	45	-----	< 0.2	0.51	6	< 10	10	< 0.5	< 2	2.60	< 0.5	13	23	44	4.84	< 10	80	0.24
258182	94139402	1.06	10	-----	< 0.2	0.86	2	< 10	30	< 0.5	< 2	1.45	< 0.5	7	26	14	3.62	< 10	40	0.20
258183	94139402	0.84	< 5	-----	< 0.2	0.36	6	< 10	10	0.5	< 2	1.33	< 0.5	11	22	19	3.50	< 10	380	0.19
258184	94139402	1.02	15	-----	< 0.2	0.79	< 2	< 10	< 10	< 0.5	< 2	2.28	< 0.5	4	11	12	4.20	< 10	40	0.19
258185	94139402	0.78	1200	-----	21.2	0.10	120	< 10	< 10	0.5	12	9.08	4.0	< 1	11	>10000	7.83	30	370	0.09
258186	94139402	0.66	160	-----	0.6	2.32	24	< 10	10	0.5	8	0.44	< 0.5	11	11	25	7.84	10	30	0.13
258187	94139402	0.96	90	-----	0.2	2.06	22	< 10	10	0.5	8	0.44	< 0.5	12	8	48	7.69	10	140	0.21
258188	94139402	0.78	35	-----	< 0.2	1.31	6	< 10	20	0.5	< 2	0.79	< 0.5	8	15	10	4.68	10	10	0.17
258189	94139402	0.80	335	-----	0.8	2.94	2	< 10	40	< 0.5	4	0.18	< 0.5	2	12	< 1	6.97	10	< 10	0.13
258190	94139402	0.66	90	-----	< 0.2	2.13	6	< 10	40	< 0.5	< 2	0.16	< 0.5	3	18	< 1	5.80	10	< 10	0.15
258191	94139402	0.58	470	-----	1.0	1.57	4	< 10	< 10	< 0.5	8	0.10	< 0.5	9	55	< 1	7.91	10	30	0.14
258192	94139402	0.70	110	-----	0.2	1.79	12	< 10	40	< 0.5	< 2	0.23	< 0.5	< 1	19	< 1	5.43	10	< 10	0.21
258193	94139402	0.80	95	-----	< 0.2	1.55	12	< 10	40	< 0.5	< 2	0.22	< 0.5	4	18	8	3.94	< 10	10	0.15
258194	94139402	0.82	45	-----	< 0.2	0.78	< 2	< 10	10	< 0.5	< 2	0.79	< 0.5	< 1	14	26	3.89	< 10	10	0.24
258195	94139402	0.70	325	-----	1.0	1.60	12	< 10	< 10	< 0.5	16	0.02	< 0.5	11	66	< 1	10.20	10	20	0.05
258196	94139402	0.78	50	-----	< 0.2	0.72	6	< 10	< 10	< 0.5	4	0.55	< 0.5	6	40	< 1	5.18	< 10	20	0.21
258197	94139402	0.64	60	-----	< 0.2	0.32	8	< 10	< 10	< 0.5	< 2	0.53	< 0.5	3	51	< 1	4.63	< 10	250	0.24
258198	94139402	0.88	70	-----	< 0.2	2.84	2	< 10	40	0.5	10	0.11	< 0.5	< 1	18	< 1	8.50	10	< 10	0.07
258199	94139402	0.80	30	-----	< 0.2	2.86	14	< 10	30	0.5	2	0.31	< 0.5	5	23	< 1	5.99	10	< 10	0.17
258200	94139402	0.62	645	-----	3.4	5.45	30	< 10	< 10	0.5	16	0.38	< 0.5	6	7	43	12.65	30	120	0.08
258700	94139402	2.14	>10000	0.322	98.0	0.14	172	< 10	< 10	0.5	8	1.75	145.0	3	8	>10000	9.37	10	5090	0.06
258876	94139402	1.76	325	-----	1.2	0.38	10	< 10	< 10	< 0.5	< 2	0.64	< 0.5	7	20	393	4.36	< 10	70	0.20
258877	94139402	1.38	155	-----	0.8	3.78	18	< 10	< 10	0.5	12	0.11	< 0.5	7	30	42	10.15	20	10	0.03

CERTIFICATION: 





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Page Number :1-B  
 Total Pages :2  
 Certificate Date: 07-SEP-2001  
 Invoice No. : I0123459  
 P.O. Number :  
 Account :HPQ

Project : 1770  
 Comments : ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0123459

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF
256701	94139402	< 10	1.02	1435	17	0.01	6	1430	< 2	5.29	4	4	58	< 0.01	< 10	< 10	27	< 10	112	----
256702	94139402	< 10	1.00	8880	2	< 0.01	< 1	210	16	3.01	6	1	289	< 0.01	< 10	< 10	14	< 10	106	----
256703	94139402	< 10	1.52	2620	9	0.01	2	730	46	6.09	6	2	33	< 0.01	< 10	< 10	30	10	142	----
256704	94139402	< 10	1.62	2670	3	< 0.01	< 1	720	138	>10.00	54	2	50	< 0.01	< 10	< 10	44	30	272	----
257501	94139402	10	0.03	45	16	< 0.01	1	670	194	1.14	22	< 1	9	< 0.01	< 10	< 10	7	< 10	146	----
257502	94139402	< 10	1.09	5350	21	< 0.01	2	1020	966	4.60	364	4	160	< 0.01	< 10	< 10	12	< 10	938	----
257957	94139402	< 10	0.45	1085	4	< 0.01	26	400	>10000	>10.00	>10000	< 1	38	< 0.01	< 10	< 10	13	2240	>10000	----
258037	94139402	< 10	0.63	440	4	0.02	1	1160	102	3.90	54	1	17	< 0.01	< 10	< 10	18	< 10	1145	----
258038	94139402	< 10	0.68	5740	1	< 0.01	< 1	170	224	0.81	24	2	505	< 0.01	< 10	< 10	8	< 10	262	----
258039	94139402	< 10	0.11	3700	< 1	< 0.01	1	260	178	0.76	2	< 1	447	< 0.01	< 10	< 10	5	< 10	50	----
258040	94139402	< 10	0.35	1295	5	< 0.01	16	250	>10000	7.24	254	< 1	61	< 0.01	< 10	< 10	2	1890	>10000	----
258041	94139402	< 10	0.59	1665	3	< 0.01	17	600	>10000	>10.00	3820	1	118	< 0.01	< 10	< 10	23	190	>10000	----
258176	94139402	< 10	0.64	745	1	0.01	3	920	426	3.74	40	1	61	< 0.01	< 10	< 10	16	< 10	572	----
258177	94139402	< 10	0.54	220	1	< 0.01	1	890	58	1.23	14	2	6	< 0.01	< 10	< 10	10	< 10	150	----
258178	94139402	10	0.62	1540	< 1	0.01	3	930	24	2.89	4	3	100	< 0.01	< 10	< 10	14	< 10	70	----
258179	94139402	10	0.77	810	< 1	0.03	4	930	14	2.87	2	4	38	< 0.01	< 10	< 10	20	< 10	100	----
258180	94139402	< 10	0.02	75	1	< 0.01	1	250	310	>10.00	8	< 1	24	< 0.01	< 10	< 10	5	20	7790	----
258181	94139402	< 10	0.25	960	16	0.01	1	960	14	4.90	2	1	40	< 0.01	< 10	< 10	14	< 10	78	----
258182	94139402	< 10	0.57	500	1	0.03	1	1160	8	2.41	< 2	2	25	< 0.01	< 10	< 10	37	< 10	44	----
258183	94139402	10	0.19	310	1	0.02	3	990	14	3.17	2	2	51	< 0.01	< 10	< 10	11	< 10	62	----
258184	94139402	< 10	0.68	1055	1	0.04	< 1	1440	< 2	3.81	< 2	2	61	< 0.01	< 10	< 10	25	< 10	16	----
258185	94139402	< 10	3.60	8280	< 1	< 0.01	< 1	280	164	5.09	14	2	97	< 0.01	< 10	< 10	13	< 10	326	----
258186	94139402	< 10	1.53	1445	5	0.03	< 1	1240	8	4.61	< 2	4	15	< 0.01	< 10	< 10	81	< 10	78	----
258187	94139402	< 10	1.85	1815	6	0.01	< 1	1270	16	3.16	6	6	16	< 0.01	< 10	< 10	67	< 10	92	----
258188	94139402	< 10	0.93	1630	3	0.01	< 1	1120	6	2.41	2	3	13	< 0.01	< 10	< 10	39	< 10	54	----
258189	94139402	< 10	1.50	1060	2	0.02	< 1	970	< 2	1.79	< 2	3	6	< 0.01	< 10	< 10	52	< 10	58	----
258190	94139402	< 10	1.26	860	6	0.03	< 1	1040	< 2	1.89	2	3	6	< 0.01	< 10	< 10	53	< 10	34	----
258191	94139402	< 10	0.76	345	16	0.01	< 1	770	< 2	5.11	< 2	2	5	< 0.01	< 10	< 10	42	10	16	----
258192	94139402	< 10	1.19	570	4	0.03	< 1	1140	< 2	2.25	< 2	2	10	< 0.01	< 10	< 10	71	< 10	20	----
258193	94139402	< 10	1.06	595	7	0.04	< 1	1220	< 2	1.45	2	3	7	< 0.01	< 10	< 10	47	< 10	52	----
258194	94139402	< 10	0.82	670	3	0.03	< 1	1090	< 2	3.73	2	1	21	< 0.01	< 10	< 10	16	< 10	10	----
258195	94139402	< 10	0.69	360	1	0.01	< 1	400	< 2	5.58	< 2	3	8	< 0.01	< 10	< 10	67	10	14	----
258196	94139402	< 10	0.46	955	10	0.01	< 1	570	< 2	4.22	< 2	1	13	< 0.01	< 10	< 10	11	< 10	8	----
258197	94139402	< 10	0.17	345	4	0.01	< 1	300	< 2	4.86	2	< 1	11	< 0.01	< 10	< 10	5	< 10	< 2	----
258198	94139402	< 10	1.22	820	3	0.01	< 1	690	< 2	1.52	< 2	4	5	< 0.01	< 10	< 10	52	< 10	62	----
258199	94139402	< 10	1.71	1425	6	0.02	< 1	1180	< 2	1.39	2	4	11	< 0.01	< 10	< 10	75	< 10	64	----
258200	94139402	< 10	3.65	4190	11	< 0.01	< 1	1120	50	4.34	6	5	17	< 0.01	< 10	< 10	99	< 10	352	----
258700	94139402	< 10	0.21	3190	16	< 0.01	< 1	260	6590	6.65	68	3	39	< 0.01	< 10	< 10	9	< 10	>10000	----
258876	94139402	< 10	0.23	580	35	0.03	< 1	990	48	4.03	2	< 1	25	< 0.01	< 10	< 10	5	< 10	86	----
258877	94139402	< 10	1.97	1430	11	0.02	< 1	700	14	3.84	6	3	16	< 0.01	< 10	< 10	62	10	98	----

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number : 1-C  
 Total Pages : 2  
 Certificate Date: 07-SEP-2001  
 Invoice No. : 10123459  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS

### A0123459

SAMPLE	PREP CODE	BaO % XRF	CaO % XRF	Cr2O3 % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	SrO % XRF	TiO2 % XRF	LOI % XRF	TOTAL %
256701	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
256702	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
256703	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
256704	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
257501	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
257502	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
257957	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258037	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258038	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258039	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258040	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258041	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258176	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258177	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258178	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258179	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258180	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258181	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258182	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258183	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258184	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258185	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258186	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258187	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258188	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258189	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258190	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258191	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258192	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258193	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258194	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258195	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258196	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258197	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258198	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258199	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258200	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258700	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258876	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258877	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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



# ALS Chemex

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 Analytical Chemists \* Geochemists \* Registered Assayers  
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 PHONE: 604-984-0221 FAX: 604-984-0218

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :2-A  
 Total Pages :2  
 Certificate Date: 07-SEP-2001  
 Invoice No. :10123459  
 P.O. Number :  
 Account :HPQ

## CERTIFICATE OF ANALYSIS A0123459

SAMPLE	PREP CODE	Weight Au ppb Kg FA+AA oz/ton	Au FA oz/ton	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	
258878	94139402	1.30	125	0.4	2.34	16	< 10	< 10	< 0.5	6	0.29	< 0.5	11	29	< 1	6.69	10	30	0.12	
258879	94139402	1.62	130	1.2	3.08	14	< 10	< 10	0.5	14	0.42	< 0.5	13	33	47	10.40	20	30	0.01	
258880	94139402	1.46	320	0.4	3.28	14	< 10	20	< 0.5	14	0.17	< 0.5	7	19	< 1	8.92	10	10	0.09	
258881	94139402	1.32	50	< 0.2	2.20	6	< 10	< 10	< 0.5	2	0.20	< 0.5	6	30	< 1	6.12	10	40	0.11	
258882	94139402	1.14	90	0.2	1.27	14	< 10	40	< 0.5	< 2	0.20	< 0.5	5	21	< 1	4.12	< 10	60	0.22	
258883	94139402	0.80	350	2.0	0.54	16	< 10	10	0.5	< 2	0.50	< 0.5	13	22	115	4.70	< 10	70	0.36	
258884	94139402	0.78	155	1.2	1.07	8	< 10	10	< 0.5	< 2	0.09	< 0.5	4	29	< 1	5.05	< 10	80	0.25	
258885	94139402	0.88	15	0.2	1.45	6	< 10	10	0.5	2	0.82	< 0.5	11	20	< 1	5.03	< 10	60	0.24	
258886	94139402	0.74	20	1.0	0.67	6	< 10	30	< 0.5	< 2	1.74	3.5	7	21	4	3.29	< 10	290	0.27	
258887	94139402	1.08	< 5	1.0	0.54	4	< 10	70	< 0.5	< 2	0.03	< 0.5	< 1	17	< 1	4.00	< 10	60	0.28	
258888	94139402	1.82	75	0.6	2.56	14	< 10	< 10	< 0.5	8	0.15	< 0.5	5	16	< 1	7.06	10	40	0.14	
258889	94139402	0.70	450	1.0	0.88	14	< 10	40	< 0.5	< 2	0.10	< 0.5	4	49	58	3.56	< 10	270	0.25	
258890	94139402	0.78	140	0.8	2.93	10	< 10	< 10	0.5	14	0.15	< 0.5	8	30	< 1	10.60	10	80	0.15	
258891	94139402	1.56	150	0.8	3.01	8	< 10	< 10	0.5	14	0.15	< 0.5	8	34	< 1	10.70	10	80	0.15	
258892	94139402	0.70	560	1.0	2.19	6	< 10	60	< 0.5	4	0.09	< 0.5	4	35	396	6.89	10	40	0.11	
258893	94139402	1.32	175	0.2	2.16	8	< 10	< 10	0.5	10	0.11	< 0.5	10	32	6	9.10	10	40	0.15	
258898	94139402	1.02	5	< 0.2	1.45	< 2	< 10	60	< 0.5	< 2	0.44	< 0.5	4	35	< 1	3.38	< 10	< 10	0.08	
258990	94139402	1.00	< 5	< 0.2	1.49	< 2	< 10	60	< 0.5	< 2	0.47	< 0.5	4	43	< 1	3.38	< 10	< 10	0.09	
258991	94139402	1.36	515	2.6	< 0.01	84	< 10	< 10	0.5	36	< 0.01	< 0.5	82	61	< 1	>15.00	10	60	0.05	
258992	94139402	1.50	70	>100.0	0.07	28	< 10	< 10	< 0.5	4	2.54	31.0	2	22	886	4.30	< 10	2560	0.03	
258993	94139402	0.76	10	0.2	0.32	< 2	< 10	600	< 0.5	< 2	0.05	0.5	< 1	68	< 1	0.55	< 10	90	0.23	
258994	94139402	1.06	150	2.6	3.05	80	< 10	< 10	0.5	36	0.10	< 0.5	7	58	98	>15.00	20	20	0.07	
258995	94139402	1.12	60	9.2	0.25	84	< 10	< 10	< 0.5	18	7.01	< 0.5	2	35	3270	7.09	10	150	0.15	
258996	94139402	0.94	25	1.2	0.94	40	< 10	< 10	0.5	12	3.28	1.5	23	50	42	7.17	10	210	0.15	
258997	94139402	1.10	35	< 0.2	1.06	12	< 10	< 10	< 0.5	< 2	0.22	< 0.5	6	20	< 1	5.50	< 10	10	0.21	
258998	94139402	1.16	110	0.8	2.08	248	< 10	< 10	0.5	32	0.07	< 0.5	47	43	< 1	>15.00	10	10	0.03	
258999	94139402	0.94	170	2.4	0.13	364	< 10	10	< 0.5	12	0.11	4.0	1	70	17	7.29	< 10	420	0.07	
259000	94139402	1.40	>10000	0.512	>100.0	< 0.01	>10000	< 10	< 10	0.5	616	< 0.01	18.5	436	22	2410	>15.00	20	1890	0.03

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



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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :2-B  
 Total Pages :2  
 Certificate Date: 07-SEP-2001  
 Invoice No. :10123459  
 P.O. Number :  
 Account :HPQ

Project : 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0123459

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF
258878	94139402	< 10	1.84	905	3	0.04	1	1320	< 2	4.04	2	3	10	< 0.01	< 10	< 10	96	< 10	60	----
258879	94139402	< 10	2.21	1215	9	0.04	2	850	< 2	6.66	4	8	28	< 0.01	< 10	< 10	113	10	78	----
258880	94139402	< 10	1.51	1325	20	0.03	< 1	1150	< 2	2.48	6	4	9	< 0.01	< 10	< 10	81	< 10	64	----
258881	94139402	< 10	1.35	835	17	0.05	< 1	1100	< 2	2.66	2	4	18	< 0.01	< 10	< 10	71	< 10	40	----
258882	94139402	10	0.74	420	9	0.02	< 1	1000	< 2	2.24	2	1	14	< 0.01	< 10	< 10	29	< 10	24	----
258883	94139402	< 10	0.17	505	23	< 0.01	< 1	910	6	4.18	2	1	17	< 0.01	< 10	< 10	13	< 10	10	----
258884	94139402	< 10	0.40	310	78	< 0.01	< 1	720	10	2.67	2	1	10	< 0.01	< 10	< 10	18	< 10	24	----
258885	94139402	< 10	0.93	1145	3	0.01	1	1080	34	3.20	2	3	26	< 0.01	< 10	< 10	37	< 10	98	----
258886	94139402	< 10	0.53	1470	3	0.02	< 1	940	96	2.91	2	1	46	< 0.01	< 10	< 10	17	< 10	380	----
258887	94139402	10	0.32	225	3	0.03	< 1	1040	338	1.02	2	2	24	< 0.01	< 10	< 10	27	< 10	60	----
258888	94139402	< 10	1.35	830	12	0.01	< 1	800	14	2.36	2	3	20	< 0.01	< 10	< 10	62	< 10	48	----
258889	94139402	< 10	0.37	280	25	0.01	< 1	790	< 2	2.09	2	1	7	< 0.01	< 10	< 10	28	< 10	30	----
258890	94139402	< 10	1.41	935	4	0.02	< 1	980	2	5.14	6	3	10	< 0.01	< 10	< 10	58	< 10	50	----
258891	94139402	< 10	1.45	960	4	0.02	< 1	990	2	5.29	6	4	11	< 0.01	< 10	< 10	61	10	50	----
258892	94139402	< 10	1.10	435	22	0.02	< 1	680	< 2	1.35	2	4	12	< 0.01	< 10	< 10	88	< 10	50	----
258893	94139402	< 10	1.08	1070	15	< 0.01	< 1	690	6	5.41	2	2	14	< 0.01	< 10	< 10	37	10	38	----
258989	94139402	< 10	1.19	200	3	0.04	< 1	1040	< 2	1.31	< 2	3	26	0.08	< 10	< 10	53	< 10	2	----
258990	94139402	< 10	1.23	210	4	0.05	< 1	1140	< 2	1.30	2	3	27	0.08	< 10	< 10	55	< 10	8	----
258991	94139402	< 10	< 0.01	< 5	< 1	0.01	6	160	24	>10.00	2	< 1	6	< 0.01	< 10	< 10	6	40	62	----
258992	94139402	< 10	0.09	1295	< 1	< 0.01	< 1	130	>10000	5.88	388	< 1	117	< 0.01	< 10	< 10	1	< 10	2700	----
258993	94139402	10	0.03	465	1	< 0.01	< 1	70	168	0.17	6	< 1	15	< 0.01	< 10	< 10	1	< 10	118	12.93
258994	94139402	< 10	2.42	1065	2	< 0.01	13	620	68	>10.00	6	4	10	< 0.01	< 10	< 10	94	30	44	----
258995	94139402	< 10	0.12	2670	4	< 0.01	7	590	46	5.88	4	1	100	< 0.01	< 10	< 10	8	10	84	----
258996	94139402	< 10	0.89	1390	5	0.01	2	750	58	7.42	4	1	60	< 0.01	< 10	< 10	19	10	298	----
258997	94139402	< 10	0.59	195	3	0.02	< 1	1130	6	4.03	2	1	11	< 0.01	< 10	< 10	18	< 10	12	16.35
258998	94139402	< 10	1.30	280	3	< 0.01	26	390	14	>10.00	< 2	4	10	< 0.01	< 10	< 10	60	20	12	----
258999	94139402	< 10	0.01	185	< 1	< 0.01	9	250	614	4.16	12	< 1	9	< 0.01	< 10	< 10	12	< 10	586	----
259000	94139402	< 10	< 0.01	< 5	3	< 0.01	< 1	180	6110	10.00	906	< 1	13	< 0.01	< 10	< 10	6	< 10	2110	----

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 V2C 6H1

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :2-C  
 Total Pages :2  
 Certificate Date: 07-SEP-2001  
 Invoice No. :10123459  
 P.O. Number :  
 Account :HPQ

## CERTIFICATE OF ANALYSIS

A0123459

SAMPLE	PREP CODE	BaO % XRF	CaO % XRF	Cr2O3 % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	SrO % XRF	TiO2 % XRF	LOI % XRF	TOTAL %
258878	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258879	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258880	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258881	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258882	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258883	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258884	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258885	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258886	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258887	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258888	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258889	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258890	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258891	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258892	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258893	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258989	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258990	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258991	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258992	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258993	94139402	0.25	0.07	< 0.01	1.02	5.14	0.43	0.07	0.05	0.04	77.07	< 0.01	0.11	2.09	99.27
258994	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258995	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258996	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258997	94139402	0.23	0.34	< 0.01	8.24	3.86	1.56	0.04	2.93	0.29	60.20	0.01	0.49	5.30	99.84
258998	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258999	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
259000	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-A  
 Total Pages :4  
 Certificate Date: 10-SEP-2001  
 Invoice No. : I0123331  
 P.O. Number :  
 Account : HPQ

Project : 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0123331

SAMPLE	PREP CODE	Weight		Au	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	
		Kg	ppb	FA	FA	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppb	%	
258014	-- --	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258015	94139402	1.94	465	-----	3.6	0.95	620	< 10	30	< 0.5	< 2	3.92	0.5	15	13	51	7.45	< 10	430	0.25		
258016	94139402	0.70	< 5	-----	55.4	1.49	16	< 10	220	< 0.5	< 2	0.35	< 0.5	11	< 1	>10000	1.65	< 10	660	0.10		
258017	94139402	1.22	60	-----	1.2	0.89	12	< 10	1400	< 0.5	< 2	1.00	178.0	7	68	174	1.41	< 10	14490	0.11		
258018	94139402	1.68	2170	-----	18.6	0.83	490	< 10	< 10	0.5	8	0.05	2.0	9	51	651	9.65	< 10	1700	0.10		
258019	94139402	1.70	>10000	0.299	26.6	0.42	476	< 10	< 10	0.5	4	0.03	< 0.5	7	77	>10000	14.25	10	2830	0.11		
258020	94139402	1.38	1315	-----	9.6	0.41	394	< 10	< 10	< 0.5	< 2	0.13	< 0.5	13	26	1925	8.23	< 10	580	0.10		
258021	94139402	1.26	1360	-----	12.4	0.35	176	< 10	10	< 0.5	< 2	0.05	5.5	3	117	2390	4.58	< 10	2410	0.05		
258022	94139402	1.16	805	-----	2.6	0.44	228	< 10	< 10	< 0.5	6	0.13	< 0.5	10	36	40	5.68	< 10	420	0.11		
258023	94139402	1.44	615	-----	5.0	0.17	612	< 10	10	< 0.5	6	0.02	< 0.5	5	58	17	5.56	< 10	950	0.21		
258024	94139402	0.98	105	-----	1.0	0.55	210	< 10	230	< 0.5	6	0.09	< 0.5	6	30	9	2.83	< 10	180	0.15		
258025	94139402	1.24	255	-----	1.8	0.34	196	< 10	100	< 0.5	< 2	0.08	< 0.5	5	39	20	3.39	< 10	370	0.21		
258026	94139402	1.56	505	-----	24.2	0.53	588	< 10	20	< 0.5	4	2.26	132.0	15	31	8710	6.07	< 10	7900	0.13		
258027	94139402	1.42	275	-----	25.0	0.17	410	< 10	20	< 0.5	< 2	10.50	22.5	7	22	2380	3.50	< 10	2320	0.06		
258028	94139402	1.64	555	-----	14.4	0.37	758	< 10	10	< 0.5	< 2	4.55	17.0	11	21	118	5.21	< 10	4930	0.11		
258029	94139402	1.94	225	-----	12.8	0.36	884	< 10	10	< 0.5	8	1.51	< 0.5	13	45	56	8.38	< 10	3820	0.24		
258030	94139402	0.36	< 5	-----	0.8	0.19	88	< 10	10	< 0.5	8	3.36	< 0.5	5	33	6	10.50	< 10	320	0.14		
258031	94139402	0.52	5	-----	0.2	0.29	50	< 10	30	< 0.5	< 2	0.21	< 0.5	7	40	4	5.30	< 10	290	0.24		
258032	94139402	0.74	< 5	-----	0.6	0.11	40	< 10	10	< 0.5	< 2	3.66	< 0.5	3	29	5	6.63	< 10	150	0.08		
258033	94139402	0.62	< 5	-----	1.4	0.35	58	< 10	< 10	1.0	6	0.18	< 0.5	8	38	10	>15.00	10	690	0.24		
258034	94139402	1.44	>10000	1.140	>100.0	0.09	8340	< 10	20	< 0.5	110	0.02	>500	9	23	4870	4.55	10	56200	0.01		
258035	94139402	1.36	>10000	0.364	71.6	0.12	>10000	< 10	< 10	0.5	76	0.85	>500	12	55	9230	7.97	10	19010	0.06		
258036	94139402	1.26	480	-----	39.2	0.24	1030	< 10	< 10	0.5	28	0.17	119.5	16	34	>10000	10.05	< 10	1820	0.15		
258051	94139402	1.28	235	-----	1.6	2.94	210	< 10	20	0.5	2	0.18	4.5	11	36	63	9.67	< 10	60	0.16		
258052	94139402	1.24	20	-----	0.6	2.70	28	< 10	50	< 0.5	12	0.91	2.0	13	16	40	5.63	< 10	100	0.13		
258053	94139402	1.34	45	-----	0.6	1.77	16	< 10	30	< 0.5	10	0.18	< 0.5	10	20	11	5.96	< 10	80	0.27		
258054	94139402	1.40	4980	-----	2.0	2.48	46	< 10	10	0.5	6	0.31	< 0.5	17	20	18	9.16	< 10	190	0.19		
258055	94139402	1.72	3290	-----	2.4	2.25	36	< 10	10	0.5	10	0.20	< 0.5	12	36	59	9.94	< 10	80	0.27		
258056	94139402	1.80	1260	-----	9.8	1.68	10	< 10	10	0.5	2	3.06	176.0	10	24	1295	7.79	< 10	9730	0.14		
258057	94139402	1.12	175	-----	0.4	3.57	66	< 10	20	0.5	10	0.26	0.5	14	13	4	9.56	< 10	20	0.20		
258058	94139402	1.82	6220	-----	4.6	0.63	74	< 10	10	< 0.5	18	10.80	< 0.5	3	6	807	5.75	< 10	200	0.03		
258059	94139402	1.42	275	-----	0.6	2.33	38	< 10	30	0.5	< 2	2.11	< 0.5	14	34	10	6.80	< 10	20	0.22		
258060	94139402	1.66	235	-----	3.8	0.07	38	< 10	< 10	0.5	< 2	0.05	< 0.5	32	47	12	>15.00	10	100	0.07		
258061	94139402	1.54	65	-----	0.2	1.85	12	< 10	40	< 0.5	8	0.26	< 0.5	14	69	277	4.22	< 10	50	0.32		
258062	94139402	1.44	270	-----	6.6	2.56	46	< 10	< 10	0.5	2	0.14	< 0.5	19	29	6610	>15.00	10	130	0.13		
258063	94139402	1.12	175	-----	2.2	1.87	20	< 10	< 10	0.5	14	0.03	< 0.5	27	45	17	>15.00	20	30	0.10		
258064	94139402	1.38	50	-----	0.8	1.40	14	< 10	10	0.5	6	0.18	< 0.5	25	50	77	9.39	< 10	20	0.20		
258065	94139402	1.16	160	-----	1.2	1.06	22	< 10	< 10	0.5	10	0.48	< 0.5	29	66	22	12.00	10	20	0.22		
258066	94139402	1.30	100	-----	1.0	1.51	22	< 10	10	0.5	6	0.31	< 0.5	35	27	83	11.05	< 10	40	0.18		
258067	94139402	2.02	1475	-----	1.2	3.69	42	< 10	30	0.5	2	0.19	0.5	9	20	45	9.59	< 10	< 10	0.19		

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



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## CERTIFICATE OF ANALYSIS A0123331

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF
258014	--	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258015	94139402	< 10	0.65	3860	9	< 0.01	1	1170	74	4.82	18	3	100	< 0.01	< 10	< 10	58	< 10	370	----
258016	94139402	< 10	0.54	965	4	0.04	5	1930	8	0.61	14	1	36	< 0.01	< 10	< 10	17	10	86	----
258017	94139402	< 10	0.23	1195	21	0.03	6	410	2010	0.07	< 2	1	177	< 0.01	< 10	< 10	19	< 10	4840	----
258018	94139402	< 10	0.51	110	13	< 0.01	5	430	92	7.94	28	< 1	27	< 0.01	< 10	10	25	< 10	398	----
258019	94139402	< 10	0.18	115	21	< 0.01	7	310	78	>10.00	32	< 1	22	< 0.01	< 10	20	22	< 10	266	----
258020	94139402	< 10	0.22	110	12	< 0.01	7	710	42	7.41	24	< 1	38	< 0.01	< 10	10	15	< 10	48	----
258021	94139402	< 10	0.19	130	15	< 0.01	4	220	120	2.92	20	< 1	40	< 0.01	< 10	< 10	10	< 10	952	----
258022	94139402	< 10	0.20	150	9	< 0.01	4	720	34	4.70	4	< 1	37	< 0.01	< 10	< 10	10	< 10	46	----
258023	94139402	< 10	0.01	40	9	< 0.01	2	420	46	3.20	18	< 1	75	< 0.01	< 10	< 10	7	< 10	40	----
258024	94139402	< 10	0.20	520	1	< 0.01	3	880	34	0.46	< 2	2	8	< 0.01	< 10	< 10	31	< 10	70	----
258025	94139402	< 10	0.01	205	5	< 0.01	3	920	64	1.07	2	2	10	< 0.01	< 10	< 10	9	< 10	120	----
258026	94139402	< 10	0.29	1895	15	< 0.01	4	800	4270	5.74	30	1	39	< 0.01	< 10	< 10	28	< 10	>10000	----
258027	94139402	< 10	1.05	>10000	7	< 0.01	1	430	644	2.80	32	3	175	< 0.01	< 10	< 10	18	< 10	2920	----
258028	94139402	< 10	0.29	2850	10	< 0.01	3	430	644	5.03	38	1	77	< 0.01	< 10	< 10	20	< 10	2420	----
258029	94139402	< 10	0.21	1120	15	< 0.01	2	640	78	8.49	44	< 1	42	< 0.01	< 10	10	29	< 10	124	----
258030	94139402	< 10	0.05	535	22	< 0.01	2	170	14	>10.00	26	< 1	126	< 0.01	< 10	10	3	< 10	80	----
258031	94139402	< 10	0.03	165	16	0.01	4	160	18	4.46	10	< 1	25	< 0.01	< 10	< 10	5	< 10	52	----
258032	94139402	< 10	0.03	515	16	< 0.01	3	130	14	6.86	4	< 1	191	< 0.01	< 10	< 10	1	< 10	24	----
258033	94139402	< 10	0.04	140	34	< 0.01	4	200	20	>10.00	8	< 1	14	< 0.01	< 10	10	4	< 10	36	----
258034	94139402	< 10	0.01	365	10	< 0.01	13	340	>10000	5.52	198	< 1	16	< 0.01	< 10	< 10	< 1	10	>10000	----
258035	94139402	< 10	0.17	865	17	< 0.01	15	360	>10000	>10.00	646	< 1	33	< 0.01	< 10	< 10	< 1	< 10	>10000	----
258036	94139402	< 10	0.05	170	18	< 0.01	23	670	1545	>10.00	32	< 1	18	< 0.01	< 10	10	2	< 10	>10000	----
258051	94139402	< 10	1.87	895	11	0.03	5	1520	136	4.88	8	1	9	< 0.01	< 10	10	62	< 10	514	----
258052	94139402	< 10	1.93	1195	7	0.03	4	1700	40	2.16	10	4	26	< 0.01	< 10	< 10	108	< 10	216	----
258053	94139402	< 10	1.22	485	9	0.03	2	1690	20	3.11	2	1	22	< 0.01	< 10	< 10	72	< 10	70	----
258054	94139402	< 10	1.68	915	14	0.01	3	1520	20	6.43	6	< 1	8	< 0.01	< 10	10	106	< 10	98	----
258055	94139402	< 10	1.30	740	15	< 0.01	3	1190	22	7.14	< 2	< 1	8	< 0.01	< 10	10	43	< 10	104	----
258056	94139402	< 10	1.18	2920	9	< 0.01	5	1130	2400	5.91	26	< 1	70	< 0.01	< 10	< 10	22	< 10	>10000	----
258057	94139402	< 10	2.20	1450	14	0.01	5	1750	20	5.02	12	1	11	< 0.01	< 10	< 10	85	< 10	162	----
258058	94139402	10	4.69	7820	11	< 0.01	< 1	170	282	5.05	14	< 1	159	< 0.01	< 10	< 10	10	< 10	90	----
258059	94139402	< 10	2.08	2320	13	0.02	4	1210	20	4.84	10	2	42	< 0.01	< 10	< 10	54	< 10	104	----
258060	94139402	< 10	0.03	50	44	< 0.01	10	130	16	>10.00	< 2	< 1	6	< 0.01	< 10	30	1	< 10	14	----
258061	94139402	< 10	1.17	180	18	0.04	6	1080	2	1.97	10	3	14	< 0.01	< 10	< 10	57	< 10	34	----
258062	94139402	< 10	1.36	600	21	< 0.01	4	730	10	>10.00	2	< 1	6	< 0.01	< 10	20	50	< 10	54	----
258063	94139402	< 10	1.06	210	24	0.02	4	550	20	>10.00	2	< 1	4	< 0.01	< 10	30	92	< 10	40	----
258064	94139402	< 10	1.03	90	14	0.01	33	1190	2	6.05	12	< 1	6	< 0.01	< 10	10	33	< 10	18	----
258065	94139402	< 10	0.68	400	24	0.03	32	990	12	>10.00	8	< 1	18	< 0.01	< 10	10	27	< 10	12	----
258066	94139402	< 10	1.06	235	41	0.01	13	1180	12	>10.00	6	< 1	10	< 0.01	< 10	10	56	< 10	24	----
258067	94139402	< 10	1.74	1225	10	< 0.01	1	1460	24	3.51	10	1	6	< 0.01	< 10	10	82	< 10	136	----

CERTIFICATION:





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## CERTIFICATE OF ANALYSIS A0123331

SAMPLE	PREP CODE	Weight Au ppb Kg FA+AA	Au FA oz/ton	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	
258068	94139402	1.56	165	0.8	2.93	98	< 10	10	0.5	6	0.16	< 0.5	16	22	16	9.89	< 10	20	0.11	
258069	94139402	2.16	3390	12.0	0.54	100	< 10	< 10	0.5	< 2	1.61	< 0.5	5	75	4670	>15.00	10	1840	0.09	
258070	94139402	1.72	500	0.6	2.38	24	< 10	10	0.5	12	2.11	< 0.5	10	21	61	7.68	< 10	40	0.13	
258071	94139402	1.50	60	2.2	0.33	44	< 10	60	< 0.5	< 2	4.61	2.5	8	29	30	3.60	< 10	660	0.25	
258072	94139402	1.92	15	2.8	1.96	36	< 10	50	< 0.5	8	4.47	< 0.5	14	29	1820	4.10	< 10	30	0.19	
258073	94139402	1.22	< 5	< 0.2	2.60	6	< 10	230	0.5	< 2	1.04	< 0.5	11	27	16	3.95	< 10	50	0.20	
258107	94139402	0.94	< 5	< 0.2	2.89	14	< 10	160	< 0.5	4	1.91	< 0.5	23	72	101	4.81	< 10	10	0.08	
258108	94139402	0.56	15	0.2	3.24	18	< 10	50	0.5	< 2	5.89	0.5	37	117	113	5.09	< 10	30	0.06	
258109	94139402	0.82	< 5	< 0.2	3.24	10	< 10	30	< 0.5	16	2.33	0.5	21	54	58	5.42	< 10	< 10	0.04	
258151	94139402	1.06	< 5	< 0.2	2.45	4	< 10	740	< 0.5	< 2	2.07	0.5	12	15	13	3.58	< 10	100	0.23	
258152	94139402	0.90	1315	7.2	2.62	42	< 10	120	< 0.5	2	0.14	< 0.5	8	20	489	6.68	< 10	200	0.14	
258153	94139402	0.78	1240	1.6	3.11	108	< 10	110	0.5	< 2	0.10	< 0.5	13	29	80	9.18	10	20	0.17	
258154	94139402	0.72	< 5	< 0.2	3.77	8	< 10	100	< 0.5	6	0.54	< 0.5	5	15	10	6.85	< 10	< 10	0.09	
258155	94139402	0.82	2190	4.0	2.00	230	< 10	20	< 0.5	4	0.21	6.5	16	42	171	9.20	< 10	910	0.17	
258156	94139402	0.88	635	1.2	3.18	322	< 10	20	0.5	12	0.46	0.5	45	30	748	10.15	< 10	30	0.10	
258157	94139402	0.96	135	0.8	0.17	38	< 10	30	< 0.5	< 2	>15.00	< 0.5	12	15	4	1.80	< 10	10	0.12	
258158	94139402	0.70	305	1.0	1.82	58	< 10	30	< 0.5	< 2	0.19	< 0.5	11	16	3	6.01	< 10	10	0.07	
258159	94139402	0.62	3440	0.8	0.46	78	< 10	40	< 0.5	< 2	3.37	0.5	6	21	603	3.53	< 10	340	0.28	
258160	94139402	0.90	15	0.8	0.61	< 2	< 10	60	< 0.5	6	>15.00	< 0.5	7	9	403	2.67	< 10	50	0.11	
258161	94139402	0.56	5	< 0.2	1.22	8	< 10	70	< 0.5	6	4.01	< 0.5	9	18	3	2.40	< 10	10	0.24	
258162	94139402	0.64	170	0.8	1.34	12	< 10	40	< 0.5	< 2	>15.00	< 0.5	5	2	108	3.90	< 10	40	< 0.61	
258163	94139402	0.85	15	0.2	1.50	52	< 10	30	0.5	6	3.72	< 0.5	21	24	16	5.06	< 10	70	0.31	
258164	94139402	0.82	105	2.8	0.51	14	< 10	40	< 0.5	6	2.04	0.5	9	19	32	3.26	< 10	50	0.20	
258165	94139402	1.08	75	11.2	0.25	22	< 10	< 10	< 0.5	2	0.12	< 0.5	14	64	>10000	6.78	< 10	220	0.13	
258166	94139402	0.82	5	0.4	1.44	64	< 10	30	< 0.5	2	2.11	< 0.5	18	15	39	5.10	< 10	130	0.19	
258167	--	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258168	--	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258169	94139402	0.96	10	0.6	1.78	62	< 10	20	< 0.5	12	0.92	1.0	13	15	27	4.58	< 10	130	0.19	
258170	94139402	0.82	< 5	0.2	0.64	2	< 10	10	< 0.5	8	0.71	< 0.5	9	20	1	3.07	< 10	10	0.18	
258171	94139402	0.64	5	< 0.2	2.03	6	< 10	160	< 0.5	< 2	2.35	< 0.5	10	24	29	2.90	< 10	30	0.29	
258172	94139402	0.74	< 5	< 0.2	2.09	16	< 10	160	< 0.5	8	1.80	< 0.5	9	24	23	3.42	< 10	40	0.15	
258173	94139402	0.74	140	0.6	1.50	40	< 10	20	< 0.5	2	0.30	< 0.5	9	37	10	5.44	< 10	10	0.17	
258174	94139402	0.90	40	0.2	1.42	100	< 10	10	< 0.5	10	0.27	< 0.5	12	21	1	6.58	< 10	< 10	0.08	
258175	94139402	1.04	525	15.6	1.02	350	< 10	< 10	0.5	16	0.10	< 0.5	8	73	134	12.85	10	2320	0.20	
258234	94139402	1.40	< 5	< 0.2	1.11	8	< 10	720	< 0.5	< 2	0.96	< 0.5	7	23	18	1.64	< 10	10	0.19	
258235	94139402	1.16	250	0.2	0.30	16	< 10	470	< 0.5	< 2	0.01	0.5	1	71	3	4.31	< 10	30	0.20	
258236	94139402	1.24	435	2.0	0.13	42	< 10	150	0.5	6	0.03	1.0	5	20	4	12.70	< 10	620	0.11	
258237	94139402	1.84	35	1.8	0.95	14	< 10	10	< 0.5	12	10.75	40.5	24	10	187	5.78	< 10	3000	0.07	
258238	94139402	1.32	10	0.2	0.27	34	< 10	60	< 0.5	< 2	0.06	< 0.5	9	48	21	4.28	< 10	10	0.07	
258239	94139402	2.10	< 5	< 0.2	2.03	4	< 10	60	< 0.5	4	0.66	0.5	23	31	< 1	3.23	< 10	20	0.06	

CERTIFICATION:





# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :2-B  
 Total Pages :4  
 Certificate Date: 10-SEP-2001  
 Invoice No. : 10123331  
 P.O. Number :  
 Account : HPO

Project : 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0123331

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF
258068	94139402	< 10	1.52	1250	11	< 0.01	5	1140	12	4.77	12	1	5	< 0.01	< 10	10	58	< 10	88	-----
258069	94139402	< 10	0.88	2160	22	< 0.01	4	300	54	>10.00	136	< 1	26	< 0.01	< 10	20	9	< 10	108	-----
258070	94139402	< 10	2.24	2920	10	< 0.01	3	950	10	4.66	6	1	41	< 0.01	< 10	< 10	38	< 10	80	-----
258071	94139402	< 10	0.98	6060	5	< 0.01	3	990	232	2.16	8	3	251	< 0.01	< 10	< 10	12	< 10	320	-----
258072	94139402	< 10	0.94	1575	5	< 0.01	23	960	54	1.08	< 2	2	211	< 0.01	< 10	< 10	27	< 10	60	-----
258073	94139402	10	0.99	815	4	0.03	5	990	6	0.01	2	4	57	< 0.01	< 10	< 10	56	< 10	60	16.89
258107	94139402	< 10	2.22	1255	5	0.04	27	1420	< 2	0.27	8	22	59	0.11	< 10	< 10	233	< 10	66	15.62
258108	94139402	< 10	2.83	1560	20	0.02	42	1250	10	1.02	14	25	108	< 0.01	< 10	< 10	207	< 10	56	-----
258109	94139402	< 10	2.34	920	4	0.04	14	1380	2	0.05	10	9	56	0.09	< 10	< 10	206	< 10	60	-----
258151	94139402	< 10	1.16	890	3	0.02	4	1000	8	0.10	< 2	5	81	< 0.01	< 10	< 10	69	< 10	58	-----
258152	94139402	< 10	0.74	395	5	0.01	4	940	48	0.60	6	1	7	< 0.01	< 10	< 10	59	< 10	300	-----
258153	94139402	< 10	0.90	415	4	0.02	3	760	48	0.83	6	1	7	< 0.01	< 10	10	84	< 10	118	-----
258154	94139402	< 10	1.39	950	5	0.01	4	970	< 2	0.01	12	2	15	< 0.01	< 10	< 10	87	< 10	126	15.44
258155	94139402	< 10	0.43	390	9	0.02	2	680	134	3.46	< 2	< 1	9	< 0.01	< 10	10	53	< 10	836	-----
258156	94139402	< 10	1.05	1815	21	< 0.01	16	530	34	3.88	8	< 1	9	< 0.01	< 10	10	35	< 10	218	-----
258157	94139402	10	0.07	5480	6	< 0.01	8	250	12	1.68	< 2	< 1	294	< 0.01	< 10	< 10	4	< 10	< 2	-----
258158	94139402	< 10	0.97	615	8	0.02	3	990	10	2.57	6	1	5	< 0.01	< 10	< 10	72	< 10	52	-----
258159	94139402	< 10	0.12	1360	6	0.01	3	660	176	1.44	62	< 1	80	< 0.01	< 10	< 10	9	< 10	140	-----
258160	94139402	10	0.36	5510	4	< 0.01	2	250	12	1.79	2	< 1	350	< 0.01	< 10	< 10	9	< 10	70	-----
258161	94139402	< 10	0.54	1540	4	< 0.01	4	670	6	0.95	< 2	1	84	< 0.01	< 10	< 10	19	< 10	34	14.11
258162	94139402	< 10	1.46	8530	6	< 0.01	2	150	8	2.58	< 2	1	446	< 0.01	< 10	< 10	48	< 10	46	-----
258163	94139402	< 10	0.90	2550	7	0.01	4	1600	2	4.25	6	3	95	< 0.01	< 10	< 10	50	< 10	56	-----
258164	94139402	< 10	0.14	810	7	< 0.01	4	1190	16	2.46	< 2	< 1	43	< 0.01	< 10	< 10	8	< 10	102	-----
258165	94139402	< 10	0.03	380	16	< 0.01	5	480	12	4.36	< 2	< 1	7	< 0.01	< 10	< 10	6	< 10	54	-----
258166	94139402	< 10	1.14	1565	8	0.01	3	1550	2	3.89	6	2	71	< 0.01	< 10	< 10	34	< 10	156	-----
258167	-- --	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd
258168	-- --	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd	NotRcd
258169	94139402	< 10	1.18	800	6	0.04	3	1190	26	2.37	4	1	51	< 0.01	< 10	< 10	38	< 10	112	-----
258170	94139402	< 10	0.46	245	6	0.01	2	750	8	2.42	< 2	< 1	43	< 0.01	< 10	< 10	19	< 10	22	-----
258171	94139402	< 10	1.18	1360	3	0.04	5	930	6	0.12	4	4	51	< 0.01	< 10	< 10	53	< 10	64	-----
258172	94139402	< 10	1.35	1040	3	0.02	4	940	< 2	0.47	4	4	38	< 0.01	< 10	< 10	70	< 10	54	-----
258173	94139402	< 10	0.92	655	11	0.06	3	1060	12	3.63	< 2	< 1	22	< 0.01	< 10	< 10	61	< 10	42	-----
258174	94139402	< 10	1.05	620	9	0.04	3	1130	< 2	5.19	2	< 1	9	< 0.01	< 10	< 10	54	< 10	46	-----
258175	94139402	< 10	0.49	420	15	0.01	5	680	2050	>10.00	270	< 1	45	< 0.01	< 10	10	19	< 10	332	-----
258234	94139402	10	0.87	920	1	0.01	4	610	6	0.08	8	3	38	< 0.01	< 10	< 10	11	< 10	32	14.52
258235	94139402	< 10	0.01	125	3	< 0.01	4	450	16	0.19	6	< 1	12	< 0.01	< 10	< 10	5	< 10	2	-----
258236	94139402	< 10	0.02	195	10	< 0.01	4	590	82	0.41	< 2	< 1	169	< 0.01	< 10	20	5	< 10	118	-----
258237	94139402	< 10	5.56	8690	8	< 0.01	8	380	110	4.03	14	< 1	169	< 0.01	< 10	< 10	19	< 10	5190	-----
258238	94139402	< 10	0.11	40	7	0.03	10	610	8	1.53	6	< 1	5	< 0.01	< 10	< 10	13	< 10	10	-----
258239	94139402	10	1.51	405	8	0.10	6	1100	< 2	0.67	6	3	32	0.04	< 10	< 10	61	10	74	16.63

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number : 2-C  
 Total Pages : 4  
 Certificate Date: 10-SEP-2001  
 Invoice No. : 10123331  
 P.O. Number :  
 Account : HPO

## CERTIFICATE OF ANALYSIS A0123331

SAMPLE	PREP CODE	BaO	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	Na2O	P2O5	SiO2	SrO	TiO2	LOI	TOTAL
		% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF	% XRF
258068	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258069	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258070	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258071	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258072	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258073	94139402	0.07	1.50	< 0.01	6.33	2.68	1.96	0.12	2.81	0.23	61.81	0.01	0.48	4.45	99.34
258107	94139402	0.29	3.34	< 0.01	7.63	3.16	3.69	0.18	3.98	0.36	56.04	0.06	0.64	4.22	99.21
258108	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258109	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258151	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258152	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258153	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258154	94139402	0.20	0.82	< 0.01	10.76	2.67	2.50	0.14	2.49	0.23	60.43	< 0.01	0.50	3.31	99.49
258155	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258156	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258157	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258158	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258159	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258160	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258161	94139402	0.11	7.02	< 0.01	5.13	3.49	1.54	0.26	0.76	0.20	58.06	0.01	0.41	7.34	98.44
258162	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258163	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258164	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258165	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258166	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258167	-- --	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258168	-- --	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258169	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258170	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258171	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258172	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258173	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258174	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258175	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258234	94139402	0.21	1.21	< 0.01	3.13	3.37	1.79	0.12	2.11	0.12	67.34	0.01	0.36	3.78	98.07
258235	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258236	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258237	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258238	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258239	94139402	< 0.01	2.64	< 0.01	5.72	0.44	2.40	0.06	6.75	0.20	61.00	0.06	0.54	2.73	99.17

CERTIFICATION:



# ALS Chemex

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 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :3-A  
 Total Pages :4  
 Certificate Date: 10-SEP-2001  
 Invoice No. : I0123331  
 P.O. Number :  
 Account : HPO

Project : 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0123331

SAMPLE	PREP CODE	Weight Au ppb Kg FA+AA oz/ton	Au FA ppm	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	
258240	94139402	1.28	100	0.4	0.58	6	< 10	30	< 0.5	< 2	0.22	< 0.5	13	24	111	5.04	< 10	30	0.16	
258241	94139402	1.90	6040	1.6	0.07	42	< 10	< 10	< 0.5	< 2	7.40	1.0	26	9	12	7.86	< 10	370	0.04	
258242	94139402	2.28	< 5	< 0.2	1.05	2	< 10	360	< 0.5	< 2	0.68	< 0.5	5	20	8	1.66	< 10	< 10	0.20	
258243	94139402	1.66	80	0.2	1.67	8	< 10	30	< 0.5	6	0.17	< 0.5	8	43	24	8.47	< 10	< 10	0.30	
258244	94139402	1.92	270	4.8	1.66	150	< 10	10	0.5	16	4.30	0.5	8	21	3650	8.27	< 10	80	0.08	
258245	94139402	1.26	35	< 0.2	0.75	6	< 10	20	< 0.5	< 2	0.14	< 0.5	9	52	13	3.00	< 10	10	0.24	
258246	94139402	1.44	90	0.2	0.76	4	< 10	20	< 0.5	< 2	0.22	< 0.5	23	37	22	4.38	< 10	10	0.21	
258247	94139402	1.50	125	0.6	0.68	36	< 10	10	< 0.5	< 2	0.09	< 0.5	6	79	44	4.78	< 10	70	0.29	
258248	94139402	1.80	405	2.0	0.28	44	< 10	20	< 0.5	< 2	0.05	< 0.5	5	30	99	4.12	< 10	330	0.22	
258249	94139402	1.40	10	0.2	1.86	10	< 10	10	< 0.5	6	0.64	< 0.5	13	32	< 1	5.26	< 10	30	0.19	
258250	94139402	1.56	115	1.8	1.18	40	< 10	20	< 0.5	< 2	0.58	< 0.5	9	22	1	7.49	< 10	100	0.14	
258689	94139402	0.78	< 5	0.4	0.70	10	< 10	30	< 0.5	6	1.31	3.0	6	52	4	3.54	< 10	240	0.24	
258690	94139402	0.92	190	5.0	1.08	124	< 10	40	< 0.5	< 2	0.13	37.0	6	28	256	4.02	< 10	5490	0.17	
258691	94139402	1.40	10	< 0.2	0.42	6	< 10	70	< 0.5	< 2	0.98	0.5	9	39	5	2.16	< 10	20	0.22	
258692	94139402	1.58	< 5	0.2	0.28	38	< 10	30	< 0.5	< 2	2.66	< 0.5	12	45	16	2.84	< 10	70	0.07	
258693	94139402	0.90	< 5	0.2	0.10	10	< 10	400	< 0.5	2	>15.00	1.5	< 1	8	4	0.85	< 10	520	< 0.01	
258694	94139402	1.24	< 5	0.2	0.97	44	< 10	40	< 0.5	< 2	1.75	< 0.5	13	22	18	3.54	< 10	110	0.20	
258695	94139402	1.06	< 5	24.0	0.06	512	< 10	< 10	0.5	< 2	0.15	5.5	13	49	40	13.55	< 10	9330	< 0.01	
258696	94139402	1.20	< 5	< 0.2	3.14	26	< 10	70	< 0.5	< 2	1.49	0.5	18	20	27	4.66	< 10	130	0.05	
258697	94139402	1.24	135	0.8	0.57	172	< 10	40	< 0.5	< 2	0.84	< 0.5	9	50	8	2.29	< 10	60	0.43	
258698	94139402	0.96	>10000	0.557	63.0	0.08	462	< 10	< 10	0.5	< 2	0.19	13.5	10	54	>10000	10.65	< 10	1640	0.08
258699	94139402	0.86	60	4.0	1.22	184	< 10	20	0.5	< 2	2.06	0.5	19	40	62	5.41	< 10	360	0.26	
258864	94139402	0.86	10	< 0.2	0.84	8	< 10	20	< 0.5	2	0.18	< 0.5	5	45	25	4.56	< 10	< 10	0.13	
258865	94139402	1.36	15	13.8	0.39	416	< 10	10	< 0.5	< 2	4.35	415	7	28	127	2.38	< 10	3980	0.14	
258866	94139402	1.02	10	0.2	1.05	8	< 10	10	< 0.5	2	0.22	1.5	21	62	10	3.66	< 10	< 10	0.08	
258867	94139402	1.42	1025	27.0	0.74	330	< 10	10	0.5	36	3.56	190.0	75	35	2630	8.69	< 10	990	< 0.01	
258868	94139402	1.04	5	< 0.2	0.88	10	< 10	20	< 0.5	< 2	0.82	1.0	16	55	17	2.86	< 10	50	0.07	
258869	94139402	1.00	105	0.6	1.51	10	< 10	10	< 0.5	< 2	0.18	< 0.5	8	30	3	4.53	< 10	20	0.20	
258870	94139402	1.70	85	0.2	1.61	8	< 10	10	< 0.5	< 2	0.20	< 0.5	11	33	31	3.70	< 10	< 10	0.13	
258871	94139402	2.34	305	1.0	3.40	62	< 10	10	0.5	2	1.35	< 0.5	16	39	9	>15.00	< 10	60	0.10	
258872	94139402	1.12	770	6.0	2.80	68	< 10	< 10	0.5	4	0.19	< 0.5	17	26	12	11.15	< 10	10	0.13	
258873	94139402	1.70	10	< 0.2	0.94	6	< 10	50	< 0.5	< 2	0.25	< 0.5	11	112	14	3.83	< 10	< 10	0.12	
258874	94139402	1.14	110	0.8	2.93	28	< 10	40	< 0.5	2	0.24	< 0.5	11	28	1	6.59	< 10	20	0.17	
258875	94139402	1.74	55	0.8	4.28	16	< 10	10	0.5	6	0.22	< 0.5	12	48	< 1	10.55	< 10	10	0.10	
258968	---	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258969	94139402	0.98	< 5	< 0.2	4.02	< 2	< 10	10	< 0.5	16	1.37	0.5	30	43	104	6.27	< 10	< 10	0.02	
258970	94139402	1.16	< 5	< 0.2	0.49	< 2	< 10	270	< 0.5	< 2	1.17	< 0.5	< 1	72	< 1	6.29	< 10	720	0.35	
258971	94139402	1.36	880	21.6	2.02	494	< 10	< 10	0.5	38	0.07	< 0.5	126	76	6630	>15.00	< 10	130	0.01	
258972	94139402	0.90	170	7.6	3.69	1055	< 10	30	0.5	18	1.70	1.5	100	69	1115	10.20	< 10	90	0.12	
258973	94139402	1.32	3530	60.8	< 0.01	>10000	< 10	< 10	1.0	114	< 0.01	< 0.5	190	50	2030	>15.00	< 10	250	< 0.01	

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :3-B  
 Total Pages :4  
 Certificate Date: 10-SEP-2001  
 Invoice No. : I0123331  
 P.O. Number :  
 Account : HPO

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0123331

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF	
258240	94139402	< 10	0.34	65	19	0.01	18	1260	< 2	3.01	10	< 1	9	< 0.01	< 10	< 10	15	< 10	12		
258241	94139402	< 10	3.77	4180	17	< 0.01	6	100	10	8.37	16	< 1	82	< 0.01	< 10	10	< 1	< 10	6		
258242	94139402	10	0.68	490	< 1	0.01	3	520	< 2	0.03	4	1	27	< 0.01	< 10	< 10	19	< 10	32	14.94	
258243	94139402	< 10	1.05	220	12	0.02	13	1260	2	2.46	16	< 1	15	< 0.01	< 10	10	56	< 10	12		
258244	94139402	< 10	2.60	5160	11	< 0.01	4	650	10	5.46	16	< 1	45	< 0.01	< 10	< 10	31	< 10	54		
258245	94139402	< 10	0.40	45	9	0.02	4	890	< 2	2.27	2	< 1	26	< 0.01	< 10	< 10	11	< 10	8		
258246	94139402	< 10	0.47	50	13	0.02	35	1270	8	3.14	2	< 1	9	< 0.01	< 10	< 10	11	< 10	6		
258247	94139402	< 10	0.24	60	11	< 0.01	5	580	26	3.26	2	< 1	9	< 0.01	< 10	< 10	13	< 10	16		
258248	94139402	< 10	0.01	190	8	< 0.01	3	600	54	2.46	16	< 1	20	< 0.01	< 10	< 10	3	< 10	32		
258249	94139402	< 10	1.54	400	6	0.04	4	1730	6	3.10	2	2	33	< 0.01	< 10	< 10	60	< 10	28		
258250	94139402	< 10	0.76	445	8	0.03	3	1470	118	3.74	4	< 1	13	< 0.01	< 10	10	27	< 10	52		
258689	94139402	< 10	0.21	1775	1	0.07	4	1270	48	2.30	4	2	60	< 0.01	< 10	< 10	9	< 10	352		
258690	94139402	< 10	0.41	275	3	< 0.01	5	840	2940	1.59	62	1	24	< 0.01	< 10	< 10	17	< 10	4630		
258691	94139402	< 10	0.24	560	2	0.10	5	680	16	1.34	6	2	120	< 0.01	< 10	< 10	16	< 10	40	14.77	
258692	94139402	< 10	1.04	640	4	0.01	97	270	14	1.54	14	3	205	< 0.01	< 10	< 10	3	< 10	54		
258693	94139402	< 10	0.17	4490	< 1	< 0.01	4	130	24	< 0.01	12	< 1	775	< 0.01	< 10	< 10	9	< 10	6		
258694	94139402	< 10	0.53	290	7	0.01	14	1160	12	2.85	24	3	102	< 0.01	< 10	< 10	23	< 10	84		
258695	94139402	< 10	< 0.01	25	25	< 0.01	7	850	2990	>10.00	190	< 1	75	< 0.01	< 10	10	3	< 10	1125		
258696	94139402	< 10	1.62	685	3	0.15	5	1110	8	0.39	2	1	137	0.04	< 10	< 10	165	< 10	64	18.15	
258697	94139402	< 10	0.15	645	1	< 0.01	8	670	20	1.96	6	1	71	< 0.01	< 10	< 10	15	< 10	22	13.90	
258698	94139402	< 10	< 0.01	135	15	< 0.01	7	440	5330	9.80	94	< 1	10	< 0.01	< 10	10	3	< 10	1420		
258699	94139402	< 10	0.93	3070	11	< 0.01	11	820	46	4.89	12	1	120	< 0.01	< 10	< 10	31	< 10	72		
258864	94139402	< 10	0.69	80	6	0.02	24	880	10	2.95	10	1	7	< 0.01	< 10	< 10	40	< 10	8		
258865	94139402	< 10	0.19	6820	3	< 0.01	15	330	>10000	3.36	16	< 1	79	< 0.01	< 10	< 10	6	< 10	>10000		
258866	94139402	< 10	0.90	145	6	0.01	42	800	16	2.08	4	1	6	< 0.01	< 10	< 10	87	< 10	58		
258867	94139402	< 10	2.04	1885	10	< 0.01	12	200	3980	7.56	40	1	45	< 0.01	< 10	10	23	< 10	>10000		
258868	94139402	< 10	0.87	170	6	0.04	24	1130	24	2.60	4	4	18	0.01	< 10	< 10	64	< 10	96		
258869	94139402	< 10	0.88	365	8	0.03	4	940	14	2.91	8	1	5	< 0.01	< 10	< 10	41	< 10	58		
258870	94139402	< 10	1.55	255	6	0.01	11	1330	8	2.59	10	2	6	< 0.01	< 10	< 10	63	< 10	54		
258871	94139402	< 10	2.23	1510	17	0.02	5	450	8	>10.00	12	< 1	27	< 0.01	< 10	30	70	< 10	68		
258872	94139402	< 10	1.48	680	17	0.01	5	1010	6	7.42	8	< 1	9	< 0.01	< 10	10	71	< 10	48		
258873	94139402	< 10	0.69	165	10	0.04	33	620	2	2.30	10	2	12	< 0.01	< 10	< 10	33	< 10	20	6.23	
258874	94139402	< 10	1.80	625	23	0.03	5	1380	8	2.52	8	2	7	< 0.01	< 10	< 10	77	< 10	64		
258875	94139402	< 10	2.28	1650	11	0.03	5	930	8	3.94	4	3	8	< 0.01	< 10	10	80	< 10	106	12.05	
258968	--	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	
258969	94139402	< 10	3.27	1055	4	0.03	20	1250	< 2	0.01	8	9	37	0.10	< 10	10	194	< 10	72	14.36	
258970	94139402	10	0.11	910	< 1	0.03	1	80	< 2	0.03	< 2	< 1	46	< 0.01	< 10	< 10	1	< 10	6	12.63	
258971	94139402	< 10	0.79	225	15	< 0.01	43	440	72	9.15	14	4	6	< 0.01	< 10	30	66	< 10	92		
258972	94139402	< 10	2.40	1285	9	0.03	19	1600	134	4.01	22	17	59	< 0.01	< 10	10	176	< 10	166		
258973	94139402	< 10	< 0.01	20	28	< 0.01	4	140	578	>10.00	204	< 1	6	< 0.01	< 10	40	< 1	< 10	214		

CERTIFICATION: 



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 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :3-C  
 Total Pages :4  
 Certificate Date: 10-SEP-2001  
 Invoice No. : I0123331  
 P.O. Number :  
 Account : HPQ

Project : 1770  
 Comments : ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0123331

SAMPLE	PREP CODE	BaO % XRF	CaO % XRF	Cr2O3 % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	SrO % XRF	TiO2 % XRF	LOI % XRF	TOTAL %
258240	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258241	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258242	94139402	0.17	0.93	< 0.01	3.33	5.21	1.49	0.07	2.03	0.10	66.65	0.03	0.35	2.78	98.08
258243	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258244	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258245	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258246	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258247	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258248	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258249	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258250	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258689	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258690	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258691	94139402	0.19	1.38	< 0.01	3.30	3.04	0.46	0.08	5.11	0.16	67.30	0.04	0.29	3.38	99.50
258692	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258693	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258694	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258695	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258696	94139402	0.22	8.56	< 0.01	11.34	1.87	5.10	0.18	2.63	0.28	47.18	0.10	0.96	2.82	99.39
258697	94139402	0.46	1.23	< 0.01	3.74	8.92	0.43	0.11	0.09	0.17	65.96	0.01	0.46	4.00	99.48
258698	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258699	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258864	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258865	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258866	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258867	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258868	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258869	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258870	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258871	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258872	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258873	94139402	0.03	0.38	< 0.01	5.64	0.84	1.20	0.03	1.28	0.13	79.92	< 0.01	0.39	3.35	99.42
258874	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258875	94139402	0.06	0.35	< 0.01	16.34	0.72	3.76	0.23	2.33	0.20	56.20	< 0.01	0.46	6.48	99.18
258968	-- --	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258969	94139402	0.01	6.24	0.02	11.70	0.87	7.70	0.20	3.91	0.31	48.83	0.05	0.67	4.51	99.38
258970	94139402	0.20	1.53	< 0.01	0.71	4.57	0.42	0.13	1.46	0.03	75.08	0.01	0.12	2.74	99.63
258971	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258972	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258973	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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



# ALS Chemex

Aurora Laboratory Services Ltd.  
 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :4-A  
 Total Pages :4  
 Certificate Date: 10-SEP-2001  
 Invoice No. :10123331  
 P.O. Number :  
 Account :HPQ

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0123331

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Au FA oz/ton	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %
258974	94139402	1.46	1375	----	25.8	0.02	>10000	< 10	< 10	< 0.5	30	8.94	>500	113	24	812	10.20	< 10	25900	< 0.01
258975	94139402	1.56	3770	----	>100.0	1.72	>10000	< 10	< 10	1.0	584	0.05	117.0	460	26	7590	>15.00	20	3890	< 0.01
258976	94139402	1.12	20	----	< 0.2	0.44	456	< 10	90	< 0.5	< 2	0.46	0.5	1	68	12	0.42	< 10	70	0.19
258977	94139402	1.14	< 5	----	< 0.2	0.29	32	< 10	70	< 0.5	< 2	0.54	< 0.5	< 1	69	5	0.41	< 10	< 10	0.16
258978	94139402	1.30	< 5	----	< 0.2	1.41	48	< 10	50	< 0.5	< 2	2.66	< 0.5	11	40	19	3.75	< 10	110	0.33
258979	94139402	1.10	< 5	----	< 0.2	1.90	24	< 10	50	0.5	8	2.00	0.5	12	18	17	4.99	< 10	30	0.17
258980	94139402	1.14	385	----	32.2	2.42	>10000	< 10	20	0.5	< 2	2.02	68.0	198	67	1130	7.88	< 10	2670	0.15
258981	94139402	1.08	90	----	1.2	1.29	232	< 10	10	0.5	< 2	0.81	0.5	17	61	16	9.32	< 10	30	0.26
258982	94139402	1.36	4580	----	>100.0	0.27	>10000	< 10	< 10	1.0	272	1.15	10.5	558	20	>10000	>15.00	10	790	< 0.01
258983	94139402	0.96	20	----	0.6	1.45	90	< 10	60	< 0.5	< 2	0.24	< 0.5	12	29	52	3.92	< 10	100	0.33
258984	94139402	2.48	< 5	----	30.0	0.41	526	< 10	< 10	0.5	< 2	0.33	160.5	15	100	99	10.90	10	77100	< 0.01
258985	94139402	0.42	< 5	----	41.8	0.74	2280	< 10	< 10	0.5	< 2	0.24	18.5	116	131	5620	>15.00	20	36000	< 0.01
258986	94139402	1.02	< 5	----	41.6	0.10	586	< 10	< 10	0.5	< 2	0.14	149.0	23	96	78	13.85	10	73500	< 0.01
258987	94139402	1.72	< 5	----	20.8	0.22	636	< 10	< 10	0.5	< 2	0.17	< 0.5	6	183	80	>15.00	10	4980	< 0.01
258988	94139402	1.72	< 5	----	70.2	0.55	176	< 10	< 10	< 0.5	44	0.04	2.5	18	119	64	9.58	10	3200	< 0.01

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## CERTIFICATE OF ANALYSIS A0123331

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm	Al2O3 % XRF
258974	94139402	< 10	4.02	6480	15	< 0.01	31	170	940	9.55	656	< 1	98	< 0.01	< 10	10	< 1	< 10	>10000	-----
258975	94139402	< 10	1.17	320	30	< 0.01	13	240	6280	>10.00	222	< 1	7	< 0.01	< 10	40	32	< 10	>10000	-----
258976	94139402	< 10	0.05	185	< 1	0.11	1	50	20	0.09	< 2	< 1	81	< 0.01	< 10	< 10	< 1	< 10	148	14.16
258977	94139402	< 10	0.03	260	< 1	0.05	1	50	10	0.04	< 2	< 1	87	< 0.01	< 10	< 10	< 1	< 10	36	14.33
258978	94139402	< 10	0.71	500	8	0.04	10	1070	12	2.50	22	4	148	< 0.01	< 10	< 10	39	< 10	76	-----
258979	94139402	< 10	0.84	520	5	0.02	8	1240	16	2.40	8	6	97	< 0.01	< 10	< 10	48	< 10	84	-----
258980	94139402	< 10	1.42	1205	9	< 0.01	22	860	>10000	3.26	78	10	43	< 0.01	< 10	10	74	< 10	8880	-----
258981	94139402	< 10	0.54	340	13	< 0.01	8	600	100	8.45	6	< 1	16	< 0.01	< 10	10	15	< 10	176	-----
258982	94139402	< 10	0.53	1430	26	< 0.01	8	190	1030	>10.00	282	< 1	9	< 0.01	< 10	50	3	< 10	1220	-----
258983	94139402	< 10	0.39	370	3	0.04	4	1330	16	1.65	10	2	10	< 0.01	< 10	< 10	35	< 10	34	-----
258984	94139402	< 10	0.07	90	30	< 0.01	7	1500	>10000	>10.00	194	< 1	27	< 0.01	< 10	10	15	< 10	>10000	1.95
258985	94139402	< 10	0.11	190	24	< 0.01	37	1270	974	>10.00	1400	< 1	124	< 0.01	< 10	30	34	< 10	1175	-----
258986	94139402	< 10	0.01	35	28	< 0.01	10	790	>10000	>10.00	162	< 1	62	< 0.01	< 10	20	5	< 10	>10000	-----
258987	94139402	< 10	0.03	65	36	< 0.01	5	920	4210	>10.00	120	< 1	226	< 0.01	< 10	30	9	< 10	160	-----
258988	94139402	< 10	0.11	955	46	< 0.01	8	210	9460	8.80	62	3	114	< 0.01	< 10	10	30	< 10	818	-----

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number : 4-C  
 Total Pages : 4  
 Certificate Date: 10-SEP-2001  
 Invoice No. : I0123331  
 P.O. Number :  
 Account : HPQ

Project : 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0123331

SAMPLE	PREP CODE	BaO % XRF	CaO % XRF	Cr2O3 % XRF	Fe2O3 % XRF	K2O % XRF	MgO % XRF	MnO % XRF	Na2O % XRF	P2O5 % XRF	SiO2 % XRF	SrO % XRF	TiO2 % XRF	LOI % XRF	TOTAL %
258974	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258975	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258976	94139402	0.21	0.66	< 0.01	0.76	2.89	0.10	0.03	5.18	< 0.01	73.86	0.03	0.10	1.30	99.28
258977	94139402	0.31	0.70	< 0.01	0.80	3.67	0.05	0.04	4.45	0.01	73.78	0.02	0.09	1.13	99.38
258978	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258979	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258980	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258981	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258982	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258983	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258984	94139402	< 0.01	0.46	0.03	15.99	0.11	0.04	0.01	0.84	0.42	67.01	0.07	0.49	8.85	96.27
258985	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258986	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258987	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----
258988	94139402	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
 British Columbia, Canada V7J 2C1  
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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1  
 Total Pages :1  
 Certificate Date: 05-SEP-2001  
 Invoice No. : I0123930  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS A0123930

SAMPLE	PREP CODE	Ag g/t	Cu %	Pb %	Zn %						
258016	212 --	-----	5.68	-----	-----						
258019	212 --	-----	1.37	-----	-----						
258026	212 --	-----	-----	-----	1.94						
258034	212 --	208	-----	7.25	24.6						
258035	212 --	-----	-----	3.28	17.70						
258036	212 --	-----	1.24	-----	1.52						
258056	212 --	-----	-----	-----	2.43						
258165	212 --	-----	2.18	-----	-----						
258698	212 --	-----	2.94	-----	-----						
258865	212 --	-----	-----	1.49	6.74						
258867	212 --	-----	-----	-----	2.80						
258974	212 --	-----	-----	-----	7.63						
258975	212 --	153	-----	-----	1.90						
258980	212 --	-----	-----	1.88	-----						
258982	212 --	179	4.56	-----	-----						
258984	212 --	-----	-----	1.75	2.35						
258986	212 --	-----	-----	2.97	2.17						

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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number : 1  
 Total Pages : 1  
 Certificate Date: 05-SEP-2001  
 Invoice No. : 10123467  
 P.O. Number :  
 Account : HPQ

Project : 1770/1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS

A0123467

SAMPLE	PREP CODE	Ag g/t	Cu %	Pb %	Zn %						
258863	212 --	169	1.71	1.50	4.07						
258925	212 --	----	1.44	----	----						
258965	212 --	----	3.45	----	----						
258967	212 --	----	3.94	----	----						

CERTIFICATION:



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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
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 V2C 6H1

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1-A  
 Total Pages :1  
 Certificate Date: 27-SEP-2001  
 Invoice No. :I0124606  
 P.O. Number :  
 Account :HPQ

## CERTIFICATE OF ANALYSIS A0124606

SAMPLE	PREP CODE	Weight Au ppb Kg	Au FA FA+AA oz/ton	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	
257519	94139402	1.84	>10000	0.425	19.0	0.54	40	< 10												
257520	94139402	1.66	4560	-----	1.8	4.03	70	< 10	30	0.5	6	10.05	7.0	5	12	2990	9.85	30	640	0.12
257521	94139402	1.86	2650	-----	46.8	3.46	182	< 10	10	1.0	2	0.25	< 0.5	8	19	>10000	>15.00	30	360	0.10
257522	94139402	1.46	750	-----	1.4	3.41	28	< 10	30	0.5	6	0.71	< 0.5	14	27	324	8.91	10	60	0.14
257523	94139402	0.80	80	-----	1.0	0.42	20	< 10	40	< 0.5	< 2	2.65	< 0.5	12	18	188	4.74	< 10	30	0.25
257524	94139402	1.08	80	-----	0.2	1.24	22	< 10	30	< 0.5	2	0.82	< 0.5	17	24	20	5.20	< 10	20	0.21
257851	94139402	1.70	65	-----	8.8	0.74	110	< 10	10	0.5	6	0.35	< 0.5	13	67	885	11.65	< 10	150	0.20
257852	94139402	1.44	80	-----	0.2	0.97	18	< 10	20	< 0.5	< 2	0.17	< 0.5	7	39	25	4.72	< 10	10	0.26
257853	94139402	1.76	55	-----	0.6	2.07	10	< 10	40	< 0.5	< 2	0.14	< 0.5	7	48	206	6.72	10	380	0.13
257901	94139402	1.02	160	-----	2.0	3.93	20	< 10	40	0.5	< 2	0.22	18.0	11	28	755	10.15	10	1860	0.10
257902	94139402	1.20	< 5	-----	0.8	0.65	48	< 10	30	0.5	< 2	1.65	< 0.5	10	38	15	4.73	< 10	410	0.25
257903	94139402	1.16	< 5	-----	0.8	0.69	38	< 10	30	0.5	< 2	1.98	< 0.5	13	43	13	6.33	< 10	370	0.28
257904	94139402	1.94	65	-----	1.8	4.27	52	< 10	30	0.5	6	0.34	10.0	29	17	18	11.65	20	1160	0.07
257957	94139402	0.78	8640	-----	19.2	0.39	8	< 10	70	< 0.5	174	0.07	2.5	13	161	835	2.62	< 10	30	0.14
257958	94139402	1.68	425	-----	2.6	1.10	48	< 10	80	< 0.5	8	0.15	60.5	7	91	160	4.41	< 10	10	0.24
257959	94139402	2.69	1640	-----	4.0	0.44	26	< 10	70	< 0.5	10	0.07	2.0	14	141	261	2.85	< 10	< 10	0.15
257960	94139402	1.20	230	-----	2.0	2.60	30	< 10	60	0.5	4	0.30	10.0	7	35	99	6.37	< 10	< 10	0.34
257961	94139402	0.78	885	-----	17.8	2.26	< 2	< 10	70	< 0.5	8	0.09	3.0	1	123	5640	4.35	< 10	< 10	0.14
257962	94139402	1.00	100	-----	1.4	2.19	246	< 10	20	0.5	8	0.01	< 0.5	16	57	34	12.50	10	30	0.05
257963	94139402	1.00	2110	-----	>100.0	0.62	>10000	< 10	40	0.5	22	0.01	3.5	80	72	896	12.15	< 10	10500	0.10
257964	94139402	1.10	1555	-----	10.4	0.61	>10000	< 10	40	< 0.5	12	0.08	2.0	41	76	239	6.33	< 10	350	0.19
257965	94139402	1.46	2730	-----	34.6	0.20	>10000	< 10	< 10	0.5	54	0.23	< 0.5	141	66	2750	>15.00	10	110	0.08
257966	94139402	1.22	6140	-----	20.4	0.63	>10000	< 10	< 10	0.5	64	0.03	< 0.5	181	63	1580	12.95	< 10	140	0.11
257967	94139402	1.56	490	-----	37.8	1.02	>10000	< 10	< 10	0.5	38	1.58	15.0	218	41	8270	>15.00	10	500	0.07
257968	94139402	1.18	>10000	0.328	9.0	4.10	258	< 10	10	0.5	8	0.04	< 0.5	18	48	1890	10.85	20	100	0.06
257969	94139402	1.14	5640	-----	>100.0	0.07	2400	< 10	< 10	1.0	92	< 0.01	192.5	200	29	>10000	>15.00	10	5420	0.01
257970	94139402	1.80	1870	-----	26.0	0.64	7250	< 10	20	< 0.5	12	0.16	442	9	47	1725	4.42	< 10	7740	0.22
257971	94139402	1.50	2990	-----	21.8	0.48	>10000	< 10	10	0.5	16	0.21	170.5	15	72	5710	7.97	< 10	1780	0.23
258945	94139402	0.64	90	-----	1.6	0.23	160	< 10	40	< 0.5	< 2	0.81	1.5	7	107	1555	1.82	< 10	1730	0.19
258946	94139402	1.36	>10000	0.818	>100.0	0.36	92	< 10	10	0.5	56	0.08	>500	16	42	2810	8.33	30	510	0.15
258947	94139402	1.26	90	-----	0.8	1.64	10	< 10	40	< 0.5	< 2	0.73	13.0	9	89	112	3.23	< 10	10	0.08
258948	94139402	1.14	80	-----	0.2	1.64	4	< 10	60	< 0.5	< 2	0.58	3.5	8	59	92	3.95	< 10	20	0.16
258949	94139402	1.40	50	-----	< 0.2	1.64	6	< 10	30	0.5	< 2	1.45	< 0.5	18	110	53	6.18	< 10	10	0.23
258950	94139402	1.38	340	-----	1.6	1.87	52	< 10	10	0.5	< 2	0.23	< 0.5	12	73	794	10.10	10	30	0.23

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



# ALS Chemex

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 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-B  
 Total Pages :1  
 Certificate Date: 27-SEP-2001  
 Invoice No. : 10124606  
 P.O. Number :  
 Account : HPQ

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0124606

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
257519	94139402	< 10	3.43	>10000	4	< 0.01	< 1	400	1255	5.69	8	4	116	< 0.01	< 10	< 10	37	< 10	722
257520	94139402	< 10	2.26	3120	4	< 0.01	1	590	18	6.56	5	5	20	< 0.01	< 10	< 10	65	10	176
257521	94139402	< 10	1.86	1975	3	< 0.01	1	470	12	>10.00	< 2	5	8	< 0.01	< 10	< 10	71	30	154
257522	94139402	< 10	2.28	2980	5	0.01	1	1210	18	3.96	6	5	35	< 0.01	< 10	< 10	85	< 10	144
257523	94139402	< 10	0.99	2090	< 1	0.01	3	1270	6	4.33	8	3	45	< 0.01	< 10	< 10	19	< 10	44
257524	94139402	< 10	0.86	1695	3	0.02	2	1320	12	3.20	< 2	3	17	< 0.01	< 10	< 10	38	< 10	74
257851	94139402	< 10	0.40	150	5	0.01	4	460	2	>10.00	332	1	13	< 0.01	< 10	< 10	24	20	12
257852	94139402	< 10	0.72	150	2	0.04	1	1200	6	2.63	6	1	20	< 0.01	< 10	< 10	28	< 10	16
257853	94139402	< 10	0.87	305	3	0.02	3	750	2	2.08	6	4	10	< 0.01	< 10	< 10	73	< 10	34
257901	94139402	< 10	2.26	2060	9	0.02	1	1010	690	3.67	6	7	13	< 0.01	< 10	< 10	107	< 10	2090
257902	94139402	< 10	0.28	490	1	< 0.01	5	1220	34	4.55	18	2	94	< 0.01	< 10	< 10	15	< 10	56
257903	94139402	< 10	0.19	480	1	0.01	6	850	28	6.19	16	1	217	< 0.01	< 10	< 10	15	10	50
257904	94139402	< 10	2.61	2570	11	0.03	1	1120	384	5.46	6	7	14	< 0.01	< 10	< 10	109	< 10	1285
257957	94139402	< 10	0.11	110	15	< 0.01	4	250	134	0.17	< 2	< 1	3	0.01	< 10	< 10	16	< 10	112
257958	94139402	< 10	0.53	330	6	< 0.01	4	600	142	2.57	< 2	1	5	0.04	< 10	< 10	15	< 10	544
257959	94139402	< 10	0.12	130	13	< 0.01	2	250	54	0.81	< 2	< 1	4	0.02	< 10	< 10	9	< 10	146
257960	94139402	< 10	1.42	1075	2	< 0.01	1	1130	116	2.78	< 2	3	9	0.06	< 10	< 10	36	< 10	266
257961	94139402	< 10	1.33	1210	3	< 0.01	2	340	110	0.23	< 2	1	4	0.01	< 10	< 10	25	< 10	192
257962	94139402	< 10	1.35	265	10	< 0.01	14	400	76	2.57	< 2	5	5	< 0.01	< 10	< 10	183	< 10	60
257963	94139402	< 10	0.18	125	10	< 0.01	1	220	6480	1.72	200	1	27	< 0.01	< 10	< 10	37	< 10	644
257964	94139402	< 10	0.24	345	1	< 0.01	3	360	618	3.91	38	< 1	4	< 0.01	< 10	< 10	10	< 10	380
257965	94139402	< 10	0.10	290	1	< 0.01	22	220	352	>10.00	106	1	17	< 0.01	< 10	< 10	14	30	176
257966	94139402	< 10	0.26	120	2	< 0.01	70	370	558	9.81	460	1	5	< 0.01	< 10	< 10	16	10	34
257967	94139402	< 10	0.87	890	14	< 0.01	26	360	430	>10.00	3480	2	110	< 0.01	< 10	< 10	49	10	1830
257968	94139402	< 10	2.17	885	4	< 0.01	25	460	6	3.37	16	6	6	< 0.01	< 10	< 10	95	< 10	44
257969	94139402	< 10	0.03	15	1	< 0.01	11	160	5390	>10.00	186	< 1	7	< 0.01	< 10	< 10	9	< 10	>10000
257970	94139402	< 10	0.18	225	4	< 0.01	19	690	5140	4.86	82	1	8	< 0.01	< 10	< 10	13	< 10	>10000
257971	94139402	< 10	0.11	70	7	< 0.01	17	1000	3210	7.70	108	< 1	11	< 0.01	< 10	< 10	6	< 10	>10000
258945	94139402	< 10	0.01	240	4	< 0.01	5	450	44	1.71	8	1	44	< 0.01	< 10	< 10	5	< 10	218
258946	94139402	< 10	0.06	480	254	< 0.01	15	760	>10000	8.68	78	< 1	< 1	0.01	< 10	< 10	4	70	>10000
258947	94139402	< 10	1.31	190	12	0.06	24	1370	464	1.50	2	4	35	0.14	< 10	< 10	76	< 10	506
258948	94139402	< 10	1.37	150	13	0.06	1	1220	164	2.46	< 2	6	29	0.16	< 10	< 10	80	< 10	186
258949	94139402	< 10	1.42	380	2	0.03	62	1360	20	5.11	< 2	4	76	< 0.01	< 10	< 10	69	< 10	74
258950	94139402	< 10	1.07	530	5	< 0.01	38	1060	22	6.80	< 2	3	7	< 0.01	< 10	< 10	51	10	62

CERTIFICATION:



# ALS Chemex

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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1-A  
 Total Pages :1  
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 Account : HPQ

## CERTIFICATE OF ANALYSIS

### A0124592

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm
256726	94139402	0.72	65	0.2	0.65	20	< 10	10	< 0.5	< 2	0.14	< 0.5	5	31	7	4.61	< 10	90	0.21	< 10
256727	94139402	0.70	105	0.2	1.98	4	< 10	160	< 0.5	< 2	0.19	< 0.5	1	23	49	3.79	10	110	0.13	< 10
256728	94139402	0.52	10	0.2	0.58	8	< 10	30	< 0.5	< 2	0.14	< 0.5	5	21	4	3.70	< 10	30	0.19	< 10
256729	94139402	0.68	310	2.8	0.21	92	< 10	< 10	< 0.5	< 2	0.09	< 0.5	13	59	106	6.54	< 10	670	0.18	< 10
256730	94139402	0.76	305	6.6	0.10	22	< 10	< 10	0.5	< 2	0.56	< 0.5	41	62	>10000	9.05	< 10	1710	0.10	< 10
256731	94139402	0.78	400	2.2	3.57	4	< 10	10	0.5	< 2	3.21	< 0.5	14	29	9780	8.31	10	140	0.11	< 10
256732	94139402	0.78	< 5	< 0.2	2.63	< 2	< 10	90	< 0.5	< 2	2.19	< 0.5	5	29	138	3.22	10	50	0.10	< 10
256733	94139402	0.66	590	6.0	0.67	48	< 10	10	0.5	< 2	4.44	9.0	15	22	>10000	4.32	< 10	1350	0.24	< 10
256734	94139402	0.94	15	0.4	2.21	20	< 10	140	< 0.5	< 2	0.37	< 0.5	11	24	314	4.68	< 10	80	0.17	< 10
256735	94139402	0.84	250	4.0	1.87	< 2	< 10	40	0.5	< 2	0.77	< 0.5	20	26	>10000	6.06	10	190	0.20	< 10
256736	94139402	1.14	40	2.4	2.24	20	< 10	40	0.5	< 2	0.53	< 0.5	17	24	5660	4.81	10	60	0.23	< 10
257525	94139402	1.34	< 5	< 0.2	0.96	28	< 10	20	0.5	< 2	2.53	< 0.5	13	12	119	6.57	< 10	140	0.11	< 10
257526	94139402	1.56	< 5	< 0.2	0.77	12	< 10	20	0.5	< 2	3.83	< 0.5	13	13	71	5.15	< 10	180	0.11	< 10
257527	94139402	1.34	5	< 0.2	0.49	14	< 10	10	< 0.5	< 2	1.79	< 0.5	10	15	209	3.97	< 10	270	0.15	< 10
257528	94139402	1.92	5	< 0.2	0.47	26	< 10	10	< 0.5	< 2	0.27	< 0.5	9	16	131	4.33	< 10	140	0.15	< 10
257529	94139402	1.36	< 5	0.2	1.33	44	< 10	30	< 0.5	< 2	0.26	< 0.5	10	18	64	4.18	< 10	120	0.15	< 10
257530	94139402	1.94	5	< 0.2	0.44	26	< 10	120	< 0.5	< 2	0.39	< 0.5	4	19	116	2.33	< 10	90	0.16	< 10
257531	94139402	2.00	< 5	< 0.2	0.54	30	< 10	20	< 0.5	< 2	1.25	< 0.5	7	24	89	3.73	< 10	370	0.16	< 10
257854	94139402	1.08	15	0.2	0.36	12	< 10	10	< 0.5	< 2	1.66	< 0.5	14	28	279	5.95	< 10	2320	0.17	< 10
257855	94139402	0.84	< 5	< 0.2	1.18	10	< 10	30	0.5	< 2	1.62	< 0.5	16	30	111	4.49	< 10	510	0.15	< 10
257856	94139402	1.16	15	0.2	2.08	36	< 10	10	< 0.5	< 2	1.07	< 0.5	11	44	54	5.63	< 10	940	0.12	< 10
257857	94139402	1.22	20	1.0	0.28	22	< 10	< 10	0.5	< 2	3.86	< 0.5	22	36	1990	11.45	10	4140	0.15	< 10
257858	94139402	1.36	35	0.8	0.10	50	< 10	< 10	0.5	< 2	1.62	< 0.5	68	53	90	>15.00	10	340	0.12	< 10
257905	94139402	0.80	35	0.2	0.22	56	< 10	80	< 0.5	< 2	4.44	< 0.5	6	63	101	1.46	< 10	80	0.13	< 10
257906	94139402	0.80	890	1.4	0.41	180	< 10	10	< 0.5	< 2	2.96	5.5	19	67	315	4.74	< 10	660	0.17	< 10
257907	94139402	0.58	365	3.4	2.64	100	< 10	10	0.5	< 2	2.77	2.5	19	50	92	6.98	10	160	0.16	< 10
257908	94139402	0.66	245	1.2	0.87	150	< 10	10	< 0.5	< 2	0.76	< 0.5	11	40	346	4.17	< 10	50	0.20	< 10
257909	94139402	0.78	140	1.4	0.31	128	< 10	30	< 0.5	< 2	1.17	< 0.5	11	57	350	3.27	< 10	40	0.19	< 10
257910	94139402	0.68	25	0.2	1.55	4	< 10	60	< 0.5	< 2	4.47	< 0.5	7	26	525	3.48	< 10	80	0.13	< 10
257911	94139402	1.04	1020	3.0	< 0.01	454	< 10	< 10	0.5	< 2	0.19	< 0.5	89	45	166	>15.00	10	110	0.05	< 10
257972	94139402	1.24	705	5.8	2.16	66	< 10	10	0.5	< 2	1.52	< 0.5	20	40	3850	7.29	10	230	0.15	< 10
257973	94139402	1.16	230	1.6	1.48	48	< 10	< 10	0.5	< 2	1.56	< 0.5	151	46	398	>15.00	20	1140	0.14	< 10
257974	94139402	1.54	240	2.0	1.19	76	< 10	< 10	< 0.5	< 2	3.14	< 0.5	20	28	1120	6.70	< 10	90	0.13	< 10
257975	94139402	1.52	3950	10.2	1.37	228	< 10	< 10	0.5	< 2	0.47	< 0.5	13	49	3950	12.85	10	490	0.20	< 10
257976	94139402	1.06	2440	14.4	1.48	360	< 10	< 10	0.5	< 2	1.27	< 0.5	67	25	>10000	12.00	10	580	0.12	< 10
257977	94139402	1.20	470	4.4	1.29	122	< 10	< 10	0.5	< 2	3.25	< 0.5	27	38	6630	6.55	10	370	0.17	< 10
257978	94139402	1.24	970	8.0	1.27	238	< 10	< 10	0.5	< 2	2.28	< 0.5	41	31	5600	9.47	10	440	0.18	< 10
257979	94139402	1.38	480	5.6	1.73	296	< 10	< 10	0.5	< 2	2.55	< 0.5	102	35	6120	12.10	10	180	0.18	< 10
257980	94139402	1.34	745	4.4	1.38	98	< 10	< 10	< 0.5	< 2	1.59	40.0	24	26	6380	5.67	10	7910	0.19	< 10

CERTIFICATION: 



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project: 1771  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1-B  
 Total Pages :1  
 Certificate Date: 26-SEP-2001  
 Invoice No. : 10124592  
 P.O. Number :  
 Account : HPQ

## CERTIFICATE OF ANALYSIS A0124592

SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
256726	94139402	0.50	135	4	0.01	< 1	1290	10	2.83	6	1	8	< 0.01	< 10	< 10	13	< 10	26
256727	94139402	2.05	1070	17	0.03	< 1	1340	16	0.35	2	3	10	< 0.01	< 10	< 10	92	< 10	252
256728	94139402	0.35	165	1	< 0.01	< 1	1440	18	2.63	4	1	8	< 0.01	< 10	< 10	12	< 10	20
256729	94139402	0.01	15	4	< 0.01	2	220	102	7.14	2	1	8	< 0.01	< 10	< 10	5	10	34
256730	94139402	0.03	85	3	< 0.01	5	260	68	9.62	12	1	14	< 0.01	< 10	< 10	7	20	18
256731	94139402	2.06	635	3	< 0.01	2	790	< 2	2.04	10	10	77	< 0.01	< 10	< 10	118	< 10	106
256732	94139402	2.68	1375	1	0.01	2	1390	4	1.30	6	10	49	< 0.01	< 10	< 10	112	< 10	152
256733	94139402	0.35	920	5	< 0.01	1	1010	80	3.92	2	3	88	< 0.01	< 10	< 10	19	< 10	1080
256734	94139402	1.88	570	5	< 0.01	1	1430	4	0.79	4	9	15	< 0.01	< 10	< 10	86	< 10	104
256735	94139402	1.55	385	5	0.01	2	1210	8	1.39	8	5	26	< 0.01	< 10	< 10	86	< 10	94
256736	94139402	2.01	1720	3	< 0.01	3	1300	22	1.83	6	9	17	0.04	< 10	< 10	95	< 10	302
257525	94139402	0.64	840	1	0.02	< 1	1430	22	3.77	8	10	63	< 0.01	< 10	< 10	46	< 10	50
257526	94139402	0.75	1185	< 1	0.03	< 1	1560	18	3.68	8	10	97	< 0.01	< 10	< 10	38	< 10	70
257527	94139402	0.80	585	< 1	0.01	< 1	1190	4	3.02	< 2	6	47	< 0.01	< 10	< 10	18	< 10	14
257528	94139402	0.17	95	10	0.01	< 1	1350	10	3.50	4	4	13	< 0.01	< 10	< 10	13	< 10	14
257529	94139402	0.91	330	2	0.01	< 1	1550	30	2.44	2	5	12	< 0.01	< 10	< 10	42	< 10	88
257530	94139402	0.16	290	1	0.01	< 1	1270	10	0.78	< 2	2	16	< 0.01	< 10	< 10	10	< 10	8
257531	94139402	0.65	905	1	0.01	< 1	1230	6	2.31	2	5	32	< 0.01	< 10	< 10	30	< 10	112
257854	94139402	0.78	790	1	0.01	< 1	1580	52	6.55	6	6	34	< 0.01	< 10	< 10	12	10	158
257855	94139402	1.74	830	< 1	0.01	3	1360	2	4.06	2	9	25	< 0.01	< 10	< 10	44	< 10	54
257856	94139402	2.30	1085	1	< 0.01	2	1110	64	4.68	4	10	32	< 0.01	< 10	< 10	90	< 10	178
257857	94139402	1.39	1070	18	< 0.01	< 1	990	118	>10.00	10	4	125	< 0.01	< 10	< 10	11	20	232
257858	94139402	0.04	110	40	< 0.01	4	590	28	>10.00	12	1	52	< 0.01	< 10	< 10	10	40	< 2
257905	94139402	0.17	790	2	< 0.01	< 1	510	2	1.20	28	3	94	< 0.01	< 10	< 10	4	< 10	10
257906	94139402	0.31	660	3	< 0.01	4	730	152	4.22	18	4	73	< 0.01	< 10	< 10	11	< 10	982
257907	94139402	2.14	2180	3	0.01	10	940	160	3.91	8	14	46	< 0.01	< 10	< 10	157	< 10	652
257908	94139402	0.65	300	3	< 0.01	3	1000	32	3.43	8	4	21	< 0.01	< 10	< 10	33	< 10	58
257909	94139402	0.11	195	6	< 0.01	2	1060	26	3.23	4	3	19	< 0.01	< 10	< 10	14	< 10	12
257910	94139402	1.09	1005	3	0.01	1	980	2	0.96	4	10	86	0.03	< 10	< 10	84	< 10	40
257911	94139402	0.01	20	13	< 0.01	16	200	16	>10.00	16	1	10	< 0.01	< 10	< 10	14	40	< 2
257972	94139402	2.03	1290	3	0.01	9	1120	6	4.51	26	9	60	< 0.01	< 10	< 10	101	< 10	96
257973	94139402	1.08	1005	35	< 0.01	9	920	38	>10.00	22	5	54	< 0.01	< 10	< 10	70	40	40
257974	94139402	1.17	885	7	0.01	2	1140	12	6.40	8	5	74	< 0.01	< 10	< 10	61	10	38
257975	94139402	0.98	865	5	< 0.01	3	930	40	>10.00	14	4	16	< 0.01	< 10	< 10	47	30	80
257976	94139402	1.25	1230	71	< 0.01	20	2370	14	>10.00	16	6	32	< 0.01	< 10	< 10	75	30	80
257977	94139402	1.26	1405	5	0.01	6	1370	12	6.00	8	6	66	< 0.01	< 10	< 10	66	10	140
257978	94139402	1.04	1160	3	< 0.01	6	2020	46	8.75	14	5	38	< 0.01	< 10	< 10	55	10	160
257979	94139402	1.37	1745	122	< 0.01	15	1150	24	>10.00	16	6	50	< 0.01	< 10	< 10	76	20	64
257980	94139402	1.37	1090	13	< 0.01	3	1440	828	5.36	8	4	38	< 0.01	< 10	< 10	65	< 10	7240

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 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Project : 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :1-A  
 Total Pages :1  
 Certificate Date: 24-SEP-2001  
 Invoice No. :I0124605  
 P.O. Number :  
 Account :HPQ

## CERTIFICATE OF ANALYSIS A0124605

SAMPLE	PREP CODE	Weight Au ppb fusion		Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	
		Kg	FA+AA wt. gm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
258701	94069407	0.26	< 5	10.01	< 0.2	2.78	56	< 10	170	1.5	< 2	0.18	< 0.5	60	35	58	5.65	30	< 1	0.04
258702	-- --	0.00	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258703	94069407	0.24	< 10	5.03	< 0.2	1.96	60	< 10	170	1.0	< 2	0.73	0.5	40	41	41	4.22	10	< 1	0.08

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## CERTIFICATE OF ANALYSIS A0124605

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
258701	94069407	< 10	0.51	>10000	6	< 0.01	93	2500	16	0.12	12	3	29	< 0.01	< 10	< 10	37	< 10	202
258702	-- --	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed	NotRed
258703	94069407	< 10	0.93	2940	3	< 0.01	89	1670	26	0.10	10	3	111	0.01	< 10	< 10	40	< 10	204

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MAIN STATION, BOX 938  
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 Account : HPQ

Project : 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS

A0124793

SAMPLE	PREP CODE	Weight Kg	Au ppb		Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La
			FA+AA	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%
256711	94069407	0.28	10	< 0.2	1.81	72	< 10	1480	1.0	< 2	0.13	< 0.5	22	3	34	6.29	< 10	< 1	0.09	10	
256712	94069407	0.26	< 5	< 0.2	1.04	38	< 10	70	0.5	< 2	0.03	< 0.5	20	4	56	5.65	< 10	< 1	0.04	10	
256713	94069407	0.36	< 5	< 0.2	1.78	32	< 10	100	1.5	< 2	0.07	< 0.5	38	5	59	7.59	10	< 1	0.04	10	
256714	94069407	0.30	< 5	< 0.2	1.95	38	< 10	120	1.5	< 2	0.08	1.5	38	1	55	9.68	10	< 1	0.03	< 10	
256715	94069407	0.28	15	< 0.2	2.20	18	< 10	140	1.5	< 2	0.04	< 0.5	50	5	126	8.34	10	< 1	0.03	< 10	
256716	94069407	0.30	10	< 0.2	2.89	40	< 10	70	0.5	< 2	0.05	< 0.5	46	16	111	6.28	10	< 1	0.06	< 10	

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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
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 V2C 6H1

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

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 Invoice No. : 10124793  
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 Account : HPQ

<b>CERTIFICATE OF ANALYSIS</b>	<b>A0124793</b>
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SAMPLE	PREP CODE	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
256711	94069407	0.54	2780	< 1	< 0.01	9	2200	26	0.05	14	7	15	0.01	10	< 10	63	< 10	114
256712	94069407	0.22	1845	1	< 0.01	28	1230	22	0.01	18	6	5	< 0.01	10	< 10	17	< 10	126
256713	94069407	0.42	4970	2	< 0.01	49	1770	28	0.01	8	8	9	< 0.01	20	< 10	21	< 10	174
256714	94069407	0.35	6530	15	< 0.01	25	1290	62	0.04	8	8	36	< 0.01	20	< 10	16	< 10	704
256715	94069407	0.77	6820	15	< 0.01	30	840	34	0.02	8	10	11	< 0.01	20	< 10	26	< 10	146
256716	94069407	0.81	4240	2	< 0.01	37	2400	46	0.03	12	4	6	0.03	10	< 10	53	< 10	106

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Page Number :1-A  
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 Certificate Date: 26-SEP-2001  
 Invoice No. :I0124792  
 P.O. Number :  
 Account :HPQ

## CERTIFICATE OF ANALYSIS A0124792

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Au FA oz/ton	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %
P256705	94139402	0.52	15		0.8	2.32	16	< 10	220	< 0.5	< 2	0.27	1.5	11	10	10	4.32	< 10	< 1	0.36
P256706	94139402	0.60	5		1.4	1.10	12	< 10	110	0.5	< 2	2.24	0.5	12	16	16	3.71	< 10	1	0.24
P256707	94139402	0.78	< 5		0.8	1.83	32	< 10	30	1.0	< 2	0.05	0.5	31	15	62	7.79	< 10	< 1	0.26
P256708	94139402	0.88	< 5		4.4	0.22	118	< 10	10	< 0.5	< 2	0.03	1.5	10	25	83	8.09	< 10	< 1	0.12
P256709	94139402	1.02	< 5		0.2	1.55	52	< 10	60	0.5	10	0.87	< 0.5	7	14	29	4.40	< 10	< 1	0.31
P256710	94139402	0.50	< 5		< 0.2	1.72	6	< 10	220	< 0.5	2	0.82	< 0.5	9	26	18	2.47	< 10	1	0.15
P256717	94139402	0.62	5		< 0.2	0.85	8	< 10	70	< 0.5	< 2	0.03	< 0.5	4	68	22	4.49	< 10	< 1	0.17
P256718	94139402	0.46	20		0.2	2.46	208	< 10	120	< 0.5	< 2	1.84	< 0.5	13	19	19	3.96	< 10	< 1	0.26
P256719	94139402	0.72	10		0.8	1.64	172	< 10	50	< 0.5	< 2	6.15	< 0.5	7	44	49	4.15	< 10	< 1	0.18
P256720	94139402	0.84	< 5		< 0.2	1.33	4	< 10	100	0.5	< 2	0.65	< 0.5	10	24	68	3.43	< 10	< 1	0.19
P256721	94139402	0.64	< 5		< 0.2	0.68	10	< 10	70	< 0.5	< 2	0.06	< 0.5	9	18	5	2.94	< 10	< 1	0.43
P256722	94139402	0.50	< 5		< 0.2	2.49	< 2	< 10	670	< 0.5	< 2	2.19	< 0.5	10	21	1	3.75	< 10	< 1	0.11
P256723	94139402	0.78	40		< 0.2	1.64	10	< 10	220	0.5	< 2	2.73	< 0.5	9	16	16	3.10	< 10	< 1	0.47
P256724	94139402	0.66	< 5		0.8	0.19	24	< 10	80	< 0.5	< 2	0.02	< 0.5	8	62	25	5.94	< 10	< 1	0.10
P256725	94139402	0.56	< 5		< 0.2	1.96	8	< 10	90	< 0.5	< 2	0.44	< 0.5	9	15	24	4.34	< 10	< 1	0.26
P257503	94139402	1.08	225		2.0	0.38	28	< 10	30	0.5	< 2	2.10	4.5	10	18	122	4.56	< 10	< 1	0.22
P257504	94139402	1.66	< 5		0.2	0.49	110	< 10	110	< 0.5	< 2	0.11	< 0.5	3	18	5	2.24	< 10	< 1	0.45
P257505	94139402	1.74	465		0.8	0.34	26	< 10	290	< 0.5	2	0.01	< 0.5	< 1	52	4	7.57	< 10	< 1	0.28
P257506	94139402	1.46	5		0.6	0.48	12	< 10	10	< 0.5	< 2	2.32	< 0.5	14	29	28	4.94	< 10	< 1	0.29
P257507	94139402	1.30	20		1.0	1.26	8	< 10	10	< 0.5	2	0.49	< 0.5	10	24	20	5.39	< 10	< 1	0.34
P257508	94139402	1.02	35		0.2	1.61	8	< 10	50	< 0.5	< 2	0.14	< 0.5	8	32	5	5.16	< 10	< 1	0.35
P257509	94139402	1.58	60		1.0	0.78	10	< 10	30	< 0.5	< 2	0.31	< 0.5	9	25	34	4.99	< 10	< 1	0.30
P257510	94139402	1.76	120		< 0.2	2.10	8	< 10	60	< 0.5	< 2	0.91	< 0.5	10	30	36	4.40	< 10	< 1	0.25
P257511	94139402	1.40	50		0.2	1.15	12	< 10	10	< 0.5	< 2	0.56	< 0.5	13	26	9	5.31	< 10	< 1	0.31
P257512	94139402	1.24	60		< 0.2	1.66	8	< 10	130	< 0.5	< 2	0.37	< 0.5	6	38	19	4.46	< 10	< 1	0.29
P257513	94139402	1.84	< 5		< 0.2	0.21	14	< 10	140	< 0.5	< 2	0.03	< 0.5	< 1	53	5	1.88	< 10	< 1	0.24
P257514	94139402	1.16	< 5		< 0.2	0.62	24	< 10	190	< 0.5	< 2	0.99	< 0.5	2	40	7	2.04	< 10	< 1	0.41
P257515	94139402	1.50	< 5		0.2	0.52	18	< 10	140	< 0.5	< 2	0.15	< 0.5	4	45	7	2.73	< 10	< 1	0.24
P257516	94139402	1.14	< 5		< 0.2	0.86	26	< 10	110	0.5	< 2	1.42	< 0.5	5	21	6	2.51	< 10	< 1	0.41
P257517	94139402	1.76	< 5		0.2	0.21	26	< 10	120	< 0.5	< 2	0.01	< 0.5	< 1	39	2	1.55	< 10	< 1	0.26
P257518	94139402	0.42	>10000	0.825	23.8	0.81	436	< 10	< 10	1.0	22	0.09	180.0	74	61	500	>15.00	10	< 1	0.42
P257952	94139402	1.16	< 5		0.6	0.37	38	< 10	210	< 0.5	< 2	< 0.01	< 0.5	< 1	40	4	1.64	< 10	< 1	0.31
P257953	94139402	0.90	30		0.6	0.73	52	< 10	150	< 0.5	< 2	0.08	< 0.5	3	37	6	4.87	< 10	< 1	0.33
P257954	94139402	1.04	< 5		1.6	0.24	40	< 10	80	< 0.5	< 2	0.28	< 0.5	2	24	8	2.54	< 10	< 1	0.23
P257955	94139402	1.12	< 5		0.8	0.39	42	< 10	190	< 0.5	< 2	0.05	< 0.5	1	67	5	1.80	< 10	< 1	0.42
P257956	94139402	1.10	20		4.6	0.20	50	< 10	230	< 0.5	< 2	0.01	< 0.5	< 1	28	9	2.68	< 10	< 1	0.28
P258042	94139402	1.62	95		0.6	0.52	12	< 10	30	< 0.5	< 2	2.27	< 0.5	6	37	2	2.84	< 10	< 1	0.30
P258043	94139402	1.40	1155		>100.0	1.29	274	< 10	< 10	1.5	< 2	2.84	1.5	5	1	>10000	>15.00	10	< 1	0.06
P258044	94139402	1.90	3880		>100.0	2.04	410	< 10	< 10	1.5	2	0.47	4.0	4	8	>10000	>15.00	10	< 1	0.08
P258045	94139402	1.48	195		4.8	4.40	68	< 10	10	0.5	6	0.15	< 0.5	12	21	452	13.65	10	< 1	0.11

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1-B  
 Total Pages :2  
 Certificate Date: 26-SEP-2001  
 Invoice No. :10124792  
 P.O. Number :  
 Account :HPQ

Project : 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS A0124792

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
P256705	94139402	< 10	1.18	1165	5	0.04	4	1170	5	0.97	2	5	10	< 0.01	< 10	< 10	93	< 10	74
P256706	94139402	< 10	0.91	2240	5	0.04	4	1000	20	1.76	6	4	99	< 0.01	< 10	< 10	34	< 10	94
P256707	94139402	< 10	0.72	1255	15	0.03	98	350	16	5.79	< 2	4	8	< 0.01	< 10	< 10	36	< 10	160
P256708	94139402	< 10	0.01	145	75	0.05	20	190	30	9.38	8	< 1	7	< 0.01	< 10	< 10	37	< 10	88
P256709	94139402	< 10	0.75	265	9	0.04	18	710	18	3.41	2	3	35	< 0.01	< 10	< 10	29	< 10	95
P256710	94139402	< 10	0.98	670	2	0.03	4	1150	6	0.04	2	1	44	0.12	< 10	< 10	27	< 10	52
P256717	94139402	< 10	0.18	105	1	0.04	5	180	14	0.18	4	3	15	< 0.01	< 10	< 10	21	< 10	316
P256718	94139402	< 10	1.46	645	3	0.03	3	1120	44	0.49	14	3	84	< 0.01	< 10	< 10	56	< 10	68
P256719	94139402	< 10	0.80	1955	3	0.01	16	650	44	1.67	14	4	151	< 0.01	< 10	< 10	38	< 10	40
P256720	94139402	< 10	0.87	290	2	0.03	21	130	6	1.46	2	4	30	< 0.01	< 10	< 10	53	< 10	148
P256721	94139402	< 10	0.01	20	36	< 0.01	3	620	16	2.27	2	1	14	< 0.01	< 10	< 10	7	< 10	2
P256722	94139402	< 10	1.74	1230	< 1	0.03	4	900	28	0.20	2	4	56	0.10	< 10	< 10	66	< 10	66
P256723	94139402	< 10	0.77	900	< 1	0.05	2	1060	< 2	0.03	6	4	111	< 0.01	< 10	< 10	35	< 10	54
P256724	94139402	< 10	0.02	35	16	< 0.01	4	460	42	2.08	2	< 1	9	< 0.01	< 10	< 10	5	< 10	6
P256725	94139402	< 10	1.40	460	3	0.04	3	1050	8	2.30	2	3	14	0.13	< 10	< 10	29	< 10	48
P257503	94139402	< 10	0.32	1665	1	< 0.01	1	1270	876	3.73	4	2	69	< 0.01	< 10	< 10	7	< 10	300
P257504	94139402	< 10	0.03	35	1	< 0.01	1	930	18	1.32	14	2	14	< 0.01	< 10	< 10	12	< 10	10
P257505	94139402	< 10	0.11	40	21	0.01	1	550	8	0.59	2	< 1	25	< 0.01	< 10	< 10	18	< 10	2
P257506	94139402	< 10	0.43	690	1	0.03	2	1610	22	5.13	< 2	3	76	< 0.01	< 10	< 10	14	< 10	20
P257507	94139402	< 10	1.06	660	2	0.04	1	1390	76	3.51	2	4	108	< 0.01	< 10	< 10	54	< 10	74
P257508	94139402	< 10	1.14	300	3	0.05	4	980	< 2	2.95	4	4	8	< 0.01	< 10	< 10	77	< 10	30
P257509	94139402	< 10	0.58	185	9	0.02	2	1000	30	3.95	2	1	19	< 0.01	< 10	< 10	19	< 10	76
P257510	94139402	< 10	1.54	1335	153	0.06	4	900	12	1.71	2	4	32	< 0.01	< 10	< 10	83	< 10	226
P257511	94139402	< 10	0.80	325	6	0.04	2	1360	6	3.85	2	3	31	< 0.01	< 10	< 10	63	< 10	34
P257512	94139402	< 10	1.01	925	9	0.03	2	790	< 2	1.14	2	3	14	< 0.01	< 10	< 10	58	< 10	74
P257513	94139402	< 10	0.01	30	2	< 0.01	1	480	24	0.56	10	< 1	6	< 0.01	< 10	< 10	4	< 10	14
P257514	94139402	< 10	0.16	750	< 1	< 0.01	< 1	640	18	0.32	12	1	27	< 0.01	< 10	< 10	13	< 10	20
P257515	94139402	< 10	0.09	790	1	0.01	3	410	24	0.58	8	1	6	< 0.01	< 10	< 10	8	< 10	90
P257516	94139402	< 10	0.34	1110	< 1	0.01	1	580	14	0.36	4	3	38	< 0.01	< 10	< 10	8	< 10	264
P257517	94139402	< 10	< 0.01	20	1	0.01	< 1	350	36	0.65	20	< 1	7	< 0.01	< 10	< 10	3	< 10	8
P257518	94139402	< 10	0.21	160	129	< 0.01	9	460	2310	>10.00	< 2	1	9	0.02	< 10	< 10	19	30	3330
P257952	94139402	< 10	0.05	50	3	< 0.01	< 1	170	28	0.30	14	< 1	12	< 0.01	< 10	< 10	1	< 10	46
P257953	94139402	< 10	0.19	435	4	0.03	2	600	46	1.04	20	3	7	< 0.01	< 10	< 10	13	< 10	88
P257954	94139402	< 10	0.03	125	< 1	0.01	< 1	560	50	1.60	26	1	12	< 0.01	< 10	< 10	10	< 10	82
P257955	94139402	< 10	0.02	190	1	< 0.01	1	230	36	0.42	26	< 1	8	< 0.01	< 10	< 10	11	< 10	40
P257956	94139402	< 10	< 0.01	25	< 1	< 0.01	< 1	450	34	0.21	32	1	9	< 0.01	< 10	< 10	13	< 10	8
P258042	94139402	< 10	0.43	5830	2	< 0.01	1	570	44	1.93	2	2	274	< 0.01	< 10	< 10	6	< 10	38
P258043	94139402	< 10	1.12	4900	5	< 0.01	4	430	44	>10.00	28	2	73	< 0.01	< 10	< 10	24	30	374
P258044	94139402	< 10	1.29	1835	4	< 0.01	5	310	106	>10.00	22	3	21	< 0.01	< 10	< 10	31	30	520
P258045	94139402	< 10	3.01	2040	3	< 0.01	3	880	200	6.73	8	6	9	< 0.01	< 10	< 10	99	10	298

CERTIFICATION: 



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Analytical Chemists \* Geochemists \* Registered Assayers  
212 Brooksbank Ave., North Vancouver  
British Columbia, Canada V7J 2C1  
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To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
KAMLOOPS, BC  
V2C 6H1

Project: 1770  
Comments: ATTN: G. EVANS FAX: R. FARMER

Page Number :2-A  
Total Pages :2  
Certificate Date: 26-SEP-2001  
Invoice No. : I0124792  
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## CERTIFICATE OF ANALYSIS A0124792

SAMPLE	PREP CODE	Weight Kg	Au ppb FA+AA	Au FA oz/ton	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %
P258046	94139402	1.36	1965	>100.0	1.20	364	< 10	10	1.5	4	3.18	4.0	1	4	>10000	>15.00	20	< 1	< 1	0.07
P258047	94139402	0.92	26	>100.0	2.0	1.29	32	< 10	30	< 0.5	< 2	0.61	< 0.5	16	20	226	6.31	< 10	< 1	0.25
P258048	94139402	1.74	200	>100.0	0.95	128	< 10	20	0.5	< 2	0.05	6.0	4	14	>10000	12.35	10	< 1	< 1	0.05
P258049	94139402	0.90	< 5	>100.0	1.6	0.75	22	< 10	30	< 0.5	< 2	0.54	< 0.5	10	21	219	4.74	< 10	< 1	0.21
P258050	94139402	0.88	80	>100.0	10.4	0.64	178	< 10	< 10	< 0.5	< 2	0.05	9.5	7	85	268	8.74	< 10	10	0.24
P258167	94139402	0.94	160	>100.0	4.8	2.78	16	< 10	40	< 0.5	2	9.43	16.0	14	12	2170	5.56	10	< 1	0.10
P258168	94139402	0.72	140	>100.0	8.4	1.53	< 2	< 10	20	0.5	< 2	1.91	>500	11	25	5640	4.70	10	21	0.31
P258894	94139402	1.14	70	>100.0	2.4	0.97	24	< 10	30	< 0.5	< 2	0.22	< 0.5	11	25	27	6.17	< 10	< 1	0.23
P258895	94139402	1.20	25	>100.0	0.6	2.45	14	< 10	70	< 0.5	< 2	0.20	0.5	9	28	26	5.44	10	< 1	0.25
P258896	94139402	1.18	20	>100.0	0.2	0.73	4	< 10	40	< 0.5	< 2	0.15	< 0.5	12	25	9	4.20	< 10	< 1	0.24
P258897	94139402	1.38	130	>100.0	1.6	1.82	12	< 10	40	< 0.5	< 2	0.14	< 0.5	10	40	25	5.71	10	< 1	0.14
P258898	94139402	1.02	30	>100.0	2.2	0.38	22	< 10	30	0.5	< 2	1.04	2.5	15	29	17	4.63	< 10	< 1	0.23
P258899	94139402	1.18	50	>100.0	29.2	5.48	30	< 10	20	0.5	< 2	0.11	< 0.5	8	6	>10000	14.10	20	< 1	0.05
P258900	94139402	1.32	70	>100.0	14.6	3.57	10	< 10	10	0.5	< 2	0.23	5.5	11	14	>10000	10.60	10	< 1	0.09
P258933	94139402	1.06	< 5	>100.0	0.6	2.37	18	< 10	460	0.5	< 2	0.25	< 0.5	12	11	226	3.73	< 10	< 1	0.41
P258934	94139402	1.12	< 5	>100.0	< 0.2	2.40	< 2	< 10	190	< 0.5	< 2	0.95	< 0.5	11	17	48	3.52	< 10	< 1	0.16
P258935	94139402	1.32	< 5	>100.0	< 0.2	2.64	10	< 10	170	< 0.5	2	1.29	< 0.5	10	15	25	3.65	< 10	< 1	0.21
P258936	94139402	0.78	< 5	>100.0	< 0.2	1.73	4	< 10	360	< 0.5	< 2	1.10	< 0.5	10	19	13	3.36	< 10	< 1	0.23
P258937	94139402	1.76	< 5	>100.0	< 0.2	1.79	134	< 10	100	< 0.5	< 2	3.46	3.0	19	13	27	4.53	< 10	< 1	0.34
P258938	94139402	0.96	< 5	>100.0	< 0.2	0.49	28	< 10	160	< 0.5	< 2	0.08	< 0.5	< 1	51	9	1.63	< 10	< 1	0.42
P258939	94139402	0.84	< 5	>100.0	< 0.2	0.64	26	< 10	100	< 0.5	< 2	0.11	< 0.5	3	24	9	1.79	< 10	< 1	0.23
P258940	94139402	0.86	< 5	>100.0	< 0.2	0.33	36	< 10	140	< 0.5	< 2	0.05	< 0.5	3	33	9	2.28	< 10	< 1	0.23
P258941	94139402	0.92	< 5	>100.0	< 0.2	0.52	42	< 10	180	< 0.5	< 2	0.09	< 0.5	2	35	8	1.90	< 10	< 1	0.40
P258942	94139402	1.48	< 5	>100.0	0.2	0.51	18	< 10	80	< 0.5	< 2	8.83	< 0.5	< 1	9	6	1.08	< 10	< 1	0.19
P258943	94139402	1.68	< 5	>100.0	0.8	0.41	40	< 10	190	< 0.5	< 2	0.06	< 0.5	< 1	64	8	2.67	< 10	< 1	0.45
P258944	94139402	1.28	< 5	>100.0	< 0.2	1.08	12	< 10	90	0.5	< 2	0.71	< 0.5	3	21	6	2.76	< 10	< 1	0.25

CERTIFICATION: *[Signature]*



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## CERTIFICATE OF ANALYSIS A0124792

SAMPLE	PREP CODE	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
P258046	94139402	< 10	1.46	5170	6	< 0.01	4	300	156	>10.00	38	2	111	< 0.01	< 10	< 10	24	30	360
P258047	94139402	< 10	1.09	1425	3	0.02	3	1500	82	5.24	2	4	16	< 0.01	10	< 10	55	< 10	184
P258048	94139402	< 10	0.52	3840	3	< 0.01	3	260	296	7.41	88	2	64	< 0.01	10	< 10	17	10	782
P258049	94139402	< 10	0.46	1025	1	0.01	1	1370	122	3.56	6	2	15	< 0.01	< 10	< 10	19	< 10	90
P258050	94139402	< 10	0.23	230	2	0.01	4	650	696	7.53	124	1	12	< 0.01	40	< 10	14	10	1290
P258167	94139402	< 10	2.15	4710	4	< 0.01	1	920	922	3.11	2	4	154	< 0.01	< 10	< 10	56	< 10	2250
P258168	94139402	< 10	0.92	2220	3	< 0.01	5	1130	1700	4.84	18	2	39	< 0.01	< 10	< 10	31	< 10	>10000
P258894	94139402	< 10	0.52	275	3	0.03	3	1590	90	4.15	2	1	9	< 0.01	10	< 10	26	< 10	174
P258895	94139402	< 10	1.59	1170	4	0.03	2	1010	22	2.08	6	4	13	< 0.01	10	< 10	82	< 10	312
P258896	94139402	< 10	0.37	120	7	0.01	3	1240	20	3.82	2	< 1	10	< 0.01	< 10	< 10	10	< 10	22
P258897	94139402	< 10	1.27	425	25	0.12	4	1200	18	3.36	4	4	13	< 0.01	10	< 10	111	< 10	124
P258898	94139402	< 10	0.15	840	3	< 0.01	3	1130	260	4.70	6	2	58	< 0.01	< 10	< 10	8	< 10	540
P258899	94139402	< 10	2.87	2380	6	< 0.01	3	960	296	4.24	10	8	7	< 0.01	10	< 10	96	< 10	286
P258900	94139402	< 10	2.01	2140	7	0.02	4	1150	144	4.26	10	7	12	< 0.01	10	< 10	102	< 10	674
P258933	94139402	10	1.11	755	2	0.01	11	1340	10	0.23	4	5	11	< 0.01	10	< 10	61	< 10	50
P258934	94139402	< 10	2.04	1110	< 1	0.02	3	1180	< 2	0.01	< 2	2	30	0.10	< 10	< 10	47	< 10	76
P258935	94139402	< 10	1.68	665	< 1	0.05	3	910	16	< 0.01	2	4	40	0.10	< 10	< 10	51	< 10	94
P258936	94139402	< 10	0.62	725	< 1	0.04	3	1150	4	0.20	2	3	47	0.10	< 10	< 10	29	< 10	60
P258937	94139402	10	0.45	1720	3	0.05	5	1850	174	1.61	18	9	59	0.16	10	< 10	55	< 10	226
P258938	94139402	10	0.04	100	7	0.02	1	230	26	0.27	14	1	8	< 0.01	< 10	< 10	5	< 10	28
P258939	94139402	10	0.14	955	< 1	< 0.01	8	680	10	< 0.01	2	3	5	< 0.01	10	< 10	16	< 10	28
P258940	94139402	10	0.03	875	3	< 0.01	1	490	24	0.12	24	3	5	< 0.01	10	< 10	7	< 10	28
P258941	94139402	10	0.05	350	2	< 0.01	1	640	38	0.31	12	1	8	< 0.01	< 10	< 10	13	< 10	34
P258942	94139402	10	0.35	2070	1	< 0.01	< 1	410	12	0.52	8	1	226	< 0.01	< 10	< 10	7	< 10	12
P258943	94139402	< 10	0.03	95	31	0.01	1	500	88	0.63	30	< 1	12	< 0.01	< 10	< 10	9	< 10	12
P258944	94139402	10	0.33	1355	< 1	< 0.01	< 1	790	18	< 0.01	4	4	14	< 0.01	10	< 10	20	< 10	54

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



# ALS Chemex

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

To: TECK EXPLORATION LTD.

MAIN STATION, BOX 938  
 KAMLOOPS, BC  
 V2C 6H1

Page Number :1  
 Total Pages :1  
 Certificate Date: 28-SEP-2001  
 Invoice No. : I0125573  
 P.O. Number :  
 Account : HPQ

Project: 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS

### A0125573

SAMPLE	PREP CODE	Ag g/t	Cu %	Zn %							
P258043	212	245	4.43								
P258044	212	129	11.55								
P258046	212	296	13.40								
P258048	212	119	5.91								
P258168	212	-----	-----	5.75							
P258899	212	-----	1.37								
P258900	212	-----	1.63								

CERTIFICATION:



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Page Number :1  
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 Invoice No. :10125692  
 P.O. Number :  
 Account :HPQ

Project : 1770  
 Comments: ATTN: G. EVANS FAX: R. FARMER

## CERTIFICATE OF ANALYSIS

A0125692

SAMPLE	PREP CODE	Ag g/t	Cu %	Pb %	Zn %						
257521	212 --	-----	3.48	-----	-----						
257963	212 --	161	-----	-----	-----						
257969	212 --	195	2.30	-----	2.21						
257970	212 --	-----	-----	-----	3.74						
257971	212 --	-----	-----	-----	1.67						
258946	212 --	110	-----	9.02	11.00						

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



**APPENDIX 3**  
**ANALYTICAL PROCEDURES**

# TECHNICAL INFO

## Geological Principles - Sample Preparation Procedures

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- [Introduction](#)
- [Contamination Control during Sample Preparation](#)
- [Sample Preparation Equipment](#)
  - [Drying Ovens](#)
  - [Crushers](#)
  - [Pulverizers](#)
  - [Screens](#)
- [Contamination Introduced by Sample Preparation Equipment](#)
  - [Table: Contamination Levels Observed in Granite for Different Grinding Media](#)
- [Sample Preparation Procedures](#)
  - [Crushing](#)
  - [Pulverizing](#)
  - [Screening](#)
  - [Special Procedures](#)
- [Composites](#)
- [Quality Control Procedures for Sample Preparation](#)
- [Pulp and Reject Policy](#)



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### Introduction

Geological samples are highly variable and encompass a broad range of sample types that includes soils, silts, drill core, rocks and panning concentrates. The purpose of sample preparation is to produce a small, dry and manageable sample suitable for laboratory scale analysis while at the same time ensuring that the prepared sample is homogeneous and fully representative of the original field material. Experience has shown that the potential risk for contamination is greater in the sample preparation process than in any other part of laboratory operations. For this reason particular care and attention must be paid to sample handling and there must be strict adherence to standard operating procedures and good work practices. The physical plant facilities must be designed for an orderly workflow, possess sufficient crushing and grinding equipment to allow for specialized usage, and have a comprehensive dust control system.

- For sample preparation procedures and prices, see the [Sample Preparation Services](#).



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### Contamination Control during Sample Preparation

We take many steps to minimize the risk of cross contamination between samples during the preparation process. One of the most important steps is to sort and classify samples according to matrix type and expected metal concentrations as soon as they enter the laboratory. The samples will then be routed through the laboratory in different batch streams. Physically separated areas are maintained as much as possible so that, for example, concentrates and vegetation samples would never be processed in the same area.

Once samples are classified, they are prepared using equipment which has been designated for certain matrix types and expected metal concentration ranges. Equipment is color-coded and numbered so that it is clear for which sample type it is intended to be used.

In all our sample preparation laboratories, we have invested a considerable amount of time and energy in designing proper dust control systems. Our experience has shown that the fine dust which can otherwise collect will invariably contain trace amounts of gold and base metals. We are progressively updating all our sample preparation laboratories, for example by building enhanced dust control systems in which crushing and grinding equipment is virtually completely enclosed. The end result is an improved dust control system which reduces the risk of sample contamination and which provides a healthier work environment for our employees.

It is unfortunate that all machinery grinding surfaces impart some degree of metal content to samples during pulverization. As a result, there will always be some degree of contamination when crushing and grinding procedures are used. However at Chemex we have a great variety of grinding surfaces that vary widely in their chemical composition. We offer equipment made of hardened manganese steel, chrome steel or carbon steel as well as non-ferrous materials such as zirconia and tungsten carbide. Hence an explorationist can choose one of these options in such a way as to eliminate the possibility of contaminating a sample with an element of potential exploration significance.

- The issues of contamination from grinding surfaces, the elements imparted to the sample, and their likely concentration ranges, are discussed more fully in the Contamination Introduced by Sample Preparation Equipment section.



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## Sample Preparation Equipment

The main equipment in use at Chemex consists of:

- crushers (roll, traditional jaw and oscillating jaw)
- pulverizers (small ring, large ring, plate)
- ball mills
- drying ovens
- an assortment of splitters, screens and homogenizing equipment

### Drying Ovens

The sample drying process is more critical than may appear at first. Many samples arrive at the laboratory sopping wet and drying time for these samples is invariably a major contributor to lengthened turnaround times. Hence it would be tempting to improve turnaround time by using blast furnace drying techniques. However there is a considerable risk to sample integrity by taking such an approach in that some samples will appreciably oxidize at higher temperatures (especially sulfides) and some potentially volatile elements (arsenic, antimony, mercury-all key pathfinder elements for gold exploration) will be lost at elevated drying temperatures. Of course, even if these elements are not of immediate interest, the samples will be rendered useless for any future analysis.

At Chemex we use two different drying temperatures and once again the choice of temperature depends on the sample classification. For rocks, rock chips, drill core and other "coarse" material with a relatively low surface area, we employ a drying temperature in the range of 110-120 deg C (230-250 deg F). Independent studies of these sample types have shown that the potentially volatile elements will not be lost at this temperature. However for soils, silts, sediments and other "fine" materials with a proportionately higher surface area, we limit the drying temperature to 60 deg C (140 deg F).

Our ovens are all large, gas-heated forced air furnaces; samples are pre-loaded onto moveable drying racks before being rolled into an oven. This avoids the potential contamination risk that is inherent in fixed shelving units. Large samples are placed into stainless steel trays to ensure efficient heat transfer and minimal drying times.

### Crushers

In recent years improvements have been made to the traditional jaw crusher by the introduction of the oscillating jaw crusher. These new crushers, built specifically for laboratory usage, provide enhanced crushing by ensuring that the sample receives continuous grinding as it passes between the plates. The end result is a finer product in a single step, typically >50% is -1mm whereas only about 10% is -1mm in the traditional jaw crusher. These new crushers are also much easier to clean and therefore chances of cross contamination between samples are reduced. We have replaced all our old jaw crushers with these improved oscillating crushers.

We also use roll crushers at Chemex as these crushers are ideal for processing larger reverse circulation drilling samples due to their higher throughput. Our roll crushers are fitted with vibratory feeders to ensure a smooth sample delivery at a more or less constant rate. One of the limitations of these crushers is that the rolls will physically separate when the material fed into the machines contains very coarse particles. Of course this will result in some coarse material passing through the rolls. A further disadvantage is that roll crushers are not as easy to clean as jaw crushers. However as we use roll crushers for samples that are typically large, the carryover should only amount to a fraction of a percent.

A third kind of crusher that Chemex employs is a ball mill used exclusively for the preparation of secondary reference materials in bulk.

- The ball mill, and the secondary reference materials that it produces, are described in greater detail in the Quality Assurance section.

### Pulverizers

At Chemex we use two different types of pulverizers, ring mills and plate pulverizers. Ring mills have become the industry standard in recent years. Basically they consist of a bowl which contains either a small puck and one or more rings, or a large saucer. Crushed samples are added to the bowl, the bowls are sealed and then subjected to centrifugal force by mechanical action. The puck and/or ring(s), being free to move inside the bowl, subject the sample to considerable grinding action, resulting in a very fine sample. Bowls are manufactured in different sizes ranging from 50 g capacity to 5 kg capacity. At Chemex we use two sizes primarily, 250 g and 2 kg. The bowls themselves are made of different materials including manganese steel, chrome steel, zirconia and tungsten carbide so that it is easy to avoid contaminating a sample with an element of potential interest.

The second type of pulverizer that we use is the vertical plate pulverizer. In these units, a stationary plate stands on end while the rotating plate is pushed into it from the side. In our pulverizers, even plate pressure is guaranteed by a unique pneumatic plate closure system; this system also allows for the two plates to separate completely when cleaning between samples, thus minimizing chances of sample contamination. Our plate pulverizers are typically fitted with a vibratory feeding system to prevent overfeeding of the sample which would result in a widened gap between the grinding surfaces. Vertical plate pulverizers are applicable to coarse gold projects because the plates are capable of breaking up soft gold nuggets and reducing its particle size, thereby producing less variance in the gold assays. Although the gold will initially "smear" on the plates, it will be subsequently ground off by the harder matrix material.

### Screens

Screens are used to sieve soil samples in order that the fine fraction can be analyzed. At Chemex we use stainless steel screens exclusively. Brass screens are a potential source of contamination for both copper and zinc, especially if the sample contains hard, abrasive particles.



## Contamination Introduced by Sample Preparation Equipment

The intense grinding action produced by crushers and pulverizers results in wear metals being added to the samples being ground. The elements that are added will depend on the composition of the grinding surfaces. The amount of the elements added is harder to determine as it will depend on a number of factors including the hardness of the grinding surface, the hardness of the sample and the length of grinding time.

- The Table shows typical levels of contaminating elements that can be added for each type of grinding medium. It

must be stressed that these are typical ranges which may not apply to exceptional samples.

**Table: Contamination Levels Observed in Granite for Different Grinding Media**

Composition of Pulverizer Rings or Plates					
Element	Manganese steel (ppm)	Chrome steel (ppm)	Carbon steel (ppm)	Zirconia (ppm)	Tungsten carbide (ppm)
Chromium	2-10	20-500	5-25	<1	
Iron	0.2-1.5%	0.1-0.5%	0.2-1.5%	<10	
Manganese	10-100	5-20	10-125	<1	
Molybdenum	<1	1	1	<1	
Nickel	1-2	1-5	6	<1	
Lead		2	3	<2	
Vanadium		1	<1	<1	
Tungsten					30-300
Cobalt					10-100
Zirconium				30-300	
Hafnium				1-5	



## Sample Preparation Procedures

### Crushing

Samples that require crushing are dried at 110-120 deg C and then crushed with either an oscillating jaw crusher or a roll crusher. The Chemex QC specifications for crushed material is that >70% of the sample must pass a 10 mesh (2 mm) screen (see [Graph 1](#)). Crushing charges are based on the sample weight. The entire sample is crushed but only a portion of the crushed material is carried through to the pulverizing stage. That amount, typically 250 g to 1 kg, is subdivided from the main sample by use of a riffle splitter. In either case, a substantial part of the sample (the "reject") remains. Ordinarily we retain a 1-2 kg split of this reject, but if a client wishes to pay a small additional charge, then we will retain the entire reject.

- For more details, please consult the [Pulp and Reject Storage Policy](#) section.

### Pulverizing

A crushed split derived from the crushing process is pulverized using either a ring mill or a plate pulverizer. The size of the split is determined by the client based on the pulverizing procedure that is selected. Split sizes for manganese or chrome steel rings are typically 250 g to 1 kg; however split sizes for zirconia rings are 100 g and those for tungsten carbide rings are only 75 g. Because of the relative lightness of these latter two materials, the size of the sample to be pulverized must necessarily be reduced to these weights in order to achieve the Chemex QC specification for final pulverizing, namely that >95% of the sample be less than 150 mesh (106 microns) (see [Graph 3](#)).

For those samples which require enhanced homogeneity, such as samples which are known to exhibit coarse gold behavior, intermediate pulverization of the entire sample (or a representative split) is also available. The Chemex QC specification for intermediate pulverizing is that 90% of the sample must pass a 250 micron (-60 mesh) screen (see [Graph 2](#)).

### Screening

Soil and sediment samples are typically sieved through a -80 mesh (180 micron) screen and the fine fraction is retained for analysis. This procedure is satisfactory for smaller (i.e. 500 g or less) samples where the exploration target is base

metals. However, when gold is the exploration target, we recommend that the particle size of the minus fraction be further reduced using ring mill pulverization to 95% -150 mesh (106 microns) in order to obtain more reproducible gold data.

With today's emphasis on gold exploration, many "soil" samples weigh in at several kilograms or more. In this latter case, the samples often contain larger components such as pebbles or agglomerations of clay and other material. For samples like this, we recommend that after disaggregation the sample is sieved through a -10 mesh (2 mm) screen to remove the coarse material. Following this intermediate screening, the -10 mesh (2 mm) material is then split to about 500g using a riffle screen and then sieved through a standard -80 mesh (180 micron) to obtain a minimum of 150 g of fine material. We still recommend further ring mill pulverization if gold is the exploration target, for the reasons outlined above.

- Detailed flow sheets which outline our screening procedures for all sample weights are available. Please contact a Chemex Client Services representative for more information.

## Special Procedures

Vegetation and humus samples require special procedures because they are easily contaminated, difficult to reduce in particle size and awkward to homogenize. This type of sample tends to be highly variable, ranging from well-rotted humus to bits of tree trunk. All vegetation sample preparation is done in our main Vancouver laboratory because we have special facilities available. Samples submitted to branch offices will be shipped to the Vancouver laboratory and this may result in some extra shipping charges to the client if the weights are judged to be excessive.

- For more specific information on the preparation of your particular sample type, please contact a Chemex Client Services representative.



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## Composites

Composite samples are normally prepared on a volumetric basis and the composite is homogenized by mixing the samples in vials which are mounted in dual orbiting mixers. Composites can be prepared on a weight basis if desired but the charges are greater because the labor costs are significantly higher.



---

## Quality Control Procedures for Sample Preparation

- Detailed information is provided in the Quality Assurance section.



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## Pulp and Reject Policy

Pulps are retained until the end of the calendar year and then clients are contacted in writing and asked to select one of three options:

- returning the pulp to the client
- continued storage subject to a warehousing charge
- discarding the pulp

Reject material can be saved in part or in total according to instructions received from the client. If no specific instructions are received, the Chemex default policy is to retain the entire reject. There is no charge for storage of a 1-2 kg reject split. The charges for storing the entire reject vary according to sample weight. We guarantee that we will retain the reject for a minimum of 90 days; in practice, most reject is retained until the end of the calendar year and clients are contacted to determine how they wish to dispose of the reject.

We can provide reports about your pulps and rejects at any time upon request. These reports will include information about Chemex workorder numbers, your project name or number, and numbers of samples.

Please note that when local tipping fees are significant, we reserve the right to bill clients for the cost of disposing rejects to landfill.



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# TECHNICAL INFO

## Multi-Element Packages - Trace Geochemical Analysis by ICP Spectroscopy

- [Introduction](#)
- [G32 - 32 Element Partial Leach Multielement ICP Analysis](#)
- [G32m - 32 Element Partial Leach Package with Quantitative Low Detection Mercury](#)
- [The G9 Multielement ICP Packages](#)
- [The VG Multielement Package for Vegetation and Humus](#)
- [T24 - 24 Element Total Digestion Multielement ICP Package](#)
- [T27 - 27 Element Total Digestion Multielement ICP Package](#)
- [Quality Control Procedures for ICP Spectroscopy](#)
- [FAQs](#)



### Introduction

Inductively-coupled plasma atomic emission spectroscopy (ICP spectroscopy) has been a highly successful and popular analytical technique for a number of reasons which have been outlined in the section entitled [Plasma Emission Spectroscopy](#).

- Several of the most successful packages that have traditionally been offered by Chemex are outlined below.



### G32 - 32 Element Partial Leach Multielement ICP Analysis

The most important traditional ICP package in use at Chemex has been denoted G32 and has historically been our most popular and successful ICP package. Data for 32 elements are reported, giving the explorationist the widest possible range of information. Even though the leach has been designated "partial", it is still sufficiently strong to dissolve 18 of the elements in a quantitative manner. The remaining 14 elements are dissolved in a manner which is usually incomplete

- These elements are outlined both in our [Fee Schedule](#) and on our [Certificates of Analysis](#).

In addition to offering the widest range of information about elemental concentrations, the [G32 package](#) is also the most economical of the large scale packages, thus providing extremely good value.

The [G32 package](#) has been designed for soils, silts, lake and stream sediment analysis. Rock characterization is better accomplished using the ICP package outlined below.

- For a complete list of G32 elements, detection limits, and upper limits, see the [Nitric Aqua-Regia Leach Packages \(ICP-32\)](#) section of the [1998 Fee Schedule](#).



Many laboratories offer some form of multielement ICP package roughly equivalent to the Chemex G32 package but subtle differences exist from one package to another and complete agreement between these various packages cannot necessarily be expected. Some of the features of the G32 package which should be borne in mind by explorationists are as follows:

### Digestion or Leaching Procedure

Chemex uses a nitric acid-aqua regia digestion for the G32 package. The use of pure nitric acid in the early stage of the digestion facilitates both the dissolution of sulfide minerals and the destruction of organic matter. Consequently the nitric-aqua regia digestion is stronger than a 3:1 HCl:HNO<sub>3</sub> aqua regia digestion or a 3:1:2 HCl:HNO<sub>3</sub>:H<sub>2</sub>O digestion used by other laboratories. Data produced with the Chemex G32 package is often fractionally higher than the data generated using weaker aqua regia systems. However, none of these partial leach digestion systems completely dissolves all elements, especially those shaded in yellow in the 1998 Fee Schedule. This issue is discussed in greater detail below. For explorationists requiring totally quantitative data, the Chemex T24 package described below offers an attractive alternative.

### Detection Limits

A brief glance at the list of detection limits in the G32 package shows that there is a wide variation from one element to another. Several different factors such as analytical sensitivity of an elemental spectral line and interelement interferences have a major effect on the detection limit offered. The G32 package represents a compromise, an attempt to offer the most meaningful detection limit for the largest number of elements.

### Accuracy and Precision

The precision of the G32 elements at the detection limits is +/- 100%. At concentration values 5 times higher than the detection limit, the precision is typically +/- 40%; at values 100 times the detection limit, the precision is typically +/- 10%. An explorationist who requires extremely precise data within the range of 1-5 times the detection limit of an element within the G32 package should consider using one of our ultratrace G32 package instead. These ultratrace packages have been designed to be quantitative and offer significantly lower detection limits.

### Interelement Effects

The concentration values of some elements in the G32 package are routinely corrected for interelement effects caused by spectral line overlap. Great care and attention is taken to ensure that these corrections are made properly. Certain major elements such as Al and Fe have significant effects on some trace element concentrations (e.g. Be), depending on the analytical wavelength that has been selected. Although these interelement effects can usually be compensated for, in extreme cases the effect may be sufficiently great as to prevent the measurement of a small number of elements as stated in our Fee Schedule.

### Evaluation of data for incompletely dissolved elements

Silicates, clays and resistant minerals are incompletely dissolved in all partial leach aqua regia digestion systems. Elements such as Al, Ba, Ti, Na and K (those shaded in yellow in the 1998 Fee Schedule) will rarely be fully dissolved and so data for these elements will never match data generated by stronger digestion techniques such as total digestions or whole rock analyses.

### Cautionary Notes

The explorationist should keep in mind the comments made above regarding the digestion efficiency of the various aqua regia digestion systems. Concentration values for many elements, especially those that are incompletely dissolved, are more likely to be higher with a nitric-aqua regia digestion than with other weaker aqua regia digestions.

Professional opinion varies significantly on the potential usefulness of data derived from incompletely dissolved elements. Analysts have traditionally urged caution but at least one school of thought among exploration geochemists believes that much of this data may be potentially useful.



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## G32m - 32 Element Partial Leach Package with Quantitative Low Detection Mercury

The analytical sensitivity for mercury using ICP spectroscopy is adequate for some sample types but in many cases explorationists require a better sensitivity than the 1 ppm detection limit offered by conventional ICP spectroscopy. In the G32m package, we substitute a quantitative geochemical procedure for mercury (Chemex code 20). This procedure uses conventional cold vapor atomic absorption spectroscopy with a detection limit for Hg of 10 ppb, a one hundred fold improvement over that offered in the G32 package.



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## The G9 Multielement ICP Packages

### Introduction

Not all explorationists require the comprehensive information provided by the G32 and the G32m packages. As a result Chemex designed a number of condensed 9-element packages which offer quantitative data for the elements reported.

- For a complete list of elements for the various G9 procedures and prices, see the ICP-AES Multielement Analysis section of the 1998 Fee Schedule.

### The G9g Package

The G9g package includes pathfinder elements likely to be of interest to those explorationists searching for gold.

### The G9m Package

The G9m package contains the same 9 elements as the G9g package. The only difference is that in the G9g package, mercury is determined by ICP spectroscopy to a detection limit of 1 ppm, whereas in the G9m package, mercury is determined by cold vapor atomic absorption spectroscopy to a detection limit of 10 ppb.

### The G9b Package

The G9b multielement package has been designed to be of interest to those explorationists looking for base metals and the G9b package includes elements such as nickel, cobalt, iron and manganese instead of gold pathfinders.



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## The VG Multielement Package for Vegetation and Humus

The VG package consists of a suite of 33 elements (including gold) which has been designed to offer the best possible detection limits for the analysis of highly organic samples. The VG package uses both ICP spectroscopy and instrumental neutron activation analysis (NAA) to obtain exceptionally low detection limits, e.g. 0.1 ppb Au.

These low detection limits can only be obtained if the samples are highly organic vegetation or humus samples and this package is not appropriate even for soils or sediments due to increased interferences from the inorganic constituents of such samples.

- For a complete list of elements for the VG package and prices, please contact a Chemex sales and marketing representative.



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## T24 - 24 Element Total Digestion Multielement ICP Package

### Introduction

The Chemex T24 package has been designed to be complementary to the G32 package. Whereas the G32 package offers a partial leach, the T24 package includes a total digestion so that data reported for all 24 elements is considered quantitative. This package is considered most appropriate for rock characterization as it includes data for all major and minor elements except silicon.

- For a complete list of elements in the T24 package and prices, see the Triple-Acid Total Digestion section of the 1998 Fee Schedule.

### Digestion

The T24 package uses a total digestion in which the sample is completely dissolved using a mixture of hot, concentrated nitric, perchloric and hydrofluoric acids. In order for this digestion to go to completion, the acid mixture must be taken to dryness. This process ensures the best possible dissolution but also results in the loss of volatile elements such as arsenic, antimony and mercury. In addition, this digestion particular acid mixture results in the loss of silicon, an element not normally considered to be volatile. Obviously reliable data cannot be reported for these four elements with the T24 package.

To assist in the final dissolution of the sample residue, hydrochloric acid is added and then sample analysis is carried out in a dilute hydrochloric acid matrix.

This digestion will be "total" for most rock samples. Certain types of highly resistant minerals, for example zircons, may not be totally attacked. In these limited cases, we recommend that the whole rock fusion technique be used.

- For a complete list of elements using the whole rock fusion technique and prices, see the Chemex packages in the Whole Rock Analysis section of the 1998 Fee Schedule.

### Cautionary Note

Certain mineral species are capable of fully dissolving during the digestion process but because of their fundamental chemistry are prone to precipitation rather quickly. Barium, even if present in relatively low concentrations, is susceptible to precipitation and may also remove (co-precipitate) other elements such as silver and lead as it precipitates. Laboratory technicians are trained to watch for this phenomenon and corrective action is taken where possible by quickly analyzing solutions following the digestion process.

### Pricing

The T24 package yields substantially the same information as provided by whole rock analysis (with the exception of silicon) but also includes significant trace element information. Yet the total cost of the T24 package is half that of whole rock analysis and thus represents extremely good value for the budget-conscious explorationist.



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## T27 - 27 Element Total Digestion Multielement ICP Package

As noted in the section above, three elements of significant interest to explorationists, namely arsenic, antimony and mercury, are lost during the T24 digestion. Since these elements are frequently crucial pathfinder elements in the search for gold, we have included them in an expanded T27 package. The T27 package includes the standard T24 package outlined above but with the addition of quantitative individual procedures for arsenic, antimony and mercury (Chemex codes 13, 22 and 20 respectively).

- For a complete list of elements in the T27 package and prices, see the ICP-AES Multielement Analysis section of the 1998 Fee Schedule.



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## Quality Control Procedures for ICP Spectroscopy

- Click here for details of the Quality Control Procedures in place for ICP-AES.



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## FAQs

**Why are my barium results by the T24 procedure lower than those that I got by your whole rock procedure?**

In the T24 procedure, samples are digested using the triple acid combination of nitric, perchloric and hydrofluoric acids. A sample containing a significant amount of sulfides will produce sulfate ions during the digestion and this can occasionally cause the premature precipitation of barium as barium sulfate, resulting in low barium data. In the whole rock procedure, the samples are greatly diluted following the whole rock fusion and this helps prevent precipitation of barium.

**Why, instead of receiving data for thallium, did the certificate of analysis say "INTERFERENCE"?**

Thallium is an element that suffers from spectral overlap from iron. Occasionally the iron concentration is so high as to swamp the thallium signal. In this case, there is little that we can do but to report that an interference has prevented the measurement. If the thallium value is crucial to you, then we would propose the standard geochemical procedure (code 39) which is an AAS measurement.

**Couldn't you report As, Sb and Hg data from a T24 package anyway and let me decide how to use the data?**

We have looked at arsenic data after a T24 digestion and compared it with arsenic data generated by the optimized geochemical procedure by AAS (code 13). The data scatter was extremely wide-in some cases, most of the arsenic was lost, in others most of the arsenic remained. Under these circumstances we feel we would be reckless to report any data.

I'm not really interested in all that data from partially digested elements. Can you simplify my certificates by eliminating all the partially digested elements?

You bet we can. Just contact one of our [Client Services representatives](#) and we will make the necessary arrangements.

Why do you have an upper limit on your G32 package? Some other labs don't have upper limits on their ICP packages.

There are a number of reasons why we adopt this approach. The main one is our insistence on contamination control by sorting samples according to expected metal concentrations and routing them through separate batch streams. In this way we can provide better service for all clients by minimizing chances of cross contamination. We prefer that samples expected to exceed our G32 upper limits be analyzed by one of our ICP assay packages, A30 or A22, which have been especially designed for this purpose. The digestions for these packages take place in a physically separate part of the laboratory designed for handling higher grade samples. In addition, even though ICP-AES has linear calibration curves over several orders of magnitude, these curves cannot be extended indefinitely to higher concentrations. For best results it is preferable to prepare a more dilute solution as we do for the A22 and A30 packages.

I would like to have arsenic reported in my G9b package. Can I ask for arsenic instead of iron?

In choosing the elements that we allow to be substituted in our packages, we permit substitutions when the measurement procedure is identical for both elements. In the case of iron and arsenic, both are measured by AAS but they are made in fundamentally different ways on different equipment and the arsenic procedure is more costly. Hence we would not ordinarily allow this substitution. However it is likely that you could add arsenic at a significantly reduced rate if you discussed the matter with a [Chemex Client Services representative](#). Incidentally we do constantly review our packages in order to make sure that we are satisfying industry demand. Let us know if there are certain combinations you would like to see packaged together.



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## The Fire Assay-Gravimetric Procedure for Ore Grade Samples

The classic technique of gold measurement is the fire assay fusion followed by cupellation and a gravimetric finish (Chemex codes 996 and 997 primarily). This is still the preferred procedure for the analysis of high grade ores. There is no upper limit applied for these procedures but clients should note that the detection limit is significantly higher than for procedures which use spectroscopic measurement techniques.

## Fire Assay-Atomic Absorption procedures for Low Grade Ore and Exploration Samples

With the increase in the price of gold and the discovery of large low grade gold deposits throughout the world, many samples reach the laboratory which have "intermediate" levels of gold, that is in the range of 5-15 g/t (0.1-0.4 oz/ton). These samples are best analyzed using FA-AA procedures (Chemex codes 877, 398 and 998 primarily).

Exploration samples require a better detection limit than that offered by gravimetric procedures. The combination of a fire assay fusion with atomic absorption spectroscopy (AAS) offers the advantages of a large subsample together with a very sensitive analytical technique to yield detection limits in the range of 1-5 ppb (Chemex codes 100, 983 and 3993 primarily). The best detection limit of 1 ppb is provided by Chemex code 3993 which includes a fire assay fusion followed by a solvent extraction and then a final measurement using AAS. Because of the additional extraction step, the code 3993 procedure is more expensive than the code 100 and 983 procedures. However for explorationists looking for the best resolution of low level gold anomalies, this procedure is excellent.

## Advantages of the Fire Assay Process

- A large subsample (10-50g or more) can be taken for analysis, helping to ensure that the subsample is truly representative of the field material
- The fire assay fusion is considered to provide a "total" gold
- All samples are amenable to the fire assay procedure in the hands of a skilled assayer
- The fire assay procedure is universally accepted as the definitive method for the analysis of gold
- The fire assay fusion quantitatively dissolves and extracts the entire platinum metal group in addition to gold and silver.

## Limitations of the Fire Assay Process

- When a gravimetric finish is used, it is essential that the separation ("parting") of silver and gold is complete; if the silver is incompletely removed, then the gold results will be artificially high and the silver results will be low.
- Inquarting (the addition of a known amount of silver) is a normal procedure in the gravimetric analysis of silver and gold. In order to determine silver, the value of the inquart must be subtracted from the total silver weight. In the event that the samples contain low silver, the resulting gravimetric silver analyses can suffer from high uncertainty.
- A certain amount of silver (usually estimated to be in the range of 2%) is lost by volatilization during the cupellation process.
- When an atomic absorption spectroscopy finish is selected, the upper reporting limit is set at 0.5 oz/ton (15 g/t) and samples higher than this must be re-analyzed using a gravimetric finish.
- Samples containing coarse gold can give erratic results making it difficult to determine the true ore grade; however this problem is caused by sample heterogeneity rather than the fire assay process.
- Soil samples (typically -80 mesh, 180 micron material) can also give erratic results but again for the same reason
- It can take many years of experience before a fire assayer has the necessary degree of skill and knowledge to flux difficult ore types.
- Some ores such as chromites and tellurides can be more difficult to fuse, resulting in the need to take smaller subsamples for analysis and consequently yielding higher detection limits than normal.



## Alkaline Cyanidation



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## Limitations of Silver Analytical Methodology

In the determination of silver using acid digestions, the analyst must be aware that silver is not a particularly soluble element. Silver halides in particular are quite insoluble and silver is also prone to co-precipitate with other compounds such as barium sulfate or lead sulfate. Ordinarily an excess of hydrochloric acid is used to keep silver in solution by complexation. It is also advantageous to perform the silver analyses as soon as possible after sample digestion.

When silver is determined by ICP-AES, there can be a significant spectral interference from iron. If samples contain "normal" levels of iron, i.e. in the range of several percent, a successful correction can be made. However for samples containing elevated iron concentrations, we recommend that AAS techniques be used in preference to ICP. As part of our Quality Assurance program, we do carry out random AAS checks of ICP-generated silver data where it is suspected that elevated levels of iron may be present.

The limitations of the fire assay procedure have been discussed elsewhere on this website. The principal limitations in the measurement of silver relate to inquarting, the parting of silver and gold, and the volatility losses of silver during the cupellation process.



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## Quality Control Procedures for Silver

The quality control procedures in use for the fire assay process and chemical digestion procedures is outlined in the Quality Assurance section.



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## FAQs

### How do I know if my samples require a total digestion for silver assay?

If your samples contain silver halide minerals and originate in the U.S. Southwest or Mexico, then it may be necessary to use a total digestion silver assay (code 3386). We recommend talking to a Chemex Client Services representative regarding the analysis of a limited batch of test samples.

### When is an aqua regia digestion adequate for a silver assay?

The aqua regia digestion is ordinarily adequate for a reliable silver assay. However, if silver halide minerals are present, we recommend a total digestion. It is always possible to analyze a small test batch by both methods in order to confirm the validity of the aqua regia digestions.



**APPENDIX 4**  
**STATEMENT OF COSTS**



## STATEMENT OF COSTS

### 1. Wages

Graeme Evans – Geologist (BSc) P.Geo @ (June 18 <sup>th</sup> - Sept 26 <sup>th</sup> ) Field Time 58 days @ \$ 400.00/day	\$23,200.00
Jim Lehtinen – Geologist (BSc) P.Geo @ ( June 28 <sup>th</sup> -Sept 25 <sup>th</sup> ) Field Time 56 days @ \$ 345.00/day	\$19,320.00
Robin Whiteaker – Geologist (BSc) GIT @ ( June 18 <sup>th</sup> -Aug.22 <sup>nd</sup> ) Field Time 52 days @ \$ 280.00/day	\$14,560.00
Darcy Baker– Geologist PhD candidate @ ( June 28 <sup>th</sup> -Sept 12 <sup>th</sup> ) Field Time 50 days @ \$ 250.00/day	\$12,500.00
Brian Kay– Geologist (BSc) GIT @ ( June 18 <sup>th</sup> -Sept 26 <sup>th</sup> ) Field Time 58 days @ \$ 210.00/day	\$12,180.00
Nicholas Mitchel- Geology Student (4 <sup>th</sup> Year -UVIC ) (June 18 <sup>th</sup> -Sept.26 <sup>th</sup> ) Field time 52 days @ \$242/day	\$12,582.00
Phil Gordon– Geology Student 3 <sup>rd</sup> Yr-UBC @ ( June 18 <sup>th</sup> -Sept 01) Field Time 52 days @ \$ 210.00/day	\$10,920.00

### 2. Accom. And Field Suplies

Lodging Stewart June 28-Sept 26 total 326 man days @ \$75/ man day (meals & accomadation)	\$24,450.00
Field Suplies (Camp gear, field equipment)	\$ 4,820.00
Cost of McElhaney Orthophoto and digital trim maps	\$ 4,276.00

### 3. Helicopter & Transportation Costs

Vancouver Island Helicopters 206 @ \$867.00/hr (includes. Fuel) casual June 21st-Sept. 24th for a total of 82.6 hrs	\$71,614.20
Portion of Truck Leases June 18 <sup>th</sup> - Sept. 26 <sup>th</sup> 2-Chev. 4X4 PU's (incl. Fuel, mileage, service)	\$4,220.00

#### 4. Rock Analyses

687 rocks analyzed for Au geochem & 33 element ICP total digestion,  
and Hg cold fusion @ \$21.65/sample Chemex \$14,873.55

rocks analyzed for 18 Au assays, 21 Ag assays, 26 Cu assays, 18 Pb assays,  
30 Zn assays @ \$4.90/sample assay Chemex \$ 553.70

31 wholerock analyses by XRF for major elements @ \$24/sample \$744.00

Sample Shipments via. Greyhound (Smithers to Vancouver) \$ 1632.00

#### 5. Report Writing & Compiling

G. Evans 15 days @ \$400/day \$6000.00

J. Lehtinen 6 days @ \$345/day \$2070.00

S. Archibald -Draftsman 18 days @ \$200/day \$3600.00

Materials & Copy Costs \$ 180.00

**TOTAL COST \$244,297.45**

**APPENDIX 5**

**STATEMENT OF QUALIFICATIONS**

## STATEMENT OF QUALIFICATIONS

I, Graeme Evans, do certify that:

- 1) I am a geologist and have practiced my profession for the last nineteen years.
- 2) I graduated from the University of British Columbia, Vancouver, British Columbia with a Bachelor of Science degree in Geology (1983).
- 3) I am a member in good standing with the APEGBC as a professional geoscientist.
- 4) I was actively involved and supervised the Homestake Ridge program and authored the report herein. I was present and actively mapping and co-ordinating the field crew for the program. I was present during the entire program except for a break during a period from July 23-July 31,2001.
- 5) All data contained in this report and conclusions drawn from it are true and accurate to the best of my knowledge.
- 6) I hold no direct or indirect personal interest, in the Homestake Ridge property which is the subject of this report.



*Graeme Evans*  
Dec. 14, 2001

Graeme Evans  
Senior Geologist  
December, 2001

## GEOLOGIST'S CERTIFICATE

I, Jim Lehtinen, of 4317 Briardale Road, Royston in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a contract Geologist employed with Teck Cominco, with offices located in Kamloops, British Columbia.
2. THAT I am a graduate of the University of British Columbia (1984), with a Bachelor of Science degree in Geology.
3. THAT I am a Professional Geoscientist registered in good standing with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
4. THAT I have no personal interest in the Homestake Ridge Property, the subject of this report.
5. THAT this report is based on field work carried out during the period from June to September of 2001, and on publicly available reports.

DATED at Royston, British Columbia, this 12<sup>th</sup> day of December, 2001.

  
Jim Lehtinen, P. Geo.

