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ARIS Summary Report

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Camp: 050	Stewart Camp	)									
Claim(s):	Mining Leas	e Lot 7092									
Operator(s): Author(s):	Homestake ( Cunningham										
Report Year:	1998										
No. of Pages:	45 Pages										
Commodities Searched For:	Gold, Silver,	Lead, Zinc,	Copper								
General Work Categories:	DRIL, GEOC	3		·							
	Geochemica SAMP	Diamond su I Sampling/ai		(2 hole(s);BQTW) (59 sample(s);) ment	(309	).9 m)		×	·		
Keywords:	Andesites, H	azelton Gro	up, Ju <b>rassi</b> c,	Mudstones, Pyrite	, Rhyolii	ies, Sto	ckworks				
Statement Nos.:	3130288										
MINFILE Nos.:	104B 008										
<b>Related Reports:</b>	24608										

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### ASSESSMENT REPORT OF THE 1998 DIAMOND DRILLING PROGRAM ON THE ESKAY CREEK PROJECT

Skeena Mining Division British Columbia NTS 104B/9W-10E

Latitude: 56°37' Longitude: 130°34

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Submitted by I. Cunningham-Dunlop**OFFOLOGICAL SURVEY BRANCH** ASSESSMENT REPORT

December 15, 1998

#### SUMMARY

The Eskay Creek Project is located 83 kilometers northwest of Stewart, British Columbia in the eastern flanks of the Coast Mountain Range. The property consists of 8 mining leases and 10 located mineral claims and is accessed by a 58 kilometer, all-weather road from the main Stewart-Cassiar Highway. The core claims consist of 4 key mining leases which form a narrow, northeast-trending block with a strike length of approximately 5 kilometers. This package is 100% owned by Prime Resources Group Inc., a wholly-owned subsidiary of Homestake Canada Inc.

The Eskay Creek property is underlain by volcanic and sedimentary rocks of the Lower to Middle Jurassic Hazelton Group. The Hazelton Group can be further subdivided into the Unuk River, Betty Creek, Mt. Dilworth, and Salmon River Formations (arranged in order from oldest to youngest). The stratigraphy in the project area consists of an upright succession of andesite, marine sediments, intermediate to felsic volcaniclastic rocks, rhyolite, contact mudstone (host to the main Eskay Creek deposits), and basaltic sills and flows. This sequence is in turn capped by mudstones and conglomerates of the Bowser Lake Group. These rocks are folded into a gently, northeast plunging fold termed the Eskay Anticline and are cut by north, northwest and northeast, subvertical fault structures.

Mineralization on the property is generally hosted in the contact mudstone between the main Eskay rhyolite and the overlying basaltic flows. The 21A, 21B, 21E and NEX Zones all occur at this stratigraphic contact and consist of stratiform, mudstone-hosted clastic to massive lenses of sulphide and sulphosalts. The HW Zone, characterized by more massive sulphides, is located higher in the stratigraphic sequence. Stockwork and discordant mineralization is also hosted within the footwall rhyolite in the Pumphouse, Pathfinder, 109, and 21C Rhyolite Zones.

A two-hole, 309.98 meter diamond drill program was carried out on main L. 7092 mining lease between September 13 and September 17, 1998. Two holes, C98-947 and C98-948, were collared from the water tower access road in order to test for the northwestern strike extension of the 21C Zone within the main rhyolite body. DDH C98-947 intersected the zone where anticipated and returned a value of 7.90 AuEq gpt/6.00 m. DDH C98-948 encountered severe ground conditions within hanging wall andesite package and had to be abandoned before reaching the target horizon.

Recommendations for 1999 include further drilling along strike and down-dip on the 21C Zone in order to confirm and also expand the existing resource.

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## **1.0 INTRODUCTION**

This report constitutes a summary of the diamond drill program carried out on the Eskay Creek Project by Homestake Canada Inc./Prime Resources Group Inc. during the fall of 1998.

This report was prepared for assessment work credit and covers the amount of \$26,416.50 in expenditures.

## 2.0 PROPERTY LOCATION, ACCESS AND LAND TITLE

The Eskay Creek Mine is located 83 kilometers northwest of Stewart, British Columbia in the eastern flanks of the Coast Mountain ranges (Figure 1). The mine is accessible by a 58.5 kilometer, all-weather road from the Stewart Cassiar Highway (Highway 37) just south of the hamlet of Bob Quinn. This road travels along the east side of the Iskut River for a distance of 38 km to its junction with Palmiere Creek drainage system. The road then follows the Palmiere Creek to its headwaters and then down Tom MacKay Creek to the mine site.

The Eskay Creek Property is located on Crown Land in the Skeena Mining Division and Cassiar Land District and consists of 8 mining leases and 10 located mineral claims. (Figure 2). The core claims of the property are 100% owned by Prime Resources Group Inc., a wholly-owned subsidiary of Homestake Canada Inc., and include four mining leases, L. 7092-7095, which were conversions of prior two-post located claims called the KAY and TOK claims. These leases form a narrow, northeast-trending block covering a strike length of 5 kilometers. A summary of the mineral titles and land tenure is presented in Tables 1 and 2.

There are no known federal, provincial or regional parks, wilderness or conservancy areas, ecological reserves, or recreational areas near the Eskay Creek Mine property. The area is subject to native title with the Tahltan Nation being the sole claimant in the region. B.C. Hydro holds flooding reserve rights over a portion of the Iskut River valley through which the mine access road passes.

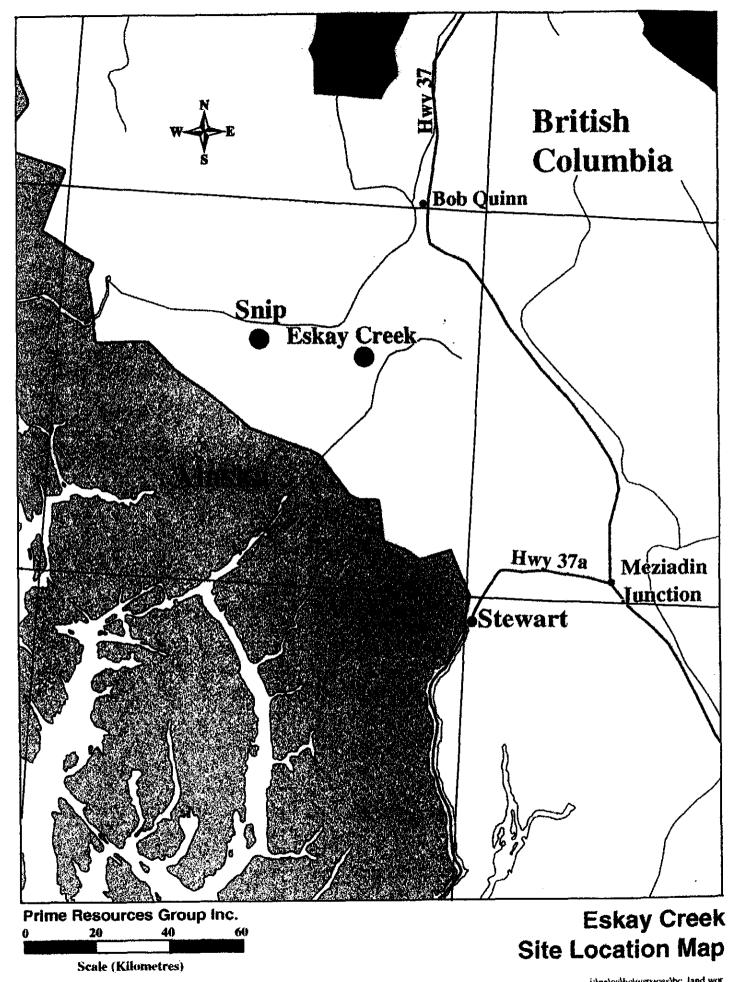
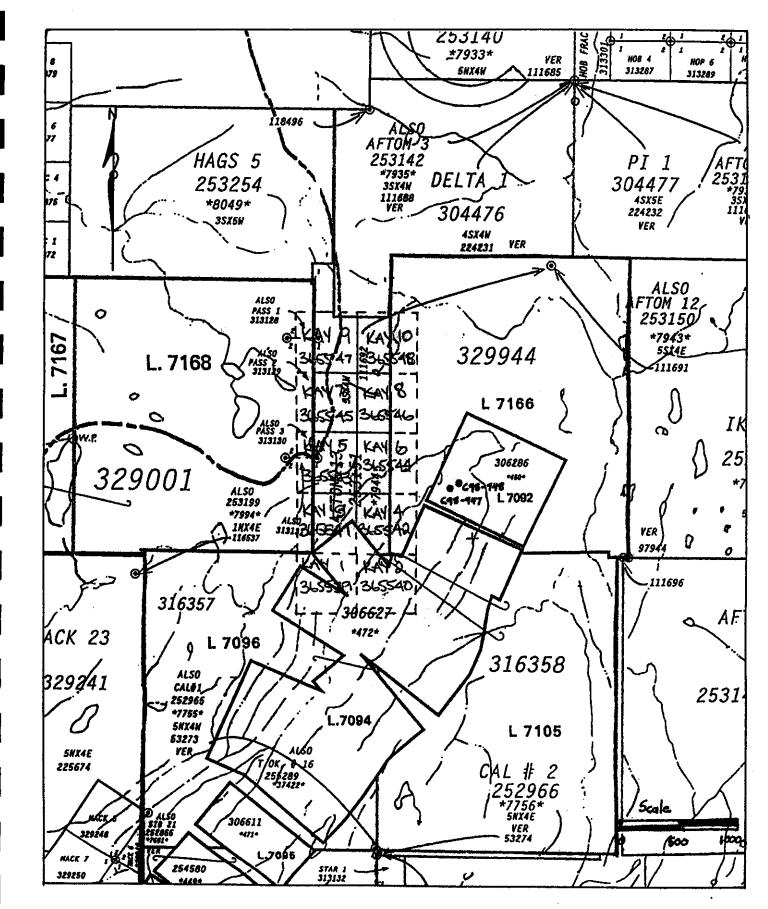


Figure 1

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### Table 1: Mineral Titles - Eskay Creek Area

#### LOCATED CLAIMS

Property Name	Claim Name	Record Number	# of Claims
Eskay Creek (1066)	KAY 1 to 10	365539 to 365548	10
		Τα	tal 10

#### **MINING LEASES**

Property Name	Lot Name	Old Lease # / Mining Lease #	# of Leases
Eskay Creek (1066)	L. 7093	449 / 254580	1
	L. 7092	450 / 306286	1
	L. 7095	471 / 306611	1
	L. 7094	472 / 306627	1
Gnc (1075)	L. 7096	316357 (Same)	1
	L. 7105	316358 (Same)	1
	L. 7106	316359 (Same)	1
Ski (1078)	L. 7166	329944 (Same)	1
		Tota	8

### Table 2: Land Tenure – Eskay Creek Area

### 1) Eskay Creek Group (Project Code 1066)

Owned 100% by Prime Resources Group Inc.

## 2) Gnc Group (Project Code 1075)

 Owned 66.6% by Prime Resources Group Inc. / 33.4% by Canarc Resources Corp.

### 3) Ski Group (Project Code 1078)

- Owned 100% by Prime Resources Group Inc.

#### 3.0 PHYSIOGRAPHY, VEGETATION AND CLIMATE

The Eskay Creek Mine is located on the Prout Plateau, a rolling sub-alpine upland on the eastern flank of the Boundary Ranges of the Coast Mountains. The Prout Plateau is characterized by severely glaciated rock terrain with elevations ranging from 330 meters along the Iskut River to 1,200 meters along the ridges.

The surficial geology of the immediate mine area is highly varied. It includes glacial till deposits, talus at the base of bedrock outcrops, colluvium on steep slopes, organics in poorly drained depressions and kettle holes, alluvial deposits along streams, and alluvial fan deposits along shorelines.

The vegetation on the property is governed by a combination of elevation, water supply and slope. Above 950 meters elevation, the vegetation is sub-alpine consisting of stunted balsam, heather and grasses. Below 950 meters, old growth spruce, fir and hemlock predominate. Areas with steep slopes are densely covered by slide alder, devil's club and skunk cabbage.

Annual precipitation at the Eskay Creek Mine site is heavy and ranges from 2000 to 3500 mm. Most of the precipitation falls as snow between November and April, resulting in thick accumulations of 10 to 20 meters. This snow pack does not fully disappear until early August. The summers are cool and damp.

#### **4.0 PREVIOUS EXPLORATION WORK**

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The Eskay Creek property has been the focus of much exploration activity dating back to 1932. Numerous programs of geological mapping, geochemical and geophysical surveying, trenching, and diamond drilling have been carried out on various portions of the claim group with both precious metal and VMS-style targets in mind. This work culminated in discovery of the 21A and 21B Zones in 1988-89, followed by underground development of the 21B Zone in 1990-91, and the official opening of the Eskay Creek Mine in 1995. Current reserves and resources for the Eskay Creek Mine stand at 2.75 million ounces of gold and 121.5 million ounces of silver based on a tonnage of 1,693,000 tonnes and an average grade of 50.51 Au gpt and 2231 Ag gpt.

A total of 1,386 surface drill holes totaling 308,371.24 meters have been completed on the Eskay Creek Project during the period from 1932 to December 1998. This report covers two of those holes which were drilled on the L. 7092 mining lease during September 1998.

#### **5.0 GEOLOGY**

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#### 5.1 REGIONAL GEOLOGY

The Iskut River Region lies near the western margin of the Intermontane Tectonic Belt within the Stikine Terrane of the Northern Cordillera (Table 3). In this area, deformed and metamorphosed sedimentary and volcanic rocks of the Paleozoic Stikine Assemblage are overlain by Triassic and Jurassic volcano-sedimentary arc complexes of the Stikinia Assemblage (>5000 m thick). These are, in turn capped by Middle to Upper Jurassic siliciclastic sediments of the Bowser Basin that formed an overlap assemblage following the amalgamation of the Stikine and Cache Creek Terranes (Figures 3 & 4). Plutonic rocks commonly intrude all these assemblages with a total of six suites being recognized (Table 4).

Coast Plutonic Complex	Tertiary	Post tectonic, felsic plutons.	
"Bowser Overlap" Assemblage (includes Bowser Lake Group)	Middle-Upper Jurassic	Deformed, siliciclastic sediments.	
"Stikinia" Assemblage (includes Stuhini & Hazelton Groups)	Triassic-Jurassic	Deformed volcanics, intrusives, and basinal sediments.	
Stikine Assemblage	Early Devonian to Early Permian	Highly deformed limestones and volcanics.	

Table 3: Iskut River Tectonic rock Units (After Anderson, 1989).

## Table 4: Iskut River Plutonic Rock Units (After MDRU, 1992).

Coast Plutonic Complex	Biotite minette lamprophyres, Gabbro-Syenite (Mt. Hoodoo)	
Hyder	Monzogranite, qtz monzonite + granodiorite - Post tectonic.	
Eskay Creek	Monzodiorite	
Texas Creek	Calc-Alk bi-hbl granodiorite and qtz monzodiorite commonly cut by kspar megacrystic andesite dikes.	
Stikine	Cpx-gabbro + diorite, hbl qtz monzodiorite and bi-ksp- megacrystic qtz monozonite. Co-spatial with Stuhini volcs.	
Sulphurets 'Flow Dome'	Felsic intrusives/extrusives.	·
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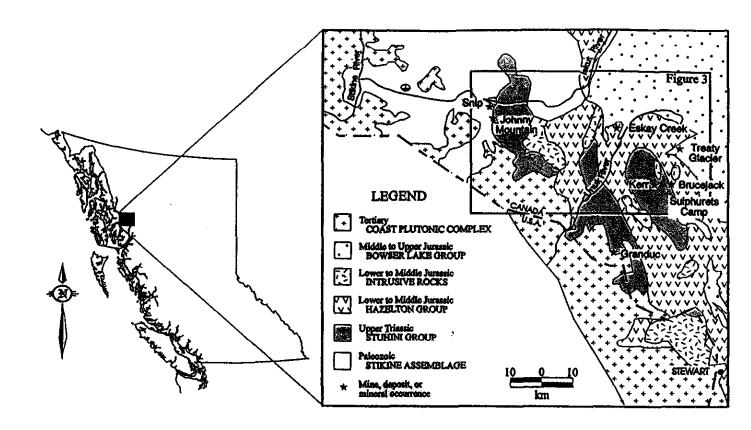


Figure 3: Generalized Geologic Map of B.C. including the Iskut River Area (After MacDonald et al., 1996).

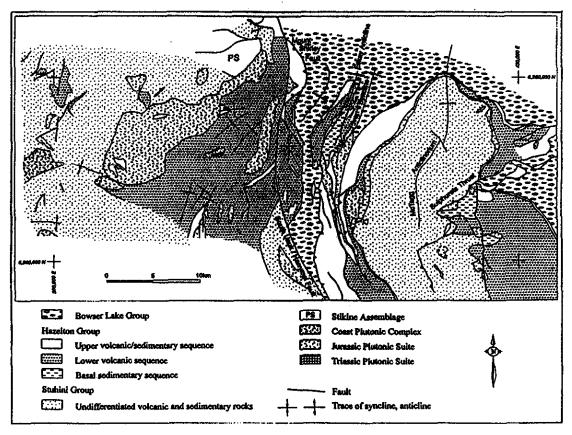


Figure 4: Geologic Map of the Iskut River Area (After MacDonald et al., 1996).

The dominant structural features within the Iskut River Region consist of north-northeast plunging regional anticline and syncline pairs accompanied by strong, regionally-developed, steeply dipping, penetrative cleavage fabrics. The regional folds and cleavage fabrics are interpreted to have formed during a mid-Cretaceous orogenic shortening event centered on a northwesterly compressive axis.

The area has also been cut by numerous faults of varying orientations and interpreted ages. Those related to the regional Cretaceous shortening event include west-vergent thrust faults such as the Coulter Creek Fault. Other major faults include north, northwest, and northeast-striking sub-vertical structures, which form strong topographic lineaments and displace both stratigraphic contacts and mineralized zones. Many of these faults developed during a second period of deformation with a northeast compressive axis and include such major features as the South Unuk/Harrymel Structure, the Forrest-Kerr Fault, and the Argiilite Creek Fault.

Mineralization in the Iskut River Area is generally varied in age and deposit type. Examples include: 1) porphyry, skarn, and related vein deposits; 2) near-surface, epithermal alteration and veins; and 3) submarine exhalative precious and base metal mineralization. All of these deposits exhibit a close spatial relationship to Early Jurassic subvolcanic plutons, particularly the potassium megacrystic, plagioclase, and biotite porphyritic intrusions that were emplaced between 180 Ma and 200 Ma. (i.e. Sulphurets Porphyry). A list of the major Lower to Middle Jurassic mineral deposits that occur in the Iskut Area can be found below in Table 6.

Kerr	Alkaline Porphyry	66 mT @ 0.84%Cu & 0.01 Au opt	Upper Triassic
Doc	Mesothermal Gold	0.2 mT @ 0.32 Au opt	Upper Triassic
Inel	Mesothermal Gold	Prospect	Lower Jurassic (Texas Creek)
Snip	Mesothermal Gold	2.4 mT @ 0.65 Au opt	Lower Jurassic (Texas Creek)
Johnny Mountain	Mesothermal Gold	0.3 mT @ 0.83 Au opt	Lower Jurassic (Texas Creek)
Premier-Silbak	Epithermal Gold	4.6 mT @ 0.39 Au opt	Lower Jurassic (Texas Creek)
Sulphurets	Mesothermal Gold	1.4 mT @ 0.35 Au opt	Lower Jurassic
Eskay Creek	Volcanic Associated Massive Sulphide	1.4 mT @ 1.69 Au opt & 78.3 Ag opt	Lower-Mid Jurassic

#### Table 5: Mineral Deposit Types of the Iskut River Area (After Edmunds & Kurran, 1993).

#### 5.2 PROPERTY GEOLOGY

#### 5.2.1 General

The Eskay Creek deposit is hosted within the Jurassic rocks of the Stikina Assemblage (Table 6). It is situated near the northern margin of the Eskay Anticline, at the stratigraphic transition from marine sediments of the Bowser Lake Group to volcanic rocks of the uppermost Hazelton Group (Figure 5). The Hazelton Group has been further divided into four rock formations which (ranging from oldest to youngest) include the Unuk River Formation, Betty Creek Formation, Mt. Dilworth Formation, and the Salmon River Formation.

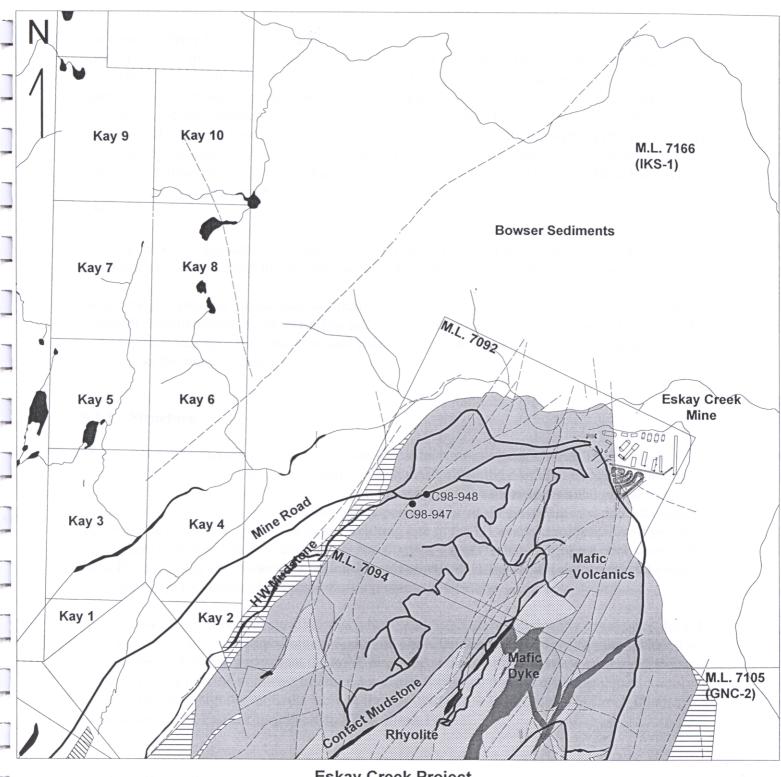
Formation/Group	Lithologies	Age (Ma)
Ashman Fm. (Bowser Lake Group)	Shale, siltstone, greywackes, quartz arenites and chert pebble conglomerates.	156-163 Ma
Salmon River Fm. (Hazelton Group)	(ii) black siliceous shale, white reworked tuff turbidite; pillow lava and limy to siliceous shale-siltstone; andesitic volcanics	163-187 Ma
	(i) thin belemnite-rich calcareous sandstone and mudstones.	187-193 Ma
Mount Dilworth Fm. (Hazelton Group)	White-maroon grey weathering welded to non- welded felsic tuff and tuff breccias. Commonly aphyric, flow-banded and spherulitic. Dacite- rhyolite composition.	Unknown
Betty Creek Fm. (Hazelton Group)	Maroon to green volcanic siltstone, greywacke, breccia with common sedimentary structures and jasperoid veins.	193-196 Ma
Unuk River Fm. (Hazelton Group)	Rusty white-orange weathering, thinly bedded siliciclastic calareous siltstone dominates the unit.	Ма

#### Table 6. Stikinia Assemblage Description (After Anderson & Thorkelson, 1990).

#### 5.2.2 Stratigraphy

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At the bottom of the stratigraphic package and occupying the core of the Eskay Anticline, lies the Unuk River Formation. This unit is a thick sequence of coarse, broadly andesitic breccias and volcaniclastic rocks topped by marine shales and clastic sediments. It is overlain by the Betty Creek Formation, which has been informally divided into upper and lower members. The upper Eskay Creek Member is dominated by sediment and epiclastic units while the lower East Ridge Member is comprised chiefly of andesitic epiclastic and volcaniclastic rocks. The next rocks in the succession are the regionally extensive, felsic pyroclastic deposits of the Mt. Dilworth Formation. These felsics are separated from the overlying Salmon River Formation by a volcanic hiatus that allowed the accumulation of 10-15 m of black mudstone.



Eskay Creek Project Geology and Drill Hole Location Map



The Salmon River Formation, host to the Eskay Creek Deposit, is divided into a homogeneous upper section of mudstone and argillite and a heterogeneous, bimodal volcano-sedimentary assemblage forming the lower section. This lower bimodal volcanic package consists of an upper submarine mafic flow/dyke sequence overlying a variably brecciated and fragmental rhyolite flow-dome complex termed the 'Eskay Rhyolite'. Interbeds of pyrite-laminated mudstone, chert, marl, limestone and vitric tuffs occur intermittently throughout this package. A mudstone bed containing Aalenian fossils and termed the 'Contact Mudstone' is found at the base of the Salmon River mafic package and immediately overlying the 'Eskay Rhyolite'. This unit varies in thickness up to 50 m and serves as the host to the main Eskay 21 Zone mineralization.

Capping the entire sequence are thick accumulations of Bowser Lake Group mudstones and conglomerates covered locally by a thin veneer of in-situ soils and transported tills.

Intrusives are common throughout the stratigraphic sequence with the lower portion intruded by porphyritic monzodiroite to diorite dikes and younger felsic dikes/sills which were feeders to the main rhyolite package. Basaltic dikes and sills feed the hanging wall mafic package and cut all the strata in the mine section.

#### 5.2.3 Structure

The rocks at Eskay Creek have been deformed by at least two tectonic events. The earliest deformation event (D1) was a NNW compression that formed the northeast trending, synclineanticline couples and a spaced pressure solution cleavage. The cleavage is axial planar to the bedding-defined Eskay Creek Anticline and is pervasive in all the phyllosilicate-rich lithologies and even the massive sulphide horizons. Faulting late in the D1 event developed east-dipping thrust sheets south of Eskay Creek such as the Coultier Creek Thrust. All of the rock units in the Iskut River Region also underwent regional metamorphism during the D1 deformational event resulting in the formation of porphyroblastic prehnite and calcite.

The second deformational event (D2) was a NNE compression, which locally re-oriented the D1 cleavage planes and formed prominent north and northeast trending, steeply dipping faults. The cross-cutting relations suggest that the north set is the earliest with apparently consistent sinistral displacement, while the northeast trending set displays oblique normal displacement. Some of the more significant faults include the Argillite Creek Fault, Andesite Creek Fault, Pumphouse Creek Fault, Portal Fault and East Break Fault.

#### 5.2.4 Alteration

Three main types of alteration have been identified at Eskay Creek. These include k-feldspar, silica, and chlorite-sericite. The k-feldspar occurs cryptically in the footwall rhyolite as a finegrained replacement of plagioclase. Alkali ratios (Na2O/K2O & Na2O) quantify this potassic alteration which extends up to 1100 meters south of the deposit. Strong silica alteration is also present throughout the rhyolite in the form of extremely fine-grained quartz-flooding and densely developed quartz-filled micro-veinlets. The phyllosilicate alteration is more proximal in style and generally forms tabular zones of aphanitic sericite and clinochlore in the upper 3-20 m of the footwall rhyolite directly beneath the 21B Zone.

#### 5.2.5 Mineralization

Mineralization at Eskay Creek is found in two different environments: 1) as stratiform. mudstone-hosted, clastic to massive lenses of sulphide and sulphosalts; and 2) as discordant, rhyolite-hosted, crustiform base and precious metal veins and stratiform sericitic and/or silicaflooded zones. The stratiform mineralization is hosted in black carbonaceous mudstone and sericitic tuffaceous mudstone of the Salmon River Formation at the contact between the Eskay Rhyolite and the overlying mafic volcanic package. The main zone of mineralization, the 21B Zone, consists of stratiform clastic sulphide-sulphosalt beds and forms a body roughly 900 m long, 60 to 200 m wide and up to 15 m thick. Individual clastic sulphide layers range from 1 cm to 50 cm thick. These beds contain fragmentals of coarse-grained sphalerite, tetrahedrite, Pbsulphosalts with lesser freibergite, galena, pyrite, electrum, amalgam and minor arsenopyrite. Stibnite occurs locally in late veins and as a replacement of clastic sulphides. Rare cinnabar is associated with the most abundant accumulations of stibnite. Barite occurs as isolated clasts and in the matrix of bedded sulphides and sulphosalts, or as rare clastic or massive accumulations. At the same stratigraphic horizon as the 21B Zone are the NEX and 21E Zones, the 21A Zone (characterized by As-Sb-Hg sulphides), and the barite-rich 21C-Barite Zone. Stratigraphically above the 21B Zone and usually above the first basaltic sill, the mudstones also host a localized body of base metal-rich, relatively precious metal-poor, massive sulphides referred to as the Hanging Wall or HW Zone.

Stockwork and discordant mineralization at Eskay Creek is hosted in the rhyolite footwall in the Pumphouse, Pathfinder, 109 Zone, and 21C-Rhyolite Zones. The Pumphouse and Pathfinder Zones are characterized by pyrite, sphalerite, galena and chalcopyrite-rich veins and veinlets hosted in strongly sericitized and chloritized rhyolite. The 109 Zone comprises gold-rich quartz veins with sphalerite, galena, pyrite, and chalcopyrite associated with abundant carbonaceous material hosted mainly in siliceous rhyolite. The 21C-Rhyolite Zone consists of very fine cryptic pyrite with rare sphalerite and galena in sericitized rhyolite.

#### **6.0 DIAMOND DRILLING**

#### 6.1 Objectives

The 1998 Diamond Drill Program on the Eskay Creek Project was designed to test for the northwestern strike extension of the 21C Zone within the main rhyolite body.

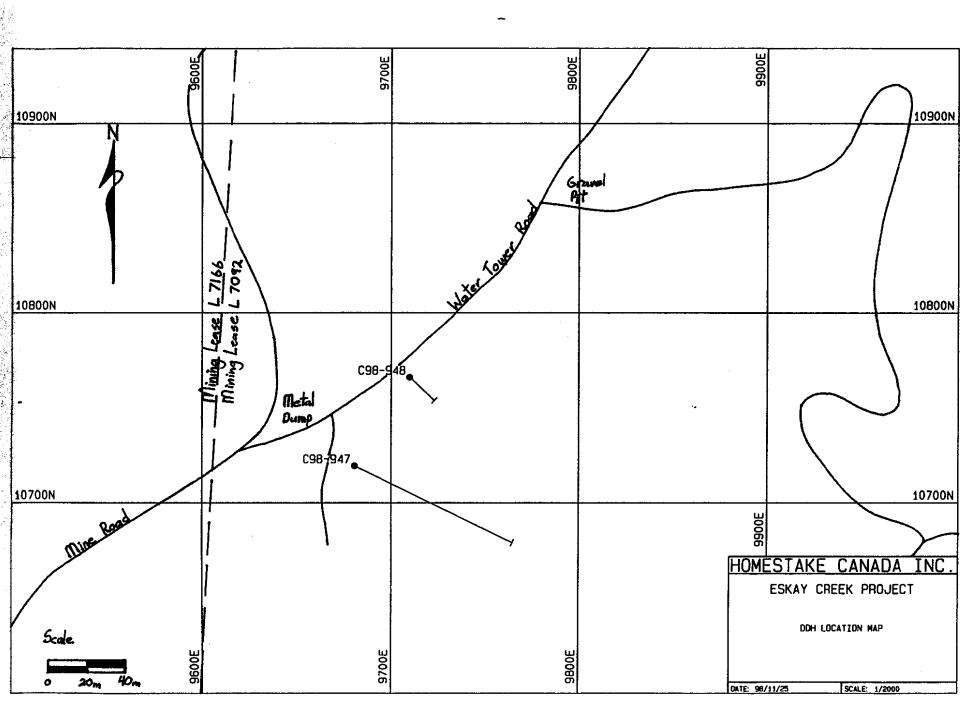
#### 6.2 Methods

Two diamond drill holes, C98-947 and C98-949, were performed on the Eskay Creek property between September 13, 1998 and September 17, 1998. Total depths for the two holes were 206.96 m and 103.02 m respectively (Table 6 and Figure 6).

The drilling was carried out by Hy-Tech Drilling of Smithers, B.C. using 4-man drill crew, a skid-mounted, JKS-300 hydraulic drill, and BQTW sized core. The drilling crews and geologists worked out of the established Homestake Exploration Camp located at Km 45 on the Eskay Creek Mine access road. Equipment was mobilized to the C98-947 drill site by a Hughes 500D helicopter provided by Northern Mountain Helicopters based out of Prince George, B.C. All diamond drill core was logged at the coreshack at the Eskay Creek Mine and then moved to the main core storage facility at Km 44.

Drill data was entered into lap-top computers using the in-house logging program, DLOG. All lithologies were coded using a 4-character field while textural descriptions, colours and structures were summarized using a 2-character field. Primary and secondary geologic intervals were described separately. A remark field was used to take detailed notes on bedding orientations, presence of fossils and descriptions that were not coded for elsewhere. All data input into DLOG was then interpreted into meaningful descriptions when the diamond drill log were printed. The DLOG program was used to collect information that was subsequently imported into AutoCad, MapInfo, and Vulcan for data plotting.

Hole Number	Mine Northing	Mine Easting	Elevation	Azimuth	Dip	Length
C98-947	10719.32 N	9680.53 E	861.41 m	141	-65	206.96 m
C98-948	10766.00 N	9709.78 E	853.40 m	146	-79	103.02 m



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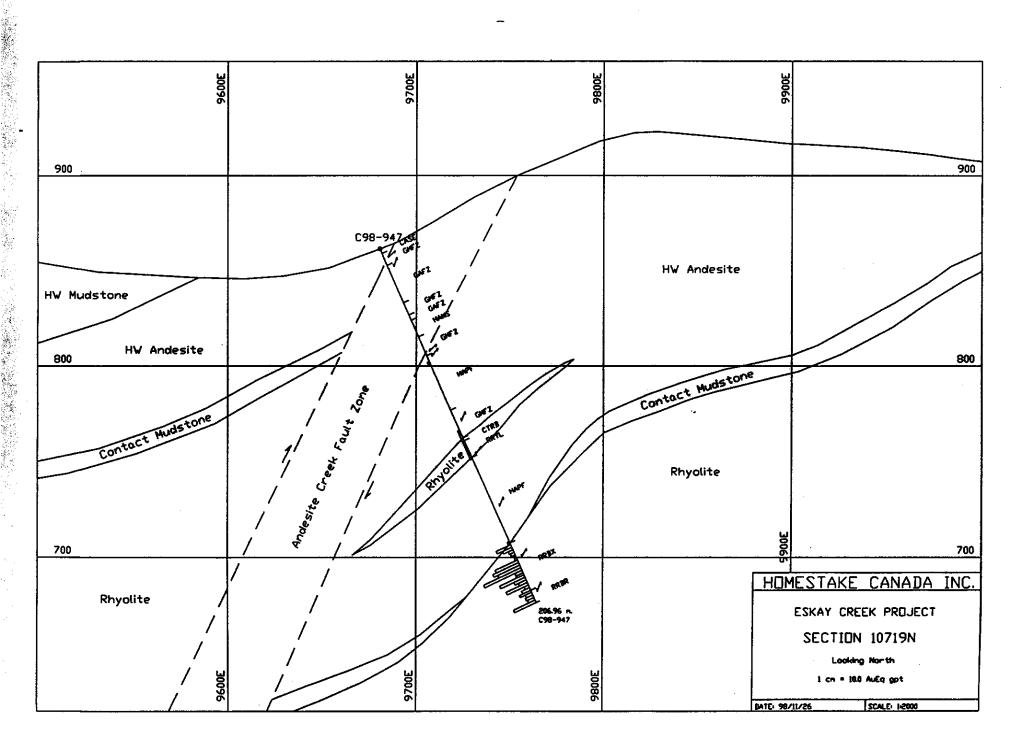
#### 6.3 Results

#### 6.3.1 Drill Hole C98-947

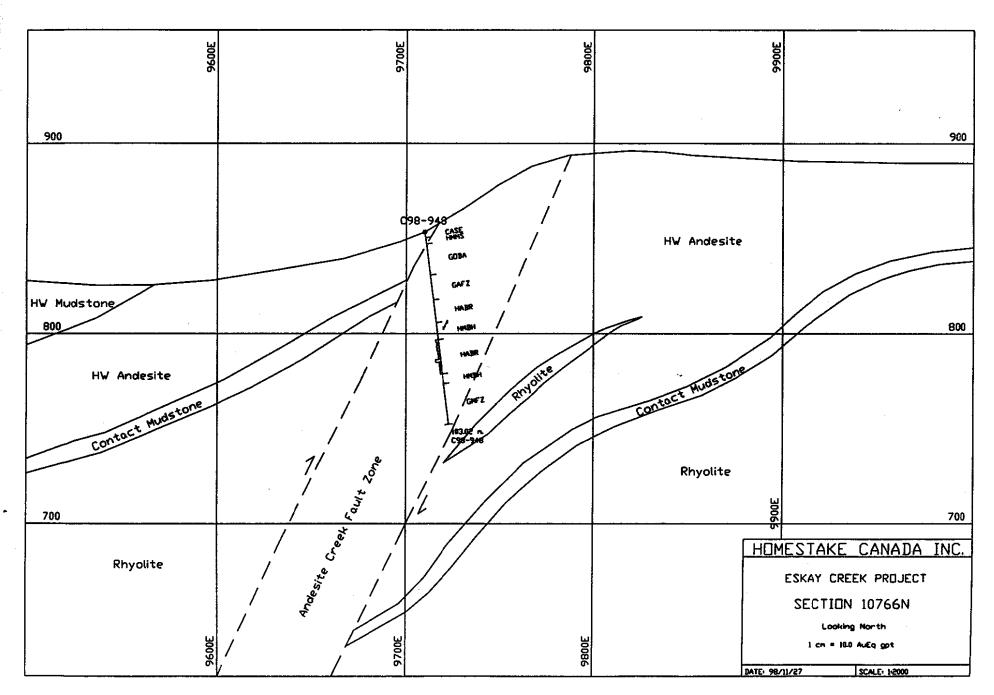
DDH C98-947 was collared on the edge of the Eskay Creek Mine metal dump and was drilled at Azimuth 141/Dip -65 to a total depth of 206.96 meters to test for the northwestern strike extension of the 21C Zone, north of Section 10700N (Figure 7). The hole started within a hanging wall suite of massive andesite flow and faulted rubbly mudstone before intersecting the main contact mudstone between 110.64-112.24 meters and the main Eskay Rhyolite between 112.24-206.96 meters. The hole passed through a zone of patchy sericite alteration with local shearing and 2-4% pyrite hosted by rhyolite breccia between 182.20-188.20 meters and returned a value of 7.93 AuEq gm/t/6.00 meters for the 21C-Rhyolite Zone. No other significant results were returned in the hole.

#### 6.3.2 Drill Hole C98-948

The second hole, DDH C98-948, was collared approximately 75 meters to the northeast of DDH C98-947 along the access road to the Eskay Creek Mine water tower (Figure 8). The hole was drilled at Azimuth 146/Dip -79 to a total depth of 103.02 meters and was designed to follow-up on the results from C98-947. The hole collared within a hanging wall sequence of andesite breccia and hydrothermally brecciated mudstone before intersecting a rubbly mudstone fault zone from 81.35-103.02 meters. Ground conditions deteriorated rapidly over the bottom 20 meters of the hole with numerous seams of grey clayey fault gouge and diminishing core recovery. The hole was finally abandoned at 103.02 meters when severe drilling difficulties were encountered.



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#### 7.0 DISCUSSION AND RECOMMENDATIONS

The results from DDH C98-947 are encouraging and more drilling is warranted to test:

a) the northern strike extent of the 21C Zone;

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- b) the down-dip potential of the zone on both the east and west sides of the Andesite Creek and Argillite Creek Faults.
- c) the deep depth potential of the Andesite Creek Fault as a possible conduit/feeder system to the 21C mineralization.

Great care should be given, however, when collaring holes in the immediate vicinity of the major faults due to the very poor ground conditions.

Respectively Submitted R. Cunningb**ám**-Duniop Ian R. Cu hand-Dunlo anir OVINCE OF

#### **8.0 REFERENCES**

ANDERSON, R.G., 1989. A Stratigraphic, Plutonic, and Structural Framework for the Iskut River Map Area, NW BC. In Current Research, Part E, GSC Paper 89-1E, p. 145-154.

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MACDONALD, A.J., LEWIS, P.D., THOMPSON, J.F.H., NADARAJU, G., BARTSCH, R.D., BRIDGE, D.J., RHYS, D.A., ROTH, T., KAIP, A., GODWIN, C.I. and SINCLAIR, A.J., 1996. Metallogeny of an Early to Middle Jurassic Arc, Iskut River Area, Northwestern British Columbia. Economic Geology, Volume 91, p. 1098-1114.

MDRU, 1992. Metallogenesis of the Iskut River Area, Northwestern British Columbia. Annual Technical Report – Year 2, June 1991 – May 1992, Mineral Deposit Research Unit, University of British Columbia.

### 9.0 STATEMENT OF QUALIFICATIONS

I, IAN R. CUNNINGHAM-DUNLOP, of the City of North Vancouver, Province of British Columbia do hereby certify that:

- 1. I am a professional geologist residing at 2537 Sechelt Drive, North Vancouver, British Columbia, V7H 1N7.
- 2. I am a graduate of Queen's University, Kingston, Ontario (1984) and hold a B.Sc. (Eng.) degree in geological engineering.
- 3. I have been practicing as a geologist for over 18 years.
- 4. I am a member of the Association of Professional Engineers of Ontario.
- 5. I am presently employed by Homestake Canada Inc. of 1100-1050 West Georgia Street, Vancouver, B.C. as a Senior Project Geologist.
- 6. I am familiar with the material covered by this report having personally supervised the fieldwork from the 1998 field season.
- 7. I do not have any direct or indirect interest in the Eskay Creek Property nor do I expect to receive any in return for conducting the work or preparing this report
- 8. Permission is granted for the use of this report, in whole or in part, for assessment and qualification requirements, but not for advertising purposes.

Dated at Vancouver, British Columbia This 15<sup>th</sup> day of December, 1998

Ian R. Cumuing POVINCE OF O

## APPENDIX A

## STATEMENT OF EXPENDITURES

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## STATEMENT OF EXPENDITURES

### DDH C98-947

	Grand Total	\$26,416.50
	Total	\$11,034.34
<u>Technical Support</u> 1 day @ \$263 per day		\$263.00
Geological Supervision 2 days @ \$413 per day.		\$826.00
Assaying Eskay Mine Assay Lab. 14 core samples @ \$11.31 per sample.		\$158.34
Diamond Drilling Hy-Tech Drilling Invoice for DDH C98-947.		\$9,787.00
DDH C98-948	Total	\$15,382.16
1 day @ \$263 per day	Tetel	\$263.00
Technical Support		
<u>Geological Supervision</u> 3 days @ \$413 per day.		\$1,239.00
<u>Assaying</u> Eskay Mine Assay Lab. 45 core samples @ \$11.31 per sample.		\$542.88
1.6 hours @ \$725.80 per hour.		\$1,161.28
Helicopter Charter Northern Mountain Helicopters.		
Diamond Drilling Hy-Tech Drilling Invoice for DDH C98-947.		\$12,176.00
The 1 Th 1111		

Apportionment of work to Kay Claims: \$17,000. The balance of the funds applied to Prime Resources Group Inc. P.A.C. Account No. 121911.

## APPENDIX B

## DIAMOND DRILL LOGS - C98-947 and C98-948

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HOMES	TAKE	CANA	)A
	CALLER.	<b>UNITE</b>	// L

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DIAMOND DRILL HOLE LOG

1

C98947

PROJECT: Eskay Creek Project DRILL HOLE: C98947 LENGTH: 206.96	Date	Commenced: 09/13/98 Completed: 09/15/98 Diam: BQTW	Contractor: HY-1	TECH		Logged Geotech	by: ICD by: MCKD
Collar Location							
Exploration Grid Mine (	23) Grid		•				
Northing: 19484.96 1071 Basting: 21600.99 9680 Elevation: 861.41 865							
S 1	MMARS	ł	Depth	DOWN HOLI Azim	SURVEYS Inclin	Mine Az	Method
2.70-9.60 RT 9.60-31.55 RT 31.55-38.70 RT 38.70-41.76 RT 41.76-51.51 RT 51.51-62.58 RT 62.58-94.37 RT 94.37-110.64 RT 110.64-112.24 CT 112.24-122.12 RT 122.12-172.30 RT 172.30-199.84 RT	BBLY ANDES BBLY MODST BBLY ANDES MASSIVE J BBLY MODST PILLOWED BBLY MODST MIACT MOD YOLITE PILLOWED YOLITE BRY	CONE FAULT ZONE ANDESITE FLOM CONE FAULT ZONE MATRIX RHY BRECCIA ANDESITE FLOM	0.00 6.01 103.63 205.44	141.00 138.50 138.50 138.50	-65.00 -64.00 -63.00 -63.00	118.00 115.50 115.50 115.50	ESTIMATE SPERRY SUN ACID TEST ACID TEST

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## HOMESTAKE CANADA - Eskay Creek Project

PAGE 1 of 6

					1	1 No. 1 No. 1		1 2020 0			1		102
PROM	TO	DESCRIPTION	Sample	Interval	Width	Au gpt	Ag gpt	Pb *	Zn 🐮	Cu 🕈	λs *	Hg ppm	
0.00	2.70	CASING			1	1			1		1		1
			1 1			l	İ.	1	1	Ì	1	Í	Í
2.70	9.60	RUBBLY MUDSTONE FAULT ZONE				1		ļ	!	Į	ļ	ļ	
		Dark gray, broken, gouge			!	ļ	Į.	1		ļ	[	ļ	ļ
		bedding 70°:fault/gouge 60°	!!!			1	!	ļ			ļ	ļ	ļ
		Frs=100/m			1	ļ	ţ	!	ļ	1	1	!	
		.5% pyrite - laminations					!	1		!	Į.	ļ	!
		Massive to poorly bedded mudstone; highly broken core				ļ	1	!		1	ļ		!
		with several sections of intense grey muddy fault				1	1			ļ	ļ		
		gouge. Gouge zones are fairly cohesive and support					1	1	1	ł			!
		angular mudstone fragments up to 2.0 cm in size; minor					1	{		1		F	!
		veining and sulphides.				1	ł		1	i	i		ł
		9.60 m: lower contact sharp at 40 degrees to the c/a.			ļ	Í	į	l I	İ	į	ļ	į	į
9.60	31.55	RUBBLY ANDESITE FAULT ZONE				l	1					ł 1	ļ
	92.00	Green, broken, brecciated				1	i	1	i	i	i	ł	i
		Frs=40/m :Vns =1/m	i i		1	1	i	i	i	i	i	i	i
		1% chlorite alteration - pervasive	i i		i	1	i ~	i	i	i	i	i	i i
		1% qz veining - microveins	i i		i	j	i	Í	i	Ì	i	i	İ
		13 pyrite - disseminated	i i		i	i	i	i	i	i	i	İ	i –
		Intermixed massive flow and flow breccia; the massive	i i		i	i	İ	i	İ	Ì	Ì	ĺ	İ
		sections are fine-grained with vague pillow outlines	i i		İ	İ	İ	Í	İ	İ	İ		İ.
		(?) while the brecciated portions are characterized by	1 1		1	1	1	1	1	1	1	1	1
		numerous subangular to subrounded fragments of	1 1		1	1	1	1	1	1	1	1	ļ
		andesite within a dark grey mudstone matrix (>50%			1	l	l	1		ļ		1	ļ
		fragments); strongly broken core throughout the unit	. I I		I	1	1	ļ	ļ	ļ	ļ	ļ	!
		with numeous intervals of lost and ground core,					ł	ļ	ļ	!			ļ
		particularly between 19.81-31.55 m; weak to moderate			Į –	! -	ļ	!	l	1	!		1
		orange-red iron staining on fracture surfaces; minor			ł	!	1	!		1	!		!
		veining; <1% pyrite.							ł 1	1			
		31.55 m: lower contact obscured by broken core.	i i		ļ	İ	İ	i	İ	į	i	<b>.</b> .	ļ
31.55	38.70	RUBBLY MUDSTONE FAULT ZONE				l 1	1		1	ł	 		
		Dark gray, broken, gouge	i i		i	i	i	i	i	i	i	i	i
		Frs=80/m	i i		i	i	i	i	i	i	i	i	i
		.5% pyrite - disseminated	i i		i	i	İ	i	İ	İ	i	İ	İ
		Section of highly broken core consisting of fragments	j i		i	İ	İ	İ	İ	İ	1	1	1
		of massive mudstone and vuggy mudstone-matrix andesite	i i		1	1	l i	1		t	1	1	
		breccia; numerous pieces of white-grey quartz vein	i i		1		1			1	ł		
		material up to 5.0 cm in length; minor iron staining;	1		ļ	1	1			ļ			I .
		<1% pyrite.			ļ	!	ļ			ļ			ļ
		10 70 m. laws canback falls within intermal of warm								F 1	 		
		38.70 m: lower contact falls within interval of very					!			!	6 <sup>.</sup> 1		
		rubbly core.	. i		1	1	ļ	ļ		ļ	ļ		!

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## HOMESTAKE CANADA - Eskay Creek Project

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FROM	TO	DESCRIPTION	Sample	Interval	Width	Au gpt	Ag gpt	Pb 🕏	Zn 🕇	Cu ¥	As t	Hg ppm	Sb
							1	ļ		ļ			
.70	41.76	RUBBLY ANDESITE FAULT ZONE	1 I		!	ļ	ł	ļ	1	!	ļ	!	!
		Green, broken, massive	ţ ļ		!	!	!	!	ļ	!	1	!	ļ
		Frs=30/m :Vns =1/m	[ ]	-	1	!	1	]	1	ļ	ļ	!	Į.
		1% chlorite alteration - blebs	! !		1	!	1	1	1	1	ļ	!	!
		14 qz veining - microveins	1		1	ļ	ļ		!		1	!	ļ.
		1% pyrite - disseminated			!	!	!		1	ł	ļ	ļ	ł
		Highly broken massive andesite; 1-2% fine chlorite			!	ļ	1	!	1	!	!	!	!
		clots to 1 mm in size; no other visible textures;			!		!	!	1	<u> </u>	!	!	!
		minor alteration, veining and sulphides.								1			
L.76	51.51	HW MASSIVE ANDESITE	i i		i	l	i	i	i	1		İ	i
		Green, massive	1 1		ļ	ł	l		Į –	1	ļ		!
		cleavage, foliation 60°	1 1		ł.	ł	l	l	ļ	1	ļ		ļ
		Frs=10/m :Vns =2/m	1 1		1	1	l .	I	l	1	ļ	I	ļ
		2% chlorite alteration - pervasive	1 1		1	1	1	l	ļ	1	[	ļ	1
		1% carbonate alteration - fracture fill	1 1		1	1	ł	ł		1	ļ	- ·	1
		1% carbonate veining - microveins	1 1		l I	1	1	1		1	I	1	ļ –
		1% pyrite - disseminated	1 1		1	t	1		1	1	1	1	1
		Massive andesite flow; local concentrations of fine	1 1		1	l	1	1	ł		<b>1</b> .	1	l –
		white leucoxene and dark green chlorite grains;	1 1		1	1	1	1	1	1	1	1	1
		possible pillow rims near the upper limit; weakly	1		1		ł	1	ŧ	1	ł	ł	1
		fractured with local carbonate infilling; minor	1 1		1	ĺ	1	1	ł	1	1	I	1
		carbonate vein set at 50-70 degrees to the c/a; 1%	1 1		1		1	1	1	1	1	1	1
		fine disseminated and fracture-controlled pyrite.				1		1			1		!
		51.51 m: lower contact obscured by broken core.						+   					
<48.	31-49.68;	> RUBBLY ANDESITE FAULT ZONE	i i		i		ļ	ĺ		İ			i
		Green, broken, massive			1.	1	1			1	1	1	1
		Frs=70/m :Vns =1/m			1	1	1				1	1	ļ
		24 chlorite alteration - pervasive			1	1	l	1		1	1	1	1
		1% carbonate alteration - fracture fill	1		ļ	I	l .			1	ļ	1	ļ.
		1% carbonate veining - microveins			ļ	I	ļ	l	ļ		ļ	!	ļ
		1% pyrite - disseminated			1	ł	ļ	ļ	ļ	1	l	l	l I
		Strongly broken version of overlying andesite flow;	1 1		I.	1	ļ.	l	ļ	ļ	ļ		ļ
		minor gouge.			1								l
51	62.58	RUBBLY MUDSTONE FAULT ZONS				1							i
		Dark gray, broken, laminated	i i		i	i	İ	İ	İ	İ	İ	Ì	E .
		bedding 70*	i i		i	ĺ	i		i	i	i	İ	i
		Frs=50/m :Vns =2/m	i i		i .	i	i	i	i	i	i	i	i
		1% graphite - coatings	i i		i		İ	i i	i	i	i	i	i
		1% carbonate veining - microveins	i l		i			i i	i	i	i	i	i
		1% pyrite - laminations	i i		i				i	i	i	i	i
		Strongly broken laminated mudstone with numerous			i i				İ	i	i	i	i
		sections of friable and shattered core; minor seams of	: !		1				1		1	1	i

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# HOMESTAKE CANADA - Eskay Creek Project

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FROM	TO	DESCRIPTION	Sample	Interval	Width	Au gpt	Ag gpt	Pb 🐐	Zn *	Cu ¥	λs <b>†</b>	Hg ppm	Sb ¥
		black gritty fault gouge up to 1.0 cm in width; rare carbonate veins parallel to the bedding; 1% laminated pyrite, local clusters of rosettes with carbonate rims near the lower limit.											
		62.58 m: lower contact quite sharp at 60 degrees to the c/a.											
2.58	94.37	HM PILLOMED ANDESITE FLOM Greenish-gray, pillowed, amygdaloidal cleavage, foliation 50° Frs=5/m :Vns =5/m 1% chlorite alteration - pervasive 1% carbonate alteration - fracture fill 5% carbonate veining - macroveins 2% pyrite - disseminated Pillowed andesite flow; weakly chloritic pillow rims with numerous fine white carbonate-filled amygdules within the pillow cores; dark grey/black mudstome forming the interstial material; very weak pervasive carbonate and chlorite alteration; numerous white carbonate veins to 1.0 cm in size at 40-60 degrees to the c/a; 1-2% pyrite as fine disseminated grains and locally as fracture-controlled stringers.		65.90-66.83 67.97-68.51	0.93	0.5			•	1			0.1
		<ul> <li>65.90-66.83 m: section of brecciated mudstone with white-grey carbonate infilling; 2-4% pyrite as fine stringers; contacts irregular.</li> <li>67.97-68.51 m: laminated mudstone with numerous fine pyrite and lesser pyrrhotite stringers at 40-50 degrees to the c/a; minor ptygmatic carbonate veining; contacts irregular.</li> <li>88.60-89.02 m: massive mudstone band at 45 degrees to the c/a; clusters of white crystallites below the upper margin.</li> </ul>											
		upper margin. 89.42-90.03 m: andesite debris flow; abundant fine lithic fragments to 1.0 cm in size consisting primarily of andesite, mudstone and grey chert - appears graded downhole; contacts sharp at 40-50 degrees to the c/a. 93.19-94.37 m: andesite debris flow as above; contacts at 65 degrees to c/a. 94.37 m: lower contact obscured by broken core.											
4.37	110.64	RUBBLY MUDSTONE FAULT ZONE Dark gray, broken, laminated bedding 45°	521510	106.06-107.50 107.50-109.00 109.00-110.64	1.44 1.50 1.64	0.5	5	0.01 0.01 0.01	0.02	0.01	0.06	21	0. 0. 0.

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### HOMESTAKE CANADA - Eskay Creek Project

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		DESCRIPTION	Sample	Interval	Width	Au gpt	Ag gpt	Pb t	Zn 🐐	Cu 🕏	λs ₹	нд рра	Sb ¥
		Prs=50/m : Vns =3/m			i		1		ĺ				
		1% graphite - coatings	1		1		ŧ					ļ	
		2% qz-carb veining - macroveins							]				!
		2% pyrite - laminations	1 1			1	1		1			ļ	!
		Strongly broken, very graphitic mudstone; massive to			ļ		1		ļ			ł	
		poorly bedded with local clusters of crystallites in	1		ļ	1			!			ł	1
		vague bedding concentrations; several bands of highly	1		!							[	
		veined andesite up to 2.0 meters in width - largest			1		1						i.
		from 103.42-103.63 m and 104.09-106.06 m; intensely	4		ł	ļ			1				1 1
		broken core below 107.50 m - highly sheared and				1			1				1 9
		chloritized with mumerous seams of grey muddy fault			-	4 1	1		1				ł
		gouge at 40-60 degrees to the c/a; transition into mudstone debris flow below 110.05 m with weak				1			1			1	Í
		silicification and 3-5% fracture-controlled pyrite.					1			1		1	i
		Billellication and 3-54 fracture-contioned pyrite.				1				İ			ĺ
110.64 1:	12.24	CONTACT MUD MATRIX RHY BRECCIA	521512	110.64-112.24	1.60	0.5	5	0.01	0.03	0.01	0.04	4	   0.01
		Fine-coarse grained, blackish-green, brecciated			1	1			ł	1		1	1
		Frs=15/m :Vns =1/m	i i		1	1	1	ļ	ł		1	1	1
		10% chlorite alteration - patches	1		1	1	1		l	1	ł	l	1
		10% sericite alteration - patches				1	<b>I</b>			1		!	
		1% qz veining - macroveins	1		1								1
		4% pyrite - fracture fill				I			ļ	!		ļ	ļ
		Large subangular fragments of silicified/sericitized				Į			ļ			ļ	
		rhyolite within a black mudstone matrix - very chaotic	1		1	Į –	!		!	}		ļ	ļ
		appearance; weakly broken core; ptygmatic quartz			1	1	]		!			ļ	
		veining to 1.0 cm in size above the downhole limit;			!	1	!		!	Į			1
		3-5% fracture-controlled pyrite at the upper contact				1	!		!				1
		with percentage decreasing gradually downhole.					 						ļ
		112.24 m: lower contact obscured by broken core.				1	1						1
112.24 12	22.12	RHYOLITE		112.24-114.00	1.76	0.5			•	2	:		
		Whiteish-green, veined, broken		114.00-115.42	1.42	0.5		0.01	•	•			
		qz_carb veining 60°		115.42-116.15	:	0.5		0.01					
		Frs=5/m : Vns =15/m		116.15-117.56	:	0.5	-	0.01		1		•	
		10% silica alteration - patches		117.56-118.20	0.64	0.5	-	0.01					
		5% sericite alteration - patches			0.89	0.5	•	0.01					
		5% ga-carb veining - macroveins		119.09-120.10 120.10-120.70	10.60	0.5		0.01		1		1	
		2% pyrite - fracture fill High-altered and fractured rhyolite - varies from		120.70-122.12	1.42	0.5		0.01				-	
		massive to brecciated; several sections of buff,	1222264	200.70-244.14	1	1 0.5		0.01	1			i î	i
		bleached amygdaloidal flow between 112.24-112.40,			1	1						i	i
		115.42-116.15 m and 119.75-120.10 m; intensely	1		1				i		i	i	i
		silicified section from 116.15-117.56 with strong	1			i	i i		i			i	i
		stockwork quartz-carbonate veining over bottom 0.50			1	i			i	i i		i	Í
		meters; second zone of strong silicification and	1		i	i	i i		i	j i		İ	i

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## HOMESTAKE CANADA - Eskay Creek Project

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FROM	TÔ	DESCRIPTION	Sample	Interval	Width	Au gpt	Ag gpt	Pb 🕯	Zn t	Cu 🕏	<b>As t</b>	Hg ppm	Sb 🐐
		veining from 118.20-119.09 m; core becomes quite broken from 121.30 m to the lower limit but with no visible signs of gouge; 1-2% fine disseminated and fracture-controlled pyrite.			1       								
		122.12 m: lower contact obscured by broken core.											
122.12	172.30	HW PILLOWED ANDESITE FLOW		122.12-123.12	1.00	0.5							0.01
		Greenish-gray, pillowed, amygdaloidal qz_carb veining 45°	521524	171.30-172.30	1.00	0.5	5	0.01	0.03	0.01	0.01	17	0.01
		Prs=5/m :Vns =4/m	1		!	ļ			ļ			! !	
		3% chlorite alteration - amygdules			1	ļ							
		2% carbonate alteration - pervasive 4% qz-carb veining - macroveins				{	1						
		1% pyrite - disseminated	1			1			ł I				
		Massive to pillowed flow; vague pillow rims with fine	1			1						i i	
		chlorite-filled awygdules within the pillow cores;	i		i	i	i i					i i	
		local infilling of black mudstone within the	i		i	i	i i		İ	i .		i i	
		interstices; moderate to strong fracturing/brecciation	1		1	1			<b>I</b> .				
		from 128.55-131.95 m with buff bleaching of fragments;			1	ļ	1					ļļ	
		numerous white quartz veins up to 10.0 cm in width at	ł		!	ļ			1				
		20-60 degrees to the c/a - typically with carbonate			!	!						!	
		margins; very weak pervasive carbonate; 1-2% fine disseminated pyrite.				ļ							
		148.50-172.30 m: shows transiton into dominantly fine											
		to medium-grained massive flow; locally fractured with							1				
		fine chlorite and carbonate infilling. 172.30 m: lower contact sharp at 30 degrees to the			-			l	1 . 1				
		c/a; unit taking on medium grey color for 2.0 meters			ł								
		above contact; no contact mudstone or any obvious	1		i	i	i					i i	
		signs of alteration of mineralization.			Ì	l							
172.30	199.84	RHYOLITE BRECCIA		172.30-173.20	0.90	0.5		0.01				7	0.01
		Gray, brecciated gz veining 55°			1.50	4.2	•	0.01					0.01
		qz veining 55° Frs=5/m :¥ns =8/m			1.50	1.3						• •	0.01
		10% silica alteration - patches			1.50	1.1							0.01
		5% chlorite alteration - patches			1.50	0.5							
		10% sericite alteration - patches			1.50	0.5	• •	0.01	0.01	0.01	0.03	23	0.01
		3% qz veining - macroveins			1.50	6.5	5	0.01	0.02	0.01	0.03		0.01
		4% pyrite - fracture fill	519464	183.70-185.20	1.50	7.5	5	0.01	0.02	0.01	0.04		0.01
		Rhyolite breccia with variety of subangular to	519465	185.20-186.70	1.50	6.3	14	0.01	0.03				0.01
		subrounded fragments of rhyolite up to 10.0 cm in size			1.50	10.9		0.01					0.01
		within a dark grey rhyolite ash matrix; zone of	519467	188.20-189.70	1.50	2.0	5	0.01	0.02	0.01	0.03	4	0.01

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## HOMESTAKE CANADA - Eskay Creek Project

### PAGE 6 of 6

PROM	TO	DESCRIPTION	Sample	1	Interval	Width	Au gpt	<b>A</b> g gpt	Pb 🕯	Zn *	Cu ¥	λs t	Hg ppm	Sb t
		brecciation and shearing from the upper contact to	519468	189	70-190.80	1.10	2.0	10	0.01	0.01	0.01	0.03		0.01
		173.20 m with numerous thin seams of grey muddy gouge	519469	190.	80-192.30	1.50	5.0	157	0.01	0.05	0.04	0.01		
1		at 25-40 degrees to to c/a; patchy and		•	30-193.80	1.50	2.4		0.02		5			
		fracture-controlled sericite and lesser chlorite to				1.46	2.1							
		190.80 m with 2-4% fine disseminated pyrite - locally				1.49	5.3				• • • • • •	•		
		5-7% over short core lengths; unit takes on medium to	•	•		1.50	1.2							1 +
1		pale grey color below 190.80 m with increased	519475	198.	25-199.84	1.59	2.2	13	0.01	0.01	0.01	0.03	1	0.01
		silicification and descreasing sericite/chlorite	!	ļ		!	Į –			ł	ł	ļ		
1		downhole;					1							
		195.27-199.84 m: network of dark grey chlorite		i						i	i	i		·
İ		stringers with 3-5% fracture-controlled pyrite at	1	ĺ		ĺ	İ			ĺ	l I	1		
Ì		30-50 degrees to c/a.	1	1		1					<b>I</b> .		1 1	
1		199.84 m: lower contact diffuse at approximately 45	1	l i		l	• • •			l	ļ			
		degrees to the c/a.		ļ										
199.84	206.96	AUTOBRECCIATED RHYOLITE FLOW	519776	199.	84-201.00	1.16	3.3	5	0.01	0.03	0.01	0.03	1	0.01
i		Gray, auto-brecciated, flow-top BX.	519777	201	00-202.50	1.50	1.8	5	0.01	0.01	0.01	0.03	1	0.01
i		Prs=5/m :Vns =2/m	519778	202.	50-204.00	1.50	2.1	5	0.01	0.02	0.01	0.02		
Í		15% silica alteration - pervasive	519779	204	00-205.50	1.50	1.7			0.05	0.01	0.02		
1		1% qz veining - microveins	519781	205	50-206.96	1.46	6.1	23	0.01	0.04	0.01	0.03	1	0.01
1		2% pyrite - blebs		1	• •	1	1		l I	ł		ł		
1		Autobrecciated rhyolite flow with large, subangular	1 1	1			1 :	1 1		1	l i	l		
: 1		flow banded fragments to 10.6 cm in size; moderate to		1			•							
-1		strong silicification giving the unit a pale					1							
· I		grey/white color; minor fracture-controlled sericite									ļ	ł		
		and chlorite; 1-2% pyrite as scattered grains and		ļ								[		
		blebs.		1			1							
		206.96 m; End of Hole.		1		1	· .			1				
(eoh)			i i	İ		i				İ	İ	l l		

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HOMESTAKE CANADA

DIAMOND DRILL HOLE LOG

C98948

PROJECT: Esk DRILL HOLE: LENGTH:	tay Creek Project C98948 103.02		Date	Commenced: 09/15/98 Completed: 09/17/98 Diam: BQTW	Contractor: HY-T	всн		Logged ) Geotech	by: АВ by: MCKD
	Collar Location				<u> </u>	••••••••••••••••••••••••••••••••••••••			
Вх	ploration Grid	Mine (023)	Grid						
Northing: Basting: Elevation:	19516.50 21646.15 853.40	10766.00 9709.78 853.40	, ,					· · · · · · · · · · · · · · · · · · ·	
		នបាក	AR	1		DOWN HOLE			
	0 00 2 65	CASING			Depth	Azim	Inclin	Mine Az	Method
	0.00-3.05 3.05-6.40			UDSTONE	0.00	146.00	-79.00	123.00	ESTIMATE
	5.40-23.00			OKEN ANDESITE FZ	6.01	155.50	-79.00	132.50	SPERRY SUN
	23.00-36.22	RUBBLY	ANDES	SITE FAULT ZONE	103.02	157.50	-81.00	134.50	SPERRY SUN
	36.22-48.35			BRECCIA					
	48.35-57.47			MAL BRECCIA MUD					
	57.47-76.05			BRECCIA					
l	76.05-81.35			NMAL BRECCIA MUD					
	81.35-103.0	2 RUBBLY	MUDS.	NONE FAULT ZONE					

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## HOMESTAKE CANADA - Eskay Creek Project

PAGE 1 of 2

HOLL	. 6707												
FROM	TO	DBSCRIPTION	Sample	Interval	Width	Au gpt	Ag gpt	Pb *	Zn t	Cu ¥	As t	Hg ppm	sb
.00	3.05	CASING					ļ	ĺ	ļ	i I	1	ļ	ĺ
.05	6.40	HN MASSIVE MUDSTONE				1					1		}
	••••	Dark gray	i i		1	i	i	i	i	i	i	i	i
		Prs=15/m	i i		1	i	İ	i	i	j	i	i	i
		15% graphite - pervasive	i i		i	i	i	i	i	İ	i	i	i
		Mudstone with 20cm andesite pillow breccia. Pillow	i i		i i	i	i	i	Í	İ	i	i i	1
		fragments purply-brown with chloritic amygdules;	i i		1	İ	İ	İ	Ì	İ	1	Í	Ì
		interstitial carbonate.	1 1		1	1	1	1	1	ł	1	1	1
		Lower contact obliterated by broken core.				ļ	1		ļ	1	1	!	
5.40	23.00	OXIDIZED BROKEN ANDESITE FZ					i	1	ĺ		1	1	ł
		Redish-brown, rubbly, oxidized	1 1		1 '	1	1	1		1			1
		Prs=117/m	1 1		1 1	1	1		1	ł	ļ		1
		Faulted HAFL with clayey, gougy zones.			1	ļ	ļ		1	ţ			1
		21.75-22.55m Oxidized fault gouge.			• •	[		1	ļ	ţ	ļ	i	ļ.
		Lower contact obliterated by broken core.						1	1	· ·	1		
3.00	36.22	RUBBLY ANDESITE FAULT ZONE			i i	ļ	İ		1			i	į
		Grayish-gray, rubbly, amygdaloidal	1 1			l	ļ	1	ļ	!	1	ł	ļ
		Prs-96/m			1	1	ļ	ļ	Į	Į	ļ		ļ
		1% chlorite alteration - amygdules			1	1	ļ	1	ļ.	ļ	!		!
		26.60-26.67m Rubbly, gougy zone. Contacts obliterated				!	ļ	1	!	ļ	ļ	!	!
		by broken core.				1		!	ļ	!			
		32.15-33.60m Siliceous mudstone and andesite breccia				1		-	!		ļ		!
		with carbonaceous matrix. Contact obliterated by				•	!	!					
		broken core.							!	1	!		
		Lower contact obscured by broken core.						1	1	i	1		
6.22	48.35	HW ANDESITE BRECCIA			1	!	ł		1	ļ		1	
		Grayish-gray, brecciated				1	1		!		ł	1	1
		Frs=5/m :Vns =1/m					}	1	1				1
		5% chlorite alteration - patches				1	1		}		{		ł
		10% carbonate alteration - pervasive .2% carbonate veining - microveins				1	ł	1	1		1		ł
		Chlorite and carbonate interstitially.				1	i	1	1	ł	1	1	1
		38.44-38.96m Blocky, broken core, minor fault zone.				i	i	1	ł	I J	1	1	ł.
		Contacts obscured by broken core.			1	i	1	1	ł		1	i	i i
		43.60-43.75m Rubbly, gougy core. Contacts obscured by			1	i	i	i	i	1	i	i	i
		broken core.				í	i	i	i	i	i	i	i
		Lower contact transition zone with 15cm of andesite			i	í	i	i	i	i	i	i	i
		fragments in a mudstone matrix.	i i		į i	ļ	İ	į	į	İ	į	İ	İ
8.35	57.47	HW HYDROTHERMAL BRECCIA MUD					1			t 		1	
-		Dark gray, brecciated, broken	i i		i i	i	i	İ	i	İ	1	1	İ
		qz_carb veining 30°					-		•	•		•	

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### HOMESTAKE CANADA - Eskay Creek Project

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	C7071					r	1		<b>r</b>	J			
ROM	TÔ	DESCRIPTION	Sample	Interval	Width	Au gpt	Ag gpt	Pb ¥	Zn t	Cu 🐮	As t	Hg ppm	Sb t
		Prs=25/m : Vns =3/m	1			ĺ			ĺ				
		20% silica alteration - pervasive	1			ļ							
		4% carbonate veining - macroveins				1							
		10% pyrite - patches	1 1		ł	l							
		Contorted, swirly, irregular pyritized mudstone with				ļ							
		45% quartz. Pyrite interstitial, weins and fracture			1	ļ							
•		fill.											
		Locally rubbly core with minor fault gouge.				[			ļ				
		Lower contact marked by 35cm carbonate vien. Vein			1	[			]				
		upper contact at 30 degrees to ca and lower at 15			1								
		degrees to ca.				ľ			1				
47	76.05	HW ANDESITE BRECCIA	519834	57.47-59.00	1.53	0.5		0.01					
		Grayish-gray, brecciated	519835	59.00-60.50	1.50	0.5	5	0.01	0.02	0.01			
		Prs=5/m :Vns =1/m	519836	60.50-62.00	1.50	0.5	15	0.01	0.03	-	•	, ,	
		10% chlorite alteration - pervasive		62.00-63.50	1.50	0.5		0.01		2			
		15% carbonate alteration - interstitial	519838	63.50-65.00	1.50	0.5		0.01	:				
		.5% carbonate veining - macroveins	519839	65.00-66.50	1.50	0.5	5	0.01	0.03	0.01			
		10% pyrite - patches	519840	66.50-68.00	1.50	0.5	5	0.01	0.03	0.01	0.07		
		Pyrite in veinlets and irregular blebs and patches	[519841]	68.00-69.50	1.50	1.3	11	0.01	0.03	0.01			
		interstitially, commonly associated with carbonate.	519842	69.50-71.00	1.50	0.5	5	0.01	0.02	0.01	0.03		
		Blocky broken core in less than 1m intervals.	519843	71.00-72.50	1.50	0.5	5	0.01	0.02	0.01			
		74.00m 10cm clayey, gouge.	519844	72.50-74.00	1.50	0.5		0.01	•				
		Lower contact gradational, mud and andesite intervals.	519846	74.00-75.00	1.00	0.5	5	0.01	0.01	0.01	0.03	16	C
)5	81.35	HW HYDROTHERMAL BRECCIA MUD	519847	75.00-76.05	1.05	0.5	5	0.01	0.02	9.01	0.04	26	G
		Dark gray, brecciated			1								
		Frs=10/m :Vns =2/m								ļ			
		30% silica alteration - patches				ļ				1			
		5% carbonate alteration - patches			1 I	ļ			ļ				
		2% carbonate veining - macroveins			1	ŀ							
		Blocky broken core, 5% interstitial pyrite and in			1	1			. ·				
		small blebs. Rare <1m intervals with andesite			1	ļ							
		fragments. Lower contact obscured by broken core.				1							
		-	i i						į ·				
35 :	103.02	RUBBLY MUDSTONE FAULT ZONE	ļ		1				р 1				
		Dark gray, rubbly, gouge											
		Prs=137/m :Vns =6/m			-								
		20% clay alteration - patches											
		10% graphite - patches											
		2% qz veining - macroveins			1								
		1% pyrite - patches			1								
		Intervals (<1m) bleached, greenish andesite breccia.			ļ								
		88.09 to end of hole: Clayey fault gouge.			1								
		EOH 103.02m Hole shut down due to fault.			!								
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## APPENDIX C

## CERTIFICATES OF ANALYSIS

### **ESKAY CREEK MINE**

# **EXPLORATION DRILL CORE SAMPLES**

LOT #: X8-3465

DATE: 18-Sep 1998

(														
	SAMPLE	Au	Ag	AuEq	Pb	Zn	Cu	As	Hg	Sb	MgO	AI2O3	S.G.	Moisture
	number	g/t	g/t	g/t	%	%	%	%	ppm	%	%	%	i	wt.%

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8		l	+											· · · · ·	
	7	521507	-1.0	-10		-0.01	0.03	-0.01	-0.01	4	-0.01				
	8	521508	-1.0	-10		-0.01	0.05	-0.01	-0.01	13	-0.01				
l	9	521509	-1.0	-10		-0.01	0.01	-0.01	0.05	7	0.01				
	10	521510	-1.0	-10		0.01	0.02	-0.01	0.06	21	0.01				
1	11	521511	-1.0	-10		0.01	0.03	-0.01	0.05	10	0.01				
Ĭ	12	521512	-1.0	-10		-0.01	0.03	-0.01	0.04	4	0.01				
`	13	521513	-1.0	-10		0.01	0.06	-0.01	0.03	5	-0.01				
	14	521514	-1.0	-10		-0.01	0.02	-0.01	0.02	7	-0.01				
	15	521515	-1.0	-10		-0.01	0.03	-0.01	0.02	6	-0.01				
	16	521516	-1.0	-10		-0.01	0.01	-0.01	0.01	-1	0.01				
	17	521517	-1.0	-10		-0.01	0.02	-0.01	0.02	-1	-0.01				
	18	521518	-1.0	-10		-0.01	0.01	-0.01	0.01	-1	-0.01				
1	19	521519	-1.0	-10		-0.01	0.01	-0,01	0.02	3	-0.01				
	20	521520	-1.0	-10		-0.01	0.04	-0.01	-0.01	17	-0.01				
	21	521521	-1.0	-10		-0.01	0.02	-0.01	0.03	4	0.01				
	22	521522	-1.0	-10		-0.01	0.02	-0.01	0.02	1	-0.01				
	23														
	24														
	25	521505	-1.0	12	0.2										
Į	26	521520	-1.0	-10											
							samples		24		base metals	;	132		
							total Au, Ag		48		total determ	Inations	180		

total Au, Ag

merged xis. deleted dbf. deleted

#### **ESKAY CREEK MINE**

## **EXPLORATION DRILL CORE SAMPLES**

LOT #: X8-3462

DATE: 18-Sep 1998

	SAMPLE	Au	Ag	AuEq	Pb	Zn	Cu	As	Hg	Sb	MgO	AI2O3	S.G.	Moisture	
	number	g/t	g/t	g/t	%	%	%	%	ppm	%	%	%		wt.%	
1	521523	-1.0	-10		0.01	0.05	-0.01	0.02	-1	-0.01					
2	521524	-1.0	-10		-0.01	0.03	-0.01	0.01	17	-0.01					
3	521525	-1.0	13	0.2	-0.01	0.01	-0.01	0.01	7	-0.01					
4	519456	4.2	-10	4.2	0.01	0.03	-0.01	0.20	-1	-0.01					
5	519457	2.7	-10	2.7	0.01	0.02	-0.01	0.04	-1	-0.01					
6	519458	1.3	-10	1.3	-0.01	0.01	-0.01	0.02	8	-0.01					
7	519459	1.1	-10	1.1	-0.01	0.02	-0.01	0.02	21	-0.01					
8	519460	1.2	-10	1.2	-0.01	0.02	-0.01	0.02	14	-0.01					
9	519461	-1.0	-10		-0.01	0.01	-0.01	0.01	24	-0.01				i	
10	519462	-1.0	-10		-0.01	0.01	-0.01	0.03	23	-0.01					
11	519463	6.5	-10	6.5	-0.01	0.02	-0.01	0.03	-1	-0.01					
12	519464	7.5	-10	7.5	-0.01	0.02	-0.01	0.04	-1	-0.01			-		
13	519465	6.3	14	6.5	-0.01	0.03	-0.01	0.06	12	-0.01					
14	519466	10.9	-10	10.9	0.01	0.02	-0.01	0.08	8	-0.01					
15	519467	2.0	-10	2.0	0.01	0.02	-0.01	0.03	4	-0.01					
16	519468	2.0	10	2.2	-0.01	0.01	-0.01	0.03	-1	-0.01					
17	519469	5.0	157	7.5	0.01	0.05	0.04	0.01	7	0.02					
18	519470	-1.0	-10		-0.01	0.02	0.01	-0.01	-1	0.01					
19	519471	2.4	66	3.5	0.02	0.04	0.01	0.02	-1	-0.01					
20	519472	2.1	16	2.4	-0.01	0.02	-0.01	0.01	2	-0.01					
21	519473	5.3	70	6.4	0.01	0.05	0.01	0.06	-1	0.03					
22	519474	1.2	-10	1.2	-0.01	0.02	-0.01	0.10	4	-0.01				<u> </u>	
23														<u></u>	
24							·							<u> </u>	
25	51 <b>947</b> 0	-1.0	-10												
26	519473	5.0	77	6.2											
						samples		24		base metals		132	•		
						total Au, Ag		48		total determ	inations	180			

merged xis. deleted dbf. deleted

**CERTIFICATION:** 

## ESKAY CREEK MINE

## **EXPLORATION DRILL CORE SAMPLES**

LOT #: X8-3474

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DATE: 18-Sep 1998

	SAMPLE	Au	Ag	AuEq	Pb	Zn	Cu	As	Hg	Sb	MgO	AI2O3	8.G.	Moistu
	number	g/t	g/t	g/t	%	%	%	%	ppm	%	%	%		wt.%
	1 519475	2.2	13	2.4	0.01	0.01	-0.01	0.03	-1	-0.01				
	2 519776	3.3	-10	3.3	0.01	0.03	-0.01	0.03	-1	0.01				
	3 51977	1.8	-10	1.8	0.01	0.01	-0.01	0.03	-1	-0.01				
	4 519778	2.1	-10	2.1	0.01	0.02	-0.01	0.02	-1	-0.01				[
*.	5 519779	1.7	13	1.9	0.02	0.05	0.01	0.02	-1	0.01				
	6 519780	1.4	-10	1.4	0.03	0.05	0.01	0.02	-1	0.01				
	7 519781	6.1	23	6.5	0.01	0.04	0.01	0.03	-1	0.01		· _ · · · · ·		

eem		- 4	base metals	132
total	Au, Ag	48	total determinations	180
				merged xls. deleted dbf. deleted

#### **ESKAY CREEK MINE**

# **EXPLORATION DRILL CORE SAMPLES**

LOT #: X8-3472

DATE: 18-Sep 1998

	SAMPLE	Au	Ag	AuEq	Pb	Zn	Cu	As	Hg	Sb	MgO	A1203	S.G.	
l i	number	g/t	g/t	g/t	%	%	%	%	ppm	%	%	~~203 %		Moisture Wt.%
											/•	70	E	WL 70

-	519834	-1.0	18	0.3	-0.01	0.03	0.01	0.07	-1	0.02		
23												
24										·····		
25	519813	-1.0	-10									
26	519 <b>830</b>	-1.0	-10									
					\$8mples		24		base metal		132	
					1	iotal Au, Ag		48		total determination	ıs 180	
											merged	٠
											merged xis. delete dbf. delete	

X8-3472.XLS

CERTIFICATION:\_

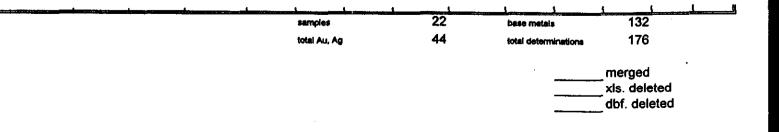
#### **ESKAY CREEK MINE**

## **EXPLORATION DRILL CORE SAMPLES**

LOT #: X8-3494

DATE: 20-Sep 1998

		••••••••••••••••••••••••••••••••••••••												-
	SAMPLE	Au	Ag	AuEq	Pb	Zn	Cu	As	Hg	Sb	MgO	AI203	<b>S.</b> G.	Molsture
<u> </u>	number	g/t	g/t	g/t	%	%	%	%	ppm	%	%	%		wt.%
ļ	1 519835	-1.0	-10		-0.01	0.02	-0.01	0.05	3	0.02				
	2 519836	-1.0	15	0.2	-0.01	0.03	0.01	0.08	19	0.02				
	3 519837	-1.0	12	0.2	-0.01	0.03	-0.01	0.09	14	0.02				
	4 519838	-1.0	-10		-0.01	0.03	-0.01	0.01	-1	0.02				
	5 519839	-1.0	-10		-0.01	0.03	-0.01	0.06	3	0.02				
ļ	6 <b>51984</b> 0	-1.0	-10		-0.01	0.03	-0.01	0.07	-1	0.02				
	7 519841	1.3	11	1.5	-0.01	0.03	-0.01	0.06	1	0.02				
	8 519842	-1.0	-10		-0.01	0.02	-0.01	0.03	8	0.02				
I	9 51 <b>9843</b>	-1.0	-10		-0.01	0.02	-0.01	0.02	6	0.01				
1	0 519844	-1.0	-10		-0.01	0.02	-0.01	0.02	9	0.02				
1	1 519845	-1.0	-10		-0.01	0.03	0.01	0.01	1	0.01				
1	2 519846	-1.0	-10		-0.01	0.01	-0.01	0.03	16	0.01				
1	3 519847	-1.0	-10		-0.01	0.02	-0.01	0.04	26	0.01				



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