

PART I

GEOCHEMICAL REPORT:

Geochemistry of Stream Sediments from High Energy Depositional Sites on the Tag West and Tag East Claim Groups, Eskay Creek Area, BC

Tag West Claim Group

Claims: Aftom #20, P-Mac #1 to #10, Fred 15, Noot 1 to 4, Sto 1 to 2, Polo 7 to 8, Megan 1 to 2, Rambo 1, Rambo 3, Rambo 5, Fog 1 to 6, Link Fr.

Latitude: 56° 32' 15"N to 56° 36' 30"N

Longitude: 130° 11' W to 130° 33' W

Tag East Claim Group

Claims: Aftom # 7, Aftom # 9, Aftom # 14 to # 19, Calvin, Polo13, Lance 3 to 4, Bell 1 to 8, Irving 1 to 4

Latitude: 56°36'15"N to 56°39'00"N

Longitude: 130°14'15"W to 130°27'00"W

Mining Division:

Skeena, MD

NTS:

104 B 09W, 10E.
104 B 058, 059, 068, 069

Owners:

Registered Owners of Claims: Court Bailiff, Heritage American Resource Corp.,
Watershed Resources Ltd. and Uniterre Resources Ltd.

Operator:

St. Andrew Goldfields Ltd.

Date:

December 18, 2001

Authors:

Paul McGuigan, P. Geo., Tecucomp Geological Inc.
W. R. Gilmour, P. Geo., Discovery Consultants
Suite 101 – 1338 West 6th Avenue,
Vancouver, BC V6H 1A7
Canada

Ministry of Energy & Mines
Energy & Minerals Division
Geological Survey Branch

**ASSESSMENT REPORT
TITLE PAGE AND SUMMARY**

TAG WEST GROUP

TITLE OF REPORT [type of survey(s)] Geochemistry of Stream Sediments TOTAL COST \$ 37,411.30

AUTHOR(S) Paul J. McGowan, PGeo SIGNATURE(S) Paul J. McGowan
William G. Inman, P. Geo W. G. Inman

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) N/A YEAR OF WORK 2001

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) #3170852 Sep 7-2001

PROPERTY NAME Eskay Property - Tag West Group

CLAIM NAME(S) (on which work was done) Neot 1-4, P-MAC1, Fred 15, Afton 20, Sto 1, Rambo 1, 3, 5

COMMODITIES SOUGHT Gold, silver

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN _____

MINING DIVISION Skeena NTS 104B 9W E 10E

LATITUDE 56° 34' 00" N LONGITUDE 130° 30' W * (at centre of work)

OWNER(S)
1) Court Bailiff #141757 2) Heritage American Resource Corp #14050
3) Uniterre Resources Ltd. #124656

MAILING ADDRESS
Uniterre: 910-470 Granville St Vancouver V6C 1V5
Heritage: 40 C. Jonsson, 1710-1177 W. Hastings St. Vancouver BC V6E 2L3.

OPERATOR(S) [who paid for the work]
1) St. Andrew Goldfields 2) _____

MAILING ADDRESS
Suite 105-1540 Cornwall Rd. Oakville, Ontario L6T 7W5

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
Lower to Middle Jurassic Hazelton Group and Middle Jurassic Bowser Lake Group contain anomalous stream geochemistry for gold, silver, zinc, arsenic, antimony, mercury and tellurium.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS _____

TAG WEST.

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL			
(number of samples analysed for ...)			
Silt. Soil	BLEG 45 spls.	Noot 1-4	} #37,111.30
Silt	Sieved Silt 50 spls	P-MAC 1	
Rock		FRED 15	
Other	Heavy Mineral 3 spls	AFTOM 20 STO 1, RAMBO 1, 3, 5	
DRILLING			
(total metres; number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
TOTAL COST			# 37,111.30

Ministry of Energy & Mines
Energy & Minerals Division
Geological Survey Branch

**ASSESSMENT REPORT
TITLE PAGE AND SUMMARY**

TAG EAST

TITLE OF REPORT [type of survey(s)] Geochemistry of Stream Sediments TOTAL COST \$43565.43

AUTHOR(S) Paul J. McGowan P. Geo SIGNATURE(S) Paul J. McGowan
W. Schmidt

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) N/A YEAR OF WORK 2001

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S) #3170850 Sep. 7/2001

PROPERTY NAME Eskey Property - Tag East

CLAIM NAME(S) (on which work was done) Afton 7, 14, 15, 18, 19, Lance 3, Bell 2
Calvin Irving 1

COMMODITIES SOUGHT Gold, Silver

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN _____

MINING DIVISION Skeena NTS 104B 9W, E10E.

LATITUDE 56° 38' 00" N LONGITUDE 130° 20' 00" W (at centre of work)

OWNER(S)
1) Court Bailiff #141757 2) Heritage American Resources
3) Watershed Resources #130636 #14050

MAILING ADDRESS
Watershed: Box 2787 Heritage c/o C. Joneson
Smithers, BC V0J 2N0 1710-1177 W Hastings St.
Vancouver BC

OPERATOR(S) [who paid for the work]
1) St. Andrew Goldfields. 2) _____

MAILING ADDRESS
Suite 105 - 1540 Cornwall Rd
Oakville, Ontario L6J 7W5

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
Lower to Middle Jurassic Hazelton Group and Middle
Jurassic Bowser Lake Group contain anomalous
stream geochemistry for gold, silver, zinc, arsenic
antimony, mercury.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS _____

TAG EAST

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping _____			
Photo interpretation _____			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic _____			
Electromagnetic _____			
Induced Polarization _____			
Radiometric _____			
Seismic _____			
Other _____			
Airborne _____			
GEOCHEMICAL			
(number of samples analysed for ...)			
Soil	BLEG - 21 spls.	AFTON #7, #14, #15, #18, #19 LANCE 3 BELL 2 CALVIN IRVING 1	} \$43,565.43
Silt	Sieved Silt 22 spls.		
Rock			
Other	Heavy Mineral 9 spls.		
DRILLING			
(total metres; number of holes, size)			
Core _____			
Non-core _____			
RELATED TECHNICAL			
Sampling/assaying _____			
Petrographic _____			
Mineralographic _____			
Metallurgic _____			
PROSPECTING (scale, area) _____			
PREPARATORY/PHYSICAL			
Line/grid (kilometres) _____			
Topographic/Photogrammetric (scale, area) _____			
Legal surveys (scale, area) _____			
Road, local access (kilometres)/trail _____			
Trench (metres) _____			
Underground dev. (metres) _____			
Other _____			
TOTAL COST			\$43,565.43

SUMMARY

The Tag East and Tag West claim groups are located in northwestern British Columbia, 70 km northwest of Stewart, BC. Reference maps are NTS sheets 104B 9W and 10E. The claims are accessed by the nearby Eskay Creek Mine access road that extends from Highway 37 to the mine and during the 2001 Geochemical Work described herein, the claims were accessed by helicopter from the mine access road and directly from Bell II Lodge located on Highway 37.

St. Andrew Goldfields requested an orientation geochemical program to develop reliable techniques to geochemically characterize small, steep drainages that contain immature sediments. The area of sampling was located on Prout Plateau and the headwaters of Unuk River and Storie Creek and in watersheds draining the Tag West and Tag East claim groups.

The requested survey was designed as an initial pass over the area, employing helicopter-based sampling crews. Follow-up surveys aimed at increasing the density of sampling and area of coverage will be conducted in the next field season with a combination of helicopter-based and fly-camp based crews.

During the period, August 18 to 26, 2001, a five-man team sampled high-energy sediments, using a helicopter for moves between sampling sites. On Tag West Group, 45 Bulk Leach Extractable Gold (BLEG), 50 Sieved Silt and 3 Heavy Mineral samples were taken. On the Tag East Group, 21 BLEG, 22 Sieved Silt and 9 Heavy Mineral samples were taken.

The level of sampling effort and helicopter time on the survey was somewhat greater on the Tag East Group, as compared with the Tag West Group, due to longer traverses, more heavy mineral samples and more aborted sampling attempts.

The area of the Tag West and Tag East claim group is mostly underlain by Lower to Middle Jurassic Hazelton Group volcanic and sedimentary rocks and by Middle Jurassic Bowser Lake Group sediments. Mafic to felsic intrusions related spatially and temporally to volcanic rocks of the Betty Creek and Salmon River Formations are found on both Tag East and Tag West claim groups.

The orientation survey indicated the suitability of sampling stream sediments that have been deposited during freshet stages of stream flows. Samples taken in this high-energy environment defined promising geochemical patterns on the Tag West and Tag East claim groups. Gold in Sieved Silt and gold in BLEG samples confirm each other's reliably. Almost all gold results in BLEGs greater than 1.6 ppb are confirmed with gold in Sieved Silts greater than 16 ppb. The approximated ratio of concentration ranges from 1:5 to 1:10 BLEG vs. Sieved Silts. Each gold geochemical pattern is confirmed with a moderate correlation

with silver, antimony, arsenic and mercury results in the Sieved Silt sampling. A nugget effect appears to occur in the Sieved Silt gold results, which display a wider range of values than the BLEGs and somewhat weaker correlation with other elements. Anomalies in each have downstream dispersion trains of 200 to 600 meters.

Heavy Mineral samples proved suitable for detecting areas of anomalous gold at greater distances than the BLEG and Sieved Silt samples. In the rugged terrain of the Tag East claim group, Heavy Mineral samples were successful in characterizing areas that lacked sufficient density of helicopter landing sites or sample sites for a reliable BLEG / Sieved Silt survey. Although insufficient samples were obtained to be certain, Heavy Mineral dispersion trains for gold on the claim groups are at least 2 to 3 kilometres.

Three geochemically anomalous areas were identified and follow-up geochemical surveys are recommended. The main anomaly is located on the central part of the Tag West claim group (the "Area Two" anomaly). It is an anomaly that appears sourced by alteration and mineralization in Salmon River Formation rocks (mafic and felsic volcanic rocks) and footwall felsic intrusions within Betty Creek and Jack Formations. Area Two is on the Aftom 20 and Noot 2 claims and the abutting SIB claims. The anomaly is broad. In areas underlain by Salmon River Formation bedrock, it is a gold-silver-zinc anomaly and passes into a distinctive gold-mercury (antimony-arsenic-silver-copper-tellurium) anomaly in the lower strata of Betty Creek and Jack Formation. The changes likely reflect broad distributions of disseminated mineralization within alteration and stockworks that feed the Lulu and other stratabound horizons of Salmon River Formation on the Noot 2 and SIB claims.

The other prominent geochemical anomaly is located on the Tag East claim group, centered on the Lance 3, Bell 5, Aftom 7 and Aftom 19 claims (the "Area Three" anomaly). Gold in Heavy Mineral, BLEG and Sieved Silt samples defines a broad anomaly within mostly felsic rocks of the important Salmon River Formation.

Follow-up geochemical surveys are recommended for the entire area of the Tag West and Tag East claim groups, at a density greater than 5 samples per square kilometre for BLEG and Sieved Silt samples and a density of one Heavy Mineral sample for each 5 to 10 square kilometre of drainage.

The cost of the 2001 Geochemical Program conducted on the Tag West and Tag East claim groups is as follows:

Tag West Group	\$37,111.30
Tag East Group	<u>\$43,565.43</u>
Total 2001 Program:	\$80,676.73

TABLE OF CONTENTS

SUMMARY	II
TABLE OF CONTENTS	IV
INTRODUCTION	1
Location, Access and Site Description	1
Scope of Work	2
Property Description	2
<i>Tag West Claim Group</i>	<i>3</i>
<i>Tag East Claim Group</i>	<i>3</i>
Previous Work	3
Work Accomplished	5
REGIONAL GEOLOGY	6
PROPERTY GEOLOGY	7
Introduction	7
Stuhini Group – Triassic	7
Hazelton Group – Lower to Middle Jurassic	7
<i>Division of Lower Jurassic Stratigraphy</i>	<i>7</i>
<i>Jack Formation: Lower Hazelton Group sedimentary strata:</i>	<i>8</i>
<i>Betty Creek Formation</i>	<i>9</i>
<i>Salmon River Formation: Bimodal volcanic unit</i>	<i>9</i>
Bowser Lake Group – Middle Jurassic	7
Intrusions	7
Structure	7

Mineral Deposits and Occurrences	7
<i>Iskut River Area</i>	7
<i>Eskay Mine</i>	7
GEOCHEMICAL SURVEY	7
Design of the Survey	7
Collection Methods	7
Methods of Sample Preparation and Analysis	7
<i>BLEG Samples</i>	7
<i>Sieved Silt Samples</i>	7
<i>Heavy Mineral Samples</i>	7
Methods of Interpretation of Results	7
<i>BLEG and Sieved Silt Data Interpretation</i>	7
<i>Heavy Mineral Data Interpretation</i>	7
BLEG Sample Results	7
Sieved Silt Sample Results	7
<i>Gold</i>	7
<i>Silver</i>	7
<i>Lead</i>	7
<i>Copper</i>	7
<i>Antimony</i>	7
<i>Arsenic</i>	7
<i>Mercury</i>	7
<i>Tellurium</i>	7
Heavy Mineral Sample Results	7

<i>Gold</i>	7
<i>Copper</i>	7
<i>Lead</i>	7
<i>Zinc</i>	7
<i>Antimony</i>	7
<i>Arsenic</i>	7
<i>Mercury</i>	7
<i>Barium</i>	7
Comparison of Results	7
<i>Comparisons of Gold In BLEG vs. Gold in Sieved Silt Samples.</i>	7
<i>Gold in Heavy Mineral Samples</i>	7
Interpretation of Geochemical Anomalies	7
<i>Area One: Tag West Group</i>	7
<i>Area Two: Tag West Group</i>	7
<i>Area Three: Tag East Group</i>	7
<i>Other Anomalous Sites</i>	7
CONCLUSIONS & RECOMMENDATIONS	7
Survey Techniques	7
Anomaly Follow-up	7
<i>Area One: Tag West Group</i>	7
<i>Area Two: Tag West Group</i>	7
<i>Area Three: Tag East Group</i>	7
<i>Other Recommended Sampling</i>	7
COST STATEMENT	7

REFERENCES	7
STATEMENT OF QUALIFICATIONS	7
William R. Gilmour, P. Geo.	7
Paul J. McGuigan, P. Geo.	7
APPENDIX I: ANALYTICAL METHODS	VII
<i>Preparation of Heavy Mineral Concentrates – C. F. Mineral Research Ltd.</i>	<i>VII</i>
<i>Analytical Techniques – Activation Laboratories Ltd.</i>	<i>VII</i>
<i>Analytical Techniques – Acme Analytical Laboratories Ltd.</i>	<i>VII</i>
APPENDIX II: BLEG RESULTS	VII
<i>Acme Analytical Laboratories BLEG Results</i>	<i>VII</i>
APPENDIX III: SIEVED SILT RESULTS	VII
<i>Acme Analytical ICP_MS Results on Sieved Silt Samples</i>	<i>VII</i>
APPENDIX IV: HEAVY MINERAL RESULTS	VII
<i>C.F. Mineral Laboratories – Separation Weights</i>	<i>VII</i>
<i>Acme Analytical – ICP-MS</i>	<i>VII</i>
<i>Activation Laboratories – INAA</i>	<i>VII</i>
<i>Activation Laboratories – ICP_MS</i>	<i>VII</i>
<i>Interpretation: Anomalous Samples</i>	<i>VII</i>
APPENDIX V: FILINGS: COST STATEMENTS AND GROUPING NOTICES	VII
<i>Statement of Work – Tag West Group</i>	<i>VII</i>
<i>Grouping Notice – Tag West Group</i>	<i>VII</i>
<i>Statement of Work – Tag East Group</i>	<i>VII</i>
<i>Grouping Notice – Tag East Group</i>	<i>VII</i>
APPENDIX VI: MAPS	VII
TAG WEST & TAG EAST CLAIM GROUPS: GEOCHEMICAL PROGRAM, DECEMBER 18, 2001	VII

<i>Figure 2</i>	<i>Mineral Claims 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 3</i>	<i>Geology and Sample Locations 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 4</i>	<i>Gold BLEG 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 5</i>	<i>Gold Sieved Silt 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 6</i>	<i>Silver Sieved Silt 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 7</i>	<i>Copper Sieved Silt 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 8</i>	<i>Lead Sieved Silt 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 9</i>	<i>Zinc Sieved Silt 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 10</i>	<i>Arsenic Sieved Silt 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 11</i>	<i>Antimony Sieved Silt 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 12</i>	<i>Mercury Sieved Silt 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 13</i>	<i>Tellurium Sieved Silt 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 14</i>	<i>Gold -150HN 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 15</i>	<i>Lead -35+150HN 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 16</i>	<i>Zinc -35+150HN 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 17</i>	<i>Mercury -35+150HN 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 18</i>	<i>Barium -35+150 HN 1:20,000 Scale</i>	<i>VII</i>
<i>Figure 19</i>	<i>Interpretation of Geochemistry 1:20,000 Scale</i>	<i>VII</i>

INTRODUCTION

Location, Access and Site Description

The Tag East and Tag West claim groups are located in northwestern British Columbia, 70 km northwest of Stewart and 900 kilometres northwest of Vancouver (Fig. 1). Reference maps are NTS Sheets 104B 9W and 10E.

The claims are accessed by the nearby Eskay Mine access road that extends from Highway 37 to the mine. Present access is by helicopter from a fuel cache located along the Eskay Creek Mine road about five kilometres west from the mine. During the work described herein, the claims were accessed by helicopter from the mine access road and directly from Bell II Lodge located on Highway 37.

The area is within the Unuk River watershed. Major drainages include the Unuk River, Coulter Creek, and Storie Creek. All rivers and creeks originate from glacial meltwaters, and reach peak flow conditions in the summer months. The region is mountainous with elevations ranging from 250 metres on the Unuk River to approximately 2150 metres at John Peaks. Mountain slopes are moderate to very steep. The tree line occurs at about 1200 metres and at higher elevations, valleys are commonly filled with glaciers. Semi-permanent ice and snow may be encountered on north facing slopes. Snow conditions are extreme in alpine areas while river bottom areas receive snow seasonally. However, precipitation in the form of rain occurs all year round.

Valley bottoms are densely forested with mature stands of fir, Sitka spruce, cedar, hemlock, aspen, alder, and maple. A thick undergrowth of ferns, salmonberry, huckleberry and devil's club is usually present.

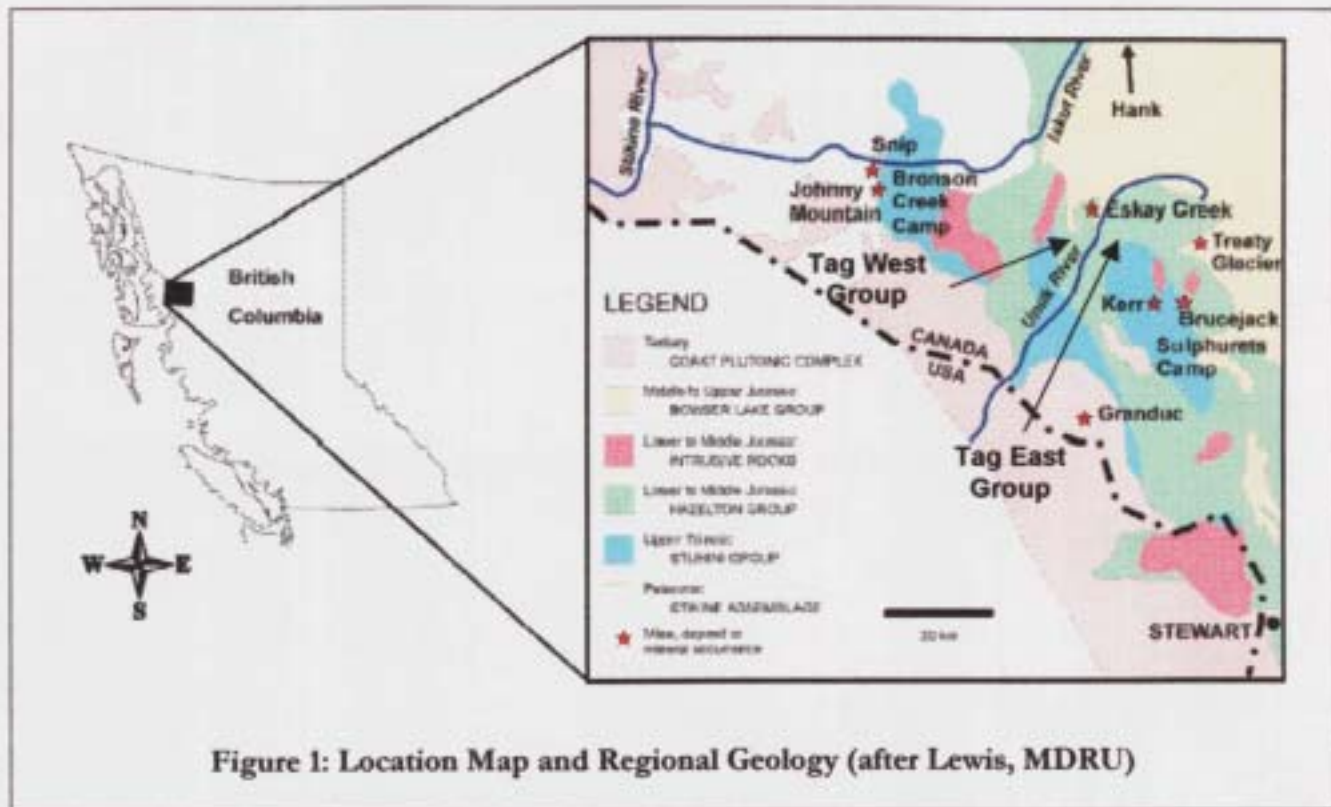


Figure 1: Location Map and Regional Geology (after Lewis, MDRU)

Scope of Work

St. Andrew Goldfields requested an orientation geochemical program to develop reliable techniques to geochemically characterize small, steep drainages that contain immature sediments. The area of sampling was located on Prout Plateau and the headwaters of Unuk River and Storie Creek and in watersheds draining the Tag West and Tag East claim groups.

The requested survey was designed as an initial pass over the area, employing helicopter-based sampling crews. Follow-up surveys aimed at increasing the density of sampling and area of coverage will be conducted in the next field season with a combination of helicopter-based and fly-camp based crews.

Property Description

The property is operated by St. Andrew Goldfields Ltd. of Toronto, Ontario. Claims are owned by the Court Bailiff, Heritage American Resource Corp., Watershed Resources Ltd. and Uniterre Resources Ltd.

The 2001 exploration by Tecucomp Geological Inc. in the Eskay Creek area was done on parts of the Tag West and Tag East claim groups. The work and dates of work done on individual claims is listed in the Statements of Work in Appendix V. All of these claims are in the Skeena and Liard Mining Divisions.

Tecucomp Geological Inc. did all the work with sub-contract work for sampling by Discovery Consultants of Vernon, BC. The following is a list of claims which were explored or had assessment filed from contiguous claims:

Tag West Claim Group

Aftom #20, P-Mac #1 to #10, Fred 15, Noot 1 to 4, Sto 1 to 2, Polo 7 to 8, Megan 1 to 2, Rambo 1, Rambo 3, Rambo 5, Fog 1 to 6, Link Fr.

Tag East Claim Group

Aftom # 7, Aftom # 9, Aftom # 14 to # 19, Calvin, Polo13, Lance 3 to 4, Bell 1 to 8, Irving 1 to 4

For details, see Appendix V, Grouping Notices.

Previous Work

The general geology of the Eskay Creek deposit and property geology are described by Bartsch (1990), Idrirk el al (1990), Blackwell (1990), Britton et al. (1990), Ettlinger (1991), Roth and Godwin (1992), Roth (1993a, 1993b) and MacDonald et al (1996).

Previous industrial work in the area of the Tag West and Tag East groups is summarized below:

- 1989 Prime Explorations cut a grid on AFTOM 5. No information is available in the assessment tiles.
- An airborne geophysical program was flown over the VR4, 6 and the CCMI-3 claims for Teuton Resources Corp. The VLF-EM surveying identified numerous anomalies and conductive zones.
- 1990 During the period September 16 to December 31, 1989 American Fibre Carp, completed a drilling program of 15 BQ diamond drill holes (totaling 1831 undertaken on the SIB-POLO claims (Copeland. D.J., 1990).
- The STORY claims were mapped and sampled (Gal, 1990) A number of grab samples returned anomalous gold values, ranging from 1.44 to 3.83 g/t Au. Granges Inc. mapped and prospected the UNUK claims as well as executing a six-hole drill program (Gaboury, 1990). One anomalous grab sample with 1.4 g/t Au was found but no significant mineralization was discovered at depth.

- 1990 The FRED 15 claim was sampled and one hole was drilled by Swift Minerals (Verzosa, 1990) but no significant mineralization was found.
- Calpine Resource's project on the GNC 1-3 , SKI 4 claims included airborne and ground geophysics, linecutting, geology and geochemistry (Chapman et al, 1990). Sampling of the area returned values of 189 oz/t Au and 0.29 oz/t Ag, and a massive sulphide horizon that returned values of 24.8% Cu, 0.127 oz/t Au and 6.27 oz/t Ag.
- 1991 Hicks and Metcalfe (1991) did limited reconnaissance geologic mapping on AFTOM 5. Work was limited to observation of Stuhini Group volcanic rocks and Bowser Lake Group sedimentary rocks in the easterly branch of the Unuk River crossing the claims.
- Airborne geophysics was flown over the LAKE 1-2 claims by Tymar Resources/Akiko-Lori Gold Resources (Lloyd and Klit, 1991).
- 1993 Canamera Geological Ltd. completed 6 days of reconnaissance mapping on AFTOM 16 (Grunenberg, 1993a).
- Grunenberg (1993b) reported on results of a geophysical survey performed on the AFTOM 20 claim.
- The BONSAI 1-4, 7 claims were mapped sampled and trenched by Prime Resources (Kuran et al, 1993). No anomalous mineralization was discovered.
- One diamond drill hole was drilled by Homestake Canada Inc. on the GNC1 claim (Kuran, 1993). Assay results from 337.1 to 360.45 m: 14.5 to 52 ppb Au, 299 to 601 ppm Zn, 99 to 262 ppm As and 27 to 48 ppm Sn.
- 1995 Canamera conducted a field program of reconnaissance mapping, prospecting, soil and silt geochemical sampling for the Tagish Joint Venture.
- 1996 Canamera conducted a field program of structural, grid, and reconnaissance mapping, prospecting, soil geochemical sampling, and UTEM geophysics for the Tagish Joint Venture. A new cut and surveyed grid was the basis of the detailed mapping and UTEM program in the Fred 15 area.
- 1997 Canamera Geological Ltd. (AR 25258) conducted geological and geochemical exploration on the Aftom, Calvin, Dup, Fred, Hags, Noot and Pmac Mineral Claims.

Work Accomplished

The site was initially visited in early August 2001 for orientation by Dr. V. Wall, an Australian geological consultant, and P. McGuigan, P. Geo. of Tecucomp Geological Inc. of Vancouver, BC. Design of the survey was conducted by collaboration between Wall and McGuigan and between McGuigan and W. Gilmour of Discovery Consultants of Vernon, BC.

During the period, August 18 to 26, a five-man team was mobilized to the Eskay claim groups for a geochemical sediment survey. Personnel experienced in BLEG and Heavy Mineral sampling were not available locally. Therefore, McGuigan traveled from Vancouver and three samplers from Discovery Consultants of Vernon, BC were mobilized from Vernon. The sampling crew from Vernon traveled by four-wheel drive truck with all the sampling equipment, supplies and emergency helicopter fuel. The team was stationed at the nearby Bell II Lodge, located east of the claim area, on Highway 37. Access to the claim areas was accomplished by truck via the Eskay Mine road and via a Canadian Helicopters A-Star model helicopter from Bell II.

The crews were positioned at each sample site using the A-Star helicopter. Each of four samplers was alternately positioned at sampling sites distributed as uniformly as feasible over the two claim groups. McGuigan made decisions on sampling locations and level of effort at each site as the survey progressed.

Samples were transported to Bell II via truck and brought to Vernon with the sampling crew upon demobilization. Work done for this survey included the following:

Work Done	Tag West Group	Tag East Group
BLEG Samples	45	21
Sieved Silt Samples	50	22
Heavy Mineral Samples	3	9

Samples were more readily obtained from sites on the Tag West Group. Drainages on the Tag East Group were difficult to access and sample. The area is deeply incised by large creeks. Tributary creeks have few suitable sample sites. Many hours were spent in aborted attempts at sampling. Heavy mineral samples from the main drainages were taken in areas where the BLEG and Sieved Silt samples could not be obtained upstream. The level of sampling effort and helicopter time on the survey was somewhat greater on the Tag East Group, as compared with the Tag West Group, due to longer traverses, more heavy mineral samples and more aborted sampling attempts.

REGIONAL GEOLOGY

The Iskut River and Unuk River areas straddle the boundary between the Intermontane and the Coast belts in northwest British Columbia. This region is underlain by rocks comprising the western boundary of the Stikine Terrane (Stikinia). At this latitude, Stikinia consists of well stratified, Middle Paleozoic to Mesozoic sedimentary rocks and volcanic and comagmatic plutonic rocks of island-arc affinity that include: the Early Devonian to Permian Paleozoic Stikine assemblage, the Late Triassic Stuhini Group and the Early Jurassic Hazelton Group. These are overlapped by Middle Jurassic to early Tertiary foredeep and successor basin sediments of the Bowser Lake and Sustut Groups, Late Cretaceous to Tertiary continental volcanic rocks of the Sloko Group, and Late Tertiary to Recent bimodal shield volcanism of the Edziza and Spectrum ranges. Warm-spring, tufa deposits forming along faults in the nearby Mess Creek valley attest to areas of dynamic geological evolution in modern day.

Most of Stikinia is comprised of Upper Triassic to Middle Jurassic sedimentary rocks and volcanic and comagmatic plutonic rocks of island-arc affinity in the Iskut River – Unuk River area. The arcs formed during several discrete pulses of magmatism that built arcs located on a submerged plate margin, outboard of the North American continent. The sedimentary rocks in the easternmost part of this basin overlapped continental margin rocks, suggesting this volcanic chain may have been located a few hundreds, but not thousands, of kilometres from the old continental margin. The positions of Stikinia that today lie west of the Cache Creek subduction complex, are unknown in the early Mesozoic. The region west of the North American continent in the early Mesozoic may have resembled the present western Pacific Ocean basin, with its scattered chains of volcanic islands.

In the latest Early Jurassic, about 180 million years ago, a major change of plate motions led to tectonism on the site of the old submerged continental margin and ocean floor along western North America. This change may be related to the opening of the Atlantic Ocean that accompanied the break-up of the supercontinent Pangea. At about the same time as the North Atlantic opened, the North American plate started to shift northwestward towards and over the ancestral Pacific basin. Earlier arc rocks of Triassic and Early Jurassic age were deformed along a convergent plate margin, forming firstly a volcanic arc, closely followed by down-warping and the formation of a foredeep basin, the Bowser Basin.

PROPERTY GEOLOGY

Introduction

The general geology of the claim area was in part established by geologists of the Geological Survey of Canada (Anderson, 1989; Anderson and Thorkelson, 1990) and the British Columbia Geological Survey Branch (Alldrick and Britton, 1988; Alldrick et al., 1989, 1990). A multi-year metallogenic study was conducted by the Mineral Deposit Research Unit (MDRU) at the University of British Columbia (Lewis et al, 2001).

The geological compilation and lithological descriptions used in following section on the Hazelton Group are adapted with only minor modifications from the work by the MDRU. Please refer to Lewis in MDRU Special Publication No. 1 (Lewis et al, 2001) for a more detailed description of the lithologies.

Rocks of the Stikine Assemblage do not crop out in the area of the Tag West and Tag East claim groups. Stratified rocks in the area are mostly Lower to Middle Jurassic Hazelton Group and Middle Jurassic Bowser Lake Group.

Stuhini Group – Triassic

The oldest Mesozoic strata in the region are sedimentary and volcanoclastic rocks of the Triassic Stuhini Group. The Stuhini Group consists of a dominantly sedimentary lower division and a dominantly volcanic and volcanoclastic upper division. Most of the sedimentary division comprises undifferentiated fine-grained, well-bedded rocks, but coarser conglomerate layers serve as local stratigraphic markers. The volcanic division is locally subdivided into mafic to intermediate tuff and volcanic breccia, mafic porphyritic flows, and felsic flows and flow breccia.

Stuhini Group strata located near the southern border of the Tag East claim group consist mostly of intercalated mafic volcanics (TrSm) and sediments (TrSs).

Hazelton Group – Lower to Middle Jurassic

Division of Lower Jurassic Stratigraphy

Most relevant in the geochemical interpretation of the Tag West and Tag East groups is the Hazelton Group stratigraphy. The stratigraphic divisions used on the maps differ from those on earlier maps of the Iskut River area, particularly

within the Hazelton Group. These studies define three major stratigraphic divisions within the Hazelton Group. They comprise, from lowest to highest:

- basal, coarse to fine grained, locally fossiliferous siliciclastic rocks,
- porphyritic andesitic composition flows, breccias, and related epiclastic rocks; dacitic to rhyolitic flows and tuffs; and locally fossiliferous marine sandstone, mudstone, and conglomerate, and
- bimodal subaerial to submarine volcanic rocks and intercalated mudstone.

Lewis adopted the designations Jack Formation, Betty Creek Formation, and Salmon River Formation to the above major divisions.

Jack Formation: Lower Hazelton Group sedimentary strata:

Basal Hazelton Group typically consists of locally fossiliferous conglomerate, sandstone, and siltstone of the Jack Formation. These rocks are well exposed in the upper Unuk River/Sulphurets area along both limbs of the McTagg Anticlinorium and have been traced at least as far south as the Frank Mackie icefield. Strata of correlative age are also present in the Salmon Glacier area. No exposures of the Jack Formation are known west of Harrymel Creek.

The most complete and best exposed sections are located in alpine areas north and south of John Peaks and along the west side of the Jack Glacier. The Jack Formation was first defined (informally) by Henderson et al. (1992), who used the name for distinctive coarse clastic and calcareous fossiliferous rocks occurring at the Stuhini Group/Hazelton Group contact. Henderson et al. (1992) placed the unit between the two groups; the present inclusion within the Hazelton Group is based on the conformable relationship with overlying rocks and the often unconformably contact with Stuhini Group strata.

Lithology: The Jack Formation is a lithologically varied sequence of sedimentary rocks that overlies Stuhini Group strata. Best reference sections of the Jack Formation occur at the Bruce Glacier/Jack Glacier area, south of John Peaks, and near Eskay Creek. At Bruce and Jack glaciers, the formation consists of a thin conglomerate containing clasts of subjacent Stuhini Group turbiditic mudstones and siltstone (Henderson et al., 1992). Overlying the basal sequence are fossiliferous limy sandstone and siltstone, and thinly to medium bedded, locally phyllitic, turbiditic siltstones and interbedded sandstones, up to several hundred metres thick.

There is a general transition southward towards John Peaks towards a thicker basal conglomerate and sandstone, and a thinner calcareous and turbiditic component. At the reference section south of John Peaks and on the ridge

extending east from Unuk Finger, the Jack Formation consists entirely of conglomerate and sandstone. Well-rounded granitoid cobbles are diagnostic, typically comprising up to 50% of the clasts. West of the Unuk River in the Eskay Creek / Tag West claim group area, Jack Formation rocks comprise several hundred metres of thickly bedded to massive wackes with local conglomeratic lenses and cross-stratified intervals (JrH1, JrH1a).

Contact relationships: The basal contact of the Jack Formation is well exposed at the Jack Glacier and south of John Peaks as a sharp, angular unconformity. Along strike from these localities, the contact is less distinct and bedding is concordant with underlying rocks. However, the unit can usually be recognized on the basis of the cobble conglomerate beds at its base.

Age: Fossil assemblages collected from the Jack Formation in the Unuk River indicate a Lower Jurassic age. Well-preserved ammonites occur in the Eskay Creek reference section and also near Treaty Glacier, and are diagnostic of an Upper Hettangian to Lower Sinemurian age. Unconformably underlying Stuhini Group turbiditic siltstone to mudstone in this area contain Upper Norian bivalves, providing a maximum age constraint. Upper biostratigraphic age limits are provided by Upper Pliensbachian ammonite collections from the Betty Creek Formation near Eskay Creek and near John Peaks. Isotopic age constraints from bounding units corroborate an Early Jurassic age. Dacitic crystal tuff in the underlying Stuhini Group at John Peaks yields a U-Pb zircon date of 215-220 Ma (V. McNicoll reported in Anderson, 1993), and a granitoid clast from the Jack Formation in this same section is dated at about 225 Ma. U-Pb zircon dates from the overlying Betty Creek Formation are as old as 193 ± 1 Ma.

Betty Creek Formation

Lower Jurassic volcanic and volcanoclastic strata have been problematic for workers in the Iskut River area, and stratigraphic nomenclature has been unevenly applied. Most studies in the Iskut and Stewart area assign intermediate composition rocks in this interval to either the Betty Creek Formation or the Unuk River Formation as by Grove (1986), and felsic rocks to the Mount Dilworth Formation. Much of the difficulty in working with this part of the section stems from the poor stratigraphic continuity of lithofacies, and the lack of regional definitions of the formations.

Previous workers assigned Lower Jurassic felsic rocks to Mount Dilworth Formation and a highly variable volcanic and sedimentary sequence to the Unuk River Formation. Both formation names have been dropped from usage in the area. Basal Jack Formation now incorporates much of the basal sedimentary sequence previously mapped as Unuk River Formation. The entire volcanic and volcanoclastic sequence from the Jack Formation to a distinct shift in style of volcanism in the lower Middle Jurassic is now assigned to the Betty Creek

Formation. This formation encompasses most of the rocks previously assigned to the Betty Creek and Unuk River formations, as well as some rocks previously assigned to the Mount Dilworth formation. Use of the Mt. Dilworth and Unuk River Formations is discontinued due to their poorly constrained definition.

Within the Betty Creek Formation, three members are defined. The *Unuk River Member* comprises andesitic composition volcanic and volcanoclastic strata, similar to the rock types included within the original definition of the Unuk River Formation by Grove (1986). The *Brucejack Lake Member* of the Betty Creek Formation consists of andesitic to dacitic pyroclastic, epiclastic, and flow rocks which stratigraphically succeed and may be in part laterally equivalent to parts of the Unuk River Member. The Unuk River and Brucejack Lake Members are overlain by marine sedimentary rocks of the *Treaty Ridge Member*.

Unuk River Member: Andesitic flows, breccias, and volcanoclastic rocks

Andesitic composition flows, volcanic breccias, and related epiclastic rocks overlying the Jack Formation are included within the Unuk River Member of the Betty Creek Formation. The Unuk River Member is well exposed throughout the eastern Iskut River area, with thickest, best exposed sections at Eskay Creek, Johnny Mountain, Treaty Creek, and Salmon Glacier. The thickness of the Unuk River Member varies substantially: coarse volcanic breccias locally form accumulations up to 2 km thick; these localized deposits may pinch out completely in distances of less than 5 km.

Lithology: The thickest and best preserved sections of the Unuk River Member are near Treaty Creek and in the Sulphurets area. In these locations, hornblende + plagioclase-phyric andesitic to dacitic flows and dark green volcanic breccias are intercalated with lapilli to block tuff, and lesser amounts of epiclastic sandstone and wacke. Volcanic breccias are monolithologic to slightly polyolithic, commonly contain vesicular clasts, and have a plagioclase-rich volcanic matrix. At Salmon Glacier, two distinct members are differentiable: a lower porphyritic andesitic volcanic breccia to block tuff (Unuk River formation of Alldrick, 1991), separated by plagioclase-hornblende-potassium feldspar megacrystic flows or sills from an upper, maroon, well bedded epiclastic conglomerate to sandstone member (Betty Creek Formation of Alldrick, 1991).

Contact Relationships: The Unuk River Member conformably overlies the Jack Formation in sections exposed at Eskay Creek, John Peaks, Salmon Glacier, and Treaty Glacier. At Johnny Mountain, the Unuk River Member forms the lowermost unit of the Hazelton Group and unconformably overlies the Triassic Stuhini Group. The upper contact is defined as a transition to either epiclastic dacitic rocks of the Brucejack Lake Member, or to marine sedimentary rocks of the Treaty Ridge Member.

Age: The age of the Unuk River Member is constrained by fossils collected

from bounding units, and by isotopic dating of volcanic flows at Johnny Mountain. An older limit of Upper Hettangian to Lower Sinemurian is provided by fossil collections from the underlying Jack Formation (described above). Treaty Ridge Member strata overlying the Unuk River Member at Eskay Creek and near John Peaks contain Upper Pliensbachian ammonites, bracketing the age of the former to Sinemurian or Pliensbachian. U-Pb zircon dates at Johnny Mountain corroborate this timing: Plagioclase-phyric dykes cutting dacite to andesite Unuk River Member flows have a U-Pb zircon age of 192 ± 3 Ma, while samples from the unit itself yield U-Pb zircon ages of 193 ± 3 Ma. Overlying felsic tuffs, correlated with the Brucejack Lake Member, provide a further bracketing constraint of 194 ± 3 Ma (M.L. Bevier, pers. comm., 1994).

Brucejack Lake Member: Felsic pyroclastic rocks and rhyolite flows

Dacitic to rhyolitic pyroclastic rocks, epiclastic rocks, and volcanic flows within the Betty Creek Formation are assigned to the Brucejack Lake Member. These rocks are well exposed in reference sections at Brucejack Lake, south of John Peaks, and Johnny Mountain. Dacites in the Granduc Mountain area are also included within the Brucejack Lake Member. Rocks previously mapped as Betty Creek Formation in its type area near the Salmon Glacier are included within the Brucejack Lake Member. The Brucejack Lake Member is not recognized in the north central part of the map area at Eskay Creek or between Snippaker and Harrymel Creeks. Near Granduc Mountain, the Brucejack Lake member comprises a megaclastic breccia and laterally equivalent lapilli tuff, which overlies bedded crystal to dust tuff and volcanic conglomerate. To the north, water-lain crystal and ash tuffs just south of John Peaks, and multiple thin cooling units of crystal-rich welded lapilli tuff at Treaty Creek are likely equivalents. Possible vent areas for the tuffs at Brucejack Lake comprise massive, flow banded dacite domes which grade outward into autobreccia and massive, hematitic mud matrix volcanic breccia, and potassium-feldspar megacrystic flow-banded flows. In the western Iskut River area at Johnny Mountain, dacitic to rhyolitic flows and welded lapilli tuff, which overlie the lower Hazelton andesite-dacite sequence form the Brucejack Lake Member.

Age: Numerous new U-Pb dates indicate that the early pulse of felsic volcanism in the Hazelton Group near Iskut River spanned a 5-10 million year period. The oldest age of 194 ± 3 Ma was obtained from flow rocks interlayered with lapilli tuff at Johnny Mountain. This section also represents some of the most felsic rocks included in the Brucejack Lake Member. Zircon extracted from bedded ash tuffs at John Peaks yielded a slightly younger U-Pb age of 190 ± 1 Ma (R. Anderson, pers. comm., 1994). Several other isotopic ages fall within the 185-188 Ma range: Vent-related dacite at Brucejack Lake yields U-Pb dates of 185.6 ± 1.0 Ma and 185.8 ± 1 Ma. Laterally equivalent potassium feldspar megacrystic dacite flows yield overlapping ages of $187.7 +5.8 / -1.5$ Ma.

Treaty Ridge Member: Upper sedimentary sequence

Heterogeneous sedimentary strata including sandstone, conglomerate, turbiditic siltstone, and limestone characterize the Treaty Ridge Member of the Betty Creek Formation. Many of the rock types of the Jack Formation are present in the Treaty Ridge Member, but the occurrence of clasts derived from Unuk River member volcanic rocks, and the absence of the distinctive granitoid clast conglomerate serve to differentiate the two units. In areas lacking strata of the Unuk River and Brucejack Lake Members, such as near the Bruce Glacier, the base of the Treaty Ridge member is difficult to establish. The Treaty Ridge Member varies from a few metres to several hundreds of metres thick. Thickest measured sections are present at Treaty Creek and Eskay Creek, while at Johnny Mountain the unit is non-existent. The most distinctive rock type within the unit consists of rusty brown to tan weathering, bioclastic sandstone and intercalated siltstone or argillite. At Salmon Glacier, this rock type forms a layer 2-3 m thick, and represents the total thickness of the Treaty Ridge Member. To the north at Treaty Ridge, the bioclastic unit is succeeded by a several hundred metre thick turbiditic mudstone to sandstone section. Bioclastic sandstones are also present in the Member at Eskay Creek and John Peaks, where they are interstratified with siltstone, arenitic sandstone, and heterolithic rounded cobble conglomerate. West of these areas, a thick, grey weathering, medium-bedded limestone and siltstone sequence is a probable stratigraphic equivalent.

Age: Abundant and diverse fauna within the Treaty Ridge Member which span Upper Pliensbachian to Upper Aalenian stages (Nadaraju, 1993) suggest that the unit records a long period of volcanic quiescence. Upper Pliensbachian ammonite collections provide age constraints at three locations. At Eskay Creek, bioclastic sandstones contain ammonites *Tiloniceros* cf. *Propinquum* and *Protogrammoceras*. A lithologically similar section at John Peaks and interstratified limestone and siltstone sections to the west at Lyons Creek both yield the Kunae Zone (Upper Pliensbachian) ammonite *Arietoceras* cf. *algovianum*. At Treaty Creek the base of the member is slightly younger: here diverse faunal collections from the bioclastic sandstone includes Toarcian belemnites (G. Jakobs, J. Palfy, pers. comm.). Higher in this same section, ammonites *Tmetoceras* cf. *Kirki*, *Leioceras*, and *Pseudolioceros* constrain an Upper Aalenian age for turbiditic mudstone and siltstone. Together, these fossil occurrences suggest that sedimentation spans the Upper Pliensbachian, the Toarcian, and most of the Aalenian stages, although no single section includes fauna diagnostic of all three stages. Isotopic ages in the Iskut River area are consistent with a magmatic gap in this time period.

Salmon River Formation: Bimodal volcanic unit

The upper part of the Hazelton Group in the Iskut River area comprises dacitic to rhyolitic flows and tuffs, localized interlayered basaltic flows, and intercalated

volcaniclastic intervals. Although these different rock types can easily be mapped separately on a property scale, their interfingering nature and lack of continuity dictate that they be grouped into a single unit for regional mapping purposes. This part of the Hazelton Group has attracted the most attention of geologists due to its association with mineralization at Eskay Creek, but at the same time its distribution, internal stratigraphy, and age are poorly understood. Previous workers have mapped felsic volcanic components as the Mount Dilworth formation, and mafic volcanic components as a distinct facies of the Salmon River Formation. These assignments become problematic with latest mapping constraints that demonstrate that locally more than one felsic horizon exists, and that mafic volcanic rocks occur both above and below these felsic intervals. The accompanying maps assign all Hazelton Group rocks above the Treaty Ridge Member to the Salmon River Formation, which is subdivided into the Bruce Glacier, Troy Ridge, Eskay Rhyolite, and John Peaks members.

Bruce Glacier Member:

The Bruce Glacier Member of the Salmon River Formation comprises widely distributed dacite to rhyolite flows, tuffs, and epiclastic rocks. These rocks vary from as little as a few tens of metres to over 400 metres in thickness, with thickest accumulations on the west limb of the McTagg Anticlinorium between the Bruce Glacier and the Iskut River valley. Lithofacies within the member are highly variable both regionally and vertically in a given section. Deposits proximal to extrusive centres include banded flows, massive domes with carapace breccias, autoclastic megabreccias, and block tuffs. Extrusive centres have been identified at several locations in the Iskut River area, including Brucejack Lake, Julian Lake (near the headwaters of Snippaker Creek) and Bruce Glacier. These felsic extrusive centres are characterized by thick, domal porphyritic centres, grading outward to flow breccias and talus piles. Slightly to densely welded lapilli to ash tuffs characterize more distal equivalents. Reworked tuffs locally form thick epiclastic accumulations and may fill in paleobasins adjacent to extrusive centres.

Troy Ridge Member:

Sedimentary and tuffaceous sedimentary rocks of the Salmon River Formation are assigned to the Troy Ridge Member. This member includes the distinctive black and white striped strata, known as the pyjama beds, present at Salmon River and to a lesser extent in northern parts of the area and the mineralized contact zone mudstone at Eskay Creek. Contact relations with other Salmon River Formation members are variable: for example, at Eskay Creek the member lies above the Eskay Rhyolite and Bruce Glacier Members, but below the John Peaks Member. At Julian Lakes the member is interstratified with rocks assigned to both the John Peaks and Bruce Glacier members. These types of stratigraphic relationships suggest that the Troy Ridge Member represents sediments

accumulated during breaks in local volcanic activity.

John Peaks Member:

Mafic components of the Salmon River Formation, assigned here to the John Peaks Member, are localized in their distribution and are missing from much of the Iskut River area. Generally they occur above the felsic members (Bruce Glacier and Eskay Rhyolite), but at Treaty Creek thick sections of mafic flows and breccias lie below welded tuffs of the Bruce Glacier Member. Mafic sections are thickest at Mount Shirley and near the mouth of Sulphurets Creek, and form intermediate thicknesses at Eskay Creek and Johnny Mountain. Textures present include massive flows, pillowed flows, broken pillow breccias, and volcanic breccias. Plagioclase phenocrysts up to 2 cm long are characteristic of the pillowed sequence south of John Peaks. At Treaty Glacier the mafic component grades upward from pillowed and massive flows into broken pillow breccia, and finally, hyaloclastite matrix supporting abundant irregular globular volcanic fragments.

Eskay Rhyolite Member:

Rhyolite flows, breccias, and tuffs in the Eskay Creek area are assigned to the Eskay Rhyolite Member of the Salmon River Formation. Although this rhyolite is lithologically similar to some exposures of the Bruce Glacier Member, particularly in the Virginia Lake region, it can be distinguished geochemically on the basis of an Al:Ti ratio of greater than 100. At Eskay Creek, the member forms a distinct mappable unit overlying the Bruce Glacier Member and underlying the John Peaks Member, with thicknesses of up to 250 m.

Age: Age constraints for the Salmon River Formation include U-Pb zircon ages from the Bruce Glacier Member and fossil collections from intercalated sedimentary sections assigned to the Troy Ridge Member. Because of the interfingering relationships of the different members these determinations are interpreted as being representative of the entire formation. U-Pb zircon dates obtained from the Bruce Glacier Member bracket the age of the unit to around 172-178 Ma. At Bruce Glacier, a U-Pb age of 176.2 ± 2.2 Ma has been obtained from flow-banded dacites near the base of the section. Stratigraphically equivalent flows across the Unuk River valley have yielded a U-Pb age of $173.6 \text{ Ma} + 5.6/-0.5 \text{ Ma}$ (Childe, 1994). In the Snippaker Creek area, two U-Pb ages fall within this same range: $172.3 \pm 1.0 \text{ Ma}$, and $178.2 \pm 5.0 \text{ Ma}$. Fossil collections from within the Troy Ridge Member are consistent with U-Pb age determinations of adjacent rocks, but are problematic when compared to biochronological constraints from the underlying Betty Creek Formation. Fossil collections at Eskay Creek indicate a middle Bajocian age for the unit, while slightly older Upper Toarcian ammonites have been collected from the Julian Lakes area. This Toarcian age is older than Upper Aalenian ammonites from the

Treaty Ridge Member at Treaty Ridge, indicating that either formations are diachronous across the map area, or that units at Julian Lakes should be reassigned to lower positions.

Bowser Lake Group – Middle Jurassic

The Middle and Upper Jurassic Bowser Lake Group (Map Unit JrB) contains the youngest Mesozoic strata in the claim area. In general, the Bowser Lake Group consists of a thick succession of shale and silty mudstones (JrB3), with local buff sandstone interbeds (JrB2), lesser amounts of interbedded chert rich conglomerate and polymictic conglomerate (JrB3).

It conformably or paraconformably overlies Hazelton Group rocks. In many areas the boundary between Bowser Lake and Hazelton Group rocks is unclear and is not defined. In general, the presence of a volcanic component in the sediments indicates rocks belonging to Salmon River Formation of Hazelton Group.

Rich faunal collections from Bowser Lake Group turbiditic mudstones in the Prout Plateau define a Bathonian to Callovian age for lowest exposed stratigraphic levels. Outside of the Iskut River map area, Kimmeridgian faunas are characteristic of higher stratigraphic levels.

Intrusions

Mesozoic intrusive activity in the Stewart-Iskut area occurred in two major intervals: Late Triassic pulse and an extended Early to Middle Jurassic plutonism. Anderson (1989, 1993) suggests that Triassic and Jurassic intrusive active in the Iskut River area can be divided into 5 temporal cycles. However, additional geochronology (MacDonald, 1996) indicates the temporal suites are as follows:

- Late Triassic (228-221 Ma) Stikine Plutonic Suite related to the building of a Late Triassic volcanic arc.
- Early Jurassic (195 –180 Ma) Texas Creek Plutonic Suite related to an Early Jurassic volcanic arc that was coeval to Betty Creek Formation volcanics.
- Early to Middle Jurassic (180-170 Ma) intrusions that are related to the upper division of the Hazelton Group, the Salmon River Formation. Further west and north, intrusions of the Three Sisters plutonic suite are possibly correlative.

In the area to the Tag West and Tag East claims, mafic dykes and felsic intrusions (JrF) that are controlled by syn-mineralization faulting at Eskay Creek

are classified with the latest pulse of magmatism. Other intrusions, such as alkali feldspar-plagioclase-hornblende porphyry (JrP) that are hosted by Betty Creek, are likely related to the either latest pulses of Betty Creek volcanism or to Salmon River volcanism, on the basis of intrusive relationships and composition. The Eskay Porphyry (JrP) which is located proximal to the footwall of the 21 Zone is a grey-green, plagioclase \pm K-feldspar \pm hornblende \pm biotite porphyry with up to 50% coarse to fine-grained phenocrysts in an aphanitic groundmass. It is a hypabyssal stock of dacitic or granitic composition; 186 ± 2 Ma U/Pb (zircon) age (MacDonald et al, 1992; Ghosh, 1992) and is correlative with the Early Jurassic pulse of magmatism.

Structure

Polyphase deformation affects rocks that are older than Late Cretaceous, and crustal scale faults affect rocks in the Iskut area as young as Tertiary. Early and middle Devonian rocks within the Iskut area have been subjected to up to four phases of folding and deformation. Mid-Carboniferous to Early Permian rocks record as few as two phases of deformation, whereas the Late Triassic and Jurassic strata record no more than two phases of deformation in addition to a regionally important post-Norian unconformity.

Mid-Devonian, northeast-verging structures correspond to a northern Cordilleran-wide event correlative with the Antler Orogeny of the southwest U.S. and Ellesmerian Orogeny in the arctic. Pre-Norian, Permo-Triassic (Tahltanian Orogeny) deformation was accompanied by upper greenschist facies metamorphism.

Early Jurassic (circa 185 Ma) deformation broadly warped and folded the rocks into upright, open structures and correlate with the beginning of the formation of the foredeep basin of the Bowser Basin.

Late Jurassic to Tertiary contraction produced northeast-verging structures related to development of the Skeena Fold and Thrust Belt.

The youngest structures record east-west extension and northerly translation, thought to post-date the Eocene. The Late Paleozoic and Mesozoic volcanic and plutonic rocks within the Iskut area are characterized by metal deposits related to island-arc volcanic centers.

Mineral Deposits and Occurrences

Iskut River Area

The Iskut River area is mineralized with a diversity of mineral deposit types. Most of the mineralization occurred in Lower to Middle Jurassic time and is

spatially associated with contemporaneous intrusions. Significant deposits and/or producers include:

1. Eskay Creek (to December 31, 1998): Total production and proven-probable reserves are 1.9 million tons (Mt) at 60.2 g/t Au, 2,652 g/t Ag, 3.2 percent Pb, 5.2 percent Zn, and 0.7 percent Cu from a stratabound sulphide-sulfosalt deposit.
2. Snip Mine (now closed) opened in 1991 with reserves of 960,000 tons of 28.5 g/t Au from a shear-hosted gold vein.
3. Johnny Mountain Mine or Stonehouse (1988 to 1991) that produced 207,000 tons grading 14.1 g/t from an epithermal stockwork deposit.

The region also contains the near surface, sulphidation Treat Glacier deposit (Au only) and porphyry deposits at Sulphurets and Snowfields (Au); Mitchell, Red Bluff (Cu-Au-Mo).

The above deposits are all related to the intrusions and volcanism of the Early Jurassic (195 –180 Ma) and Early-Middle Jurassic (180-170 Ma) magmatism.

The Granduc Mine, located south of the claim area on the South Unuk River, was a significant producer of copper from a volcanic-exhalative massive sulphide deposit hosted by highly-deformed, Late Triassic age dacites and basaltic andesites.

Eskay Mine

The Eskay Creek deposit is an unusual, polymetallic, Au-Ag-rich massive sulfide-sulfosalt deposit located on claims adjacent to the Tag East claim group. Economic concentrations of precious and base metals are contained in the 21 Zone, which is divided into a number of subzones.

As of December 31, 1998, total production and proven-probable reserves are 1.9 million tons (Mt) at 60.2 g/t Au, 2,652 g/t Ag, 3.2 percent Pb, 5.2 percent Zn, and 0.7 percent Cu. The 21B zone, which contains the bulk of the reserves, began production in 1995. The mineralization occurs mainly as well-preserved stratabound breccias of sulfide-sulfosalt and also as discordant footwall quartz sulfide veins.

Mineralization at Eskay Creek is inferred to have formed at, or near, the sea floor in a relatively shallow-water setting. Significant quantities of gold-silver mineralization occur within crosscutting structures to, and as irregular stratabound replacements of earlier sulphide mineralization.

GEOCHEMICAL SURVEY

Design of the Survey

Sampling for this survey was conducted at sites characterized by active stream channels containing a range of coarse, immature sediments, dominated by gravels, cobbles and boulders. Sampling of high energy sites contrasts with the standard stream sediment sampling procedure where silt and/or clay are collected from accumulation sites associated with more quiet-water sedimentation.

Gold deposits are targeted by this survey and gold is the primary pathfinder element employed in the survey. Sampling the high-energy environment is especially important in gold exploration. Currently, three basic sampling/analytical methods are employed by industry to sample the high energy environment (details are given in the section following and in Appendix I):

1. **Bulk Leach Extractable Gold (BLEG) Surveys**, yielding a gold determination from a large sample of sieved sediment (typically, minus 20 mesh material). BLEG sampling is selective to native gold particles and gold within oxides.
2. **Sieved Silt Surveys**: Large amounts of high-energy sediment are sieved to obtain a coarse sand and silt sample (minus 20 mesh) that is later sieved to minus 80 mesh and analyzed for gold and multi-elements. Analysis is by a large, 30g sub-sample, aqua-regia digestion and ICP-MS. All gold in native form and within oxide and sulphide minerals is determined. The ICP-MS determines a suite of elements that assists in interpretation.
3. **Heavy Mineral Surveys**: Sieving of large amounts of high-energy sediment to obtain a coarse fraction that is sieved in the laboratory and separated by density and magnetic properties into various combinations of size, density and magnetic fractions. Determination of gold is by ICP-MS and/or INAA on each of the heavy, nonmagnetic fractions.

Local stream drainages are developed in bedrock and in areas of incised colluvium, glacial till and glaciofluvial outwash deposits. In this survey, gravel bars within active stream channels were sampled at the appropriate location (Fletcher, 1990) – at the bar head. Fletcher (Fletcher and Wolcott, 1989) has demonstrated that gold is mainly transported during freshets when bar sediments are eroded and later re-deposited. Sampling of freshet deposits requires a vertical profile be sampled. Erratic winnowing of, and re-deposition

of light sediments at the surface of the bars also necessitates sampling at depth.

The high-energy environment provides the best setting for obtaining the needed consistent quantities of physically transported gold, sulphides and other heavy mineral materials, especially in recently glaciated terrains, such as Iskut River / Unuk River area. The same high-energy sediments contain precipitates of hydromorphically-transported iron, base metals and gold.

Their high-energy stream environments contain products of both hydromorphically dispersed gold and base metals, and physically transported grains of gold, iron oxide and partly weathered sulphides.

Comments on cut-off samples and samples required for dispersion trains.

Collection Methods

The samples were collected by carefully shoveling the sediments into a -20 mesh stainless steel sieve (diameter 36 cm, depth 17 cm) that rests in a large aluminum pan containing water. Some liquid detergent was added to the wash water to prevent flotation of small metallic mineral grains. Using handles on the sieve, a rotary-type motion like a washing machine was used to sieve the sediments.

The priority in this survey was to collect sufficient sample for bulk leachable-gold analysis (BLEG). The BLEG sample was collected first from the hole opened in the streambed. After the BLEG sample was collected and bagged, the sampler returned to the dug hole and widened it for "Sieved Silt" and Heavy Mineral samples.

In this manner sufficient material was collected at each site for 'Sieved Silt', bulk leachable-gold (BLEG), and/or Heavy Mineral samples. The sieve and pans were carefully cleaned between samples to prevent contamination.

Not all the sites were suitable for the collection of sufficient -20 mesh sample for each of the techniques. If the BLEG sampling was consuming too much time and/or insufficient sample was being obtained, the sampler aborted the collection procedure. The sample that was collected was bagged and placed in the "Sieved Silt" sample collection. Heavy Mineral samples were the lowest priority in the survey. Time constraints and sample site restrictions dictated the large level of effort for taking all three sample types be restricted to those sites on the larger drainages or to those sites that samplers encountered sufficient quantities of the -20 mesh material without extensive digging.

Methods of Sample Preparation and Analysis

In total, 72 Sieved Silt samples and 66 BLEG samples were collected and sent to Acme Analytical Laboratories, in Vancouver, BC, for sample preparation and analysis. Heavy Mineral samples, totaling 12, were sent to C.F. Mineral Research, in Kelowna, BC, for the preparation of heavy mineral concentrates.

BLEG Samples

All the -20 mesh material was treated to a cyanide leach. More information is available in Appendix I and the results are shown in Appendix II.

Sieved Silt Samples

The Sieved Silt samples were sieved to -80 mesh and, following aqua regia digestion, were analyzed by ICP-MS techniques. Gold and multi-element determinations were made. Notably, the sub-sample for digestion and analysis was 30 g in most cases. Details of analytical techniques are described in Appendix I and the results are shown in Appendix III.

Heavy Mineral Samples

The Heavy Mineral samples were wet sieved, then subjected to a 2.96 specific gravity (intermediate) heavy liquid separation, followed by a 3.27 specific gravity (heavy) separation. More information on the concentration process is available in Appendix I

The intermediate and heavy fractions were then separated by magnetic susceptibility into magnetic, paramagnetic and nonmagnetic fractions. The weights of the various fractions produced are shown in Appendix IV.

The heavy nonmagnetic (HN) fractions were sent to Activation Labs of Toronto for analysis. The heavy paramagnetic (HP), intermediate paramagnetic (IP) and the clay-sized (-400L) fractions were sent to Acme Labs of Vancouver for analysis. At both labs the -35+60 fractions were pulverized before analysis. More information on the analytical techniques is available in Appendix I.

Methods of Interpretation of Results

BLEG and Sieved Silt Data Interpretation

The results from the analysis of **BLEG** and **Sieved Silt** samples were reviewed and outliers from two samples sites that were not representative of natural geological materials were rejected. The data for those sites are not presented herein. Data for the remaining samples was compiled into the tables presented in Appendices II through IV. The samples, comprising 66 BLEG and 72 Sieved Silt samples were studied using frequency diagrams, cumulative frequency diagrams and Pearson Correlation Coefficients of the arithmetic and log-normalized values.

Bedrock geology and geomorphology vary between significantly between the sites sampled. Insufficient samples are present in each of the major areas of bedrock geology to derive statistically valid determination of populations, especially for identification of background populations. However, the merged samples sets from all domains show crudely separate element sample populations that are indicative of broad areas of uninteresting geology and several areas of higher, potentially anomalous results that merit follow-up with additional sampling.

A detailed interpretation of the multi-element Sieved Silt results is not warranted for this number of samples. Significant patterns appear in the results for gold, silver, copper, lead, zinc, antimony, arsenic, mercury and tellurium. The results of the interpretation are summarized in Table 1 - background and anomalous values are shown.

An underlay of the regional geology and the mineral claims are shown on all the Sieved Silt and the BLEG maps, as aids to interpretation and location.

Heavy Mineral Data Interpretation

The heavy mineral stream sediment survey was designed as an orientation of the geochemical response on the terrain of the Tag West and Tag East claim groups. It was not intended to evaluate the mineral potential on the claims. The emphasis of the interpretation is on the determination of useful heavy mineral fractions to aid in future exploration in the area.

Results from the fraction weighing, neutron activation analysis (INAA) and ICP-MS analysis are compiled and presented in Appendix IV.

Table 1: Partitioning of BLEG and Sieved Silt Sampling Results

Element-Sample Type - Units	Background Population	Mixed Population	Anomalous	Upper Anomalous	Notes
Au-BLEG-ppb	<0.5	0.5 to <2.5	2.5 to <10	10+	Insufficient samples & large range, anything above 1 ppb is interesting. Some samples in the range .5 to 1 ppb are correlative with other elements and geology
Au-Silt-ppb	<6.0	6.0 to <16	16 to <50	50+	Anomalous/Upper Anomalous is poorly defined –insufficient samples but results down to 6 ppb correlate with BLEG and other geochemistry.
Ag-Silt-ppm	<0.27	0.27 to <0.50	0.50+		
Cu-Silt-ppm	<45	40 to <73	73		Three populations
Pb-Silt-ppm	<17	17 to <39	39+		
Zn-Silt-ppm	<158	158 to <316	316+		No clear Anomalous. Above 300 correlates with geology.
As-Silt-ppm	<22	22 to <69	69+		Broad mixed population
Sb-Silt-ppm	<2.5	2.5 to <7.0	7.0+		2.5 to 7.0 is upper background population
Hg-Silt-ppb	<158	158 to <316	316+		Three populations, corresponding to two background population and an anomalous population above 316.
Te-Silt-ppm	<0.10	0.10 to <0.56	0.56+		Very low background population, some samples are anomalous above 0.56. Correlates somewhat with gold

A table in Appendix IV summarizes gold, silver, copper, lead, zinc, cadmium, arsenic, antimony, mercury and barium anomalies. The use of the term 'anomalous' is not based on a statistical analysis, due to the small number of samples. Its use is intended to convey the relative significance of certain sample site results relative to other sample site results.

Four samples had insufficient material to analyse in the -35+60 HN fraction and two of these samples had insufficient material in the -35+60 HP fraction. As a result, the interpretation used the calculated -35+150 HN fraction in determining anomalies.

Generally the heavy nonmagnetic (HN) fractions are the most useful, but the heavy paramagnetic (HP) and the intermediate paramagnetic (IP) fractions can also be of importance. The purpose of producing and analysing all these fractions is to determine which fraction(s) is best suited for geochemical exploration in the area. A fraction containing a higher concentration of an element and showing the best contrast of anomalous versus background values, meets these criteria.

The issue in heavy minerals of whether to report concentration values or weight values is addressed under the gold results section. In most cases, the concentration values are reported for elements other than gold. However, one should be aware of concentration values for significantly small or large fraction weights. For example, sample H03 has 982 g of heavies while samples H05 and H07 have 55 g and 63 g of heavies, respectively.

If weights are low and concentration values low, or if weights are high and concentration values high, then there is no need to adjust the results. However, if the converse is true, some further evaluation of the results is needed. For example, the -60+150 HN fraction in sample H07 weighs only 0.6 g, but contains highly anomalous concentrations of zinc (35,400 ppm) and copper (5,800 ppm). In this case, anomalous values for both concentration and weight values need to be determined, with the concept that both have to be anomalous. If any such determinations are needed, they will be discussed under the appropriate element results below.

An underlay of the regional geology and the mineral claims are shown on the Heavy Mineral maps, as aids to interpretation and location.

BLEG Sample Results

The analytical results are compiled in Appendix II, with the gold values plotted on a 1:20,000 map (Figure 4). The results of the BLEG interpretation are summarized in Table 1— background and anomalous values are shown.

The interpretation indicated a background population of <0.5 ppb gold. This report deems values of 2.5 ppb and higher as anomalous. Values from 0.5 to 2.4 ppb are a mixed population, and in some areas are peripheral and/or downstream from anomalous drainages. For example in Area One and Area Two: Tag West Group.

The anomalous values cluster well, with 5 of the 10 anomalous samples forming a group of contiguous drainages.

The anomalous BLEG values do not persist very far downstream. On all four anomalous creeks with downstream samples, the downstream sample is more than a magnitude less, that is, < 10% of the anomalous value, within 400 to 600 metres.

Sieved Silt Sample Results

All the analytical results are compiled in Appendix III, with results for the following elements plotted on a 1:20,000 maps (Figures 5 – 13). The results of the interpretation of the Sieved Silt values are summarized in Table 1 – background and anomalous values are shown.

Gold

Background values are < 6 ppb, with > 15 ppb being anomalous. Values of 50 ppb or more are more significantly anomalous.

The anomalous values cluster well, with 7 of the 12 anomalous samples forming groups of 3 and 4 contiguous drainages.

Similar to the anomalous BLEG values, the anomalous values do not persist very far downstream. On three of four anomalous creeks with downstream samples, the downstream sample is more than a magnitude less, that is, < 10% of the anomalous value, within 400 to 600 metres.

Silver

Background values are < 0.270 ppm, with 0.500 ppm or more being anomalous.

The values between background and anomalous may be of significance.

The anomalous values cluster well, with 4 of the 7 anomalous samples forming a group of contiguous drainages.

The contrast between background and anomalous is low, but samples downstream from anomalous values are either still anomalous or are in the possibly significant population. This is in marked contrast to the gold geochemistry.

Zinc

Background values are < 158 ppm, with >315 ppm being anomalous. The contrast between background and anomalous is low, although the anomalous values cluster well. Nine of the 14 anomalous samples form a group of contiguous drainages.

Lead

Background values are < 17 ppm, with > 38 ppm being anomalous. There are 7 anomalous samples and they do not cluster well, as do some other elements.

Copper

Background values are < 45 ppm, with > 72 ppm being anomalous. The contrast between background and anomalous is low, although the anomalous samples cluster well. Six of the 12 anomalous samples form a group of contiguous drainages.

Antimony

Background values are < 2.5 ppm, with > 6.9 ppm being anomalous. Seven of the samples are anomalous. The contrast between background and anomalous is moderate. The anomalous samples do not cluster well, as do some other elements.

Arsenic

Background values are < 22 ppm, with > 68 ppm being anomalous. Of 6 anomalous samples, 3 form a group of contiguous drainages.

Mercury

Background values are < 158 ppb, with > 315 ppb being anomalous. The

anomalous values cluster well, with 13 of the 17 anomalous samples forming groups of 7, 3 and 3 contiguous drainages. This clustering is due in part to the downstream dispersal of anomalous values. In all four cases of anomalous samples with downstream samples, the downstream samples are also anomalous.

Tellurium

Background values are < 0.10 ppm, with > 0.55 ppm being anomalous. The contrast between background and anomalous is good. All four anomalous samples form a cluster of contiguous drainages.

Heavy Mineral Sample Results

The heavy mineral stream sediment survey was designed as an orientation of the geochemical response on the Eskay project. It was not intended to evaluate the mineral potential on the Eskay claims. The emphasis of the interpretation will be the determination of useful heavy mineral fractions to aid in future exploration in the area.

The median values and the geometric mean values, Appendix IV, show a consistence trend for copper, lead, zinc, cadmium, arsenic, antimony and mercury – the coarse size fractions (-35+60) have the highest concentration within each type of fraction. Also, the concentration values increase among the types of fractions, from IP to HP to HN.

Samples # 4, 5 and 7 contained notably small amount of heavy minerals.

Often the different values among fractions of the same sample can indicate different mineralogy. For example, the zinc values in the HN fractions are likely zinc-bearing sulphides, while zinc in the HP and/or IP fraction can indicate secondary, due to weathering, zinc minerals such as hemimorphite. The same sulphide/oxide partitioning can occur in other elements. However, the results from this orientation survey indicate that in general sulphides are predominant over secondary oxide minerals. Exceptions do occur, for example, compare the arsenic values in HN versus HP fractions for samples # 2 and # 3. But, interpreting these results can be complicated by the presence in the HP fraction of non-weathered pyrrhotite.

The Heavy Mineral gold, lead, zinc, mercury and barium results are plotted on 1:20,000 maps – Figures 14 through 18.

Fractions Obtained

A total of 25 fractions were produced for each sample – see table in Appendix IV. Nine heavy mineral fractions per sample site were analysed, as well as a clay-

sized, light fraction. All the results are shown in Appendix IV.

Gold

The INNA results of the -150HN fraction were chosen to best identify areas of gold mineralization. Fletcher and Day (1988) have demonstrated that coarser fractions often indicate stream hydraulics, that is, placering effects instead of indicating gold mineralization.

INNA analysis was used over fire assay methods for two reasons: the method is more accurate for small samples and the method is non-destructive, allowing for additional analysis of the same sample material. The entire fraction was analysed by INAA, even if sub-samples were needed. This prevented the problematic situation of trying to make homogeneous splits of small concentrates. Note that the problem is apparent in the ICP-MS results on the HN fractions. In this analysis only 0.5 g of material was used. Sample # 23 is the best example, where the 0.5 g analysis results, in ppb, are only about 1 % of the total sample yield.

The weight of gold in micrograms (ug) in the -150HN fraction is the preferred value to use in interpreting the results. The amount of gold present is more significant than the concentration of gold in the concentrate, which can vary significantly depending on the presence or absence of other heavy minerals. The only constrain on using micrograms of gold is that the concentration level must be above a threshold level – in this survey about 500 ppb Au. Values > 2.5 ug gold is deemed to be anomalous for this survey. Both the weight and concentration of gold are shown on Figure 14.

Three strongly, 2 moderately and 1 possibly anomalous sites occur in the 150HN fraction. Five of these sites (#3, 4, 21, 22, 23) are situated in the Storie Creek area. These drainages are contiguous, over a distance of 9 km. The other anomalous catchment is on the east side of Area Two.

Silver

The highest silver values tended to be in the coarser size fractions, except where there was significant gold in the sample – then the -150HN fraction was highest. Silver values > 3.0 ppb in either the coarse or the fine fraction are anomalous.

Copper

Copper values > 350 ppm in the -35+150HN fraction are anomalous. Note that although sample #4 contained 5800 ppm in the -60+150HN fraction, the sample is not anomalous – the very small fraction weight produces a non-anomalous amount of copper in the sample.

Lead

Lead values > 150 ppm in the -35+150HN fraction are anomalous.

Zinc

Zinc values > 900 ppm in the -35+150HN fraction are anomalous.

Antimony

Antimony values > 25 ppm in the -35+150HN fraction are anomalous.

Arsenic

Arsenic values > 150 ppm in the -35+150HN fraction are anomalous.

Mercury

Mercury values > 1500 ppb in the -35+150HN fraction are anomalous.

Barium

The INNA results indicate the presence of barite, which is not digested by aqua regia in the standard ICP-MS method. Barium values > 30000 ppm in the -35+150 HN fraction are anomalous. The barite is likely sedimentary in nature and appears to be associated with particular rock units.

Comparison of Results

Comparisons of Gold In BLEG vs. Gold in Sieved Silt Samples.

Gold in Sieved Silt and gold in BLEG samples confirm each other's reliably, although the two methods are not measuring the same mineralogy or the same size of stream sediment. Almost all gold results in BLEGs greater than 1.6 ppb are confirmed with gold in Sieved Silts greater than 16 ppb. The approximated ratio ranges from 1:5 to 1:10 BLEG vs. Sieved Silts. Each are confirmed with a moderate correlation with silver, antimony, arsenic and mercury results. A nugget effect appears to occur in the Sieved Silt gold results, which display a wider range of values than the BLEGs and somewhat weaker correlation with other elements.

The nugget effect is not as pronounced for BLEG samples in this survey, where 2 to 7 kg were leached. However, the leaching only extracts free or loosely

bound gold, not gold tied up in other mineral grains. In areas of the world with deep oxidation, BLEG samples are potentially more useful, especially when sampling regoliths. Also, note that the BLEG samples are only analysed for gold.

However, when sampling stream sediments in glaciated areas, the use of a fine size fraction and the analysis of gold-bearing minerals are important advantages of the Sieved Silt and Heavy Mineral methods.

In large-scale stream sediment surveys for gold, heavy mineral methods are usually better than sieved silt or BLEG surveys. The nugget effect problem is a problem in silt surveys where up to only a 30 g sub-sample is analysed. Reproducibility of results can be a problem.

There is a place for BLEG and/or Sieved Silt sampling in place of heavy minerals: in small immature-sediment drainages. Here the mineral grains often have not had sufficient erosion/weathering to liberate the fine-grained gold or gold-bearing particles. This situation usually occurs in follow-up surveys. A review of the field notes in this survey, indicates that the vast majority of stream sediment samples were relatively mature. Within the project area, some stream sediments contain few fines. In these areas, for cost effective reasons, silt and/or BLEG methods can be more practical than heavy mineral methods.

Gold in Heavy Mineral Samples

The small number of heavy mineral samples and non-coincidental samples make it difficult to compare results of the three methods used. To note the coinciding of sample types, refer to Figure 3, which shows all the sample locations. Of the 6 'anomalous' -150 HN sites, 3 were not anomalous in either silt or BLEG. This can be explained by the reasons mentioned above, and also by the indication that the heavy minerals detect gold further downstream than do silt and BLEG methods; for example, sample #22, downstream from #3. By choosing a very specific fraction, based on grain size, specific gravity and magnetic susceptibility, the mineral heavy method is more sensitive in detecting gold.

Due to this increased sensitivity, the sample density of a heavy mineral survey can be significantly lower than by using other geochemical methods. In surveys, such as this one, where transportation costs are a high percentage of the budget, the less the sites the less expense the survey. This helps balance the higher costs of processing the heavy mineral samples.

As well as the above-mentioned advantages of heavy minerals, the contrast between anomalous and background is often much greater with heavy minerals. This makes interpretation easier and more reliable.

Interpretation of Geochemical Anomalies

Area One: Tag West Group

Area One is comprised of the Fred 15/Noot 3 claim area (see Figure 19). Anomalies lie on the fringes of the Prout Plateau, in an area underlain by a veneer of glacial till and outwash. The streams are poorly developed and have low gradients.

On the Fred 15 claim, there is a single-sample Sieved Silt gold-silver-arsenic anomaly that is confirmed with BLEG gold. On the Noot 3 there is a one- to three-sample gold-lead anomaly.

There is one Heavy Mineral sample (# 7) on the Fred 15, with an area of <0.5 km². This sample is anomalous in zinc and cadmium.

The bedrock geology is Salmon River Fm. basalts, felsic volcanics and sediments and Betty Creek volcanics that are cut by northwest trending faults. Gold anomalies, especially these that are partly confirmed with silver and arsenic (and lead) warrant follow-up for fault-hosted and stratabound gold mineralization. Significantly, all the anomalies drain areas with John Peak (mafic volcanic rocks and sediments) and Bruce Glacier (felsic volcanic) Member rocks. The Fred 15 anomaly is especially interesting due to its correlation with silver and arsenic.

Area Two: Tag West Group

Area Two is comprised of the Noot 2 and 4, Rambo 1 and 3, and the Aftom 18 and 20 claims (see Figure 19). Anomalies lie in streams draining Prout Plateau and the ridge of the Sib claims. The main drainage is Coulter creek, which deeply incises a blanket of glacial outwash deposits. Smaller drainages are located on the Aftom 20 claim and cut a veneer of till and talus deposits. These short creeks drain the slopes above the west side of the Inuk River.

The western boundary of Area Two approximates Coulter Creek, which coincides with the middle of a 1 km wide north-south band of Bowser Group rocks and the trace of the Coulter Creek thrust fault. The eastern boundary of Area Two is the Unuk River. Area Two straddles the Eskay Creek Anticline that contains Jack Formation sediments (JrH1) and Betty Creek Fm.-Unuk River Member volcanics (JrH2) in its core, flanked on both limbs by Salmon River Fm. felsic volcanics and sediments. Small dykes and stocks of Jurassic porphyry, in part correlative with sub-volcanic intrusion coeval with Eskay Member volcanics, intrude the area.

The western limb of the anticline is truncated by the Coulter Creek thrust.

However, a narrow band of Salmon River Fm. volcanics and sediments hosts the important Lulu Zone (300 m west of South Zone) that lies just east of Coulter Creek, on the Sib property.

A cluster of nine contiguous drainages, anomalous in zinc, is restricted to a narrow north-south area at the western edge of Area Two. It appears that the source of the zinc anomaly is the base of the Bowser Lake Group and/or Salmon River Fm. rocks near the Bowser Lake Group contact.

Marked by the prominent zinc anomaly on the west, are clusters of anomalies in other elements that define a clear zonation of stream geochemistry in Area Two:

- Slightly overlapping the zinc anomaly, but mainly to the east, is a cluster of five contiguous drainages anomalous in gold, both in Sieved Silt and BLEG samples. A silver anomaly corresponds to the gold anomaly.
- Somewhat overlapping the gold-silver anomaly, but mainly to the east is a cluster of seven contiguous drainages anomalous in mercury.
- Overlapping the eastern edge of the mercury anomaly are three contiguous drainages anomalous in arsenic. Four contiguous drainages, anomalous in tellurium, overlap the arsenic anomaly.
- Overlapping the arsenic-tellurium anomaly, but extending easterly is a cluster of six contiguous drainages anomalous in copper. The eastern portion of this anomaly includes a southeast-draining tributary of the Unuk River. This drainage is also variably anomalous in mercury, arsenic, lead, zinc, antimony and gold.
- Antimony and lead do not form large clusters of contiguous drainages. In the western portion of this area they are loosely associated with the anomalous arsenic, mercury, gold and silver values.

Taken together, the BLEG and Sieved Silt surveys shows a marked west to east geochemical zonation; from zinc in the west, passing eastward to gold-silver, mercury, arsenic-tellurium, copper. The zonation marks the passage down-section in the Salmon River/Betty Creek section. The zonation is asymmetrical and most likely reflects zoning related to rocks on the western limb of the Eskay Anticline that contain possible stratabound mineralization in Salmon River formation of the Sib property and underlying cross-cutting veins systems located on the Noot 2 and Aftom 20 claims.

Provisionally, the geochemical anomalies appear to have little contribution from the rocks within the eastern limb of the Eskay Creek anticline. Few suitable sample sites were available on that limb and closer spaced sampling might revise the interpreted pattern.

There are three Heavy Mineral samples in this area. Coulter Creek and tributaries (sample # 24), the largest catchment, is a zinc-cadmium-silver-arsenic-antimony-copper-barium anomaly. Sample # 4, draining into Eskay Creek, is a gold-barium anomaly.

Area Three: Tag East Group

Area Three is comprised of Storie Creek and tributaries lying on the southeast side of the creek on the Aftom 7, 16 and 19, Pole 13, Bell 5 and 7, and Lance 3 claims (see Figure 19).

Four samples are anomalous: one gold-copper-mercury, one gold-copper and two copper. The gold anomalies are both at Sieved Silt and BLEG sites.

There are five Heavy Mineral samples in this area, all anomalous in gold. Samples along Storie Creek (#1, 23) are gold and gold-silver-lead-mercury anomalies. Sample # 21, draining Atom 19 and Polo 13 claims, is a gold-silver-antimony-arsenic anomaly. The samples (#3, 22) on the Lance 3 claim give an upstream gold-lead-arsenic-antimony-mercury anomaly and a downstream gold-silver-copper-lead-zinc-cadmium-arsenic-antimony-mercury anomaly.

Taken together, the results indicate that a source area lies in a northeast trending belt trending parallel to Storie Creek. Small drainages have gold in BLEG, Sieved Silt and Heavy Mineral samples. The larger Storie Creek responds in the Heavy Mineral sampling. The gold geochemistry indicates that the source is in the rocks at or stratigraphically below, the Salmon River formation – John Peaks basalts and Bruce Glacier Member felsic volcanic rocks.

Other Anomalous Sites

On Eskay Creek, there is a two-sample silver-zinc-antimony-arsenic anomaly. The upstream cut-off sample is anomalous, indicating that the anomaly source lies upstream of the claim group. Eskay Creek drains a linear zone of Betty Creek and Salmon River formation rocks that contain the Mackay Adit and the 21A zone and footwall veins and alteration.

In the northeast portion of the project area, on the Bell 2, Calvin and Irving 1 claims, there is a three-sample mercury anomaly (draining Hazelton and Bowser Groups) and a one-sample zinc anomaly (draining Bowser Group). There are three Heavy Mineral samples in the area, comprising a catchment of about 8 km². They confirm the low gold values in the Sieved Silt and BLEG sampling. There is an upstream (# 28) mercury-barium anomaly and a downstream (# 6) lead-zinc-cadmium-mercury-barium anomaly.

CONCLUSIONS & RECOMMENDATIONS

Survey Techniques

In choosing preferred geochemical survey strategy, the cost and the relative level of collection effort between BLEG, Sieved Silt and Heavy Mineral geochemical surveys are important factors. Based on the results of this orientation survey, a combination of BLEG sampling and Sieved Silt sampling appears to reflect local geology at downstream distances of 200 to 600 metres in the drainages for gold. When compared to Heavy Mineral surveys, the Sieved Silt and BLEG surveys do not detect gold nearly as far downstream.

Long dispersion trains for zinc, mercury, antimony, arsenic are present in the Sieved Silt sampling, as indicated by the results on Area Two and the responses on Eskay Creek.

In the project area, the scarcity of fines in many creek sediments significantly contributes to the cost of a survey. Insufficient fines amongst the coarse material of the streambeds caused longer sampling times and aborted efforts at many sites.

Further conclusions can be drawn after data from additional surveys are available. Of prime interest is the reliability of the gold results from the Sieved Silt surveys in comparison to BLEG surveys. Until additional data is available, the authors provisionally recommend the following configuration for future sampling:

1. BLEG samples should be taken at every sample site as a first priority. Samples of -20 mesh material should be increased to 5 kg where feasible.
2. Sieved Silt samples should weigh 500 g and be twinned with BLEG samples in order to yield the multi-element signature. 500-gram samples should ensure that at least 30 g of -80 mesh material is available for each ICP-MS analysis.
3. The high-energy sample sites continue to be employed. With fly-camps and more time at each location, samplers should be able to increase sieving time and increase the density of sampling.
4. Sample densities for the combined BLEG / Sieved Silt surveys should be 10 to 15 per square kilometre in order to provide better definition for follow-up.

5. Heavy Mineral samples should weigh 10 kg. The Heavy Mineral surveys should target larger drainages, in order to cover each sub-area completely. A net of Heavy Mineral samples located in 5 to 10 square kilometre catchments should readily compliment the BLEG sampling. In further surveys, the availability of sediment fines may determine the most practical type of sample.
6. For Heavy Mineral surveys, all of the -150 HN fraction should be analysed for gold by INAA methods and the -35+100 HN fraction for base metals and pathfinder elements.

Anomaly Follow-up

Area One: Tag West Group

Prospecting is recommended for mineralized structures and the Salmon River sediments and volcanics in the area of Fred 15 claim. Additional sampling should focus on the Noot 3, in the area of John Peaks basalts and sediments.

Sample density should be increased to 10 per square kilometre, or as dense as the topography will allow.

Area Two: Tag West Group

The Area Two anomalies are the most intense and contiguous on the orientation survey. Prospecting and additional high-energy sediment sampling are recommended over the entire area and should be expanded to the south to include the Sto 1 & 2 claims. The terrane will allow sample densities in the range of 10 to 20 per square kilometres and it is recommended to fill the area with BLEG and Sieved Silt samples. This would effectively localize the anomalies sufficiently for practical follow-up with geophysical surveys and geology.

Targets in this area are horizons of Salmon River sediments and volcanic rocks. Crosscutting structures are mineralized with gold on the abutting Sib claims and the core of the Eskay Anticline is anomalous in the full suite of indicator elements, in addition to gold.

Area Three: Tag East Group

Area Three contains a broad band of Salmon River and Jack Formation rocks, including a section of Salmon River Formation basalts. Extensive pyrite mineralization is present.

Targets in the area are stratabound and vein gold deposits hosted by Salmon River and Betty Creek Formations. It is recommended to conduct detailed

BLEG and Sieved Silt surveys at the density of 10 samples per square kilometer to localize the extensive anomalies.

Other Recommended Sampling

The 2001 survey was not designed to be a complete survey of the Eskay Creek area holdings of the operator, St. Andrew Goldfields. It is recommended to continue increasing the density of all types of high-energy sediment sampling techniques, to fully characterize the geochemistry of the land package. Initially, a density of 10 sample sites per square kilometre is recommended for BLEG and Sieved Silt surveys. This sampling should be based from fly-camps and employ mountain experienced sample crews.

COST STATEMENT

2001 GEOCHEMICAL PROGRAM ON TAG WEST AND TAG EAST CLAIM GROUPS

Costs Apportioned by Area of Claims and Collection Effort Except for Sample Analysis Costs

		QUANTITY	UNITS	RATE	TOTAL	Tag West	Tag East
TECHNICAL PERSONNEL: Assessment Work Program - Fieldwork							
Proj Manager	Paul McGuigan, P. Geo.	9.00	days	750.00	6,750.00	3,105.00	3,645.00
Sr. Geologist	Visiting Consultant - Dr. V. Wall	2.00	days	1,000.00	2,000.00	920.00	1,080.00
Management Fee	Discovery Consultants				951.02	437.47	513.55
Technician	R. Anctil	8.00	days	280.00	2,240.00	1,030.40	1,209.60
Technician	R. Michell	8.00	days	299.78	2,398.24	1,103.19	1,295.05
Technician	D. Strain	8.00	days	325.47	2,603.76	1,197.73	1,406.03
Sub-total:					16,943.02	7,793.79	9,149.23
TECHNICAL PERSONNEL: Preparation, Interpretation and Report Writing							
Proj. Manager	Paul McGuigan- Preparations	6.00	days	750.00	4,500.00	2,070.00	2,430.00
	Paul McGuigan - Reporting	10.00	days	750.00	7,500.00	3,450.00	4,050.00
Sr. Geologist	WR Gilmour , P. Geo.-Preparation	2.00	days	450.00	900.00	414.00	486.00
Sr. Geologist	T. Carpenter-Preparation, Report	1.00	days	450.00	450.00	207.00	243.00
Sr. Geologist	WR Gilmour, P.Geo. -Report	13.00	days	450.00	5,850.00	2,691.00	3,159.00
	CAD Work, Map Plotting				3,743.47	1,722.00	2,021.47
	Secretarial				200.00	92.00	108.00
	Tenure/ Base Map CAD Work, Geology/Topo Base	2.00	days	500.00	1,000.00	460.00	540.00
Sub-total:					24,143.47	11,106.00	13,037.47
CAMP AND LOGISTICS SUPPORT							
Travel -Air	1 Geologist Vanc Smithers RT	1.00	RT	956.58	956.58	440.03	516.55
Accommodations	Smithers Hotel, 2 nights	2.00	nights	90.00	180.00	82.80	97.20
Apportioned Travel	Property Examination 1st week Aug				600.00	276.00	324.00
Vehicle Rental	4x4 Truck	1.00	days	40.00	40.00	18.40	21.60
Vehicle	Transport fuel, men, site work	3,101.00	km	0.30	930.30	427.94	502.36
	Gas				233.88	107.58	126.30
Accommodations	Bob Quinn 4 men, 1 night				342.00	157.32	184.68
Accommodations	Bell II 5 men, 4 nights incl meals				1,512.00	695.52	816.48
Lodging, on road	Meals and Hotel, during travel				445.36	204.87	240.49
Communications	Tecucomp, Field				169.38	77.91	91.47
Communications	Discovery				83.86	38.58	45.28
Helicopter Charter	22.9 Hrs, including fuel at Bell II	22.90	hr		20,065.33	9,230.05	10,835.28
Sub-total:					25,558.69	11,757.00	13,801.69
HEAVY MINERAL GEOCHEMICAL ANALYSES							
CF Mineral Research							
	Preparation of 12 Samples, and 25 fractions for each sample				3,471.64		
Acme Analytical Labs							0.00
	Sample Pulverizing	24.00	spl	2.25	54.00		
	ICP-MS (1F)	88.00	spl	18.45	1,623.60		
Activation Labs							
	Sample pulverizing (RX6):	9.00	spl	12.00	108.00		
	INAA small (3A):	6.00	spl	14.00	84.00		
	INAA medium (3A):	17.00	spl	16.00	272.00		
	INAA large (3A):	19.00	spl	18.00	342.00		
	ICP-MS (Ultratrace 1):	42.00	spl	16.00	672.00		
	Hg analysis (1G):	42.00	spl	6.50	273.00		
	Sample Shipping				190.71		
Sub-total:					7,090.95	1,772.74	5,318.21

continued on next page...

Costs, continued						
BLEG AND SILT GEOCHEMICAL ANALYSES						
BLEG	Acme Group 3C Au	67.00 spls	18.45	1,236.15		
Sieved Sediment	Acme Group 1F-MS	74.00 spls	18.45	1,365.30		
Sediment	Acme Preparation	74.00 spls	1.26	<u>93.24</u>		
		<i>Sub-total:</i>		2,694.69	1,832.57	862.12
MAPPING AND OTHER TECHNICAL SUPPLIES						
Map Bases	Digital Trim Map Files, 4 sheets			1,712.00	787.52	924.48
Map Prints	Field maps			106.85	49.15	57.70
Maps, Pubs	Background info, area maps, GSC			683.42	314.37	369.05
Equipment Rent	Radio, sieves			317.60	146.10	171.50
Field Supplies				352.16	161.99	190.17
Reproductions	Report Copies/Supplies			100.00	46.00	54.00
Reproductions	Report Copies-Maps			<u>973.88</u>	<u>447.98</u>	<u>525.90</u>
		<i>Sub-total:</i>		4,245.91	1,953.12	2,292.79
TOTAL ASSESSMENT WORK				80,676.73	37,111.30	43,565.43

The cost of the 2001 Geochemical Program conducted on the Tag West and Tag East claim groups is as follows:

Tag West Group	\$37,111.30
Tag East Group	<u>\$43,565.43</u>
Total 2001 Program:	\$80,676.73

REFERENCES

- Alldrick, D. and Britton, J., 1988, Geology and Mineral Deposits of the Sulphurets Area, BC, Ministry of Energy, Mines and Petroleum Resources, Open File Map 1988-4.
- Alldrick, D.J., 1991, Geology and ore deposits of the Stewart mining camp, British Columbia: Unpublished Ph.D. thesis, Vancouver, B.C., University of British Columbia, 347 p.
- Alldrick, D.J. and Britton, J.M., 1991, Sulphurets area geology: British Columbia Ministry of Energy, Mines and Petroleum Resources Open File Map 1991-21.
- 1992, Unuk area geology: British Columbia Ministry of Energy, Mines and Petroleum Resources Open File Map 1992-22.
- Alldrick, D., Britton, J., Webster, I., and Russel, C., 1989, Geology and Mineral Deposits of the Unuk Area, (104B/7E, SW, 9W, 10E), BC Ministry of Energy, Mines and Petroleum Resources, Open File 1989-10.
- Alldrick, D., Britton, I., MacLean, M., Hancock, K., Fletcher, B. and Hiebert, S., 1990, Geology and Mineral Deposits of the Snippaker Area (104B/6E, 7W, 10W, 11 E), BC Ministry of Energy. Mines and Petroleum Resources, Open File 1990-16.
- Anderson, R.G., 1989, A Stratigraphic. Plutonic and Structural Framework for the Iskut Map Area, Northwestern British Columbia, in Current Research, Part E, Geological Survey of Canada, Paper 89-1 E.
- Anderson, R. and Thorkelson, D., 1990, Mesozoic Stratigraphy and Setting for Some Mineral Deposits in Iskut River Map Area, Northwestern BC, in Current Research, Part E, Geological Survey of Canada. Paper 90-1E.
- Anderson, R.G., 1993, A Mesozoic stratigraphic and plutonic framework for northwestern Stikinia (Iskut River area), northwestern British Columbia, in Dunne, G. and McDougall, K., eds., Mesozoic paleogeography of the western United States, II: Los Angeles, CA, Society of Economic Paleontologists and Mineralogists, Pacific Section, p. 477-494.
- Bartsch. R.D., 1993a, A Rhyolite Flow Dome in the Upper Hazelton Group. Eskay Creek Area (1048!9, IO); BC Ministry of Energy Mines and Petroleum Resources. Geological Fieldwork. 1992, Paper 1993-1, p. 331-334.

- Bartsch, R.D., 1993b, Lithostratigraphy of the Eskay Creek area, Northwestern British Columbia, Canada; unpub. Msc. thesis, University of British Columbia, Vancouver. BC_ 178 p.
- Blackwell, J., 1990, Geology of the Eskay Creek #21 Deposits, Mineral Deposits Division, Geological Association of Canada, The Gange, Number 3 1, pages 1-4.
- Bridge, D.A. and Burroughs, G.R., 1995, Report of 1995 Geological and Geochemical Exploration Work Done on Aftom, Calvin, Dup: Fred, Mojo, Noot and Pmac Mineral Claims, Skeena Mining Division (AR 24176).
- Britten, J., Blackwell, J. and Schroeter, T., 1990, #21 Zone Deposits, Eskay Creek, Northwestern BC, Ministry of Energy, Mines and Petroleum Resources, Exploration in BC 1989, pages 197-223.
- Burroughs, G.R., Bridge, D.A. and Haynes, S.J., 1996. 1996 Geological, Geochemical and Geophysical Exploration Work Completed on the Eskay Creek Project, Skeena and Liard Mining Divisions (AR 24853).
- Chapman, I. and Raven, W., 1991, Assessment Report on Gigi Resources Ltd.'s and Tradewind Resources Ltd.'s Upper Unuk River Project, Unuk River Area: BC (AR 20 8%).
- Chapman, J., Raven, W., Vanwermeskerken, M. and Lebel, J.. 1990, Summary Report on the Airborne and Ground Geophysics, Linecutting, Geology and Geochemistry on the GNC Property for Calpine Resources Inc., Iskut-Sulphurets Area, BC (AR 20030).
- Childe, F.C., 1994, Radiogenic isotopic investigations of the Eskay Creek volcanic hosted massive sulphide deposit, British Columbia, Canada [abs.]: United States Geological Survey Circular 1107, p. 58.
- Copeland, D.J., 1990. Geological and Drilling Report on the SIB 20.39, POLO 1-13 Claims. American Fibre. Corp., 160~. (AR 20139).
- Childe, F.C., Barrett, T.J. and McGuigan, P.J., 1994, The Granduc VMS deposit, northwestern British Columbia: U-Pb ages and Pb isotope relations [abs.]: Geological Society of America Abstracts with Programs, v. 26; 7, p. 381.
- Dawson, G. and Harrison, D., 1990, Geological Report on the Aftom 9 Claim, Skeena Mining Division, BC (AR 2 1792).
- Ettlinger, A., 1991, Eskay Creek 21 Zone, in MDRU Metallogensis of the Iskut River Area, Northwestern BC, MDRU Annual Technical Report Year 1.

- Fletcher, W.K. (1990): Dispersion and Behaviour of Gold in Stream Sediments. BC Ministry of Energy, Mines and Petroleum Resources, Open File 1990-28.
- Fletcher, W.K. and Day S.J. (1988): Behaviour of Gold and Other Heavy Minerals in Drainage Sediments: Some Implications for Exploration Geochemical Surveys; in Prospecting in Areas of Glaciated Terrain – 1988; Canadian Institute of Mining and Metallurgy
- Fletcher, W.K. and Wolcott, J (1989): Seasonal Variation on Transport of Gold in Harris Creek: Implications for Exploration; Association of Exploration Geochemists, Explore 66
- Gabouty, B.E., 1990. Geological and Drilling Report on the UNUK Claims, Granges Inc. (AR 20390)
- Gall, L.P., 1990. Geological Report on the STORY Claims, Ecstall Mining Corporation, Omega Gold Corporation, Golden Arrow Resources Inc. (AR 20589).
- Grove, E.W., 1986, Geology and mineral deposits of the Unuk River-Salmon River-Anyox area: British Columbia Ministry of Energy, Mines and Petroleum Resources Bulletin 63, 152 p. Henderson, J.R.,
- Grunenberg, P., 1993a, Geological, Geochemical and Geophysical Report on the Aftom Group Claims Skeena Mining Division (AR 23152).
- Grunenberg, P., 1993b. Geophysical Report on the Aftom 20 Claim, Skeena Mining Division, BC (AR 23157).
- Grunenberg, P., 1993c, Geological and Geophysical Report on thenup Group Claims. Skeena Mining Division; BC (AR 23158).
- Henderson, J., Kirkham, R., Henderson, M., Payne, J., Wright, T. and Wright, R., 1992, Stratigraphy and Structure of the Sulphurets Area, BC, (104B 8 and 9), in Current Research, Part A, Geological Survey of Canada, Paper 92.1A.
- Hicks, K. and Metcalfe, P., 1991, Geological Report on the Aftom 5, 6, 10, 11, 13 and 20 Claims, Part 1 of 2 (AR 21918).
- Hopper, D., 1989a, Assessment Report on Skeena Mining Division CRY #1, Prospecting, Rock Sampling and Geochemical Sampling, (AR 19291).
- Hopper, D, 1989b, Assessment, Prospecting, Rock Sampling Report on the Fred 16 and Dup 8 Claims, Skeena Mining Division (AR 19347).
- Idziszek, C., Blackwell, J., Fenlon, .I., McArthur, G. and Mallo, D., 1990, The

- Eskay Creek Discovery, Mining Magazine, March, 1990, pages 172-173.
- Kirkham, R.V., Henderson, M.N., Payne, J.G., Wright, T.O. and Wright, R.I., 1992, Stratigraphy and structure of the Sulphurets area, British Columbia, (104 B/8, 9): Canada Geological Survey Paper 92-1A, p. 323-332.
- Konkin, K., 1989, Assessment Report on Corey Claim Group, Stewart, BC.
Kuran, D., 1993. Drilling Report on the GNC I Claim, 56 p. (AR 23193).
- Kuran, D., Patterson, K.M. and Kaip, A.W., 1993. Assessment report 1993 Exploration Program Bonsai Property (AR 23718)
- Lewis, P.D., 1992, Structural geology of the Prout Plateau region, Iskut River map area, British Columbia: British Columbia Ministry of Energy, Mines and Petroleum Resources Paper 1992-1, p. 521-528.
- 1993, Stratigraphic and structural setting of the Iskut River area, in Metallogenesis of the Iskut River area, northwestern British Columbia: Unpublished Annual Technical Report - Year 3, Mineral Deposit Research Unit, University of British Columbia.
- Lewis, P.D., Macdonald, A.J. and Bartsch, R.D., 2000, Hazelton Group/Bowser Lake Group stratigraphy in the Iskut River area: progress and problems, in Metallogenesis of the Iskut River area, northwestern British Columbia: Mineral Deposit Research Unit Special Publication Number 1.
- Lewis, P., 1992, Structural Evolution of the Iskut River Area: Preliminary Results, in Mineral Deposits Research Unit, Metallogeny of the Iskut River Area, BC. Annual Technical Report Year 2, University of BC, Vancouver, BC
- Lewis, P., 1993, Stratigraphic and Structural Setting of the Iskut River Area: Preliminary results, Annual Technical Report, Year 3, Mineral Deposits Research Unit, Metallogeny of the Iskut River Area, BC.
- Lewis, P., 1995, Field Report, Iskut River Project, July 9-13, 1995, for Canamera Geological Ltd., 11 p.
- Lloyd, J. and Klit, D.A., 1991, Geophysical Report on the Lakewater Property, Lake]-2 Claims (AR 21432).
- Mallo, D. and Dvorak, Z., 1989. Assessment Report on the VR Property Airborne Geophysical Program VR 4, VR 6 and CCM l-3 Claims (AR 18992).
- Macdonald, A.J., 2000a, Eskay Porphyry, in Metallogenesis of the Iskut River

area, northwestern British Columbia: Mineral Deposit Research Unit
Special Publication Number 1.

-----, 2000 b, Kerr-Sulphurets camp and Brucejack Lake, in Metallogenesis
of the Iskut River area, northwestern British Columbia: Mineral Deposit
Research Unit Special Publication Number 1.

Macdonald, A.J., van der Heyden, P., Lefebure, D.V. and Alldrick, D.J., 1992,
Geochronometry of the Iskut River area - an update: British Columbia
Ministry of Energy, Mines and Petroleum Resources Paper 1992-1, p.
495-502.

MacDonald, J.A., Lewis, P.D., Thompson, J.F.H., Nadarajhu, G., Bartsh, R.D.,
Bridge, D.J., Rhys, D.A., Roth, T., Kaip, A., Godwin, C.I., Sinclair, A.J.,
1996, Metallogeny of an Early to Middle Jurassic Arc, Iskut River Area,
Northwestern B.C.: *Economic Geology*, V. 91, p. 1098-1114

MacIntyre, D.G. and Struik, L.C. 1997: Nechako Natmap Project - 1996
Overview; in *Geological Fieldwork 1996*, Lefebure, D.V., McMillan,
W.J. and McArthur, Editors; Ministry of Employment and Investment,
Paper 1997-1, p. 39-45.

Nadaraju, G., 1993, Triassic-Jurassic biochronology of the eastern Iskut River
map area, northwestern British Columbia: Unpublished M.Sc. thesis,
Vancouver, B.C., University of British Columbia, 223 p.

Robinson, M., West, C., Daoud, D. et al., 1997, Report of 1997 Geological and
Geochemical Exploration Work Done on the Aftom, Calvin, Dup, Fred,
Hags, Noot and Pmac Mineral Claims, NTS 104B19 & 1046/10, Skeena
and Liard Mining Division, BC. British Columbia for Canamera
Geological Ltd. (AR 25258)

Roth, T., 1993a, Surface Geology of the 21 Zone, Eskay Creek, BC, in
Geological Fieldwork 1992, Ministry of energy, Mines and Petroleum
Resources, Paper 1993-1, p. 325-333.

Roth, T., 1993b, The 21A Zone, Eskay Creek, Northwestern BC, unpub. M. SC.
thesis, University of BC, Vancouver, BC.

Roth, T. and Godwin, C., 1992, Preliminary Geology of the 21A Zone, Eskay
Creek, BC, Ministry of Energy, Mines and Petroleum Resources.
Geological Fieldwork, 1991, Paper 1992-1, p.529-533.

Schofield, S. and Hanson, G., 1922, Geology and Mineral Deposits of Salmon
River District, BC, *Geological Survey of Canada, Memoir 132*, 81 p.

Sherlock, R.L., Barrett, T.J., Roth, T., Childe, F., Thompson, J.F.H., Kuran, D.,

Marsden, H., Allen, R., (1993), Geological Investigations of the 21B Deposit, Eskay Creek, Northwestern B.C. (104B9W); Geological Fieldwork, Paper 1994- 1.

Struik, L.C., Anderson, R.G., Woodsworth, G.J., MacIntyre, D.G., Gareau, S., and Haggart, J.W., 1999: *Fieldtrip 3: Terranes and accretion along a central British Columbia transect*, Field trip guidebook, 9th International Terrane Conference, Vernon, British Columbia; Geological Association of Canada Cordilleran Section, Vancouver, British Columbia, 93 p.

Tipper, H. and Richards, T., 1976, Jurassic Stratigraphy and History of North Central BC, Geological Survey of Canada, Bulletin 270, 73 p.

Verzosa, R.S., 1990, 1990 Diamond Drilling Program on the North Coulter Property (AR 20659).


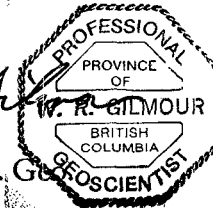
STATEMENT OF QUALIFICATIONS

William R. Gilmour, P. Geo.

I, William R. Gilmour, of 13511 Sumac Lane, Coldstream, British Columbia, V1B 1A1, do hereby certify that:

- I am a consulting geologist in mineral exploration associated with Discovery Consultants, Vernon, BC.
- I have been practicing my profession continuously since graduation in 1970.
- I am a graduate of the University of British Columbia, with a Bachelor of Science degree in Geology.
- I am a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia.
- This report is based on a major involvement in the planning of the exploration program, a thorough review of the fieldwork carried out by Discovery Consultants personnel, and an interpretation of the geochemical results.

I consent to the use of this report for submission for assessment requirements for the Tag West and Tag East claim groups.

William R. Gilmour, P. Geo.

December 18, 2001

Paul J. McGuigan, P. Geo.

I, Paul J. McGuigan, P. Geo., of Suite 118-4875 Valley Drive, Vancouver, BC V6J 4B8, do hereby certify the following:

- I am a consulting geoscientist with Tecucomp Geological Inc. of Vancouver, BC.
- I have been practicing my profession continuously since graduation in 1975, as a geologist and geochemist in North and South America and Africa. I worked from continuously from graduation to 1986 as a geoscientist for such firms as Resource Associates of Alaska, Pechiney Developments NPL and Esso Minerals Canada Ltd. Since 1996, I have been a principal of Cambria Geological Ltd. and Tecucomp Geological Inc. and a consulting geoscientist.
- I am a graduate of the University of British Columbia, with a Bachelor of Science degree in Geology (Honours).
- I am a Professional Geoscientist in good standing with the Association of Professional Engineers and Geoscientists of British Columbia and a Member of its Consulting Practice Committee and the Geoscience Committee.
- This report is the result of my planning and my personal field supervision of the exploration program and my interpretation of the geochemical results.

I consent to the use of this report for submission for assessment requirements for the Tag West and Tag East claim groups.



Paul J. McGuigan, P. Geo.

December 18, 2001

APPENDIX I: ANALYTICAL METHODS

Preparation of Heavy Mineral Concentrates – C. F. Mineral Research Ltd.

Analytical Techniques – Activation Laboratories Ltd.

Analytical Techniques – Acme Analytical Laboratories Ltd.

The heavy mineral samples were sent to C.F. Mineral Research Ltd. in Kelowna, British Columbia, for the preparation of heavy mineral concentrations. The following is a brief, simplified description of the laboratory sample preparation.

1. The samples were wet sieved into the following size fractions: -20+35, -35+60 and -60 mesh. The suspended clay-sized material was allowed to settle out and collected as a -400L (light) fraction.
2. After drying, each of the -20+35, -35+60 and -60 mesh fractions were slowly fed into the middle of a column of tetrabromomethane (TBE), with a specific gravity of 2.96.
3. The resultant heavy minerals that settle to the bottom of the TBE column are then further separated by methylene iodide (MI), with an effective specific gravity of 3.27. The minerals between 2.96 and 3.27 specific gravity are the intermediate (I) fraction and those with a specific gravity above 3.27 are the heavy (H) fraction.
4. The -60 mesh fractions were then further sieved into the following fractions: -60+150 and -150 mesh.
5. A Frantz electromagnetic separator was used to generate distinct fractions based on variations in magnetic susceptibility, as follows:

magnetic (M)	mainly magnetite
paramagnetic (P)	somewhat magnetic; mineral include iron-silicates such as garnet and epidote
nonmagnetic (N)	sulphides such as pyrite, chalcopyrite, galena; gold; accessory minerals such as zircon

6. From these 25 fractions (see Appendix II), 10 fractions were selected for further sample preparation and analyses. The selected fractions comprise:

<u>Description</u>	<u>Fractions</u>
heavy nonmagnetic	-35+60HN, -60+150HN, -150HN
heavy paramagnetic	-35+60HP, -60+150HP, -150HP
intermediate paramagnetic	-35+60IP, -60+150IP, -150IP
clay-sized lights	-400L

7. The HP, IP and L fractions were sent to Acme Analytical Laboratories Ltd. and the HN fractions to Activation Laboratories Ltd. for analysis.

N:\702\Ass. Report\prepCFMv5.wk4

Analytical Techniques**Eskay Project Activation Laboratories Ltd.****Stream Sediment Samples Submitted**

Heavy, nonmagnetic fraction in three size fractions

Sample Preparation

The -35+60 mesh fraction was pulverized (to -150 mesh) before analysis

Instrumental Neutron Activation Analysis (INAA)

(Code 3A)

The samples are encapsulated, irradiated and measured in a multielement mode by INAA. This method is non-destructive to the samples, making them available for further use. This method gives a total value for the element.

<u>Element</u>	<u>Detection Limit</u> (ppm unless noted)	<u>Element</u>	<u>Detection Limit</u> (ppm unless noted)
Au	5 ppb	Ir	50 ppb
Ag	5	La	1
Mo	20	Lu	0.05
Ni	200	Na	0.05 %
Zn	200	Nd	10
Hg	5	Rb	50
As	2	Sb	0.2
Ba	200	Sc	0.1
Br	5	Se	20
Ca	1 %	Sm	0.1
Ce	3	Sr	0.2 %
Co	5	Ta	1
Cr	10	Tb	2
Cs	2	Th	0.5
Eu	0.2	U	0.5
Fe	0.02 %	W	4
Hf	1	Yb	0.2

Analytical Techniques**Eskay Project Activation Laboratories Ltd.****Inductively Coupled Plasma Emission Mass Spectrometry (ICP-MS) analysis**
(Ultratrace 1)

This partial extraction is analyzed by ICP-MS to provide lower detection limits.

Digestion: Aqua regia (hydrochloric and nitric acids) extraction is used to leach sulphides, some oxides and some silicates.
Mineral phases which are hardly (if at all) attacked include barite, zircon, monazite, sphene, chromite, gahnite, garnet, ilmenite, rutile and cassiterite.
The balance of the silicates and oxides are only slightly to moderately attacked, depending on the degree of alteration.
Generally, but not always, most base metals and gold are usually dissolved.
Elements marked with * may only be partially extracted. For example, zinc in gahnite or shene will not be soluble.

Analysis:	<u>Element</u>	<u>Detection Limit</u> (ppm unless noted)	<u>Element</u>	<u>Detection Limit</u> (ppm unless noted)
	Au	0.2 ppb	Hf	* 0.1
	Ag	0.05	In	* 0.02
	Cu	0.1	K	0.01 %
	Cd	0.1	La	0.5
	Mn	* 1	Li	* 0.5
	Mo	* 0.01	Lu	0.1
	Pb	* 0.01	Mg	* 0.01 %
	Ni	* 0.1	Na	* 0.001 %
	Zn	* 0.1	Nb	* 0.1
	Hg (CV)	5 ppb	Nd	* 0.1
	As	* 0.1	Rb	* 0.1
	B	* 1	Re	0.001
	Ba	* 0.5	Se	* 0.1
	Sb	* 0.02	Sm	* 0.1
	W	* 0.2	Sn	* 0.05
	Al	* 0.01 %	Sr	* 0.5
	Be	* 0.1	Ta	* 0.05
	Bi	0.02	Tb	* 0.1
	Ca	0.01 %	Te	0.02
	Ce	* 0.01	Th	* 0.1
	Co	* 0.1	Tl	* 0.02
	Cr	* 0.5	U	* 0.1
	Cs	* 0.1	V	* 1
	Eu	* 0.1	Y	* 0.1
	Fe	* 0.01 %	Yb	* 0.1
	Ga	* 0.02	Zr	* 0.1
	Ge	* 0.1		

Note that Hg analysis is by cold vapour FIMS methods.
N:\702\Ass. Reports\LabtechActivationv5.wk4

Analytical Techniques

Eskay Project

Acme Analytical Laboratories Ltd.

Stream Sediment Samples Submitted

1. Bulk Leach-Extractable Gold (BLEG)
2. Sieved Silt
3. Heavy Mineral Fractions
4. Clay-Sized Fraction

1. BLEG

The entire -20 mesh field sample was analysed.
The sample was leached in 5 % cyanide for 24 hours, with shaking every 5 minutes.
Analysis was by ICP-MS.
This method measures the concentration of free or loosely-bonded gold. That is, gold associated with sulphides will not be extracted.

2. Sieved Silt

The -20 mesh field samples were dried and sieved to -80 mesh.
To help overcome any nugget effect, up to a 30 g sample was used for analysis
Most of the analyzed size was 30g or 15g; a few were less
Analysis was by ICP-MS.

3. Heavy Mineral Fractions

The heavy, paramagnetic fraction and the intermediate paramagnetic fraction, each with three size fractions, were submitted.
The -35+60 mesh fractions were pulverized (to -150 mesh) before analysis
Analysis was by ICP-MS.

4. Clay-Sized Fraction

The clay-sized fraction, from the wet sieving of the heavy mineral samples, was submitted.
Analysis was by ICP-MS.

Analytical Techniques

Eskay Project

Acme Analytical Laboratories Ltd.**Analytical Method****Inductively Coupled Plasma Emission Mass Spectrometry (ICP-MS) analysis
(Group 1F-MS)**

The ICP-MS method is used to provide lower detection limits, and is intended for lean material.

Samples underwent a primary ICP-ES (Emission Spectrometry) scan. This analysis was used for elements above ICP-MS upper-limits values.

Digestion:

Aqua regia (hydrochloric and nitric acids) extraction is used to leach sulphides, some oxides and some silicates.

Mineral phases which are hardly (if at all) attacked include barite, zircon, monazite, sphene, chromite, gahnite, garnet, ilmenite, rutile and cassiterite.

The balance of the silicates and oxides are only slightly to moderately attacked, depending on the degree of alteration.

Generally, but not always, most base metals and gold are usually dissolved.

Elements marked with * may only be partially extracted. For example, zinc in gahnite or shene will not be soluble.

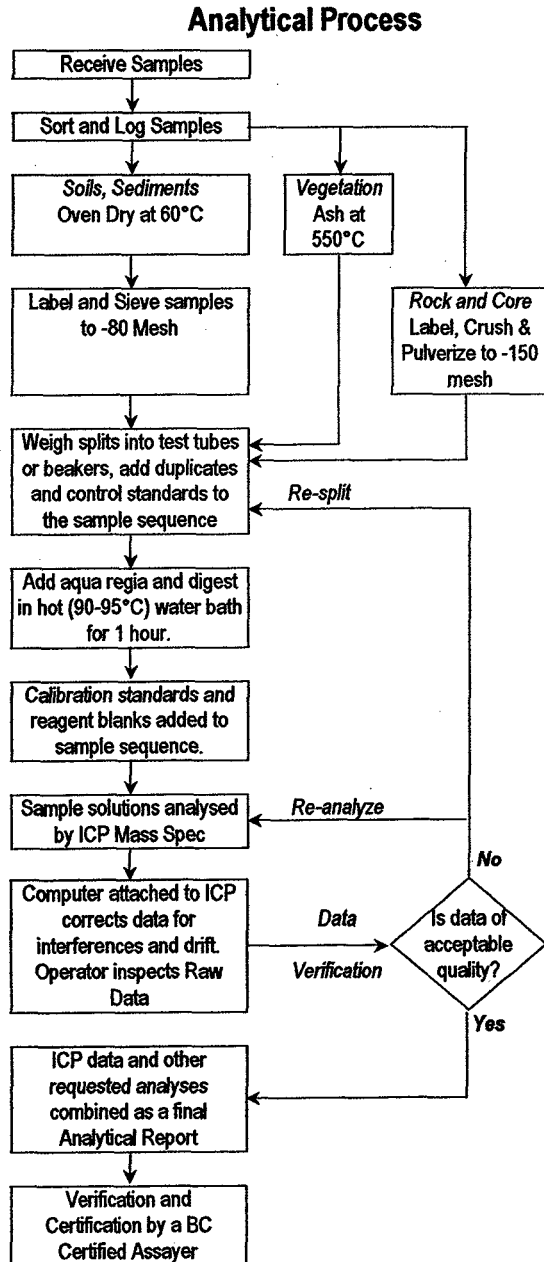
As and Sb may be partially lost due to volatilization.

<u>Element</u>	<u>Detection Limit</u> (ppm unless noted)	<u>Element</u>	<u>Detection Limit</u> (ppm unless noted)
Au	0.2 ppb	Cr	* 0.5
Ag	2 ppb	Fe	* 0.01 %
Cu	0.01	Ga	0.1
Cd	0.01	K	* 0.01 %
Mn	* 1	La	* 0.5
Mo	0.01	Mg	* 0.01 %
Pb	0.01	Na	* 0.001 %
Ni	* 0.1	P	* 0.001 %
Zn	0.1	S	* 0.01 %
Hg	5 ppb	Sc	* 0.1
As	* 0.1	Se	* 0.1
B	* 1	Sr	* 0.5
Ba	* 0.5	Te	0.02
Sb	* 0.02	Th	* 0.1
W	* 0.2	Ti	* 0.001 %
Al	* 0.01 %	Tl	0.02
Bi	0.02	U	* 0.1
Ca	* 0.01 %	V	* 2
Co	0.1		

N:\702\Ass. Report\LabtechAcmev5.wk4



METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 1F-MS – ULTRATRACE BY ICP-MS • AQUA REGIA



Comments

Sample Collection

Samples may consist of soil, sediment, plant or rock. A minimum field sample weight of 200 gm is recommended.

Sample Preparation

Soils and sediments are dried (60°C) and sieved to -80 mesh (-177 microns). Moss-mat samples are dried (60°C), pounded to loosen trapped sediment, then sieved to -80 mesh. Rocks are dried (60°C) crushed (>75% -10 mesh) and pulverized (>95% -150 mesh). Depending on the option packages selected by the client, splits of 1 to 30 g are weighed. Blanks, duplicate pulp splits and internal reference material DS2 are added to the analytical batch (34 samples) to monitor precision and accuracy. A duplicate split from the crushed (rejects) fraction is added for drill core and trench samples to monitor sub-sampling precision.

Sample Digestion

Samples are leached by the addition of Aqua Regia (2:2:2 mixture of ACS grade conc. HCl, conc. HNO₃ and distilled H₂O) at the ratio of 3 mL/gm. Sample solutions are heated for 1 hr in a hot water bath (90-95°C). The solutions are then diluted to 20:1 mL/gm ratio. Reagent blanks are carried in parallel through leaching and analysis.

Sample Analysis

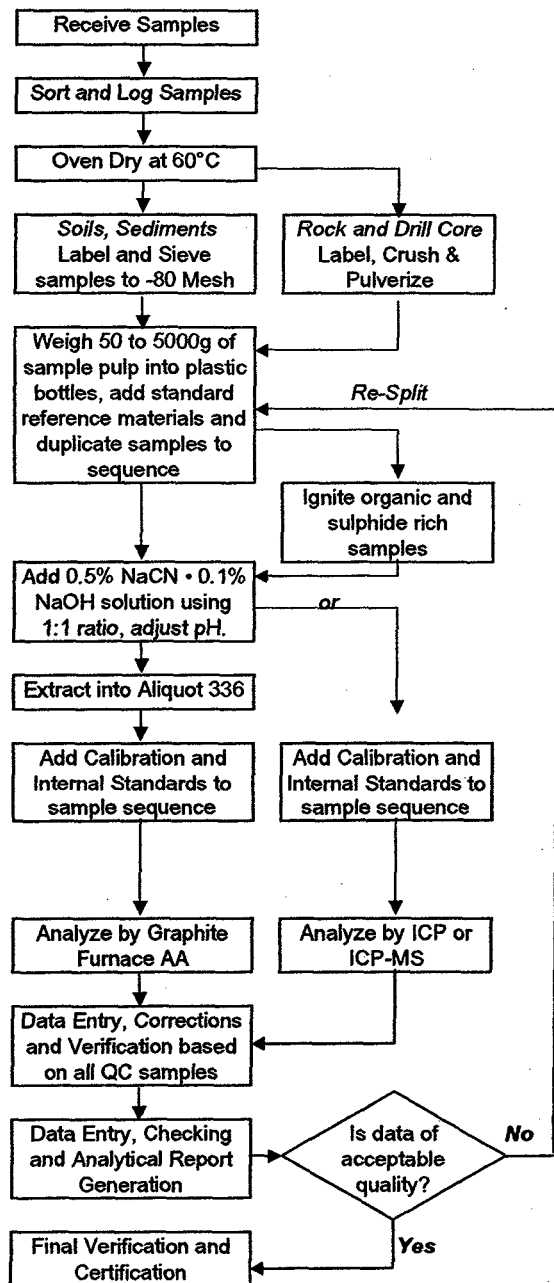
Analysis is by an Elan 6000 ICP Mass Spec for the determination of 37 elements comprising: Au, Ag, Al, As, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, Hg, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Se, Sr, Te, Th, Ti, U, V, W and Zn. Extended element packages containing incompatible elements (Hf, Nb, etc.) and REEs are available. Sample volumes of 10 to 30 gm are recommended when the determination of Au or other elements subject to the nugget effect are of importance.

Data Evaluation

Raw data are reviewed by the instrument operator and by the laboratory information management system. The data is subsequently reviewed and adjusted by the Data Verification Technician. Finally all documents and data undergo a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before it is released to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

METHODS AND SPECIFICATIONS FOR ANALYTICAL PACKAGE GROUP 3C - CYANIDE EXTRACTION - ASSAY LEACH

Analytical Process



Comments

Sample Preparation

Soils and sediments are dried (60°C) and sieved to -80 mesh ASTM (if necessary), rocks and drill core are crushed and pulverized to -100 mesh (-150 microns). The entire sample may be used for analysis or a representative split weighing from 50 to 5000g may be taken. Samples are placed in plastic bottles. Control Standards (STD Au-S, Au-R, G-2), Analytical Blanks and Sample Duplicates (if required) are added to the sequence. Samples rich in organics or sulphides must be ignited prior to leaching to reduce cyanide consumption.

Sample Leaching

A 0.5% NaCN • 0.1% NaOH solution is added to each bottle using a 1:1 solution volume to sample weight ratio. pH is adjusted to 10 or 11 using lime or NaOH. Solutions are agitated for 10 minutes every 2 hours for 16 hours or rolled on a bottle roller for 16 hrs. An aliquot is centrifuged for direct ICP-ES or ICP-MS analysis. Analysis by Graphite Furnace AA requires extraction with Aliquot 336 in MIBK.

Sample Analysis

Sample solutions are either analysed by Graphite Furnace AA (Varian Spectra 10) for the determination of Au to 0.002 oz/t or by ICP-ES or ICP-MS. Data is captured by the Laboratory Information Management System and adjusted for background and drift.

Data Evaluation

Raw and final data from the analysis undergoes a final verification by a British Columbia Certified Assayer who then signs the Analytical Report before release to the client. Chief Assayer is Clarence Leong, other certified assayers are Dean Toye and Jacky Wang.

(Note: the above procedure is used on bulk sediment, rocks, drill core, and occasionally on soils.)

APPENDIX II: BLEG RESULTS

Acme Analytical Laboratories BLEG Results

ESKAY PROJECT
BLEG STREAM SEDIMENT SURVEY

<u>Sample No.</u>	<u>-20 mesh</u>		<u>Sample No.</u>	<u>-20 mesh</u>	
	<u>Field/ Analytical</u>	<u>Au</u>		<u>Field/ Analytical</u>	<u>Au</u>
	<u>Sample</u> wt. (kg)	<u>ppb</u>		<u>Sample</u> wt. (kg)	<u>ppb</u>
702-B-01	2.5	4.5	702-B-41	1.8	2.5
702-B-02	3.1	1.6	702-B-42	1.7	0.4
702-B-03	4.1	0.0	702-B-43	2.3	17.7
702-B-04	2.1	1.3	702-B-44	3.6	0.0
702-B-05	2.3	0.3	702-B-45	4.4	0.0
702-B-06	2.6	0.4	702-B-46	3.6	0.2
702-B-07	4.0	0.0	702-B-47	4.0	0.0
702-B-08	4.2	0.0	702-B-48	3.7	0.0
702-B-09	3.7	0.0	702-B-49	3.0	1.1
702-B-10	3.6	6.2	702-B-50	4.1	0.0
702-B-11	4.5	14.9	702-B-51	3.8	0.0
702-B-12	6.7	9.0	702-B-52	5.8	0.4
702-B-13	5.4	0.0	702-B-53	4.1	0.0
702-B-14	6.7	0.0	702-B-54	2.0	1.1
702-B-15	5.2	0.0	702-B-55	2.5	0.0
702-B-16	5.4	0.0	702-B-56	2.6	0.1
702-B-17	3.7	0.0	702-B-57	2.9	0.4
702-B-18	7.5	0.0	702-B-58	3.0	12.0
702-B-19	3.1	0.0	702-B-59	3.7	1.4
702-B-21	1.9	0.3	702-B-62	6.4	0.4
702-B-22	4.5	0.3	702-B-63	4.9	0.7
702-B-23	3.6	0.8	702-B-64	7.4	0.0
702-B-25	5.5	2.7	702-B-65	3.9	1.3
702-B-26	7.7	0.0	702-B-66	4.7	0.7
702-B-27	5.8	5.4	702-B-67	4.6	0.3
702-B-28	6.3	0.0	702-B-68	3.3	0.5
702-B-30	4.5	0.0	702-B-69	5.5	2.9
702-B-31	4.3	0.4	702-B-70	2.8	0.4
702-B-32	6.7	0.0	702-B-71	2.7	0.4
702-B-33	2.5	0.0			
702-B-34	5.6	0.0			
702-B-35	5.6	0.0			
702-B-36	5.6	0.6			
702-B-37	5.6	1.6			
702-B-38	4.8	1.3			
702-B-39	5.1	0.5			
702-B-40	4.2	0.0			

Notes: Au 0.0 ppb = <0.1 ppb
Acme File: 103076

N:\702\Ass. Report\BLEGv5.wk4

APPENDIX III: SIEVED SILT RESULTS

Acme Analytical ICP_MS Results on Sieved Silt Samples

ESKAY PROJECT - SIEVED SILT STREAM SEDIMENT RESULTS

Sample No.	Sieve Analysis			ICP-MS Analysis					
	<u>-20 mesh</u>	<u>-80 mesh</u>	<u>-80 mesh</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Cd</u>
	<u>Field</u>	<u>Lab</u>	<u>Analytical</u>						
<u>Sample</u>	<u>Sample</u>	<u>Sample</u>	<u>wt. (g)</u>	<u>ppb</u>	<u>ppm</u>	<u>ppm</u>	<u>ppm</u>	<u>ppm</u>	<u>ppm</u>
702-S-01	860	464	30	4.3	0.223	60.76	10.87	92.8	0.46
702-S-02	642	24	15	3.4	0.135	56.78	12.09	140.0	0.47
702-S-03	1010	274	30	2.1	0.219	58.32	10.28	97.1	0.50
702-S-04	792	62	30	3.0	0.105	61.63	18.40	112.8	0.30
702-S-05	658	150	30	7.7	0.178	89.02	25.71	114.0	0.35
702-S-06	516	40	30	3.0	0.134	47.41	15.89	125.6	0.44
702-S-07	660	20	15	2.1	0.200	50.47	10.31	307.0	2.44
702-S-08	759	44	30	1.4	0.292	58.40	13.64	375.2	4.27
702-S-09	878	62	30	1.7	0.175	58.36	16.40	293.5	2.24
702-S-10	656	24	15	1.9	0.294	50.05	13.71	371.4	2.85
702-S-11	510	44	30	6.2	0.458	55.34	14.84	325.8	3.03
702-S-12	696	92	30	68.6	0.681	33.26	21.94	130.7	0.53
702-S-13	660	124	30	80.4	0.369	78.27	24.39	91.7	0.38
702-S-14	554	41	30	5.2	0.229	61.42	25.39	260.3	0.77
702-S-15	468	60	30	3.2	0.165	36.83	13.85	169.2	0.57
702-S-16	372	24	15	3.4	0.170	37.14	14.52	174.1	0.56
702-S-17	422	54	30	2.5	0.236	63.12	14.36	187.0	0.47
702-S-18	304	22	15	2.4	0.327	38.03	10.75	336.0	1.86
702-S-19	614	106	60	2.6	0.162	53.29	16.17	182.9	1.01
702-S-20	442	36	30	3.0	0.132	35.20	13.06	111.5	0.34
702-S-21	114	10	7.5	1.6	0.393	29.87	61.22	330.9	1.95
702-S-22	290	40	30	3.1	0.282	58.04	81.18	483.3	1.65
702-S-23	292	38	30	7.2	0.481	122.16	58.77	271.7	0.98
702-S-24	836	48	30	2.5	0.163	116.75	23.69	160.1	0.50
702-S-25	198	20	15	23.0	0.415	36.42	85.22	428.4	1.75
702-S-26	536	44	30	2.3	0.147	43.78	13.09	246.1	2.02
702-S-27	206	18	15	1.2	0.222	75.41	15.87	367.9	2.82
702-S-28	826	46	30	3.8	0.309	41.50	16.51	652.5	7.49
702-S-29	150	6	5	4.8	0.179	70.75	17.41	256.9	1.50
702-S-30	208	20	15	2.0	0.221	25.69	10.67	196.5	1.68
702-S-31	458	62	30	1.5	0.540	55.22	30.09	711.8	6.36
702-S-33	398	40	30	3.5	0.104	32.93	12.05	121.8	0.49
702-S-35	466	66	30	9.1	0.180	66.78	17.74	181.5	0.53
702-S-36	282	32	30	5.7	0.160	66.97	11.51	113.4	0.24
702-S-37	414	60	30	4.8	0.152	46.01	15.25	87.7	0.25
702-S-38	316	26	15	11.8	0.301	73.93	36.63	160.1	0.78
702-S-39	388	38	30	2.9	0.114	34.29	12.03	109.3	0.38
702-S-40	284	28	15	542.1	0.312	35.08	22.10	200.9	1.09
702-S-41	434	88	30	55.7	0.328	78.15	10.71	107.2	0.68
702-S-42	576	34	30	17.2	0.492	81.88	21.85	164.5	0.83
702-S-43	694	48	30	237.9	0.740	53.60	31.30	191.0	0.76
702-S-44	476	32	30	2.5	0.247	52.62	13.27	316.2	3.56
702-S-45	540	20	15	3.4	0.569	64.45	16.25	405.2	3.91
702-S-46	178	16	7.5	5.9	0.144	44.68	13.62	268.7	2.29
702-S-47	480	58	30	1.9	0.286	67.14	18.49	505.9	4.88
702-S-48	544	54	60	16.8	0.482	73.29	18.99	511.7	4.61
702-S-49	364	46	30	5.2	0.337	78.58	52.85	214.6	0.68

Appendix: III **ESKAY PROJECT - SIEVED SILT STREAM SEDIMENT RESULTS**

Sample No.	-20 mesh	-80 mesh	-80 mesh	ICP-MS Analysis					
	Field	Lab	Analytical	Au	Ag	Cu	Pb	Zn	Cd
	Sample	Sample	Sample	ppb	ppm	ppm	ppm	ppm	ppm
	wt. (g)	wt. (g)	wt. (g)						
702-S-50	638	88	30	6.2	0.374	73.41	24.67	99.7	0.42
702-S-51	554	38	30	3.0	0.609	67.53	37.30	929.0	8.57
702-S-52	250	20	15	84.9	0.828	27.77	26.73	346.7	4.00
702-S-53	210	46	30	6.3	0.295	77.58	20.70	112.3	0.71
702-S-54	424	32	30	3.0	0.135	33.23	11.69	224.6	1.47
702-S-55	378	28	15	2.7	0.127	41.04	11.30	160.0	0.51
702-S-56	382	32	30	5.4	0.147	28.36	12.15	153.6	0.50
702-S-57	444	60	30	4.8	0.309	31.37	15.31	244.4	2.32
702-S-58	372	24	15	4.4	0.174	29.07	14.58	140.4	1.06
702-S-59	370	32	30	21.4	0.223	40.62	78.36	271.0	1.92
702-S-62	404	32	30	3.2	0.240	52.67	12.26	284.4	1.41
702-S-63	318	42	30	2.4	0.243	64.40	20.34	269.2	2.31
702-S-64	316	20	15	3.6	0.120	32.17	12.82	122.6	0.44
702-S-65	420	48	30	3.7	0.135	40.15	16.45	119.4	0.49
702-S-66	410	46	30	2.1	0.102	33.99	9.85	121.7	0.36
702-S-67	738	64	30	4.2	0.150	36.07	13.44	114.8	0.42
702-S-68	334	42	30	3.5	0.406	37.86	11.46	233.7	3.77
702-S-69	576	82	30	31.2	0.728	33.58	17.23	218.3	2.29
702-S-70	360	18	15	4.5	0.211	37.57	11.61	248.1	2.50
702-S-71	276	34	35	30.4	0.130	30.56	60.07	220.1	1.09
702-S-72	280	32	30	7.2	0.140	36.56	15.52	143.7	0.68
702-S-73	306	46	30	6.5	0.198	62.75	23.39	260.6	1.82
702-S-74	228	24	15	12.0	0.134	20.11	14.40	212.7	1.30
702-S-75	188	24	15	4.2	0.147	41.17	17.78	125.9	0.30
702-S-101	302	16	15	4.1	0.173	51.10	14.78	163.6	0.97

Notes:

Acme Labs File: 103077

Quality Control

STANDARD DS3a			30	19.2	0.283	121.48	32.16	153.7	5.38
STANDARD DS3b			30	16.6	0.264	125.31	32.72	148.5	5.43
STANDARD DS3c			30	21.9	0.265	121.45	33.13	150.7	5.78

N:\702\Ass. Report\SievedSiltv5.wk4

Appendix: III **ESKAY PROJECT - SIEVED SILT STREAM SEDIMENT RESULTS**

ICP-MS Analysis

Sample No.	As ppm	Sb ppm	Hg ppb	Te ppm	Mo ppm	Bi ppm	Co ppm	Ni ppm	Cr ppm
702-S-01	13.9	3.23	193	0.03	1.70	0.07	12.0	19.0	20.4
702-S-02	62.5	3.23	299	0.02	12.38	0.09	34.6	57.6	132.2
702-S-03	12.5	2.99	188	0.04	1.79	0.07	11.2	17.6	18.9
702-S-04	38.0	4.18	104	0.06	1.90	0.12	19.6	25.1	15.3
702-S-05	57.3	6.48	208	0.07	3.64	0.16	25.7	25.0	12.3
702-S-06	19.0	2.28	83	0.05	1.47	0.12	19.8	45.8	33.1
702-S-07	22.3	3.22	122	0.05	4.08	0.14	20.9	121.3	62.6
702-S-08	21.2	4.62	176	0.05	5.00	0.17	23.0	117.6	44.0
702-S-09	13.6	4.03	138	0.07	4.34	0.25	22.8	116.8	41.7
702-S-10	25.5	5.14	155	0.05	5.64	0.16	18.7	98.2	46.9
702-S-11	35.8	5.17	286	0.19	3.59	0.13	22.9	55.5	32.1
702-S-12	23.1	5.63	418	0.05	1.62	0.09	20.3	58.1	48.5
702-S-13	33.2	5.41	219	0.04	1.30	0.08	14.9	22.9	19.7
702-S-14	36.8	4.89	122	0.06	2.32	0.12	22.3	31.7	24.3
702-S-15	28.7	3.32	131	0.04	1.87	0.09	16.8	33.0	22.8
702-S-16	12.1	1.26	114	0.10	1.56	0.19	26.6	116.3	77.3
702-S-17	13.8	1.02	105	0.10	1.68	0.20	34.7	156.1	92.7
702-S-18	16.0	2.72	468	0.06	6.81	0.14	15.5	65.7	32.5
702-S-19	17.8	3.27	666	0.04	4.93	0.13	13.3	22.8	8.3
702-S-20	11.5	1.01	74	0.07	1.82	0.18	21.8	59.7	51.5
702-S-21	53.9	6.46	466	0.03	5.74	0.09	24.3	31.4	30.6
702-S-22	125.9	7.72	912	0.05	2.81	0.12	19.5	38.0	22.9
702-S-23	98.5	4.81	390	1.48	2.10	0.33	31.0	28.6	16.5
702-S-24	37.0	3.49	231	0.13	1.34	0.22	25.0	41.1	17.6
702-S-25	142.6	12.69	208	0.04	8.48	0.29	25.2	39.4	28.6
702-S-26	12.9	1.61	94	0.06	3.98	0.18	25.3	113.7	54.8
702-S-27	16.9	3.48	128	0.07	5.24	0.22	30.1	136.0	53.5
702-S-28	29.1	4.61	455	0.04	5.29	0.14	26.5	111.7	46.2
702-S-29	84.9	9.90	387	0.60	3.45	0.33	39.1	47.0	33.7
702-S-30	12.2	1.44	99	0.05	3.27	0.14	20.7	94.6	55.1
702-S-31	39.2	12.71	732	0.05	23.24	0.16	13.7	69.4	18.5
702-S-33	9.6	1.73	111	0.04	2.12	0.13	21.9	95.7	81.3
702-S-35	16.1	1.65	164	0.11	2.01	0.21	31.3	151.8	92.0
702-S-36	15.5	4.38	211	0.04	2.22	0.21	15.3	24.5	22.7
702-S-37	16.8	2.22	520	0.05	1.19	0.10	12.7	15.6	11.3
702-S-38	93.3	6.50	349	0.06	1.36	0.12	19.2	32.9	20.1
702-S-39	19.2	2.17	156	0.04	1.55	0.10	13.8	64.5	47.3
702-S-40	11.4	1.28	129	0.03	3.35	0.13	18.3	80.1	54.0
702-S-41	25.1	4.88	323	0.03	3.84	0.08	12.5	15.2	14.8
702-S-42	32.0	3.46	136	0.09	1.35	0.13	20.9	42.7	30.3
702-S-43	55.3	8.54	2379	1.40	2.33	0.45	23.2	49.3	50.9
702-S-44	19.6	4.77	189	0.06	4.93	0.16	19.6	109.8	50.8
702-S-45	44.9	8.44	256	0.07	7.05	0.16	16.5	88.1	39.5
702-S-46	13.7	1.53	148	0.06	3.21	0.14	31.2	107.3	60.3
702-S-47	16.5	2.77	132	0.07	6.01	0.24	23.2	113.2	34.5
702-S-48	25.7	5.01	140	0.07	5.65	0.22	19.8	105.3	39.5
702-S-49	105.9	6.37	366	0.62	4.39	0.38	25.5	33.0	26.7

Appendix: III **ESKAY PROJECT - SIEVED SILT STREAM SEDIMENT RESULTS**

ICP-MS Analysis

Sample No.	As ppm	Sb ppm	Hg ppb	Te ppm	Mo ppm	Bi ppm	Co ppm	Ni ppm	Cr ppm
702-S-50	26.1	4.92	316	0.04	1.65	0.08	13.3	21.7	18.6
702-S-51	44.0	14.89	787	0.08	25.83	0.16	14.1	82.2	22.6
702-S-52	44.9	6.14	545	0.04	6.71	0.09	22.5	56.1	39.3
702-S-53	25.7	4.72	284	0.04	2.28	0.08	13.3	22.7	18.8
702-S-54	13.6	1.28	106	0.06	2.54	0.16	26.4	106.3	76.2
702-S-55	13.0	1.31	118	0.06	2.06	0.16	29.2	153.2	124.2
702-S-56	8.9	0.78	139	0.05	1.74	0.15	18.2	98.8	61.7
702-S-57	14.6	2.39	121	0.02	5.08	0.15	18.4	53.6	42.5
702-S-58	13.6	1.63	101	0.05	2.69	0.14	20.2	43.4	31.4
702-S-59	19.3	2.37	135	0.05	4.90	0.17	18.3	70.7	39.8
702-S-62	9.2	1.32	96	0.05	3.51	0.18	24.5	143.2	59.8
702-S-63	15.2	2.22	177	0.07	5.11	0.28	30.3	138.3	55.1
702-S-64	8.5	0.88	80	0.05	2.07	0.15	23.3	80.2	61.7
702-S-65	12.8	1.42	103	0.08	1.88	0.19	22.1	86.4	56.7
702-S-66	7.8	0.66	80	0.03	2.74	0.13	19.1	50.4	37.9
702-S-67	9.8	0.98	99	0.06	1.61	0.15	26.9	51.6	35.0
702-S-68	24.4	2.05	189	0.04	4.13	0.12	17.4	51.1	23.9
702-S-69	73.0	5.55	188	0.04	4.98	0.14	18.7	45.3	22.5
702-S-70	24.6	1.96	114	0.04	4.97	0.14	22.2	73.6	40.7
702-S-71	9.1	0.75	72	0.03	2.68	0.12	18.0	62.4	53.1
702-S-72	11.1	0.97	110	0.06	2.49	0.15	23.3	48.7	42.2
702-S-73	16.3	1.51	122	0.07	5.30	0.14	30.8	85.8	52.4
702-S-74	16.9	0.78	53	0.00	4.55	0.19	18.0	50.3	37.5
702-S-75	16.1	1.42	147	0.07	1.71	0.22	29.0	30.5	17.7
702-S-101	14.7	1.62	132	0.07	2.62	0.14	26.9	97.5	72.1

Notes:

Quality Control

STANDARD DS3a	28.0	4.82	235	1.05	9.19	5.65	12.3	36.3	174.2
STANDARD DS3b	28.5	4.72	225	1.05	9.28	5.67	12.1	36.3	190.7
STANDARD DS3c	28.8	4.70	230	1.05	9.32	5.57	13.0	37.7	191.9

ESKAY PROJECT - SIEVED SILT STREAM SEDIMENT RESULTS

ICP-MS Analysis

Sample No.	<u>Fe</u> %	<u>Mn</u> ppm	<u>Ba</u> ppm	<u>W</u> ppm	<u>Al</u> %	<u>B</u> ppm	<u>Ca</u> %	<u>Ga</u> ppm	<u>K</u> %
702-S-01	3.07	723	88.3	<.2	1.01	2	2.55	4.2	0.13
702-S-02	8.59	1688	241.9	<.2	2.65	2	0.60	9.5	0.08
702-S-03	3.06	743	97.2	<.2	1.03	2	2.51	4.4	0.13
702-S-04	4.58	1116	222.6	<.2	1.16	1	0.33	3.2	0.08
702-S-05	5.51	1538	212.6	<.2	1.05	1	0.36	3.0	0.08
702-S-06	3.92	1186	161.2	<.2	1.63	1	0.57	5.6	0.07
702-S-07	4.03	943	119.3	<.2	1.53	1	0.28	4.4	0.06
702-S-08	4.21	753	110.2	<.2	1.15	1	0.24	3.6	0.08
702-S-09	4.41	706	118.3	<.2	1.42	1	0.25	4.4	0.05
702-S-10	4.24	827	149.2	<.2	1.35	1	0.25	4.1	0.08
702-S-11	4.92	2791	215.8	<.2	1.82	0	0.55	5.1	0.07
702-S-12	3.82	1954	175.3	<.2	1.56	1	0.44	5.2	0.05
702-S-13	3.84	666	80.0	<.2	1.04	2	2.25	4.5	0.16
702-S-14	4.97	1158	191.6	<.2	1.62	1	0.45	4.9	0.10
702-S-15	5.66	786	192.4	<.2	1.57	1	0.37	4.5	0.10
702-S-16	4.24	1338	140.3	<.2	2.10	2	0.38	6.5	0.06
702-S-17	4.72	1213	184.6	<.2	2.21	2	0.41	6.7	0.06
702-S-18	3.88	1107	196.0	<.2	1.66	2	0.47	5.5	0.08
702-S-19	3.99	682	227.7	<.2	0.88	2	0.59	2.8	0.11
702-S-20	4.31	1263	88.2	<.2	2.00	2	0.33	6.5	0.07
702-S-21	5.41	2127	233.0	<.2	1.68	0	0.50	5.7	0.11
702-S-22	5.00	2029	184.6	<.2	1.32	0	0.41	4.0	0.08
702-S-23	6.69	1796	221.1	<.2	1.37	0	0.45	4.0	0.03
702-S-24	5.53	1094	169.3	<.2	1.22	0	0.60	3.7	0.04
702-S-25	4.64	1402	105.9	1.0	1.48	1	0.41	4.5	0.11
702-S-26	4.05	993	81.9	<.2	1.81	1	0.30	6.2	0.08
702-S-27	4.78	909	134.8	<.2	1.77	0	0.23	5.1	0.06
702-S-28	4.35	2024	175.1	<.2	1.66	1	0.33	5.3	0.06
702-S-29	5.50	14190	508.2	0.3	0.88	2	0.55	2.8	0.04
702-S-30	4.21	1698	123.1	<.2	1.74	1	0.24	6.3	0.05
702-S-31	4.06	838	140.6	<.2	0.85	1	0.41	2.8	0.04
702-S-33	3.54	1084	117.9	<.2	2.07	2	0.21	7.1	0.05
702-S-35	4.74	1089	249.4	<.2	2.10	2	0.43	6.6	0.08
702-S-36	4.10	958	319.4	<.2	1.34	3	0.75	5.4	0.10
702-S-37	3.65	575	244.9	<.2	0.95	2	0.46	2.8	0.11
702-S-38	5.22	2012	166.0	<.2	1.38	1	0.32	4.1	0.09
702-S-39	3.46	841	93.6	<.2	1.43	1	0.27	5.0	0.05
702-S-40	3.95	958	155.6	<.2	1.81	2	0.44	6.3	0.10
702-S-41	3.90	815	87.6	<.2	1.32	1	1.08	6.3	0.14
702-S-42	4.99	1217	115.7	<.2	1.87	1	0.40	5.3	0.05
702-S-43	4.77	1328	131.1	<.2	1.46	1	0.36	4.4	0.06
702-S-44	4.03	797	111.0	<.2	1.17	1	0.23	3.9	0.08
702-S-45	4.92	1152	164.4	0.2	1.11	1	0.28	3.3	0.09
702-S-46	4.13	1763	125.0	<.2	1.81	1	0.28	6.0	0.07
702-S-47	4.26	800	161.7	<.2	1.14	1	0.41	3.4	0.06
702-S-48	4.87	838	152.6	<.2	1.50	1	0.28	4.7	0.07
702-S-49	10.10	983	160.2	<.2	1.39	1	0.36	4.5	0.05

ICP-MS Analysis

Sample No.	<u>Fe</u> %	<u>Mn</u> ppm	<u>Ba</u> ppm	<u>W</u> ppm	<u>Al</u> %	<u>B</u> ppm	<u>Ca</u> %	<u>Ga</u> ppm	<u>K</u> %
702-S-50	3.57	691	79.8	<.2	0.99	1	2.51	4.6	0.15
702-S-51	4.48	935	144.8	<.2	0.78	1	0.36	2.5	0.05
702-S-52	4.84	3876	218.6	<.2	1.77	1	0.42	6.6	0.08
702-S-53	3.71	704	99.6	<.2	1.02	2	1.95	4.7	0.14
702-S-54	3.91	1838	154.1	<.2	2.03	2	0.31	6.7	0.08
702-S-55	4.40	1469	113.6	<.2	2.36	2	0.34	8.0	0.06
702-S-56	3.54	1456	228.9	<.2	1.89	2	0.40	6.8	0.07
702-S-57	4.22	894	135.3	<.2	1.80	1	0.47	8.0	0.08
702-S-58	3.92	1021	161.9	<.2	1.64	2	0.36	7.0	0.12
702-S-59	4.19	1163	127.6	<.2	1.77	2	0.47	6.8	0.08
702-S-62	4.85	841	65.9	<.2	2.27	1	0.31	7.5	0.07
702-S-63	4.76	862	77.4	<.2	2.02	1	0.25	6.8	0.07
702-S-64	4.14	1169	101.4	<.2	2.25	2	0.41	8.9	0.08
702-S-65	3.90	1033	94.5	<.2	1.86	2	0.31	6.9	0.07
702-S-66	4.19	901	91.3	<.2	2.11	2	0.47	6.9	0.09
702-S-67	4.81	1567	102.2	<.2	1.98	1	0.61	6.6	0.09
702-S-68	3.80	1099	143.3	<.2	0.91	1	0.36	2.9	0.08
702-S-69	3.99	1131	140.9	<.2	1.40	2	0.48	5.0	0.07
702-S-70	4.01	1082	101.7	<.2	1.69	2	0.39	5.5	0.09
702-S-71	3.72	996	79.3	<.2	2.00	1	0.35	7.0	0.06
702-S-72	4.32	1273	125.0	<.2	2.11	1	0.47	7.5	0.08
702-S-73	4.55	1368	147.9	<.2	1.92	1	0.40	6.1	0.07
702-S-74	4.43	1004	134.9	0.2	2.51	1	0.62	12.2	0.11
702-S-75	5.21	2433	139.3	<.2	2.10	2	0.54	6.6	0.08
702-S-101	3.94	1233	91.7	<.2	1.76	1	0.21	5.4	0.04

Notes:

Quality Control

STANDARD DS3a	3.10	811	154.1	4.1	1.64	1	0.49	6.5	0.16
STANDARD DS3b	3.08	808	159.7	3.7	1.67	1	0.51	6.5	0.16
STANDARD DS3c	3.10	817	152.3	3.9	1.66	1	0.52	6.6	0.16

ESKAY PROJECT - SIEVED SILT STREAM SEDIMENT RESULTS

ICP-MS Analysis

Sample No.	<u>La</u> ppm	<u>Mg</u> %	<u>Na</u> %	<u>P</u> %	<u>S</u> %	<u>Sc</u> ppm	<u>Se</u> ppm	<u>Sr</u> ppm	<u>Th</u> ppm
702-S-01	9.3	0.92	0.028	0.186	0.53	2.9	2.4	138.9	1.2
702-S-02	11.2	1.73	0.021	0.114	1.13	9.2	0.6	40.1	1.2
702-S-03	9.2	0.93	0.028	0.176	0.50	2.9	2.1	132.3	1.2
702-S-04	10.0	0.56	0.018	0.135	0.00	3.3	0.1	31.4	1.1
702-S-05	10.8	0.42	0.015	0.137	0.00	5.1	0.0	29.6	1.0
702-S-06	11.1	1.01	0.077	0.106	0.02	2.5	0.4	55.5	1.1
702-S-07	9.1	1.14	0.035	0.082	0.06	3.6	1.0	27.3	1.5
702-S-08	8.9	0.84	0.028	0.083	0.21	4.0	3.4	29.8	2.1
702-S-09	8.2	0.91	0.024	0.089	0.19	3.9	1.5	31.7	2.4
702-S-10	10.4	0.93	0.029	0.090	0.12	3.5	2.8	26.8	1.9
702-S-11	14.9	0.89	0.084	0.118	0.06	2.8	4.1	39.2	0.9
702-S-12	11.0	1.04	0.052	0.099	0.06	2.4	1.1	28.7	0.8
702-S-13	9.5	0.93	0.036	0.198	1.14	3.1	6.2	123.6	1.1
702-S-14	10.2	0.97	0.024	0.155	0.04	3.9	0.3	31.4	1.2
702-S-15	10.1	0.81	0.023	0.141	0.01	3.4	0.3	25.9	1.1
702-S-16	10.7	1.38	0.021	0.107	0.11	3.1	1.4	58.4	1.7
702-S-17	8.6	1.77	0.016	0.116	0.10	4.6	1.0	58.1	1.4
702-S-18	12.2	0.75	0.026	0.115	0.02	2.9	2.5	85.9	0.7
702-S-19	10.2	0.47	0.019	0.137	0.35	4.8	0.4	38.7	1.4
702-S-20	13.4	1.23	0.028	0.112	0.05	4.1	0.0	26.6	1.2
702-S-21	13.8	1.06	0.013	0.111	0.17	6.7	0.0	30.1	1.9
702-S-22	7.7	0.69	0.018	0.127	0.20	3.9	0.4	31.2	1.1
702-S-23	5.0	0.76	0.014	0.198	0.61	4.5	3.6	30.5	0.9
702-S-24	5.7	0.75	0.018	0.190	0.60	4.3	0.7	45.9	1.3
702-S-25	29.5	0.91	0.130	0.082	0.19	2.8	0.0	34.9	3.3
702-S-26	9.3	1.18	0.057	0.092	0.15	3.7	0.9	32.9	1.9
702-S-27	8.4	1.08	0.015	0.093	0.34	3.5	2.2	26.9	2.4
702-S-28	12.3	0.99	0.043	0.088	0.09	3.0	2.9	29.7	1.6
702-S-29	6.5	0.45	0.036	0.152	0.73	2.6	4.8	45.2	0.6
702-S-30	9.5	1.09	0.032	0.069	0.06	2.7	0.6	37.0	1.4
702-S-31	9.1	0.71	0.008	0.098	0.37	4.7	6.6	22.3	1.4
702-S-33	11.8	1.15	0.013	0.076	0.01	2.7	0.8	33.6	1.9
702-S-35	8.8	1.76	0.013	0.112	0.16	6.0	1.2	67.1	2.0
702-S-36	12.1	0.69	0.030	0.207	0.04	4.9	1.6	46.7	0.7
702-S-37	9.0	0.45	0.006	0.133	0.39	4.1	0.5	32.2	1.4
702-S-38	9.1	0.62	0.014	0.130	0.03	5.2	0.6	26.3	1.4
702-S-39	8.8	1.01	0.023	0.080	0.04	2.9	0.5	29.1	1.3
702-S-40	14.7	1.24	0.063	0.098	0.03	4.0	0.8	41.1	1.9
702-S-41	10.5	1.25	0.014	0.274	0.46	6.0	0.9	82.6	1.6
702-S-42	7.8	1.12	0.014	0.164	0.06	3.9	0.6	24.8	1.4
702-S-43	8.1	0.96	0.047	0.137	0.47	2.9	3.5	27.0	1.2
702-S-44	9.6	0.82	0.029	0.087	0.14	4.4	2.5	29.8	2.2
702-S-45	10.1	0.74	0.023	0.116	0.47	4.1	6.9	25.1	1.8
702-S-46	10.3	1.26	0.039	0.081	0.06	3.5	1.1	33.4	1.8
702-S-47	9.2	0.69	0.010	0.093	0.29	4.2	3.0	58.0	2.7
702-S-48	9.0	0.95	0.007	0.091	0.66	2.9	5.7	31.1	2.7
702-S-49	4.6	0.75	0.013	0.173	1.29	6.4	1.7	27.9	0.8

Appendix: III **ESKAY PROJECT - SIEVED SILT STREAM SEDIMENT RESULTS**

ICP-MS Analysis

Sample No.	<u>La</u> ppm	<u>Mg</u> %	<u>Na</u> %	<u>P</u> %	<u>S</u> %	<u>Sc</u> ppm	<u>Se</u> ppm	<u>Sr</u> ppm	<u>Th</u> ppm
702-S-50	7.6	0.89	0.023	0.173	1.27	3.0	4.5	137.3	1.1
702-S-51	8.2	0.63	0.007	0.099	0.63	4.8	6.7	23.8	1.6
702-S-52	14.4	0.88	0.074	0.112	0.05	2.7	2.4	34.2	1.6
702-S-53	7.9	0.89	0.025	0.180	1.01	3.1	4.1	103.1	1.1
702-S-54	9.8	1.33	0.013	0.095	0.07	3.1	1.4	48.2	1.4
702-S-55	10.5	2.02	0.026	0.097	0.08	3.6	1.2	52.7	1.4
702-S-56	13.4	1.13	0.018	0.103	0.08	2.6	1.2	94.3	0.9
702-S-57	30.9	0.91	0.036	0.194	0.04	4.2	1.4	38.1	3.5
702-S-58	15.8	0.84	0.060	0.110	0.09	3.8	1.6	31.8	2.1
702-S-59	17.5	0.93	0.062	0.124	0.03	4.5	1.3	48.4	2.1
702-S-62	7.5	1.49	0.071	0.096	0.05	5.0	0.8	36.9	1.8
702-S-63	6.2	1.20	0.027	0.098	0.30	4.7	2.0	29.5	2.3
702-S-64	13.5	1.43	0.074	0.090	0.07	3.9	0.8	53.6	2.3
702-S-65	11.7	1.21	0.017	0.095	0.12	3.7	0.8	28.0	2.0
702-S-66	15.0	1.25	0.079	0.097	0.02	4.4	0.6	37.4	1.1
702-S-67	10.2	1.29	0.110	0.100	0.14	5.4	0.1	49.8	1.8
702-S-68	11.8	0.53	0.032	0.128	0.17	4.0	2.3	33.9	1.5
702-S-69	23.2	0.79	0.052	0.154	0.05	4.0	0.6	34.5	1.9
702-S-70	14.2	1.07	0.042	0.120	0.07	3.9	1.1	37.0	1.8
702-S-71	14.8	1.09	0.044	0.094	0.04	3.3	0.3	29.8	1.2
702-S-72	15.6	1.19	0.047	0.124	0.08	4.4	0.3	35.2	1.4
702-S-73	14.3	1.14	0.039	0.107	0.00	5.5	0.5	34.8	1.4
702-S-74	31.6	1.13	0.149	0.100	0.04	3.5	0.1	52.7	4.8
702-S-75	8.0	0.83	0.038	0.111	0.08	5.7	0.1	41.8	1.5
702-S-101	12.5	1.23	0.011	0.103	0.00	3.5	0.2	18.4	1.4

Notes:

Quality Control

STANDARD DS3a	16.0	0.58	0.027	0.095	0.04	2.4	1.0	24.8	3.8
STANDARD DS3b	15.5	0.58	0.028	0.094	0.04	2.6	1.1	27.0	3.8
STANDARD DS3c	16.7	0.58	0.028	0.092	0.04	2.6	1.0	27.7	4.1

Appendix: III **ESKAY PROJECT - SIEVED SILT STREAM SEDIMENT RESULTS**

ICP-MS Analysis

Sample No.	<u>Ti</u> %	<u>Ti</u> ppm	<u>U</u> ppm	<u>V</u> ppm
702-S-01	0.071	0.110	0.2	64
702-S-02	0.130	0.180	0.8	120
702-S-03	0.073	0.100	0.2	66
702-S-04	0.011	0.100	0.6	30
702-S-05	0.004	0.120	1.4	31
702-S-06	0.093	0.090	0.6	42
702-S-07	0.036	0.300	0.8	42
702-S-08	0.027	0.320	0.4	37
702-S-09	0.012	0.260	0.4	33
702-S-10	0.030	0.320	0.7	38
702-S-11	0.104	0.190	1.1	49
702-S-12	0.077	0.110	0.5	41
702-S-13	0.076	0.120	0.2	72
702-S-14	0.018	0.080	0.6	50
702-S-15	0.023	0.090	0.6	43
702-S-16	0.014	0.100	0.2	47
702-S-17	0.008	0.110	0.1	56
702-S-18	0.006	0.350	0.4	50
702-S-19	0.000	0.400	0.2	45
702-S-20	0.029	0.110	0.4	50
702-S-21	0.003	0.480	0.4	61
702-S-22	0.009	0.720	0.4	33
702-S-23	0.009	0.100	0.1	37
702-S-24	0.009	0.060	0.2	31
702-S-25	0.137	0.930	3.7	42
702-S-26	0.057	0.280	0.4	44
702-S-27	0.007	0.300	0.5	34
702-S-28	0.047	0.770	1.2	39
702-S-29	0.041	0.320	0.7	29
702-S-30	0.040	0.180	0.2	41
702-S-31	0.002	1.130	0.8	43
702-S-33	0.034	0.120	0.3	43
702-S-35	0.006	0.120	0.1	55
702-S-36	0.017	0.130	0.2	82
702-S-37	0.000	0.140	0.1	36
702-S-38	0.009	0.190	0.3	41
702-S-39	0.029	0.100	0.2	39
702-S-40	0.088	0.170	0.7	52
702-S-41	0.058	0.190	0.3	124
702-S-42	0.014	0.070	0.2	45
702-S-43	0.056	0.090	0.3	39
702-S-44	0.026	0.310	0.3	36
702-S-45	0.015	0.350	0.8	35
702-S-46	0.044	0.230	0.5	48
702-S-47	0.001	0.370	0.3	32
702-S-48	0.000	0.280	0.4	34
702-S-49	0.009	0.120	0.1	51

Appendix: III **ESKAY PROJECT - SIEVED SILT STREAM SEDIMENT RESULTS**

ICP-MS Analysis

Sample No.	<u>Ti</u> %	<u>Ti</u> ppm	<u>U</u> ppm	<u>V</u> ppm
702-S-50	0.071	0.130	0.2	63
702-S-51	0.002	1.350	1.0	43
702-S-52	0.114	0.330	0.7	49
702-S-53	0.077	0.180	0.2	72
702-S-54	0.013	0.140	0.2	44
702-S-55	0.040	0.090	0.2	57
702-S-56	0.018	0.100	0.3	40
702-S-57	0.071	0.180	1.1	63
702-S-58	0.082	0.150	0.5	46
702-S-59	0.094	0.220	0.8	56
702-S-62	0.139	0.310	0.5	56
702-S-63	0.028	0.370	0.3	43
702-S-64	0.143	0.120	0.7	74
702-S-65	0.026	0.120	0.2	44
702-S-66	0.075	0.180	0.3	54
702-S-67	0.124	0.130	0.3	58
702-S-68	0.036	0.230	0.3	31
702-S-69	0.065	0.620	0.7	59
702-S-70	0.052	0.380	0.4	48
702-S-71	0.085	0.180	0.6	55
702-S-72	0.074	0.170	0.6	59
702-S-73	0.063	0.310	0.7	61
702-S-74	0.265	0.140	2.9	78
702-S-75	0.019	0.120	0.3	45
702-S-101	0.018	0.140	0.3	45

Notes:

Quality Control

STANDARD DS3a	0.089	0.990	6.2	73
STANDARD DS3b	0.094	1.040	5.0	76
STANDARD DS3c	0.090	1.010	5.8	76

APPENDIX IV: HEAVY MINERAL RESULTS

C.F. Mineral Laboratories – Separation Weights

Acme Analytical – ICP-MS

Activation Laboratories -- INAA

Activation Laboratories -- ICP_MS

Interpretation: Anomalous Samples

Eskey Project**C.F. Mineral Research Ltd.**

Heavy Mineral Sample No. ->	<u>702-H01</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>28</u>	<u>Total</u>
field sample -> - 20 mesh (kg)	14.0	11.2	11.5	10.5	8.1	12.3	9.1	8.9	12.6	10.5	9.3	8.5	127
<u>SG - MS Fr.</u>	<u>Size Fraction</u>												
HN	0.9	0.0	7.3	0.6	0.0	0.9	0.1	13.9	6.7	14.4	11.7	3.7	60
HN	8.3	0.1	10.5	0.4	0.0	2.0	0.1	24.1	14.9	17.5	8.5	3.7	90
HN	63.4	12.1	113.4	0.8	0.6	9.5	0.6	81.5	63.8	54.4	10.9	6.7	418
HN	<u>7.9</u>	<u>13.8</u>	<u>85.3</u>	<u>2.0</u>	<u>2.8</u>	<u>10.3</u>	<u>1.5</u>	<u>7.7</u>	<u>17.0</u>	<u>6.3</u>	<u>9.7</u>	<u>2.2</u>	<u>167</u>
HN subtotal	80.6	26.1	216.5	3.9	3.4	22.7	2.3	127.2	102.5	92.7	40.8	16.3	735
HP	4.9	1.5	15.9	8.0	0.4	1.6	0.4	10.5	17.9	55.2	6.4	2.7	125
HP	39.6	3.3	36.5	5.2	0.5	4.9	0.7	22.5	53.5	92.2	4.6	3.0	266
HP	214.2	18.5	245.0	6.8	2.0	17.2	3.9	88.1	195.6	173.2	6.3	4.7	976
HP	<u>109.8</u>	<u>7.6</u>	<u>74.9</u>	<u>2.8</u>	<u>1.3</u>	<u>8.0</u>	<u>1.2</u>	<u>38.4</u>	<u>47.2</u>	<u>20.4</u>	<u>3.4</u>	<u>1.0</u>	<u>316</u>
HP subtotal	368.5	30.9	372.4	22.9	4.3	31.8	6.1	159.5	314.2	341.0	20.6	11.4	1683
HM	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.4	0.0	0.0	1
HM	0.1	0.0	0.3	0.1	0.0	0.1	0.0	1.0	0.4	1.0	0.0	0.0	3
HM	1.8	0.3	3.9	0.3	0.1	0.7	0.3	5.5	2.3	3.4	0.0	0.1	19
HM	<u>0.8</u>	<u>0.1</u>	<u>1.6</u>	<u>0.1</u>	<u>0.0</u>	<u>0.2</u>	<u>0.1</u>	<u>2.2</u>	<u>0.8</u>	<u>0.5</u>	<u>0.0</u>	<u>0.0</u>	<u>6</u>
HM subtotal	2.8	0.4	5.9	0.5	0.2	0.9	0.4	8.8	3.6	5.3	0.1	0.1	29

HEAVY MINERAL FRACTIONS - WEIGHTS (g)**Eskey Project C.F. Mineral Research Ltd.**

Heavy Mineral Sample No. ->	<u>702-H01</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>28</u>	<u>Total</u>
IN -20+35	1.6	1.0	5.6	2.2	2.8	1.2	0.5	3.7	10.5	12.9	2.2	2.2	46
IN -35+60	17.2	19.6	6.7	5.2	1.8	2.9	1.5	3.9	12.0	9.6	4.8	2.1	87
IN -60+150	239.1	305.4	232.2	37.9	20.4	109.1	19.1	38.9	234.6	16.0	125.5	8.3	1386
IN <u>-150</u>	<u>49.5</u>	<u>44.0</u>	<u>70.3</u>	<u>19.0</u>	<u>9.8</u>	<u>69.4</u>	<u>17.5</u>	<u>14.3</u>	<u>48.8</u>	<u>4.9</u>	<u>33.9</u>	<u>9.7</u>	<u>391</u>
IN subtotal	307.4	370.0	314.9	64.4	34.7	182.5	38.5	60.8	305.9	43.4	166.4	22.2	1911
IP -20+35	5.7	4.6	13.4	19.0	1.5	4.1	1.5	8.2	26.5	31.7	8.9	7.5	132
IP -35+60	20.2	13.4	14.7	12.9	1.7	9.7	3.3	8.4	33.3	24.7	9.4	6.8	158
IP -60+150	49.7	43.4	39.7	25.3	8.1	41.1	8.9	21.9	68.1	28.1	14.2	9.4	358
IP <u>-150</u>	<u>2.7</u>	<u>1.9</u>	<u>4.3</u>	<u>8.5</u>	<u>1.1</u>	<u>4.0</u>	<u>1.8</u>	<u>3.4</u>	<u>8.2</u>	<u>1.2</u>	<u>1.0</u>	<u>2.9</u>	<u>41</u>
IP subtotal	78.3	63.3	72.0	65.6	12.4	58.9	15.5	41.8	136.1	85.7	33.4	26.6	690
IM -20+35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0
IM -35+60	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0
IM -60+150	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.0	1
IM <u>-150</u>	<u>0.1</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0</u>
IM subtotal	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.1	0.1	1
H & I Total (g)	838	491	982	157	55	297	63	398	863	568	261	77	5049
L	5.5	5.7	7.8	7.9	4.7	6.2	3.9	4.8	3.1	3.8	5.3	16.6	

SG specific gravity: H > 3.2; I 2.9 - 3.2

MS magnetic susceptibility: N non-, P para-,
M magnetic

L suspended sediment

Bold Fractions were submitted for analysis

N:\702Ass. Reports\HMfractionsv5.wk4

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	Sample/ Analytical		Sample Analytical		Au	Au	Au	Au	Ag	Ag
	20 mesh wt. (kg)	wt. (g) INNA	wt. (g) ICP-MS	wt. (g) ICP-MS	ppb INAA	ug INAA	ppb ICP-MS	ug ICP-MS	ppm INAA	ppm ICP-MS
Analytical Method -> <u>Sample/Fraction</u>										
702-H01 -35+60 HN	14.0	8.2		0.5	35	0	5	0	-5	0.7
702-H01 -60+150 HN	14.0	63.2		0.5	41	2	37	2	-5	1.1
702-H01 -150 HN	14.0	7.9		0.5	541	3	223	1	-5	1.6
H01 -35+150 HN	14.0									
702-H01 -35+60HP	14.0		39.6	30			3	0		0.2
702-H01 -60+150HP	14.0		214.2	30			3	0		0.2
702-H01 -150HP	14.0		109.8	30			28	0		0.6
702-H01 -35+60IP	14.0		20.2	15			2	0		0.2
702-H01 -60+150IP	14.0		49.7	30			2	0		0.2
702-H01 -150IP	14.0		2.7	1			2	0		0.1
702-H01 -400L	14.0		5.5	5			1	0		0.5
702-H02 -35+60 HN	11.2	<i>is</i>			<i>is</i>		<i>is</i>		<i>is</i>	<i>is</i>
702-H02 -60+150 HN	11.2	12.1		0.5	15	0	2	0	-5	0.1
702-H02 -150 HN	11.2	13.8		0.5	87	1	124	2	-5	0.2
H02 -35+150 HN	11.2									
702-H02 -35+60HP	11.2		3.3	1			11	0		0.4
702-H02 -60+150HP	11.2		18.5	15			10	0		0.2
702-H02 -150HP	11.2		7.6	7.5			8	0		0.2
702-H02 -35+60IP	11.2		13.4	7.5			9	0		0.2
702-H02 -60+150IP	11.2		43.4	30			7	0		0.1
702-H02 -150IP	11.2		1.9	1			5	0		0.1
702-H02 -400L	11.2		5.7	5			5	0		0.4
702-H03 -35+60 HN	11.5	10.5		0.5	151	1	47	0	-5	2.8
702-H03 -60+150 HN	11.5	113.4		0.5	314	31	145	14	-5	1.7
702-H03 -150 HN	11.5	85.3		0.5	1005	74	414	31	-5	1.6
H03 -35+150 HN	11.5									
702-H03 -35+60HP	11.5		36.5	30			6	0		0.3
702-H03 -60+150HP	11.5		245.0	30			3	0		0.2
702-H03 -150HP	11.5		74.9	30			9	0		0.2
702-H03 -35+60IP	11.5		14.7	7.5			2	0		0.3
702-H03 -60+150IP	11.5		39.7	30			2	0		0.1
702-H03 -150IP	11.5		4.3	1			1	0		0.1
702-H03 -400L	11.5		7.8	5			2	0		0.7
702-H04 -35+60 HN	10.5	<i>is</i>			<i>is</i>		<i>is</i>		<i>is</i>	<i>is</i>
702-H04 -60+150 HN	10.5	0.9		0.5	7	0	9	0	-5	1.5
702-H04 -150 HN	10.5	2.0		0.5	2540	5	3820	7	-5	1.4
H04 -35+150 HN	10.5									
702-H04 -35+60HP	10.5		5.2	1			40	0		3.7
702-H04 -60+150HP	10.5		6.8	5			25	0		1.4
702-H04 -150HP	10.5		2.8	1			15	0		1.0
702-H04 -35+60IP	10.5		12.9	7.5			28	0		1.1
702-H04 -60+150IP	10.5		25.3	15			5	0		0.2
702-H04 -150IP	10.5		8.5	7.5			6	0		0.2
702-H04 -400L	10.5		7.9	5			5	0		0.6

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	20 mesh wt. (kg)	Sample/ Analytical	Sample	Au	Au	Au	Au	Ag	Ag
		wt. (g)	wt. (g)	ppb	ug	ppb	ug	ppm	ppm
		INNA	ICP-MS	INAA	INAA	ICP-MS	ICP-MS	INAA	ICP-MS
702-H05 -35+60 HN	8.1	<i>is</i>		<i>is</i>		<i>is</i>		<i>is</i>	<i>is</i>
702-H05 -60+150HN	8.1	0.6	0.5	-5	0	2	0	-5	0.2
702-H05 -150 HN	8.1	2.8	0.5	13	0	2	0	-5	0.1
H05 -35+150 HN	8.1								
702-H05 -35+60HP	8.1		<i>is</i>			<i>is</i>			<i>is</i>
702-H05 -60+150HP	8.1		2.0	1		4	0		0.4
702-H05 -150HP	8.1		1.3	1		2	0		0.3
702-H05 -35+60IP	8.1		1.7	1		4	0		0.5
702-H05 -60+150IP	8.1		8.1	7.5		1	0		0.1
702-H05 -150IP	8.1		1.1	1		1	0		0.2
702-H05 -400L	8.1		4.7	1		1	0		0.7
702-H06 -35+60 HN	12.3	1.9	0.5	30	0	8	0	-5	1.2
702-H06 -60+150 HN	12.3	9.5	0.5	43	0	13	0	-5	1.0
702-H06 -150 HN	12.3	10.3	0.5	10	0	2	0	-5	0.4
H06 -35+150 HN	12.3								
702-H06 -35+60HP	12.3		4.9	1		18	0		1.8
702-H06 -60+150HP	12.3		17.2	15		24	0		1.4
702-H06 -150HP	12.3		8.0	7.5		13	0		0.9
702-H06 -35+60IP	12.3		9.7	7.5		7	0		0.5
702-H06 -60+150IP	12.3		41.1	30		7	0		0.3
702-H06 -150IP	12.3		4.0	1		2	0		0.2
702-H06 -400L	12.3		6.2	1		1	0		0.2
702-H07 -35+60 HN	9.1	<i>is</i>		<i>is</i>		<i>is</i>		<i>is</i>	<i>is</i>
702-H07 -60+150HN	9.1	0.6	0.5	54	0	15	0	-5	0.8
702-H07 -150HN	9.1	1.5	0.5	50	0	5	0	-5	0.2
H07 -35+150 HN	9.1								
702-H07 -35+60HP	9.1		<i>is</i>			<i>is</i>			<i>is</i>
702-H07 -60+150HP	9.1		3.9	1		24	0		0.2
702-H07 -150HP	9.1		1.2	1		12	0		0.3
702-H07 -35+60IP	9.1		3.3	1		2	0		0.2
702-H07 -60+150IP	9.1		8.9	7.5		3	0		0.1
702-H07 -150IP	9.1		1.8	1		2	0		0.2
702-H07 -400L	9.1		3.9	1		1	0		0.5
702-H21 -35+60 HN	8.9	24.0	0.5	268	7	12	0	-5	2.6
702-H21 -60+150 HN	8.9	81.4	0.5	1116	103	19	2	-5	0.9
702-H21 -150 HN	8.9	7.7	0.5	5960	52	8270	72	-5	21.1
H21 -35+150 HN	8.9								
702-H21 -35+60HP	8.9		22.5	15		5	0		0.2
702-H21 -60+150HP	8.9		88.1	30		5	0		0.1
702-H21 -150HP	8.9		38.4	30		14	0		0.3
702-H21 -35+60IP	8.9		8.4	7.5		3	0		0.3
702-H21 -60+150IP	8.9		21.9	15		3	0		0.2
702-H21 -150IP	8.9		3.4	1		1	0		0.1
702-H21 -400L	8.9		4.8	1		1	0		0.5

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	20 mesh wt. (kg)	Sample/ Analytical	Sample	Analytical	Au	Au	Au	Au	Ag	Ag
		wt. (g)	wt. (g)	wt. (g)	wt. (g)	ppb INAA	ug INAA	ppb ICP-MS	ug ICP-MS	ppm INAA
702-H22 -35+60 HN	12.6	12.0		0.5	228	2	25	0	-5	4.1
702-H22 -60+150 HN	12.6	63.8		0.5	310	16	45	2	-5	3.2
702-H22-150 HN	12.6	17.0		0.5	854	11	77	1	-5	3.4
H22 -35+150 HN	12.6									
702-H22 -35+60HP	12.6		53.5	15			11	0		0.6
702-H22 -60+150HP	12.6		195.6	15			9	0		0.2
702-H22 -150HP	12.6		47.2	15			7	0		0.3
702-H22 -35+60IP	12.6		33.3	15			2	0		0.4
702-H22 -60+150IP	12.6		68.1	15			2	0		0.2
702-H22 -150IP	12.6		8.2	1			1	0		0.1
702-H22 -400L	12.6		3.1	1			0	0		0.5
702-H23 -35+60 HN	10.5	17.3		0.5	17200	283	98	2	73	2.2
702-H23 -60+150 HN	10.5	54.4		0.5	4390	227	22	1	-5	1.2
702-H23 -150 HN	10.5	6.3		0.5	6710	40	45	0	-5	6.0
H23 -35+150 HN	10.5									
702-H23 -35+60HP	10.5		92.2	30			3	0		0.1
702-H23 -60+150HP	10.5		173.2	30			4	0		0.2
702-H23 -150HP	10.5		20.4	15			6	0		0.2
702-H23 -35+60IP	10.5		24.7	15			4	0		0.2
702-H23 -60+150IP	10.5		28.1	15			7	0		0.2
702-H23 -150IP	10.5		1.2	1			2	0		0.1
702-H23 -400L	10.5		3.8	1			0	0		0.6
702-H24 -35+60 HN	9.3	8.4		0.5	85	1	4	0	-5	6.4
702-H24 -60+150 HN	9.3	10.9		0.5	50	1	3	0	-5	4.7
702-H24-150 HN	9.3	9.6		0.5	126	1	1	0	-5	1.5
H24 -35+150 HN	9.3									
702-H24 -35+60HP	9.3		4.6	1			7	0		4.8
702-H24 -60+150HP	9.3		6.3	5			8	0		2.6
702-H24 -150HP	9.3		3.4	1			4	0		1.7
702-H24 -35+60IP	9.3		9.4	7.5			2	0		1.1
702-H24 -60+150IP	9.3		14.2	7.5			3	0		0.7
702-H24 -150IP	9.3		1.0	1			1	0		0.5
702-H24 -400L	9.3		5.3	5			0	0		0.8
702-H28 -35+60 HN	8.5	3.6		0.5	82	0	9	0	-5	2.7
702-H28 -60+150 HN	8.5	6.7		0.5	151	1	12	0	-5	2.7
702-H28 -150 HN	8.5	2.2		0.5	53	0	14	0	-5	2.3
H28 -35+150 HN	8.5									
702-H28 -35+60HP	8.5		3.0	1			31	0		3.7
702-H28 -60+150HP	8.5		4.7	1			32	0		3.3
702-H28 -150HP	8.5		1.0	1			24	0		3.1
702-H28 -35+60IP	8.5		6.8	5			13	0		1.2
702-H28 -60+150IP	8.5		9.4	7.5			12	0		0.7
702-H28 -150IP	8.5		2.9	1			5	0		0.3
702-H28 -400L	8.5		16.6	5			2	0		0.2

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	20 mesh Analytical wt. (kg)	Sample/ Analytical wt. (g)	Sample wt. (g)	Analytical wt. (g)	Au	Au	Au	Au	Ag	Ag
					ppb INAA	ug INAA	ppb ICP-MS	ug ICP-MS	ppm INAA	ppm ICP-MS

Analytical Method ->
Sample/Fraction

Median Values

	<u>n</u>						
-35+60 HN	8	118	1.0	10	0.1	<5	2.6
-60+150 HN	12	52	1.0	14	0.1	<5	1.1
-150 HN	12	541	2.0	61	0.7	<5	1.5
-35+60 HP	10			9			0.5
-60+150 HP	12			6			0.2
-150 HP	12			10			0.3
-35+60 IP	12			4			0.3
-60+150 IP	12			3			0.2
-150 IP	12			2			0.1
-400L	12			1			0.5

Geometric Mean

	<u>n</u>						
-35+60 HN	8	181	1.4	15	0.1		2.4
-60+150 HN	12	224	6.9	13	0.1		1.0
-150 HN	12	433	4.1	54	0.5		2.5
-35+150 HN							
-35+60 HP	10			9			0.7
-60+150 HP	12			9			0.4
-150 HP	12			10			0.5
-35+60 IP	12			4			0.4
-60+150 IP	12			4			0.2
-150 IP	12			2			0.2
-400L	12			1			0.5

Au (ug) micrograms of Au in -150HN fraction, normalized to 10 kg of -20 mesh field sample

is insufficient sample weight

"-" <

Activation Labs report 23231, 23231b

Acme Labs report 103850

Hg analysis on HN fractions by Flow Injection Method

HN analysis by INAA and ICP-MS

HP, IP, L analysis by ICP-MS

N:\702\Ass. Report\HMresultsv7.wk4

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Zn</u>	<u>Cd</u>	<u>As</u>	<u>As</u>	<u>Sb</u>	<u>Sb</u>	<u>Hg</u>
	ppm ICP-MS	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA
702-H01 -35+60 HN	190	45	672	576	3.0	70	61	21	12	-5
702-H01 -60+150 HN	219	81	443	485	2.7	92	77	22	20	-5
702-H01 -150 HN	306	129	567	472	3.2	263	194	33	22	-5
H01 -35+150 HN	215	77	469	495	2.7	89	75	22	19	-5
702-H01 -35+60HP	79	13		138	0.8		14		6	
702-H01 -60+150HP	74	10		81	0.4		10		5	
702-H01 -150HP	163	40		206	1.2		66		11	
702-H01 -35+60IP	124	17		307	1.6		23		4	
702-H01 -60+150IP	91	11		173	0.8		14		4	
702-H01 -150IP	79	9		132	0.5		10		2	
702-H01 -400L	128	27		238	2.6		23		4	
702-H02 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H02 -60+150 HN	109	23	-200	110	0.3	95	56	13	7	-5
702-H02 -150 HN	93	18	-200	91	0.2	62	45	8	5	-5
H02 -35+150 HN	109	23	150	110	0.3	95	56	13	7	-5
702-H02 -35+60HP	361	72		202	0.7		328		20	
702-H02 -60+150HP	377	81		232	0.7		305		20	
702-H02 -150HP	277	68		208	0.6		199		18	
702-H02 -35+60IP	347	84		245	0.7		287		19	
702-H02 -60+150IP	250	68		200	0.6		171		14	
702-H02 -150IP	219	64		193	0.5		148		9	
702-H02 -400L	157	51		186	0.8		93		9	
702-H03 -35+60 HN	288	408	1230	1080	4.4	294	352	87	49	-5
702-H03 -60+150 HN	269	163	681	455	2.3	202	198	37	27	-5
702-H03 -150 HN	264	159	257	282	1.6	189	245	23	19	-5
H03 -35+150 HN	271	184	727	508	2.5	209	211	41	29	-5
702-H03 -35+60HP	86	37		155	0.7		25		10	
702-H03 -60+150HP	65	12		75	0.3		11		5	
702-H03 -150HP	71	10		67	0.3		14		4	
702-H03 -35+60IP	125	19		196	0.5		20		5	
702-H03 -60+150IP	85	10		128	0.3		11		3	
702-H03 -150IP	69	8		115	0.2		8		1	
702-H03 -400L	164	47		183	0.9		38		6	
702-H04 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H04 -60+150 HN	394	224	700	325	1.5	285	203	21	15	-5
702-H04 -150 HN	117	26	494	248	0.6	63	40	9	4	-5
H04 -35+150 HN	394	224	700	325	1.5	285	203	21	15	-5
702-H04 -35+60HP	704	268		591	2.0		516		35	
702-H04 -60+150HP	273	121		342	1.1		225		19	
702-H04 -150HP	190	79		354	1.0		148		12	
702-H04 -35+60IP	389	147		658	1.7		348		25	
702-H04 -60+150IP	68	27		187	0.5		43		5	
702-H04 -150IP	81	29		261	0.5		52		5	
702-H04 -400L	117	49		415	2.6		50		6	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Zn</u>	<u>Cd</u>	<u>As</u>	<u>As</u>	<u>Sb</u>	<u>Sb</u>	<u>Hg</u>
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	ICP-MS	ICP-MS	INAA	ICP-MS	ICP-MS	INAA	ICP-MS	INAA	ICP-MS	INAA
702-H05 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H05 -60+150HN	130	15	460	350	1.5	19	14	5	3	-5
702-H05 -150 HN	65	10	570	314	1.1	19	10	5	2	-5
H05 -35+150 HN	130	15	460	350	1.5	19	14	5	3	-5
702-H05 -35+60HP	<i>is</i>	<i>is</i>		<i>is</i>	<i>is</i>		<i>is</i>		<i>is</i>	
702-H05 -60+150HP	123	33		406	2.7		60		7	
702-H05 -150HP	102	19		530	2.5		38		5	
702-H05 -35+60IP	182	31		922	4.7		120		9	
702-H05 -60+150IP	44	9		253	1.2		20		3	
702-H05 -150IP	75	16		460	1.8		27		3	
702-H05 -400L	71	18		424	7.0		23		2	
702-H06 -35+60 HN	321	365	1320	1240	6.5	136	112	14	12	-5
702-H06 -60+150 HN	317	135	1390	1350	8.3	128	91	16	12	-5
702-H06 -150 HN	111	57	510	428	2.6	56	42	9	4	-5
H06 -35+150 HN	318	174	1378	1331	8.0	129	95	16	12	-5
702-H06 -35+60HP	352	125		621	4.0		243		24	
702-H06 -60+150HP	406	119		599	4.0		187		28	
702-H06 -150HP	320	74		544	2.9		124		17	
702-H06 -35+60IP	235	56		699	2.9		118		12	
702-H06 -60+150IP	171	46		458	2.1		70		10	
702-H06 -150IP	110	26		313	1.2		27		4	
702-H06 -400L	68	23		193	1.3		20		2	
702-H07 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H07 -60+150HN	5800	22	41300	35400	381.1	82	67	4	2	-5
702-H07 -150HN	644	15	3200	3260	30.3	29	24	3	1	-5
H07 -35+150 HN	5800	22	41300	35400	381.1	82	67	4	2	-5
702-H07 -35+60HP	<i>is</i>	<i>is</i>		<i>is</i>	<i>is</i>		<i>is</i>		<i>is</i>	
702-H07 -60+150HP	231	12		352	2.5		22		2	
702-H07 -150HP	407	28		513	3.6		36		4	
702-H07 -35+60IP	205	15		566	2.9		27		2	
702-H07 -60+150IP	107	16		313	1.9		17		3	
702-H07 -150IP	141	26		437	2.7		27		3	
702-H07 -400L	140	39		460	6.5		27		3	
702-H21 -35+60 HN	153	44	502	255	2.4	126	65	65	38	8
702-H21 -60+150 HN	184	32	-200	250	2.2	91	87	20	30	-5
702-H21 -150 HN	359	99	711	525	5.3	611	713	38	39	-5
H21 -35+150 HN	177	35	250	251	2.2	99	82	30	32	-2
702-H21 -35+60HP	90	13		51	0.3		28		26	
702-H21 -60+150HP	71	5		34	0.2		14		8	
702-H21 -150HP	119	9		60	0.5		33		9	
702-H21 -35+60IP	217	17		246	1.0		56		11	
702-H21 -60+150IP	122	11		161	0.7		20		7	
702-H21 -150IP	90	9		167	0.5		13		2	
702-H21 -400L	169	32		280	3.3		51		7	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Zn</u>	<u>Cd</u>	<u>As</u>	<u>As</u>	<u>Sb</u>	<u>Sb</u>	<u>Hg</u>
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	ICP-MS	ICP-MS	INAA	ICP-MS	ICP-MS	INAA	ICP-MS	INAA	ICP-MS	INAA
702-H22 -35+60 HN	364	456	2160	1850	8.6	422	312	128	85	-5
702-H22 -60+150 HN	561	433	1122	1018	5.5	380	403	71	67	-5
702-H22-150 HN	633	507	903	737	4.5	689	640	80	53	-5
H22 -35+150 HN	530	436	1286	1149	6.0	386	389	80	70	-5
702-H22 -35+60HP	79	38		162	0.7		18		9	
702-H22 -60+150HP	69	13		80	0.3		11		6	
702-H22 -150HP	100	14		71	0.3		21		7	
702-H22 -35+60IP	151	28		244	0.6		22		6	
702-H22 -60+150IP	111	14		151	0.4		15		5	
702-H22 -150IP	73	10		111	0.3		9		2	
702-H22 -400L	132	30		133	0.7		27		3	
702-H23 -35+60 HN	154	431	1100	672	4.7	188	106	62	28	-5
702-H23 -60+150 HN	202	181	369	453	2.0	119	134	23	20	-5
702-H23 -150 HN	492	308	548	519	4.0	510	469	39	35	-5
H23 -35+150 HN	190	241	546	506	2.7	136	128	32	22	-5
702-H23 -35+60HP	56	14		61	0.3		12		7	
702-H23 -60+150HP	62	9		59	0.3		10		4	
702-H23 -150HP	84	11		62	0.4		18		5	
702-H23 -35+60IP	149	20		303	1.5		23		5	
702-H23 -60+150IP	138	16		214	1.0		20		5	
702-H23 -150IP	59	9		105	0.5		9		2	
702-H23 -400L	142	30		242	2.5		33		4	
702-H24 -35+60 HN	707	59	3930	3570	49.5	334	242	37	24	-5
702-H24 -60+150 HN	575	86	3150	2990	38.0	305	295	29	34	-5
702-H24-150 HN	200	25	1270	1230	13.3	128	117	12	4	-5
H24 -35+150 HN	633	74	3490	3243	43.0	318	272	33	30	-5
702-H24 -35+60HP	804	49		2752	19.5		264		39	
702-H24 -60+150HP	630	49		2296	17.5		174		42	
702-H24 -150HP	354	45		1565	12.7		145		21	
702-H24 -35+60IP	350	32		2174	13.7		138		29	
702-H24 -60+150IP	236	30		1343	11.0		86		19	
702-H24 -150IP	166	29		990	8.6		58		8	
702-H24 -400L	122	33		761	9.0		30		4	
702-H28 -35+60 HN	256	95	957	670	2.3	201	148	26	17	-5
702-H28 -60+150 HN	264	139	902	726	3.1	176	136	22	17	-5
702-H28 -150 HN	255	124	549	491	1.7	214	157	26	15	-5
H28 -35+150 HN	261	123	921	706	2.8	185	140	24	17	-5
702-H28 -35+60HP	390	142		281	1.4		373		29	
702-H28 -60+150HP	421	129		273	1.4		329		29	
702-H28 -150HP	427	121		322	1.3		302		23	
702-H28 -35+60IP	302	89		500	1.5		200		21	
702-H28 -60+150IP	273	71		411	1.3		124		16	
702-H28 -150IP	182	40		291	0.7		60		5	
702-H28 -400L	70	23		113	0.4		23		2	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	Cu	Pb	Zn	Zn	Cd	As	As	Sb	Sb	Hg
Analytical Method ->	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
<u>Sample/Fraction</u>	ICP-MS	ICP-MS	INAA	ICP-MS	ICP-MS	INAA	ICP-MS	INAA	ICP-MS	INAA
<u>Median Values</u>										
-35+60 HN	272	230	1165	876	4.6	195	130	49	26	<5
-60+150 HN	267	110	691	470	2.5	124	113	21	18	<5
-150 HN	259	78	549	481	2.9	128	137	23	10	<5
-35+60 HP	221	44		182	0.8		135		22	
-60+150 HP	177	23		253	0.9		41		8	
-150 HP	176	34		265	1.1		52		10	
-35+60 IP	211	30		403	1.5		87		10	
-60+150 IP	116	16		207	0.9		20		5	
-150 IP	86	21		227	0.5		27		3	
-400L	132	31		240	2.5		29		4	
<u>Geometric Mean</u>										
-35+60 HN	269	155	1220	935	5.6	192	144	44	27	
-60+150 HN	334	82	873	753	4.2	129	109	18	15	
-150 HN	231	63	603	483	2.7	135	111	16	9	
-35+150 HN	332	85	948	779	4.4	133	108	20	15	
-35+60 HP	194	48		239	1.2		78		17	
-60+150 HP	166	28		200	1.0		48		10	
-150 HP	181	31		228	1.2		61		9	
-35+60 IP	214	35		451	1.7		70		10	
-60+150 IP	124	21		258	1.0		33		6	
-150 IP	102	18		234	0.8		24		3	
-400L	118	32		260	2.0		33		4	

Appendix:IV

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	Hg	Te	Mo	Mo	Bi	Co	Co	Ni	Ni	Cr
Analytical Method ->	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample/Fraction	ICP-MS	ICP-MS	INAA	ICP-MS	ICP-MS	INAA	ICP-MS	INAA	ICP-MS	INAA
702-H01 -35+60 HN	1552	0.1	-20	2	0.2	38	14	-200	17	488
702-H01 -60+150 HN	1170	0.2	-20	3	0.3	40	23	-200	35	281
702-H01 -150 HN	1658	0.4	-20	4	0.4	63	45	-200	78	158
H01 -35+150 HN	1213	0.1	-20	3	0.2	40	22	-200	33	305
702-H01 -35+60HP	213	0.0		4	0.1		10		14	
702-H01 -60+150HP	161	0.0		1	0.1		9		12	
702-H01 -150HP	624	0.1		2	0.1		24		39	
702-H01 -35+60IP	244	0.0		6	0.1		24		29	
702-H01 -60+150IP	157	0.0		3	0.1		23		24	
702-H01 -150IP	95	0.1		2	0.1		24		29	
702-H01 -400L	377	0.1		5	0.1		23		56	
702-H02 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H02 -60+150 HN	30	0.3	-20	3	0.2	32	21	-200	28	98
702-H02 -150 HN	90	0.3	-20	2	0.2	21	15	-200	24	126
H02 -35+150 HN	30	0.3	-20	3	0.2	32	21	-200	28	98
702-H02 -35+60HP	285	0.1		14	0.3		65		105	
702-H02 -60+150HP	282	0.2		13	0.4		86		119	
702-H02 -150HP	213	0.2		10	0.4		61		99	
702-H02 -35+60IP	235	0.2		11	0.4		83		101	
702-H02 -60+150IP	174	0.1		7	0.4		59		64	
702-H02 -150IP	145	0.2		6	0.4		51		68	
702-H02 -400L	487	0.1		7	0.3		44		39	
702-H03 -35+60 HN	4157	0.3	-20	4	0.5	60	40	-200	51	300
702-H03 -60+150 HN	1588	0.3	-20	3	0.3	50	39	-200	64	205
702-H03 -150 HN	1477	0.3	-20	3	0.3	42	44	-200	79	109
H03 -35+150 HN	1806	0.3	-20	3	0.4	51	39	-200	63	213
702-H03 -35+60HP	444	0.0		3	0.1		12		19	
702-H03 -60+150HP	169	0.0		1	0.1		10		12	
702-H03 -150HP	141	0.0		1	0.1		12		18	
702-H03 -35+60IP	251	0.0		3	0.1		24		23	
702-H03 -60+150IP	113	0.0		2	0.1		24		24	
702-H03 -150IP	77	0.0		1	0.1		23		26	
702-H03 -400L	441	0.1		3	0.2		34		60	
702-H04 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H04 -60+150 HN	339	0.3	44	18	0.3	70	47	-200	50	170
702-H04 -150 HN	252	0.2	-20	2	0.2	21	15	-200	23	110
H04 -35+150 HN	339	0.3	44	18	0.3	70	47	-200	50	170
702-H04 -35+60HP	794	0.3		33	0.5		142		122	
702-H04 -60+150HP	373	0.2		15	0.3		111		144	
702-H04 -150HP	263	0.2		11	0.3		77		118	
702-H04 -35+60IP	536	0.3		19	0.5		113		107	
702-H04 -60+150IP	77	0.1		3	0.1		52		57	
702-H04 -150IP	83	0.1		3	0.1		35		37	
702-H04 -400L	321	0.1		4	0.2		36		47	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	Hg	Te	Mo	Mo	Bi	Co	Co	Ni	Ni	Cr
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Analytical Method ->			INAA			INAA		INAA		INAA
<u>Sample/Fraction</u>	ICP-MS	ICP-MS		ICP-MS	ICP-MS		ICP-MS		ICP-MS	
702-H05 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H05 -60+150HN	1608	0.3	-20	6	0.2	14	9	-200	52	200
702-H05 -150 HN	315	0.3	-20	5	0.1	15	8	-200	55	173
H05 -35+150 HN	1608	0.3	-20	6	0.2	14	9	-200	52	200
702-H05 -35+60HP	<i>is</i>	<i>is</i>		<i>is</i>	<i>is</i>		<i>is</i>		<i>is</i>	
702-H05 -60+150HP	576	0.2		23	0.1		56		139	
702-H05 -150HP	413	0.2		17	0.2		34		120	
702-H05 -35+60IP	836	0.5		34	0.2		57		129	
702-H05 -60+150IP	164	0.1		7	0.1		19		43	
702-H05 -150IP	302	0.2		10	0.1		25		101	
702-H05 -400L	986	0.1		8	0.2		22		89	
702-H06 -35+60 HN	5794	0.2	22	11	0.3	56	48	-200	48	18
702-H06 -60+150 HN	3029	0.4	-20	12	0.3	49	39	-200	42	-10
702-H06 -150 HN	1069	0.3	-20	7	0.2	25	21	-200	27	43
H06 -35+150 HN	3498	0.3		12	0.3	50	41	-200	43	7
702-H06 -35+60HP	2223	1.1		36	0.4		80		97	
702-H06 -60+150HP	1880	1.1		35	0.4		71		87	
702-H06 -150HP	1262	0.8		23	0.4		51		66	
702-H06 -35+60IP	772	0.7		23	0.3		48		68	
702-H06 -60+150IP	508	0.6		13	0.2		39		50	
702-H06 -150IP	291	0.3		6	0.2		29		39	
702-H06 -400L	950	0.1		6	0.2		18		38	
702-H07 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H07 -60+150HN	2063	0.4	73	10	0.2	74	59	-200	253	155
702-H07 -150HN	287	0.3	-20	4	0.2	45	49	-200	179	143
H07 -35+150 HN	2063	0.4	73	10	0.2	74	59	-200	253	155
702-H07 -35+60HP	<i>is</i>	<i>is</i>		<i>is</i>	<i>is</i>		<i>is</i>		<i>is</i>	
702-H07 -60+150HP	72	0.3		9	0.1		115		264	
702-H07 -150HP	156	0.3		16	0.4		82		275	
702-H07 -35+60IP	75	0.2		13	0.1		75		182	
702-H07 -60+150IP	58	0.2		8	0.2		61		132	
702-H07 -150IP	94	0.2		11	0.3		39		169	
702-H07 -400L	382	0.1		9	0.5		62		215	
702-H21 -35+60 HN	7988	0.1	-20	15	0.2	38	14	-200	25	130
702-H21 -60+150 HN	848	0.2	-20	7	0.2	41	14	-200	18	127
702-H21 -150 HN	14744	0.3	36	16	0.3	51	42	-200	53	160
H21 -35+150 HN	2471	0.1	-20	8	0.2	41	14	-200	19	128
702-H21 -35+60HP	819	0.1		4	0.1		12		12	
702-H21 -60+150HP	342	0.1		1	0.0		8		7	
702-H21 -150HP	394	0.1		3	0.1		13		14	
702-H21 -35+60IP	543	0.2		10	0.1		32		34	
702-H21 -60+150IP	209	0.2		4	0.1		28		26	
702-H21 -150IP	88	0.1		2	0.1		28		25	
702-H21 -400L	378	0.0		10	0.2		31		55	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Hg</u>	<u>Te</u>	<u>Mo</u>	<u>Mo</u>	<u>Bi</u>	<u>Co</u>	<u>Co</u>	<u>Ni</u>	<u>Ni</u>	<u>Cr</u>
	ppb ICP-MS	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA
702-H22 -35+60 HN	6163	0.5	-20	9	0.8	76	61	-200	72	300
702-H22 -60+150 HN	3724	0.5	-20	6	0.6	80	75	-280	128	257
702-H22-150 HN	3332	0.5	-20	7	0.7	120	107	-200	186	222
H22 -35+150 HN	4108	0.5	-20	6	0.6	79	73	-267	120	264
702-H22 -35+60HP	527	0.1		2	0.1		12		14	
702-H22 -60+150HP	196	0.1		1	0.1		8		11	
702-H22 -150HP	214	0.1		1	0.1		14		24	
702-H22 -35+60IP	361	0.1		4	0.1		25		24	
702-H22 -60+150IP	193	0.1		2	0.1		25		25	
702-H22 -150IP	97	0.1		1	0.1		21		24	
702-H22 -400L	209	0.0		4	0.1		26		66	
702-H23 -35+60 HN	2398	0.2	-20	4	0.5	49	16	-200	20	522
702-H23 -60+150 HN	1776	0.2	-20	3	0.3	39	22	-200	32	277
702-H23 -150 HN	1989	0.4	-20	7	0.5	66	57	-200	101	285
H23 -35+150 HN	1926	0.2	-20	3	0.3	41	20	-200	29	336
702-H23 -35+60HP	398	0.1		2	0.0		9		10	
702-H23 -60+150HP	141	0.1		1	0.0		7		9	
702-H23 -150HP	143	0.1		2	0.1		11		21	
702-H23 -35+60IP	234	0.2		7	0.1		25		30	
702-H23 -60+150IP	172	0.2		5	0.1		24		28	
702-H23 -150IP	107	0.1		2	0.1		13		19	
702-H23 -400L	420	0.0		7	0.2		26		75	
702-H24 -35+60 HN	826	0.2	-20	10	0.3	38	35	-200	214	27
702-H24 -60+150 HN	560	0.3	28	9	0.3	40	40	-200	231	50
702-H24-150 HN	272	0.2	-20	6	0.3	30	25	-200	132	132
H24 -35+150 HN	676	0.3	7	9	0.3	39	38	-200	223	40
702-H24 -35+60HP	639	0.5		32	0.2		34		185	
702-H24 -60+150HP	212	0.5		33	0.3		56		229	
702-H24 -150HP	191	0.4		23	0.4		45		239	
702-H24 -35+60IP	121	0.3		27	0.2		32		186	
702-H24 -60+150IP	83	0.3		20	0.2		39		235	
702-H24 -150IP	85	0.2		13	0.3		32		206	
702-H24 -400L	231	0.0		9	0.3		37		158	
702-H28 -35+60 HN	4423	0.4	-20	10	0.5	97	75	-200	102	67
702-H28 -60+150 HN	3744	0.5	45	8	0.5	97	87	367	97	58
702-H28 -150 HN	3160	0.5	-20	7	0.5	104	89	-200	95	1700
H28 -35+150 HN	3982	0.5	22	8	0.5	97	83	168	99	61
702-H28 -35+60HP	3571	1.1		15	0.6		109		118	
702-H28 -60+150HP	2716	0.8		11	0.6		102		101	
702-H28 -150HP	4528	0.9		10	0.6		97		106	
702-H28 -35+60IP	1206	0.4		10	0.4		65		71	
702-H28 -60+150IP	789	0.3		7	0.3		52		55	
702-H28 -150IP	486	0.2		4	0.2		34		38	
702-H28 -400L	891	0.1		2	0.2		21		30	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	Hg	Te	Mo	Mo	Bi	Co	Co	Ni	Ni	Cr
	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Analytical Method ->			INAA			INAA		INAA		INAA
Sample/Fraction	ICP-MS	ICP-MS		ICP-MS	ICP-MS		ICP-MS		ICP-MS	
Median Values										
-35+60 HN	4290	0.2	<20	10	0.4	53	37	<200	50	215
-60+150 HN	1598	0.3	<20	6	0.3	45	39	<200	51	163
-150 HN	1273	0.3	<20	5	0.3	42	43	<200	78	143
-35+60 HP	597	0.1		9	0.1		23		58	
-60+150 HP	247	0.1		10	0.1		56		94	
-150 HP	249	0.1		10	0.2		39		83	
-35+60 IP	306	0.1		11	0.2		40		70	
-60+150 IP	168	0.1		6	0.1		33		46	
-150 IP	95	0.1		3	0.1		29		37	
-400L	401	0.1		6	0.2		29		58	
Geometric Mean										
-35+60 HN	3357	0.2		7	0.4	53	31		49	133
-60+150 HN	1068	0.3		6	0.3	47	33		61	112
-150 HN	936	0.3		5	0.3	41	34		69	170
-35+150 HN	1242	0.3		6	0.3	47	32		61	117
-35+60 HP	672	0.2		8	0.1		29		40	
-60+150 HP	321	0.1		6	0.1		31		47	
-150 HP	356	0.2		6	0.2		33		62	
-35+60 IP	341	0.2		11	0.2		44		63	
-60+150 IP	168	0.1		5	0.1		34		48	
-150 IP	132	0.1		4	0.1		28		47	
-400L	447	0.1		6	0.2		30		65	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Cr</u>	<u>Fe</u>	<u>Fe</u>	<u>Mn</u>	<u>Ba</u>	<u>Ba</u>	<u>W</u>	<u>W</u>	<u>Al</u>	<u>B</u>
	ppm ICP-MS	% INAA	% ICP-MS	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA	ppm ICP-MS	% ICP-MS	ppm ICP-MS
702-H01 -35+60 HN	19	8	3	296	3500	12	-4	0.2	0.5	13
702-H01 -60+150 HN	12	8	6	374	4300	26	-4	0.3	0.4	7
702-H01 -150 HN	12	14	11	461	4700	20	-4	0.3	0.5	7
H01 -35+150 HN	13	8	6	365	4200	25	-4	0.3		
702-H01 -35+60HP	12		4	817		71		-0.2	0.7	9
702-H01 -60+150HP	9		3	582		39		-0.2	0.5	2
702-H01 -150HP	12		5	535		35		-0.2	0.6	2
702-H01 -35+60IP	24		10	1694		178		-0.2	2.5	5
702-H01 -60+150IP	27		8	1543		100		-0.2	2.4	3
702-H01 -150IP	36		8	1342		65		-0.2	2.6	3
702-H01 -400L	65		4	1736		132		-0.2	1.4	5
702-H02 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H02 -60+150 HN	9	8	5	827	2100	153	-4	-0.2	0.7	1
702-H02 -150 HN	10	6	4	501	1800	151	-4	1.5	0.8	4
H02 -35+150 HN	9	8	5	827	2100	153	-4	-0.2		
702-H02 -35+60HP	31		21	1153		159		-0.2	0.6	-1
702-H02 -60+150HP	22		22	1954		204		-0.2	1.1	1
702-H02 -150HP	49		15	950		211		-0.2	1.4	1
702-H02 -35+60IP	21		18	1245		226		-0.2	1.9	2
702-H02 -60+150IP	23		14	1292		237		-0.2	2.2	2
702-H02 -150IP	33		14	926		257		-0.2	2.9	2
702-H02 -400L	29		8	3794		309		0.2	1.4	8
702-H03 -35+60 HN	14	15	11	252	9800	3	-4	0.2	0.4	7
702-H03 -60+150 HN	10	13	11	311	4900	11	-4	0.3	0.4	5
702-H03 -150 HN	12	10	10	395	2700	12	-4	0.3	0.5	6
H03 -35+150 HN	11	13	11	306	5300	10	-4	0.3		
702-H03 -35+60HP	19		4	805		205		-0.2	0.7	10
702-H03 -60+150HP	8		3	517		38		-0.2	0.5	1
702-H03 -150HP	13		3	541		41		-0.2	0.7	-1
702-H03 -35+60IP	24		10	1706		183		-0.2	2.3	6
702-H03 -60+150IP	30		7	1301		104		-0.2	2.4	2
702-H03 -150IP	36		7	1160		70		-0.2	2.7	2
702-H03 -400L	69		6	1695		229		-0.2	2.0	7
702-H04 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H04 -60+150 HN	18	12	10	878	93000	22	85	14.4	0.7	4
702-H04 -150 HN	15	6	4	514	7900	96	-4	0.3	1.1	5
H04 -35+150 HN	18	12	10	878	93000	22	85	14.4		
702-H04 -35+60HP	19		31	3940		44		2.0	0.7	-1
702-H04 -60+150HP	28		17	2131		174		-0.2	0.8	2
702-H04 -150HP	71		12	1114		147		-0.2	1.7	2
702-H04 -35+60IP	27		21	1598		195		-0.2	2.1	3
702-H04 -60+150IP	21		8	1079		77		-0.2	1.3	1
702-H04 -150IP	28		8	994		130		-0.2	2.6	2
702-H04 -400L	45		6	4218		248		-0.2	2.0	8

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Cr</u>	<u>Fe</u>	<u>Fe</u>	<u>Mn</u>	<u>Ba</u>	<u>Ba</u>	<u>W</u>	<u>W</u>	<u>Al</u>	<u>B</u>
	ppm ICP-MS	% INAA	% ICP-MS	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA	ppm ICP-MS	% ICP-MS	ppm ICP-MS
702-H05 -35+60 HN	is	is	is	is	is	is	is	is	is	is
702-H05 -60+150HN	31	5	4	582	12000	481	-4	-0.2	1.2	11
702-H05 -150 HN	24	5	3	451	3000	196	-4	-0.2	1.1	4
H05 -35+150 HN	31	5	4	582	12000	481	-4	-0.2		
702-H05 -35+60HP	is		is	is		is		is	is	is
702-H05 -60+150HP	81		11	1344		113		-0.2	0.9	1
702-H05 -150HP	97		9	1038		130		-0.2	2.1	2
702-H05 -35+60IP	42		19	1482		188		-0.2	2.3	4
702-H05 -60+150IP	23		5	707		69		-0.2	1.2	1
702-H05 -150IP	71		9	1079		166		-0.2	3.4	3
702-H05 -400L	56		4	2969		238		-0.2	1.9	8
702-H06 -35+60 HN	4	12	12	429	290000	2	-4	-0.2	0.5	6
702-H06 -60+150 HN	5	13	11	588	180000	12	-4	-0.2	0.6	10
702-H06 -150 HN	7	7	6	519	40000	25	-4	-0.2	0.7	8
H06 -35+150 HN	5	13	11	561	199000	11	-4	-0.2		
702-H06 -35+60HP	14		31	1895		22		-0.2	0.8	1
702-H06 -60+150HP	16		26	1853		24		-0.2	0.9	3
702-H06 -150HP	26		19	1089		28		-0.2	1.7	3
702-H06 -35+60IP	19		21	1380		286		-0.2	2.3	5
702-H06 -60+150IP	27		14	1209		271		-0.2	3.0	3
702-H06 -150IP	31		11	1084		207		-0.2	4.2	3
702-H06 -400L	32		4	1077		268		-0.2	0.8	5
702-H07 -35+60 HN	is	is	is	is	is	is	is	is	is	is
702-H07 -60+150HN	14	20	18	341	71000	3	-5	2.2	0.4	2
702-H07 -150HN	42	8	9	311	6400	15	-4	0.5	1.2	5
H07 -35+150 HN	14	20	18	341	71000	3	-5	2.2		
702-H07 -35+60HP	is		is	is		is		is	is	is
702-H07 -60+150HP	33		13	2827		151		-0.2	0.8	1
702-H07 -150HP	83		13	1416		106		0.3	1.8	3
702-H07 -35+60IP	53		16	1249		176		-0.2	1.6	2
702-H07 -60+150IP	37		10	1082		67		-0.2	1.6	1
702-H07 -150IP	83		12	876		79		-0.2	3.7	3
702-H07 -400L	77		6	1877		119		-0.2	2.2	12
702-H21 -35+60 HN	8	22	13	215	7400	1	5	-0.2	0.2	2
702-H21 -60+150 HN	6	12	7	273	2200	21	-4	0.2	0.2	2
702-H21 -150 HN	17	18	18	437	7900	11	-4	1.3	0.7	11
H21 -35+150 HN	7	14	9	260	3400	16	-2	0.1		
702-H21 -35+60HP	13		4	471		79		-0.2	0.5	1
702-H21 -60+150HP	5		2	268		22		-0.2	0.3	1
702-H21 -150HP	11		4	381		28		-0.2	0.6	1
702-H21 -35+60IP	45		11	1136		133		0.3	2.8	5
702-H21 -60+150IP	32		8	1111		85		1.0	2.6	1
702-H21 -150IP	41		8	1048		66		-0.2	3.7	3
702-H21 -400L	55		6	2543		148		-0.2	1.7	9

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Cr</u>	<u>Fe</u>	<u>Fe</u>	<u>Mn</u>	<u>Ba</u>	<u>Ba</u>	<u>W</u>	<u>W</u>	<u>Al</u>	<u>B</u>
	ppm ICP-MS	% INAA	% ICP-MS	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA	ppm ICP-MS	% ICP-MS	ppm ICP-MS
702-H22 -35+60 HN	7	21	17	178	12000	2	-4	-0.2	0.2	2
702-H22 -60+150 HN	6	22	21	149	7000	4	-4	-0.1	0.2	4
702-H22-150 HN	11	31	26	256	8800	5	-4	0.4	0.3	9
H22 -35+150 HN	6	22	21	153	7800	4	-4	-0.1		
702-H22 -35+60HP	12		3	611		62		-0.2	0.6	7
702-H22 -60+150HP	6		2	311		24		-0.2	0.3	2
702-H22 -150HP	10		3	372		28		-0.2	0.4	2
702-H22 -35+60IP	21		10	1825		162		-0.2	2.1	14
702-H22 -60+150IP	27		9	1580		97		-0.2	2.2	3
702-H22 -150IP	33		8	1349		67		-0.2	2.4	2
702-H22 -400L	99		5	1340		124		-0.2	1.4	10
702-H23 -35+60 HN	9	12	5	144	27000	4	-4	-0.2	0.2	3
702-H23 -60+150 HN	8	10	6	163	8700	16	-4	0.2	0.2	3
702-H23 -150 HN	15	17	17	335	11000	9	-4	0.4	0.5	12
H23 -35+150 HN	8	10	6	159	13000	14	-4	0.1		
702-H23 -35+60HP	12		3	583		64		-0.2	0.6	7
702-H23 -60+150HP	6		2	347		31		-0.2	0.3	2
702-H23 -150HP	17		3	384		34		-0.2	0.5	2
702-H23 -35+60IP	21		11	1651		143		-0.2	2.2	15
702-H23 -60+150IP	27		8	1469		111		-0.2	2.1	5
702-H23 -150IP	23		4	868		65		-0.2	1.4	3
702-H23 -400L	96		5	1653		161		-0.2	1.5	9
702-H24 -35+60 HN	3	29	25	216	140000	45	-4	-0.2	0.2	1
702-H24 -60+150 HN	12	25	23	263	64000	2	-4	-0.2	0.4	2
702-H24-150 HN	28	11	9	327	11000	9	-4	-0.2	0.9	3
H24 -35+150 HN	8	27	24	242	97000	21	-4	-0.2		
702-H24 -35+60HP	30		33	3102		9		-0.2	0.9	-1
702-H24 -60+150HP	40		27	3634		33		-0.2	1.3	1
702-H24 -150HP	82		17	1328		47		-0.2	2.2	2
702-H24 -35+60IP	89		24	1614		222		0.2	2.1	2
702-H24 -60+150IP	164		16	1372		141		0.5	3.0	3
702-H24 -150IP	93		14	1075		112		-0.2	4.3	4
702-H24 -400L	68		5	1489		195		-0.2	1.7	4
702-H28 -35+60 HN	2	30	25	232	150000	8	-4	-0.2	0.1	2
702-H28 -60+150 HN	3	29	25	288	93000	1	-4	-0.2	0.1	2
702-H28 -150 HN	5	34	26	385	53000	4	-4	-0.2	0.2	5
H28 -35+150 HN	3	29	25	269	113000	4	-4	-0.2		
702-H28 -35+60HP	17		34	1055		8		-0.2	0.6	2
702-H28 -60+150HP	18		29	1064		12		-0.2	0.5	2
702-H28 -150HP	35		27	850		7		-0.2	0.7	4
702-H28 -35+60IP	22		25	1403		166		-0.2	1.5	5
702-H28 -60+150IP	27		19	1272		292		-0.2	1.9	4
702-H28 -150IP	33		13	1018		206		-0.2	2.9	4
702-H28 -400L	32		4	1050		363		-0.2	1.0	4

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	Cr ppm	Fe %	Fe %	Mn ppm	Ba ppm	Ba ppm	W ppm	W ppm	Al %	B ppm
Analytical Method ->		INAA			INAA		INAA			
Sample/Fraction	ICP-MS		ICP-MS	ICP-MS		ICP-MS		ICP-MS	ICP-MS	ICP-MS
Median Values										
-35+60 HN	7.2	18	13	224	19500	3	<4	< 0.2	0.2	2
-60+150 HN	9.8	13	10	326	10350	14	<4	< 0.2	0.4	3
-150 HN	13.3	10	10	416	7900	14	<4	0.3	0.7	5
-35+60 HP	16		12	936		64		< 0.2	0.6	2
-60+150 HP	17		12	1204		35		< 0.2	0.7	2
-150 HP	30		11	900		38		< 0.2	1.1	2
-35+60 IP	24		17	1540		181		< 0.2	2.2	5
-60+150 IP	27		9	1282		102		< 0.2	2.2	2
-150 IP	35		9	1062		95		< 0.2	2.9	3
-400L	60		5	1716		212		< 0.2	1.6	8
Geometric Mean										
-35+60 HN	6	17	12	234	29000	5			0.3	3
-60+150 HN	9	13	10	361	17000	14			0.4	4
-150 HN	14	11	10	399	7900	20			0.6	6
-35+150 HN	9	13	10	353	19000	18				
-35+60 HP	17		10	1120		47			0.7	2
-60+150 HP	16		8	999		48			0.6	1
-150 HP	30		8	747		48			1.0	2
-35+60 IP	30		15	1484		184			2.1	5
-60+150 IP	31		10	1227		120			2.1	2
-150 IP	41		9	1058		109			2.9	3
-400L	56		5	1919		198			1.5	7

Appendix:IV

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Be</u>	<u>Br</u>	<u>Ca</u>	<u>Ca</u>	<u>Ce</u>	<u>Ce</u>	<u>Cs</u>	<u>Cs</u>	<u>Eu</u>	<u>Eu</u>	<u>Ga</u>	<u>Ge</u>
	ppm ICP-MS	ppm INAA	% INAA	% ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm CP-MS	ppm CP-MS
702-H01 -35+60 HN	0.6	71	18	1.9	76	37	6	0.5	2	1.0	2	0.1
702-H01 -60+150 HN	0.4	177	11	1.8	68	45	-2	0.7	2	1.2	2	0.2
702-H01 -150 HN	0.4	262	9	1.7	100	41	-2	0.7	3	1.2	2	0.3
H01 -35+150 HN												
702-H01 -35+60HP				1.4							3	
702-H01 -60+150HP				1.0							2	
702-H01 -150HP				1.8							2	
702-H01 -35+60IP				3.2							10	
702-H01 -60+150IP				3.1							9	
702-H01 -150IP				2.8							10	
702-H01 -400L				3.3							6	
702-H02 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H02 -60+150 HN	0.6	261	-2	0.9	512	72	16	4.9	9	2.0	2	-0.1
702-H02 -150 HN	0.6	191	-1	0.6	310	72	17	5.9	5	1.6	2	-0.1
H02 -35+150 HN												
702-H02 -35+60HP				0.4							2	
702-H02 -60+150HP				0.5							4	
702-H02 -150HP				0.7							5	
702-H02 -35+60IP				0.8							6	
702-H02 -60+150IP				0.8							7	
702-H02 -150IP				0.8							9	
702-H02 -400L				2.5							4	
702-H03 -35+60 HN	0.3	161	11	1.2	63	22	-2	0.4	2	0.7	2	0.2
702-H03 -60+150 HN	0.4	194	9	1.2	54	30	-2	0.6	2	0.9	2	0.3
702-H03 -150 HN	0.4	166	7	1.7	49	31	-2	0.6	2	0.9	2	0.3
H03 -35+150 HN												
702-H03 -35+60HP				1.6							3	
702-H03 -60+150HP				0.8							2	
702-H03 -150HP				1.0							3	
702-H03 -35+60IP				3.4							9	
702-H03 -60+150IP				2.5							10	
702-H03 -150IP				2.1							11	
702-H03 -400L				3.0							9	
702-H04 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H04 -60+150 HN	0.6	190	-2	1.9	1400	61	6	2.1	20	2.0	2	0.1
702-H04 -150 HN	0.5	137	-2	1.3	640	42	8	3.2	8	1.4	3	-0.1
H04 -35+150 HN												
702-H04 -35+60HP				0.3							3	
702-H04 -60+150HP				0.4							3	
702-H04 -150HP				0.7							6	
702-H04 -35+60IP				0.8							7	
702-H04 -60+150IP				0.7							5	
702-H04 -150IP				0.9							8	
702-H04 -400L				2.7							5	

Appendix:IV

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Be</u>	<u>Br</u>	<u>Ca</u>	<u>Ca</u>	<u>Ce</u>	<u>Ce</u>	<u>Cs</u>	<u>Cs</u>	<u>Eu</u>	<u>Eu</u>	<u>Ga</u>	<u>Ge</u>
	ppm ICP-MS	ppm INAA	% INAA	% ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm CP-MS	ppm CP-MS
702-H05 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H05 -60+150HN	0.6	90	-1	4.4	808	147	5	2.7	14	4.1	3	0.1
702-H05 -150 HN	0.6	155	-2	0.8	193	34	11	2.2	4	1.2	3	-0.1
H05 -35+150 HN												
702-H05 -35+60HP				<i>is</i>							<i>is</i>	
702-H05 -60+150HP				0.6							4	
702-H05 -150HP				0.6							8	
702-H05 -35+60IP				0.8							9	
702-H05 -60+150IP				0.4							4	
702-H05 -150IP				0.6							12	
702-H05 -400L				3.6							6	
702-H06 -35+60 HN	0.2	222	2	2.0	90	38	-2	1.4	3	1.9	2	0.1
702-H06 -60+150 HN	0.4	340	11	2.5	260	103	-2	1.7	9	3.4	2	0.2
702-H06 -150 HN	0.6	255	-2	2.8	145	68	8	3.4	5	2.7	2	0.1
H06 -35+150 HN												
702-H06 -35+60HP				0.7							3	
702-H06 -60+150HP				0.9							3	
702-H06 -150HP				1.1							6	
702-H06 -35+60IP				0.9							8	
702-H06 -60+150IP				1.0							10	
702-H06 -150IP				0.8							13	
702-H06 -400L				1.9							2	
702-H07 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H07 -60+150HN	0.3	226	5	0.4	1500	18	-2	0.9	30	1.2	17	0.9
702-H07 -150HN	0.8	150	-1	0.4	338	19	6	2.2	7	1.1	5	0.2
H07 -35+150 HN												
702-H07 -35+60HP				<i>is</i>							<i>is</i>	
702-H07 -60+150HP				0.5							2	
702-H07 -150HP				0.4							6	
702-H07 -35+60IP				0.8							5	
702-H07 -60+150IP				0.7							6	
702-H07 -150IP				0.7							12	
702-H07 -400L				3.8							6	
702-H21 -35+60 HN	0.2	242	10	0.5	23	6	-2	0.4	1	0.2	1	0.1
702-H21 -60+150 HN	0.3	162	12	1.6	45	34	-2	0.5	2	1.1	1	0.1
702-H21 -150 HN	0.6	514	6	3.1	189	77	-2	0.8	5	2.6	3	0.3
H21 -35+150 HN												
702-H21 -35+60HP				1.6							2	
702-H21 -60+150HP				0.8							2	
702-H21 -150HP				1.3							3	
702-H21 -35+60IP				3.2							13	
702-H21 -60+150IP				2.3							11	
702-H21 -150IP				1.4							16	
702-H21 -400L				3.2							8	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Be</u>	<u>Br</u>	<u>Ca</u>	<u>Ca</u>	<u>Ce</u>	<u>Ce</u>	<u>Cs</u>	<u>Cs</u>	<u>Eu</u>	<u>Eu</u>	<u>Ga</u>	<u>Ge</u>
	ppm ICP-MS	ppm INAA	% INAA	% ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm INAA	ppm ICP-MS	ppm CP-MS	ppm CP-MS
702-H22 -35+60 HN	0.2	303	8	0.4	32	6	-2	0.3	-1	0.2	1	0.3
702-H22 -60+150 HN	0.2	345	7	0.8	37	25	-2	0.3	1	0.6	1	0.5
702-H22-150 HN	0.4	599	7	1.6	97	36	-2	0.4	3	1.0	1	0.7
H22 -35+150 HN												
702-H22 -35+60HP				1.8							2	
702-H22 -60+150HP				0.6							1	
702-H22 -150HP				0.8							2	
702-H22 -35+60IP				3.9							8	
702-H22 -60+150IP				3.3							9	
702-H22 -150IP				3.2							10	
702-H22 -400L				4.2							6	
702-H23 -35+60 HN	0.3	209	14	0.7	34	10	-2	0.3	1	0.3	1	0.1
702-H23 -60+150 HN	0.3	248	13	1.1	37	26	-2	0.3	2	0.7	1	0.2
702-H23 -150 HN	0.3	728	6	2.3	138	58	-2	0.6	4	1.6	2	0.4
H23 -35+150 HN												
702-H23 -35+60HP				1.8							2	
702-H23 -60+150HP				0.6							2	
702-H23 -150HP				0.7							2	
702-H23 -35+60IP				2.4							10	
702-H23 -60+150IP				2.7							8	
702-H23 -150IP				2.0							6	
702-H23 -400L				3.4							7	
702-H24 -35+60 HN	0.2	459	2	0.1	130	4	-2	0.5	2	0.4	1	0.9
702-H24 -60+150 HN	0.3	457	-2	0.2	949	13	-2	0.9	14	0.8	2	0.7
702-H24-150 HN	0.6	329	-2	0.3	288	15	8	1.6	5	0.9	3	0.3
H24 -35+150 HN												
702-H24 -35+60HP				0.3							2	
702-H24 -60+150HP				0.7							3	
702-H24 -150HP				0.9							7	
702-H24 -35+60IP				1.2							6	
702-H24 -60+150IP				1.0							9	
702-H24 -150IP				0.9							13	
702-H24 -400L				1.9							5	
702-H28 -35+60 HN	0.2	339	-3	0.2	-4	7	-2	0.8	-1	0.7	0	0.2
702-H28 -60+150 HN	0.2	377	-2	0.5	172	47	-2	0.8	5	1.9	1	0.3
702-H28 -150 HN	0.3	584	-2	1.0	206	53	-2	1.3	7	2.1	1	0.3
H28 -35+150 HN												
702-H28 -35+60HP				0.6							2	
702-H28 -60+150HP				0.6							2	
702-H28 -150HP				0.8							2	
702-H28 -35+60IP				1.0							5	
702-H28 -60+150IP				1.3							6	
702-H28 -150IP				1.1							9	
702-H28 -400L				0.8							2	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	Be	Br	Ca	Ca	Ce	Ce	Cs	Cs	Eu	Eu	Ga	Ge
Analytical Method ->	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Sample/Fraction	ICP-MS	INAA	INAA	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	INAA	ICP-MS	CP-MS	CP-MS
Median Values												
-35+60 HN	0.2	232	9	0.6	49	9	<2	0.4	1	0.5	1	0.2
-60+150 HN	0.3	237	3	1.1	216	40	<2	0.8	7	1.2	2	0.2
-150 HN	0.6	255	<2	1.5	189	41	6	1.5	5	1.3	2	0.3
-35+60 HP				1.0								2
-60+150 HP				0.6								2
-150 HP				0.8								4
-35+60 IP				1.1								8
-60+150 IP				1.2								9
-150 IP				1.0								10
-400L				3.1								6
Geometric Mean												
-35+60 HN	0.2	223	5	0.6	36	12		0.5	1	0.5	1	
-60+150 HN	0.3	235	4	1.1	212	41		0.9	5	1.4	2	
-150 HN	0.5	285	2	1.2	183	41		1.4	4	1.4	2	
-35+150 HN												
-35+60 HP				0.8								2
-60+150 HP				0.6								2
-150 HP				0.8								4
-35+60 IP				1.5								8
-60+150 IP				1.3								8
-150 IP				1.2								10
-400L				2.7								5

Appendix:IV

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Hf</u>	<u>Hf</u>	<u>Ir</u>	<u>In</u>	<u>K</u>	<u>La</u>	<u>La</u>	<u>Li</u>	<u>Lu</u>	<u>Lu</u>	<u>Mg</u>	<u>Na</u>
	ppm INAA	ppm	ppb INAA	ppb	%	ppm INAA	ppm	ppm	ppm INAA	ppm	%	% INAA
	ICP-MS		ICP-MS		CP-MS	ICP-MS		CP-MS	ICP-MS		CP-MS	I
702-H01 -35+60 HN	2	0.1	-50	0.03	0.06	38	19	3	0.4	0.1	0.5	0.56
702-H01 -60+150 HN	3	0.1	-50	0.04	0.08	43	24	4	0.4	0.2	0.4	0.95
702-H01 -150 HN	15	0.2	-50	0.03	0.08	49	22	5	0.6	0.1	0.4	1.50
H01 -35+150 HN												
702-H01 -35+60HP					0.08		6					0.8
702-H01 -60+150HP					0.08		6					0.7
702-H01 -150HP					0.08		11					0.6
702-H01 -35+60IP					0.27		14					2.3
702-H01 -60+150IP					0.18		12					2.5
702-H01 -150IP					0.15		10					2.5
702-H01 -400L					0.16		11					1.4
702-H02 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H02 -60+150 HN	68	-0.1	-50	-0.02	0.06	350	37	11	1.0	0.2	0.5	1.53
702-H02 -150 HN	39	-0.1	-50	-0.02	0.10	211	38	11	0.7	0.1	0.4	1.72
H02 -35+150 HN												
702-H02 -35+60HP					0.08		7					1.6
702-H02 -60+150HP					0.06		12					3.5
702-H02 -150HP					0.08		18					1.6
702-H02 -35+60IP					0.17		14					2.2
702-H02 -60+150IP					0.13		13					2.0
702-H02 -150IP					0.11		11					2.0
702-H02 -400L					0.12		11					0.7
702-H03 -35+60 HN	5	0.2	-50	0.05	0.06	28	10	3	0.3	-0.1	0.4	0.42
702-H03 -60+150 HN	5	0.2	-50	0.03	0.08	33	15	4	0.3	0.1	0.4	0.85
702-H03 -150 HN	9	0.2	-50	0.03	0.09	32	16	6	0.4	0.1	0.5	1.27
H03 -35+150 HN												
702-H03 -35+60HP					0.10		6					0.9
702-H03 -60+150HP					0.08		5					0.6
702-H03 -150HP					0.09		6					0.8
702-H03 -35+60IP					0.35		14					2.2
702-H03 -60+150IP					0.26		11					2.3
702-H03 -150IP					0.17		9					2.4
702-H03 -400L					0.27		14					1.7
702-H04 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H04 -60+150 HN	142	-0.1	-50	0.03	0.11	855	30	8	2.0	0.3	0.6	0.50
702-H04 -150 HN	86	-0.1	-50	0.01	0.09	304	20	16	1.2	0.2	0.6	1.48
H04 -35+150 HN												
702-H04 -35+60HP					0.06		8					0.7
702-H04 -60+150HP					0.05		7					5.1
702-H04 -150HP					0.08		10					3.2
702-H04 -35+60IP					0.18		14					2.7
702-H04 -60+150IP					0.11		8					3.6
702-H04 -150IP					0.14		9					2.2
702-H04 -400L					0.12		13					1.1

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Hf</u>	<u>Hf</u>	<u>Ir</u>	<u>In</u>	<u>K</u>	<u>La</u>	<u>La</u>	<u>Li</u>	<u>Lu</u>	<u>Lu</u>	<u>Mg</u>	<u>Na</u>
	ppm	ppm	ppb	ppb	%	ppm	ppm	ppm	ppm	ppm	%	%
	INAA	ICP-MS	INAA	ICP-MS	CP-MS	INAA	ICP-MS	CP-MS	INAA	ICP-MS	CP-MS	INAA
702-H05 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H05 -60+150HN	286	-0.1	-50	0.02	0.17	500	77	30	3.2	0.5	0.5	1.07
702-H05 -150 HN	96	-0.1	-50	-0.02	0.06	100	18	35	1.6	0.1	0.6	1.80
H05 -35+150 HN												
702-H05 -35+60HP					<i>is</i>		<i>is</i>				<i>is</i>	
702-H05 -60+150HP					0.05		10				3.6	
702-H05 -150HP					0.08		12				2.3	
702-H05 -35+60IP					0.19		14				2.3	
702-H05 -60+150IP					0.07		6				1.4	
702-H05 -150IP					0.09		10				2.3	
702-H05 -400L					0.13		15				1.0	
702-H06 -35+60 HN	39	-0.1	-50	0.02	0.11	66	9	4	0.5	0.3	0.1	0.18
702-H06 -60+150 HN	302	-0.1	-50	0.04	0.17	168	56	6	3.2	0.7	0.1	0.20
702-H06 -150 HN	165	-0.1	-50	0.03	0.16	80	33	10	2.2	0.3	0.2	0.89
H06 -35+150 HN												
702-H06 -35+60HP					0.15		21				0.8	
702-H06 -60+150HP					0.07		27				1.1	
702-H06 -150HP					0.10		22				1.3	
702-H06 -35+60IP					0.22		25				1.3	
702-H06 -60+150IP					0.13		20				1.9	
702-H06 -150IP					0.10		14				2.4	
702-H06 -400L					0.14		10				0.6	
702-H07 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H07 -60+150HN	38	0.1	-50	1.45	0.02	741	7	9	1.5	-0.1	0.7	0.41
702-H07 -150HN	30	-0.1	-50	0.18	0.06	188	8	35	0.7	-0.1	0.8	1.51
H07 -35+150 HN												
702-H07 -35+60HP					<i>is</i>		<i>is</i>				<i>is</i>	
702-H07 -60+150HP					0.06		4				10.5	
702-H07 -150HP					0.06		6				4.6	
702-H07 -35+60IP					0.14		7				4.9	
702-H07 -60+150IP					0.11		6				4.3	
702-H07 -150IP					0.11		7				2.6	
702-H07 -400L					0.16		8				1.5	
702-H21 -35+60 HN	2	-0.1	-50	-0.02	0.03	12	3	2	0.3	-0.1	0.2	0.26
702-H21 -60+150 HN	2	0.1	-50	0.01	0.04	31	18	3	0.3	0.2	0.3	0.36
702-H21 -150 HN	32	0.2	-50	0.03	0.15	93	43	5	1.0	0.4	0.4	0.77
H21 -35+150 HN												
702-H21 -35+60HP					0.07		6				0.8	
702-H21 -60+150HP					0.05		7				0.4	
702-H21 -150HP					0.07		10				0.6	
702-H21 -35+60IP					0.19		20				2.5	
702-H21 -60+150IP					0.16		18				2.8	
702-H21 -150IP					0.14		10				3.7	
702-H21 -400L					0.24		13				2.0	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Hf</u>	<u>Hf</u>	<u>Ir</u>	<u>In</u>	<u>K</u>	<u>La</u>	<u>La</u>	<u>Li</u>	<u>Lu</u>	<u>Lu</u>	<u>Mg</u>	<u>Na</u>
	ppm INAA	ppm ICP-MS	ppb INAA	ppb ICP-MS	% CP-MS	ppm INAA	ppm ICP-MS	ppm CP-MS	ppm INAA	ppm ICP-MS	% CP-MS	% INAA
702-H22 -35+60 HN	-1	-0.1	-50	0.09	0.03	16	2	2	0.3	-0.1	0.2	0.28
702-H22 -60+150 HN	5	-0.1	-50	0.07	0.03	22	13	1	0.2	-0.1	0.2	0.26
702-H22-150 HN	28	0.3	-50	0.05	0.06	56	20	3	0.6	0.1	0.2	0.55
H22 -35+150 HN												
702-H22 -35+60HP					0.08		5				0.9	
702-H22 -60+150HP					0.06		4				0.4	
702-H22 -150HP					0.07		5				0.5	
702-H22 -35+60IP					0.37		13				2.3	
702-H22 -60+150IP					0.25		13				2.5	
702-H22 -150IP					0.18		11				2.4	
702-H22 -400L					0.20		9				1.5	
702-H23 -35+60 HN	5	0.1	-50	0.03	0.04	19	4	2	0.3	-0.1	0.3	0.37
702-H23 -60+150 HN	5	0.2	-50	0.02	0.04	25	13	2	0.3	-0.1	0.3	0.37
702-H23 -150 HN	40	0.2	-50	0.04	0.09	68	30	5	0.8	0.2	0.4	1.06
H23 -35+150 HN												
702-H23 -35+60HP					0.07		6				0.9	
702-H23 -60+150HP					0.06		5				0.4	
702-H23 -150HP					0.07		5				0.5	
702-H23 -35+60IP					0.21		15				2.0	
702-H23 -60+150IP					0.17		18				2.2	
702-H23 -150IP					0.14		12				1.3	
702-H23 -400L					0.20		11				1.5	
702-H24 -35+60 HN	-1	-0.1	-50	0.12	0.03	82	1	4	0.3	-0.1	0.1	0.13
702-H24 -60+150 HN	10	-0.1	-50	0.12	0.03	540	6	10	0.4	-0.1	0.3	0.47
702-H24-150 HN	11	-0.1	-50	0.05	0.04	183	7	22	0.7	-0.1	0.6	1.94
H24 -35+150 HN												
702-H24 -35+60HP					0.06		17				0.9	
702-H24 -60+150HP					0.05		14				2.5	
702-H24 -150HP					0.04		10				1.9	
702-H24 -35+60IP					0.14		15				1.9	
702-H24 -60+150IP					0.07		13				2.4	
702-H24 -150IP					0.06		10				2.7	
702-H24 -400L					0.11		9				1.1	
702-H28 -35+60 HN	68	-0.1	-50	0.03	0.03	23	1	2	0.4	-0.1	0.0	0.17
702-H28 -60+150 HN	684	-0.1	-50	0.06	0.03	89	22	2	5.0	0.2	0.0	0.14
702-H28 -150 HN	858	0.1	-50	0.06	0.04	109	27	4	8.1	0.2	0.2	0.58
H28 -35+150 HN												
702-H28 -35+60HP					0.12		13				1.0	
702-H28 -60+150HP					0.04		25				1.3	
702-H28 -150HP					0.05		32				1.3	
702-H28 -35+60IP					0.24		31				1.5	
702-H28 -60+150IP					0.11		33				2.0	
702-H28 -150IP					0.07		23				1.9	
702-H28 -400L					0.13		12				0.5	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	<u>Hf</u>	<u>Hf</u>	<u>Ir</u>	<u>In</u>	<u>K</u>	<u>La</u>	<u>La</u>	<u>Li</u>	<u>Lu</u>	<u>Lu</u>	<u>Mg</u>	<u>Na</u>
	ppm	ppm	ppb	ppb	%	ppm	ppm	ppm	ppm	ppm	%	%
Analytical Method ->	INAA		INAA			INAA			INAA			INAA
<u>Sample/Fraction</u>	ICP-MS		ICP-MS		CP-MS	ICP-MS		CP-MS	ICP-MS		CP-MS	I

Median Values

-35+60 HN	4	<0.1	<50	0.03	0.04	26	3	2	0.3	<0.1	0.2	0.27
-60+150 HN	24	<0.1	<50	0.03	0.05	129	20	5	0.7	0.2	0.4	0.44
-150 HN	32	<0.1	<50	0.03	0.08	93	21	8	0.7	0.1	0.4	1.29
-35+60 HP					0.08		7				0.9	
-60+150 HP					0.06		7				1.2	
-150 HP					0.08		10				1.3	
-35+60 IP					0.20		14				2.3	
-60+150 IP					0.13		13				2.4	
-150 IP					0.13		10				2.4	
-400L					0.15		11				1.2	

Geometric Mean

-35+60 HN	4				0.04	29	4	2	0.3		0.2	0.27
-60+150 HN	28				0.06	129	20	5	0.9		0.3	0.47
-150 HN	45				0.08	101	21	9	1.0		0.4	1.16
-35+150 HN												
-35+60 HP					0.08		8				0.9	
-60+150 HP					0.06		8				1.4	
-150 HP					0.07		10				1.2	
-35+60 IP					0.21		15				2.2	
-60+150 IP					0.13		13				2.4	
-150 IP					0.12		11				2.3	
-400L					0.16		11				1.1	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	Na %	Nb ppm	Nd ppm INAA	Nd ppm ICP-MS	P %	Re ppm CP-MS	Rb ppm INAA	Rb ppm ICP-MS	S %	Sc ppm INAA	Sc ppm ICP-MS	Se ppm INAA
Analytical Method ->												
Sample/Fraction	CP-MS	CP-MS			CP-MS	CP-MS			CP-MS		ICP-MS	I
702-H01 -35+60 HN	0.06	0.6	44	19		-0.001	-50	3		79		-20
702-H01 -60+150 HN	0.03	0.9	26	24		0.002	-50	4		53		-20
702-H01 -150 HN	0.03	1.6	53	21		0.005	-50	5		25		33
H01 -35+150 HN												
702-H01 -35+60HP	0.03				0.15				0.1		6	
702-H01 -60+150HP	0.02				0.13				0.2		3	
702-H01 -150HP	0.01				0.26				3.5		3	
702-H01 -35+60IP	0.04				0.15				0.2		9	
702-H01 -60+150IP	0.05				0.15				0.2		8	
702-H01 -150IP	0.04				0.16				0.2		8	
702-H01 -400L	0.24				0.16				0.7		5	
702-H02 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>		<i>is</i>	<i>is</i>	<i>is</i>		<i>is</i>		<i>is</i>
702-H02 -60+150 HN	0.03	0.2	242	39		0.001	120	5		24		-20
702-H02 -150 HN	0.02	0.1	140	36		-0.001	89	7		19		-20
H02 -35+150 HN												
702-H02 -35+60HP	0.06				0.12				0.3		5	
702-H02 -60+150HP	0.08				0.15				0.1		8	
702-H02 -150HP	0.07				0.22				0.2		7	
702-H02 -35+60IP	0.21				0.15				0.1		7	
702-H02 -60+150IP	0.21				0.15				0.1		7	
702-H02 -150IP	0.17				0.16				0.1		7	
702-H02 -400L	0.36				0.18				0.4		8	
702-H03 -35+60 HN	0.05	1.0	41	12		0.001	-50	3		60		-20
702-H03 -60+150 HN	0.03	1.5	22	15		0.002	-50	5		44		34
702-H03 -150 HN	0.03	1.2	18	16		0.001	-50	5		31		25
H03 -35+150 HN												
702-H03 -35+60HP	0.03				0.14				0.7		6	
702-H03 -60+150HP	0.02				0.13				0.3		3	
702-H03 -150HP	0.02				0.12				0.5		3	
702-H03 -35+60IP	0.04				0.16				0.2		9	
702-H03 -60+150IP	0.07				0.16				0.1		7	
702-H03 -150IP	0.07				0.14				0.1		7	
702-H03 -400L	0.21				0.18				0.6		6	
702-H04 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>		<i>is</i>	<i>is</i>	<i>is</i>		<i>is</i>		<i>is</i>
702-H04 -60+150 HN	0.03	0.8	596	36		0.004	-50	7		32		-20
702-H04 -150 HN	0.02	0.2	242	25		0.001	168	7		25		-20
H04 -35+150 HN												
702-H04 -35+60HP	0.01				0.08				1.6		6	
702-H04 -60+150HP	0.08				0.07				0.6		6	
702-H04 -150HP	0.11				0.16				0.5		6	
702-H04 -35+60IP	0.13				0.14				0.2		8	
702-H04 -60+150IP	0.22				0.08				0.1		4	
702-H04 -150IP	0.22				0.14				0.1		5	
702-H04 -400L	0.30				0.16				0.4		6	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	<u>Na</u>	<u>Nb</u>	<u>Nd</u>	<u>Nd</u>	<u>P</u>	<u>Re</u>	<u>Rb</u>	<u>Rb</u>	<u>S</u>	<u>Sc</u>	<u>Sc</u>	<u>Se</u>
	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm
Analytical Method ->			INAA				INAA			INAA		INAA
<u>Sample/Fraction</u>	CP-MS	CP-MS	ICP-MS	CP-MS	CP-MS	CP-MS	ICP-MS	CP-MS	ICP-MS	ICP-MS		I
702-H05 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>		<i>is</i>	<i>is</i>	<i>is</i>		<i>is</i>		<i>is</i>
702-H05 -60+150HN	0.03	0.6	415	81		0.008	-50	13		34		21
702-H05 -150 HN	0.02	0.4	100	21		0.007	145	7		27		-20
H05 -35+150 HN												
702-H05 -35+60HP	<i>is</i>					<i>is</i>				<i>is</i>		<i>is</i>
702-H05 -60+150HP	0.07					0.15				0.2		6
702-H05 -150HP	0.09					0.15				0.2		6
702-H05 -35+60IP	0.13					0.18				0.1		9
702-H05 -60+150IP	0.09					0.07				0.0		4
702-H05 -150IP	0.12					0.12				0.1		6
702-H05 -400L	0.46					0.15				0.6		3
702-H06 -35+60 HN	0.04	0.3	40	32		0.003	-50	6		9		-20
702-H06 -60+150 HN	0.02	0.3	164	56		0.004	-50	8		14		-20
702-H06 -150 HN	0.02	-0.1	67	41		0.004	-50	8		20		-20
H06 -35+150 HN												
702-H06 -35+60HP	0.01					0.16				2.9		17
702-H06 -60+150HP	0.01					0.25				2.7		17
702-H06 -150HP	0.02					0.27				2.5		14
702-H06 -35+60IP	0.02					0.20				0.5		16
702-H06 -60+150IP	0.02					0.23				0.3		14
702-H06 -150IP	0.02					0.16				0.2		11
702-H06 -400L	0.30					0.09				0.5		5
702-H07 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>		<i>is</i>	<i>is</i>	<i>is</i>		<i>is</i>		<i>is</i>
702-H07 -60+150HN	0.03	1.9	906	12		0.001	-50	1		15		21
702-H07 -150HN	0.03	0.2	210	13		0.002	99	4		19		-20
H07 -35+150 HN												
702-H07 -35+60HP	<i>is</i>					<i>is</i>				<i>is</i>		<i>is</i>
702-H07 -60+150HP	0.12					0.05				0.4		5
702-H07 -150HP	0.10					0.09				1.3		5
702-H07 -35+60IP	0.24					0.10				0.2		5
702-H07 -60+150IP	0.23					0.10				0.1		5
702-H07 -150IP	0.20					0.16				0.2		7
702-H07 -400L	0.79					0.12				1.0		6
702-H21 -35+60 HN	0.03	0.3	-10	4		0.002	-50	2		58		-20
702-H21 -60+150 HN	0.02	0.4	23	19		-0.001	-50	3		79		-20
702-H21 -150 HN	0.03	1.3	92	41		0.001	-50	10		30		-20
H21 -35+150 HN												
702-H21 -35+60HP	0.03					0.18				0.9		6
702-H21 -60+150HP	0.01					0.26				0.4		3
702-H21 -150HP	0.01					0.38				1.6		4
702-H21 -35+60IP	0.05					0.55				0.4		9
702-H21 -60+150IP	0.06					0.57				0.2		8
702-H21 -150IP	0.04					0.26				0.1		11
702-H21 -400L	0.45					0.19				0.8		9

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	Na	Nb	Nd	Nd	P	Re	Rb	Rb	S	Sc	Sc	Se
	%	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm
Analytical Method ->			INAA				INAA			INAA		INAA
Sample/Fraction	CP-MS	CP-MS	ICP-MS	CP-MS	CP-MS	CP-MS	ICP-MS	CP-MS	ICP-MS	ICP-MS		I
702-H22 -35+60 HN	0.03	0.6	-10	3		0.001	-50	2		42		41
702-H22 -60+150 HN	0.02	0.7	-10	12		0.004	-50	2		41		58
702-H22-150 HN	0.02	3.2	35	18		0.002	-50	3		31		114
H22 -35+150 HN												
702-H22 -35+60HP	0.03				0.13				0.5			7
702-H22 -60+150HP	0.01				0.11				0.5			2
702-H22 -150HP	0.01				0.12				1.2			3
702-H22 -35+60IP	0.04				0.18				0.3			9
702-H22 -60+150IP	0.05				0.20				0.2			9
702-H22 -150IP	0.04				0.19				0.1			8
702-H22 -400L	0.49				0.16				1.0			4
702-H23 -35+60 HN	0.04	0.3	-10	6		-0.001	-50	2		90		-20
702-H23 -60+150 HN	0.03	0.7	17	12		0.002	-50	2		69		-20
702-H23 -150 HN	0.03	2.4	64	29		0.004	-50	5		31		39
H23 -35+150 HN												
702-H23 -35+60HP	0.03				0.14				0.2			7
702-H23 -60+150HP	0.01				0.12				0.3			2
702-H23 -150HP	0.01				0.12				0.9			3
702-H23 -35+60IP	0.03				0.20				0.2			8
702-H23 -60+150IP	0.04				0.34				0.2			8
702-H23 -150IP	0.04				0.24				0.1			4
702-H23 -400L	0.39				0.15				0.7			5
702-H24 -35+60 HN	0.01	0.1	-10	5		0.004	-50	2		4		122
702-H24 -60+150 HN	0.02	0.1	415	9		0.003	-50	2		7		85
702-H24-150 HN	0.02	-0.1	114	10		0.004	79	2		21		-20
H24 -35+150 HN												
702-H24 -35+60HP	0.01				0.09				6.3			5
702-H24 -60+150HP	0.03				0.11				2.9			8
702-H24 -150HP	0.02				0.14				2.9			7
702-H24 -35+60IP	0.05				0.14				0.6			6
702-H24 -60+150IP	0.08				0.18				0.3			6
702-H24 -150IP	0.06				0.17				0.3			7
702-H24 -400L	0.28				0.10				0.7			4
702-H28 -35+60 HN	0.02	0.2	35	9		0.005	-50	2		6		-20
702-H28 -60+150 HN	0.01	0.3	15	27		0.004	-50	2		11		-20
702-H28 -150 HN	0.02	0.2	157	32		0.002	-50	2		20		-20
H28 -35+150 HN												
702-H28 -35+60HP	0.01				0.08				6.4			11
702-H28 -60+150HP	0.01				0.15				5.6			12
702-H28 -150HP	0.01				0.21				7.8			11
702-H28 -35+60IP	0.02				0.22				0.7			18
702-H28 -60+150IP	0.02				0.36				0.6			18
702-H28 -150IP	0.02				0.29				0.3			14
702-H28 -400L	0.08				0.08				0.3			6

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	<u>Na</u> %	<u>Nb</u> ppm	<u>Nd</u> ppm INAA	<u>Nd</u> ppm	<u>P</u> %	<u>Re</u> ppm	<u>Rb</u> ppm INAA	<u>Rb</u> ppm	<u>S</u> %	<u>Sc</u> ppm INAA	<u>Sc</u> ppm	<u>Se</u> ppm INAA
Analytical Method ->												
<u>Sample/Fraction</u>	CP-MS	CP-MS	ICP-MS	CP-MS	CP-MS	CP-MS	ICP-MS	CP-MS	CP-MS	ICP-MS	ICP-MS	I

Median Values

-35+60 HN	0.03	0.3	20	7		0.002	<50	2		50		<20
-60+150 HN	0.03	0.7	95	21		0.003	<50	4		33		<20
-150 HN	0.02	0.3	92	23		0.002	<50	5		25		<20
-35+60 HP	0.03				0.14				0.78		6	
-60+150 HP	0.02				0.13				0.38		5	
-150 HP	0.02				0.15				1.26		5	
-35+60 IP	0.05				0.17				0.22		9	
-60+150 IP	0.07				0.17				0.18		7	
-150 IP	0.05				0.16				0.12		7	
-400L	0.33				0.16				0.67		5	

Geometric Mean

-35+60 HN	0.03	0.3	14	8				3		26		
-60+150 HN	0.02	0.5	79	23				4		28		
-150 HN	0.02	0.4	86	23				5		24		
-35+150 HN												
-35+60 HP	0.02				0.12				0.94		7	
-60+150 HP	0.02				0.13				0.56		5	
-150 HP	0.03				0.17				1.07		5	
-35+60 IP	0.06				0.18				0.25		9	
-60+150 IP	0.07				0.18				0.14		7	
-150 IP	0.06				0.18				0.12		7	
-400L	0.32				0.14				0.62		5	

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	Se	Sm	Sm	Sn	Sr	Sr	Ta	Ta	Tb	Tb	Th	Th
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Analytical Method ->	INAA	INAA	ICP-MS	CP-MS	INAA	ICP-MS	INAA	ICP-MS	INAA	ICP-MS	INAA	ICP-MS
Sample/Fraction	CP-MS	ICP-MS	ICP-MS	CP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS	ICP-MS
702-H01 -35+60 HN	6	9	4	0.4	-0.2	101	-1	-0.05	-2	0.4	2	1.0
702-H01 -60+150 HN	15	8	5	0.4	-0.2	154	-1	-0.05	-2	0.6	3	1.5
702-H01 -150 HN	34	10	4	0.4	-0.2	170	3	-0.05	-2	0.6	4	1.4
H01 -35+150 HN												
702-H01 -35+60HP	1					58						0.4
702-H01 -60+150HP	1					55						0.5
702-H01 -150HP	14					102						0.8
702-H01 -35+60IP	2					172						1.6
702-H01 -60+150IP	1					170						1.5
702-H01 -150IP	1					150						1.3
702-H01 -400L	3					170						1.2
702-H02 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H02 -60+150 HN	1	40	8	0.4	-0.2	55	-1	-0.05	3	0.8	14	2.9
702-H02 -150 HN	0	24	7	0.4	-0.2	39	-1	-0.05	-2	0.6	10	4.4
H02 -35+150 HN												
702-H02 -35+60HP	3					29						0.7
702-H02 -60+150HP	2					42						1.4
702-H02 -150HP	2					49						2.1
702-H02 -35+60IP	2					80						1.5
702-H02 -60+150IP	2					75						1.7
702-H02 -150IP	1					69						2.5
702-H02 -400L	2					143						1.0
702-H03 -35+60 HN	26	7	2	0.4	-0.2	57	-1	-0.05	-2	0.3	2	0.7
702-H03 -60+150 HN	39	6	3	0.4	-0.2	104	-1	-0.05	-2	0.4	3	1.1
702-H03 -150 HN	30	6	3	0.4	-0.2	137	-1	-0.05	-2	0.4	3	1.4
H03 -35+150 HN												
702-H03 -35+60HP	3					61						0.4
702-H03 -60+150HP	2					44						0.5
702-H03 -150HP	3					56						0.6
702-H03 -35+60IP	1					178						1.7
702-H03 -60+150IP	1					141						1.6
702-H03 -150IP	1					113						1.3
702-H03 -400L	4					157						1.7
702-H04 -35+60 HN	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H04 -60+150 HN	3	90	8	0.5	-0.2	77	6	-0.05	7	1.1	34	9.1
702-H04 -150 HN	1	33	6	0.4	-0.2	59	-1	-0.05	3	0.8	17	4.4
H04 -35+150 HN												
702-H04 -35+60HP	4					25						0.7
702-H04 -60+150HP	2					30						0.7
702-H04 -150HP	1					46						1.2
702-H04 -35+60IP	3					65						1.0
702-H04 -60+150IP	1					54						0.7
702-H04 -150IP	1					62						1.1
702-H04 -400L	2					146						0.9

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	Se ppm	Sm ppm	Sm ppm	Sn ppm	Sr %	Sr ppm	Ta ppm	Ta ppm	Tb ppm	Tb ppm	Th ppm	Th ppm
Analytical Method ->		INAA	ICP-MS	CP-MS	INAA	ICP-MS	ICP-MS	ICP-MS	INAA	ICP-MS	INAA	ICP-MS
Sample/Fraction	CP-MS		ICP-MS	CP-MS		ICP-MS	ICP-MS	ICP-MS	INAA	ICP-MS	INAA	ICP-MS
702-H05 -35+60 HN	is	is	is	is	is	is	is	is	is	is	is	is
702-H05 -60+150HN	3	68	18	0.8	-0.2	193	-1	-0.05	6	2.2	24	3.9
702-H05 -150 HN	1	15	5	0.4	-0.2	55	-1	-0.05	-2	0.6	12	1.6
H05 -35+150 HN												
702-H05 -35+60HP	is					is						is
702-H05 -60+150HP	4					39						1.1
702-H05 -150HP	4					52						1.6
702-H05 -35+60IP	9					85						1.5
702-H05 -60+150IP	2					36						0.6
702-H05 -150IP	3					66						1.3
702-H05 -400L	5					285						0.5
702-H06 -35+60 HN	6	8	7	0.4	0.3	31	2	-0.05	2	1.1	4	1.1
702-H06 -60+150 HN	7	24	13	0.3	-0.2	132	-1	-0.05	4	2.2	14	3.3
702-H06 -150 HN	3	15	10	0.3	-0.2	112	4	-0.05	-2	1.6	12	2.7
H06 -35+150 HN												
702-H06 -35+60HP	7					62						1.3
702-H06 -60+150HP	7					67						1.9
702-H06 -150HP	5					68						2.1
702-H06 -35+60IP	4					75						2.0
702-H06 -60+150IP	2					67						2.1
702-H06 -150IP	1					51						1.6
702-H06 -400L	1					129						1.3
702-H07 -35+60 HN	is	is	is	is	is	is	is	is	is	is	is	is
702-H07 -60+150HN	43	163	4	6.0	-0.2	49	12	-0.05	9	0.5	55	12.1
702-H07 -150HN	9	40	4	1.0	-0.2	36	-1	-0.05	3	0.5	17	3.3
H07 -35+150 HN												
702-H07 -35+60HP	is					is						is
702-H07 -60+150HP	2					32						0.8
702-H07 -150HP	5					37						2.6
702-H07 -35+60IP	4					77						0.9
702-H07 -60+150IP	2					57						0.8
702-H07 -150IP	4					64						1.6
702-H07 -400L	4					206						1.6
702-H21 -35+60 HN	3	3	1	0.5	-0.2	38	-1	-0.05	-2	0.1	-1	0.3
702-H21 -60+150 HN	4	7	4	0.4	-0.2	193	-1	-0.05	-2	0.6	1	1.1
702-H21 -150 HN	13	18	10	0.3	-0.2	445	-1	-0.05	-2	1.4	7	3.1
H21 -35+150 HN												
702-H21 -35+60HP	1					103						0.5
702-H21 -60+150HP	0					71						0.5
702-H21 -150HP	2					109						0.9
702-H21 -35+60IP	2					299						1.7
702-H21 -60+150IP	1					190						1.8
702-H21 -150IP	0					108						1.4
702-H21 -400L	3					180						1.3

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Se</u>	<u>Sm</u>	<u>Sm</u>	<u>Sn</u>	<u>Sr</u>	<u>Sr</u>	<u>Ta</u>	<u>Ta</u>	<u>Tb</u>	<u>Tb</u>	<u>Th</u>	<u>Th</u>
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	CP-MS	INAA	ICP-MS	CP-MS	INAA	ICP-MS	ICP-MS	ICP-MS	INAA	ICP-MS	INAA	ICP-MS
702-H22 -35+60 HN	41	4	1	0.4	-0.2	19	-1	-0.05	-2	0.1	-1	0.3
702-H22 -60+150 HN	85	4	2	0.3	-0.2	65	-1	-0.05	-2	0.3	2	0.7
702-H22-150 HN	92	10	4	0.4	-0.2	136	-1	-0.05	-2	0.5	4	1.4
H22 -35+150 HN												
702-H22 -35+60HP	2					57						0.3
702-H22 -60+150HP	2					31						0.3
702-H22 -150HP	6					44						0.5
702-H22 -35+60IP	1					196						1.6
702-H22 -60+150IP	1					177						1.6
702-H22 -150IP	0					174						1.5
702-H22 -400L	3					221						1.1
702-H23 -35+60 HN	9	6	1	0.3	-0.2	29	-1	-0.05	-2	0.1	2	0.3
702-H23 -60+150 HN	18	6	2	0.3	-0.2	76	-1	-0.05	-2	0.3	1	0.7
702-H23 -150 HN	48	13	6	0.4	-0.2	206	-1	-0.05	-2	0.8	6	1.9
H23 -35+150 HN												
702-H23 -35+60HP	1					57						0.3
702-H23 -60+150HP	2					32						0.3
702-H23 -150HP	5					38						0.5
702-H23 -35+60IP	2					126						1.5
702-H23 -60+150IP	2					153						1.7
702-H23 -150IP	1					108						1.3
702-H23 -400L	4					180						1.2
702-H24 -35+60 HN	115	10	1	0.5	-0.2	7	-1	-0.05	-2	0.2	4	0.2
702-H24 -60+150 HN	130	70	2	0.6	-0.2	26	-1	-0.05	4	0.3	16	1.4
702-H24-150 HN	33	26	3	0.4	-0.2	33	-1	-0.05	-2	0.4	14	2.1
H24 -35+150 HN												
702-H24 -35+60HP	64					30						0.7
702-H24 -60+150HP	38					84						2.6
702-H24 -150HP	29					110						2.3
702-H24 -35+60IP	22					155						1.6
702-H24 -60+150IP	13					122						2.3
702-H24 -150IP	8					109						2.5
702-H24 -400L	6					114						2.5
702-H28 -35+60 HN	4	3	2	0.4	-0.2	11	-1	-0.05	-2	0.3	2	0.2
702-H28 -60+150 HN	6	12	6	0.5	-0.2	25	-1	-0.05	3	0.8	14	0.8
702-H28 -150 HN	6	16	7	0.5	-0.2	46	-1	-0.05	-2	1.1	31	1.4
H28 -35+150 HN												
702-H28 -35+60HP	8					53						0.5
702-H28 -60+150HP	8					56						1.1
702-H28 -150HP	9					63						1.3
702-H28 -35+60IP	5					89						1.5
702-H28 -60+150IP	3					95						2.0
702-H28 -150IP	2					70						2.0
702-H28 -400L	1					58						1.2

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	<u>Se</u> ppm	<u>Sm</u> ppm	<u>Sm</u> ppm	<u>Sn</u> ppm	<u>Sr</u> %	<u>Sr</u> ppm	<u>Ta</u> ppm	<u>Ta</u> ppm	<u>Tb</u> ppm	<u>Tb</u> ppm	<u>Th</u> ppm	<u>Th</u> ppm
Analytical Method ->		INAA	ICP-MS	CP-MS	INAA	ICP-MS	INAA	ICP-MS	INAA	ICP-MS	INAA	ICP-MS
<u>Sample/Fraction</u>	CP-MS		ICP-MS	CP-MS		ICP-MS		ICP-MS		ICP-MS		ICP-MS

Median Values

-35+60 HN	8	6	2	0.4	<0.2	30	<1	<0.05	<2	0.2	2	0.3
-60+150 HN	11	18	5	0.4	<0.2	76	<1	<0.05	3	0.6	14	1.4
-150 HN	11	15	5	0.4	<0.2	86	<1	<0.05	<2	0.6	10	2.0
-35+60 HP	3					58						0.5
-60+150 HP	2					43						0.8
-150 HP	5					54						1.3
-35+60 IP	3					108						1.5
-60+150 IP	2					109						1.7
-150 IP	1					89						1.5
-400L	3					164						1.2

Geometric Mean

-35+60 HN	12	6	2	0.4		27			0.3	2	0.4	
-60+150 HN	12	21	5	0.5		78			0.7	8	2.0	
-150 HN	9	16	5	0.4		88			0.7	9	2.2	
-35+150 HN												
-35+60 HP	4					49						0.5
-60+150 HP	3					46						0.8
-150 HP	5					60						1.2
-35+60 IP	3					119						1.5
-60+150 IP	2					98						1.4
-150 IP	1					89						1.6
-400L	3					155						1.2

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Ti</u>	<u>Ti</u>	<u>U</u>	<u>U</u>	<u>V</u>	<u>Y</u>	<u>Yb</u>	<u>Yb</u>	<u>Zr</u>
	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	CP-MS	CP-MS	INAA	ICP-MS	CP-MS	CP-MS	INAA	ICP-MS	CP-MS
702-H01 -35+60 HN		0.43	-1	0.3	50	11	3	0.8	4
702-H01 -60+150 HN		0.57	-1	0.5	62	15	3	1.1	5
702-H01 -150 HN		0.79	-1	0.6	52	15	4	1.1	7
H01 -35+150 HN									
702-H01 -35+60HP	0.10	0.11		0.2	69				
702-H01 -60+150HP	0.06	0.07		0.2	49				
702-H01 -150HP	0.06	0.27		0.2	52				
702-H01 -35+60IP	0.12	0.22		0.4	157				
702-H01 -60+150IP	0.12	0.13		0.3	148				
702-H01 -150IP	0.07	0.11		0.3	155				
702-H01 -400L	0.06	0.02		1.4	89				
702-H02 -35+60 HN		<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H02 -60+150 HN		0.11	9	1.1	32	15	7	1.1	3
702-H02 -150 HN		0.10	8	1.0	26	12	5	0.8	2
H02 -35+150 HN									
702-H02 -35+60HP	0.05	0.10		1.3	41				
702-H02 -60+150HP	0.12	0.11		1.9	71				
702-H02 -150HP	0.08	0.11		1.7	71				
702-H02 -35+60IP	0.23	0.13		2.1	98				
702-H02 -60+150IP	0.26	0.11		1.8	97				
702-H02 -150IP	0.19	0.08		1.9	102				
702-H02 -400L	0.01	0.17		5.7	46				
702-H03 -35+60 HN		2.00	-1	0.3	41	8	2	0.6	6
702-H03 -60+150 HN		0.99	-1	0.4	50	11	2	0.8	6
702-H03 -150 HN		0.72	-1	0.4	50	12	2	0.8	6
H03 -35+150 HN									
702-H03 -35+60HP	0.12	0.12		0.2	75				
702-H03 -60+150HP	0.06	0.07		0.1	48				
702-H03 -150HP	0.08	0.09		0.2	65				
702-H03 -35+60IP	0.14	0.12		0.4	160				
702-H03 -60+150IP	0.15	0.11		0.3	149				
702-H03 -150IP	0.10	0.09		0.2	161				
702-H03 -400L	0.10	0.05		1.4	129				
702-H04 -35+60 HN		<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>	<i>is</i>
702-H04 -60+150 HN		0.71	20	2.4	65	27	12	2.2	5
702-H04 -150 HN		0.15	11	0.8	36	18	9	1.2	3
H04 -35+150 HN									
702-H04 -35+60HP	0.05	0.23		1.2	60				
702-H04 -60+150HP	0.11	0.13		0.8	59				
702-H04 -150HP	0.13	0.09		0.7	89				
702-H04 -35+60IP	0.21	0.12		1.4	127				
702-H04 -60+150IP	0.40	0.03		0.5	104				
702-H04 -150IP	0.24	0.05		0.5	108				
702-H04 -400L	0.02	0.06		3.6	55				

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Ti</u>	<u>Ti</u>	<u>U</u>	<u>U</u>	<u>V</u>	<u>Y</u>	<u>Yb</u>	<u>Yb</u>	<u>Zr</u>
	%	ppm	ppm INAA	ppm	ppm	ppm	ppm INAA	ppm	ppm
	CP-MS	CP-MS	ICP-MS	CP-MS	CP-MS	CP-MS	ICP-MS	CP-MS	
702-H05 -35+60 HN		is	is	is	is	is	is	is	is
702-H05 -60+150HN		0.32	21	1.3	72	52	21	3.8	5
702-H05 -150 HN		0.27	17	0.5	38	14	11	0.8	3
H05 -35+150 HN									
702-H05 -35+60HP	is	is		is	is				
702-H05 -60+150HP	0.14	0.07		0.4	95				
702-H05 -150HP	0.15	0.09		0.4	125				
702-H05 -35+60IP	0.17	0.13		0.7	170				
702-H05 -60+150IP	0.17	0.04		0.2	73				
702-H05 -150IP	0.12	0.09		0.4	137				
702-H05 -400L	0.01	0.13		4.7	47				
702-H06 -35+60 HN		1.27	-1	0.6	22	31	3	2.2	3
702-H06 -60+150 HN		1.24	18	1.5	43	65	20	5.1	4
702-H06 -150 HN		0.58	15	0.8	37	42	14	2.5	3
H06 -35+150 HN									
702-H06 -35+60HP	0.01	0.15		0.7	124				
702-H06 -60+150HP	0.01	0.16		0.7	130				
702-H06 -150HP	0.02	0.15		0.6	153				
702-H06 -35+60IP	0.04	0.10		0.6	179				
702-H06 -60+150IP	0.02	0.11		0.5	182				
702-H06 -150IP	0.01	0.08		0.3	184				
702-H06 -400L	0.01	0.07		1.6	34				
702-H07 -35+60 HN		is	is	is	is	is	is	is	is
702-H07 -60+150HN		0.28	20	5.3	17	10	10	0.7	5
702-H07 -150HN		0.23	8	2.4	28	9	4	0.5	2
H07 -35+150 HN									
702-H07 -35+60HP	is	is		is	is				
702-H07 -60+150HP	0.11	0.05		0.3	33				
702-H07 -150HP	0.12	0.14		3.0	65				
702-H07 -35+60IP	0.32	0.02		0.5	102				
702-H07 -60+150IP	0.34	0.06		0.4	94				
702-H07 -150IP	0.18	0.07		0.6	113				
702-H07 -400L	0.02	0.13		4.9	42				
702-H21 -35+60 HN		0.51	-1	0.1	17	4	2	0.3	2
702-H21 -60+150 HN		0.34	-1	0.4	49	15	2	1.1	4
702-H21 -150 HN		0.83	-1	1.1	89	42	7	2.8	10
H21 -35+150 HN									
702-H21 -35+60HP	0.11	-0.02		0.2	88				
702-H21 -60+150HP	0.04	0.03		0.2	54				
702-H21 -150HP	0.06	0.03		0.3	79				
702-H21 -35+60IP	0.13	0.06		0.6	251				
702-H21 -60+150IP	0.11	0.04		0.5	218				
702-H21 -150IP	0.07	0.02		0.3	281				
702-H21 -400L	0.06	0.07		2.4	154				

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project Analytical Method -> <u>Sample/Fraction</u>	<u>Ti</u>	<u>Ti</u>	<u>U</u>	<u>U</u>	<u>V</u>	<u>Y</u>	<u>Yb</u>	<u>Yb</u>	<u>Zr</u>
	%	ppm	ppm INAA	ppm	ppm	ppm	ppm INAA	ppm	ppm
	CP-MS	CP-MS	ICP-MS	CP-MS	CP-MS	CP-MS	ICP-MS	CP-MS	
702-H22 -35+60 HN		2.92	-1	0.2	33	3	2	0.2	3
702-H22 -60+150 HN		1.94	-1	0.3	19	7	1	0.5	4
702-H22-150 HN		1.88	-1	0.7	45	15	4	1.1	10
H22 -35+150 HN									
702-H22 -35+60HP	0.13	0.03		0.2	69				
702-H22 -60+150HP	0.06	0.02		0.1	35				
702-H22 -150HP	0.08	0.04		0.2	49				
702-H22 -35+60IP	0.12	0.03		0.4	154				
702-H22 -60+150IP	0.13	0.03		0.4	151				
702-H22 -150IP	0.07	0.01		0.3	147				
702-H22 -400L	0.06	0.08		2.0	95				
702-H23 -35+60 HN		0.96	-1	0.1	37	3	2	0.3	3
702-H23 -60+150 HN		0.76	-1	0.3	26	7	2	0.5	4
702-H23 -150 HN		1.28	10	0.7	50	20	6	1.3	10
H23 -35+150 HN									
702-H23 -35+60HP	0.13	-0.02		0.2	77				
702-H23 -60+150HP	0.06	-0.02		0.1	42				
702-H23 -150HP	0.07	0.03		0.2	52				
702-H23 -35+60IP	0.12	0.02		0.4	156				
702-H23 -60+150IP	0.10	0.04		0.4	141				
702-H23 -150IP	0.06	0.03		0.3	83				
702-H23 -400L	0.06	0.07		2.3	99				
702-H24 -35+60 HN		0.36	-1	0.2	17	4	2	0.2	2
702-H24 -60+150 HN		0.36	-1	0.4	11	6	2	0.4	4
702-H24-150 HN		0.26	-1	0.4	21	8	5	0.4	3
H24 -35+150 HN									
702-H24 -35+60HP	0.02	0.16		0.7	79				
702-H24 -60+150HP	0.04	0.16		1.0	83				
702-H24 -150HP	0.02	0.14		0.9	80				
702-H24 -35+60IP	0.07	0.10		0.9	111				
702-H24 -60+150IP	0.10	0.09		1.0	112				
702-H24 -150IP	0.05	0.10		1.0	114				
702-H24 -400L	0.01	0.11		3.0	35				
702-H28 -35+60 HN		2.05	-1	0.3	12	8	3	0.5	3
702-H28 -60+150 HN		1.67	39	0.5	8	20	33	1.2	4
702-H28 -150 HN		1.34	70	0.6	22	27	54	1.6	5
H28 -35+150 HN									
702-H28 -35+60HP	0.02	0.22		0.3	70				
702-H28 -60+150HP	0.01	0.26		0.4	65				
702-H28 -150HP	0.02	0.27		0.4	75				
702-H28 -35+60IP	0.05	0.17		0.5	127				
702-H28 -60+150IP	0.02	0.13		0.5	142				
702-H28 -150IP	0.01	0.10		0.4	142				
702-H28 -400L	0.01	0.06		0.7	33				

HEAVY MINERAL STREAM SEDIMENT RESULTS

Eskay Project	<u>Ti</u>	<u>Ti</u>	<u>U</u>	<u>U</u>	<u>V</u>	<u>Y</u>	<u>Yb</u>	<u>Yb</u>	<u>Zr</u>
	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

Analytical Method ->

<u>Sample/Fraction</u>	CP-MS	CP-MS	ICP-MS	CP-MS	CP-MS	CP-MS	ICP-MS	CP-MS
------------------------	-------	-------	--------	-------	-------	-------	--------	-------

Median Values

-35+60 HN		1.12	<1	0.3	28	6	2	0.4	3
-60+150 HN		0.64	4	0.5	37	15	5	1.1	4
-150 HN		0.65	8	0.7	37	15	5	1.1	4
-35+60 HP	0.08	0.12		0.3	73				
-60+150 HP	0.06	0.12		0.4	57				
-150 HP	0.07	0.18		0.4	73				
-35+60 IP	0.13	0.20		0.6	155				
-60+150 IP	0.12	0.14		0.5	142				
-150 IP	0.07	0.12		0.4	140				
-400L	0.02	0.06		2.4	51				

Geometric Mean

-35+60 HN		1.02	1	0.2	26	6	2	0.5	3
-60+150 HN		0.58	3	0.7	31	16	6	1.1	4
-150 HN		0.49	4	0.7	38	17	7	1.1	4
-35+150 HN									
-35+60 HP	0.05	0.07		0.4	73				
-60+150 HP	0.05	0.07		0.3	59				
-150 HP	0.06	0.10		0.5	75				
-35+60 IP	0.12	0.08		0.6	144				
-60+150 IP	0.12	0.07		0.5	129				
-150 IP	0.06	0.06		0.4	137				
-400L	0.02	0.07		2.4	62				

**HEAVY MINERAL STREAM SEDIMENT SURVEY
ANOMALOUS SAMPLES**

Eskay Project

				Sample No. ->											
				<u>702-H1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>28</u>
<u>Element</u>	<u>Fraction</u>	<u>Analysis</u>	<u>Anomalous Classification</u>												
Au	-150 HN	INNA	>500 ppb & >2.5 ug	A		A	A				A	A	A		
Ag	-150 HN or -35+60 HN	ICP-MS	>3.0 ppm								A	A	A	A	
Cu	-35+150 HN	ICP-MS	>350 ppm									A		A	
Pb	-35+150 HN	ICP-MS	>150 ppm			A			A			A	A		
Zn	-35+150 HN	ICP-MS	>900 ppm						A	A		A		A	
Cd	-35+150 HN	ICP-MS	>5 ppm						A	A		A		A	
As	-35+150 HN	ICP-MS	>150 ppm			A						A		A	
Sb	-35+150 HN	ICP-MS	>25 ppm			A					A	A		A	
Hg	-35+150 HN	ICP-MS or FI	>1500 ppb			A			A		A	A	A		A
Ba	-35+150 HN	INNA	>30000 ppm				A		A	A				A	A

N:\702\Ass. Report\HManomalousv8.wk4

**APPENDIX V: FILINGS: COST STATEMENTS
AND GROUPING NOTICES**

Statement of Work – Tag West Group

Grouping Notice – Tag West Group

Statement of Work – Tag East Group

Grouping Notice – Tag East Group

West



Ministry of Energy and Mines
Energy and Minerals Division
Mineral Titles Branch

OFFICE USE ONLY	
EVENT NO.	3170852
RECEIVED	
#14 SEP 7 - 2001 #3980	
Gold Commissioner's Office VANCOUVER, B.C.	
Gold Commissioner Approval of Physical Work:	

STATEMENT OF WORK, CASH PAYMENT, RENTAL

Mineral Tenure Act
Sections 29, 30, 31, 33 and 50

Type of Title: Mineral Placer

Mining Division: Skeena

1. Richard Billingsley
(Name)
1114 147A Street
(Address)
Surrey BC
V3R 3W2 604 930 5531
(Postal Code) (Telephone)
Client Number 139085

Agent for Court Bailiff
(Names of all recorded holders)
Victoria
(Address)
141757
(Postal Code) (Telephone)
Client Number

If recording work, complete the following and continue onto Page 3.
If paying cash in lieu of work or lease rental, turn to (and complete) Page 4.

List the titles (claim name, lease, tenure number, crown grant lot) on which the work specified below was actually done:

Aptom 20 P-Mac #1-10, Fed 15, Neot 1-9, Sto 1-2, P 67-
Megan 1-2, Rambo 1,3,5 Fog 1-6, Link Fr
Date work started July 30/01 completed Sept 7/01 WORK PERMIT No. _____

TYPE OF WORK AND TOTAL VALUE FOR EACH TYPE BEING CLAIMED ON THIS STATEMENT

Physical Refer to Page 2 for claimable physical work types and requirements \$ A

Technical Prospecting \$ B

Geological, Geochemical, Geophysical, and/or Diamond Drilling Report to follow \$ 28,846.75 C

Portable Assessment Credit (PAC) Withdrawal (Box D)
either 30% of value in Box B & C only
or Total PAC \$ 860 D

from the account(s) of: Richard Billingsley

TOTAL VALUE OF WORK (Complete Page 3) A + B + C + D = E \$ 37,446.75

WORK CREDITS APPLIED TO CLAIMS

EVENT NUMBER: 3170852

I wish to apply \$ 36,000 of the total value in Box E (from Page 1) as follows:

Claim Name (one claim per line)	Tenure Number	No. of Units	Expiry Date	Work to be applied		Recording Fee	New Expiry Date
				Value	Years		
A-Tom #20	253157	20	01/09/13	8000	2	400	03/09/13
P-Mac #1	253176	1	01/09/13	600	3	30	04/09/13
P-Mac #2	253177	1	01/09/13	600	3	30	04/09/13
P-Mac #3	253178	1	01/09/13	600	3	30	04/09/13
P-Mac #4	253179	1	01/09/13	600	3	30	04/09/13
P-Mac #5	253180	1	01/09/13	600	3	30	04/09/13
P-Mac #6	253181	1	01/09/13	600	3	30	04/09/13
P-Mac #7	253182	1	01/09/13	600	3	30	04/09/13
P-Mac #8	253183	1	01/09/13	600	3	30	04/09/13
P-Mac #9	253189	1	01/09/13	600	3	30	04/09/13
P-Mac #10	253185	1	01/09/13	600	3	30	04/09/13
Fred K	253295	5	01/09/13	6000	2	300	03/09/13
Noot 1	306723	20	04/09/13	4000	1	200	02/09/13
Noot 2	306724	20	04/09/13	4000	1	200	02/09/13
Noot 3	306725	20	04/09/13	4000	1	200	02/09/13
Noot 4	306726	20	04/09/13	4000	1	200	02/09/13
				TOTALS	36,000	1800	

* 2 Post, Fraction, Rev. Crown Grant and Placer Claims are one unit each.

NOTICE TO GROUP / CAD EVENT NUMBER: 3170851 RECORDED Sept 7/01

Value of work to be credited to portable assessment credit (PAC) account(s).
(May only be credited from the approved value of Box C not applied to claims.)

Name	Amount
Name of owner/operator 1. _____	\$ _____
2. _____	\$ _____

I, the undersigned Applicant, hereby confirm that the information is supplied and the credits are claimed in accordance with the requirements in the Mineral Tenure Act, the Mineral Tenure Act Regulation, and the Mineral Act Regulation. I hereby acknowledge and understand that it is an offence to knowingly provide false information under the Mineral Tenure Act. I acknowledge and understand that if the statements made, or information given, in this Statement of Work are found to be false and the exploration and development has not been performed, then the work reported on this Statement will be cancelled and the subject mineral or placer claims(s) may, as a result, forfeit and vest back to the Province under section 35 of the Mineral Tenure Act.

Sept 7/01
Date

R.J. Billingsley
Signature of Applicant



Ministry of Energy and Mines
Energy and Minerals Division
Mineral Titles Branch

EVENT NUMBER 3170851
OFFICE USE ONLY

RECEIVED
#14 SEP 7 - 2001/2980
Gold Commissioner's Office
VANCOUVER, B.C.
RECORDING-STAMP

Mineral Tenure Act
SECTION 32

NOTICE TO GROUP

INDICATE TYPE OF TITLE: Mineral Placer

MINING DIVISION: Skeena

MAP NUMBER(S): 104B ~~024, 025, 026, 027, 028, 029, 030, 031, 032, 033, 034, 035, 036, 037, 038, 039, 040, 041, 042, 043, 044, 045, 046, 047, 048, 049, 050, 051, 052, 053, 054, 055, 056, 057, 058, 059, 060, 061, 062, 063, 064, 065, 066, 067, 068, 069, 070, 071, 072, 073, 074, 075, 076, 077, 078, 079, 080, 081, 082, 083, 084, 085, 086, 087, 088, 089, 090, 091, 092, 093, 094, 095, 096, 097, 098, 099, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000~~
68, 58,

1. Richard Billingsley
(Full Name)
11114 147A Street
(Mailing Address)
Surrey BC
(City) (Province)
V3R 3W2 604 930 5531
(Postal Code) (Telephone)
Client Number 139085

Agent² for: (All Recorded Holders must be stated)
Name Court Bailiff
Client Number 141757
Name Heritage American Res Corp
Client Number 140350
Name Uniterres, Ltd
Client Number 124656
Name _____
Client Number _____

request that the titles listed on the reverse Schedule be grouped under
the group name Taqia West

I am not requesting a Common Anniversary Date for this grouping.

I hereby request a Common Anniversary Date for the claims³ in this group:

Date of: _____ or

a median date⁴ based on this Notice to Group.

R.J. Billingsley
(Signature of Applicant)

OFFICE USE ONLY

If Median Date was selected above, the median date has been calculated as:

Median Date: _____

Accepted by Applicant: _____
(Signature of Applicant)

OFFICE USE ONLY

Notice to Group approved: Yes No

[Signature]
(Signature of Gold Commissioner)

01.09.11
(Date)

¹ A copy of the applicable portion of the mineral/placer titles reference map(s) with the outside boundary of the claim group outlined/highlighted must be attached.

² Agent must have specific written authority from all owners if applying for a Common Anniversary Date.

³ Although leases and crown granted claims can be included in a Notice to Group, they always retain their issued anniversary dates. Common Anniversary Dates cannot be applied to leases or crown granted claims.

⁴ Median Date is calculated as the average date of all the claims in the group based on units and current anniversary dates. A median date results in no work requirements in order to establish the common anniversary date.

Event Number: 3170851

Page 1 of 1



NOTICE TO GROUP
'Schedule'

One claim per line

Claim Name or Lease Type	Tenure Number
1 AFTem #20	253157
2 P-Mac #1	253176
3 P-Mac #2	253177
4 P-Mac #3	253178
5 P-Mac #4	253179
6 P-Mac #5	253180
7 P-Mac #6	253181
8 P-Mac #7	253182
9 P-Mac #8	253183
10 P-Mac #9	253184
11 P-Mac #10	253185
12 Fwd 15	253295
13 486713	306723
14 Noot 2	306724
15 Noot 3	306725
16 Noot 4	306726
17 Sto 1	373857
18 Sto 2	373867
19 Polo 7	253015
20 Polo 8	253016
21 Megan 1	367943
22 Megan 2	367944
23 Ramba 1	309070
24 Ramba 3	309072
25 Ramba 5	309074
26 Fog 1	305317
27 Fog 2	305318
28 Fog 3	305319
29 Fog 4	305320
30 Fog 5	305321
31 Fog 6	305322
32 Ling Fr	311923
33	
34	
35	

Claim Name or Lease Type	Tenure Number
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	

Claim Name or Lease Type	Tenure Number
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	
101	
102	
103	
104	
105	

Note: Photocopy Schedule and attach if more space is needed.



Ministry of Energy and Mines
Energy and Minerals Division
Mineral Titles Branch

OFFICE USE ONLY	
EVENT NO.	<u>3170850</u>
RECEIVED	
#14 SEP 7 - 2001 #398000	
Gold Commissioner's Office VANCOUVER, B.C.	
Gold Commissioner Approval of Physical Work: _____	

STATEMENT OF WORK, CASH PAYMENT, RENTAL

Mineral Tenure Act
Sections 29, 30, 31, 33 and 50

Type of Title: Mineral Placer

Mining Division: Skeena

1. Richard Billingsley
(Name)
11114 147A Street
(Address)
Surrey
V3R 3W2 604 930 5531
(Postal Code) (Telephone)
Client Number 139085

Agent for Court Bailiff
(Names of all recorded holders)
Victoria
(Address)
141757
(Postal Code) (Telephone)
Client Number

**If recording work, complete the following and continue onto Page 3.
If paying cash in lieu of work or lease rental, turn to (and complete) Page 4.**

List the titles (claim name, lease, tenure number, crown grant lot) on which the work specified below was actually done:
Attem #7, #9, #14-16, #18-19, Calvin, Polo 13, Lance 3-9
Bell 1-8, Irving 1-4
Date work started July 3/01 completed Sept 01/01 WORK PERMIT No. _____

TYPE OF WORK AND TOTAL VALUE FOR EACH TYPE BEING CLAIMED ON THIS STATEMENT:

Physical	Refer to Page 2 for claimable physical work types and requirements	\$	A
Technical	Prospecting	\$	B
	Geological, Geochemical, Geophysical, and/or Diamond Drilling	\$ 33,863.58	
Portable Assessment Credit (PAC) Withdrawal (Box D)	either <input checked="" type="checkbox"/> 30% of value in Box B & C only or <input type="checkbox"/> Total PAC	\$ 10,000	D
from the account(s) of: <u>Richard Billingsley</u>			
TOTAL VALUE OF WORK (Complete Page 3)		A + B + C + D = E	\$ 43,863.58



Ministry of Energy and Mines
Energy and Minerals Division
Mineral Titles Branch

EVENT NUMBER 3170848
OFFICE USE ONLY

Mineral Tenure Act
SECTION 32

NOTICE TO GROUP

INDICATE TYPE OF TITLE: Mineral Placer

MINING DIVISION: Skene

MAP NUMBER(S): 104B ~~68~~ 68, 69, 58

RECEIVED
#14 SEP 7 - 2001 3990
Gold Commissioner's Office
VANCOUVER, B.C.
RECORDING STAMP

Richard Billingsley
(Full Name)
11119 147A Street
(Mailing Address)
Surrey BC
(City) (Province)
V3R 3W2 609 930 5531
(Postal Code) (Telephone)
Client Number 139085

Agent² for (All Recorded Holders must be stated)
Name Carl Bailit
Client Number 191757
Name Heritage American Res Corp.
Client Number 140350
Name Watershed Res Ltd
Client Number 130636
Name _____
Client Number _____

request that the titles listed on the reverse Schedule be grouped under the group name Tag East

I am not requesting a Common Anniversary Date for this grouping.

I hereby request a Common Anniversary Date for the claims³ in this group:

Date of: _____ or

a median date⁴ based on this Notice to Group.

R.J. Billingsley
(Signature of Applicant)

OFFICE USE ONLY
If Median Date was selected above, the median date has been calculated as:
Median Date: _____
Accepted by Applicant: _____

(Signature of Applicant)

OFFICE USE ONLY
Notice to Group approved: Yes No
M. G.
(Signature of Gold Commissioner)
01.09.11
(Date)

¹ A copy of the applicable portion of the mineral/placer titles reference map(s) with the outside boundary of the claim group outlined/highlighted must be attached.

² Agent must have specific written authority from all owners if applying for a Common Anniversary Date.

³ Although leases and crown granted claims can be included in a Notice to Group, they always retain their issued anniversary dates. Common Anniversary Dates cannot be applied to leases or crown granted claims.

Median Date is calculated as the average date of all the claims in the group based on units and current anniversary dates. A median date results in no work requirements in order to establish the common anniversary date.

WORK CREDITS APPLIED TO CLAIMS

EVENT NUMBER: 3170850

I wish to apply \$ 43,200 of the total value in Box E (from Page 1) as follows:

Claim Name (one claim per line)	Tenure Number	No. of Units*	Expiry Date	Work to be applied		Recording Fee	New Expiry Date
				Value	Years		
Aftom #7	253146	16	01/09/13	6400	2	320	03/09/13
Aftom #9	253147	20	01/09/13	4000	1	200	02/09/13
Aftom #14	253152	20	01/09/13	4000	1	200	02/09/13
Aftom #15	253153	20	01/09/13	4000	1	200	02/09/13
Aftom #16	253154	16	01/09/13	6400	2	320	03/09/13
Aftom #18	253155	16	01/09/13	6400	2	320	03/09/13
Aftom #19	253156	20	01/09/13	4000	1	200	02/09/13
Calvin	313285	20	01/09/17	8000	2	400	03/09/17
				TOTALS	43,200	2160	

* 2 Post, Fraction, Rev. Crown Grant and Placer Claims are one unit each.

NOTICE TO GROUP / CAD EVENT NUMBER: 3170848

RECORDED Sept 7/01

Value of work to be credited to portable assessment credit (PAC) account(s).
(May only be credited from the approved value of Box C not applied to claims.)

Name	Amount
Name of owner/operator 1. _____	\$ _____
2. _____	\$ _____

I, the undersigned Applicant, hereby confirm that the information is supplied and the credits are claimed in accordance with the requirements in the Mineral Tenure Act, the Mineral Tenure Act Regulation, and the Mineral Act Regulation. I hereby acknowledge and understand that it is an offence to knowingly provide false information under the *Mineral Tenure Act*. I acknowledge and understand that if the statements made, or information given, in this Statement of Work are found to be false and the exploration and development has not been performed, then the work reported on this Statement will be cancelled and the subject mineral or placer claims(s) may, as a result, forfeit and vest back to the Province under section 35 of the Mineral Tenure Act.

7 Sept 01
Date

B.G. Billingsley
Signature of Applicant



Event Number: 3170848

Page 1 of 1

NOTICE TO GROUP
'Schedule'

One claim per line

Claim Name or Lease Type	Tenure Number
1 Afton #7	253196
2 Afton #9	253147
3 Afton #14	253152
4 Afton #15	253153
5 Afton #16	253154
6 Afton #18	253155
7 Afton #19	253156
8 Calvin	313285
9 Polo 13	253290
10 Lance 3	251899
11 Lance 4	251845
12 Bell 1	387237
13 Bell 2	387238
14 Bell 3	387239
15 Bell 4	387240
16 Bell 5	387241
17 Bell 6	387242
18 Bell 7	387243
19 Bell 8	387244
20 Irving 1	387231
21 Irving 2	387232
22 Irving 3	387233
23 Irving 4	387234
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	

Claim Name or Lease Type	Tenure Number
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	

Claim Name or Lease Type	Tenure Number
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	
101	
102	
103	
104	
105	

Note: Photocopy Schedule and attach if more space is needed.

APPENDIX VI: MAPS

- Figure 2 Mineral Claims 1:20,000 Scale*
- Figure 3 Geology and Sample Locations 1:20,000 Scale*
- Figure 4 Gold BLEG 1:20,000 Scale*
- Figure 5 Gold Sieved Silt 1:20,000 Scale*
- Figure 6 Silver Sieved Silt 1:20,000 Scale*
- Figure 7 Copper Sieved Silt 1:20,000 Scale*
- Figure 8 Lead Sieved Silt 1:20,000 Scale*
- Figure 9 Zinc Sieved Silt 1:20,000 Scale*
- Figure 10 Arsenic Sieved Silt 1:20,000 Scale*
- Figure 11 Antimony Sieved Silt 1:20,000 Scale*
- Figure 12 Mercury Sieved Silt 1:20,000 Scale*
- Figure 13 Tellurium Sieved Silt 1:20,000 Scale*
- Figure 14 Gold -150HN 1:20,000 Scale*
- Figure 15 Lead -35+150HN 1:20,000 Scale*
- Figure 16 Zinc -35+150HN 1:20,000 Scale*
- Figure 17 Mercury --35+150HN 1:20,000 Scale*
- Figure 18 Barium -35+150 HN 1:20,000 Scale*
- Figure 19 Interpretation of Geochemistry 1:20,000 Scale*