

# PART III

## 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.

#### **Operator:**

St. Andrews Goldfields Ltd.

#### **Date:**

December 18, 2001

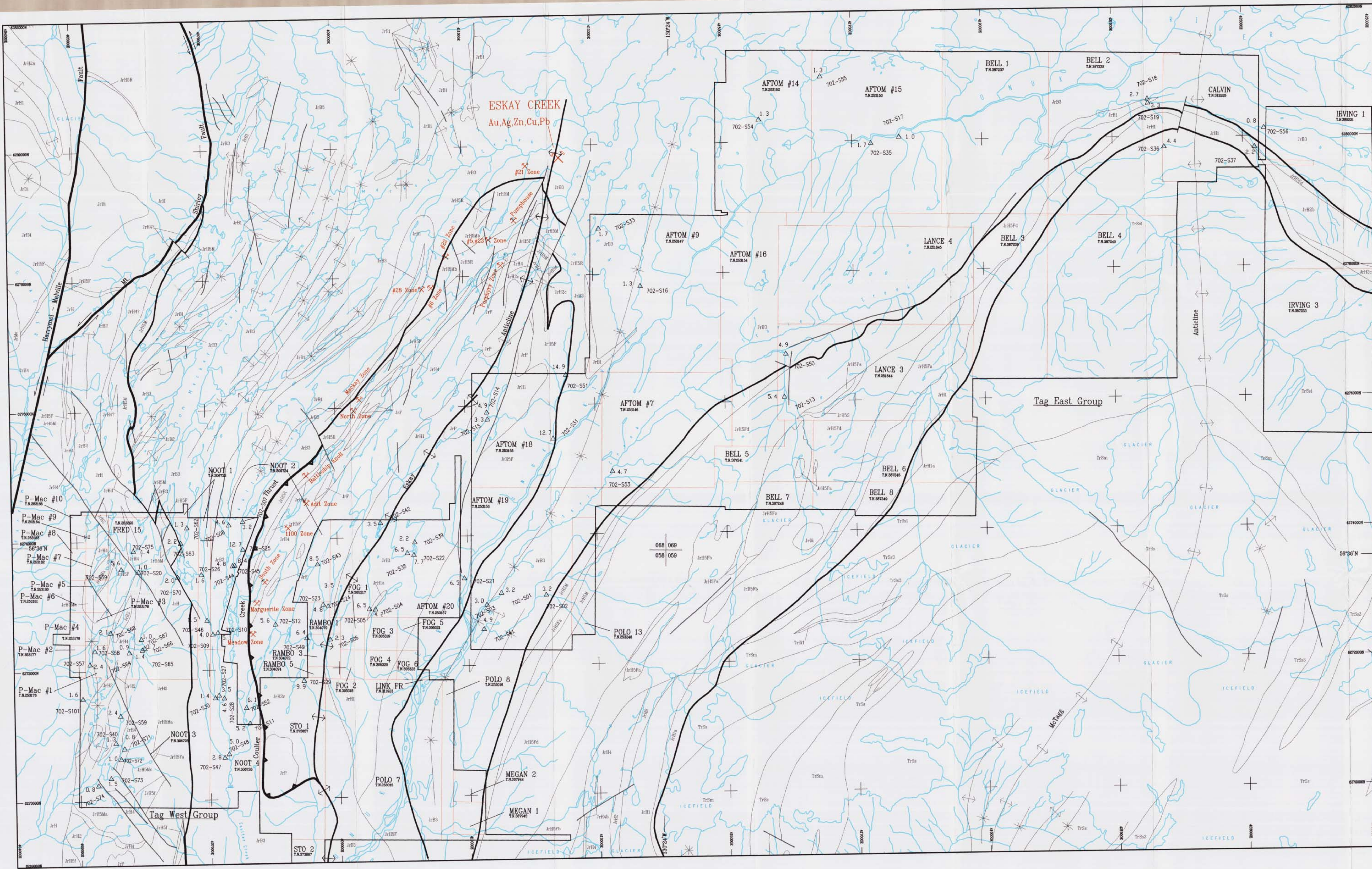
#### **Authors:**

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





**LEGEND**

- △ 702-S01 Sieved Silt Sample Location
- △ 1.2 ppm antimony in sieved silt

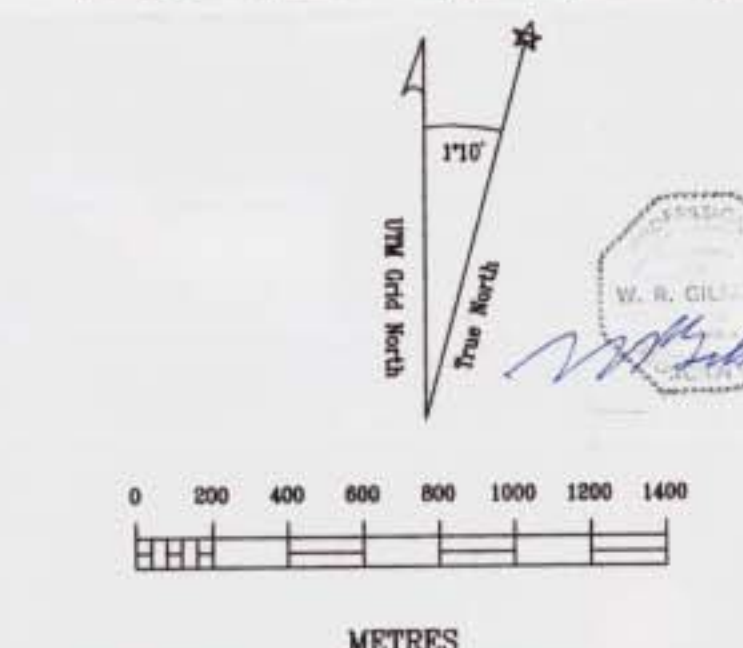
**SYMBOLS**

- Stratigraphic contact
- Bold indicates contact between Bower, Hazelton and/or Stuhni Groups
- Fault, thrust fault, bold is major faults
- Anticlinal fold axis, bold is Eskay anticline
- Synclinal fold axis

**GEOLOGY**

See Fig. 3b for Geological Legend

REVISION DATE	REVISION BY	REVISION
Sept 11/2001	RM	MM BUELS - base
Oct 1/2001	RM/RK	Geology, Silt data
Oct 3/01	RM	BLIS values
Nov 22/2001	RM	RM silt data
Nov 30	RM	Fig 4-dts
Dec 6/2001	RM	Geology update
Dec 16/2001	RM	-354 1500m up wells



**ESKAY PROJECT**

Tag West & Tag East Groups

Geochemical Stream Sediment Survey

**Antimony Sieved Silt**

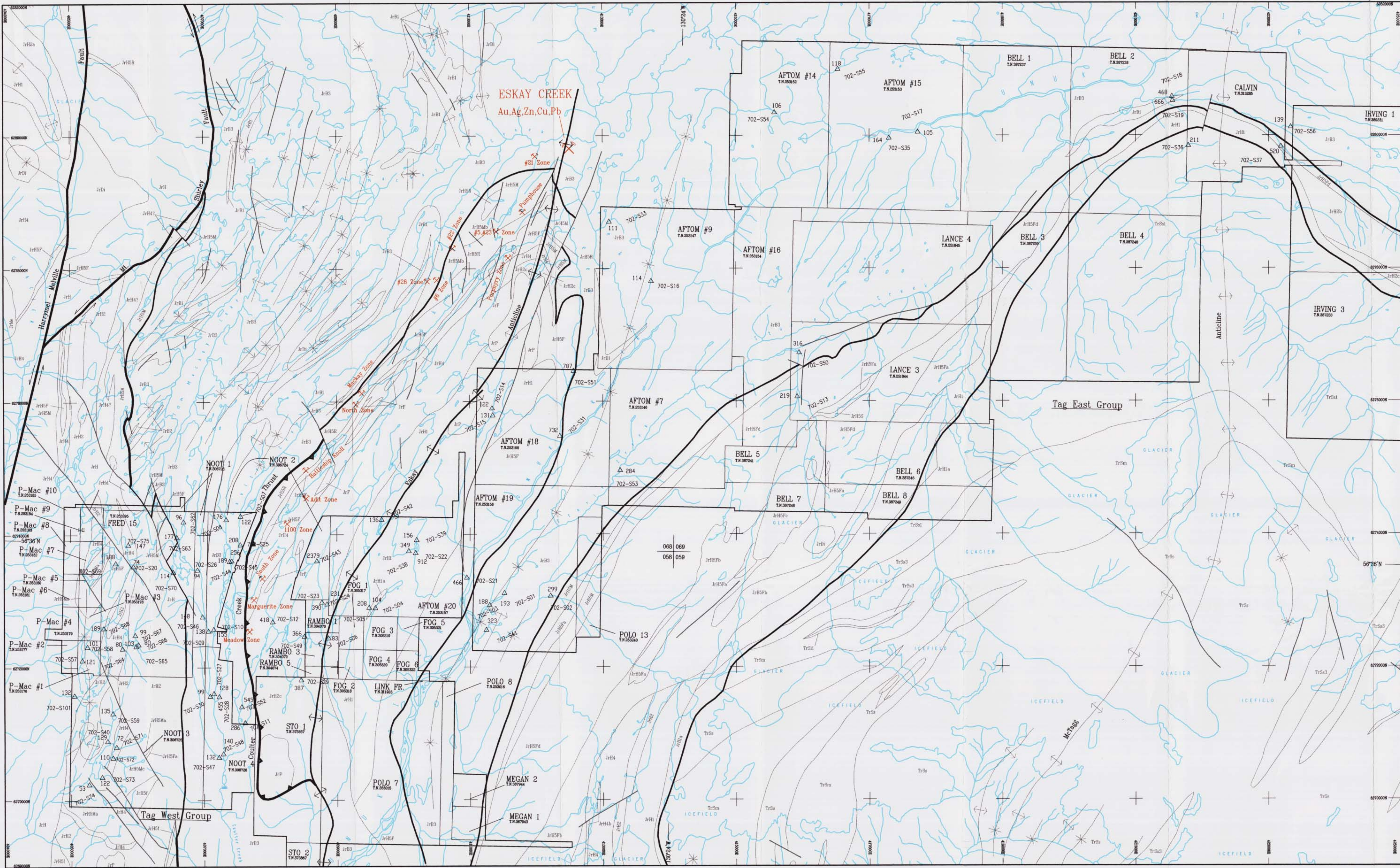
By : P. McQuigan, P. Geo.  
W.R. Gilmour, P. Geo.

Location: Eskay Cr. Mining Jurisdiction: Skeena

Datum: NAD27 Map Ref.: 1048 058 068 069 Scale: 1:20,000 UTM: 9

Project: 702 Date: Dec.17/2001 Drawn By: RM Figure: 11





**LEGEND**

- △ 702-S01 Sieved Silt Sample Location
- △ 139 ppb mercury in sieved silt

**SYMBOLS**

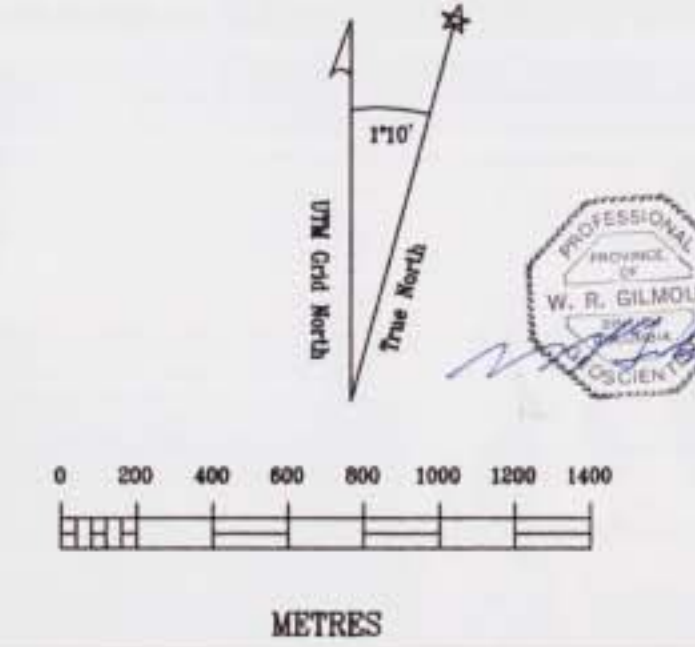
- Stratigraphic contact
- Bold indicates contact between Bower, Hazelton and/or Stuhini Groups
- Fault, thrust fault, bold are major faults
- Anticlinal fold axis, bold is Eskay anticline
- Synclinal fold axis

**GEOLOGY**

See Fig. 3b for Geological Legend

DATE	BY	REVISION
Sept. 11/2001	RM	RM/ELLS - base
Oct. 17/2001	RM/TK	Geology, Silt data
Oct. 31/01	RM	ELLS values
Nov. 22/2001	RM	RM silt data
Nov. 30	RM	Fig. data
Dec. 4/2001	RM	Geology update
Dec. 12/2001	RM	-35+150M ssp. vels

Path: 702/geoc/702.dwg



**ESKAY PROJECT**

Tag West & Tag East Groups

Geochemical Stream Sediment Survey

**Mercury Sieved Silt**

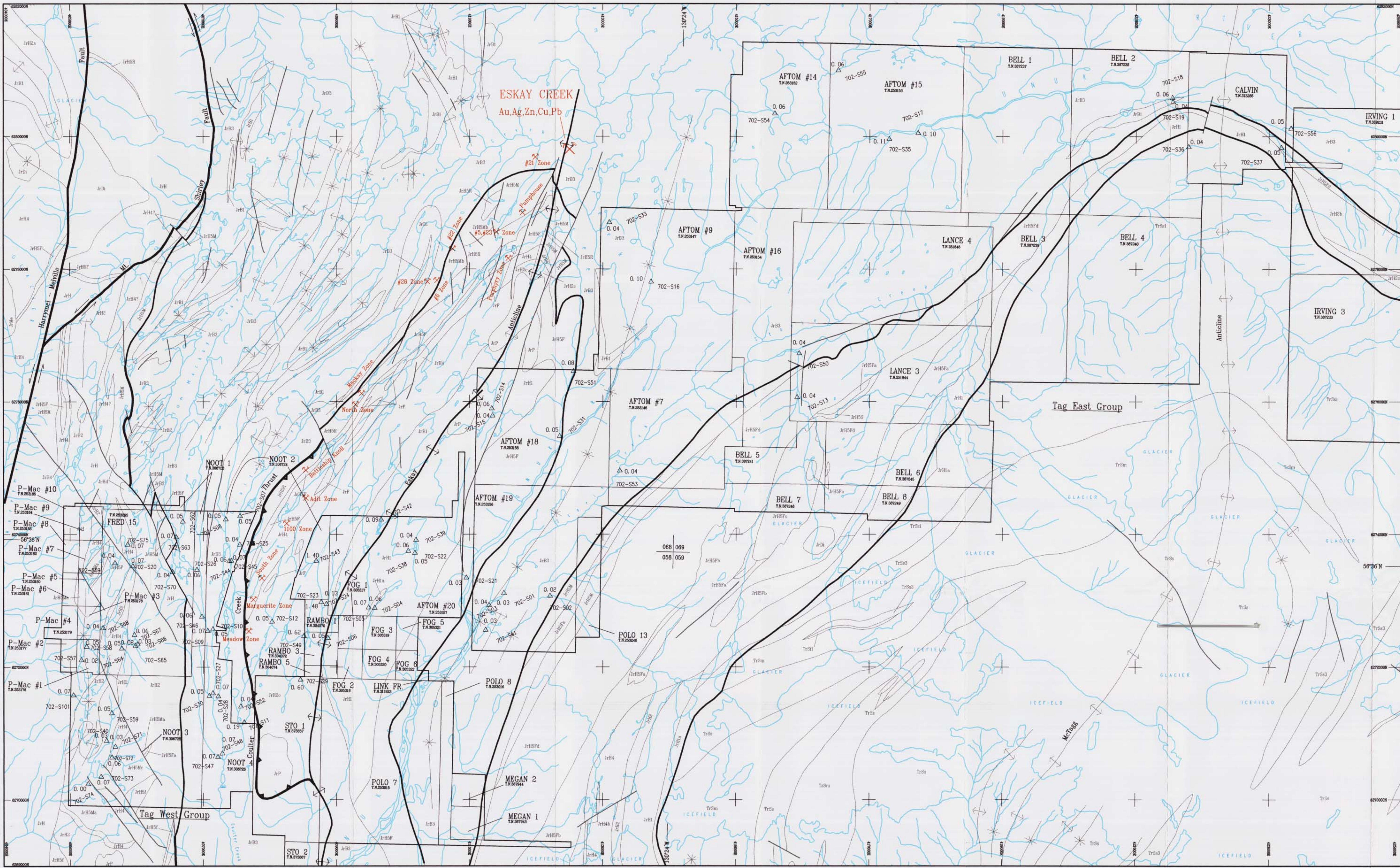
By: P. McGuigan, P. Geo.  
W.R. Gilmour, P. Geo.

Location: Eskay Cr. Mining Jurisdiction: Skeena

Datum: NAD27 Map Ref.: 1048.058.089.089 Scale: 1:20,000 UTM 9

Project: 702 Date: Dec. 17/2001 Drawn By: RM Figure: 12





**LEGEND**

- △ 702-501 Sieved Silt Sample Location
- △ 0.11 ppm tellurium in sieved silt

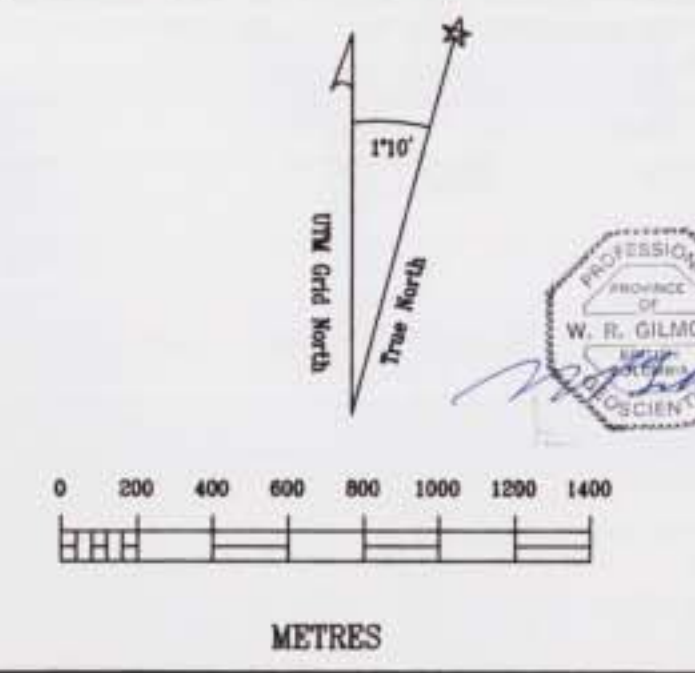
**SYMBOLS**

- Stratigraphic contact
- Bold indicates contact between Bowser, Hazelton and/or Stuhini Groups
- Fault, thrust fault, bold are major faults
- Anticlinal fold axis, bold is Eskay anticline
- Synclinal fold axis

**GEOLOGY**

See Fig. 3b for Geological Legend

REVISION	DATE	BY	DESCRIPTION
Sept. 11/2001	RM	TK, BGS, RM	Geology, Silt data
Oct. 1/2001	RM/RK	RM	RELEG values
Nov. 27/2001	RM	RM	1st map date
Nov. 30	RM	RM	Final edit
Dec. 6/2001	RM	RM	Geology update
Dec. 16/2001	RM	RM	-35-150M up wells



**ESKAY PROJECT**

Tag West & Tag East Groups

Geochemical Stream Sediment Survey

**Tellurium Sieved Silt**

By: F. McQuigan, P. Geo.  
W.R. Gilmore, P. Geo.

Location: Eskay Cr. Mining Jurisdiction: Skeena

Datum: NAD27 Map Ref.: 1248,058,068,065 Scale: 1:20,000 UTM: 9

Project: 702 Date: Dec. 17/2001 Drawn By: RM Figure: 13



LEGEND

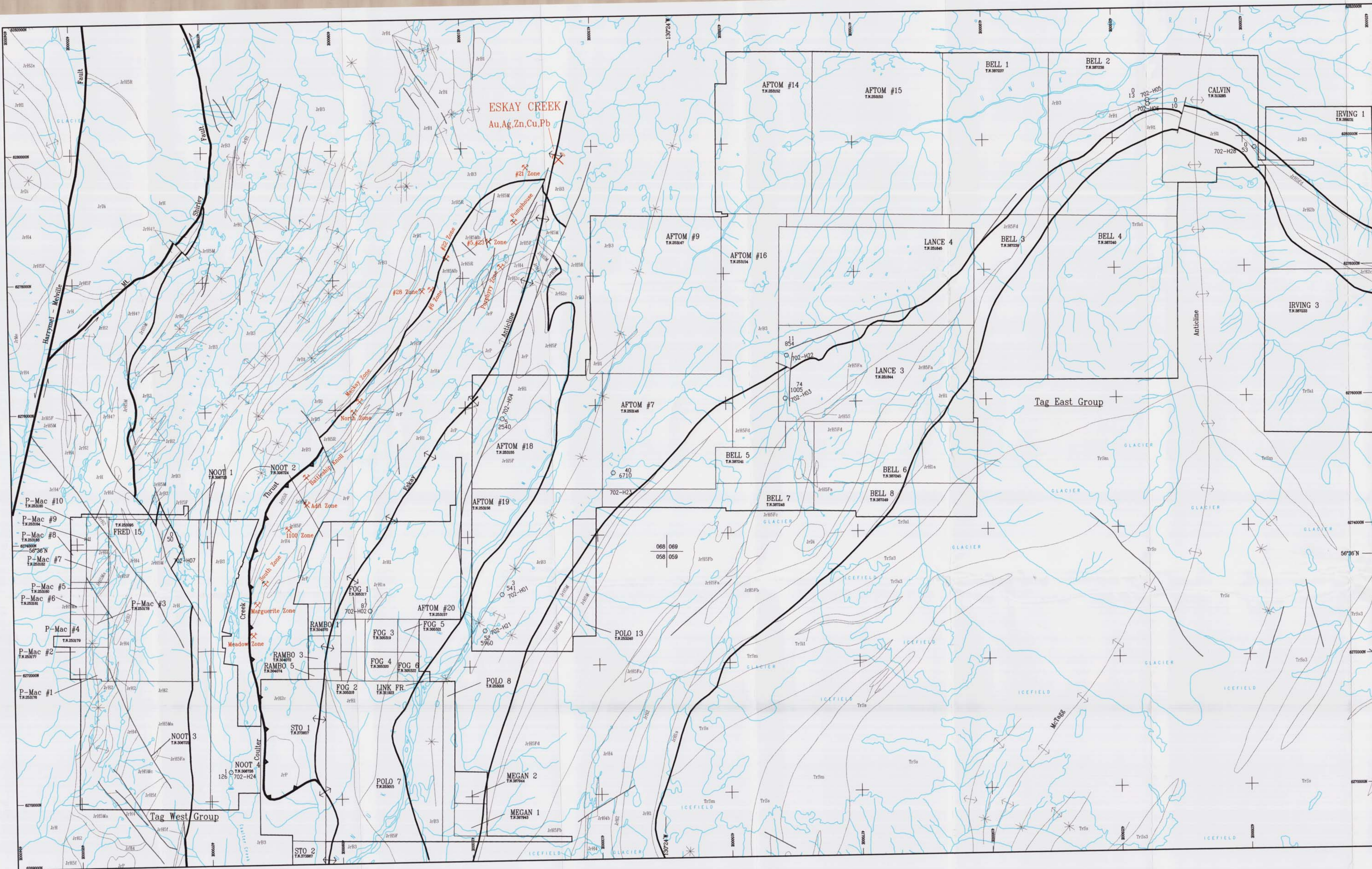
- 702-H01 Heavy Mineral Sample Location
- 20000 Value shown in micrograms gold in -150HN fraction normalized to 10 kg of -20 mesh field sample
- Value shown in ppb gold in -150HN fraction from n = 10 kg of -20 mesh field sample

SYMBOLS

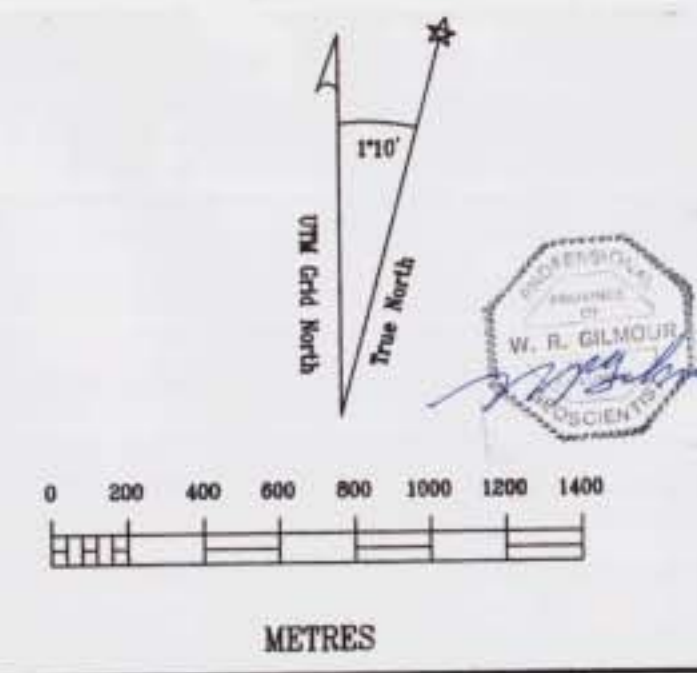
- Stratigraphic contact
- Bold indicates contact between Bowser, Hazelton and/or Stuhini Groups
- Fault, thrust fault, bold are major faults
- Anticlinal fold axis, bold is Eskay anticline
- Synclinal fold axis

GEOLOGY

See Fig. 3b for Geological Legend



DATE	REVISION	BY	REVISION
Sept 17/2001	RM	RM	Initial E.S.-lines
Oct 17/2001	RM/RK	RM	Geology, Silt dots
Oct 3/2001	RM	RM	BLEP values
Nov 22/2001	RM	RM	Map notes added
Nov 30	RM	RM	Fig 4 file
Dec 6/2001	RM	RM	Geology updates
Dec 16/2001	RM	RM	-30x150HN sup. vels



**ESKAY PROJECT**

Tag West & Tag East Groups

Geochemical Stream Sediment Survey

**Gold**

-150HN Heavy Mineral Fraction

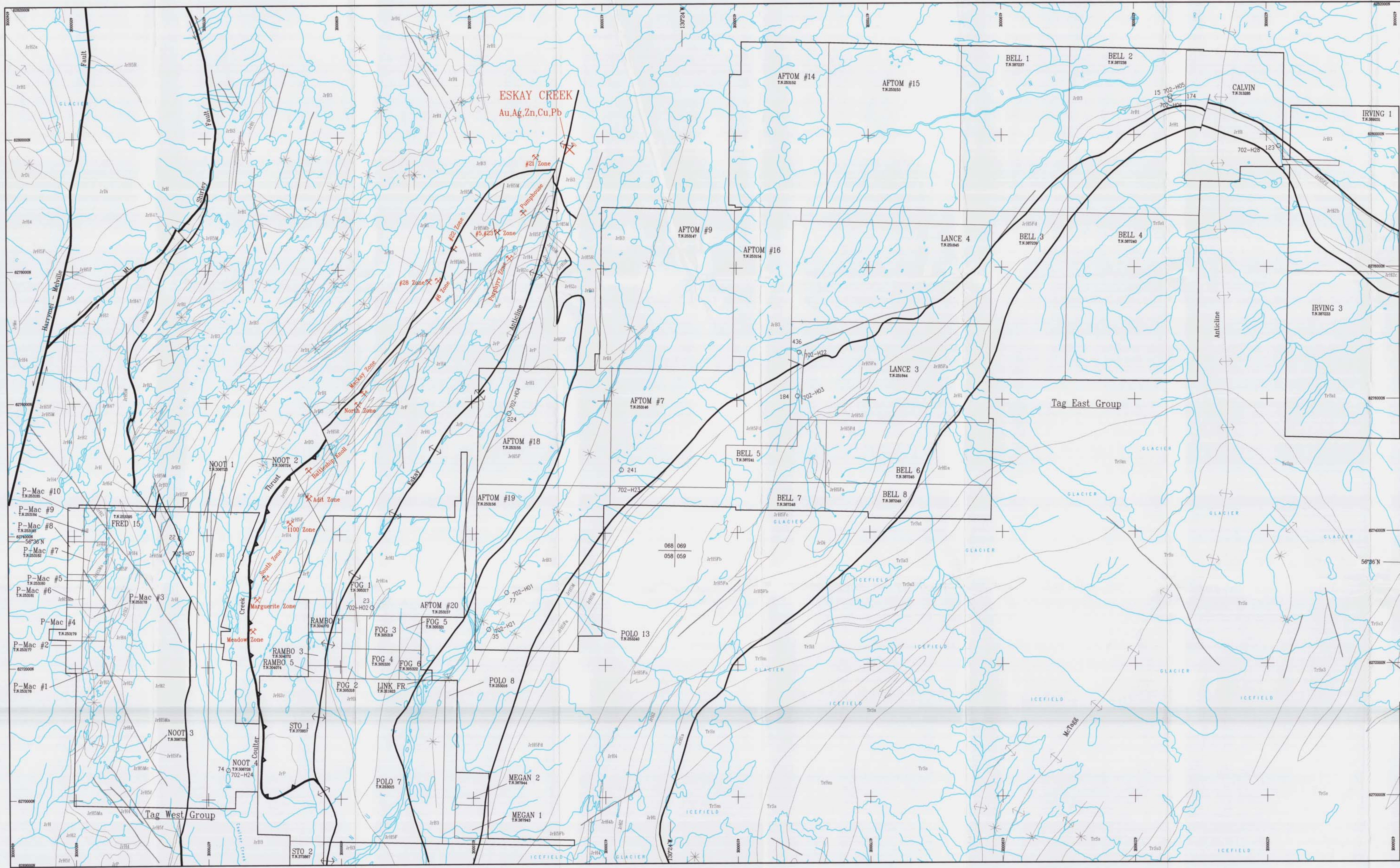
By: P. McQuigan, P. Geo.  
W.R. Gilmour, P. Geo.

Location: Eskay Cr. Mining Jurisdiction: Skeena

Datum: NAD27 Map Ref.: 1048.058.068.069 Scale: 1:20,000 UTM: 9

Project: 702 Date: Dec. 17/2001 Drawn By: RM Figure: 14





**LEGEND**

- 702-H01 Heavy Mineral Sample Location
- 25 Value shown in ppm lead in -35+150HN fraction from ~10 kg of -20 mesh field sample

**SYMBOLS**

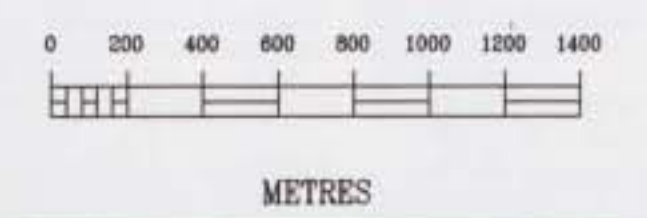
- Stratigraphic contact
- Bold indicates contact between Bowser, Hazelton and/or Stuhini Groups
- Fault, thrust fault, bold are major faults
- Anticline fold axis, bold is Eskay anticline
- Synclinal fold axis

**GEOLOGY**

See Fig. 3b for Geological Legend

REVISION	DATE	BY	REVISION
Sept 17/2001	RM	HAJ/RLS-loc	
Oct 17/2001	RM/RS	Geology, SM data	
Oct 23/01	RM	RLS values	
Nov 22/2001	RM	RM invs data	
Nov 25	RM	Fog # data	
Dec 12/2001	RM	Geology update	
Dec 16/2001	RM	-35+150HN cp vels	

Path: 702/geoc702.dwg



**ESKAY PROJECT**

Tag West & Tag East Groups

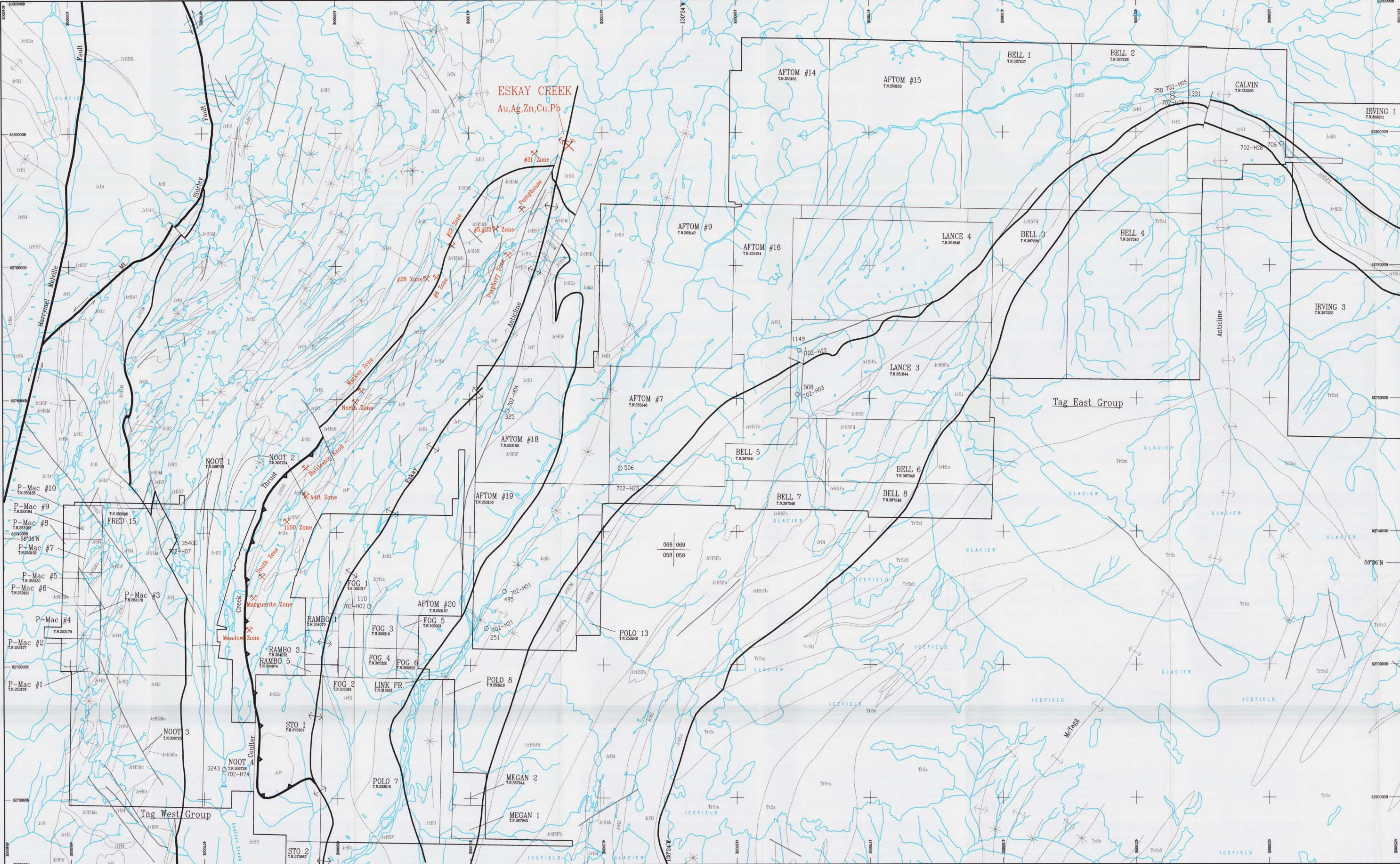
Geochemical Stream Sediment Survey

**Lead**  
-35+150HN Heavy Mineral Fraction

By: P. McGuigan, P. Geo.  
W.R. Gilmour, P. Geo.

Location:	Eskay Cr.	Mining Jurisdiction:	Skeena
Datum:	NAD27	Map Ref.:	1048.058.068.069
Project:	702	Date:	Dec. 17/2001
		Scale:	1:20,000
		Drawn By:	RM
		Figure:	15





**LEGEND**

- 702-H01 Heavy Mineral Sample Location
- 125 Value shown in ppm zinc in -35+150HN fraction from a 10 kg of -20 mesh field sample

**SYMBOLS**

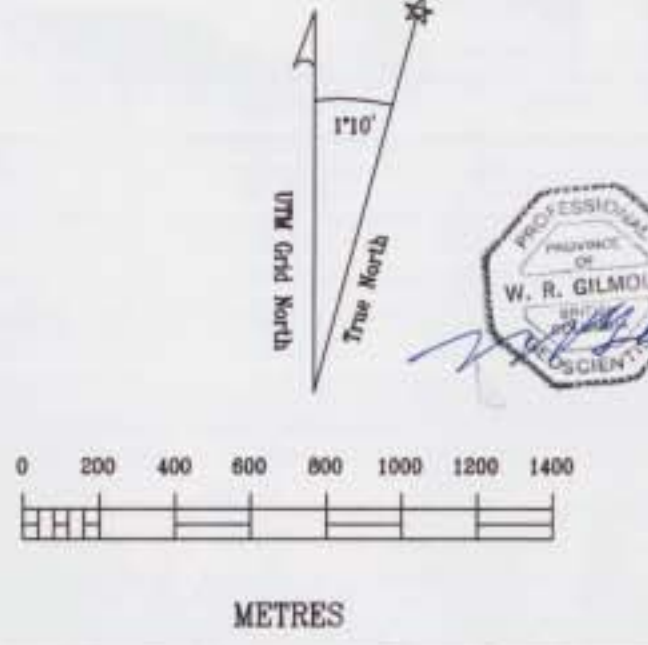
- Stratigraphic contact
- Bold indicates contact between Bowser, Hazelton and/or Stuhini Groups
- Fault, thrust fault, bold are major faults
- Anticlinal fold axis, bold is Eskay anticline
- Synclinal fold axis

**GEOLOGY**

See Fig. 3b for Geological Legend

REVISION DATE	REVISION BY	REVISION
Sep. 17/2001	RM	Final BLEM - notes
Oct. 17/2001	RM/RK	Geology, Silt data
Oct. 1/01	RM	BLEM values
Nov. 22/2001	RM	RM map data
Nov. 30	RM	Tag East
Dec. 6/2001	RM	Geology update
Dec. 16/2001	RM	-35+150HN sp. data

Path: 702/geoc/702.dwg



**ESKAY PROJECT**

Tag West & Tag East Groups

Geochemical Stream Sediment Survey

**Zinc**  
-35+150HN Heavy Mineral Fraction

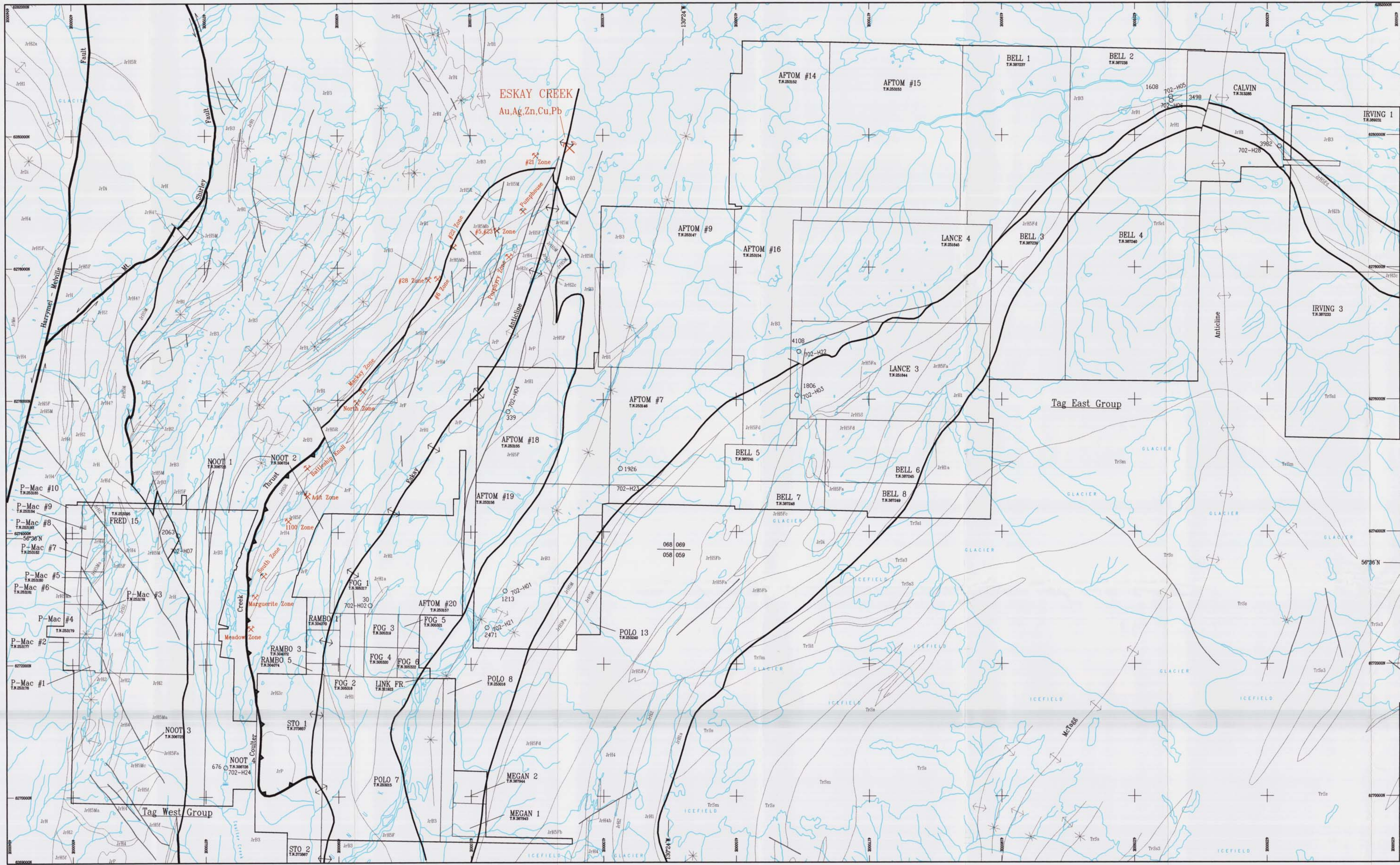
By : P. McQuigan, P. Geo.  
W.R. Gilmour, P. Geo.

Location: Eskay Cr. Mining Jurisdiction: Skeena

Datum: NAD27 Map Ref.: 1048.058.089.089 Scale: 1:20,000 UTM 9

Project: 702 Date: Dec. 17/2001 Drawn By: RM Figure: 16





**LEGEND**

- 702-H01 Heavy Mineral Sample Location
- 1600 Value shown in ppb mercury in -35+150HN fraction from = 10 kg of -20 mesh field sample

**SYMBOLS**

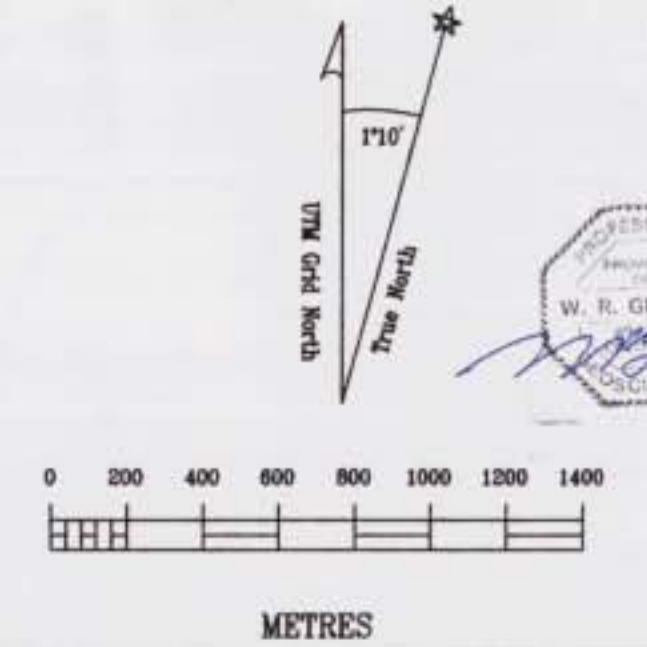
- Stratigraphic contact
- Bold indicates contact between Bowser, Hazelton and/or Stuhini Groups
- Fault, thrust fault, bold are major faults
- Anticline fold axis, bold is Eskay anticline
- Synclinal fold axis

**GEOLOGY**

See Fig. 3b for Geological Legend

REVISION	DATE	BY	REVISION
Sept 17/2001	RM	RM, JLG, S-loc	
Oct 1/2001	RM/RM	Geology, Silt data	
Oct 1/2001	RM	BELL volume	
Nov 22/2001	RM	RM area data	
Nov 30	RM	Field data	
Dec 6/2001	RM	Geology update	
Dec 16/2001	RM	-35+150HN esp. vels	

Path: 702/geo/702.dwg



**ESKAY PROJECT**

Tag West & Tag East Groups

Geochemical Stream Sediment Survey

**Mercury**  
-35+150HN Heavy Mineral Fraction

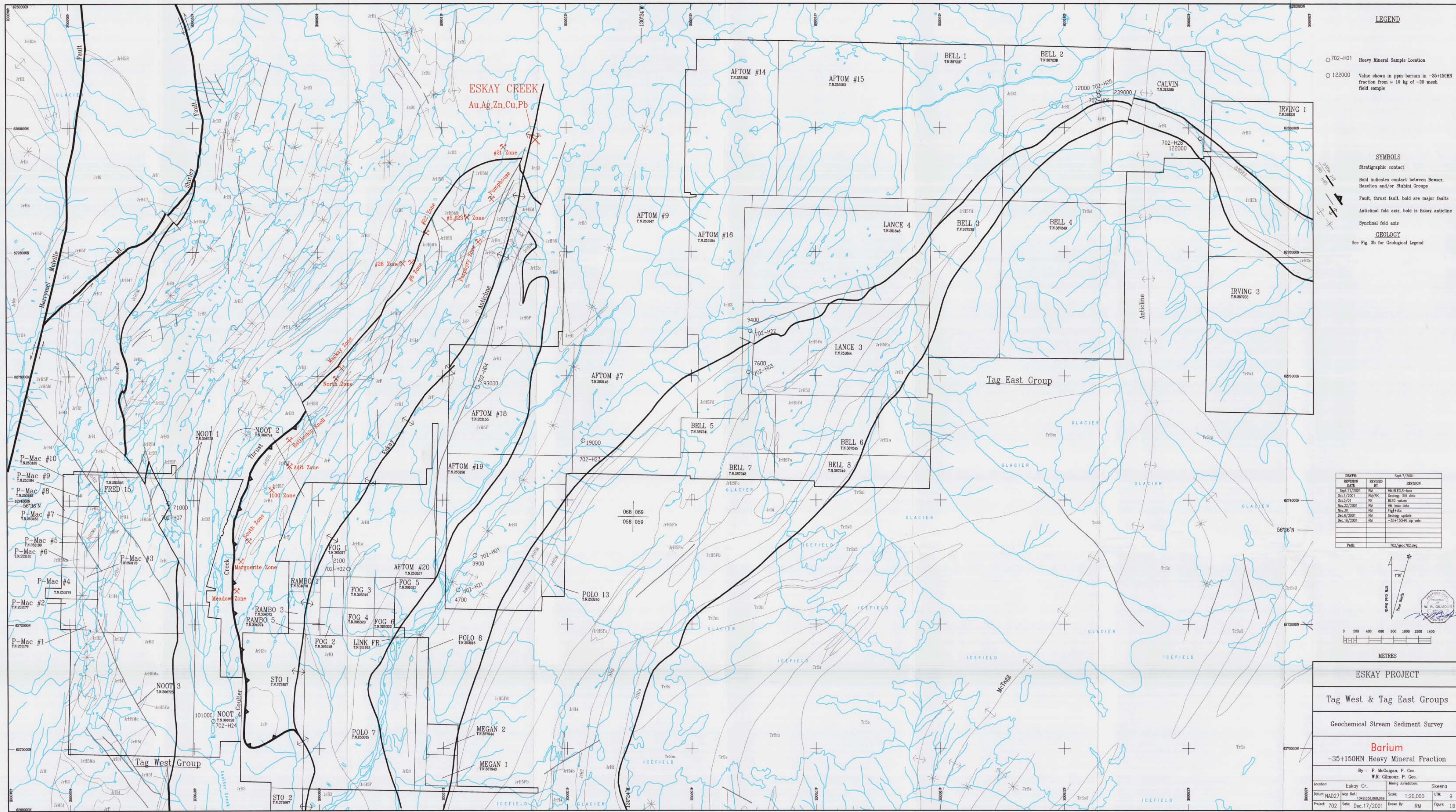
By : P. McGluegan, P. Geo.  
W.R. Gilmour, P. Geo.

Location: Eskay Cr. Mining Jurisdiction: Skeena

Datum: NAD27 Map Ref.: 1048.058, 068, 069 Scale: 1:20,000 UTM: 9

Project: 702 Date: Dec. 17/2001 Drawn By: RM Figure: 17





**LEGEND**

- 702-H01 Heavy Mineral Sample Location
- 122000 Value shown in ppm barium in -35+150HN fraction from ~ 10 kg of -20 mesh field sample

**SYMBOLS**

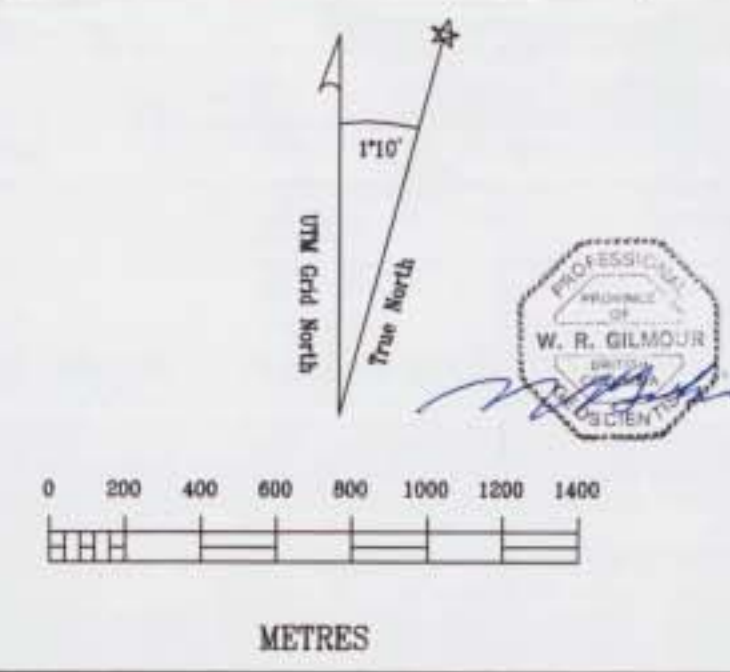
- Stratigraphic contact
- Bold indicates contact between Bower, Hazelton and/or Stuhini Groups
- Fault, thrust fault, bold are major faults
- Anticline fold axis, bold is Eskay anticline
- Synclinal fold axis

**GEOLOGY**

See Fig. 3b for Geological Legend

REV#	DATE	BY	REVISION
1	Sept. 17, 2001	RM	Final BLS-1003
2	Oct. 1, 2001	RM/RK	Geology, SSI data
3	Oct. 3, 2001	RM	BLS values
4	Nov. 22, 2001	RM	RM map data
5	Nov. 30, 2001	RM	Fig # title
6	Dec. 6, 2001	RM	Geology update
7	Dec. 16, 2001	RM	-35+150HN sp. vels

Path: 702/gec/702.dwg



**ESKAY PROJECT**

Tag West & Tag East Groups

Geochemical Stream Sediment Survey

**Barium**

-35+150HN Heavy Mineral Fraction

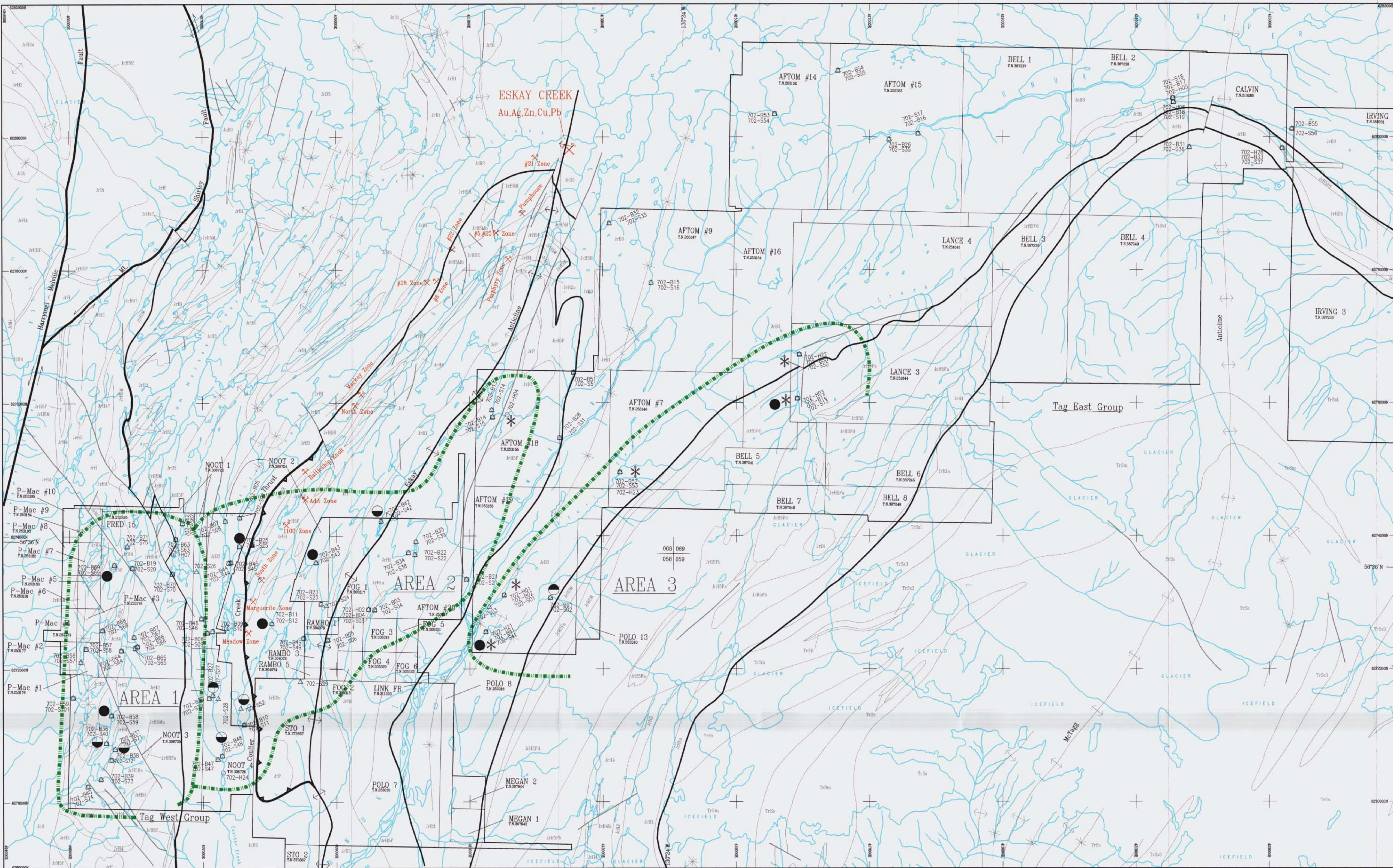
By: P. McQuigan, P. Geo.  
W.R. Gilmour, P. Geo.

Location: Eskay Cr. Mining Jurisdiction: Skeena

Datum: NAD27 Map Ref.: 1048.058, 068, 086 Scale: 1:20,000 UTM: 9

Project: 702 Date: Dec. 17/2001 Drawn By: RM Figs: 18





**LEGEND**

- 702-B01 BLEG Sample Location
- △ 702-S01 Sieved Silt Sample Location
- 702-H01 Heavy Mineral Sample Location

**SYMBOLS**

- Stratigraphic contact
- Bold indicates contact between Bowser, Hazelton and/or Stuhini Groups
- Fault, thrust fault, bold are major faults
- Anticlinal fold axis, bold is Eskay anticline
- Synclinal fold axis

**GEOLOGY**

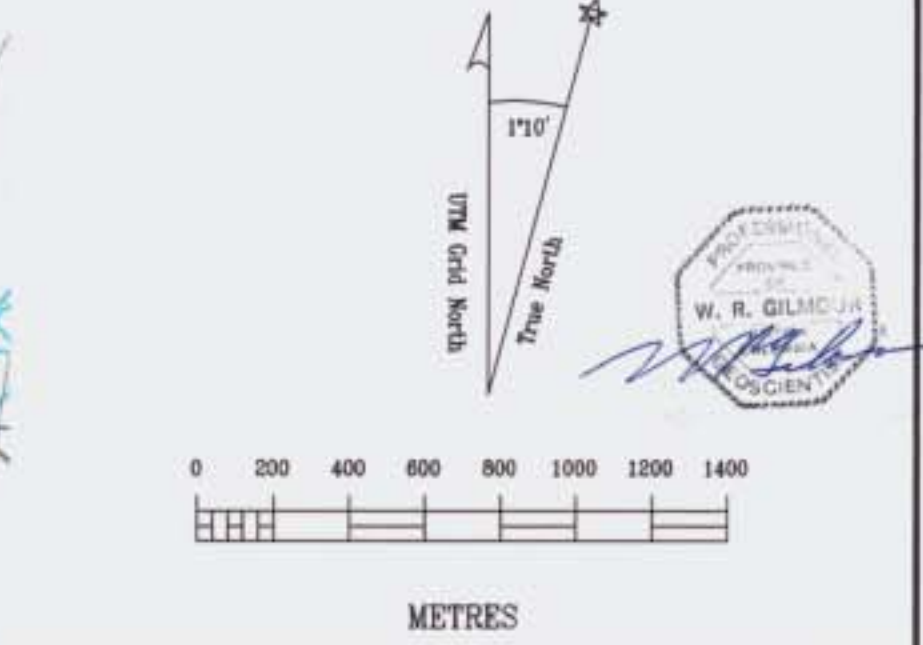
See Fig. 3b for Geological Legend

**GOLD**

- BLEG anomaly
- Sieved Silt anomaly
- BLEG & Sieved Silt anomaly
- \* Heavy Mineral anomaly
- Follow-up Area

DATE	REVISION	BY	REVISION
Sept. 17/2001	RM	RM	RM
Oct. 1/2001	RM	RM	RM
Oct. 3/01	RM	RM	RM
Nov. 22/2001	RM	RM	RM
Nov. 30	RM	RM	RM
Dec. 6/2001	RM	RM	RM
Dec. 16/2001	RM	RM	RM

Path: 702/geo/702.dwg



**ESKAY PROJECT**

Tag West & Tag East Groups

Geochemical Stream Sediment Survey

Interpretation of Geochemistry

By: P. McQuigan, P. Geo.  
W.R. Gilmanov, P. Geo.

Location: Eskay Cr. Mining Jurisdiction: Skeena

Date: 702 Map Ref.: 1048.058.068.068 Scale: 1:20,000 UTM 9

Project: 702 Date: Dec. 17/2001 Drawn By: RM Figure: 19