

**BRITISH COLUMBIA**  
**PROSPECTORS ASSISTANCE PROGRAM**  
**MINISTRY OF ENERGY AND MINES**  
**GEOLOGICAL SURVEY BRANCH**

PROGRAM YEAR: 2000/2001

REPORT #: PAP 00-30

NAME: GARRETT AINSWORTH

## D. TECHNICAL REPORT

- One technical report to be completed for each project area.
- Refer to Program Regulations 15 to 17, pages 6 and 7.



Information on this form is confidential subject to the provisions of the Freedom of Information Act.

## SUMMARY OF RESULTS

- This summary section must be filled out by all grantees, one for each project area

Name Garrett Ainsworth Reference Number 2000/2001 P126

### LOCATION/COMMODITIES

Project Area (as listed in Part A) Monashee Mountain MINFILE No. if applicable \_\_\_\_\_

Location of Project Area NTS 82L/1W Lat 50°06.3' Long 118°24.8'

Description of Location and Access Good access to Monashee Mtn. is found 80km East of Vernon. Access to top of Mountain is along South Crest by 4x4 or North by Yeoward Creek

Prospecting Assistants(s) - give name(s) and qualifications of assistant(s) (see Program Regulation 13, page 6)

Ben Ainsworth - Geologist

Sterling McLeod - Mining Diploma (BCIT)

Main Commodities Searched For Gold & Silver

Known Mineral Occurrences in Project Area St. Paul, Margan & Monashee Mines?

### WORK PERFORMED

1. Conventional Prospecting (area) G1, G2, G3, OPAL

2. Geological Mapping (hectares/scale) \_\_\_\_\_

3. Geochemical (type and no. of samples) 58 soil, 16 sediment, 20 rock

4. Geophysical (type and line km) \_\_\_\_\_

5. Physical Work (type and amount) Staking, road clearing, grid prep.

6. Drilling (no. holes, size, depth in m, total m) \_\_\_\_\_

7. Other (specify) \_\_\_\_\_

### Best Discovery

Project/Claim Name G1/SHERPA Commodities Gold/Silver

Location (show on map) Lat. \_\_\_\_\_ Long \_\_\_\_\_ Elevation \_\_\_\_\_

Best assay/sample type Sediment Sample GS-3 was 315ppb Au on G1 Quartz Vein on SHERPA - sample G-7 was 85ppb Au (See Maps)

Description of mineralization, host rocks, anomalies mineralization in quartz veins consists of pyrite, chalcopryite, arsenopyrite, galena. Argillite has pyrite, pyrochite, chalcopryite. Host rocks slightly altered. No new soil anomalies were found

FEEDBACK: comments and suggestions for Prospector Assistance Program \_\_\_\_\_

Ministry of Energy and Mines  
Kamloops, B.C.  
Rec'd OCT 18 2000

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# **Geochemical Sampling and Prospecting Report Monashee Mountain Project**

Monashee Pass, Vernon Mining Division  
British Columbia, Canada  
Latitude: 50° 07' North  
Longitude: 118° 30' West  
NTS: 82L/1W

G1, G2, G3, OPAL, SHERPA Claims

**-Owner and Operator-**

Garrett Paul Ainsworth  
Mining Diploma (BCIT)  
1989 Dunstone Place  
North Vancouver, BC  
V7H 2M3  
TEL: (604) 929-2434

October 1, 2000

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Appendix I	Analytical Results - Soil Samples
Appendix II	Analytical Results - Stream Sediment Samples
Appendix III	Analytical Results - Rock Samples

## SUMMARY

The Monashee Mountain property is located in the Vernon Mining Division of south central British Columbia. Good access to the property is found 80 km east of Vernon along Provincial Highway 6. Approximately 1900 hectares consisting of 81 units in 5 claims make up the total inventory of the Monashee Property, which are owned by Garrett Paul Ainsworth.

The area surrounding Monashee Mountain was one of the earliest mining districts in Western Canada. The Monashee, St. Paul and Morgan workings were all small polymetallic deposits found on Monashee Mountain. In 1983 Brican Resources discovered two highly anomalous areas in gold called the Gossan and Southeast grids. In 1992 Cameco Corporation did extensive silt and moss mat sampling, which showed the Gossan and Southeast drainages to be highly anomalous as well. Cameco Corporation abandoned their project in 1995 due to a drop in gold prices and difficulties with working in British Columbia.

The objective of the 2000 exploration program was to locate a source for the soil, sediment and moss mat anomalies that are on and around the Gossan grid, Southeast grid and Marsh Creek. A total of 58 soil samples, 16 sediment samples and 20 rock samples were taken between July 31 and September 20, 2000. A small quartz vein from the Morgan mine had values of 6542.3 ppb gold, 45.5 ppm silver and above 99999 ppm arsenic.

The regional geology places the Monashee property on the eastern edge of the Intermontane Belt at its boundary with the Omineca Crystalline Belt. The property is underlain by an east-southeast trending, south to west dipping sequence of volcanic and sedimentary rocks belonging to the Carboniferous and Permian Thompson Assemblage. Mineralization is observed at several small quartz veins on the Monashee Property. Pyrite is common as fine fracture fillings, and the content of pyrite increases in the vicinity of intrusive rocks, the old mine workings and the Nelson batholith.

In the SHERPA and G1 claims some small quartz veins with sulphides were found along the logging road. A silicified argillitic rock found as sub-crop in the Gossan grid had significant amounts of chalcopyrite, pyrrhotite and pyrite. Also a talus slope of magnetite was discovered at the headwaters of Marsh Creek in the OPAL claim.

The source of highly anomalous gold values in the Gossan grid, Southeast grid and Marsh Creek was not found during the 2000 exploration program. Further work on all three areas is warranted.

## **INTRODUCTION**

The Monashee Mountain property is located in the Vernon Mining Division of south central British Columbia (figure 1). The G1, G2, G3, Opal and Sherpa claims are owned and operated by Garrett Paul Ainsworth. The Ministry of Energy and Mines funded 75% of this project in the form of a Prospectors Assistance Grant. The following report outlines the results of the geochemical sampling and prospecting that was carried out between July 31 and September 20, 2000.

Previous work on the Monashee property by Brican Resources Ltd., Commonwealth Gold Corporation and Cameco Corporation found several drainages to be highly anomalous in gold values. Regional Geochemical Surveys by the Federal/Provincial Program (1985 to 1990) identified this area to be anomalous in gold, silver, arsenic, antimony, and bismuth. Rock samples were taken to find the source. Stream sediment and soil samples were taken in this work to check anomalies indicated in earlier assessment reports.

### **Location and Access**

The property is centered on Monashee Mountain contained by Yeoward Creek to the north, the Kettle River to the south and Highway 6 to the west. The National Topographic System map reference is 82L/1W and the claims are between Latitudes 50° 06.3' to 50° 09.8' North and longitudes 118° 24.8' to 118° 30.4' West.

Good access to the Monashee Mountain area is found about 80 km east of Vernon along Provincial Highway 6. Excellent 4 wheel drive access is provided from the south along the crest of the mountain, or through the St. Paul mine area from Yeoward Creek.

The nearest supply centers are the towns of Lumby and Cherryville, about 45 and 20 kilometers west of the property, respectively. The closest railhead is in the town of Lumby. Also, a major BC Hydro power line runs to the south of the property.

### **Physiography, Vegetation and Climate**

The Monashee property is located in the Whatshan Range of the Monashee Mountains, which is immediately east of the Shuswap Highlands. Elevations range from approximately 850 meters on Monashee Pass Creek to 1830 meters above sea level on top of Monashee Mountain. A rolling upland forms the upper parts of the mountains with deeply incised drainages creating steep valley flanks.

# Monashee Project

## Location Map

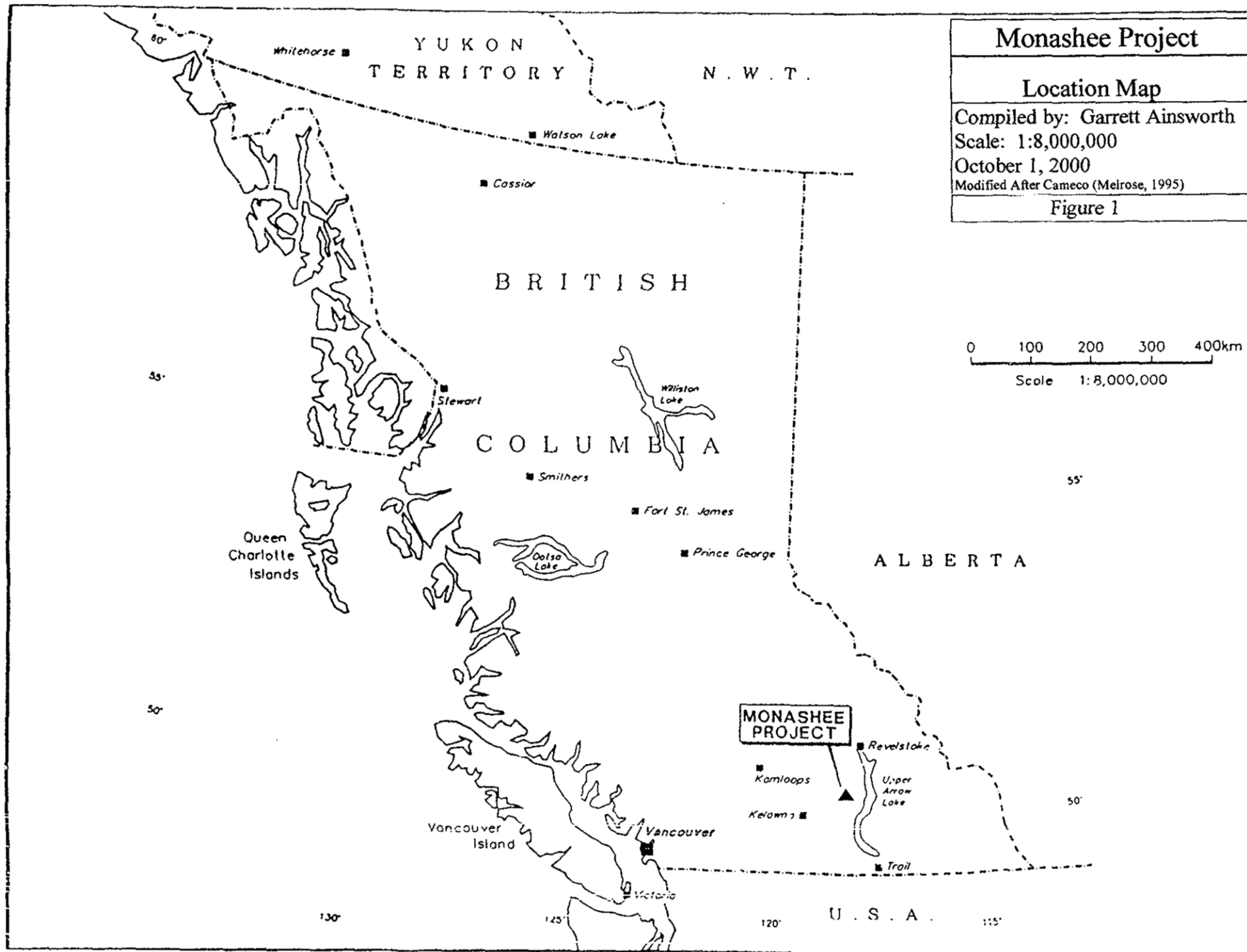
Compiled by: Garrett Ainsworth

Scale: 1:8,000,000

October 1, 2000

Modified After Cameco (Melrose, 1995)

Figure 1





Most of the property is heavily forested with mature growth of douglas fir, ponderosa pine, western white pine, white spruce, western red cedar, larch, aspen, birch and maple. Recent logging in the area has opened up approximately 20% of the property as clear cuts. Monashee mountain has a moderate amount of precipitation falling as snow from November to April. In the higher elevations the snow may stay as long as late June and return in late September to early October.

**Property and Tenure**

Approximately 1900 hectares consisting of 81 units in 5 claims make up the total inventory of the Monashee Property (Figure 2). All claims are owned by Garrett Paul Ainsworth. The claims surround the St. Paul property, which includes the old St. Paul and Morgan mines.

The following table summarizes the claims status:

<u>Claim Name</u>	<u>Record Number</u>	<u>No. of Units</u>	<u>Record Date</u>	<u>Expiry Date</u>
OPAL	239424	20	Aug 2/00	Aug 2/01
G1	239425	20	Aug 3/00	Aug 3/01
G2	239426	20	Aug 4/00	Aug 4/01
G3	239427	20	Aug 5/00	Aug 5/01
SHERPA	695967	1	Aug 9/00	Aug 9/01

**Work History**

The area surrounding Monashee Mountain was one of the earliest productive mining districts in Western Canada. In 1860 a small silver bonanza silver lode, later known as the Hidden Treasure, was discovered on Monashee Creek. Lode gold was first found in the area in 1879, and the first claims located were on the "Monashee gold ledge" on the west flank of Monashee Mountain in 1886. This property later became the Monashee Mine and yielded several thousand tons of ore. The St. Paul Mine was also another former producer that is a polymetallic deposit with high gold-silver-arsenic-antimony-copper-lead-zinc values. The Morgan workings are found 600 meters south of the St. Paul Mine (figure 3). The Silver Bell located on the north side of Monashee Creek about 7 kilometers north of Monashee mountain is another high grade silver prospect in the area.

556472

SHERPA  
695967

Forward

122917

MONASHEE 1  
358018  
55446

Cr.

MONASHEE 2 364911
MONASHEE 3 364920
MONASHEE 4 364921

G1  
239425

G2  
4188  
4187  
4186

MONASHEE MTN.  
239426  
55446

DNA 1  
310836  
55446

DNA 2  
310838  
55446

228417  
228419

OPAL  
239424

G3  
239427  
55446

Marsh

5560336

Kettle

River  
Tybop

Cr.

EUREKA MTN.

L 2152  
L 2153  
L 2154

CG CG CG

PALA  
347525

MAPLA CACHE

CONROY

206476

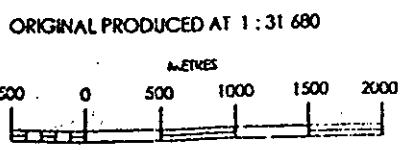
206477

MAPLA HILL

Shiell L.

Inon

Wauchope



ADMINISTRATIVE AREAS

MINING DIVISIONS: SLOCAN, VERNON

Monashee Project

Claim Map

Compiled by: Garrett Ainsworth

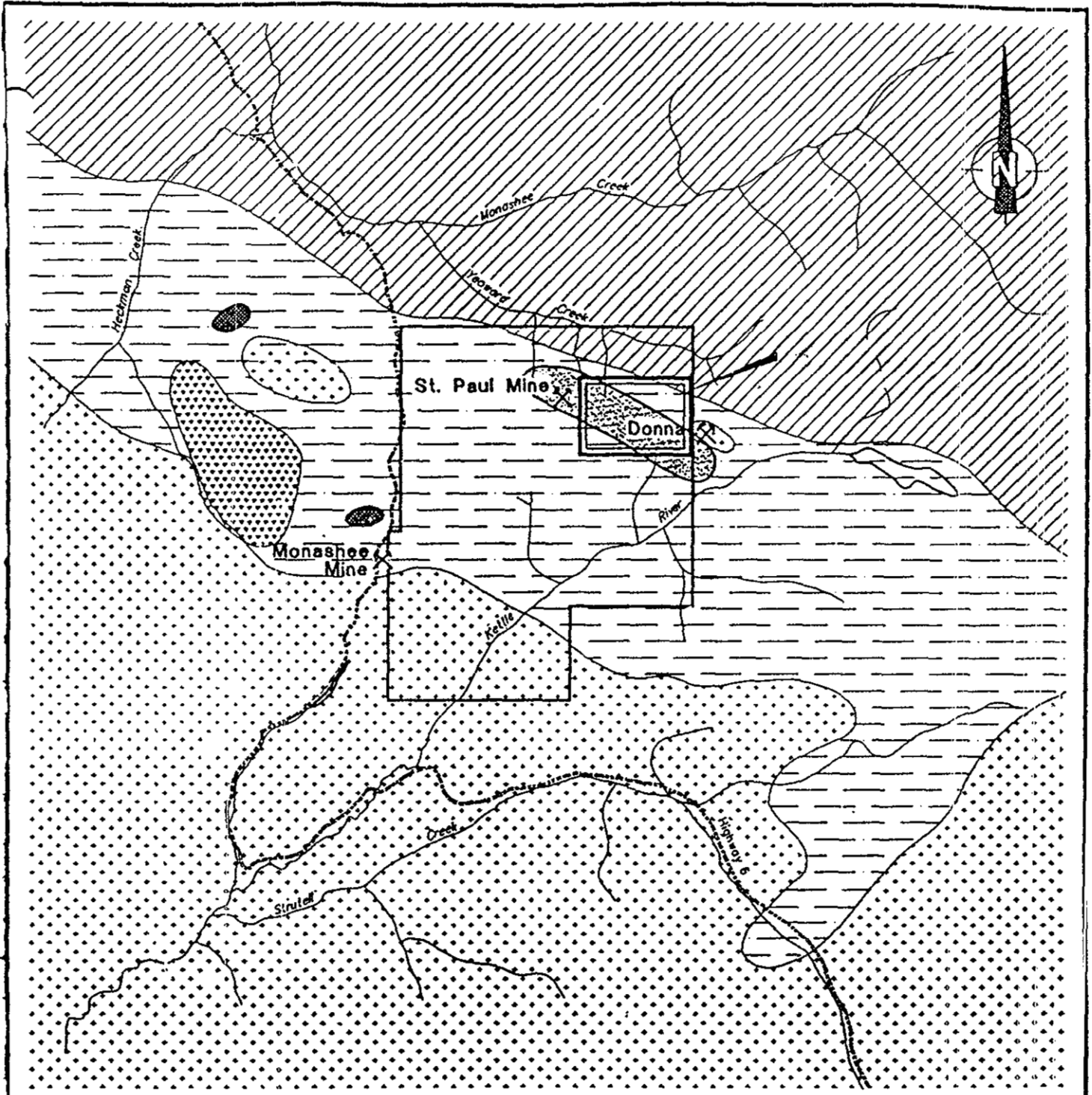
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October 1, 2000

Figure 2

M 0821.01W

5564000



**LEGEND**

- TERTIARY**
- Kamloops Group - basalt
- JURASSIC - CRETACEOUS**
- Felsic - intermediate intrusives
- TRIASSIC**
- Nicola, Stocan Group - mixed Sedimentary - Volcanic rocks
- PERMIAN**
- Thompson Assemblage - limestone and clastic sediments
- SERICITE - PYRITE ALTERATION ZONE
- GEOCHEMICAL ANOMALY
- MAJOR HIGHWAYS



**Monashee Project**

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**Property Geology**

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 Scale: 1:125,000  
 October 1, 2000  
 Modified After Cameco (Melrose, 1995)

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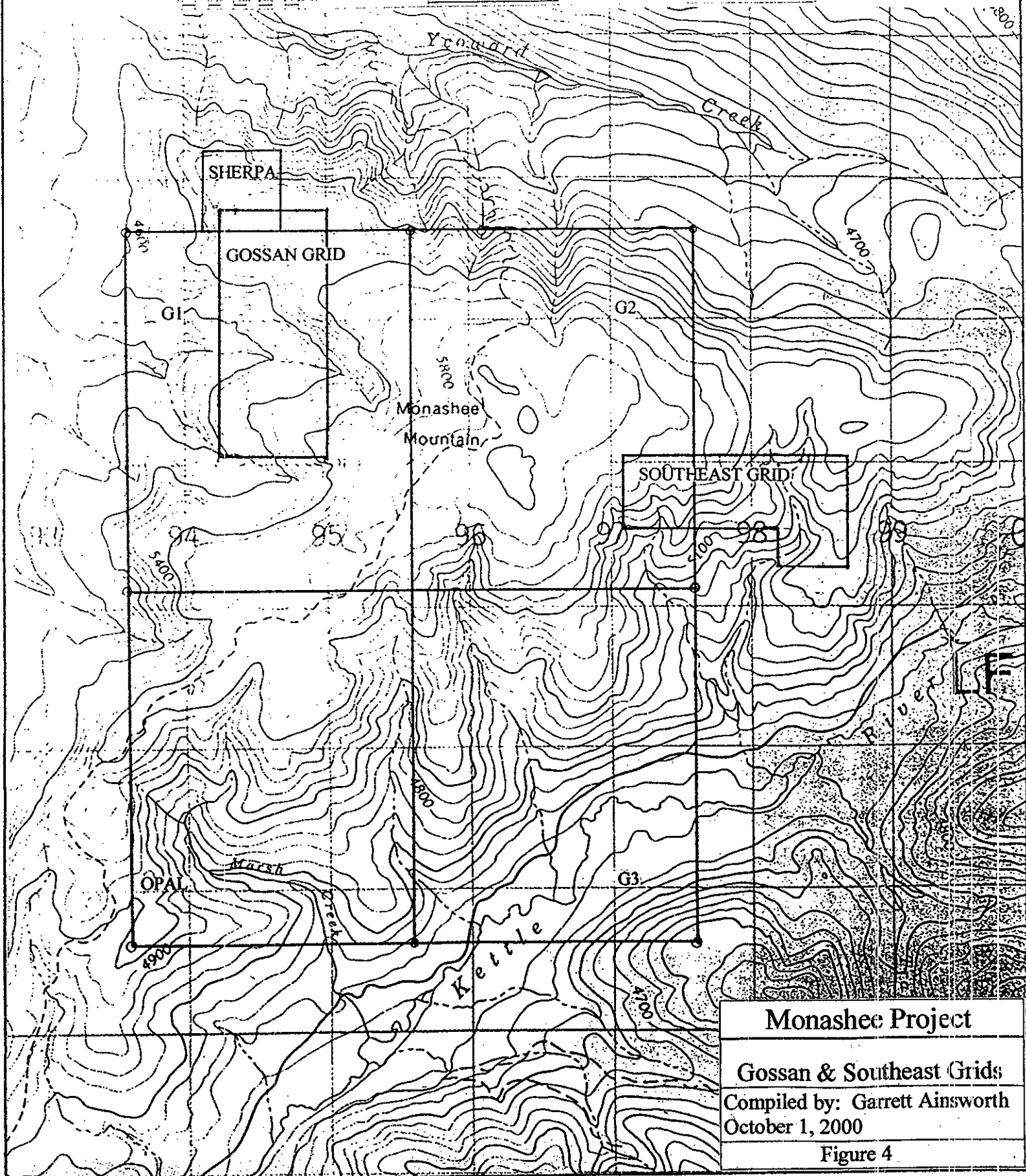
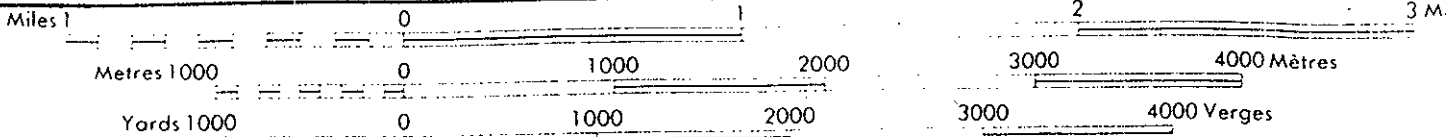
Figure 3

Exploration in the 1980's and early 1990's included geological mapping/prospecting, geochemical and geophysical surveys and some trenching and diamond drilling.

In 1983 Brican Resources did contour soil sampling, which led to the discovery of the Gossan and Southeast Grids (figure 4). Sampling on both grids was carried out at 25 meter intervals on lines 100 meters apart. On the Gossan grid a 900 meter long by 100 meter wide anomalous zone was found trending north to northwest and open at both ends. The Gossan had gold values up to 5280 ppb with 49 samples being greater than 100 ppb. Minor check sampling indicated that gold is more concentrated in the 'B' horizon than in the 'C', and in the finer fraction (-80 mesh) than in the coarser (-20 to +80 mesh) fraction. The gold-arsenic correlation is generally high, however specific samples show poor correlation. West of the baseline the gold anomaly continues southwest (downslope) from the arsenic anomaly (Daughtry & Gilmour, 1982).

On the Southeast grid anomalous values do not cluster, but occur as erratic highs and small, less anomalous zones. Gold values range up to 270 ppb with 5 samples greater than 100 ppb. The gold-arsenic correlation varied from fair to poor. A geochemical rock survey was started on the Gossan grid, but it was not completed due to the onset of winter. Also a magnetometer survey was done along 5.1 kilometers at 25 meter intervals on lines 100 meters apart. The magnetic response was generally flat ranging between 57,500 and 58,000 gammas. Brican stated that continued detailed exploration of the Gossan and Southeast areas was recommended (Daughtry & Gilmour, 1982).

In 1992 Cameco Corporation did an extensive silt and moss mat sampling program. The Gossan grid drainage had sediments of 170, 270 and 2100 ppb gold and moss mats of 85 and 120 ppb gold. The southeast grid had similar results to the gossan grid. Cameco followed up in 1993 with more sampling, geological mapping, prospecting as well as some geophysical surveys. In 1994 Cameco Corporation did a total of 631.1 meters of drilling in 6 holes around the Morgan workings. However, this only yielded 0.5 meters of 359 ppb gold. Due to their drilling results, a drop in gold prices, and difficulties with working in British Columbia Cameco abandoned their project and claims (Melrose, 1995).



**Monashee Project**

**Gossan & Southeast Grids**

Compiled by: Garrett Ainsworth  
October 1, 2000

Figure 4

## **2000 Exploration Program**

The objective of the 2000 exploration program was to locate a source for the soil, sediment and moss mat anomalies that are on and around the Gossan grid, Southeast grid, and Marsh Creek. The commodity or minerals sought after in this project are principally gold and silver. The predicted deposit types include skarn deposits and epithermal deposits.

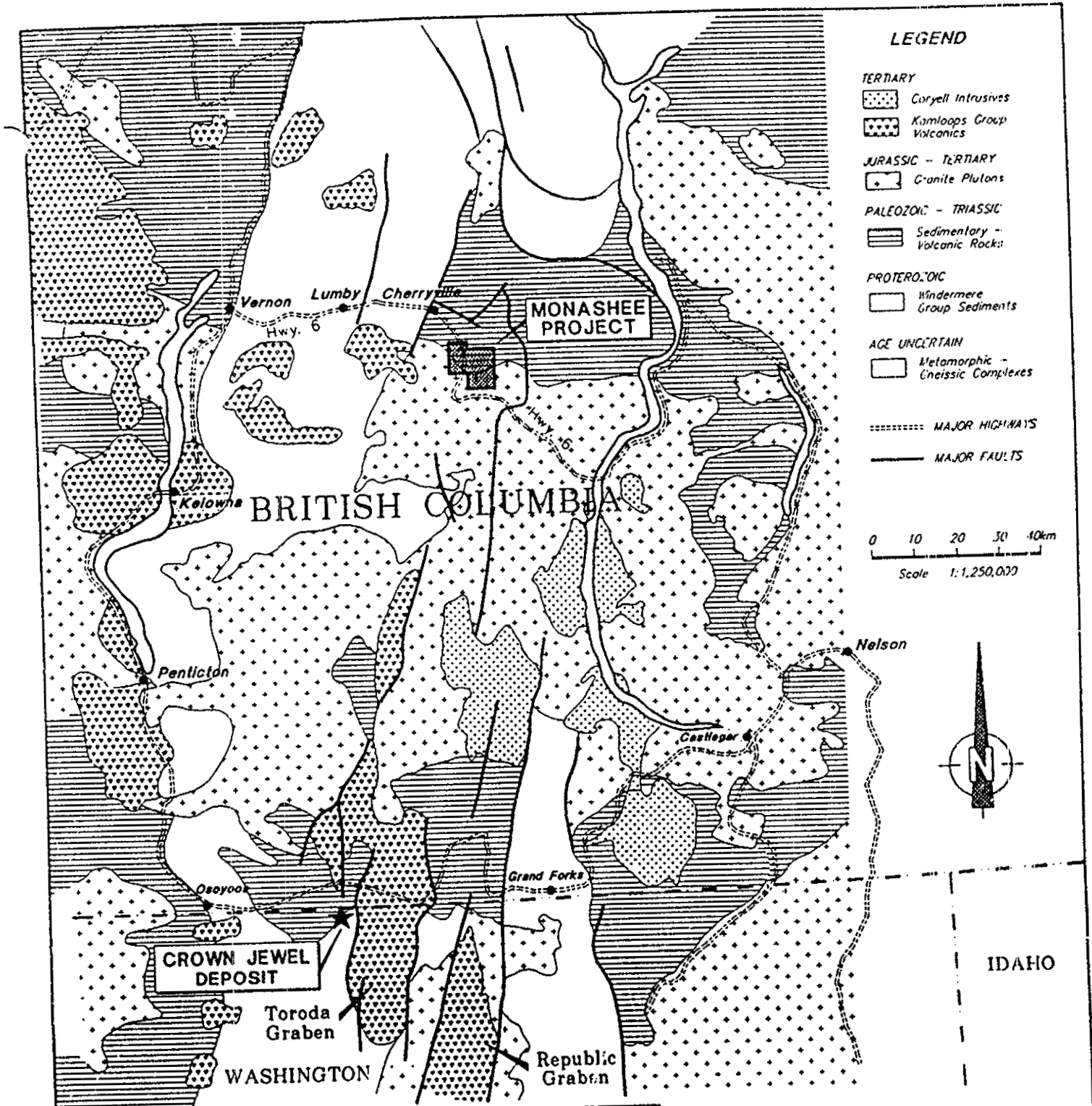
The 2000 exploration included 58 soil samples, 16 sediment samples and 20 rock samples. Pitting was carried out in areas that have been identified as anomalous in assessment reports. Due to the thickness of glacial till pitting rarely reached bedrock. Detailed geological mapping was done in areas of anomalous values. This work was completed between July 31 and September 20, 2000.

## **GEOLOGY**

The following geological sections summarize the information provided in the October 1992 report by Steven F. Coombes for Cameco Corporation. More detailed property wide geological information is done by D. Duba and W.R. Gilmour, 1993.

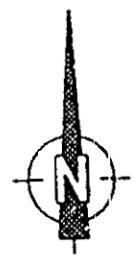
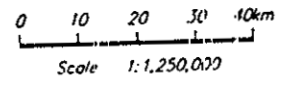
### **Regional Geology (figure 5)**

The Monashee property is located on the eastern edge of the Intermontane Belt at its boundary with the Omineca Crystalline Belt. The region is underlain by variably deformed and metamorphosed sequences of Archean to Mesozoic supracrustals, including the Proterozoic and Paleozoic Shuswap Metamorphic Complex; the Carboniferous and Permian Thompson Assemblage; and the Triassic and Jurassic Slokan and Nicola Groups. Cretaceous and/or Jurassic granitoids related to the Columbian Orogeny intrude the supracrustals in the southern region. These rocks are capped on the western side of the region by Tertiary basaltic flows and related sediments of the Kamloops Group (Coombes, 1992).

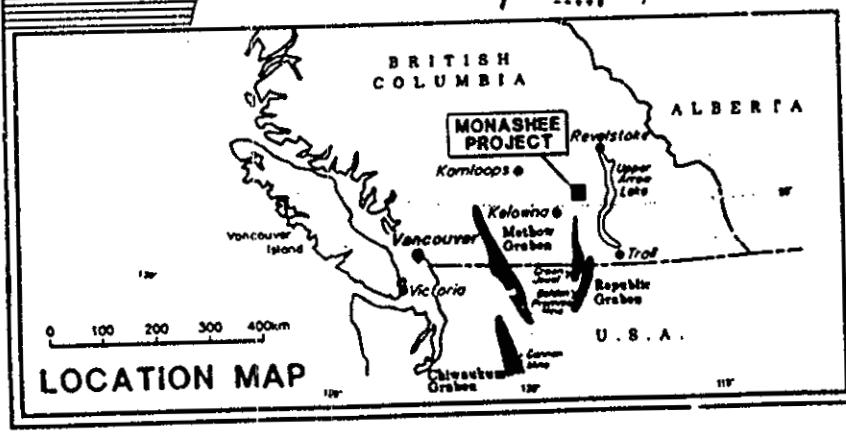


**LEGEND**

- TERTIARY**
  - Coryell Intrusives
  - Kamloops Group Volcanics
- JURASSIC - TERTIARY**
  - Granite Plutons
- PALEOZOIC - TRIASSIC**
  - Sedimentary - Volcanic Rocks
- PROTEROZOIC**
  - Windermere Group Sediments
- AGE UNCERTAIN**
  - Metamorphic - Gneissic Complexes
- MAJOR HIGHWAYS
- MAJOR FAULTS



IDAHO



**Monashee Project**

**Regional Geology**

Compiled by: Garrett Ainsworth  
 Scale: 1:1,250,000  
 October 1, 2000  
 Modified After Cameco (Melrose, 1995)

**Figure 5**

### Property Geology (figure 3)

The property is primarily underlain by an east-southeast trending, south to west dipping sequence of volcanic and sedimentary rocks belonging to the Carboniferous and Permian Thompson Assemblage. The Thompson Assemblage rocks are in contact with Triassic Slocan Group argillites and phyllites along the northern edge of the property. The Jurassic Nelson Plutonic rocks of granodiorite to quartz diorite occur in the southern part of the property. A second dioritic to gabbroic body intrudes Thompson Assemblage rocks to the west of the property. Also to the west of the claims a columnar basalt of Tertiary age forms a blanket over the older rocks. Several small intrusive rocks on Monashee Mountain are commonly associated with sulphide mineralization (Coombes, 1992).

## **GEOLOGICAL AND GEOCHEMICAL SURVEY**

### Geological Mapping Survey

#### Lithology

##### Thompson Assemblage

The volcanic flow rocks are typically massive, aphanitic, pale green dacite and less commonly medium to dark green andesite and basalt. These are typically porphyritic with small phenocrysts of augite or hornblende. Intercalations of pale to dark green, massive tuff, lapilli tuff and flow breccia is common. Tuffaceous units may contain phenocrysts of feldspar and hornblende. Pyrite is typically found as fine to coarse disseminations in all volcanic rocks in trace to 1% concentrations (Duba & Gilmour, 1993). Some volcanic rocks similar to the ones listed were found along traverses inside the claim boundaries.

Sedimentary rocks on the Monashee property commonly include a grey to black, rusty brown weathered, massive to fissile argillite and a light to medium grey, massive, recrystallized limestone. A grey-green to light brown, thinly bedded to massive, fine-grained volcanoclastic sandstone and siltstone was observed in the southern part of the property (Duba & Gilmour, 1993). The gossanous character of the rusty brown weathered argillite prompted a soil sampling grid to the northwest of the old Gossan grid in the 2000 work.



A talus slope of magnetite was discovered at the headwaters of Marsh Creek that extends 200 meters long by 300 meters wide (rock sample 07-11). Granodiorite with leached out pyrite cubes was found on west side of Gossan grid as talus. This suggests that the sedimentary/Volcanic contact is within the Gossan grid boundary. Recrystallized limestone with dark grey argillaceous limestone and calcareous argillite is the predominate sedimentary rock at the top of the drainage that the Gossan grid covers and around the Morgan mine. Immediately to the west of the Gossan grid lies a large outcrop of grey to black, rusty brown weathered argillite. Limestone with a similar composition to the Gossan was found on and around the Southeast grid.

### Intrusive Rocks

Only small intrusive bodies in the form of dykes and sills, less than 10 meters in width and dioritic in composition, are exposed within the claims. Diorite is grey, equigranular and extensively hydrothermally altered with development of chlorite and biotite. It is associated with most of the polymetallic disseminated mineralization at the St. Paul workings. It does not appear to be compositionally similar to the large Jurassic batholith exposed to the south (Duba & Gilmour, 1993).

Dykes of feldspar porphyry as well as highly altered hypabyssal diorite plugs occur in a few locations around the property (St. Paul & Morgan workings).

### Structure

The volcano-sedimentary sequence has a dominant trend east-southeasterly at 110 to 130 degrees and dips to the south on average 30 to 65 degrees. Cleavage in argillite and foliation in volcanic and sedimentary rocks is rarely well developed. It is observed in the vicinity of the Morgan and St. Paul workings trending at 110 to 130 degrees, parallel to the regional stratigraphy (Duba & Gilmour, 1993).

Sedimentary units have typically lenticular nature, very likely due to facies changes. Some of the more abrupt changes in lithology along strike may also be due or amplified by faulting, possibly in a north to northwesterly direction. The complex interdigitation and repetition of sedimentary units is difficult to interpret due to lack of outcrop exposure but there is no definite evidence of tight, isoclinal folding (Duba & Gilmour, 1993).

### Alteration

The Upper Paleozoic Thompson Assemblage rocks have undergone sub-greenschist facies metamorphism with chlorite, epidote, calcite and sericite replacing original minerals (Coombes, 1992). The limestone has undergone some recrystallization as a part of regional metamorphic event but apart from that it appears unaltered. Argillaceous sediments appear to be also fairly fresh. Except in the southeast area of the property where a representative sample was partly bleached and hornfelsed, rusty brown weathered, thinly bedded argillite with rare green diopside. The volcanic and sedimentary rocks at the contact with the younger granodiorite batholith south of the property are moderately altered (Duba & Gilmour, 1993).

The southwest facing limestone bluffs in the G1 claim contained some quartz veins and stockwork. No sulphides were found in the quartz veins.

### Mineralization

Previous reports show that the Morgan and St. Paul workings contain gold and associated sulphide ores hosted by shallow dipping quartz veins, stringers and stockworks, and altered wall-rocks. At the St. Paul prospect, mineralization, including pyrite-arsenopyrite-stibnite-sphalerite-tetrahedrite-galena, silver and gold, is in part hosted by altered diorite dykes and sills (Duba & Gilmour, 1993).

Pyrite is common as fine disseminations and fracture fillings. The content of pyrite increases in the vicinity of intrusive rocks, the old mine workings and the Nelson batholith. Milky quartz occurs rarely as narrow veinlets in argillite but it is often found as angular to subround boulders throughout the property. It may be rusty stained along fractures due to the oxidized pyrite (Duba & Gilmour, 1993).

The Gossan and Southeast grid drainages and Marsh creek all contain angular boulders of quartz that are rusty stained. Only one float sample found in the Gossan grid had other sulphides other than pyrite visual. A silicified argillitic rock found as sub-crop in the gossan grid had significant amounts of chalcopyrite, pyrrhotite and pyrite (rock sample R-14). In the SHERPA claim some 10 cm to 20 cm quartz veins with sulphides were found along the logging road (rock sample G7).

## Geochemical Surveys

A total of 58 soil, 16 sediment and 20 rock samples were collected in the 2000 exploration program. All surveys were carried out using hip chain and compass in order to maintain good control over the location of sample sites.

### Sampling Techniques

The preferred sampling medium for soil sampling was the B-horizon. In areas where little or no B-horizon existed no samples were taken. Stream sediment samples were taken +/- 5 meters along the creek in order to obtain a representative sample. Both soil and sediment sampling was done with numbered Kraft wet strength paper bags.

### Assaying Methods

All samples were analyzed by Acme Analytical Laboratories (Vancouver) or ALS Chemex (North Vancouver). Soil and Sediment samples were analyzed at -80 mesh, while rock samples were pulverized to -150 mesh and then analyzed. Analysis for soil, sediment and rock samples was done by combined fire assay for Au and ICP-ES for Ag, As, Sb, Bi.

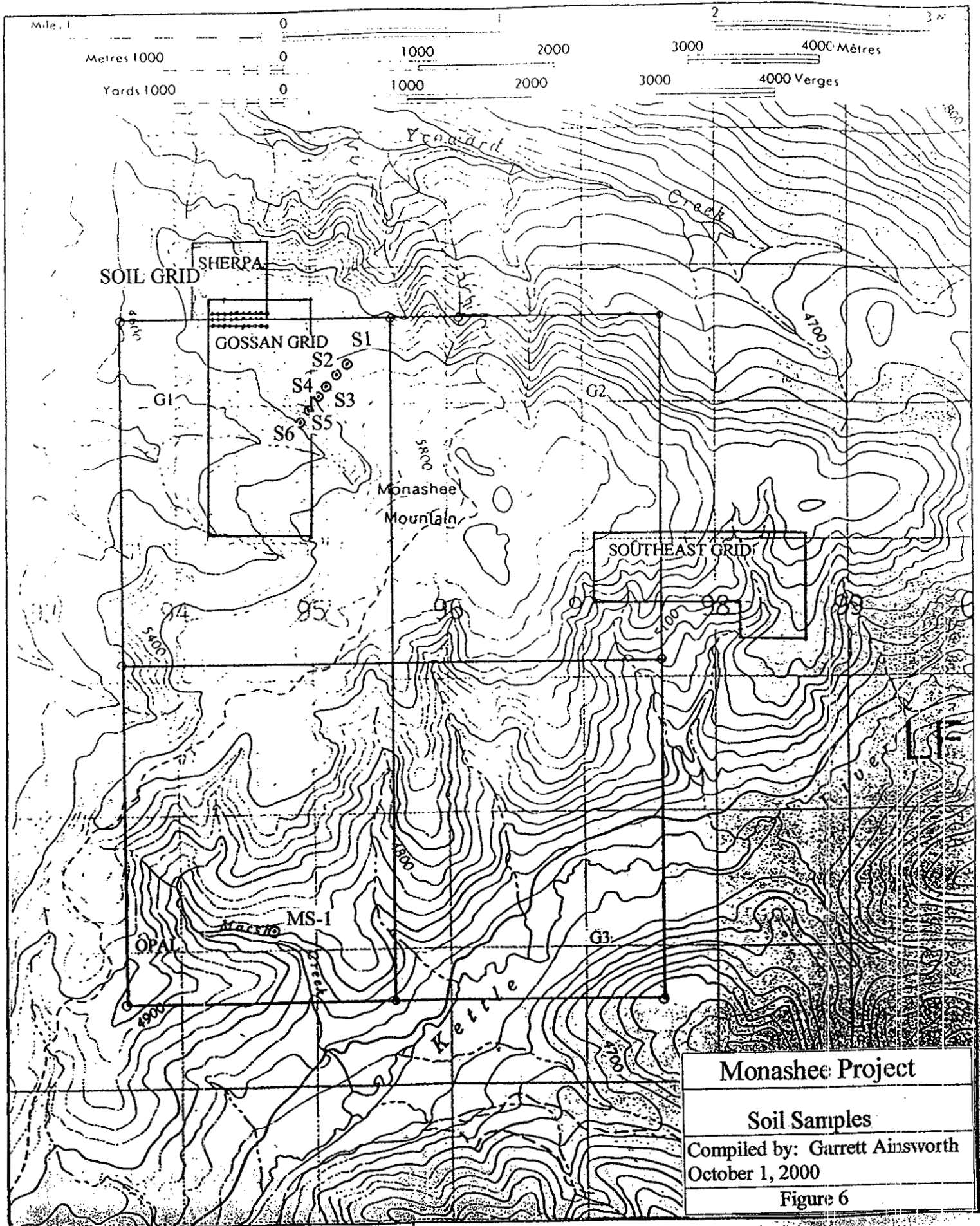
## Results of Geochemical Surveys

### Soil Sampling (figure 6)

A grid was surveyed approximately 800 meters northwest of Brican's Gossan grid. Outcrops of grey to black, rusty brown weathered, massive argillite were present in the area. A total of 51 soil samples were collected and analyzed for gold, silver, arsenic, antimony, and bismuth. The gold results show a range of values from less than 0.2 ppb to 16.7 ppb. Three samples are considered to be weakly anomalous on this grid (threshold is below 10 ppb).

A line was run down the southwest facing slope that was located in the Gossan grid. A total of 6 soil samples were taken with values ranging from less than 5 ppb to 35 ppb. Sample S6 with 35 ppb was taken from gossan soil 100 meters from the bottom of the drainage.

There is generally a poor correlation between Au and 4 elements (Ag, As, Sb, Bi) in soil samples as shown in Table 1.



### Stream Sediment Sampling (figure 7)

One sample was found to be highly anomalous (GS-3) in the drainage that goes through the Gossan grid. This sample was 315 ppb. Five samples were taken upstream from GS-3 ranging from less than 10 ppb to 15 ppb.

Seven samples were taken from the headwaters of Marsh Creek to where it meets the Kettle River. One sample was anomalous (GASS-6); found 10 meters up a rusty tributary to Marsh Creek. This sample was 41.4 ppb. The other samples ranged from 2.0 ppb to 5.6 ppb.

A sample (GASS-9) was taken in a drainage below the Morgan working and was found to be anomalous in Au, As and Sb. This sample was 91.3 ppb, 117 ppm and 3 ppm, respectively.

### Rock Sampling (figure 8)

Six samples of outcrop and float returned greater than 15 ppb gold (06-5, 06-6, 07-9, 07-10, 07-11 and G-7).

Sample 06-5 was taken from the waste dump wall rock at the Morgan workings. It was volcanic with 2 to 5 mm pyrite cubes. Arsenic (454 ppm) and antimony (4 ppm) correlated well with the 37.2 ppb gold rock.

Sample 06-6 was taken from the quartz vein at the Morgan workings. The 15 to 20 cm vein had visual pyrite, arsenopyrite, galena and chalcopyrite. Silver (45.5 ppm), arsenic (above 99999 ppm), antimony (59 ppm) and bismuth (38 ppm) all correlated with the 6542.3 ppb gold value.

Sample 07-9 was taken about 600 meters west of the Gossan grid. This rusty weathered dark argillite with a few pyrite boxes was found to be 27.9 ppb with no correlating elements.

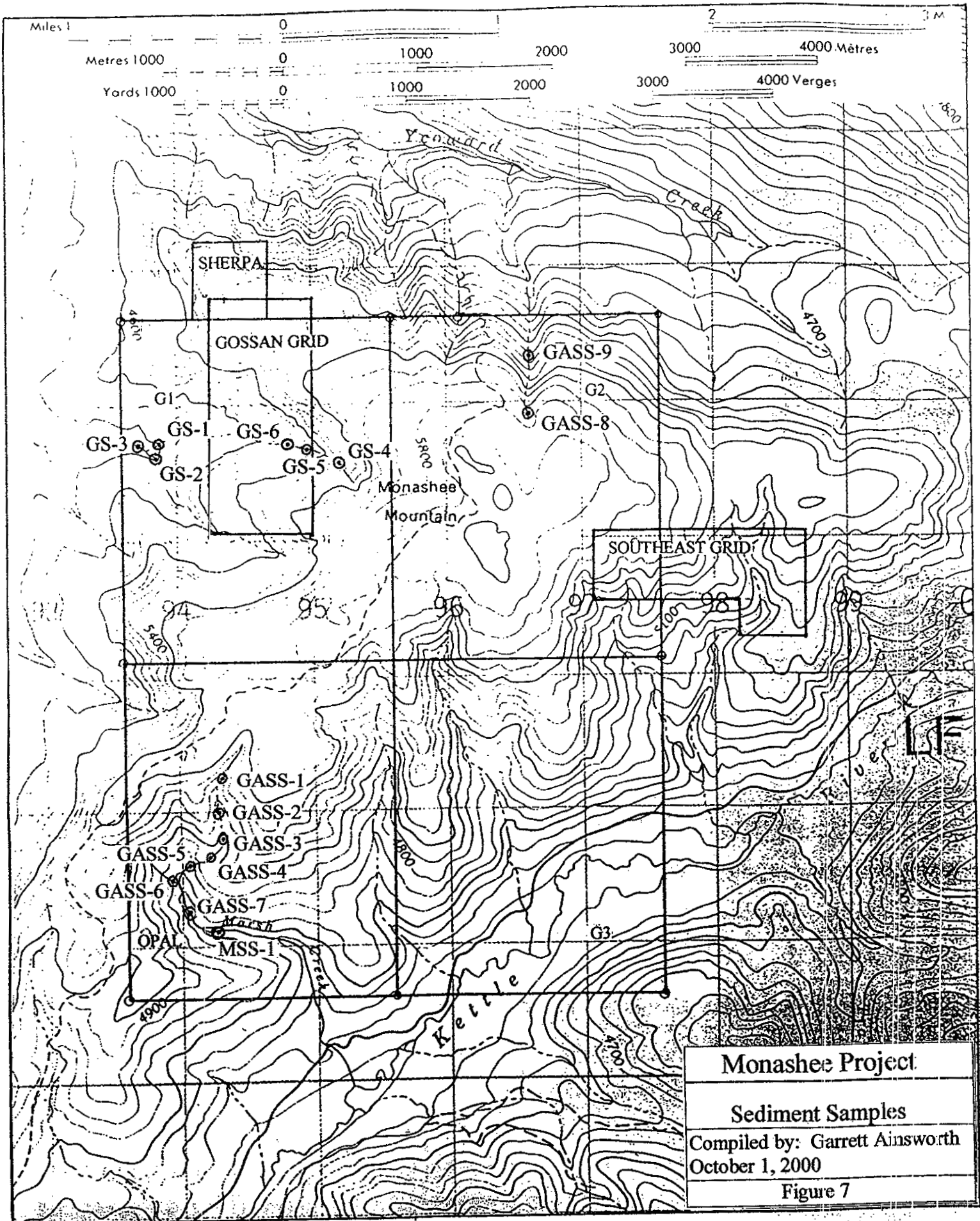
Sample 07-10 was taken about 1000 meters west of the gossan grid. This rock is similar to sample 07-9 with a higher arsenic value (183 ppm) and a lower gold (16.2 ppb).

Sample 07-11 was taken from the talus slopes of magnetite along the bank of Marsh Creek. A gold value of 18.8 ppb was found.

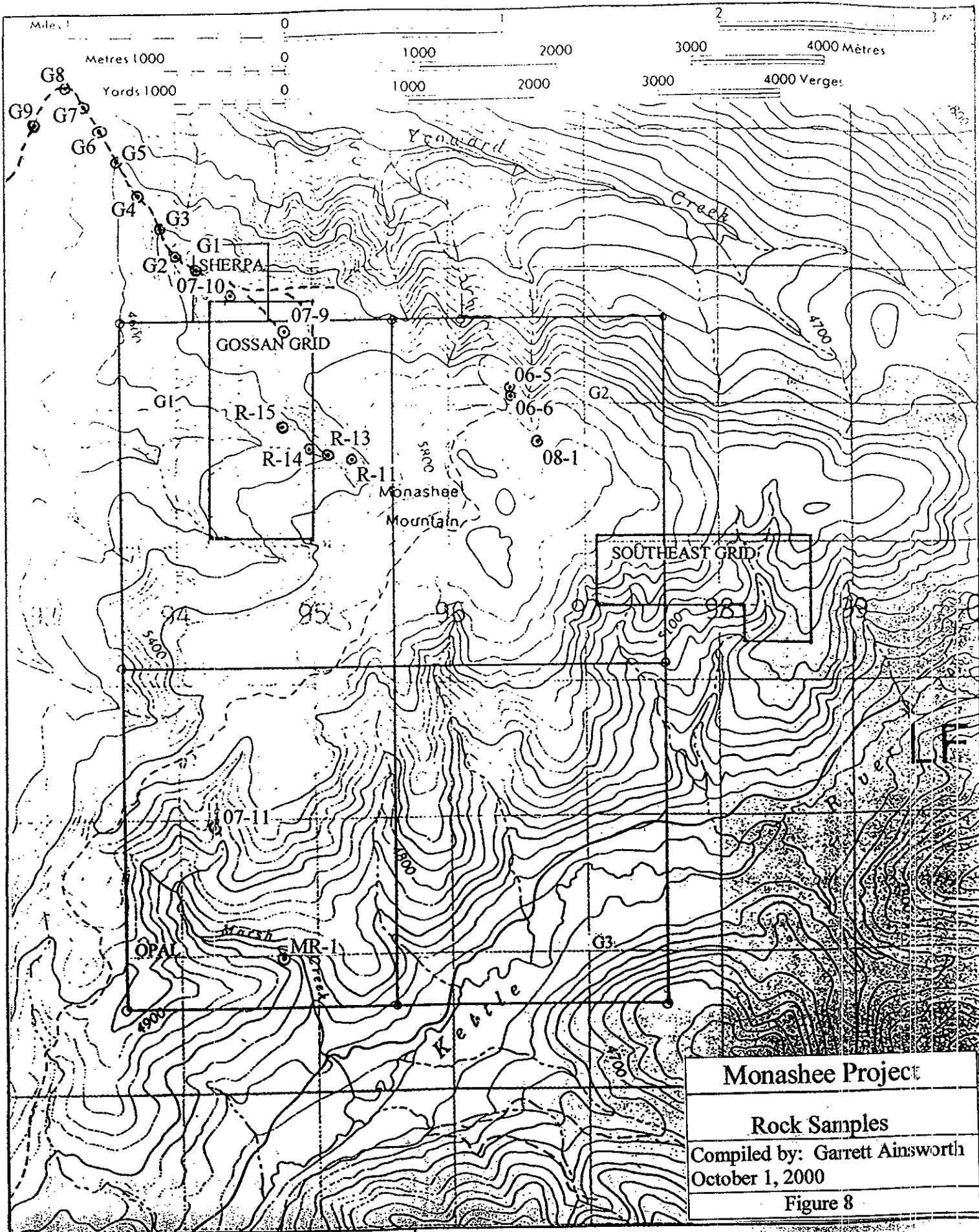
Sample G-7 was taken along the road that leads into the G1 claim. This sample was a 10 to 15 cm quartz vein that was heavily oxidized. The gold value for this rock was 85 ppb.

3 of 20  
Samples from  
Crown Grants?

+ 08-1



<b>Monashee Project</b>
<b>Sediment Samples</b>
Compiled by: Garrett Ainsworth October 1, 2000
<b>Figure 7</b>



## CONCLUSIONS

The geology of the Monashee property consists of a east-southeasterly trending, south dipping assemblage of volcanic and sedimentary rocks of Thompson Assemblage. Auriferous quartz veins and stockworks have been found to be associated with small, altered diorite dykes and sills. Previously undocumented quartz veins with sulphides were found inside the G1 claim. Also a talus slope of magnetite was found at the headwaters of Marsh Creek.

Soil sampling did not find any new anomalous areas of gold around the Gossan grid or Marsh Creek.

*Stream sediment sampling downstream from the Gossan grid confirmed anomalous results by Brican Resources, Cameco Corporation and Commonwealth Gold Corporation. A tributary of Marsh Creek was found to be anomalous in gold as well.*


Apart from the high-grade quartz vein at the Morgan workings, rock samples were generally low. Rock samples taken in the Marsh Creek and the Gossan grid area do not explain the highly anomalous soil and sediment results of earlier work.



## RECOMMENDATIONS

1. Detailed exploration of the Gossan, Southeast and Marsh Creek areas is warranted.
  - (a) A detailed rock geochemical program followed by trenching of anomalous targets on the Gossan grid is recommended.
  - (b) Soil samples should be taken along the banks of the drainage in the Southeast grid as a follow up from the highly anomalous sediment samples taken in earlier work.
  - (c) An additional 6 sediment samples should be taken upstream from sample GASS-6.
2. The entire property should be geologically mapped and prospected.

Respectfully Submitted,

  
Garrett Paul Ainsworth  
October 1, 2000

## REFERENCES

- |                               |      |  |
|-------------------------------|------|--|
| K.L. Daughtry<br>W.R. Gilmour | 1982 | Geochemical & Geophysical report on<br>Monashee Mountain. Assessment Report<br>No. 10967   |
| S.F. Coombes                  | 1992 | Geological & Geochemical Report on the<br>Monashee Project. Assessment Report<br>No. 22575 |
| D. Duba<br>W.R. Gilmour       | 1993 | Geological & Geochemical Assessment<br>Report on the Monashee Mountain.<br>No. 23110       |
| D.L. Melrose                  | 1995 | 1994 Diamond Drilling Report<br>Monashee Mountain Project<br>Assessment No. 23916          |

## **APPENDIX I**



GEOCHEMICAL ANALYSIS CERTIFICATE

Ainsworth, Garrett File # A003153 Page 1  
1989 Dunstone Place, North Vancouver BC V7H 2M3 Submitted by: Garrett Ainsworth

SAMPLE#	Ag ppm	As ppm	Sb ppm	Bi ppm	Ba ppm	Au* ppb
L25N STA 400W	<.3	12	<3	<3	255	.6
L25N STA 375W	<.3	11	<3	<3	186	1.0
L25N STA 350W	<.3	7	<3	<3	223	1.2
L25N STA 325W	<.3	8	<3	<3	175	2.0
L25N STA 300W	.3	7	<3	3	158	1.9
L25N STA 275W	<.3	16	<3	<3	111	<.2
L25N STA 250W	<.3	9	<3	<3	121	2.3
L25N STA 225W	<.3	9	<3	3	156	16.7
L25N STA 200W	.5	9	<3	<3	139	<.2
L25N STA 175W	.3	8	<3	<3	144	.9
L25N STA 150W	.4	8	<3	<3	141	1.1
L25N STA 125W	<.3	5	<3	<3	172	<.2
L25N STA 100W	1.8	43	<3	<3	584	2.5
L25N STA 75W	.3	16	<3	<3	181	1.0
L25N STA 50W	.6	5	<3	<3	114	.2
L25N STA 25W	<.3	8	<3	<3	119	.5
L25N STA 00	.3	6	<3	<3	122	.3
L00 STA 400W	<.3	10	<3	<3	164	.3
L00 STA 375W	<.3	8	<3	<3	237	.8
L00 STA 350W	.3	7	<3	<3	123	1.1
L00 STA 325W	<.3	8	<3	<3	193	1.2
L00 STA 300W	<.3	11	<3	<3	160	11.1
RE L00 STA 300W	<.3	11	<3	<3	161	1.2
L00 STA 275W	<.3	9	<3	<3	135	3.5
L00 STA 250W	.3	10	<3	<3	137	.3
L00 STA 225W	<.3	16	3	<3	108	6.4
L00 STA 200W	<.3	6	<3	<3	151	.4
L00 STA 175W	<.3	8	<3	<3	126	1.7
L00 STA 150W	.4	6	<3	<3	99	<.2
L00 STA 125W	<.3	5	<3	<3	143	<.2
L00 STA 100W	.3	5	<3	<3	176	12.7
L00 STA 75W	.6	17	<3	<3	273	1.6
L00 STA 50W	1.4	29	<3	<3	357	3.4
STANDARD DS2	<.3	61	11	10	153	210.8

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.  
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.  
- SAMPLE TYPE: SOIL SS80 60C AU\* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)  
Samples beginning 'Rt' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 21 2000 DATE REPORT MAILED: *Sept 5/00* SIGNED BY: *C.T.* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



SAMPLE#	Ag ppm	As ppm	Sb ppm	Bi ppm	Ba ppm	Au* ppb
L00 STA 25W	.5	16	<3	<3	268	1.9
L00 STA 00	.6	5	<3	<3	89	.9
L25S STA 400W	<.3	15	<3	<3	171	.8
L25S STA 375W	<.3	8	<3	<3	190	.4
L25S STA 350W	<.3	5	<3	<3	123	1.7
L25S STA 325W	<.3	8	<3	<3	214	.3
L25S STA 300W	<.3	10	<3	<3	167	.3
L25S STA 275W	<.3	11	<3	<3	153	.6
L25S STA 250W	<.3	6	<3	<3	148	.2
L25S STA 225W	<.3	5	<3	<3	185	2.0
L25S STA 200W	.3	8	<3	<3	125	2.5
L25S STA 175W	<.3	9	<3	<3	127	1.9
L25S STA 150W	<.3	8	<3	3	162	1.9
RE L25S STA 150W	<.3	6	<3	<3	165	.5
L25S STA 125W	<.3	6	<3	<3	154	.5
L25S STA 100W	.3	6	<3	<3	192	1.2
L25S STA 75W	.3	6	<3	<3	139	.9
L25S STA 50W	.9	16	<3	<3	265	1.4
L25S STA 25W	.4	9	<3	<3	176	1.0
L25S STA 0W	.5	13	<3	<3	218	1.6
STANDARD DS2	<.3	59	11	11	150	195.4

Sample type: SOIL SS80 60C. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



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 Analytical Chemists \* Geochemists \* Registered Assayers  
 212 Brooksbank Ave., North Vancouver  
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To: AINSWORTH, GARRETT  
 1989 DUNSTONE PLACE  
 NORTH VANCOUVER, BC  
 V7H 2M3

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## CERTIFICATE OF ANALYSIS A0029421

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
S1	201	202	< 5	0.2	30	< 2	67	< 1	2	10	< 2	108
S2	201	202	< 5	0.2	12	< 2	61	< 1	1	10	< 2	98
S3	201	202	< 5	0.2	18	< 2	71	< 1	< 1	10	< 2	104
S4	201	202	< 5	0.2	16	< 2	60	< 1	2	42	< 2	138
S5	201	202	< 5	0.2	18	< 2	78	< 1	3	14	< 2	132
S6	201	202	35	0.2	32	< 2	97	< 1	3	14	< 2	128
MS-1	201	202	< 5	0.2	12	< 2	69	< 1	< 1	6	< 2	106

CERTIFICATION:

## **APPENDIX II**



GEOCHEMICAL ANALYSIS CERTIFICATE



Ainsworth, Garrett File # A003154

1989 Dunstone Place, North Vancouver BC V7H 2M3 Submitted by: Garrett Ainsworth

SAMPLE#	Ag ppm	As ppm	Sb ppm	Bi ppm	Ba ppm	Au* ppb
GASS-1	<.3	8	<3	<3	106	2.8
GASS-2	<.3	9	<3	<3	90	5.6
GASS-3	<.3	10	<3	<3	89	2.6
GASS-4	<.3	10	<3	<3	88	5.5
GASS-5	<.3	8	<3	<3	93	2.7
GASS-6	<.3	18	<3	<3	91	41.4
GASS-7	<.3	14	<3	<3	140	2.6
GASS-8	<.3	80	<3	<3	111	7.3
GASS-9	<.3	117	3	<3	64	91.3
RE GASS-7	<.3	14	<3	<3	142	2.0
STANDARD DS2	<.3	57	10	10	150	219.1

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.  
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.  
- SAMPLE TYPE: STREAM SED. AU\* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)  
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 21 2000 DATE REPORT MAILED: *Sept 5/00* SIGNED BY: *C. Leong* TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS





# ALS Chemex

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To: AINSWORTH, GARRETT  
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## CERTIFICATE OF ANALYSIS A0029422

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
GS-1	201	202	15	< 0.2	2	< 2	26	< 1	2	10	4	104
GS-2	201	202	< 10	< 0.2	24	< 2	77	< 1	< 1	10	< 2	140
GS-3	201	202	315	< 0.2	14	< 2	30	< 1	< 1	18	< 2	100
GS-4	201	202	10	0.2	2	< 2	18	< 1	1	18	4	54
GS-5	201	202	< 10	< 0.2	12	< 2	28	< 1	1	10	2	84
GS-6	201	202	15	0.2	22	< 2	83	< 1	3	10	< 2	102
MSS-1	201	202	< 5	0.2	8	< 2	44	< 1	< 1	8	< 2	88

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

## **APPENDIX III**



GEOCHEMICAL ANALYSIS CERTIFICATE



Ainsworth, Garrett File # A003155  
1989 Dunstone Place, North Vancouver BC V7H 2M3 Submitted by: Garrett Ainsworth

SAMPLE#	Ag ppm	As ppm	Sb ppm	Bi ppm	Ba ppm	Au* ppb
06-5	<.3	454	4	<3	108	37.2
06-6	45.5	99999	59	38	11	6542.3
07-9	<.3	82	3	<3	118	27.9
07-10	<.3	183	<3	<3	90	16.2
07-11	<.3	24	<3	<3	92	18.8
08-1	.3	28	<3	<3	4	4.7
RE 08-1	.3	28	<3	<3	4	3.1

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.  
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.  
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB  
- SAMPLE TYPE: ROCK R150 60C AU\* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)  
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 21 2000 DATE REPORT MAILED: *Sept 1/00* SIGNED BY: *C. Leong* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



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 Comments: ATTN: GARRETT AINSWORTH

## CERTIFICATE OF ANALYSIS A0029420

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	As ppm	Bi ppm	Cu ppm	Hg ppm	Mo ppm	Pb ppm	Sb ppm	Zn ppm
G-1	205	226	< 5	< 0.2	4	< 2	48	< 1	2	2	< 2	62
G-2	205	226	< 5	< 0.2	< 2	< 2	54	< 1	1	< 2	< 2	42
G-3	205	226	< 5	< 0.2	12	< 2	45	< 1	1	6	< 2	62
G-4	205	226	< 5	< 0.2	78	< 2	35	< 1	< 1	2	< 2	44
G-5	205	226	< 5	< 0.2	< 2	< 2	10	< 1	< 1	4	< 2	40
G-6	205	226	< 5	< 0.2	< 2	< 2	194	< 1	2	< 2	< 2	102
G-7	205	226	85	< 0.2	< 2	< 2	11	< 1	< 1	6	< 2	8
G-8	205	226	< 5	< 0.2	2	< 2	79	< 1	2	8	< 2	118
G-9	205	226	< 5	0.2	2	< 2	22	< 1	< 1	6	< 2	8
MR-1	205	226	< 5	< 0.2	< 2	< 2	65	< 1	< 1	< 2	< 2	54
R-11	205	226	< 5	0.6	< 2	< 2	4	< 1	1	30	< 2	12
R-13	205	226	< 5	0.2	4	< 2	48	< 1	7	6	< 2	50
R-14	205	226	< 5	0.2	< 2	< 2	153	< 1	16	< 2	< 2	64
R-15	205	226	< 5	0.2	< 2	< 2	9	< 1	2	4	< 2	58

CERTIFICATION:

*[Signature]*