

2009 GEOCHEMICAL REPORT

MINERAL TITLES BRANCH
File
Rec'd
FEB 03 2010
L.I.#
VANCOUVER, B.C.

BC Geological Survey
Assessment Report
31394

ON THE

SLIM CREEK PROPERTY

IN THE DICKSON RANGE, 92 J/14

KAMLOOPS MINING DIVISION

123 DEGREES 12 MINUTES 2 SECONDS WEST

50 DEGREES 53 MINUTES 12 SECONDS NORTH

CLAIMS: CASPAR 1-6

TENURE NUMBERS: 507040, 507070, 507073

507075, 507077, 507080

OWNER/ OPERATOR: KEN MACKENZIE

FMC # 116450

AUTHOR: KEN MACKENZIE

EVENT # 4466817

SQUAMISH, B.C.

FEBRUARY, 2010

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT
31,319

RECEIVED
SERVICE BC
SQUAMISH
FEB 02 2010
NOT AN OFFICIAL RECEIPT
TRANS #.....

TABLE OF CONTENTS

TITLE PAGE	PAGE 1
TABLE OF CONTENTS	PAGE 2
INTRODUCTION	PAGE 3
MAP # 1 INDEX MAP	PAGE 6
MAP # 2 INDEX MAP	PAGE 7
HISTORY OF THE SLIM CREEK PROPERTY	PAGE 8
SUMMARY OF WORK PERFORMED IN 2009	PAGE 15
TECHNICAL DATA AND INTERPRETATION	PAGE 22
MAP # 3 SAMPLE NUMBERS AND SITES	PAGE 24
MAP # 4 COPPER	PAGE 25
MAP # 5 ZINC	PAGE 26
MAP # 6 BARIUM	PAGE 27
MAP # 7 COPPER + ZINC	PAGE 28
ITEMIZED COST STATEMENT	PAGE 32
AUTHOR'S QUALIFICATIONS	PAGE 33
ANALYSIS RESULTS FOR 2009	PAGE 35
SAMPLE PREPARATION, ANALYSIS & QUALITY	PAGE 44

SLIM CREEK PROPERTY INTRODUCTION

The Slim Creek Property is located in the Dickson Range of the South Chilcotin Mountains. See Map #1 (the index map) for the location. The claims can be accessed by driving to Gun Lake near Goldbridge, continue around the lake on the east shore and follow an old logging road to the main forestry road. Turn left (west) and follow the main road a short distance until the Slim Creek forestry road is reached. Turn right (north) and follow the road to Jewel Creek and beyond.

The road continues until it enters the Slim Creek valley, where it follows the south bank of Slim Creek. Near the end of the road, there is a junction. Take the left fork and continue to the end of the road where there is a large helicopter fuel tank that is used for heli-skiing in the winter. Park nearby, but well away from the fuel tank and leave room for a helicopter to land on the site.

Our previous route has been changed because the Forestry Service has closed the bridge over Slim Creek to vehicle traffic. This route can still be hiked, but it increases the distance to the cable by approximately two kilometers.

The map sheet we are using is 92 J/14 (DICKSON RANGE) 1:50,000, North American Datum 1927 (NAD 27).

From the parking spot on the south side of Slim Creek near the helicopter fuel tank, hike west along the road, cross a creek on a good bridge and then follow the recently built and marked trail uphill passing through the logged area and into the mature forest. The trail is marked with plastic tapes, sawn logs and trimmed underbrush. Follow the trail south and slightly west approximately 3/4 km up the broad ridge until you are close to the top of the ridge. There is a nice resting site on a rocky knoll just above the trail at 0492582 E, 5639243 N.

From here the route follows game trails southwest until the open meadows are reached. From this point until the first major creek crossing is reached, the route is well marked and cleared. The creek crossing is at 0491229 E, 5638271 N. We have called this area the Valley of Plenty due to considerable evidence of deer and bears. On a previous trip through this valley we even encountered a curious, medium sized wolverine that watched us from the other side of the creek as we prepared to cross. Once we began

wading across the creek the wolverine decided to leave and disappeared into the undergrowth.

Cross the stream and then continue slightly uphill and to the west until the steep edge of the valley is reached. There is an obvious avalanche track descending this slope that we have used as a trail in the past, but it is not recommended now. Instead head north a short distance along the valley floor until an open area cutting through the trees is found to ascend. This route is not as steep as the avalanche track and can be exited easily near the top. A short uphill traverse to the north leads to open sub-alpine glades that can be followed around the next ridge. Descend into the next valley, now called middle creek, cross the creek at 0489749 E, 5638009 N and contour and ascend until more open glades are found. Contour around the ridge to the west and then descend into the cabin creek valley approximately 200 feet above the cabin.

The entire route has now been flagged with plastic tape, but the trail is braided in some areas, as we have not yet determined the best way to go. We expect to continue improving the trail during the summer of 2010.

From the cabin, the property can be reached by hiking a short distance up either side of Cabin Creek through sub-alpine glades. The creek leads directly to the east side of the property.

The property can also be accessed by helicopter and numerous landing sites are available, although the central col is too small and rugged to land in. At present the nearest helicopter is based in Whistler, which is about 30 minutes by air to the claims. This means that the ferry costs are high. If more than one trip is required to move all the people and equipment in to the site, we usually drive to the end of the road and have the helicopter pick us up there. On the return trip we usually hike out to our vehicles, which keeps our costs down.

There are six claims in the property named Caspar 1 to 6 and their tenure numbers are: 507040, 507070, 507073, 507075, 507077 and 507080.

The area is high alpine with very little soil coverage so there are many rock outcrops and areas of loose rock and scree. In addition, there are two glaciers on the property-both are on the west side of peak 8597, one north of the central col and the other south of the central col. Both glaciers are associated with moraines that cover the bed rock. Other moraines are present elsewhere on the property that have been placed by previous glaciation.

The geological model we are using for this property is a copper porphyry. At present there are only secondary signs of this type of deposit, but the areas of mineralization found to date cover approximately 9 square kilometers which is consistent with other porphyry copper deposits. These deposits form the largest copper mines in the world and can contain billions of pounds of copper. However, many porphyry copper deposits are not that big and do not become mines, so there is considerable risk in exploring these prospects. To date no porphyry copper deposit of commercial value has been identified on the Slim Creek property.

Porphyry copper deposits occur in or around intrusive rocks, and the Geological Survey of Canada map (Pemberton 92 J) of this area categorizes the rocks on the property as quartz diorites although there is an indefinite boundary nearby with granodiorites. Both rock types have been associated with porphyry copper deposits so our basic model seems reasonable. In addition, there are many other producing or significantly large prospects in this region. N.C. Carter's book: Porphyry Copper and Molybdenum Deposits of West Central British Columbia documents the locations and ages of many of these deposits. Although no K-Ar ages have been measured on the Slim Creek property, similar nearby quartz diorite or granodiorite rocks have ages ranging from 47 to 78 m.y., which fall within the age range found by Carter.

Map # 1 is an index maps that shows the location of the Slim Creek property in southwestern B.C.

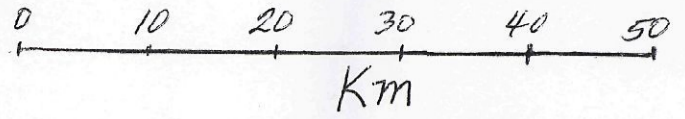
Map #2 is also an index map that shows the property in more detail and its location relative to Slim Creek, Downton Lake, the Dickson Range and the Spruce Lake Protected Area.

Microsoft office was the suite of software programs used to produce this report, which includes a database program "Access", a spreadsheet program "Excel", and a word processing program "Word".

SLIM CREEK PROPERTY

MAP # 1

1:600,000




SLIM CREEK PROPERTY

MAP # 2

1:50,000

LEGEND

ROAD 

LAKE 

BOUNDARY LINE 

TRAIL 

CABLE CROSSING 

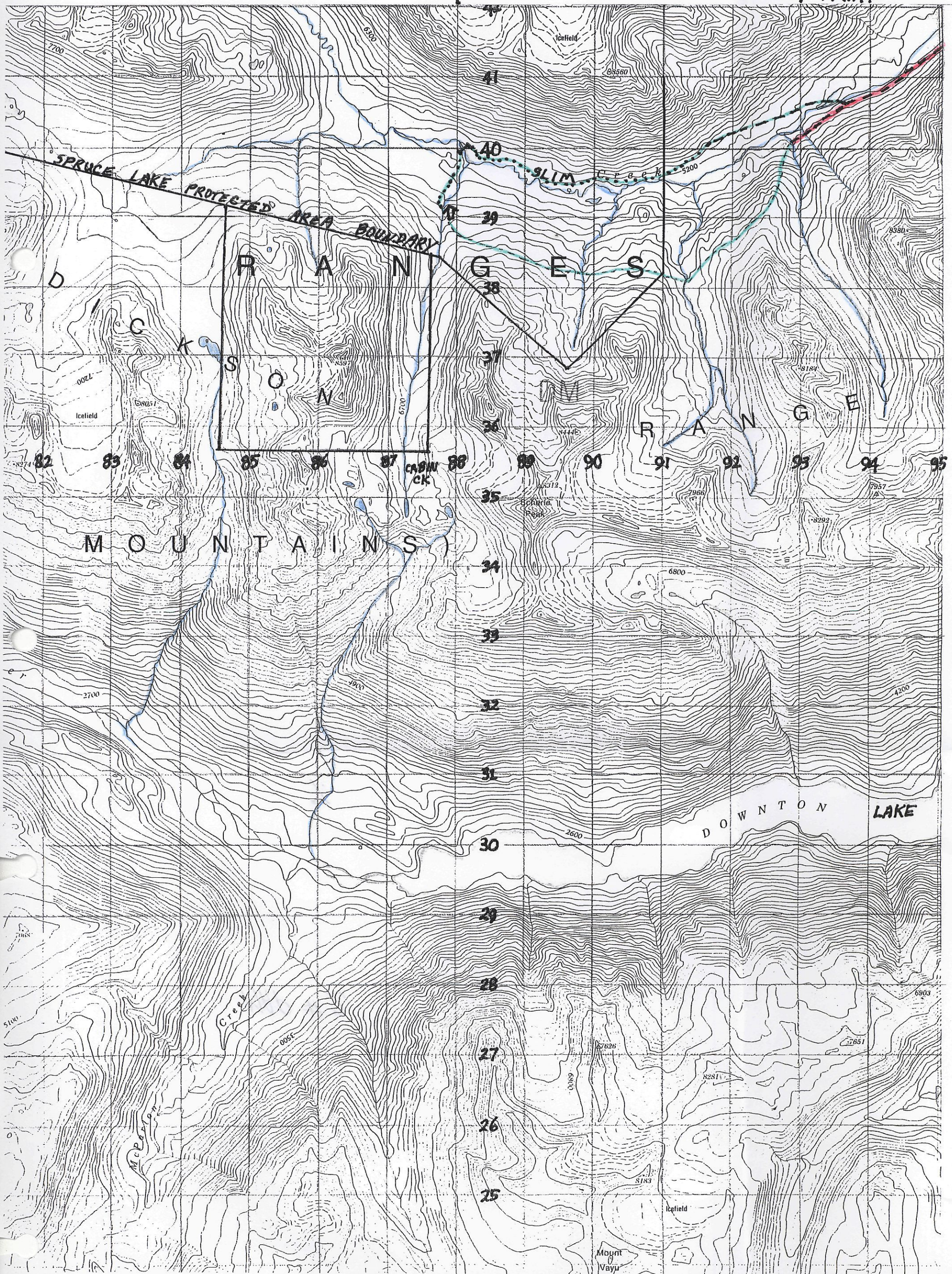
CONTOUR INTERVAL = 100 FEET.

CREEK 

CABIN 

N
↑

→ 1 Km ←



HISTORY OF THE SLIM CREEK PROPERTY

This property was discovered in 2003 during a mountaineering trip in the Dickson Range. Follow up prospecting was performed in the summer of 2004 and the area was staked February 14, 2005 using the Mineral Titles Online system. The property is located near Slim Creek adjacent to the Spruce Lake protected area and can be found on map 92J 14 East, with the mineralization centered on a col at 123 degrees 12 minutes and 2 seconds West and 50 degrees 53 minutes 12 seconds North. The prospect consists of 6 mineral claims with the following tenure numbers:

507040	507070	507073	507075
507077	507080.		

The work performed in 2003 and 2004 was very significant and the results from the prospecting done then resulted in the decision to stake the property and considerably enlarged the area required to enclose all the mineralized showings.

The original structure found high on the South ridge of an unnamed mountain (peak 8597) showed a linear structure with malachite staining above and below a dark, rusty coloured vein. The total width of the mineralized structure (malachite-rusty vein-malachite) varies in width from 0.2 meters to 2 meters. The dark, rusty material contains chalcopyrite, but considerable digging and rock breaking is required to find the primary mineral.

We climbed the peak and then descended by another route to the north on the face of the mountain, where we crossed the same structure. From this position we could see that the vein continued south to the ridge where we had first found it, but it also ran down and across the mountain to the north towards a col that was below us. Once down on the glacier, we could see the mineralized structure running right across the mountain face, except where it was covered by loose rock. Rock from both sites where we crossed the vein was combined into one sample, which was analyzed as SC 1.

Significant results for SC 1 were:

Cu	4.5%
Au	0.055 ppm
Ag	2.9 ppm
Mo	75.0 ppm

The following summer, Rick Price and I returned to the Slim Creek area and camped near the north boundary of the property, over two kilometers from the original discovery site. That evening we decided to prospect the hillside just above us and we noticed that as we approached the hillside, there was considerable fracture filling with epidote. Within 100 meters of the epidote, we found an alteration zone that extended up the hill to the ridge. The rock in this zone was multiply fractured with malachite filling many fractures and in some places the dark rusty material was present as well. By digging into this material chalcopyrite could be found. No sample was taken, but the site was noted as a mineral showing.

The next morning we traversed to the west around the two main ridges that extend out from the main peak (8597 ft) and in a boulder field we found some large boulders with fractures and faces filled or coated with the same dark, rusty mineral that contained chalcopyrite. These boulders seemed to come from the northwest ridge above us. Again no samples were taken, but the boulders were noted and mapped as float.

We continued around the mountain to the south and then climbed back up our original descent route on the west side of the mountain, to the structure that we had found the year before.

Samples SC 2, SC 3, and SC 4 were taken from this site.

SC 2 is a chip sample taken over approximately one meter covering the rusty vein and including the malachite on both sides. The rock in the vein contained some quartz and appeared to be a breccia.

Significant results for SC 2 were:

Cu	2.16%
Au	0.297 ppm
Ag	27.5 ppm
Mo	396 ppm
Hg	24 ppm

SC 3 is a random grab sample of altered wall rock that is dark coloured with malachite staining. The sample is a composite that was taken from above and below the rusty vein. SC 3 was taken in order to look for associated metals and as an attempt to determine the direction of copper movement in the rock. The rusty vein at this site strikes 170 degrees and dips 30 degrees east. Significant results for SC 3 were:

Cu	6.04%
Au	0.080 ppm
Ag	3.6 ppm

SC 4 is a selected sample of the dark rusty vein rock with some minor malachite staining on the surface that was taken over approximately 0.3 meters. The sample was selected for its possible high copper content in an attempt to determine other metal associations and the direction of copper diffusion in the rock.

Significant results for SC 4 were:

Cu	13.1%
Au	0.126 ppm
Ag	6.3 ppm
Mo	27.0 ppm

From this site we continued east up the slope until we reached the ridge, climbed the south peak and descended down and southwest close to the west ridge until we intersected the rusty vein near our first sighting of the structure. SC 5 is a chip sample taken over approximately 0.4 meters, and is due south of samples SC 2, 3, and 4. The rusty vein in this area is variable in width and near its southern terminus. The structure strikes 150 degrees and dips 30 degrees east at this site.

Significant results for SC 5 were:

Cu	1.83%
Au	0.244ppm
Ag	10.4 ppm
Mo	35 ppm

From this sample site we continued descending a long boulder filled gully that runs roughly parallel to the west ridge of the south peak, and crossed through a low point in the ridge at 7700 feet, which took us back to the west side of the mountain. As we descended from this col, we found another outcrop of malachite stained rock that was not sampled, but was noted as a mineral occurrence.

From this site we continued west and north until we had circled back to our campsite, which was approximately three kilometers from this mineral occurrence.

The next morning we decided that we would approach the central col (to the west of peak 8597) from the north so we traversed across the hillside until we intersected a north flowing stream that drains the small glacier on the west side of the mountain. We could see a few well-exposed white dykes

that were striking approximately 180 degrees and we sampled one of the dykes where there was limonite and malachite staining. SC 6 is a chip sample taken over approximately 0.5 meters from a light coloured dyke on the west side of the north ridge of peak 8597. The strike was approximately 180 degrees and the dip of this structure was 90 degrees.

Significant results from SC 6 were:

Cu 784 ppm

The dyke itself appeared to be quartz rich and fine grained.

Rock with malachite staining was found to the east and above this site. No sample was taken, but it was noted as a mineral occurrence that required later follow-up.

Before we reached the site of SC 6, we again noticed that there was a large area of epidote filling of the fractures in float and bed rock. All of the mineralized showings that we found in this area were inside this epidote halo. There was no evident pyrite halo found here (north of the central col). As we continued south, on the east side of the valley, toward the central col, we found more areas of malachite filling the fractures. In places where the glacier had recently retreated and left fresh rock, both malachite and chalcopryrite could be identified in the fractures. At one spot close to the glacier snout, we found an exposed fracture (approximately two meters by two meters) that was completely coated with malachite. Again there were other mineral showings in this area that were noted for future follow-up.

We continued up the east side of the valley until we found a good spot to get onto the glacier. After roping up and using safe glacier techniques, we passed between and over many evident crevasses. As we approached the central col, we could see malachite staining on the rocks on both sides of the valley and as we stepped from the glacier onto the rock just below the central col, there was more malachite found in the fractures of an alteration zone. The alteration zone, which was two to three meters wide, continued up to the low point in the col and beyond, down the south slope of the col. The rock in the alteration zone was multiply fractured and was a pink coloured intrusive rock. All the other country rock in this area that has not been altered by the mineralizing processes appeared to be a quartz diorite containing quartz, white feldspars, hornblende or biotite, so this area of pink intrusive rock was clearly anomalous. We had planned to pass through this col onto the glacier on the other side in order to sample the original structure, but there were other structures passing through the col that required examining and sampling, so our original plan was changed.

//.

The largest structure is situated on the south side of the central col and is a large linear depression striking at 130 degrees. Both sides of the linear depression are stained with malachite similar to the rock that surrounds the original discovery vein, but in this structure, no dark, rusty material is evident. The linear depression was followed to the west about ten meters to where it was covered over by country rock that was stained by malachite. A chip sample was taken from this site (SC 7) over a length of approximately three meters. The wall rock of this linear depression is altered to a dark colour (with the malachite staining) and there was a light coloured dyke with quartz running along strike up the middle of the structure.

Significant results for SC 7 were:

Cu	2500	ppm
Ag	4.8	ppm
Au	0.118	ppm
Mo	141	ppm

From the central col, we hiked approximately 100 meters east up the ridge toward peak 8597 and found the continuation of the discovery vein crossing through this area. A one-meter chip sample was taken from the vein, which had the now familiar look of a dark brown rusty core containing variable widths of quartz veining with malachite staining above and below. The structure varied in width from one to one and a third meters. This sample was labeled SC 8.

Significant results from SC 8 were:

Cu	1.35%	
Ag	5.6	ppm
Au	0.046	ppm

We also sampled a stained fracture that cross cuts the SC 7 structure to the west of the central col. This mineralized area is easily seen above and to the west of the col. It varies in width from 0.1 meters to 0.5 meters and extends to the north east until it disappears under the glacier to the north. From this site we could also see that the main discovery vein extended across the rock above the col until it too disappeared under the same glacier. SC 9 is a chip sample approximately 0.5 meters wide and was composed of rusty wall rock with malachite staining above, quartz veining in the middle and rusty wall rock below. This structure strikes at 42 degrees and dips at 15 degrees.

Significant results from SC 9 were:

Cu	5670	ppm
Ag	1.5	ppm

Mo 21 ppm

While exploring in the central col, we found an interesting pegmatite dyke that did not appear to contain metallic minerals. It was composed of large crystals of quartz and white feldspars. No sample was taken. From the central col we descended north on the glacier we had ascended earlier until we could safely exit the glacier onto the huge moraines on the west side. We climbed above the moraines and found another light coloured, fine grained, quartz rich dyke on the west side of the valley. This dyke, which was approximately 3 meters wide had only traces of malachite in it, but was sampled anyway. The dyke appeared to be roughly parallel with the other similar dykes found on the other side of the valley, running roughly north and south. A chip sample (SC 10) was taken over 2.75 meters, but no significant results were obtained from SC 10. However, another mineralized area (malachite in fractures) was found uphill and to the west of this site that was noted for future follow-up.

We returned to our campsite, and after plotting up our findings, realized that the col we had visited seemed to be surrounded by significant structures and that all the mineralized areas identified to date were scattered (probably randomly) around the col with the furthest distances being approximately 1.5 kilometers north, 1.25 kilometers south and 1.25 kilometers northwest of the col. As a result, we called it the central col. At that point, nothing had been done on the east side of peak 8597, but as the discovery vein dips 30 degrees to the east, we targeted that area for our next major exploration trip, looking for places where veins or fractures cross cut the main discovery vein down dip, toward the presumed source of the metallic mineralization.

Based on our findings and subsequent research, we decided that we had found a possible porphyry copper prospect and that it should be staked. Staking was done on February 14, 2005. Unfortunately, none of the considerable work done before staking was completed can be claimed as work done on the property, which seems unjust to me. Nevertheless, this initial exploration work was very necessary to define the extent of this prospect and needs to be included in this report so that descriptions of subsequent trips and traverses will be meaningful.

During the summer of 2005, three trips were made to the prospect. The details of the work done at that time can be found in the prospecting report submitted in May 2006. This work confirmed and extended many of the

findings of the previous years. Of particular significance is sample SC 11, which was found on the east side of the south ridge of peak 8597. This sample was a typical piece of float that showed malachite staining in the fractures and on the surface. Similar float from this area had chalcopyrite disseminated in the weathered rock.

Significant results for SC 11 were:

Cu	1.22%
Ag	2.3 ppm
Mo	14 ppm

Another significant sample was obtained from the pink-coloured granites in the central col that we had previously thought might represent potassic alteration.

Significant results for SC 15 were:

Cu	622 ppm
K	3.31 %
Ba	514 ppm

The potassium level found at that time is still the highest level found to date on the property. It is likely that the high potassium found in the central col is associated with potassic alteration. The high barium level (which is the third highest found to date) probably represents a barium halo, which has turned out to be very useful for our prospecting.

Additional prospecting was done during the summers of 2005, 2006 and 2007. In 2008 we began a systematic program of geochemical soil sampling. Those reports are available (or will be in the near future) on the ministry website.

SUMMARY OF WORK PERFORMED IN 2009

June 29, 2009

Rick Price and I left Squamish early in the morning and drove to Pemberton where we filled the truck with gasoline and then traveled to the end of the Slim Creek road. We cleared some small trees and bushes from the sides of the road as we drove in, but relatively little work was required. We arrived at the helicopter fuel tank before noon. After lunch we carried the chain saw and our hand tools up the trail, clearing bushes and cutting logs as necessary. The work progressed quickly and within three hours we had reached the rest spot at the top of the ridge (0492582 E, 5639243 N).

The trail is becoming well established now and less work is required each year to keep it open.

We did more clearing on the descent, reached our truck within an hour and then returned to Goldbridge. The Goldbridge Hotel was closed for a week when we arrived so we had to drive to Bralorne for food and lodging (both were excellent). The next morning we drove to the top of railroad pass, completed a short hike up a trail into the high country to the west of the pass and then returned to Squamish.

August 22 and 23, 2009

Rick Price, Sara Price and I drove to Goldbridge and stayed at the Goldbridge Hotel overnight. We were up early, ate a cold breakfast and then drove to the helicopter fuel tank at the end of the Slim Creek road. We had requested a helicopter to meet us there at 0800 and we arrived in plenty of time, but due to some confusion about the schedule, the helicopter didn't arrive until just before 0900. While waiting we weighed and labeled our packs and then tried to stay warm because the extreme heat of the early summer had moderated and the nights were becoming much colder.

Once the helicopter arrived, we loaded up and flew into cabin creek at about 6100 feet of elevation, where the creek is braided and there is considerable level ground to land on. We unloaded our packs and carried them down to the cabin where we removed most of our food, stove, gas and other overnight gear, leaving us with much lighter daypacks. We then hiked quickly back to the helicopter, and had the pilot fly us around the north side of Peggy to the next small valley that contains the north glacier. As we flew around the ridge, we could easily see the central col with its prominent rock pillar. We had been in this valley before and knew there was a small side

creek that had formed a flat delta, which made a nice landing site at around 6700 feet of elevation. All the rest of this hanging valley is filled with moraines, rounded outcrops, huge boulders and ice. This area is close to the north border of the property.

The pilot left us there and we began prospecting the floor and the east side of the valley. We immediately found intrusive rock outcrops with small veins of iron-stained calcite that were similar to the veins we found near the south border of the property. One larger vein could be seen on a cliff to the east. Mineralized float was also found on the west side of Peggy at 0486123 E, 5637985 N, and at 0486114 E, 5637890N. The float consisted of various sizes of intrusive rock with mineralized fracture surfaces. We did not find any chalcopyrite disseminated in these rocks. However, some of the fractures contained epidote mixed with a red material that we thought was probably hematite. No samples were taken for analysis.

The next day we found an outcrop on the east side of peak 8597 where this type of fracture filling was common (near soil sample SC 56, 0486888 E, 5637100N).

We continued prospecting in a southerly direction on rock and then ice covered with rock until we could exit the glacier below the Peak 8597-Peggy pass. The glacier has melted away from the rocks leaving holes and crevices along the edge that should be carefully avoided. We took two grab samples of bedrock from this area on line 0486300 E.

SC 47 0486300 E 5637500 N

This was a grab sample of the country rock (quartz diorite) for rock geochemistry. No alteration or mineralization could be seen.

Significant results for SC 47:

Ba	150	ppm
Zn	58	ppm

SC 48 0486300 E 5637400 N

This was another grab sample of similar rock but there were iron-stained fractures present.

Significant results for SC 48:

Ba	60	ppm
Zn	55	ppm

We continued prospecting uphill eastward until we passed through the Peak 8597-Peggy pass to the east side of the mountain. We had previously found a dilated fracture in this area that contained fine-grained, whitish, iron-stained breccia. Previous attempts to sample this material were unsuccessful because it was too hard, so we used a pointed rock chisel to obtain chips and sand that were analyzed as SC 49.

SC 49 0486524 E 5637583 N

Significant results for SC 49:

Ba	1530	ppm
Ca	7	%
Mn	1125	ppm
Sr	253	ppm

The barium level in this sample is the highest found on the property to date. The calcium, manganese and strontium levels are in the top 10% of all samples.

We then continued downhill to the east until we were on line 5637500 N, and we began collecting soil samples on our return to the cabin.

SC 50 0486700 E 5637500 N

This was a "C" level gray-brown soil taken from a hole 20 cm deep.

Significant results for SC 50:

Ba	210	ppm
Cu	97	ppm
P	1520	ppm
Sr	97	ppm
Zn	86	ppm

SC 51 0486800 E 5637500 N

This sample was a "C" level rusty-brown soil from 20 cm deep.

Significant results for SC 51:

Ba	120	ppm
Cu	82	ppm
Zn	72	ppm

SC 52 0486900 E 5637500 N

This was a "C" level rusty-brown soil from 25 cm deep.

Significant results for SC 52:

Ba	50	ppm
----	----	-----

Just below this point, our route became steeper so we headed south one hundred meters and then east onto our 2008 line (0487000 E).

SC 53 0487000 E 5637400 N

This sample was a "C" level yellow-brown soil from 20 cm deep.

Significant results for SC 53:

Ba 60 ppm

From here we dropped rapidly into the valley and followed cabin creek back to the cabin.

August 24, 2009

In the morning Rick, Sara and I hiked back up the valley and used the GPS to locate sample site SC 39. We then climbed uphill and obtained SC 54.

SC 54 0486900 E 5636900 N

At this site it was difficult to find a good sample so we had to take a mixture of "A" and "B" soils that were black-brown and organic from a rocky hole 20 cm deep.

Significant results for SC 54:

Ba 120 ppm

Zn 60 ppm

We then contoured around the mountain heading north on line 0486900 E.

SC 55 0486900 E 5637000 N

This sample was collected from a rocky ledge on a steep hillside. It was a "C" level light brown to yellow soil from 15 cm deep.

Significant results for SC 55:

Ba 100 ppm

Cu 93 ppm

Sr 93 ppm

Zn 78 ppm

SC 56 0486888 E 5637100 N

A "C" level yellow-brown soil 20 cm deep taken on a rocky ledge. The cliffs above had east-west fractures present that contained a mixture of epidote and a red mineral (possibly hematite).

Significant results for SC 56:

Ba	290	ppm
Cu	188	ppm
Fe	4.25	%
Mg	2.39	%
P	1610	ppm
V	117	ppm
Zn	110	ppm

The barium, copper, iron, magnesium, vanadium and zinc levels are all the highest recorded in a soil to date. The phosphorus level is the second highest found in a soil.

SC 57 0486900 E 5637200 N

This sample was a "C" level yellow-brown soil from 20 cm deep.

Significant results for SC 57:

Ba	130	ppm
Cu	105	ppm
P	1320	ppm
Zn	69	ppm

SC 58 0486900 E 5637300 N

This sample was taken between two small creeks. The soil was wet and coloured a muddy-brown. It was a "C" level soil obtained from 20 cm deep.

Significant results for SC 58:

Ba	200	ppm
Ca	1.08	%
Cu	128	ppm
Fe	4.08	%
V	114	ppm
P	1390	ppm
Sr	118	ppm
Zn	95	ppm

The calcium and strontium levels are the highest found to date in a soil sample.

We descended the slope going east until we arrived at the site where samples SC 34 and SC 35 was collected in 2008. This successfully completed a loop that confirmed the reliability of our GPS.

SC 59 0487000 E 5637500 N

A yellowish-brown "C" level soil collected from 25 cm deep.

Significant results for SC 59:

Ba	80	ppm
Cu	116	ppm
Zn	56	ppm

SC 60 0487000 E 5637600 N

This sample was a brown soil "C" level taken from 20 cm deep.

Significant results for SC 60:

Ba	110	ppm
Cu	80	ppm
P	1450	ppm
Zn	68	ppm

We then returned to the cabin, stayed overnight and hiked out the next day.

August 25, 2009.

Rick had prepared photos of our route from Google Earth, which helped us find an alternate and lower way from Middle Creek to the Valley of Plenty. Using the Google GPS coordinates, elevations and pictures we marked a new trail that is much easier than anything we had previously found. The return trip to our trucks took the usual six hours, and was accomplished with no incidents. The new route has been described in the introduction section of this report.

September 11, 2009.

Rick and I flew from Squamish with two geologists from a mining company on a property inspection. We visited various areas including the east side of peak 8597 where we collected sample SC 61.

SC 61 0486495 E 5636509 N

This was a rock sample taken from a large, angular piece of float found close to SC 32 and SC 33. It is a fine-grained, mafic rich intrusive rock that contains disseminated chalcopyrite.

Significant results for SC 61:

Ba	190	ppm
Cu	3260	ppm
P	980	ppm

V 149 ppm

Zn 118 ppm

The vanadium in SC 61 is the highest level found in a rock to date.

2009 TECHNICAL DATA AND INTERPRETATION

This report covers eleven soil samples and four rock samples. The soil samples and two of the rock samples were taken at one hundred meter intervals on various lines as shown on Map # 3 which shows the sample numbers and sites in relationship to peak 8597.

Each soil sample was obtained using the pick end of a steel rock hammer and a light, steel garden trowel. The rock hammer was used to loosen soil and to dig around rocks so they could be removed. The trowel was used to remove loose soil from the hole and to obtain the sample once the 'C' level soil horizon was reached. The holes were excavated widely to prevent upper soil layers from rolling into the hole and contaminating the 'C' level soil and was dug as deeply as possible until we reached impenetrable rock. The sample was taken from the soil just above the solid rock.

The location of each sample site was obtained using a Garmin GPSmap 60Cx GPS, with the datum setting at NAD 27. The sample number, location, description, depth and soil horizon were carefully recorded at each site and the soil obtained was placed into a labeled plastic bag, which was sealed. The sealed plastic bag was then placed into a labeled paper bag that was used to protect the plastic bag and the sample from perforation and contamination. Each sample was then carefully placed into a pack and padded to prevent inadvertent damage. This system worked very well and all samples remained intact from the field to the laboratory.

Four rock samples were collected and analysed, all four have been described earlier in this report. The rocks were examined carefully, then broken with a rock hammer and a rock chisel as necessary. All representative samples of the rocks were bagged as described for the soil samples. Both bags used for each rock sample were labeled. In addition, a hand sample of SC 61 was bagged, labeled and carried back to Squamish. The rock samples were reviewed with a 10-power lens and a stereoscopic microscope before they were submitted to the laboratory.

All samples were analysed by ALS/Chemex in North Vancouver, BC, and their reports can be found in appendix B. The company has also provided reports on the preparation of the soil and rock samples as well as their protocols for analyses. This material has been included in Appendix C, along with a Quality Assurance Overview that covers quality assurance, quality

control, external accreditation and certification, and external proficiency tests.

All geochemical sites are mapped, but rock float samples have not been included on the contour maps as their source is unknown. Only bedrock or soil samples are contoured.

Map # 4 shows all the copper levels found at each soil or bedrock survey site in 2008 and 2009. The copper levels between 50 and 99 ppm are coloured yellow and copper levels greater than 99 are coloured orange.

The section of line 0486900 E from sample SC 55 at 5637000 N to SC 58 at 5637300 N is anomalous or highly anomalous for copper over 300 metres. Sample SC 56 recorded the highest copper level found in a soil to date.

Map # 5 plots all the zinc levels found at each soil or bedrock site in 2008 and 2009. The zinc levels between 50 and 79 ppm are coloured yellow and the zinc levels greater than 79 ppm are coloured orange. To date a total of twenty-five samples have been analyzed and twenty-three of them are anomalous or highly anomalous for zinc.

The longest continuous zinc anomaly found to date extends from 5636300 N one kilometer north to 5637300 N.

Sample SC 56 shows the highest zinc level found in a soil to date.

Map # 6 shows all the barium levels found at each soil or bedrock site in 2008 and 2009. The barium levels between 55 and 99 ppm are coloured yellow and the barium levels greater than 99 ppm are coloured orange.

All twenty-five samples plotted are anomalous or highly anomalous for barium. The longest continuous barium anomaly found to date extends from 5636300 N, 1300 metres north to 5637600 N.

Sample SC 56 recorded the highest barium level found in a soil to date.

Map # 7 plots the distribution of copper plus zinc levels found in this survey. Copper + zinc levels of 100 to 179 ppm are coloured yellow and copper + zinc levels greater than 179 ppm are coloured orange.

Twenty out of twenty-five samples plotted are anomalous or highly anomalous for copper + zinc. The most consistent anomaly extends one kilometer north from SC 45 at 0487000 E 5636300 N to SC 35 and SC 58 at 5637300 N.

Sample SC 56 shows the highest copper + zinc level found in a soil to date.

Sample SC 58 has the second highest copper + zinc found in a soil to date.



SLIM CREEK PROPERTY




MAP # 3

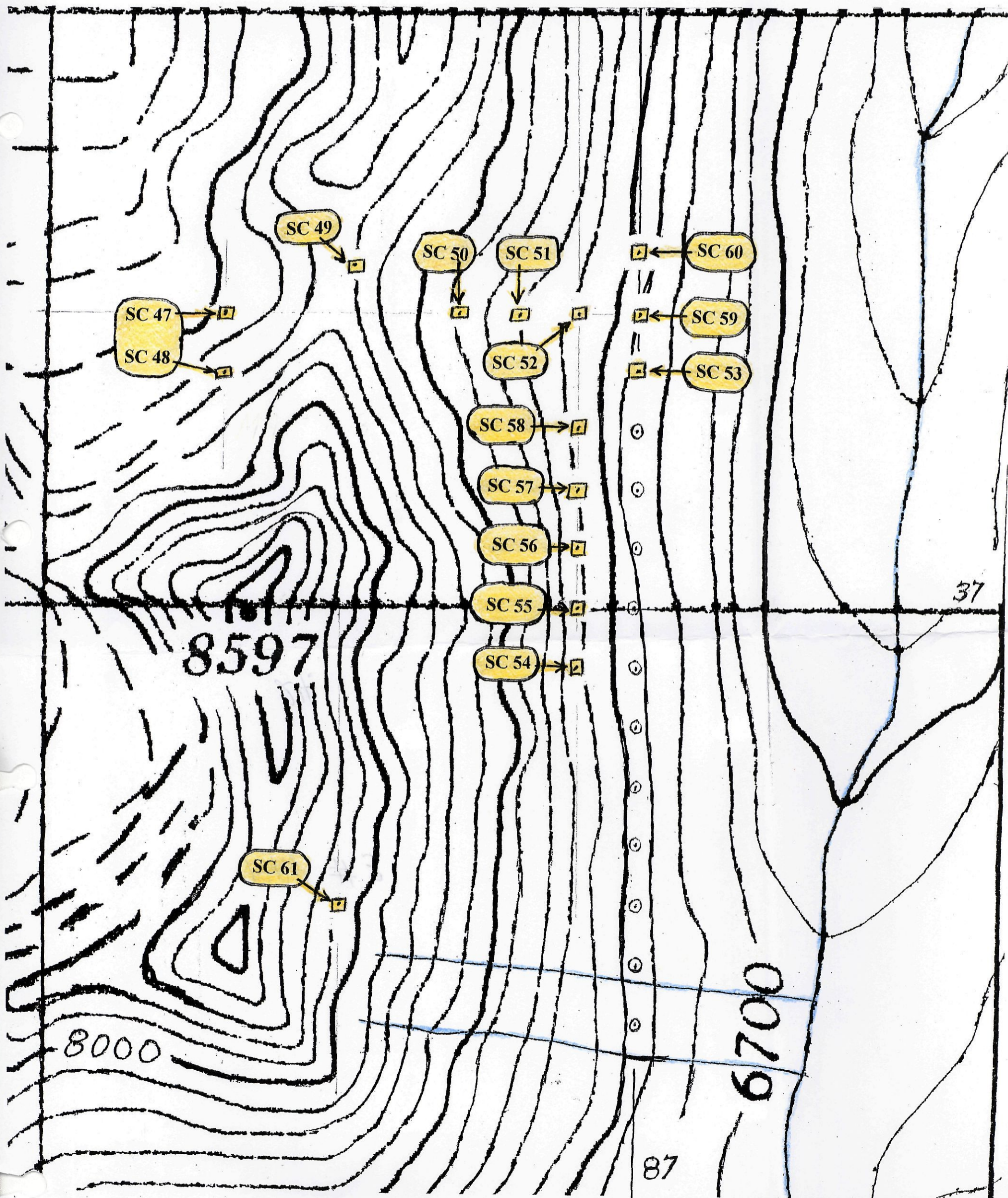
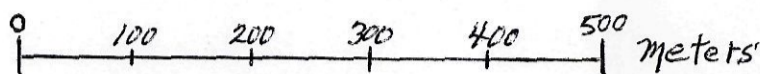
1:6,250

2009 GEOCHEMICAL REPORT-SAMPLE NUMBERS AND SITES

LEGEND:

CREEK 
2008 SAMPLE SITE 
CONTOUR INTERVAL = 100 FEET
DATUM = NAD 27

LAKE 
2009 SAMPLE SITE 
SAMPLE NUMBER 
SOURCE MAP 92 J/14





SLIM CREEK PROPERTY

MAP # 4

1:6,250

2009 GEOCHEMICAL REPORT-COPPER

LEGEND:

CREEK 

2008 SAMPLE SITE 

CONTOUR INTERVAL = 100 FEET


COPPER CONTOURS 50-99 PPM 

DATUM = NAD 27

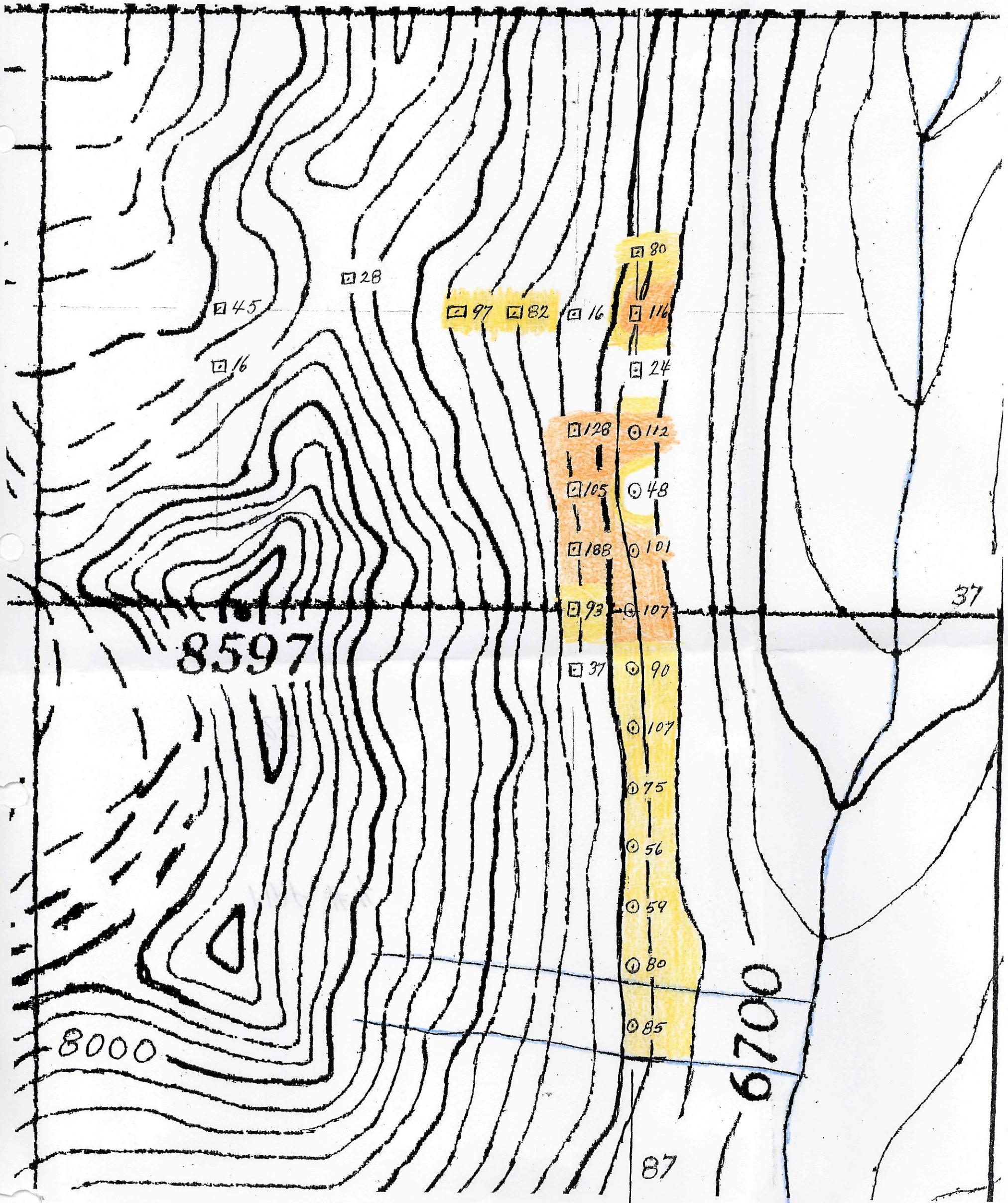
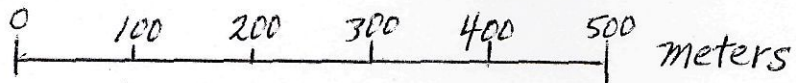
LAKE 

2009 SAMPLE SITE 

COPPER LEVEL IN ppm 90

>99 PPM 

SOURCE MAP 92 J/14




























8597

8000

6700

87

37

-  80
-  97  82  16  116
-  45  28  24
-  16  128  112
-  105  48
-  188  101
-  93  107
-  37  90
-  107
-  75
-  56
-  59
-  80
-  85



SLIM CREEK PROPERTY

MAP # 5

1:6,250

2009 GEOCHEMICAL REPORT-ZINC

LEGEND:

CREEK

2008 SAMPLE SITE

CONTOUR INTERVAL = 100 FEET

ZINC CONTOURS 50-79 PPM

DATUM = NAD 27

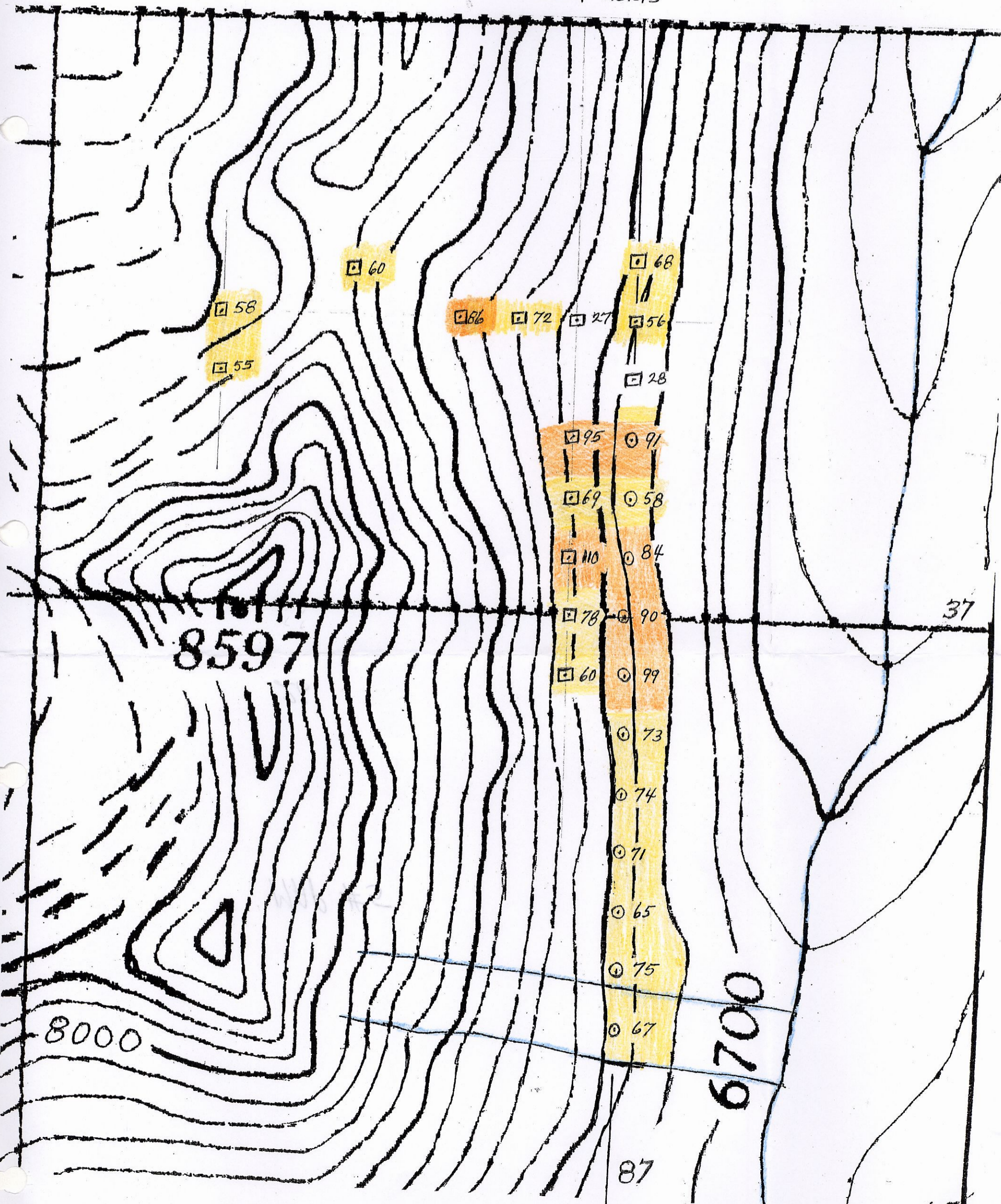
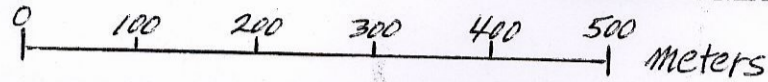
LAKE

2009 SAMPLE SITE

ZINC LEVEL IN ppm 90

>79 PPM

SOURCE MAP 92 J/14





SLIM CREEK PROPERTY

MAP # 6

1:6,250

2009 GEOCHEMICAL REPORT-BARIUM

LEGEND:

CREEK

2008 SAMPLE SITE

CONTOUR INTERVAL = 100 FEET

BARIUM CONTOURS 50-99 ppm

DATUM = NAD 27

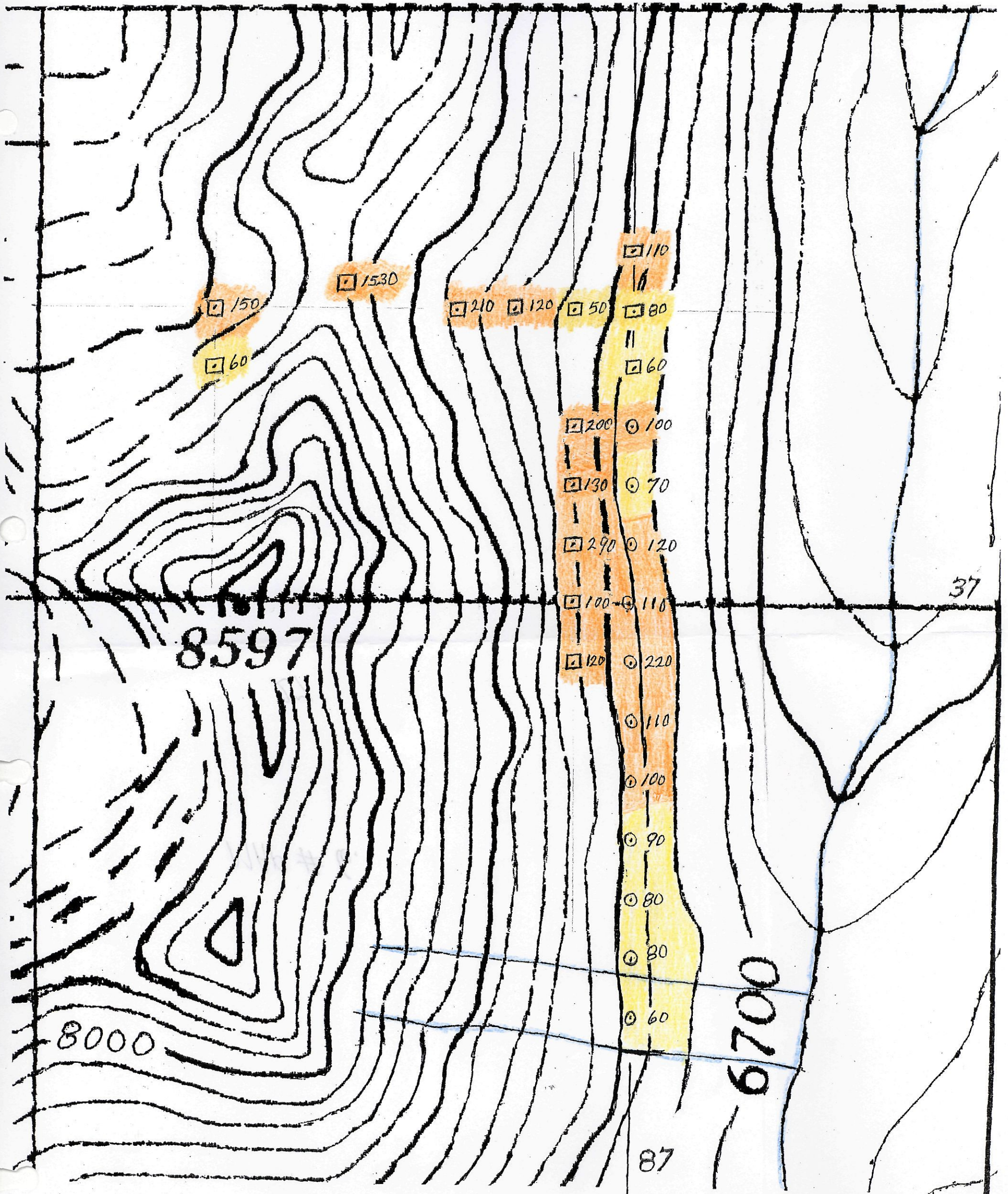
LAKE

2009 SAMPLE SITE

BARIUM LEVEL IN ppm 90

>99 ppm

SOURCE MAP 92 J/14





SLIM CREEK PROPERTY

MAP # 7

1:6,250

2009 GEOCHEMICAL REPORT-COPPER + ZINC

LEGEND:

CREEK

LAKE

2008 SAMPLE SITE

2009 SAMPLE SITE

CONTOUR INTERVAL = 100 FEET

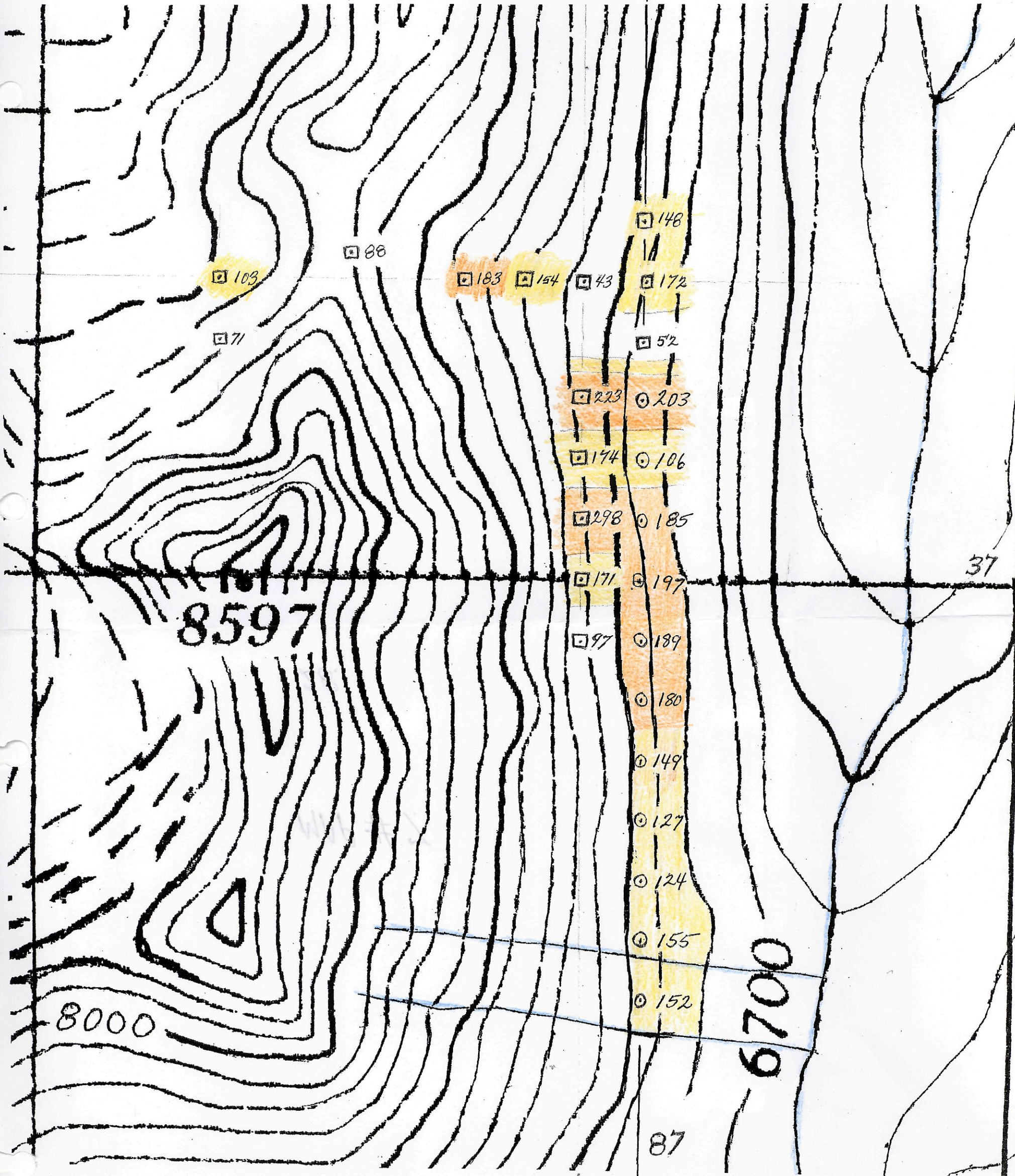
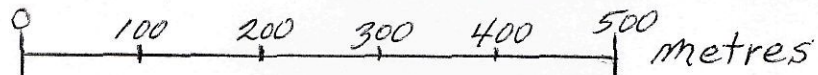
COPPER + ZINC LEVEL IN ppm 203

COPPER + ZINC CONTOURS 100-179 ppm

>179 ppm

DATUM = NAD 27

SOURCE MAP 92 J/14



8597

8000

6700

87

37

148

88

103

183

154

43

172

77

52

223

203

174

106

298

185

171

197

97

189

180

149

127

124

155

152

At the time of this report, we have found five samples containing disseminated chalcopyrite. All of these samples contain anomalous levels of zinc and none of them are magnetic.

TABLE OF SAMPLES CONTAINING DISSEMINATED CHALCOPYRITE

SAMPLE #	COPPER (%)	ZINC (ppm)	MAGNETIC
SC 19	0.42%	101 ppm	NO
SC 20	1%	338 ppm	NO
SC 30	1.3%	134 ppm	NO
SC 33	1.1%	131 ppm	NO
SC 61	0.32%	118 ppm	NO

Another interesting observation is that while most elements have their highest levels in the rocks, and lower levels in the soils, phosphorus reverses this trend and has its highest levels in soils with lower levels in the rocks (except for SC 30, which has the fourth highest level of phosphorous found to date in all samples).

TABLE OF PHOSPHOROUS LEVELS AND SAMPLE TYPE

SAMPLE #	PHOSPHOROUS	SAMPLE TYPE
SC 39	1620 ppm	SOIL
SC 56	1610 ppm	SOIL
SC 41	1530 ppm	SOIL
SC 30	1520 ppm	ROCK FLOAT
SC 50	1520 ppm	SOIL
SC 37	1490 ppm	SOIL
SC 43	1460 ppm	SOIL
SC 60	1450 ppm	SOIL
SC 40	1410 ppm	SOIL
SC 38	1400 ppm	SOIL

The above table could be extended another seven samples, which would all be soils, before the next rock is recorded. However, this next rock should be mentioned because it also contains disseminated chalcopyrite (SC 61).

It will be interesting to see if the high phosphorous levels found in these soils are indicators of rocks containing disseminated chalcopyrite and/or alteration.

CONCLUSION

The work performed this year significantly extended our ongoing geochemical survey, which is centered on the line 5637000 N. This line runs through the highest point on peak 8597 and also comes close to the central col where significant mineralization has been found in the past.

The most significant soil sample discovered this year was SC 56, which contains the highest barium, copper, iron, magnesium, vanadium and zinc levels found to date, as well as the second highest phosphorous. The area around and particularly to the west of this sample clearly requires a detailed examination.

SC 58 is also of interest due to its highest soil values of calcium and strontium, and second highest values of copper, vanadium and copper + zinc.

SC 61 was obtained from a large angular piece of float found at the base of a cliff. It contains disseminated chalcopyrite (0.32 %) as well as anomalous levels of zinc and vanadium.

The vanadium may turn out to be a useful indicator element as it has also been found in SC 56 and SC 58 in association with high levels of copper + zinc.

All rocks are tested with a magnet, and SC 61 like the previous rocks that contain disseminated chalcopyrite is not magnetic, whereas the country rocks are moderately magnetic.

Barium appears to form a continuous halo through all soils and rocks. In addition, highly anomalous levels of barium are associated with high-grade copper, altered rocks and breccias (SC 49).

We intend to follow-up on the highly significant samples that were found this year, as well as extending our lines to the south and west. We also intend to explore for a route up through the cliffs to try and find the source or sources of SC 33 and SC 61.

A geophysical survey may also be helpful. The country rocks on this property are moderately magnetic and the altered or mineralized rocks are not. A positive induced polarization anomaly, coincident with a magnetic low, could help locate a target for further exploration.

ITEMIZED COST STATEMENT FOR 2009

SCHEDULE

Food costs (including preparation)/person/day	\$60.00
Food costs without preparation/person/day	\$35.00
Vehicle to Slim Creek/trip	\$200.00
Prospectors/day	\$400.00
Report preparation and submission/day	\$400.00

TRAIL BUILDING EXPENSES FOR 2009

June 29, 2009 to June 30, 2009 = 2 days.

Rick Price and Ken MacKenzie

Food: 2 prospectors * 2 days @ \$ 20/day (breakfast and lunch) =	\$80.00
Vehicles: 1 vehicle * 2 trips @ \$200/trip =	\$400.00
Prospectors: 2 prospectors * 2 days @ \$400/day =	\$1,600.00
Bralorne Motel 1 room for 1 night + 2 meals =	\$123.33

GEOCHEMICAL SURVEY EXPENSES FOR 2009

August 22, 2009 to August 25, 2009 = 4 days

Ken Mackenzie, Rick Price, Sara Price

Food: 3 prospectors * 4 days @ \$60/day =	\$720.00
Vehicles: 2 vehicles * 2 trips @ \$200/ trip =	\$800.00
Prospectors: 3 prospectors * 4 days @ \$400/day =	\$4,800.00
Helicopter: 1.2 hours @ \$1288 =	\$1,622.88

OTHER EXPENSES

2008 report preparation and submission 1 day @ \$400/day =	\$400.00
2009 geochemical report preparation 6.68 days @ \$400/day =	\$2,675.00
Samples transported to ALS/Chemex:	\$200.00
Vehicle:	\$25.00
ALS/Chemex analyses:	\$478.66
Recording Fees:	\$407.72
Miscellaneous: Photocopies, computer, ink:	\$100.00

TOTAL EXPENSES FOR 2009: \$14,432.59

APPENDIX A

AUTHOR'S QUALIFICATIONS

K. R. MacKenzie, B.Sc., M.D.

Dr. MacKenzie is a retired physician who graduated from the University of British Columbia in 1963 with a B.Sc. in Chemistry and Mathematics. Geology 105 was taken as part of his undergraduate studies. He spent three summers working for the Geological Survey of Canada under Dr. J. O. Wheeler.

After graduating from U.B.C. in 1968 with a medical degree, Dr. MacKenzie has continued to prospect as a hobby.

Recent reading by the author includes:

The Rocks and Minerals of the World by C. Sorrell and G. Sandstrom.

Exploration and Mining Geology by William C. Peters.

Ore Deposits by C.F. Park, Jr. and R. A. MacDiarmid

A Field Guide to Rocks and Minerals by Pough

The Geochemistry of Gold and its Deposits by R. W. Boyle

Case Histories of Mineral Discoveries, Volume 3, Porphyry Copper, Molybdenum, and Gold Deposits, Volcanogenic Deposits (Massive Sulphides), and Deposits in Layered Rock by V. F. Hollister, Editor.

Porphyry Copper and Molybdenum Deposits West-Central B.C. by N.C. Carter.

Geology of the Porphyry Copper Deposits of the Western Hemisphere by Victor F. Hollister.

ATLAS OF ALTERATION by A.J.B. Thompson and J.F.H. Thompson, Editors.

ORE MINERAL ATLAS by Dan Marshall, C.D. Anglin and Hamid Mumin.

PORPHYRY DEPOSITS OF THE CANADIAN CORDILLERA
Editor: A. Sutherland Brown

THE GEOLOGY OF ORE DEPOSITS by John M. Guilbert and Charles F. Park, Jr.

GEOCHEMISTRY OF HYDROTHERMAL ORE DEPOSITS
by H. L. Barnes

GEOCHEMISTRY by Arthur H. Brownlow

FIELD GEOPHYSICS by John Milsom

XXIV INTERNATIONAL GEOLOGICAL CONGRESS
COPPER AND MOLYBDENUM DEPOSITS OF THE WESTERN
CORDILLERA by C. S. Ney and A. Sutherland Brown

PRINCIPLES OF GEOCHEMICAL PROSPECTING
by H. E. Hawkes

GEOCHEMICAL EXPLORATION
by R. W. Boyle and J. I. Mcgerrigle

APPENDIX B

ANALYSIS RESULTS FOR ALL SAMPLES

COLLECTED ON THE SLIM CREEK

PROPERTY DURING 2009.



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

2103 Dollarton Hwy

North Vancouver BC V7H 0A7

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

MACKENZIE, KEN

PO BOX 641

GARIBALDI HIGHLANDS BC V0N 1T0

Page: 1

Finalized Date: 2-OCT-2009

This copy reported on 7-OCT-2009

Account: MACKEN

CERTIFICATE VA09104191

Project: SC

P.O. No.:

This report is for 4 Rock samples submitted to our lab in Vancouver, BC, Canada on 21-SEP-2009.

The following have access to data associated with this certificate:

KEN MACKENZIE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES
Au-AA23	Au 30g FA-AA finish	AAS

To: MACKENZIE, KEN
PO BOX 641
GARIBALDI HIGHLANDS BC V0N 1T0

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:


Colin Ramshaw, Vancouver Laboratory Manager



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

2103 Dollarton Hwy

North Vancouver BC V7H 0A7

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

MACKENZIE, KEN

PO BOX 641

GARIBALDI HIGHLANDS BC V0N 1T0

Page: 2 - A

Total # of Tests: 2 (A - C)

Finalized Date: 2-OCT-2009

Account: MACKEN

Project: SC

CERTIFICATE OF ANALYSIS VA09104191

Sample Description	Method Analyte Units LOR	WEI-21	AU-AA23	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
		Recvd Wt.	Au	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe
		kg	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
		0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
SC 47		0.40	0.005	<0.2	1.87	<2	<10	150	<0.5	<2	0.85	<0.5	11	27	45	2.98
SC 48		0.54	<0.005	<0.2	1.43	4	<10	60	<0.5	<2	0.91	<0.5	11	25	16	2.61
SC 49		0.38	<0.005	<0.2	1.00	5	<10	1530	<0.5	<2	7.00	<0.5	11	10	28	2.96
SC 61		0.38	0.008	0.9	4.14	4	<10	190	<0.5	<2	1.28	<0.5	17	26	3260	3.65

37



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

: MACKENZIE, KEN
PO BOX 641
GARIBALDI HIGHLANDS BC V0N 1T0

Page: 2 - B
Total # Pages: 2 (A - C)
Finalized Date: 2-OCT-2009
Account: MACKEN

Project: SC

CERTIFICATE OF ANALYSIS VA09104191

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
		Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr
		ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm
		10	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1
SC 47		10	<1	0.39	10	1.51	421	<1	0.12	15	780	<2	<0.01	<2	5	51
SC 48		10	<1	0.17	<10	1.07	422	<1	0.05	13	730	<2	<0.01	<2	5	41
SC 49		<10	<1	0.20	<10	1.34	1125	<1	0.04	9	510	2	0.05	<2	6	253
SC 61		20	<1	1.80	<10	2.05	648	13	0.23	18	980	<2	0.16	<2	7	93

38



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

MACKENZIE, KEN
PO BOX 641
GARIBALDI HIGHLANDS BC V0N 1T0

Page: 2 - C
Total # Pages: 2 (A - C)
Finalized Date: 2-OCT-2009
Account: MACKEN

Project: SC

CERTIFICATE OF ANALYSIS VA09104191

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
		Th	Ti	Ti	U	V	W	Zn
		ppm	%	ppm	ppm	ppm	ppm	ppm
		20	0.01	10	10	1	10	2
SC 47		<20	0.22	<10	<10	89	<10	58
SC 48		<20	0.09	<10	<10	64	<10	55
SC 49		<20	<0.01	<10	<10	48	<10	60
SC 61		<20	0.29	<10	<10	149	10	118

6E



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

2103 Dollarton Hwy

North Vancouver BC V7H 0A7

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

: MACKENZIE, KEN
PO BOX 641
GARIBALDI HIGHLANDS BC V0N 1T0

Page: 1
Finalized Date: 3-OCT-2009
This copy reported on 7-OCT-2009
Account: MACKEN

CERTIFICATE VA09104192

Project: SC

P.O. No.:

This report is for 11 Soil samples submitted to our lab in Vancouver, BC, Canada on 21-SEP-2009.

The following have access to data associated with this certificate:

KEN MACKENZIE

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
SCR-41	Screen to -180um and save both

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Au-AA23	Au 30g FA-AA finish	AAS
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

To: MACKENZIE, KEN
PO BOX 641
GARIBALDI HIGHLANDS BC V0N 1T0

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:


Colin Ramshaw, Vancouver Laboratory Manager



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

2103 Dollarton Hwy

North Vancouver BC V7H 0A7

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

MACKENZIE, KEN

PO BOX 641

GARIBALDI HIGHLANDS BC V0N 1T0

Page: 2 - A

Total # Pages: 2 (A - C)

Finalized Date: 3-OCT-2009

Account: MACKEN

Project: SC

CERTIFICATE OF ANALYSIS VA09104192

Sample Description	Method Analyte Units LOR	WEI-21	AU-AA23	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
		Recvd Wt. kg	Au ppm	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %
		0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
SC 50		0.66	0.007	<0.2	2.58	<2	<10	210	<0.5	<2	0.56	<0.5	16	27	97	3.77
SC 51		0.52	0.006	0.2	2.80	6	<10	120	<0.5	2	0.29	<0.5	12	23	82	3.25
SC 52		0.40	<0.005	0.4	0.73	<2	<10	50	<0.5	<2	0.16	<0.5	4	6	16	1.25
SC 53		0.34	<0.005	0.4	1.55	5	<10	80	<0.5	2	0.22	<0.5	6	8	24	1.55
SC 54		0.34	0.006	0.2	1.91	4	<10	120	<0.5	<2	0.57	<0.5	10	17	37	2.79
SC 55		0.60	0.005	0.3	3.25	8	<10	100	<0.5	2	0.98	<0.5	15	26	93	3.72
SC 56		0.52	0.006	<0.2	3.94	4	<10	290	<0.5	<2	0.81	<0.5	22	30	188	4.25
SC 57		0.60	<0.005	0.2	3.35	8	<10	130	<0.5	<2	0.64	<0.5	16	29	105	3.85
SC 58		0.56	<0.005	0.4	3.33	6	<10	200	<0.5	<2	1.08	<0.5	19	28	128	4.08
SC 59		0.44	<0.005	<0.2	1.82	4	<10	80	<0.5	<2	0.33	<0.5	10	19	116	3.03
SC 60		0.62	0.005	0.3	1.77	5	<10	110	<0.5	2	0.46	<0.5	13	25	80	3.32

177



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

MACKENZIE, KEN
PO BOX 641
GARIBALDI HIGHLANDS BC V0N 1T0

Page: 2 - B
Total # Pages: 2 (A - C)
Finalized Date: 3-OCT-2009
Account: MACKEN

Project: SC

CERTIFICATE OF ANALYSIS VA09104192

Sample Description	Method Analyte Units LOR	ME-ICP41															
		Ge	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Sr	
		ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	
		10	1	0.01	10	0.01	5	1	0.01	1	10	2	0.01	2	1	1	
SC 50		10	<1	0.34	10	1.58	575	<1	0.02	17	1520	5	<0.01	<2	5	97	
SC 51		10	<1	0.16	10	1.07	419	1	0.01	18	940	5	0.03	<2	3	50	
SC 52		<10	<1	0.08	<10	0.23	193	1	0.03	4	620	4	0.01	<2	1	14	
SC 53		<10	<1	0.04	10	0.38	233	<1	0.02	5	670	4	0.03	<2	2	14	
SC 54		10	<1	0.10	10	0.87	393	1	0.01	14	810	7	0.08	<2	2	58	
SC 55		10	<1	0.15	10	1.35	633	<1	0.01	18	1260	4	0.04	<2	5	93	
SC 56		10	<1	0.52	10	2.39	781	<1	0.01	24	1610	3	0.01	<2	6	77	
SC 57		10	1	0.21	10	1.37	574	<1	0.01	18	1320	3	0.02	<2	4	67	
SC 58		10	<1	0.25	10	2.00	662	<1	0.01	22	1390	3	0.01	<2	7	118	
SC 59		10	<1	0.14	10	0.80	390	<1	0.02	14	880	3	0.03	<2	3	25	
SC 60		10	<1	0.17	10	0.99	550	1	0.01	17	1450	10	0.02	<2	6	29	

47



ALS Chemex

EXCELLENCE IN ANALYTICAL CHEMISTRY

ALS Canada Ltd.

2103 Dollarton Hwy
North Vancouver BC V7H 0A7

Phone: 604 984 0221 Fax: 604 984 0218 www.alschemex.com

MACKENZIE, KEN
PO BOX 641
GARIBALDI HIGHLANDS BC V0N 1T0

Page: 2 - C
Total # pages: 2 (A - C)
Finalized Date: 3-OCT-2009
Account: MACKEN

Project: SC

CERTIFICATE OF ANALYSIS VA09104192

Sample Description	Method Analyte Units LOR	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	
		Th	Ti	Ti	U	V	W	Zn
		ppm	%	ppm	ppm	ppm	ppm	ppm
		20	0.01	10	10	1	10	2
SC 50		<20	0.19	<10	<10	104	<10	86
SC 51		<20	0.16	<10	<10	88	<10	72
SC 52		<20	0.08	<10	<10	36	<10	27
SC 53		<20	0.10	<10	<10	45	<10	28
SC 54		<20	0.14	<10	<10	84	<10	60
SC 55		<20	0.18	<10	<10	103	<10	78
SC 56		<20	0.26	<10	<10	117	<10	110
SC 57		<20	0.19	<10	<10	104	<10	69
SC 58		<20	0.20	<10	<10	114	<10	95
SC 59		<20	0.16	<10	<10	93	<10	56
SC 60		<20	0.12	<10	<10	86	<10	68

13

APPENDIX C

SAMPLE PREPARATION, GEOCHEMICAL

ANALYSIS, QUALITY ASSURANCE,

QUALITY CONTROL, EXTERNAL

ACCREDITATION AND CERTIFICATION,

AND EXTERNAL PROFICIENCY TESTS



Sample Preparation Package – PREP-41
**Standard Preparation: Dry sample and dry-sieve to –180
micron**

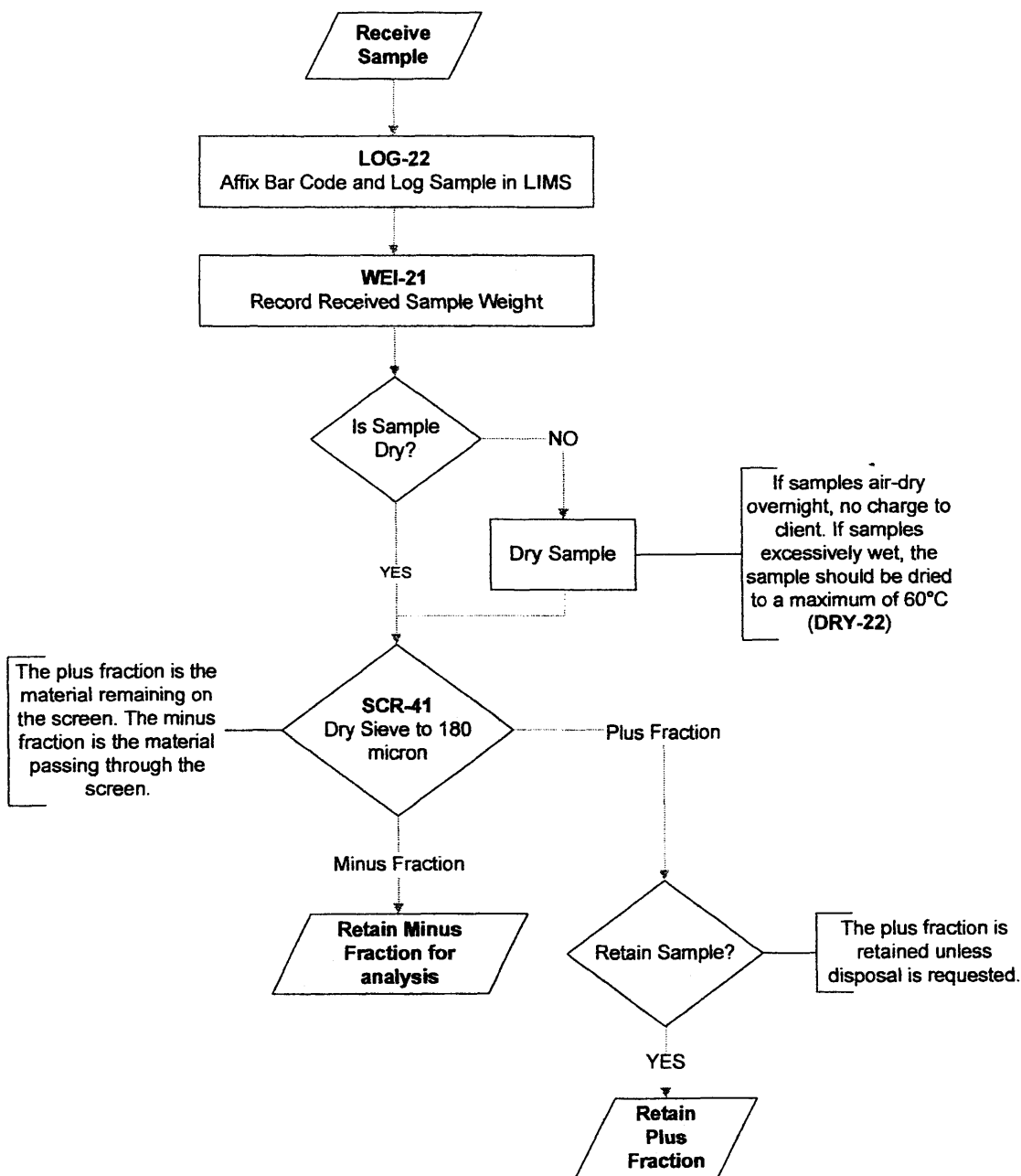
Sample preparation is the most critical step in the entire laboratory operation. The purpose of preparation is to produce a homogeneous analytical sub-sample that is fully representative of the material submitted to the laboratory.

An entire sample is dried and then dry-sieved using a 180 micron (Tyler 80 mesh) screen. The plus fraction is retained unless disposal is requested. This method is appropriate for soil or sediment samples up to 1 kg in weight.

Method Code	Description
LOG-22	Sample is logged in tracking system and a bar code label is attached.
SCR-41	Sample is dry-sieved to – 180 micron and both the plus and minus fractions are retained.



Sample Preparation Flowchart Package –PREP-41





**Geochemical Procedure - ME-ICP41
Trace Level Methods Using Conventional ICP-AES Analysis**

Sample Decomposition: Nitric Aqua Regia Digestion (GEO-AR01)
Analytical Method: Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP - AES)

A prepared sample is digested with aqua regia for in a graphite heating block. After cooling, the resulting solution is diluted to 12.5 mL with deionized water, mixed and analyzed by inductively coupled plasma-atomic emission spectrometry. The analytical results are corrected for inter-element spectral interferences.

NOTE: In the majority of geological matrices, data reported from an aqua regia leach should be considered as representing only the leachable portion of the particular analyte.

Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Silver	Ag	ppm	0.2	100	Ag-OG46
Aluminum	Al	%	0.01	25	
Arsenic	As	ppm	2	10000	
Boron	B	ppm	10	10000	
Barium	Ba	ppm	10	10000	
Beryllium	Be	ppm	0.5	1000	
Bismuth	Bi	ppm	2	10000	
Calcium	Ca	%	0.01	25	
Cadmium	Cd	ppm	0.5	1000	
Cobalt	Co	ppm	1	10000	
Chromium	Cr	ppm	1	10000	
Copper	Cu	ppm	1	10000	Cu-OG46
Iron	Fe	%	0.01	50	



Element	Symbol	Units	Lower Limit	Upper Limit	Default Overlimit Method
Gallium	Ga	ppm	10	10000	
Mercury	Hg	ppm	1	10000	
Potassium	K	%	0.01	10	
Lanthanum	La	ppm	10	10000	
Magnesium	Mg	%	0.01	25	
Manganese	Mn	ppm	5	50000	
Molybdenum	Mo	ppm	1	10000	
Sodium	Na	%	0.01	10	
Nickel	Ni	ppm	1	10000	
Phosphorus	P	ppm	10	10000	
Lead	Pb	ppm	2	10000	Pb-OG46
Sulfur	S	%	0.01	10	
Antimony	Sb	ppm	2	10000	
Scandium	Sc	ppm	1	10000	
Strontium	Sr	ppm	1	10000	
Thorium	Th	ppm	20	10000	
Titanium	Ti	%	0.01	10	
Thallium	Tl	ppm	10	10000	
Uranium	U	ppm	10	10000	
Vanadium	V	ppm	1	10000	
Tungsten	W	ppm	10	10000	
Zinc	Zn	ppm	2	10000	Zn-OG46



**Fire Assay Procedure – Au-AA23 & Au-AA24
Fire Assay Fusion, AAS Finish**

Sample Decomposition: Fire Assay Fusion (FA-FUS01 & FA-FUS02)
Analytical Method: Atomic Absorption Spectroscopy (AAS)

A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents as required, inquarted with 6 mg of gold-free silver and then cupelled to yield a precious metal bead.

The bead is digested in 0.5 mL dilute nitric acid in the microwave oven, 0.5 mL concentrated hydrochloric acid is then added and the bead is further digested in the microwave at a lower power setting. The digested solution is cooled, diluted to a total volume of 4 mL with de-mineralized water, and analyzed by atomic absorption spectroscopy against matrix-matched standards.

Method Code	Element	Symbol	Units	Sample Weight (g)	Lower Limit	Upper Limit	Default Overlimit Method
Au-AA23	Gold	Au	ppm	30	0.005	10.0	Au-GRA21
Au-AA24	Gold	Au	ppm	50	0.005	10.0	Au-GRA22



QUALITY ASSURANCE OVERVIEW

Laboratory Accreditation and Certification

ISO 17025

ALS Chemex's North Vancouver laboratory has received ISO 17025 accreditation from the Standards Council of Canada under CAN-P-4E (ISO/IEC 17025:2005), the General Requirements for the Competence of Testing and Calibration Laboratories, and the PALCAN Handbook (CAN-P-1570).



The scope of the accreditation includes the following methods:

- Au-AA: Determination of Au by Lead Collection Fire Assay and AAS
- Au/Ag-GRA: Determination of Au and Ag by Lead Collection Fire Assay and Gravimetric Finish
- PGM-ICP: Determination of Au, Pt and Pd by Lead Collection Fire Assay and ICP-AES
- ME-ICP41: Multi-Element (Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Ti, Tl, U, V, W, Zn) Determination by Aqua Regia Digestion and ICP-AES
- ME-ICP61: Multi-Element (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, S, Sb, Sc, Se, Si, Sn, Sr, Ta, Te, Ti, Tl, U, V, W, Y, Zn and Zr) Determination by 4-Acid Digestion and ICP-AES
- ICP81: Al, Co, CU, Fe, Mg, Mn, Ni, Pb, S and Zn by Sodium Peroxide Fusion and ICP-AES
- OG46: Ag, Cu, Pb, and Zn – Determination of Ores and High Grade Material Using ICP-AES Following an Aqua Regia Digestion
- OG62: Ag, Cu, Pb and Zn – Determination of Ores and High Grade Material Using ICP-AES Following a Four-Acid Digestion
- AA45: Ag, Cu, Pb and Zn – Determination of Base Meals Using AAS Following an Aqua Regia Digestion
- AA46: Ag, Cu, Pb, Zn and Mo – Determination of Ores and High Grade materials Using AAS Following an Aqua Regia Digestion
- AA61: Ag, Co, Cu, Ni, Pb and Zn – Determination of Base Metals Using AAS Following a Four-Acid Digestion
- AA62: Ag, Co, CU, Mo, Ni, Pb and Zn – Determination of Ores and High Grade Materials Using AAS Following a Four-Acid Digestion

Our Reno, Nevada and Val d'Or, Quebec labs are actively pursuing ISO 17025 accreditation for Au by Fire Assay methods.

ISO 9001



ISO 9001

ALS Chemex laboratories in North America are registered to ISO 9001:2000 for the "provision of assay and geochemical analytical services" by QMI-SAI Global Quality Registrars.

The ISO 9001:2000 registration provides evidence of a quality management system covering all aspects of our organization. ISO 17025 accreditation provides specific assessment of our laboratory's analytical capabilities. In our opinion, the combination of the two ISO standards provides our clients complete assurance regarding the quality of every aspect of ALS Chemex operations.

Aside from laboratory accreditation, ALS Chemex has been a leader in participating in, and sponsoring, the assayer certification program in British Columbia. Many of our analysts have completed this demanding program that includes extensive theoretical and practical examinations. Upon successful completion of these examinations, they are awarded the title of Registered Assayer.

Quality Assurance Program

The quality assurance program is an integral part of all day-to-day activities at ALS Chemex and involves all levels of staff. Responsibilities are formally assigned for all aspects of the quality assurance program.

Sample Preparation Quality Specifications

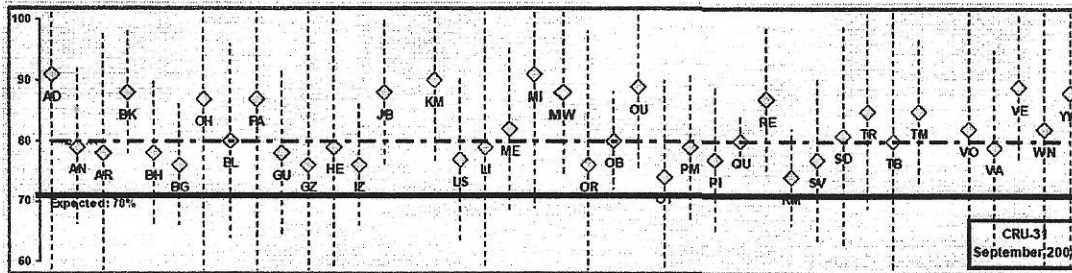
Standard specifications for sample preparation are clearly defined and monitored. The specifications for our most common methods are as follows:

- **Crushing (CRU-31)**
> 70% of the crushed sample passes through a 2 mm screen
- **Ringing (PUL-31)**
> 85% of the ring pulverized sample passes through a 75 micron screen (Tyler 200 mesh)
- **Samples Received as Pulps**
>80% of the sample passes through a 75 micron screen (Tyler 200 mesh)

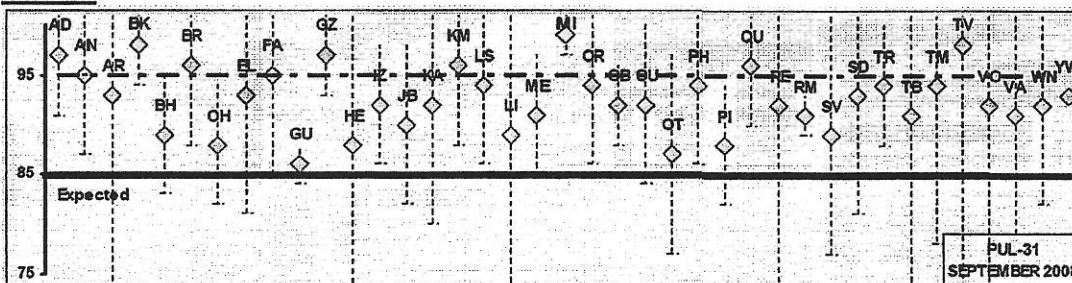
These characteristics are measured and results reported to verify the quality of sample preparation. Our standard operating procedures require that samples at every preparation station are tested regularly throughout each shift. Measurement of sample preparation quality allows the identification of equipment, operators and processes that are not operating within specifications.

QC results from all global sample preparation laboratories are captured by the LIM System and the QA Department compiles a monthly review report for senior management on the performance of each laboratory from this data.

CRU-31



PUL-31



Other Sample Preparation Specifications

Sample preparation is a vital part of any analysis protocol. Many projects require sample preparation to other specifications, for instance >90% of the crushed sample to pass through a 2 mm screen. These procedures can easily be accommodated and the Prep QC monitoring system is essential in ensuring the required specifications are routinely met.

Analytical Quality Control – Reference Materials, Blanks & Duplicates

The LIMS inserts quality control samples (reference materials, blanks and duplicates) on each analytical run, based on the rack sizes associated with the method. The rack size is the number of sample including QC samples included in a batch. The blank is inserted at the beginning, standards are inserted at random intervals, and duplicates are analysed at the end of the batch. Quality control samples are inserted based on the following rack sizes specific to the method:

Rack Size	Methods	Quality Control Sample Allocation
20	Specialty methods including specific gravity, bulk density, and acid insolubility	2 standards, 1 duplicate, 1 blank
28	Specialty fire assay, assay-grade, umpire and concentrate methods	1 standard, 1 duplicate, 1 blank
39	XRF methods	2 standards, 1 duplicate, 1 blank
40	Regular AAS, ICP-AES and ICP-MS methods	2 standards, 1 duplicate, 1 blank
84	Regular fire assay methods	2 standards, 3 duplicates, 1 blank

Laboratory staff analyse quality control samples at least at the frequency specified above. If necessary, they may include additional quality control samples above the minimum specifications.

All data gathered for quality control samples – blanks, duplicates and reference materials – are automatically captured, sorted and retained in the QC Database.

Quality Control Limits and Evaluation

Quality Control Limits for reference materials and duplicate analyses are established according to the precision and accuracy requirements of the particular method. Data outside control limits are identified and investigated and require corrective actions to be taken. Quality control data is scrutinised at a number of levels. Each analyst is responsible for ensuring the data submitted is within control specifications. In addition, there are a number of other checks.

Certificate Approval

If any data for reference materials, duplicates, or blanks falls beyond the control limits established, it is automatically flagged red by the computer system for serious failures, and yellow for borderline results. The Department Manager(s) conducting the final review of the Certificate is thus made aware that a problem may exist with the data set.

Precision Specifications and Definitions

Most geochemical procedures are specified to have a precision of $\pm 10\%$, and assay procedures $\pm 5\%$. The precision of Au analyses is dominated by the sampling precision.

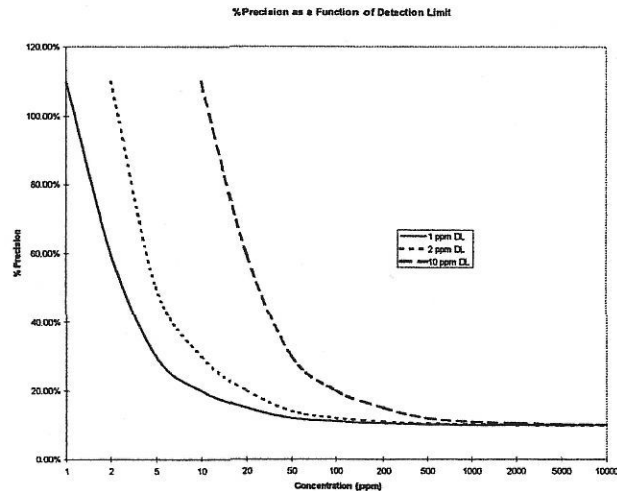
Precision can be expressed as a function of concentration:

$$P_c = \left(\frac{\text{DetectionLimit}}{c} + P \right) \times 100\%$$

- where P_c - the precision at concentration c
 c - concentration of the element
 P - the "Precision Factor" of the element. This is the precision of the method at very high concentrations, i.e. 0.05 for 5%.

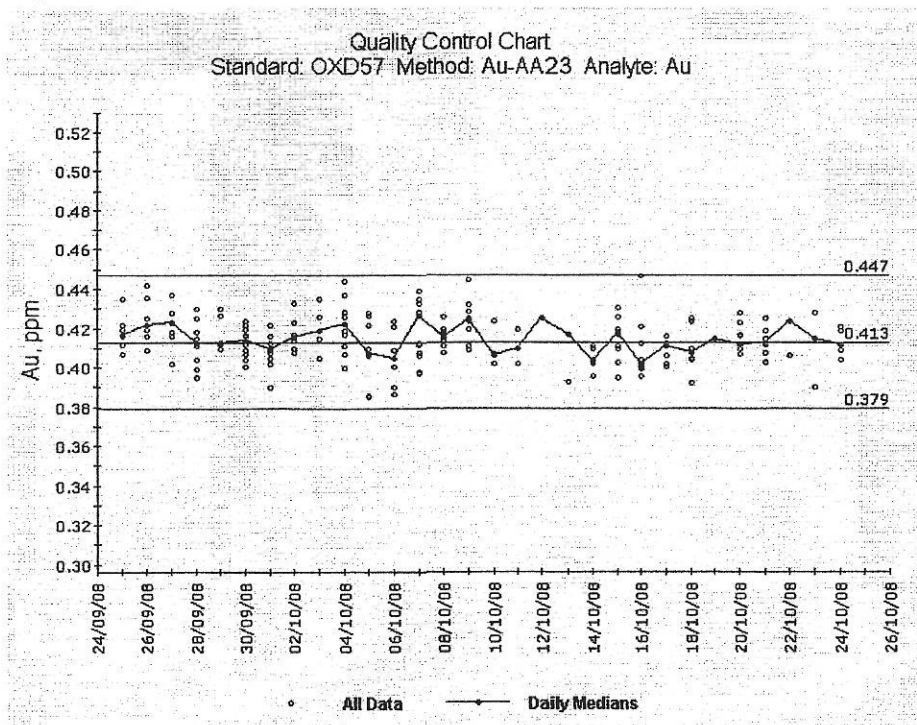
(M. Thompson, 1988. Variation of precision with concentration in an analytical system. Analyst, 113: 1579-1587.)

As an example, precision as a function of concentration (10% precision) is plotted for three different detection limits. The impact of detection limit on precision of results for low-level determinations can be dramatic.



Evaluation of Trends

Control charts for frequently used method codes are generated and evaluated by laboratory staff on a regular basis. The control charts are evaluated to ensure internal specifications for precision and accuracy are met. The data is also reviewed for any long-term trends and drifts.



External Proficiency Tests

Proficiency testing provides an independent assessment of laboratory performance by an outside agency. Test materials are regularly distributed to the participants and results are processed by a central agency. The results are usually converted to a Z-Score to rate the laboratory's result against the consensus value from all participating labs.

All ALS Chemex analytical facilities in North America participate in proficiency tests for the analytical procedures routinely done at each laboratory. ALS Chemex has participated for many years in proficiency tests organized by organizations such as Canadian Certified Reference Materials Projects, and Geostats as well as a number of independent studies organized by consultants for specific clients. We have participated also participated in several certification studies for new certified reference materials by CANMET and Rocklabs.

Feedback from these studies is invaluable in ensuring our continuing accuracy and validation of methods.

Quality Assurance Meetings

A review of quality assurance issues is held regularly at Technical and Quality Assurance Meetings. The meetings cover such topics as:

- Results of internal round robin exchanges, external proficiency tests and performance evaluation samples
- Monitoring of control charts for reference materials
- Review of quality system failures
- Incidents raised by clients
- Results of internal quality audits
- Other quality assurance issues

The Quality Assurance Department and senior laboratory management participate in these meetings.