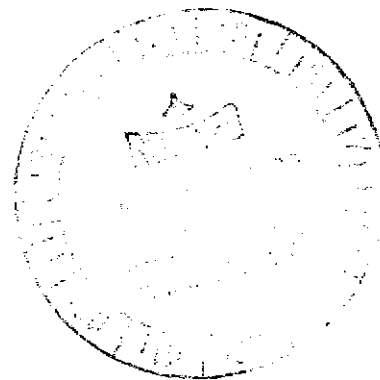




REPORT ON THE 1997 WORK PROGRAM

CAM CLAIMS 1 - 142

WHITEHORSE MINING DISTRICT, YUKON

NTS 105 E/8

by

Larry W. Carlyle, F.G.A.C., P. Geol.

Whitehorse, Yukon

April, 1998

093873

the Yukon Exploration Unit
under Section 32 (3) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 14,200.00.

M. B. B.
for Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

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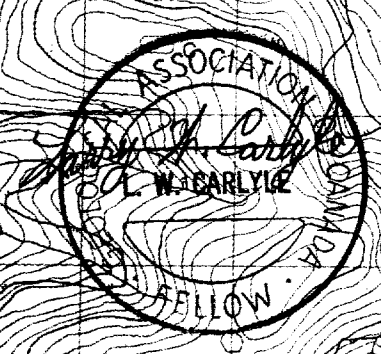
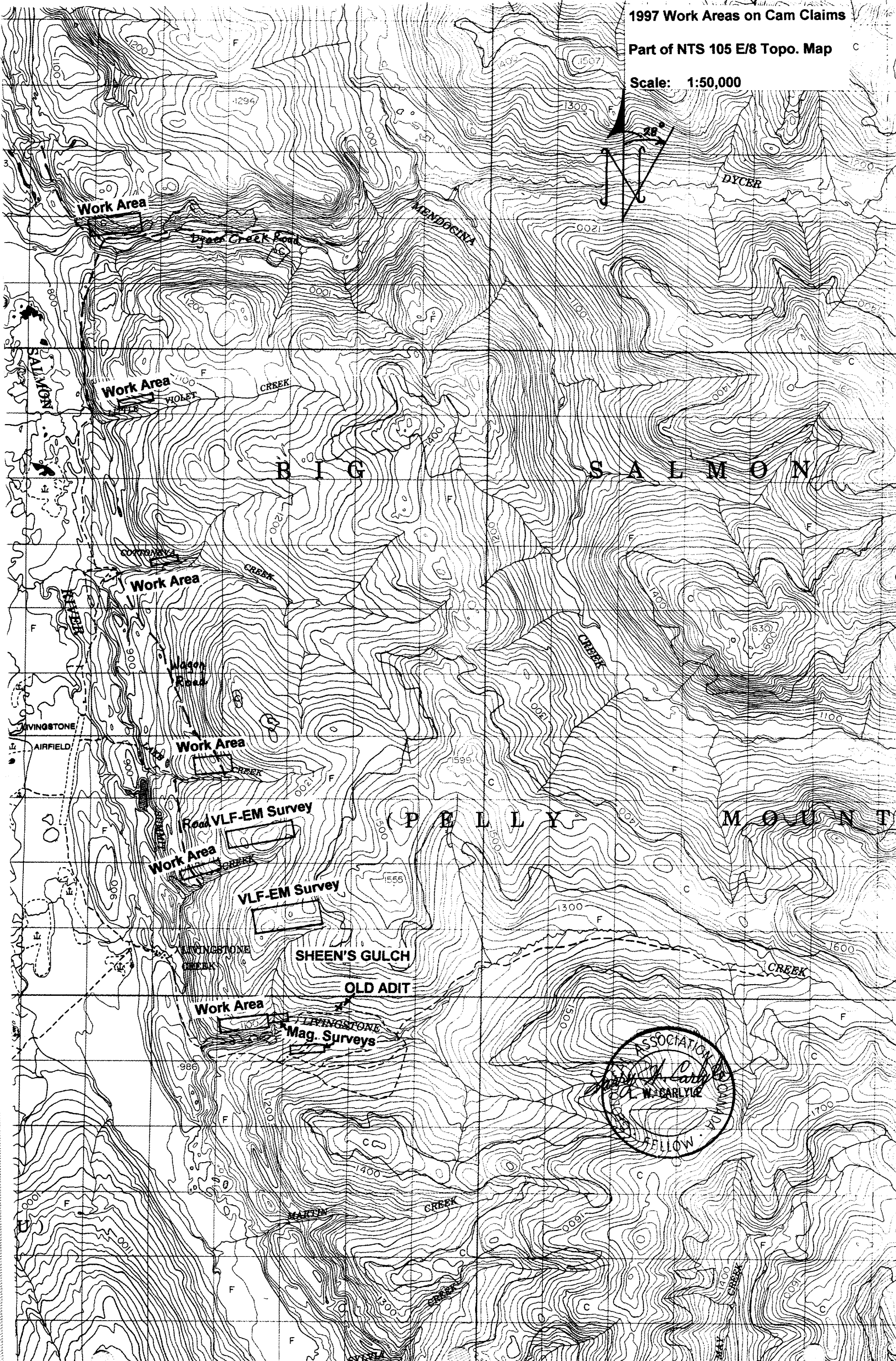
APPENDICES

Appendix A – VLF-EM Survey Data Tables
Appendix B – Sheen's Gulch and Livingstone Creek Magnetometer Survey Data Tables
Appendix C – Analytical Certificates
Appendix D – Invoices Supporting Statement of Costs

INTRODUCTION:

After several years of hearing about the 100 year production history and the large nuggets, having a purity of 860 - 895 fineness, of the Livingstone placer camp, Carlyle wanted to prospect the area. It was his belief that nuggets of the size and quality reported had not migrated far from their source. It was also surprising that so little hard rock exploration had been done in an area with such an extensive placer mining history. During the summer of 1996, the writer was able to spend 11 days prospecting the headwaters of Martin, Livingstone, Summit, and Lake Creeks (See 1997 Work Areas on Cam Claims).

During prospecting, prominent white bull quartz veins having widths from 4 inches up to 4 feet, but most commonly 1 to 2 feet, were located within faults having a strike between 320° - 340° Az. Faults were evident by the existence of sharp depressions which could be traced for significant distances along the hillsides. Further evidence of the faults was increased alteration of the biotite schist from chlorite to sericite as the faults were approached. This was also accompanied by strong shearing and light to dark brown iron oxide within the faults. The faults are more closely spaced directly east of the Big Salmon Fault (See O.F. 1101 Geology Map) and more widely spaced further toward the east. Very little mineralization other than trace oxidized pyrite was seen in any of the quartz exposed on surface. The best gold, arsenic, and copper values seemed to come from samples which had strong iron and manganese staining and/or the presence of graphitic material.

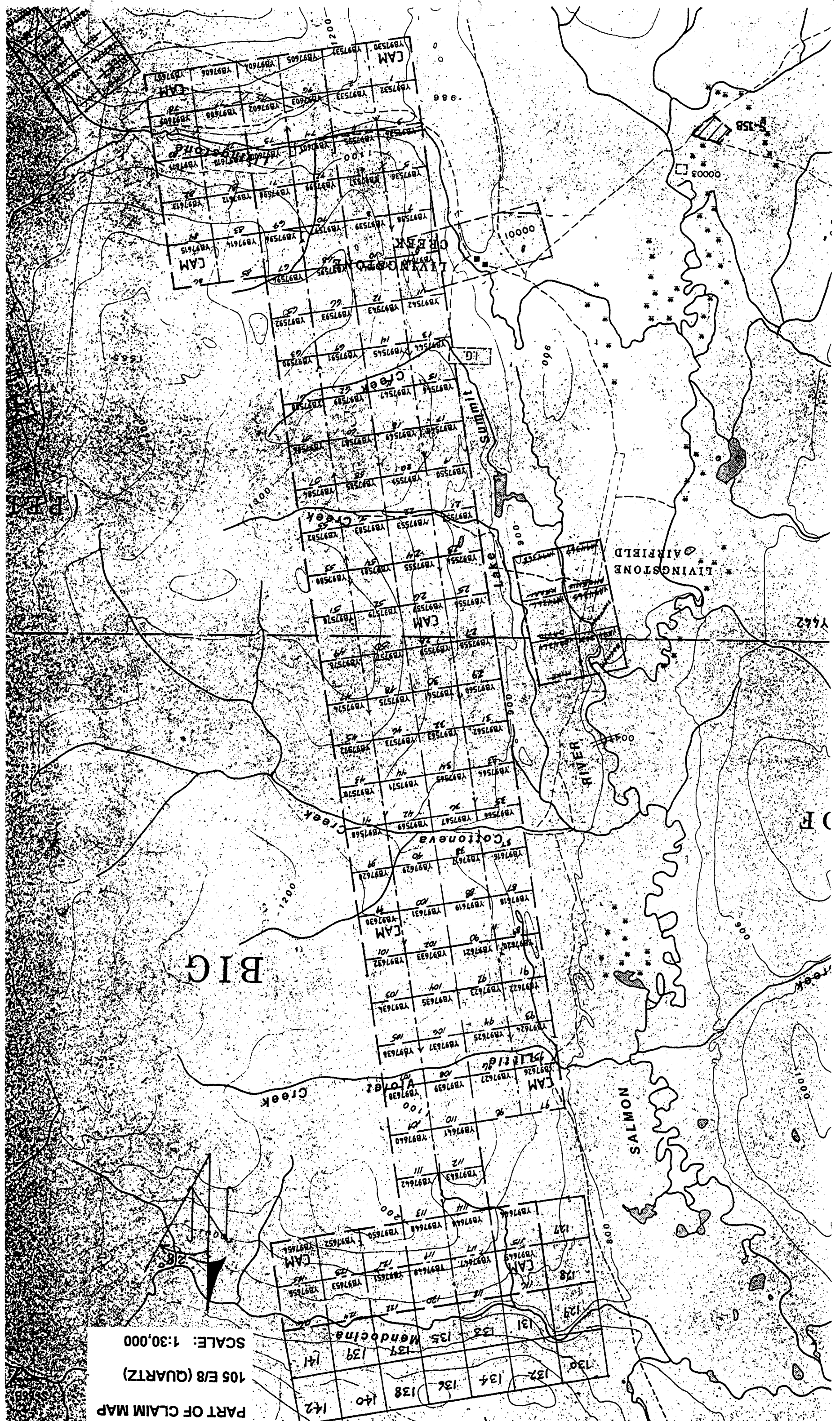


Pyrite, galena, and copper and silver sulphides were not present in the quartz on the ridges and gullies. This mineralization was only seen in vein quartz from the Horseshoe Adit (See 1997 Work Areas on Cam Claims) and vein quartz from the placer workings on Livingstone Creek. Samples taken from the adit in 1981 by Archer, Cathro & Associates personnel are reported to have assayed as high as 1.5 opt. gold.

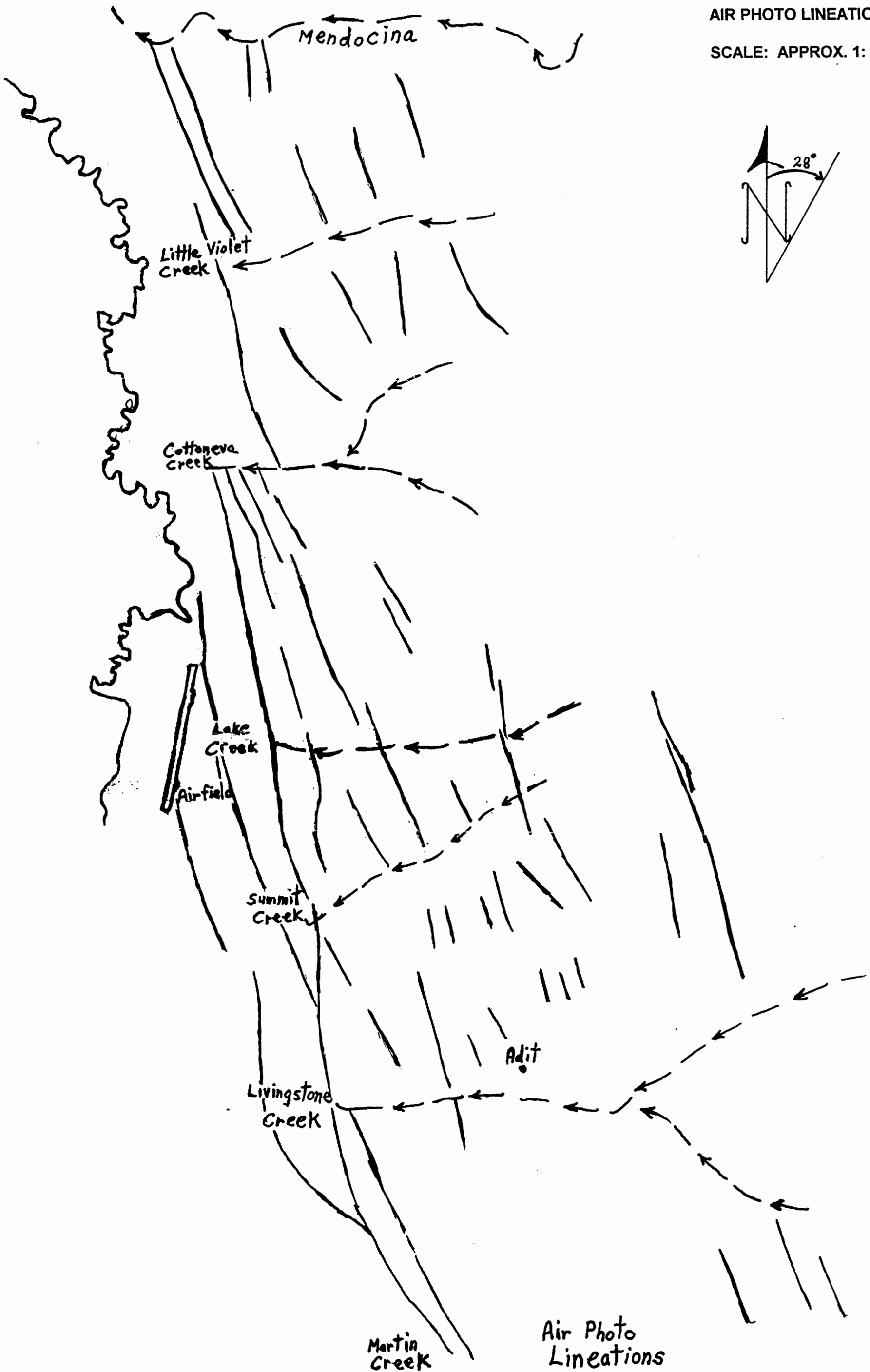
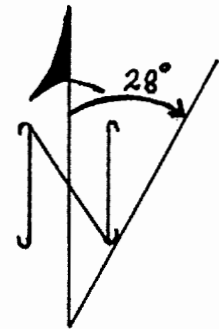
The shape of the ridges and the glacial till deposition within the creeks indicated that the glaciers which had once covered the area moved over it from the south or the southeast. The till cover appeared to be thickest in the middle of the creeks examined with it getting shallower near the headwaters and downstream as the South Big Salmon River was approached. The till was thick along the south side of the creeks and much shallower along the north side.

It was evident to the writer that the mineralization was coming from the strong faults, mentioned earlier, which strike almost perpendicular to the placer creeks. Discussions with Max Fuerstner, who has 25 years of experience and is the largest placer miner in the area, confirmed this belief. After obtaining and studying aerial photographs of the area, the strength of the fault structures was further confirmed (See Tracings of Air Photo Lineations Drawing). Claim staking started on the last day of April, 1997 and continued until a strip of claims averaging 1 ¼ mile wide extended from south of Livingstone Creek to north of Mendocina Creek (See Part of Claim Map 105 E/8 Quartz).

PART OF CLAIM MAP
105 E/8 (QUARTZ)
SCALE: 1:30,000



TRACINGS OF
AIR PHOTO LINEATIONS
SCALE: APPROX. 1: 40,000



LOCATION, ACCESS AND CLAIMS:

The 142 CAM Claims cover 5 of the 6 placer creeks which make up the Livingstone placer camp. These creeks are still being mined today; 100 years after their first discovery in 1898. The CAM Claims are located on NTS Map Sheet 105 E/8 and are centered at approximately Latitude $61^{\circ} 19' N$; Longitude $134^{\circ} 17' W$ within the Whitehorse Mining District, Yukon (See Part of Claim Map 105 E/8 Quartz). The claims are owned 50% each by Larry W. Carlyle and Max Fuerstner of Whitehorse, Yukon.

The Livingstone Creek area is accessed by a 75-mile winter road from Lake Laberge. Several air strips exist in the Livingstone area so access is usually via fixed-wing aircraft from Whitehorse; approximately 50 air miles to the south southwest. The main Livingstone air strip is 4000 feet long and has had DC-3 and Caribou aircraft landed on it. The extensive placer mining which has taken place in the area has resulted in cat trails existing up most of the creeks within the claim block. These trails enable easy access to most areas by all-terrain vehicles.

The claims cover areas which extend from the rim extending along the eastern side of the Big Salmon Fault at an elevation of approximately 900 metres (2,950 ft.) to above timberline near the top of the hills above the headwaters of the creeks at an elevation of approximately 1500 metres (4,920 ft.). The claims are on rounded to steeply sloping hills; the creek canyons have the steepest slopes. Vegetation consists of black spruce, pine, willow and buckbrush.

CLAIM NAME

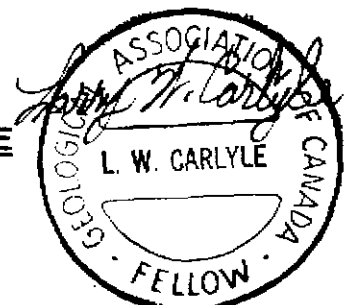
CAM 1 - 126
CAM 127 - 142

GRANT NUMBERS

YB 97530 - YB 97655
YC 07943 - YC 07958

EXPIRY DATE

May 16, 1998
July 22, 1998



These claim data were confirmed with a telephone call to the Whitehorse Mining Recorder's office on November 5, 1997 (See Part of Claim Map 105 E/8 Quartz).

REGIONAL GEOLOGY:

The geology and the placer gold deposits of the Livingstone Creek area were first described by McConnell in 1901. Regional geological mapping was carried out by Cockfield, Lees, and Bostock between 1929 and 1934. This work resulted in Map 372 A being issued in 1936 (See Part of Map 372 A included). Most of the camp was mapped as Unit 1, Precambrian quartzite, schists, limestone, gneiss, and greenstone. Along the headwaters of most of the creeks, they mapped a sheared granodiorite as Unit 2. This unit is unique and not found elsewhere on the map sheet. Further east they mapped a large zone of peridotite, hornblendite, and serpentine as Unit 10. A small stock of Unit 11, probably a Cretaceous granite, granodiorite, monzonite, or diorite was mapped at the headwaters of Little Violet Creek (See Part of Map 372 A).

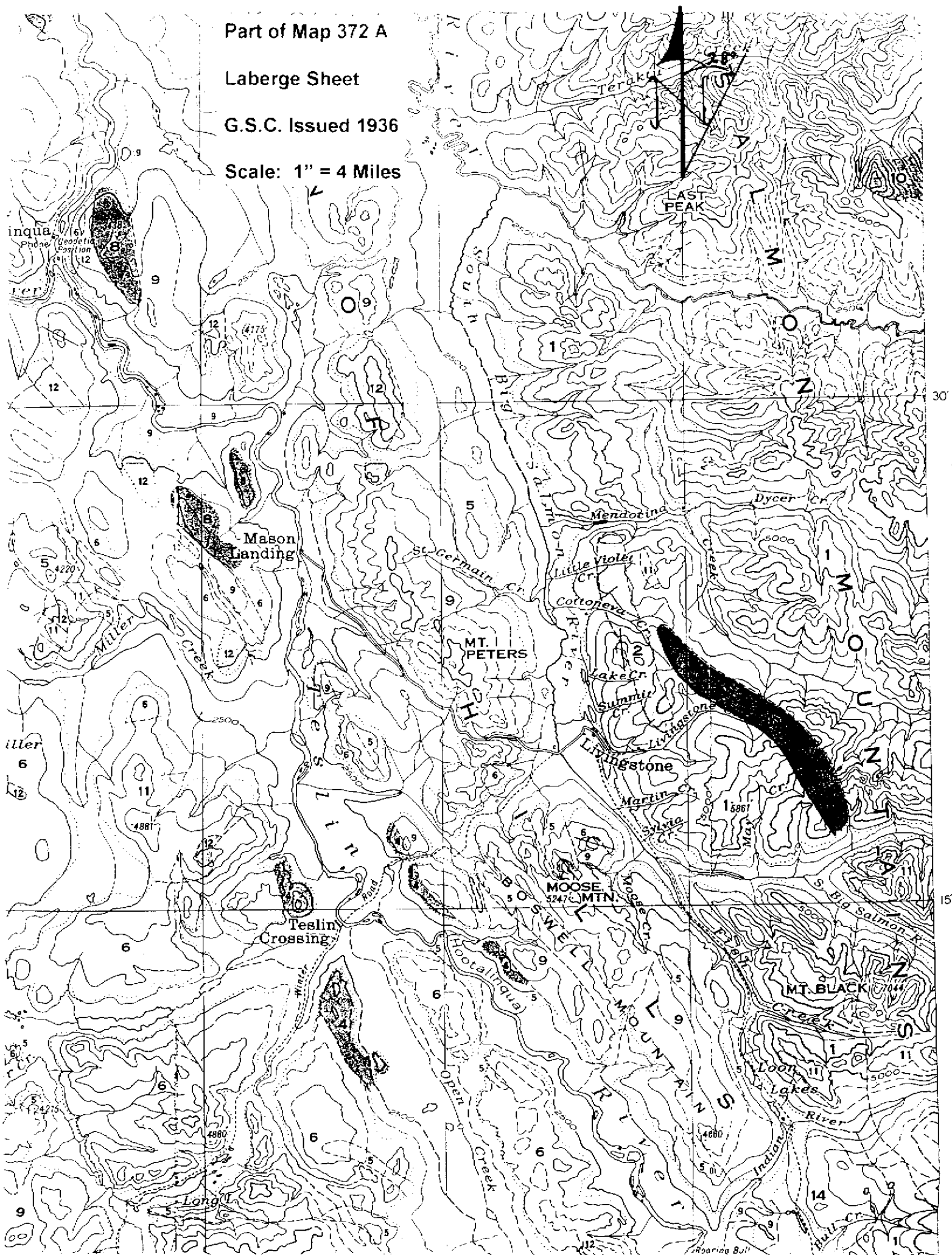
The regional geology was reinterpreted by Tempelman-Kluit in 1977-1979 (See Part of G.S.C. O.F. 1101). This interpretation identified the Big Salmon Fault, down which the South Big Salmon River flows and into which the placer creeks drain. During this mapping, Tempelman-Kluit identified the Teslin Fault (4 - 6 miles west of the Livingstone camp) as the ancient western margin of North America. Tempelman-Kluit obtained more accurate age dating for the rocks of the area; and has mapped most of the rocks as Carboniferous and/or Permian dark green, fine-grained amphibolite and amphibolitic greenstone (CP_{Av}). He has mapped Unit CP_{Ag}, a dioritic to quartz dioritic augen amphibole gneiss, in almost exactly the same location as the Unit 2 from the 1936 map.

Part of Map 372 A

Laberge Sheet

G.S.C. Issued 1936

Scale: 1" = 4 Miles



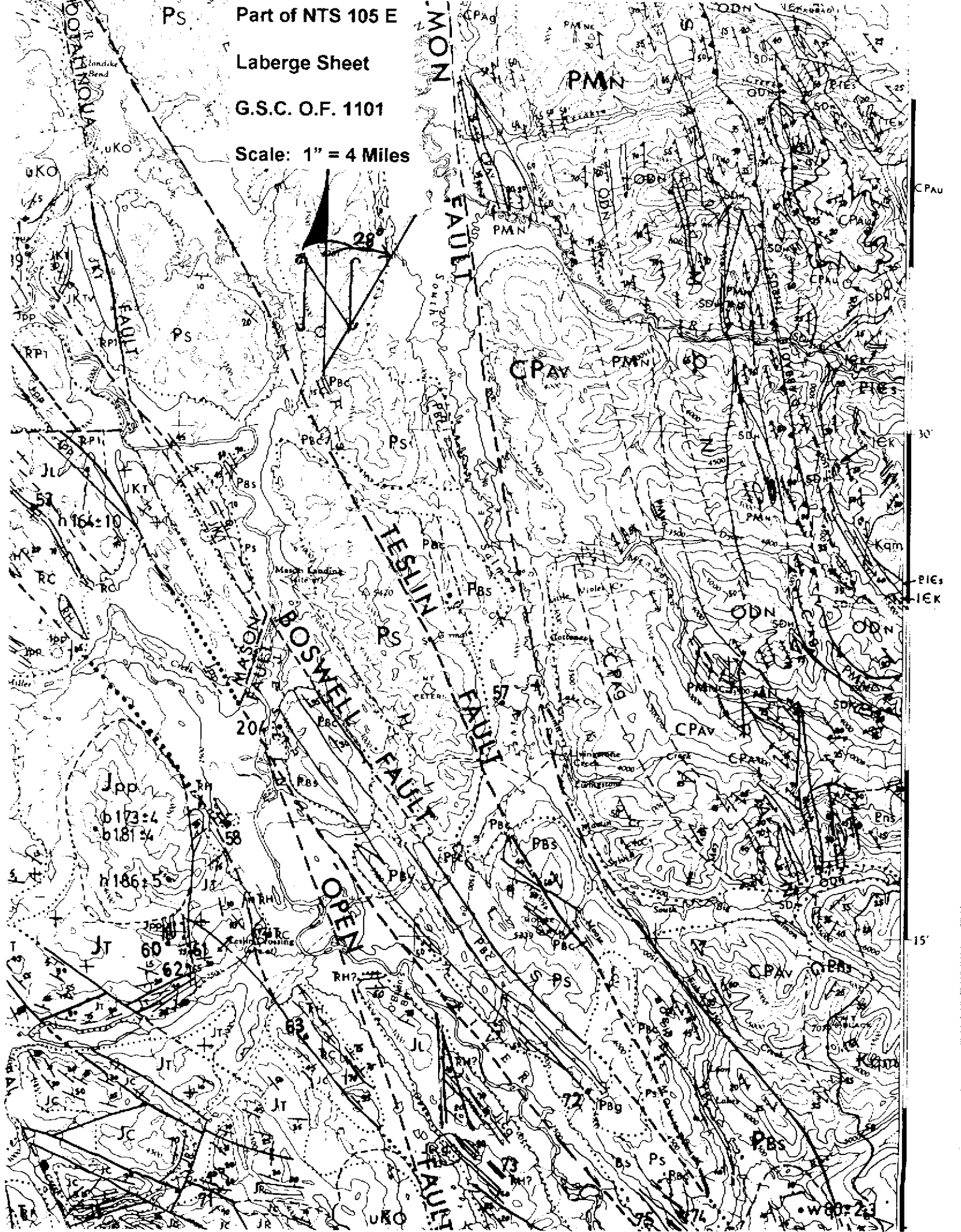
The rocks west of the Teslin Fault (also known as the Teslin Suture) were pressed against and over the original North America during the Early Cretaceous (See the sketch from Tempelman-Kluit's 1979 report). His theory postulated that this action would cause the rocks east of the Big Salmon Fault to be raised in reverse faulted thrust blocks.

Tempelman-Kluit's westerly dipping subduction zone with North American rocks in the footwall and accreted arc terrane and oceanic rocks in its hanging wall has been reinterpreted. This reinterpretation, which has been developing from the mid-1980's to 1997, considers the Teslin zone as a zone of ductile thrusting, which includes thrust sheets of North American affinity and accreted rocks that have been complexly folded and displaced northeastward and then folded again (See Figure 12, Stevens and Erdmer). Rather than marking the western limit of rocks of North American origin, the zone is most likely underlain by North American basement that extends westward beneath the Intermontane Belt. Two facts strongly support this model over that of Tempelman-Kluit:

- the same metamorphosed stratigraphies can be traced along a strike length of at least 20 km. This would not be possible in the more chaotic jumble of rock blocks expected from collapsing hangingwall rocks into a subduction zone.
- most of the rocks in the area have green schist or amphibolite grade metamorphism. Rocks in a subduction zone would most probably have eclogite or blue schist grade metamorphism.

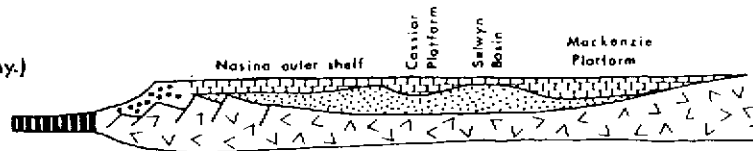
In the new model; Devonian-Mississippian granites and Permian intrusives are deformed, while Late Triassic to Early Jurassic plutons are undeformed; this would put the age of deformation and metamorphism between Late Permian and Late Triassic. Proponents of this model, suggest renaming the Teslin Suture Zone, the Teslin Tectonic Zone. Rocks within the Teslin Tectonic Zone are correlated with sedimentary and volcanic rocks of the Yukon Tanana terrane and oceanic crustal rocks of the Slide

Ps Part of NTS 105 E
Laberge Sheet
G.S.C. O.F. 1101
Scale: 1" = 4 Miles



LATE PROTEROZOIC to MISSISSIPPIAN (750-330my.)

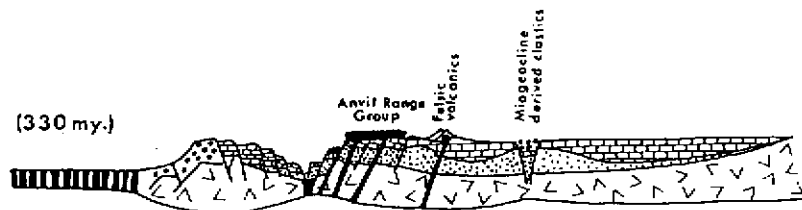
Early Paleozoic North American miogeocline



A

EARLY MISSISSIPPIAN (330 my.)

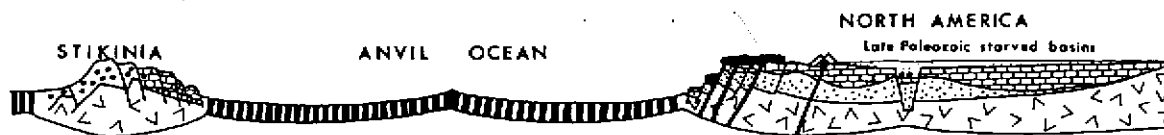
Rifting



B

CARBONIFEROUS to LATE TRIASSIC (330-220 my.)

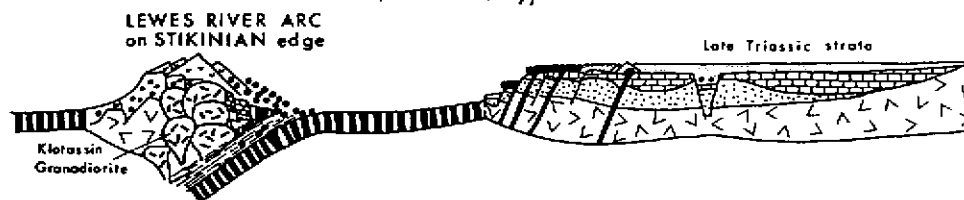
Anvil Ocean opens as Stikinia moves from North America



C

LATE TRIASSIC and EARLY JURASSIC (220-165my.)

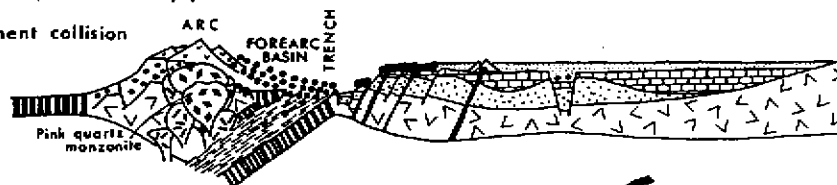
Subduction of Anvil Ocean



D

MIDDLE JURASSIC (165-150my.)

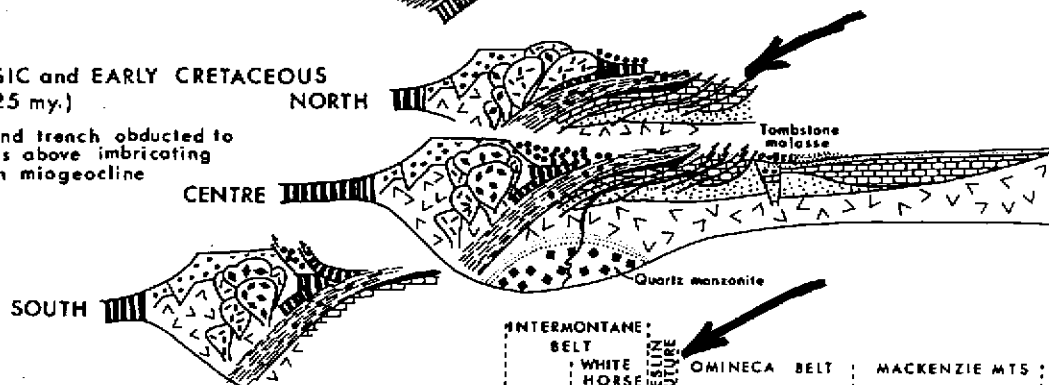
Anvil Ocean closed; arc-continent collision begins



E

LATE JURASSIC and EARLY CRETACEOUS (150-125 my.)

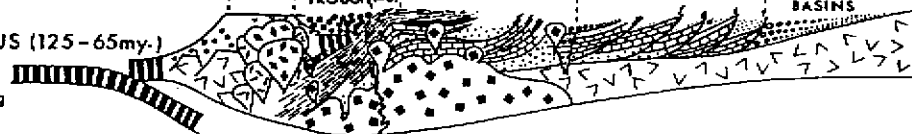
Arc, forearc and trench obducted to various degrees above imbricating North American miogeocline



F

LATE CRETACEOUS (125-65my.)

Continued imbrication of miogeocline; metamorphism and plutonism in underplating continent; subduction of Pacific begins



G

Mountain terrane. Yukon Tanana terrane rocks range in age from Devonian to Permian. After their deformation and cooling, the Slide Mountain terrane rocks were emplaced over them along low-angle, post-metamorphic faults. In the Big Salmon Range (just north of Livingstone), the Teslin Tectonic Zone is 20 km. wide. Both Slide Mountain and Yukon Tanana rocks contain steeply dipping fabrics, unlike their counterparts in the rest of the Yukon and Alaska.

The steep north-south striking D'Abbadie fault has generally been taken to represent the eastern margin of the Teslin Zone. It is most probably a narrow zone of brittle deformation reflecting a period of upper crustal normal faulting superimposed on the ductile deformation which had occurred earlier. Last Peak granite has been dated at 98 Ma. And, on the basis of contact and structural relationships, is interpreted to have intruded while the D'Abbadie fault zone was active. Dextral shearing and gentle NW plunging of the stratigraphy are also believed to have occurred at this time.

PROPERTY GEOLOGY:

Rock outcrop is limited on the CAM Claims. Exposure is generally restricted to creek canyons and to west-facing rock bluffs running parallel to the Big Salmon Fault (See Part of NTS 105 E, G.S.C. O.F. 1101). Outcrop is also frequently found in strong depressions (notches) seen cutting across ridges and extending for considerable distances along the hillsides above timberline. Most of the rocks seen on the property are metasediments of green schist or amphibolite metamorphic grade. These metasediments are dominated by strongly contorted biotite-chlorite-quartz schist. Some of the schist contains intercalated thin- and medium-bedded quartzite. Small very discontinuous patches of white to grey limestone are located in the area. Caliche is

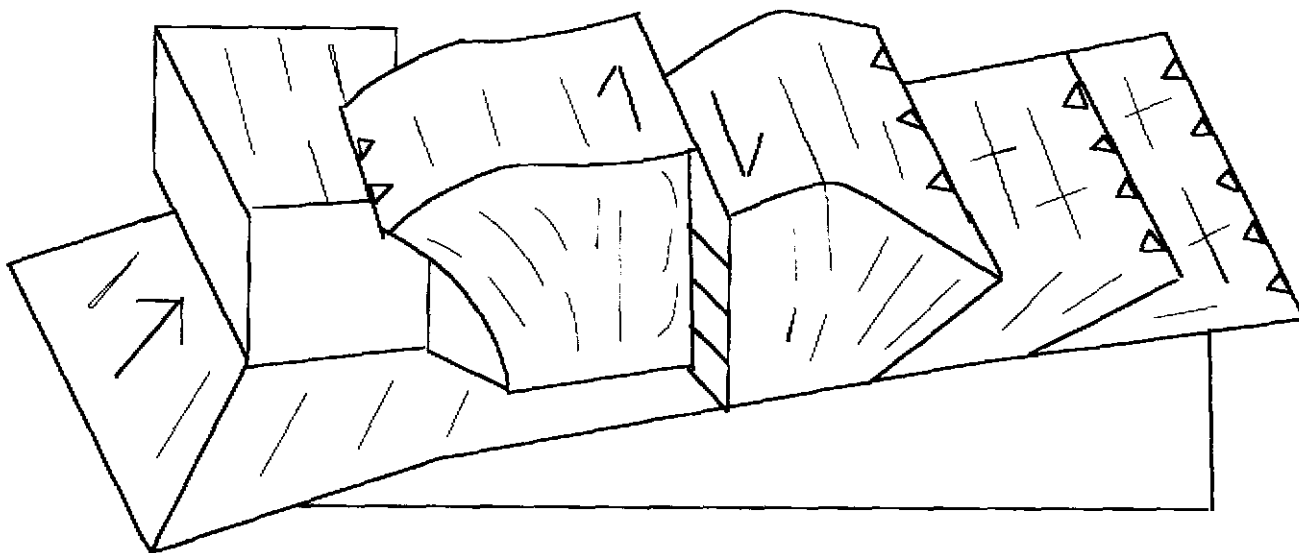


Figure 12.

Model of convergent transpression and tectonic wedging over a low-angle detachment. As the deforming mass of rock is thrust eastward toward the foreland, tectonic wedging on the hinterland side produces west vergent back thrusts and transpression produces zones of strike-slip shear. East vergent thrusting, west vergent back thrusting, and strike-slip shear partitioned in space and in time produced the array of strain domains in the Teslin tectonic zone.

From: American Geophysical Union

Tectonics, Vol. 15, No. 6, pg. 1359

December, 1996 by Robert A. Stevens and Philippe Erdmer

Structural divergence and transpression in the Teslin tectonic zone, southern Yukon Territory.

found frequently in fractures and along the bedding or schistosity of the rocks. Aerial magnetometer surveys show a couple of small magnetic highs. The first extends across Livingstone Creek in the area of Sheen's Gulch; the second extends across the lower end of Summit Creek. A ground magnetic survey over the area in Livingstone Creek (Data included in this report) showed the source to be a chlorite schist containing small magnetite crystals. This rock is believed to be the metamorphic equivalent of a basic volcanic.

White bull quartz-calcite veins or boudins are found in the depressions mentioned earlier. The quartz-calcite veins have widths from 4 inches up to 4 feet, but are most commonly 1 to 2 feet wide. The gold mineralization is believed to be in or associated with these quartz-calcite veins or boudins. The depressions are faults or shear zones having a strike between 320° - 340° Az. and appear to have westerly dips between 65° - 75° . The faults have widths of 2 - 10 metres but are usually 3 - 5 metres wide. The approach of a fault or shear zone is recognized by the alteration of biotite schist to chlorite schist then to sericite schist. This is accompanied by stronger shearing and increased light to dark brown iron oxide as a fault is approached. The faults are more closely spaced directly east of the Big Salmon Fault and more widely spaced further toward the east (See Tracings of Air Photo Lineations Drawing).

MINERALIZATION:

After having read Stroink and Friedrich (1992) the gold mineralization was believed to be in or associated with the quartz-calcite veins or boudins. Very little mineralization other than trace oxidized pyrite was seen in any of the quartz exposed on surface. The best

gold, arsenic, and copper values seemed to come from samples which had strong iron and manganese staining and/or the presence of graphitic material.

Pyrite, galena, and copper and silver sulphides were not present in the quartz from the ridges and gullies. This mineralization was only seen in vein quartz from the Horseshoe Adit (See 1997 Work Areas on Cam Claims) and from a quartz vein in the placer workings on Livingstone Creek. It was concluded that the mineralization had been concentrated below a certain elevation; possibly a paleo-watertable.

The mineralization on the property is believed to be concentrated within fault or shear zones visible on the aerial photographs and seen as the "notches" seen on the ridges and along the hillsides as mentioned earlier. Mineralization is expected to be concentrated near quartz boudins within the shear zones and associated with small amounts of sulphide minerals, iron oxides and graphitic material as found at the Macraes Mine in New Zealand. It is probable that the mineralization will be concentrated within "pockets" within the shear zones. It is expected that "pockets" of economic grade mineralization will be located within adjacent shears which will allow a single open pit to be used in mining both "pockets".

The Livingstone property appears to have several similarities to the Macraes Mine in New Zealand. The similarities provided below will be followed up with exploration during 1998.

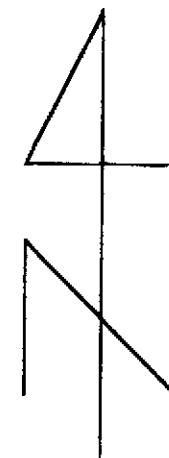
Similarities with the Macraes Mine:

1. East-west compressional plate collision; complex folding and green schist to amphibolite grade metamorphism with rapid uplift. (The new tectonic model for the Teslin Zone does not appear to drastically change this similarity).
2. Long shear length 20 - 30 km.; shear width usually 3 - 5 m.

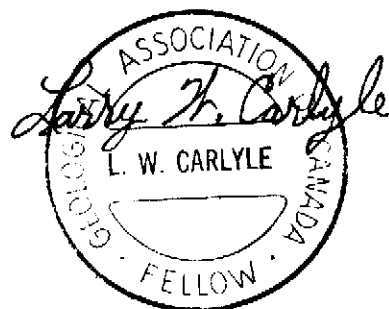
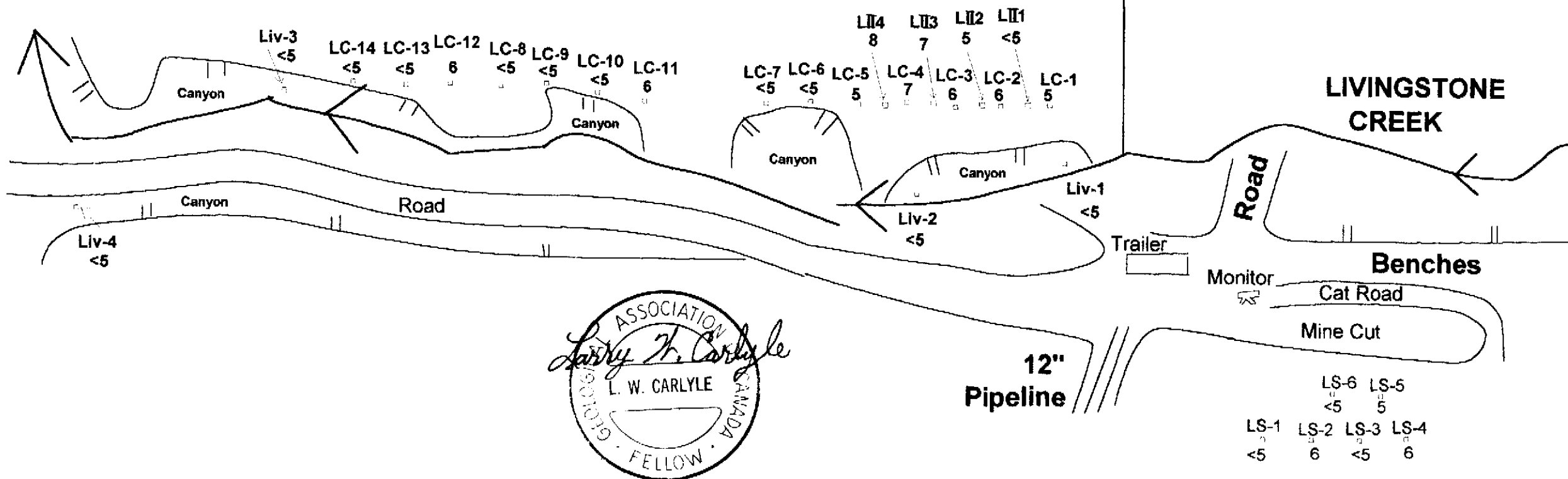
LIVINGSTONE CREEK ROCK & SOIL SAMPLES

SCALE: 1cm = 50 m

SHEEN'S
GULCH



Sample Number
Gold Value (ppb)

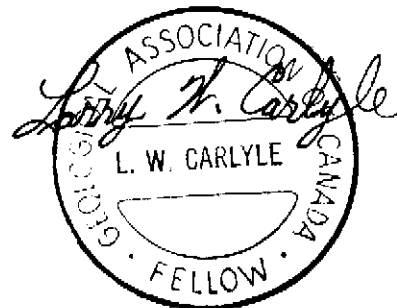
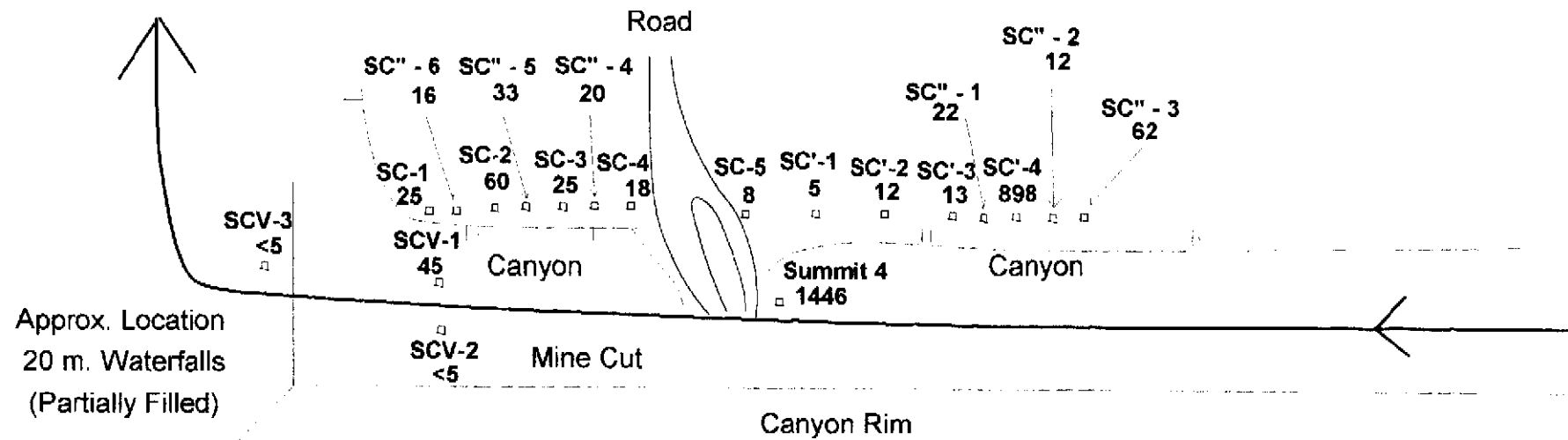
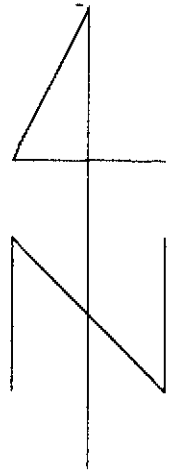


SUMMIT CREEK

ROCK & SOIL SAMPLES

SCALE : 1 cm = 50 m

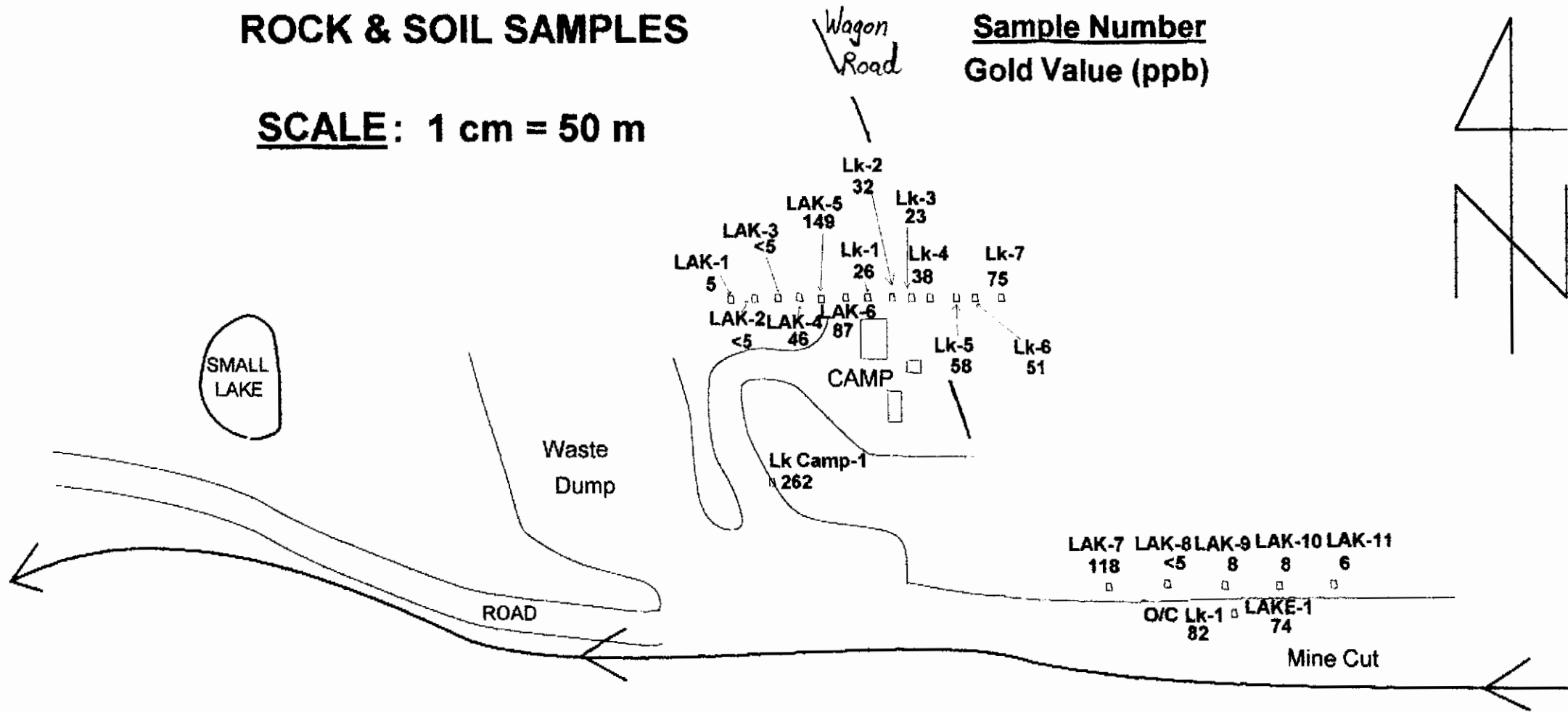
Sample Number
Gold Value (ppb)



LAKE CREEK ROCK & SOIL SAMPLES

SCALE: 1 cm = 50 m

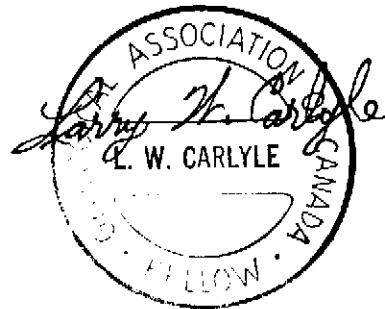
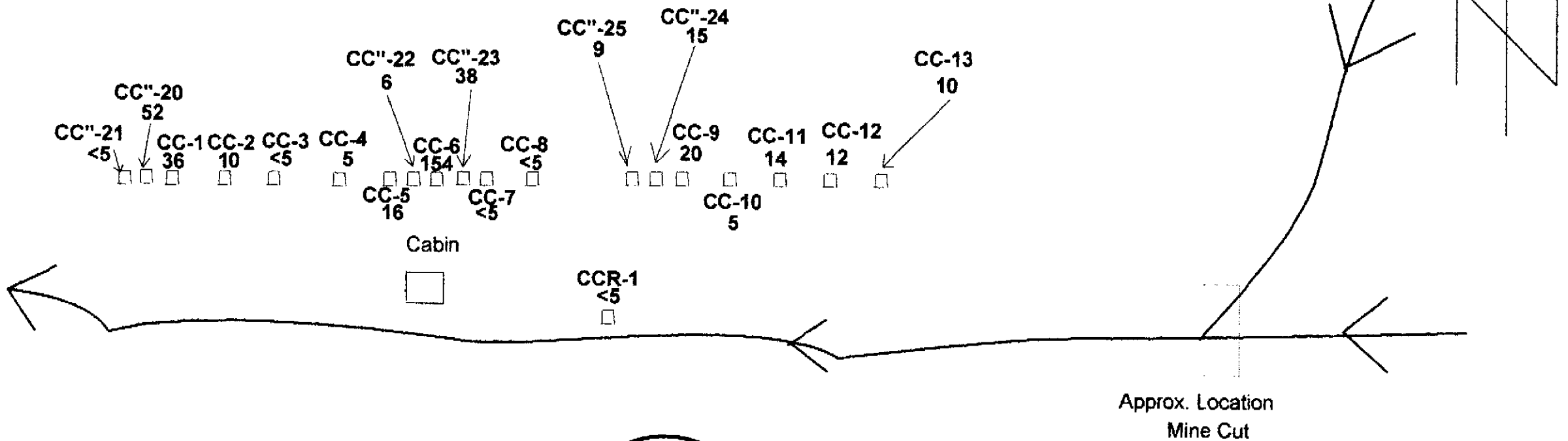
Sample Number
Gold Value (ppb)



COTTONEVA CREEK ROCK & SOIL SAMPLES

SCALE : 1 cm = 50 m

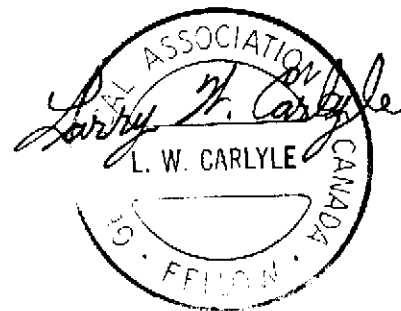
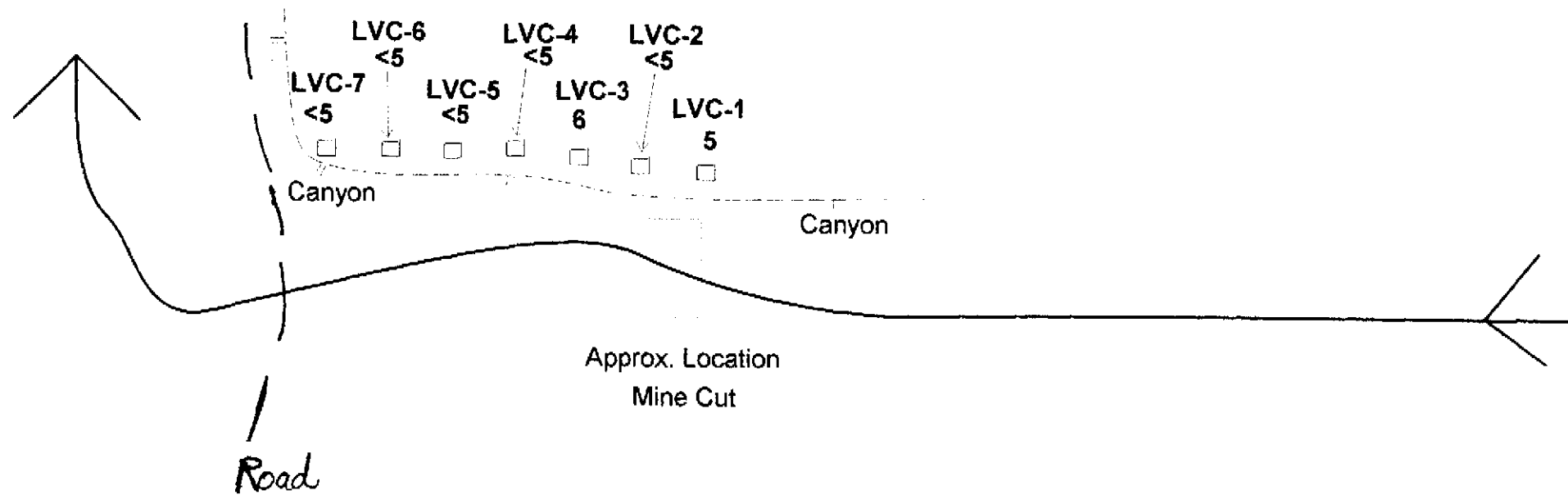
Sample Number
Gold Value (ppb)

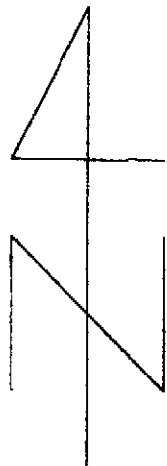


LITTLE VIOLET CREEK SOIL SAMPLES

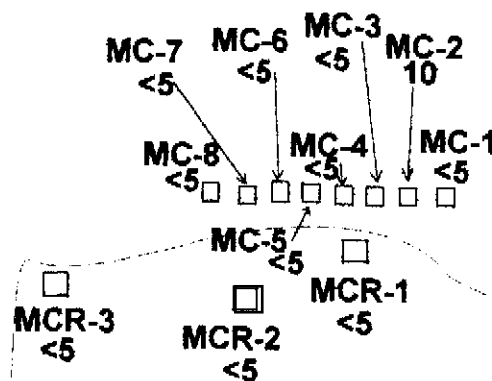
SCALE : 1 cm = 50 m

Sample Number
Gold Value (ppb)





Sample Number
Gold Value (ppb)



MENDOCINA CREEK ROCK & SOIL SAMPLES

SCALE: 1 cm = 50 m

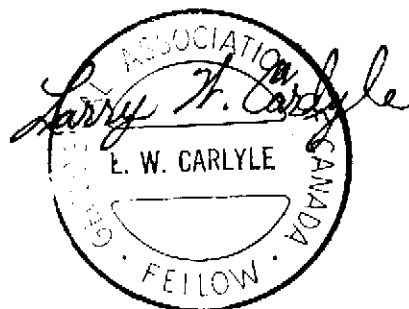
Steep Slope with many Rock Bluffs

MCR-4
<5

N. Edge Road
2-3 km from crossing

Big Salmon
River Road

Dycer Creek Road



3. Early Cretaceous mineralization age; mineralization native gold and 2 - 3% sulphides. (Late Cretaceous [98 Ma.] emplacement of intrusives, formation of D'Abbadie Fault, and dextral shearing from the latest data.)
4. Best gold values found in areas of high graphitic content.

Statistics on Macraes Mine:

Production: 12 months ending June 30, 1997 128,797 oz. Au from 3 million tonnes of ore.

Reserves: 105.47 million tonnes @ 1.44 g/t. (Cut off 0.7 g/t.)tonnes.

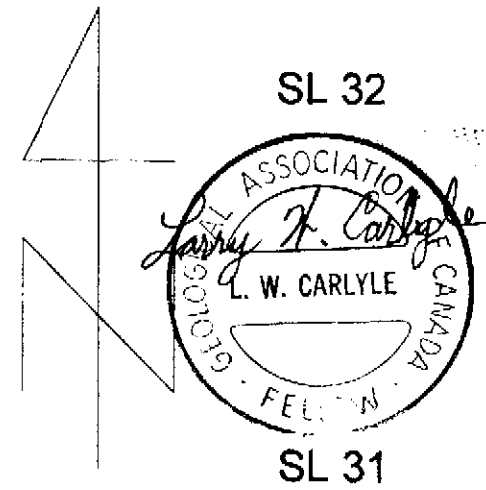
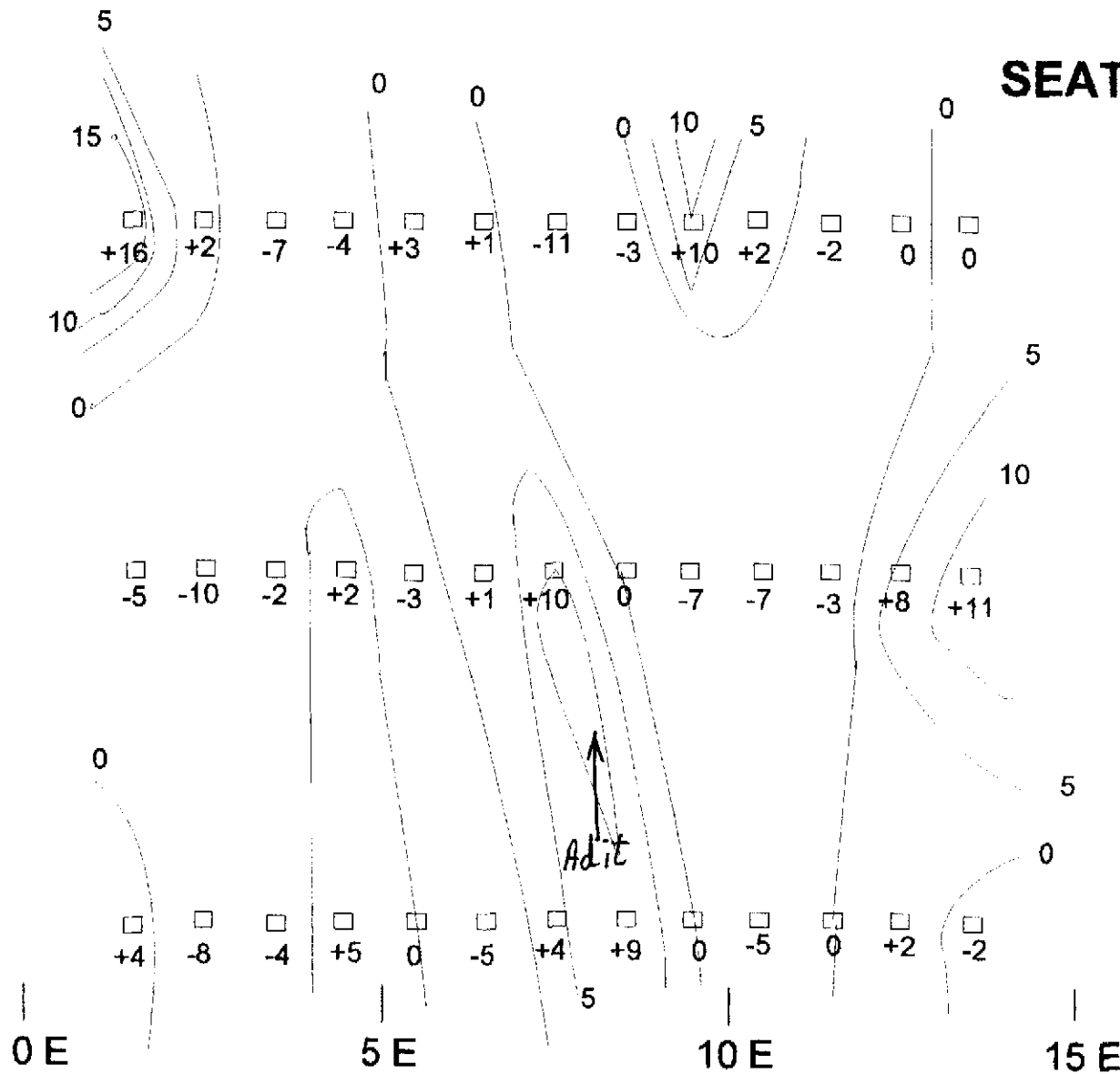
1997 WORK PROGRAM:

The work undertaken in 1997 consisted of some rock sampling, soil sampling and ground VLF-EM surveying (See 1997 Work Areas on Cam Claims). These data are included as part of this submission. Soil samples were taken in undisturbed ground along the north rims of all of the creeks in the claim block since the overburden was expected to be thinner there as well as permafrost free. A significant number of samples returned sporadic gold values above an arbitrary 10 ppb. background. Soil samples having greater than 100 ppb.(0.1 g/t) values in gold were returned from the adit area of Livingstone Creek, and Summit, Lake, and Cottoneva Creeks (See appropriate sketches, included). Ground VLF-EM surveys done along Livingstone, Summit, and Lake Creeks; over the adit area; as well as along the ridges between Livingstone and Summit Creeks and Summit and Lake Creeks; confirmed the existence of the faults seen as air photo lineations.

The best soil sample had a grade of 898 ppb.(0.9 g/t) and came from Summit Creek.

The best rock sample came from a 0.5 m. quartz veinlet in Summit Creek and had a gold

ADIT AREA FRASER FILTERED VLF SURVEY SEATTLE TRANSMITTER



SCALE:
1 cm = 20 m

L 3

<5 <5 <5 <5 7 <5 11 6 <5 11 6

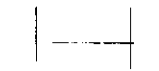
L 2

20 <5 5 8 <5 I.S. <5 <5 <5 140 9

50 m

L 1

<5 15 8 6 10 7 5 <5 5 18 5



20 m



Adit

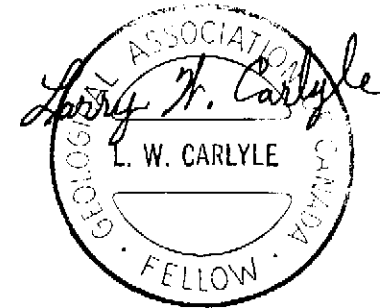
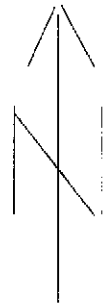
L 4

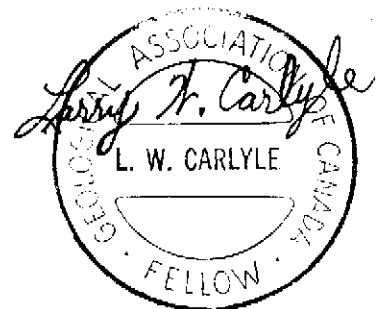
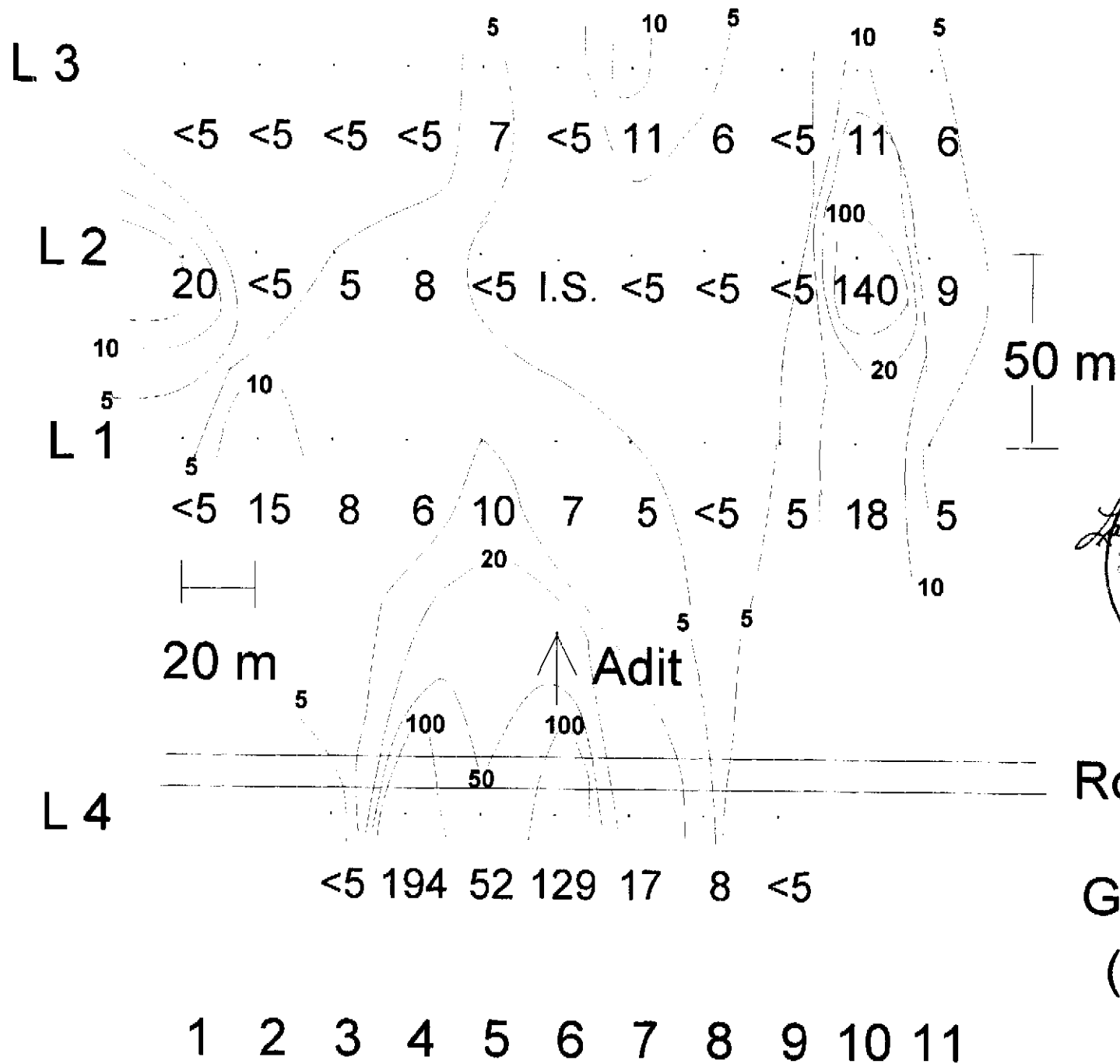
<5 194 52 129 17 8 <5

Road

GOLD
(ppb)

1 2 3 4 5 6 7 8 9 10 11





L 3

<5 <5 6 <5 <5 <5 <5 <5 <5 <5 <5

L 2

23 9 7 11 7 10 <5 <5 9 5 <5

L 1

<5 10 10 6 <5 <5 <5 <5 <5 <5 20

20 m

Adit

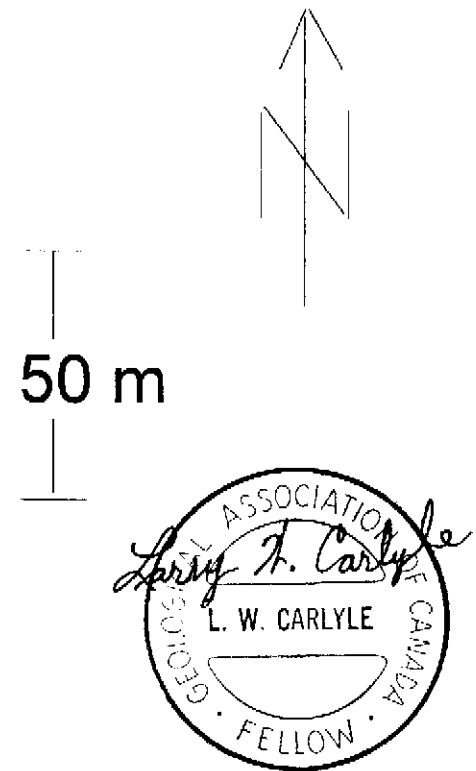
L 4

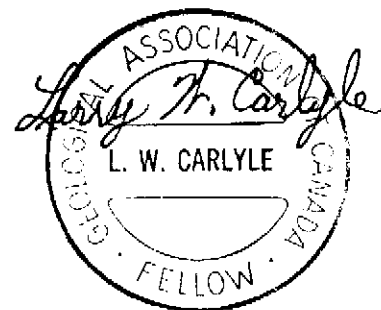
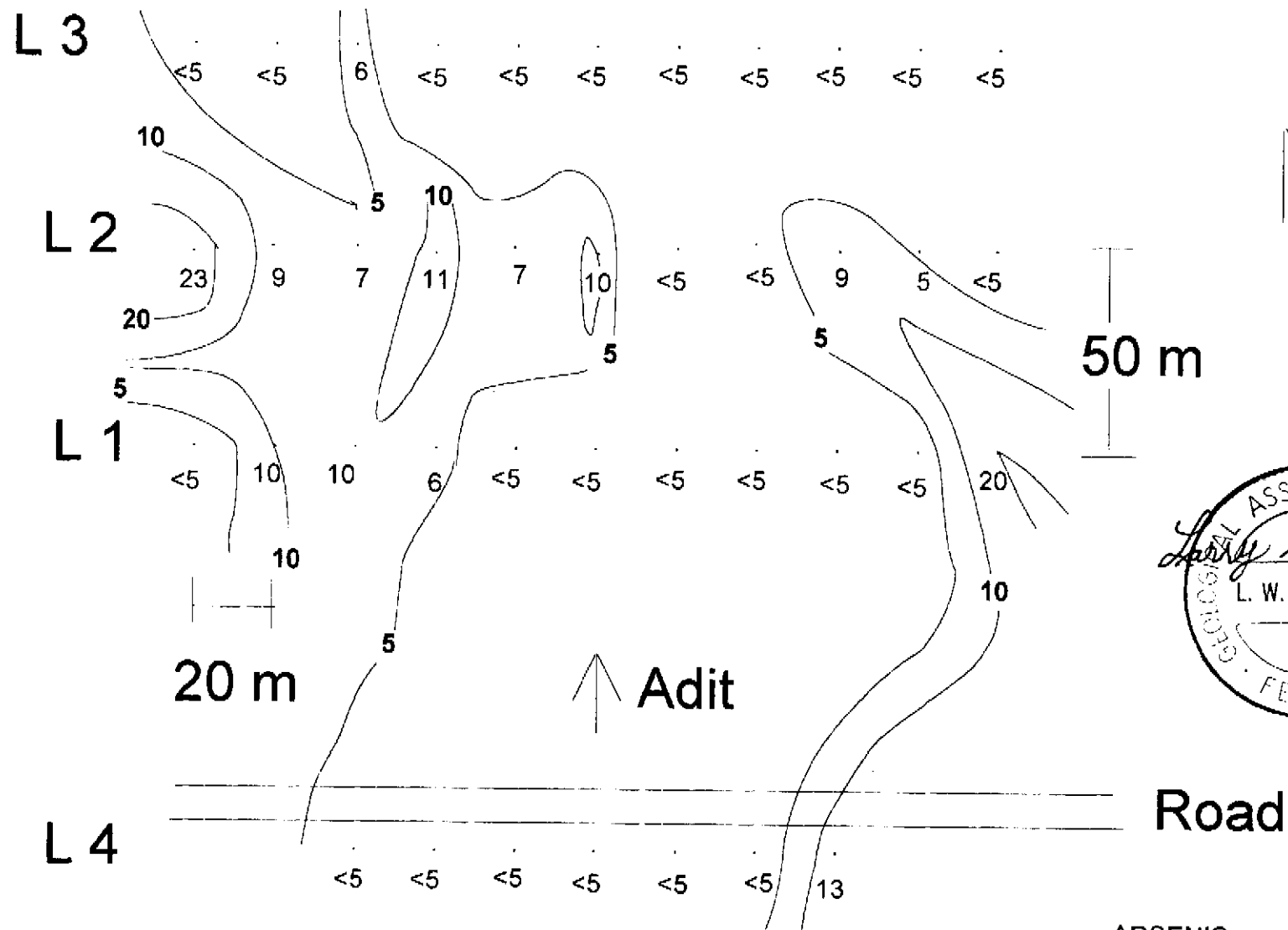
<5 <5 <5 <5 <5 <5 13

Road

ARSENIC
(ppm)

1 2 3 4 5 6 7 8 9 10 11





ARSENIC
(ppm)

1 2 3 4 5 6 7 8 9 10 11

L 3

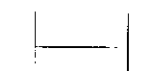
19 18 58 21 26 12 25 21 16 17 18

L 2

48 27 18 33 9 4 17 15 26 31 22

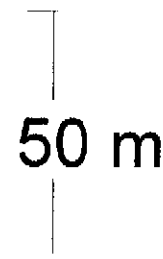
L 1

12 5 20 13 41 20 11 21 21 23 43

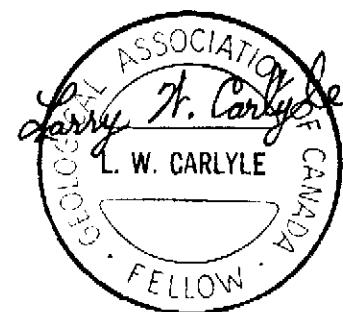


20 m

↑ Adit



50 m



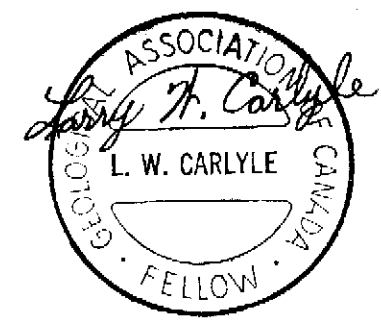
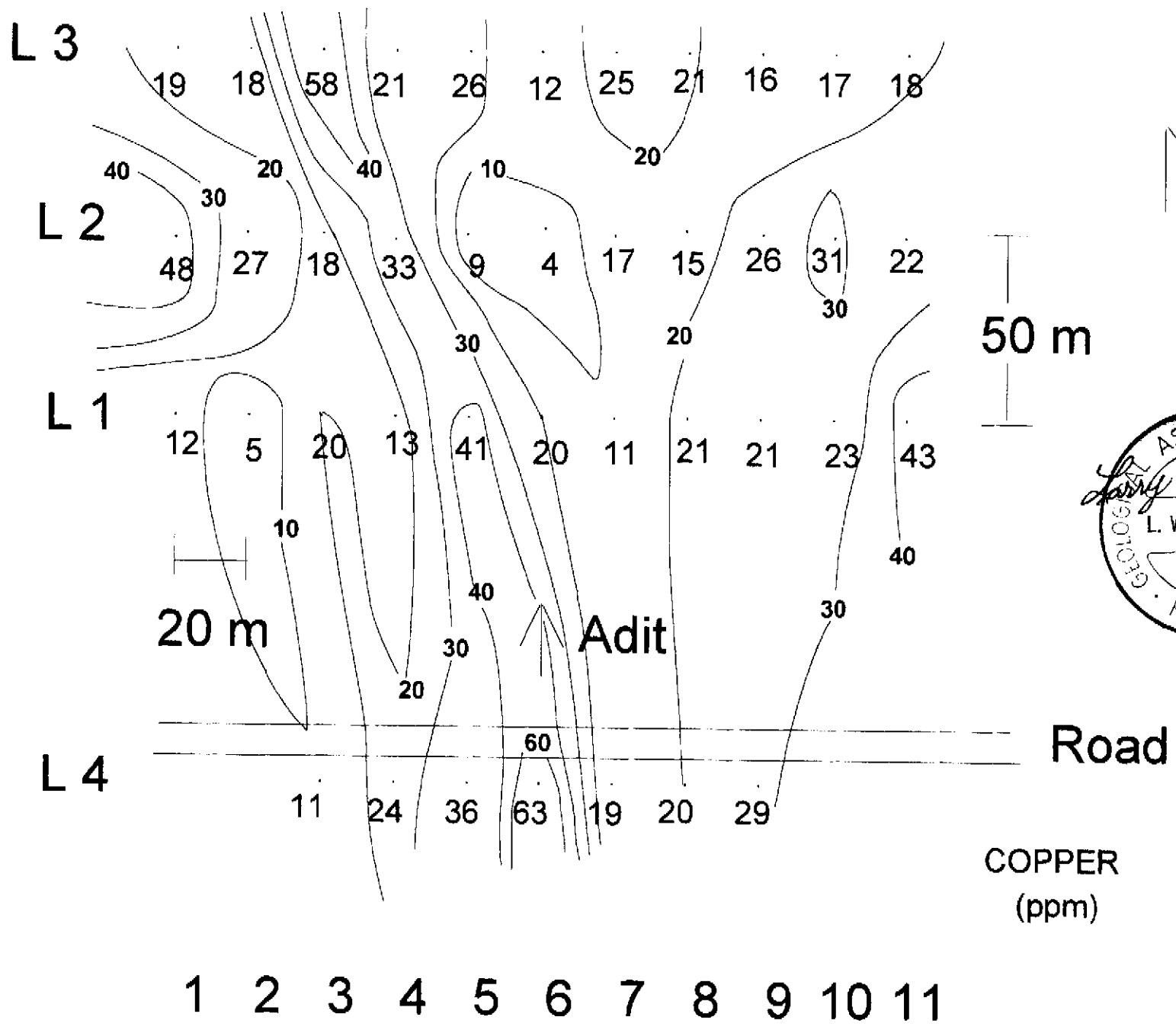
L 4

11 24 36 63 19 20 29

Road

COPPER
(ppm)

1 2 3 4 5 6 7 8 9 10 11



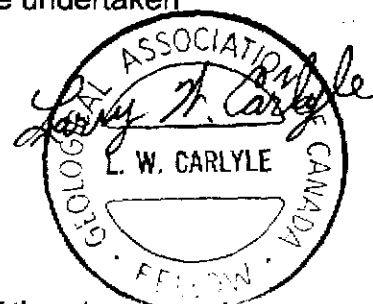
grade of 1446 ppb.(1.4 g/t) [See Summit Creek Sketch]. The area from which these samples came is expected to extend through a "notch" between Summit and Lake Creeks and into the Lake Creek Notch area (marked as "Work Area" on Lake Creek). The Lake Creek Notch area (former location of the Max Fuerstner camp) returned a significant number of gold values over 100 ppb. and also showed a strong VLF response. The Notch area is expected to extend to the lower portions of Cottoneva Creek because it contains strong air photo lineations (See Drawings). The "oldtimers" also had a wagon road through the area connecting the two creeks.

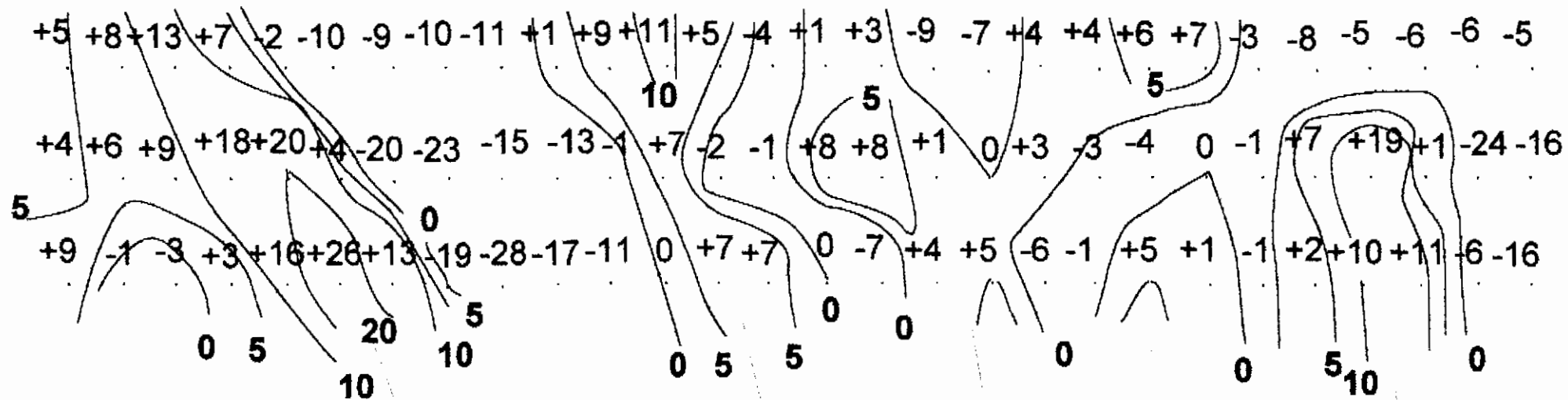
The "Work Area" on Cottoneva Creek is located approximately ½ mile upstream from where the wagon road left the creek. The work area contains a cabin and is now where the Max Fuerstner camp is located since it was moved from Lake Creek in the early winter of 1997.

Poor gold values were obtained from soil and rock samples taken along the lower ends of Livingstone, Little Violet, and Mendocina Creeks (See appropriate sketches). It is not certain why this occurred; however, additional work in the areas will be undertaken during 1998 to better understand the geology.

CONCLUSIONS:

1. Soil samples taken in undisturbed areas along the north rims of the placer creeks show anomalous values in gold, copper, and arsenic in areas where shear zones are expected to occur. Several of these anomalous values come from areas where placer concentration of the gold by creek flow is not possible; ie: anomalous





SL 10

SL 9

SL 8

N = 350

VLF SURVEY ALONG RIDGES BETWEEN LIVINGSTONE AND SUMMIT CREEKS

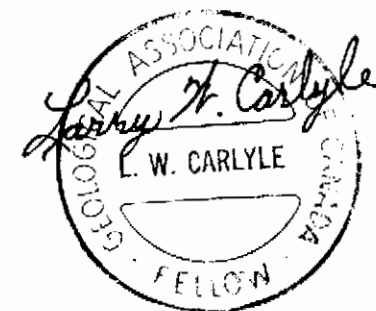
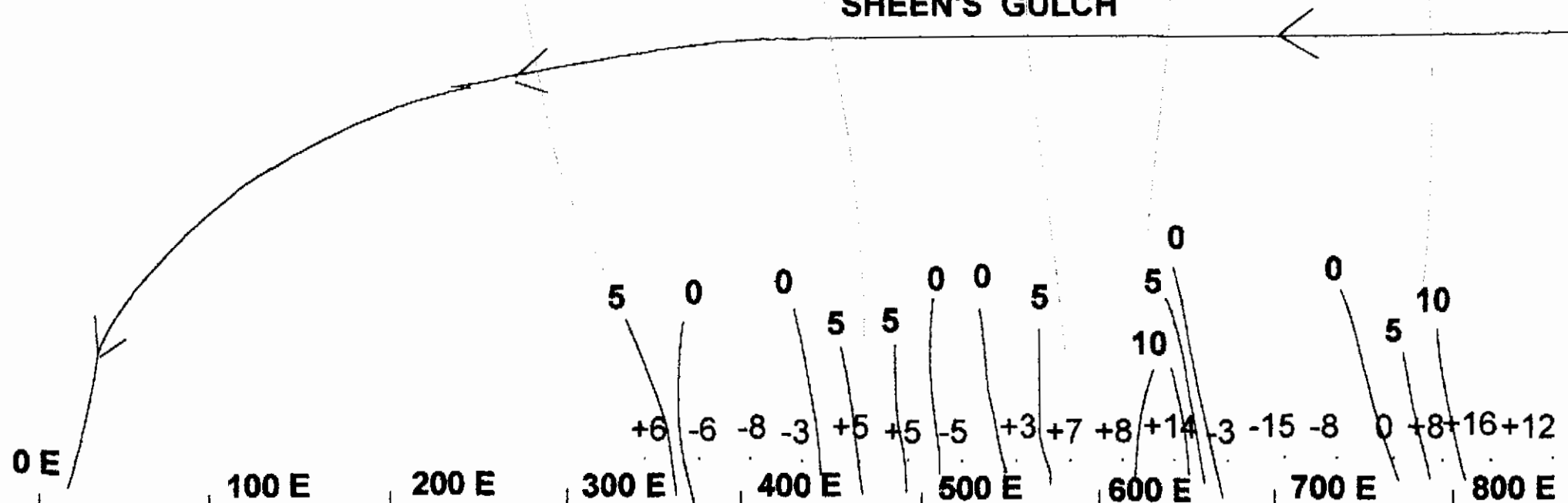
FRASER FILTERED DATA

SEATTLE TRANSMITTER

SCALE: VERTICAL: 0.9 cm = 50 m

HORIZONTAL: 0.9 cm = 30 m

SHEEN'S GULCH



SL 7

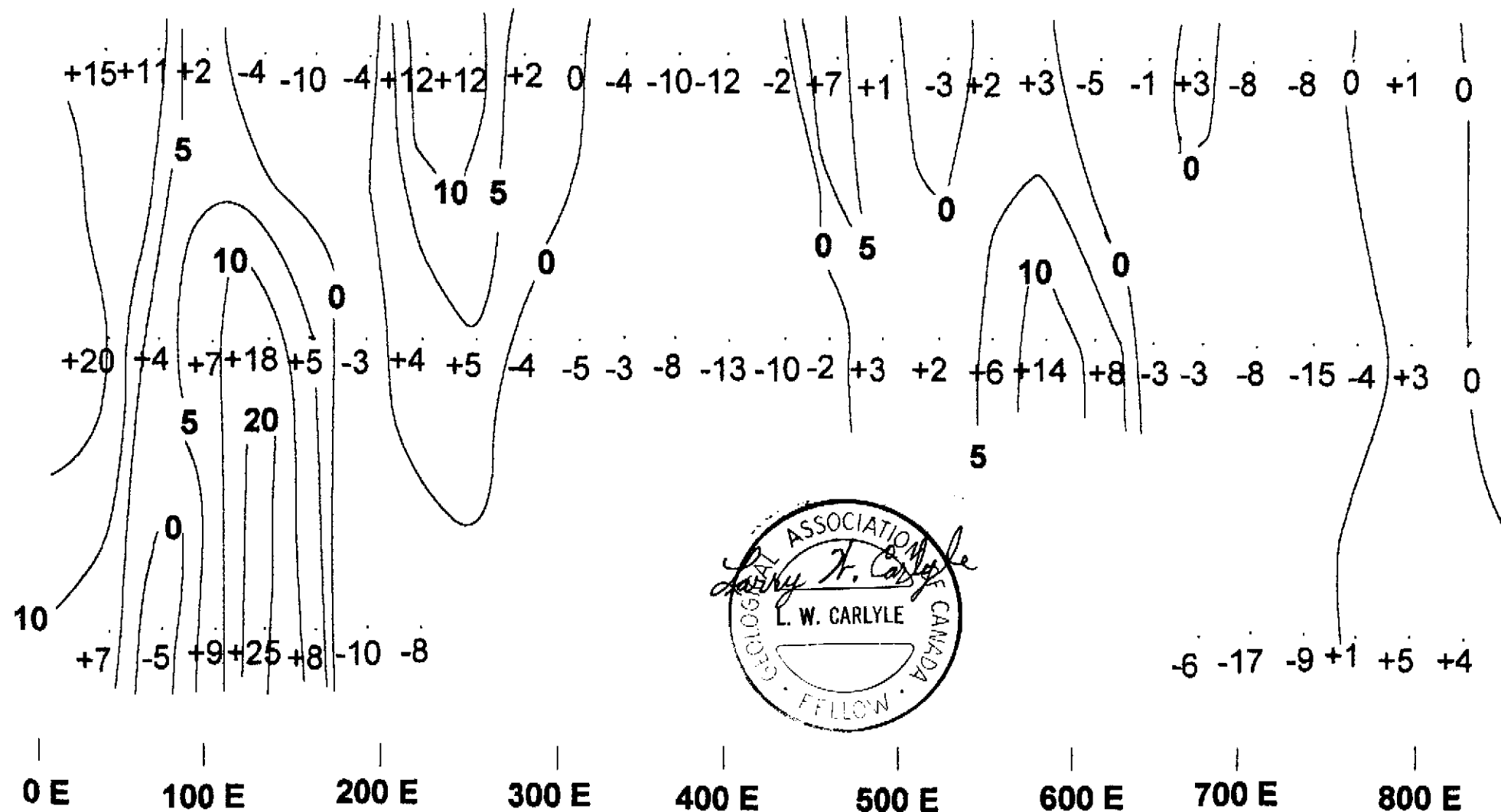
VLF SURVEY ALONG RIDGE BETWEEN SUMMIT AND LAKE CREEKS

FRASER FILTERED DATA

SEATTLE TRANSMITTER

SCALE: VERTICAL: 1 cm = 20 m

HORIZONTAL: 0.9 cm = 30 m



LIVINGSTONE CREEK

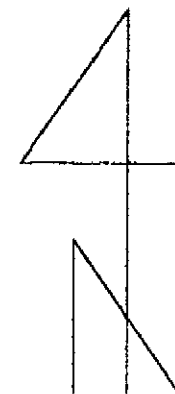
FRASER FILTERED

VLF SURVEY

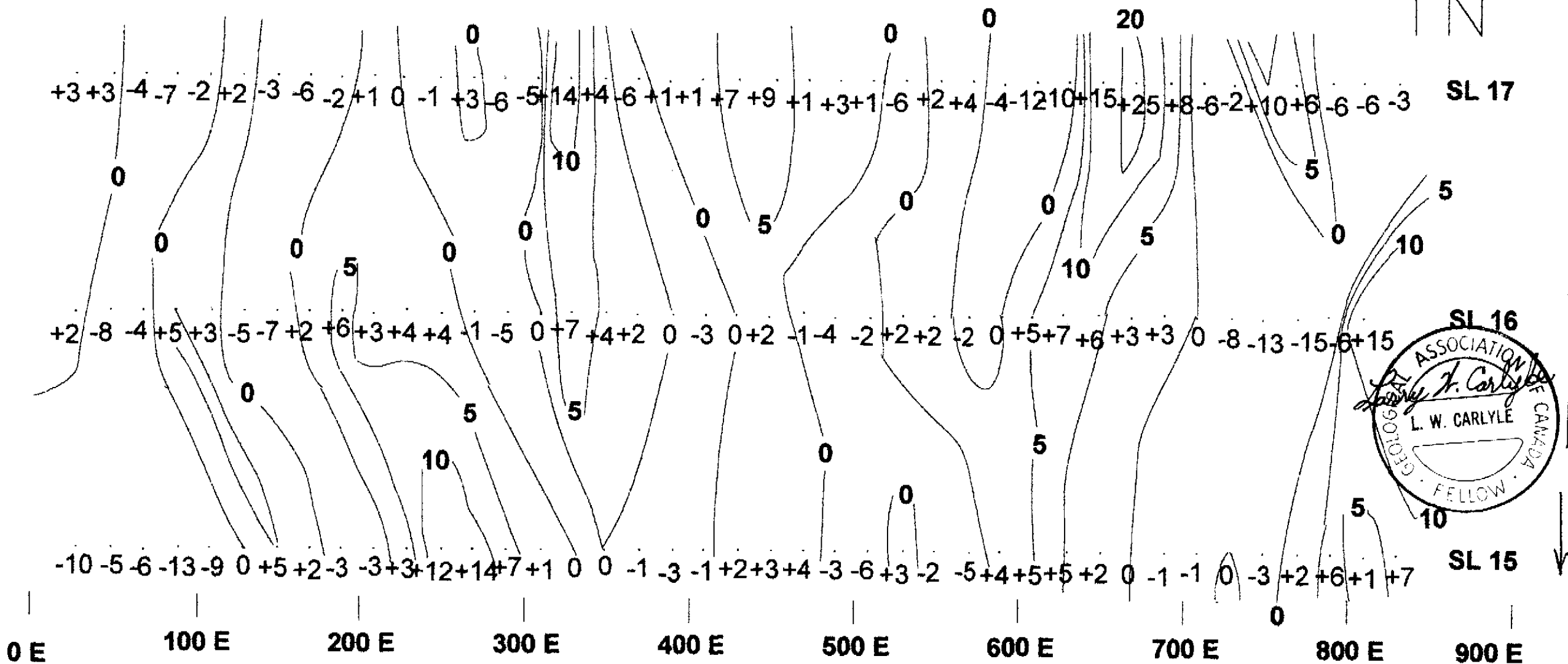
SEATTLE TRANSMITTER

SCALE: VERTICAL: 1 cm = 20 m

HORIZONTAL: 0.7 cm = 20 m

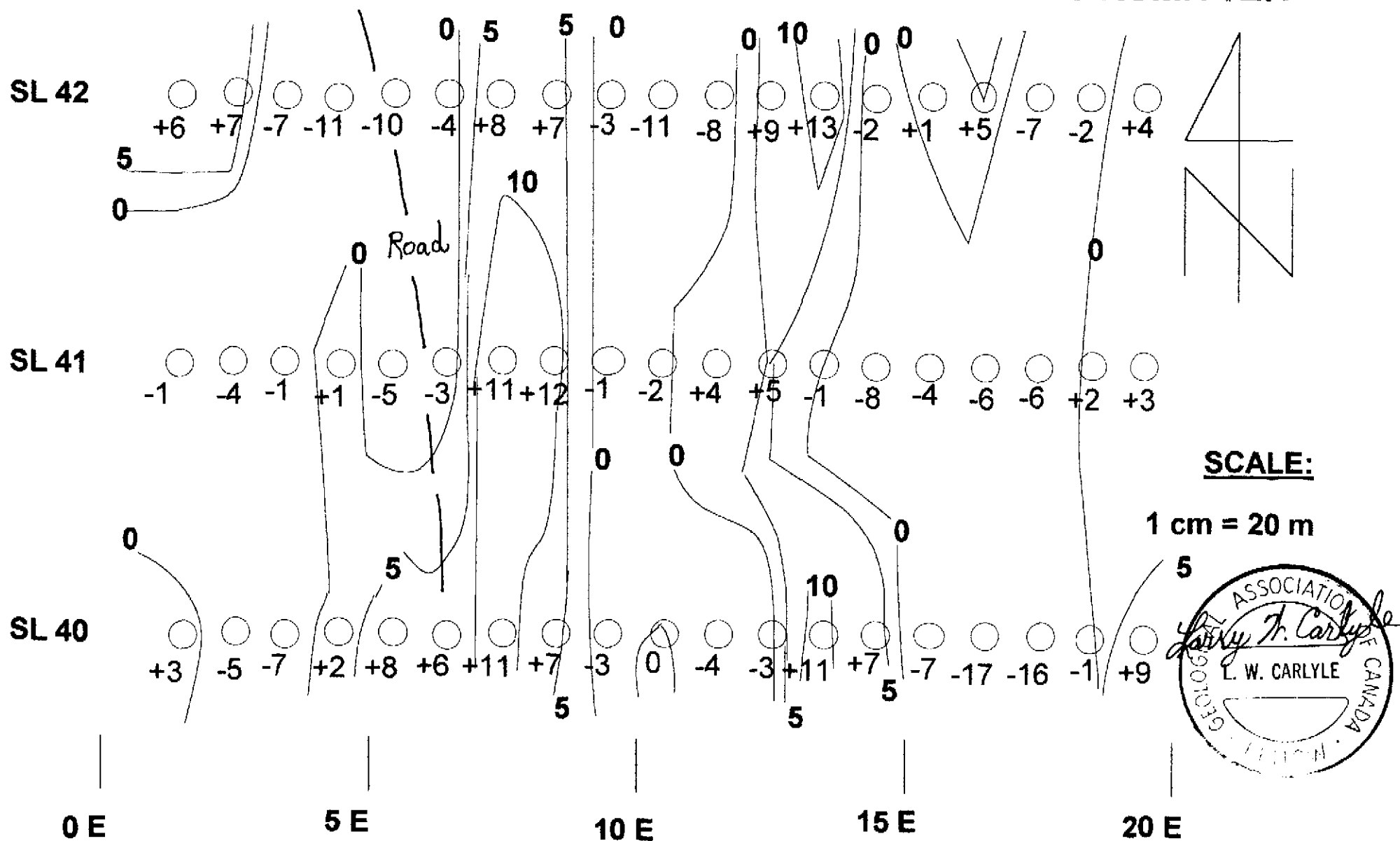


Sheen's
Gulch



SUMMIT CREEK

FRASER FILTERED VLF SURVEY SEATTLE TRANSMITTER

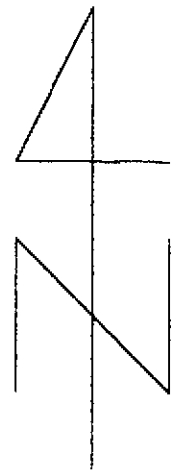
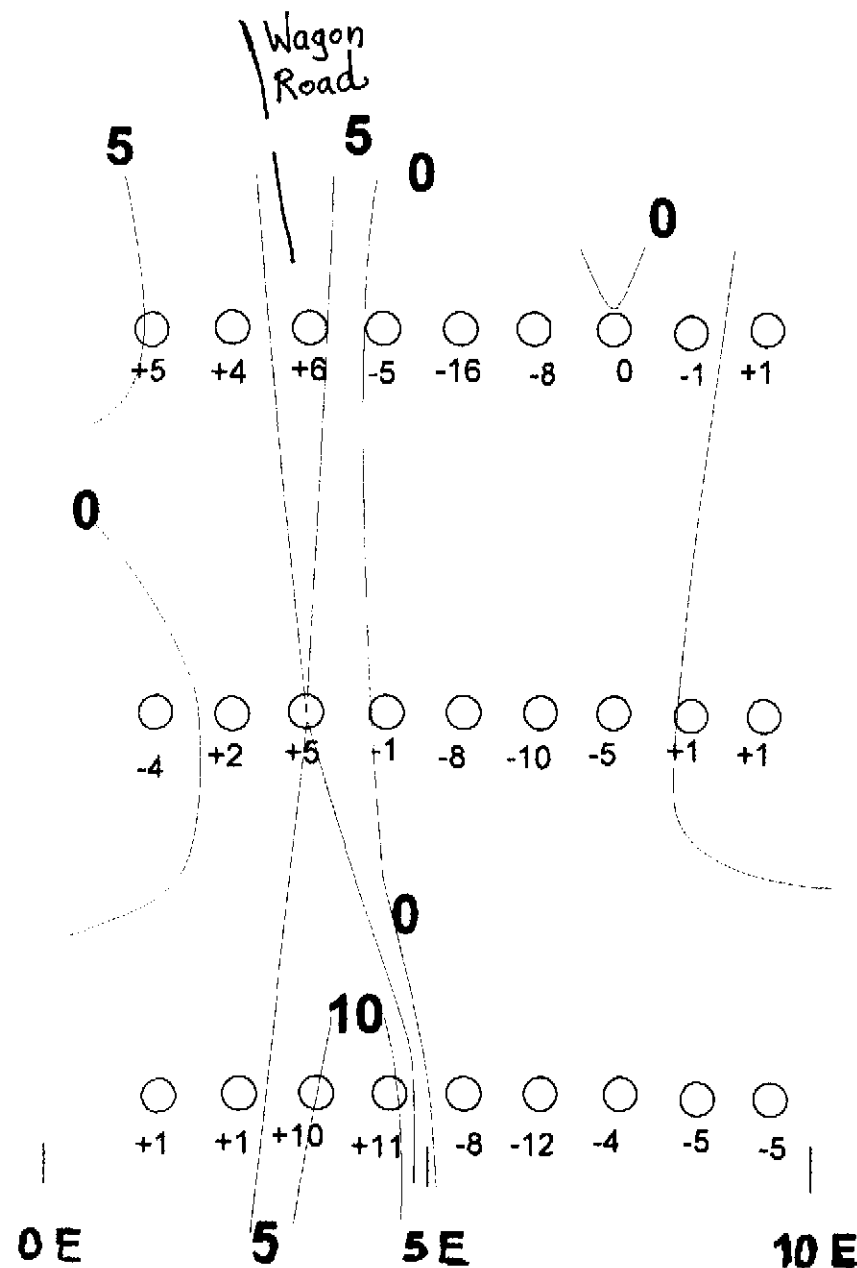


LAKE CREEK NOTCH FRASER FILTERED VLF SURVEY SEATTLE TRANSMITTER

SL 22

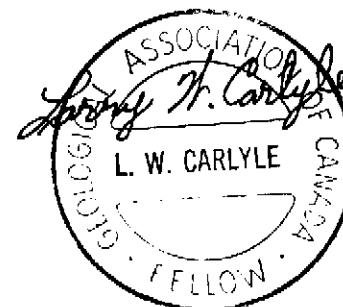
SL 21

SL 20



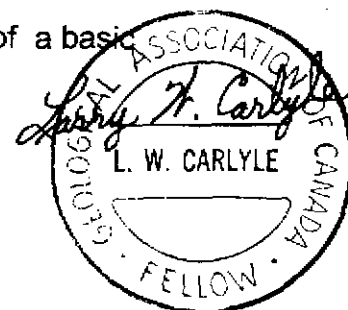
SCALE:

1 cm = 20 m



values in the area of the adit located approximately 50 metres above and at least 200 metres north of Livingstone Creek.

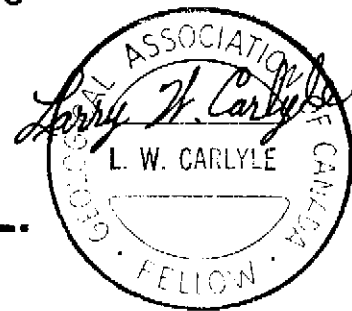
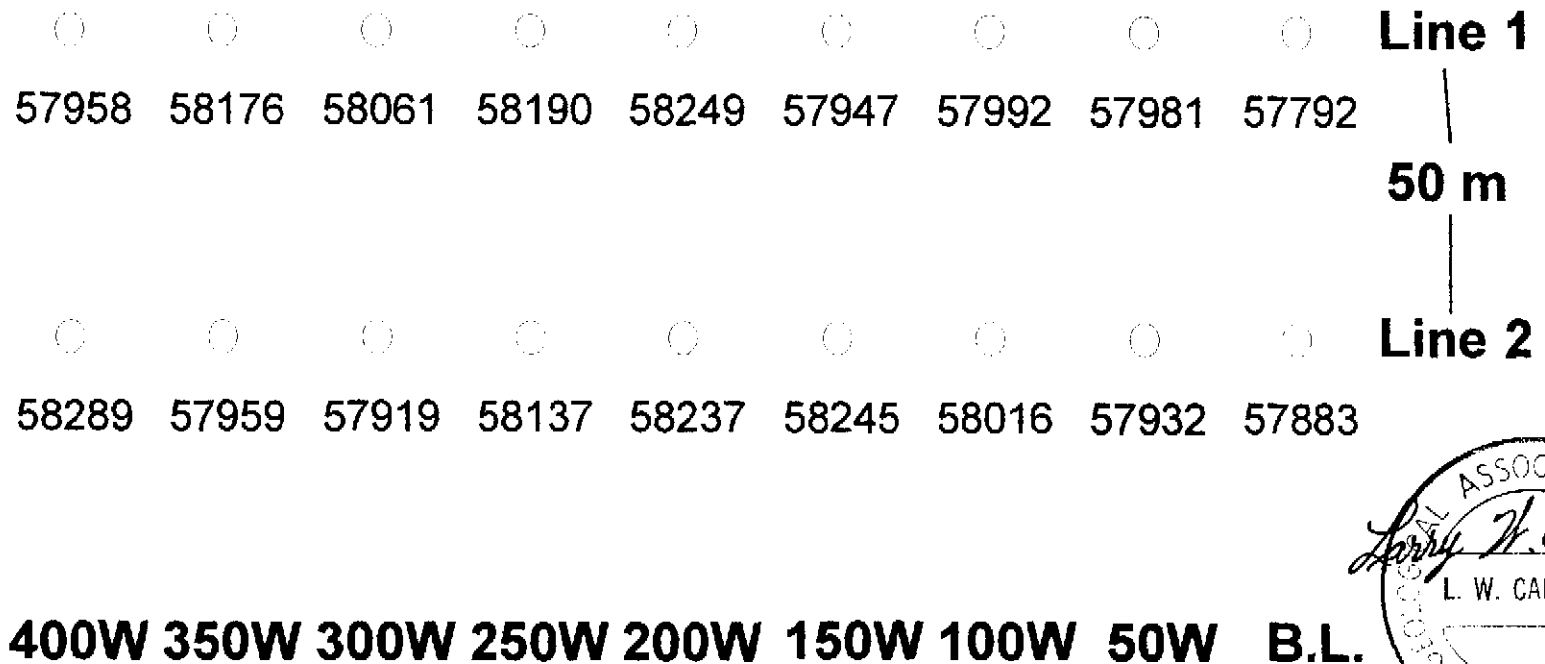
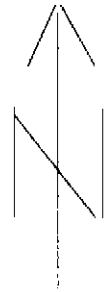
2. Ground VLF-EM surveys confirm the presence of the shear zones seen on the ground as well as in the aerial photographs.
3. Ground magnetometer surveys conducted over aerial magnetic anomalies confirms their existence. Their source is thought to be a chlorite schist containing small magnetite crystals, probably the metamorphic equivalent of a basic volcanic.



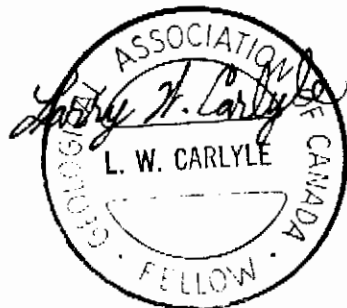
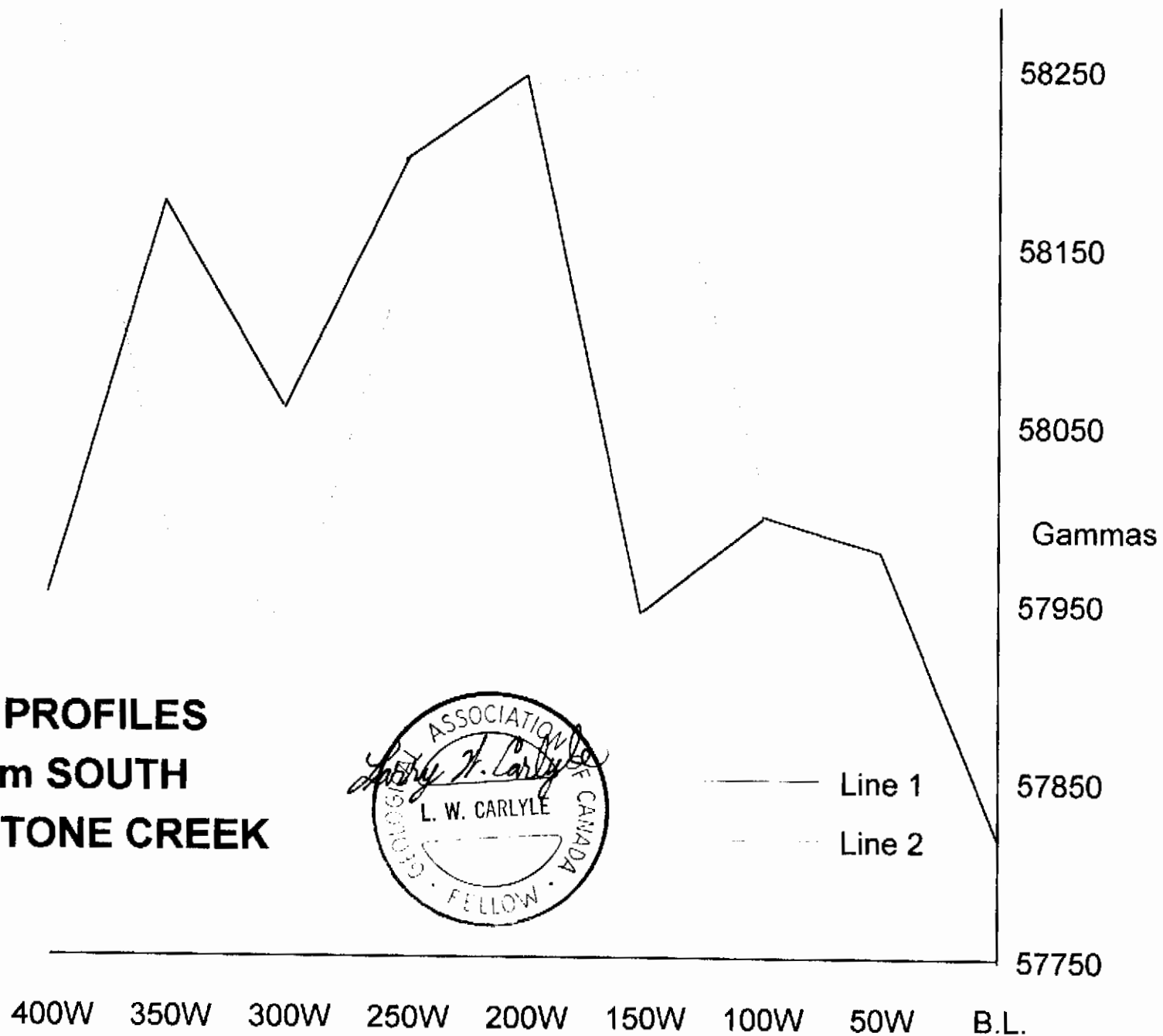
RECOMMENDATIONS:

1. Extend the soil sampling and VLF-EM grid from the area of known mineralization in the adit area for at least another 150 metres to the north. If the soil sampling increases the size of the anomaly, bulldozer trenching should be used to expose mineralization for chip sampling.
2. Soil sampling and VLF-EM surveying should be done to extend the 898 ppb. gold soil sample from the north rim of Summit Creek toward the Lake Creek Notch area.
3. Additional soil sampling and VLF-EM surveying should be used to extend the anomalies through the Lake Creek "Notch" toward Cottoncreek Creek along the "oldtimers" wagon road. The last line of soil samples taken during 1997 is approximately 100 metres north of Lake Creek just north of where Max Fuerstner

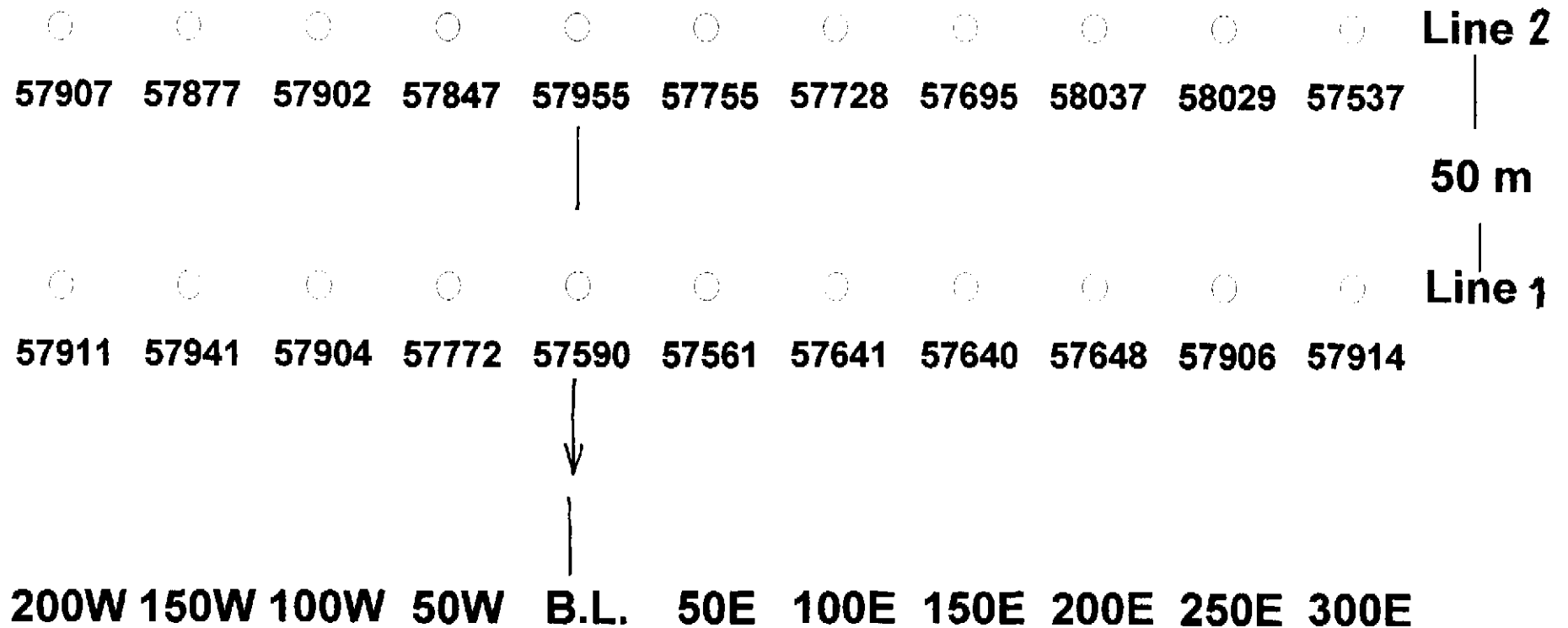
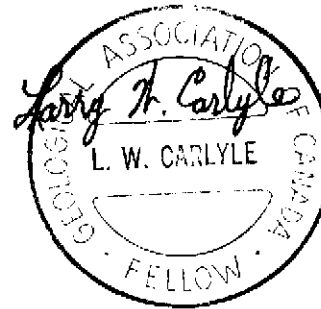
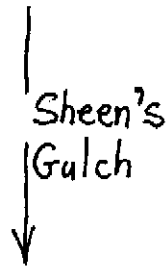
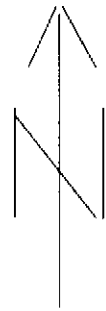
MAGNETOMETER SURVEY SOUTH OF LIVINGSTONE



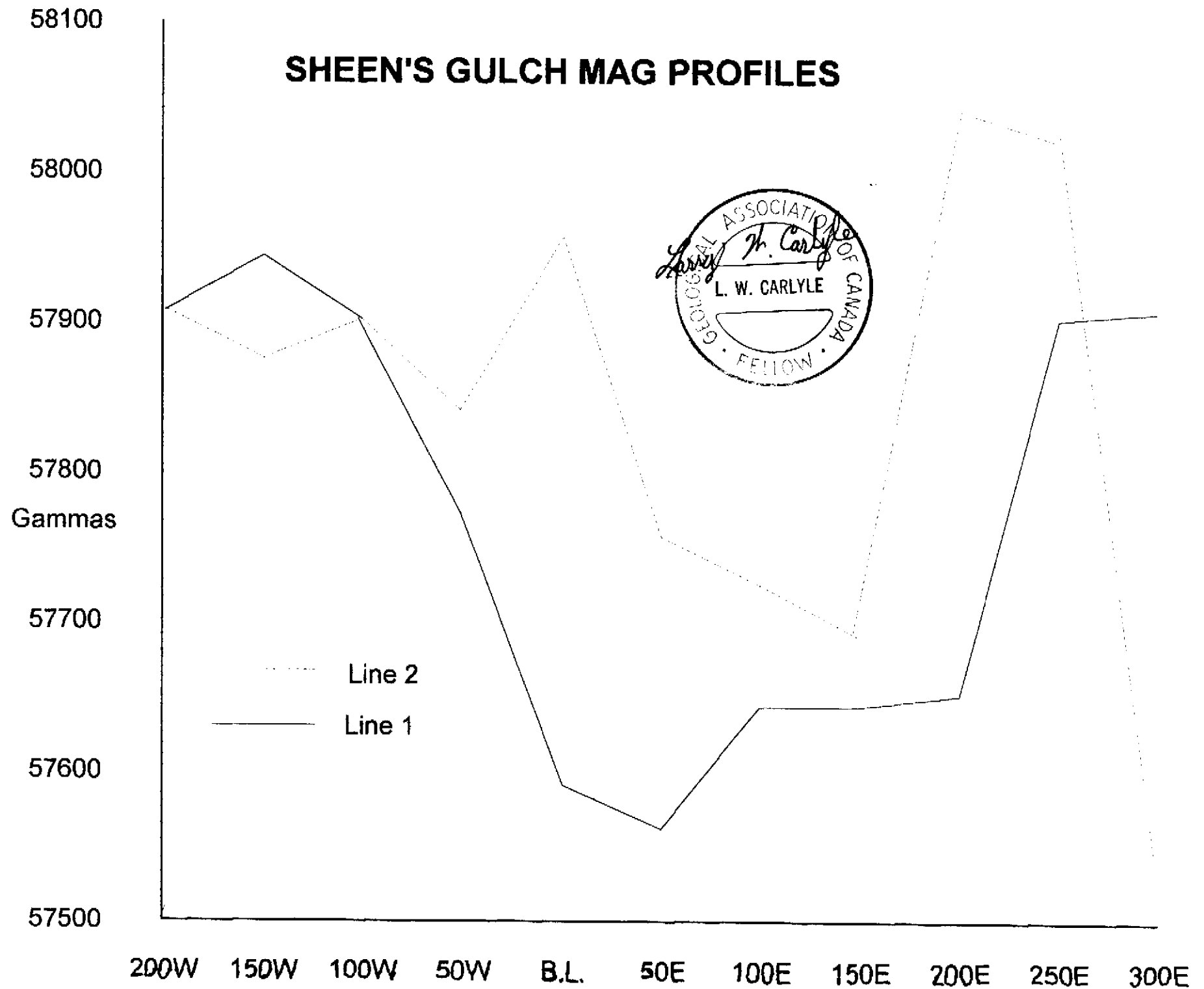
**MAG PROFILES
200 m SOUTH
LIVINGSTONE CREEK**



MAGNETOMETER SURVEY SHEEN'S GULCH



SHEEN'S GULCH MAG PROFILES

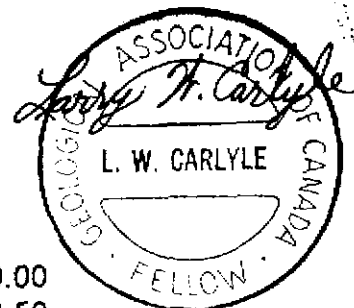


had had his camp. If this work shows the existence of an anomaly, backhoe or bulldozer trenching should be used to expose bedrock for sampling.

4. Anomalous gold values obtained from soil sampling in the area of the cabin on Cottoneva Creek should be extended toward Little Violet Creek by grid soil sampling and VLF-EM surveys.
5. The unexpectedly low gold values in soil and rock samples taken over the canyon area of lower Livingstone Creek (where most of the placer gold has been obtained) is a puzzle. Other puzzles are the low gold values obtained from soil samples at Little Violet and Mendocina Creeks. Additional prospecting, rock and soil sampling, and VLF-EM surveying will be needed in all of these areas to find explanations.

STATEMENT OF COSTS:

Field Assistant	\$ 4,810.00
Assay Costs	\$ 2,873.50
Air Craft Charters	\$ 2,585.15 *
Field Equipment (Wire, Compass, Hip Chain, Flagging)	\$ 333.73
Field Assistant Room & Board (37 days @ \$35/day)	\$ 1,295.00
Carlyle Room & Board (12 days @ \$35/day)	\$ 420.00
Carlyle Labour (12 days @ \$50/day)	\$ 600.00
Soil Sample Bags (125 @ \$0.25 ea.)	\$ 31.25
Rock Sample Bags (29 @ \$0.28 ea.)	\$ 8.12
ATV Rental (3 mths.)	\$ 2,043.70
Vehicle & ATV Fuel & Oil	\$ 200.00
Office Supplies	\$ 58.22
Report Writing	\$ 1,500.00
Total	\$ 16,758.67



* This cost includes an estimate of \$200.00 for the flying of the ATV to and from Livingstone in a Summit Air "Shorts" with other freight for the placer miners.

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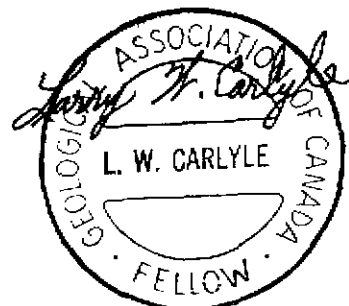
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STATEMENT OF QUALIFICATIONS

I, LARRY W. CARLYLE, do certify:

1. That I am a professional geologist; resident at 74 Tamarack Drive, Whitehorse, Yukon Y1A 4Y6.
2. That I hold a B. Sc. Degree in geology from the University of British Columbia (1970).
3. That I am a Fellow of the Geological Association of Canada (F - 4355).
4. That I am a Registered Professional Geologist in the Association of Professional Engineers, Geologists, and Geophysicists of the Province of Alberta (41097).
5. That I have practiced my profession as a mine and exploration geologist for twenty years.
6. The conclusions and recommendations in the attached report are based on work I performed or supervised on the property, and on a review of the references cited.

DATED at Whitehorse, Yukon, this 19th day of April, 1998.



APPENDIX A

VLF-EM SURVEY

DATA TABLES

VLF-EM Data
Livingstone Creek

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
15	0 E	4				15	300 E	6			
	20 E	4					320 E	7		1	
	40 E	9		-10			340 E	6		0	
	60 E	9		-5			360 E	7		0	
	80 E	9		-6			380 E	6		-1	
	100 E	15		-13			400 E	8		-3	
	120 E	16		-9			420 E	8		-1	
	140 E	17		0			440 E	7		2	
	160 E	14		5			460 E	7		3	
	180 E	14		2			480 E	5		4	
	200 E	15		-3			500 E	5		-3	
	220 E	16		-3			520 E	10		-6	
	240 E	16		3			540 E	6		3	
	260 E	12		12			560 E	6		-2	
	280 E	8		14			580 E	12		-5	
15				7		15					

VLF-EM Data
Livingstone Creek

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
15	600 E	5		4		16	0 E	12			
				5			20 E	11		2	
	620 E	9		5			40 E	8		-8	
	640 E	3		2			60 E	13		-4	
	660 E	6		0			80 E	14		5	
	680 E	4		-1			100 E	11		3	
	700 E	5		-1			120 E	11		-5	
	720 E	6		0			140 E	11		-7	
	740 E	4		-3			160 E	16		2	
	760 E	7		2			180 E	13		6	
	780 E	6		6			200 E	12		3	
	800 E	3		1			220 E	11		4	
	820 E	4		7			240 E	11		4	
	840 E	4					260 E	8		-1	
15	860 E	-4				16	280 E	10		-5	

VLF-EM Data

Livingstone Creek

[illegible]

VLF-EM Data
Livingstone Creek

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
17	0 E	10				17	300 E	12			
	20 E	10								-5	
				3			320 E	22			
	40 E	10		3			340 E	8		14	
	60 E	7		-4			360 E	12		4	
	80 E	10		-7			380 E	14		-6	
	100 E	11		-2			400 E	12		1	
	120 E	13		2			420 E	13		1	
	140 E	10		-3			440 E	12		7	
	160 E	12		-6			460 E	6		9	
	180 E	14		-2			480 E	10		1	
	200 E	14		1			500 E	7		3	
	220 E	14		0			520 E	6		1	
	240 E	13		-1			540 E	10		-6	
	260 E	15		3			560 E	9		2	
17	280 E	13		-6		17	580 E	5		4	

Livingstone Creek

[illegible]

VLF-EM Data
Around Old Adit

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
30	0 E	10				31	0 E	6			
	20 E	7					20 E	1			
				4						-5	
	40 E	4		-8			40 E	4		-10	
	60 E	9		-4			60 E	8		-2	
	80 E	10		5			80 E	7		2	
	100 E	7		0			100 E	7		-3	
	120 E	7		-5			120 E	6		1	
	140 E	10		4			140 E	11		10	
	160 E	9		9			160 E	1		0	
	180 E	4		0			180 E	6		-7	
	200 E	6		-5			200 E	6		-7	
	220 E	7		0			220 E	8		-3	
	240 E	8		2			240 E	11		8	
	260 E	5		-2			260 E	6		11	
30	280 E	8				31	280 E	5			
	300 E	7					300 E	1			

VLF-EM Data

Ridge Between Livingstone and Summit Creeks

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
7	300 E	12	50			7	720 E	8	49		
	330 E	10	53							-8	
				6			750 E	10	52	0	
	360 E	6	52				780 E	10	51	8	
	390 E	10	54	-6			810 E	8	57	16	
	420 E	12	55	-8			840 E	4	61	12	
	450 E	12	55	-3		7					
	480 E	13	56	5			870 E	-2	51		
				5			900 E	2	50		
	510 E	6	55								
	540 E	14	52	-5							
				3							
	570 E	10	55	7							
	600 E	7	56	8							
	630 E	10	60	14							
	660 E	-1	59	-3							
				-15							
7	690 E	4	52								

VLF-EM Data

Ridge Between Livingstone and Summit Creeks

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
8	0 E	12	45			8	450 E	9	45		
	30 E	9	45							0	
				9			480 E	5	45		
	60 E	4	46							-7	
	90 E	8	45	-1			510 E	13	45		
				-3			540 E	8	46		
	120 E	6	45							5	
	150 E	9	44	3			570 E	6	41		
				16						-6	
	180 E	2	45				600 E	10	40		
				26						-1	
	210 E	-3	47				630 E	10	48		
				13						5	
	240 E	-12	38				660 E	7	51		
				-19						1	
8	270 E	-2	33				690 E	8	53		
				-28						-1	
	300 E	6	35				720 E	8	53		
				-17						2	
	330 E	8	35				750 E	8	53		
				-11						10	
	360 E	13	37				780 E	6	50		
				0						11	
	390 E	12	40				810 E	0	47		
				7						-6	
	420 E	9	43				840 E	3	42		
				7						-16	
8						8	870 E	9	48		

VLF-EM Data

Ridge Between Livingstone and Summit Creeks

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
8	900 E	10	50			9	420 E	10	46		
9	0 E	6	45				450 E	9	49	-1	
	30 E	8	45				480 E	7	57	8	
	60 E	6	52	4			510 E	4	51	8	
	90 E	4	45	6			540 E	4	50	1	
	120 E	4	50	9			570 E	6	51	0	
	150 E	-5	50	18			600 E	2	44	3	
	180 E	-7	54	20			630 E	5	46	-3	
	210 E	-12	44	4			660 E	6	52	-4	
	240 E	-2	32	-20			690 E	5	51	0	
	270 E	3	35	-23			720 E	6	52	-1	
	300 E	6	38	-15			750 E	6	52	7	
	330 E	10	40	-13			780 E	-2	46	19	
	360 E	12	43	-1			810 E	-5	40	1	
9	390 E	5	45	7			840 E	8	45	-24	
				2							

VLF-EM Data

Ridge Between Livingstone and Summit Creeks

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
9				-16		10	390 E	3	54		
	870 E	9	50							5	
	900 E	10	51				420 E	2	50		
										-4	
10	0 E	9	54				450 E	4	45		
	30 E	7	54							1	
				5			480 E	5	48		
	60 E	5	52							3	
				8			510 E	0	48		
	90 E	6	57							-9	
				13			540 E	6	46		
	120 E	-2	54							-7	
				7			570 E	8	46		
	150 E	0	50							4	
				-2			600 E	5	50		
	180 E	-3	40							4	
				-10			630 E	5	52		
	210 E	3	43							6	
				-9			660 E	4	51		
	240 E	4	41							7	
				-10			690 E	0	51		
	270 E	5	42							-3	
				-11			720 E	2	47		
	300 E	12	42							-8	
				1			750 E	5	41		
	330 E	8	47							-5	
				9			780 E	5	42		
10	360 E	8	55							-6	
				11		10	810 E	7	46		

VLF-EM Data

Ridge Between Livingstone and Summit Creeks

[illegible]

VLF-EM Data
Summit Creek

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
40	0 E	16				40	300 E	4			
	20 E	11					320 E	5		-7	
	40 E	12		3			340 E	10		-17	
	60 E	12		-5			360 E	16		-16	
	80 E	16		-7			380 E	15		-1	
	100 E	15		2			400 E	12		9	
	120 E	11		8		41	420 E	10			
	140 E	12		6			0 E	13			
	160 E	8		11			20 E	12			
	180 E	4		7			40 E	12		-1	
	200 E	9		-3			60 E	14		-4	
	220 E	6		0			80 E	14		-1	
	240 E	7		-4			100 E	13		1	
	260 E	12		-3			120 E	14		-5	
	280 E	4		11			140 E	18		-3	
40				7			160 E	12		11	

VLF-EM Data
Summit Creek

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
41	180 E	9		12		42	40 E	12		7	
	200 E	9		-1			60 E	5		-7	
	220 E	13		-2			80 E	12		-11	
	240 E	7		4			100 E	12		-10	
	260 E	11		5			120 E	16		-4	
	280 E	4		-1			140 E	18		8	
	300 E	15		-8			160 E	14		7	
	320 E	8		-4			180 E	12		-3	
	340 E	15		-6			200 E	13		-11	
	360 E	14		-6			220 E	16		-8	
	380 E	15		2			240 E	20		9	
	400 E	12		3			260 E	17		13	
41	420 E	14					280 E	10		-2	
42	0 E	11					300 E	14		1	
	20 E	12				42	320 E	15			
				6							

Summit Creek

[illegible]

VLF-EM Data

Ridge Between Summit and Lake Creeks

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
1	0 E	4	50			1	450 E	4	40	-2	
	30 E	7	52	15			480 E	-2	40	7	
	60 E	-2	50	11			510 E	1	40	1	
	90 E	-2	46	2			540 E	0	39	-3	
	120 E	-4	43	-4			570 E	2	40	2	
	150 E	-2	43	-10			600 E	-3	38	3	
	180 E	0	42	-4			630 E	2	49	-5	
	210 E	4	44	12			660 E	2	47	-1	
	240 E	-2	43	12			690 E	-2	45	3	
	270 E	-6	43	2			720 E	3	42	-8	
	300 E	-4	42	0			750 E	5	45	-8	
	330 E	-6	37	-4			780 E	4	45	0	
	360 E	-4	36	-10			810 E	4	45	1	
	390 E	-2	38	-12			840E	4	45	0	
	420 E	2	39				870 E	4	45		

VLF-EM Data
Ridge Between Summit and Lake Creeks

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
2	0 E	10	41			2	450 E	5	36		
	30 E	14	50							-2	
	60 E	-2	50	20			480 E	6	36	3	
	90 E	6	47	4			510 E	4	37	2	
	120 E	2	48	7			540 E	4	40	6	
	150 E	-5	43	18			570 E	4	40	14	
	180 E	-5	40	5			600 E	-2	39	8	
	210 E	-3	41	-3			630 E	-4	47	-3	
	240 E	-4	38	4			660 E	-2	41	-3	
	270 E	-8	41	5			690 E	-1	40	-8	
	300 E	-4	37	-4			720 E	-2	42	-15	
	330 E	-4	36	-5			750 E	7	42	-4	
	360 E	-3	38	-3			780 E	5	43	3	
	390 E	-2	35	-8			810 E	4	46	0	
2				-13		2	840 E	5	47		
	420 E	3	36	-10			870 E	4	48		

VLF-EM Data

Ridge Between Summit and Lake Creeks

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
3	0 E	12	45			3	630 E	0	47		
	30 E	6	48				660 E	0	44		
				7						-6	
	60 E	4	47				690 E	-2	42		
				-5						-17	
	90 E	7	43				720 E	8	44		
				9						-9	
	120 E	8	47				750 E	7	45		
				25						1	
3	150 E	-6	50			3	780 E	8	46		
				8						5	
	180 E	-4	40				810 E	6	50		
				-10						4	
	210 E	-2	39				840 E	4	49		
				-8			870E	6	53		
	240 E	2	35								
	270 E	0	40								

VLF-EM Data
Lake Creek

Line	Station	Dip <	Field Strength	Fraser Filter		Line	Station	Dip <	Field Strength	Fraser Filter	
20	0 E	12				21	0 E	7			
	20 E	11					20 E	9			
				1						-4	
	40 E	11		1			40 E	10		2	
	60 E	11		10			60 E	10		5	
	80 E	10		11			80 E	7		-1	
	100 E	2		-8			100 E	8		-8	
	120 E	8		-12			120 E	10		-10	
	140 E	12		-4			140 E	13		-5	
	160 E	10		-5			160 E	15		1	
20	180 E	14		-5		21	180 E	13		1	
	200 E	13					200 E	14			
	220 E	16					220 E	13			

Lake Creek

[illegible]

APPENDIX B

SHEEN'S GULCH AND LIVINGSTONE CREEK

MAGNETOMETER SURVEY

DATA TABLES

MAGNETOMETER SURVEYS
SHEEN'S GULCH AND 200 METRES SOUTH OF LIVINGSTONE CREEK
May 4, 1997

Line	Station	Time	Readings	Average Reading	Corrected Reading	
<u>SHEEN'S GULCH</u>						
1	B.L.	11:38	57600 57585 57584	57590	57590	
	50 E	11:40	57550 57572 57565	57562	57561	
	100 E	11:46	57638 57648 57646	57644	57641	
	150 E	11:49	57667 57631 57634	57644	57640	
	200 E	11:52	57677 57631 57634	57653	57648	
	250 E	11:55	57910 57914 57913	57912	57906	Chlorite Schist
1	300 E	12:00	57922 57926 57918	57922	57914	Chlorite Schist
2	300 E	12:06	57550 57543 57548	57547	57537	
	250 E	12:08	58047 58053 58026	58042	58029	

MAGNETOMETER SURVEYS
SHEEN'S GULCH AND 200 METRES SOUTH OF LIVINGSTONE CREEK
May 4, 1997

Line	Station	Time	Readings	Average Reading	Corrected Reading	
<u>SHEEN'S GULCH</u>						
2	200 E	12:12	58050 58049 58048	58049	58037	
	150 E	12:15	57727 57699 57699	57708	57695	
	100 E	12:18	57738 57737 57750	57742	57728	
	50 E	12:22	57758 57773 57778	57770	57755	
	B.L.	12:26	57982 57995 57940	57972	57955	
	50 W	12:29	57874 57863 57859	57865	57847	
	100 W	12:33	57911 57930 57923	57921	57902	
	150 W	12:37	57885 57900 57908	57898	57877	
2	200 W	12:41	57920 57942 57926	57929	57907	

MAGNETOMETER SURVEYS
SHEEN'S GULCH AND 200 METRES SOUTH OF LIVINGSTONE CREEK
May 4, 1997

Line	Station	Time	Readings	Average Reading	Corrected Reading	
<u>SHEEN'S GULCH</u>						
1	200 W	12:44	57936 57929 57937	57934	57911	
	150 W	12:48	57953 57982 57962	57966	57941	
	100 W	12:50	57915 57951 57921	57929	57904	
	50 W	12:53	57811 57790 57793	57798	57772	
	B.L.	1:01	57616 57618 57624	57619	57590	
<u>SOUTH OF LIVINGSTONE</u>						
1	B.L.	1:53	57577 57651 58147	57792	57792	
	50 W	1:56	57616 58251 58068	57978	57981	
	100 W	1:58	58128 57672 58157	57986	57992	

MAGNETOMETER SURVEYS
SHEEN'S GULCH AND 200 METRES SOUTH OF LIVINGSTONE CREEK
May 4, 1997

Line	Station	Time	Readings	Average Reading	Corrected Reading	
<u>SOUTH OF LIVINGSTONE</u>						
1	150 W	2:00	57809 57859 58150	57939	57947	
	200 W	2:03	58111 58315 58287	58238	58249	Chlorite Schist
	250 W	2:05	58202 58131 58193	58175	58190	Chlorite Schist
	300 W	2:11	57886 58324 57913	58041	58061	Chlorite Schist
	350 W	2:17	58147 58185 58115	58149	58176	Chlorite Schist
1	400 W	2:23	57934 57847 57990	57924	57958	Chlorite Schist
2	400 W	2:28	58117 58468 58165	58250	58289	Chlorite Schist
	350 W	2:34	57908 57917 57914	57913	57959	
	300 W	2:41	57988 57805 57801	57865	57919	

MAGNETOMETER SURVEYS
SHEEN'S GULCH AND 200 METRES SOUTH OF LIVINGSTONE CREEK
May 4, 1997

Line	Station	Time	Readings	Average Reading	Corrected Reading	
<u>SOUTH OF LIVINGSTONE</u>						
2	250 W	2:50	57764 58184 58271	58073	58137	
	200 W	2:54	58065 58285 58156	58169	58237	
	150 W	2:58	58241 58161 58115	58172	58245	
	100 W	3:00	58107 57867 57849	57941	58016	
	50 W	3:03	57904 57737 57920	57854	57932	
2	B.L.	3:06	57794 57834 57776	57801	57883	
1	B.L.	3:08	57729 57703 57692	57708	57792	

APPENDIX C

ANALYTICAL CERTIFICATES

03/06/97

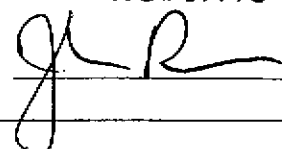
Assay Certificate

Page 1

Larry Carlyle

WO#07778

Certified by



Sample #	Au ppb
L 1 - 1	<5
L 1 - 2	15
L 1 - 3	8
L 1 - 4	6
L 1 - 5	10
L 1 - 6	7
L 1 - 7	5
L 1 - 8	<5
L 1 - 9	5
L 1 - 10	18
L 1 - 11	5
L 2 - 1	20
L 2 - 2	<5
L 2 - 3	5
L 2 - 4	8
L 2 - 5	<5
L 2 - 6	I.S.
L 2 - 7	<5
L 2 - 8	<5
L 2 - 9	<5
L 2 - 10	140
L 2 - 11	9
Cottoneva #1	25
Cottoneva #2	7
Lk. Crk. Camp	262
Lk. Crk. Qtz	25
Livingstone Crk. V.M.	26





CERTIFICATE C ANALYSIS
iPL 97F0447

2036 Columbia St
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Northern Analytical Laboratories

27 Samples

Out: Jun 09, 1997 In: Jun 03, 1997

[044716:25:08:79060997]

Project : W.O. 7778
Shipper : Norm Smith
Shipment: PO#: 332313
Analysis:
ICP(AQR)30

Comment: LARRY CARLYLE

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1 Northern Analytical Laboratories EN RT CC IN FX
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Canada
Att: Norm Smith Ph: 403/668-4968
Fx: 403/668-4890
Em: NAL@hypertech.yk.ca

CODE	AMOUNT	TYPE	PREPARATION DESCRIPTION		PULP		REJECT
B311	27	Pulp	Received as it is, no sample prep.		12M/Dis		OOM/Dis
					NS=No Sample Rep=Replicate M=Month Dis=Discard		
Analytical Summary							
##	Code	Method	Units	Description	Element	Limit Low	Limit High
01	0721	ICP	ppm	Ag ICP	Silver	0.1	99.9
02	0711	ICP	ppm	Cu ICP	Copper	1	20000
03	0714	ICP	ppm	Pb ICP	Lead	2	20000
04	0730	ICP	ppm	Zn ICP	Zinc	1	20000
05	0703	ICP	ppm	As ICP	Arsenic	5	9999
06	0702	ICP	ppm	Sb ICP	Antimony	5	999
07	0732	ICP	ppm	Hg ICP	Mercury	3	9999
08	0717	ICP	ppm	Mo ICP	Molybdenum	1	999
09	0747	ICP	ppm	Tl ICP (Incomplete Digestion)	Thallium	10	999
10	0705	ICP	ppm	Bi ICP	Bismuth	2	9999
11	0707	ICP	ppm	Cd ICP	Cadmium	0.1	99.9
12	0710	ICP	ppm	Co ICP	Cobalt	1	9999
13	0718	ICP	ppm	Ni ICP	Nickel	1	9999
14	0704	ICP	ppm	Ba ICP (Incomplete Digestion)	Barium	2	9999
15	0727	ICP	ppm	W ICP (Incomplete Digestion)	Tungsten	5	999
16	0709	ICP	ppm	Cr ICP (Incomplete Digestion)	Chromium	1	9999
17	0729	ICP	ppm	V ICP	Vanadium	2	9999
18	0716	ICP	ppm	Mn ICP	Manganese	1	9999
19	0713	ICP	ppm	La ICP (Incomplete Digestion)	Lanthanum	2	9999
20	0723	ICP	ppm	Sr ICP (Incomplete Digestion)	Strontium	1	9999
21	0731	ICP	ppm	Zr ICP	Zirconium	1	9999
22	0736	ICP	ppm	Sc ICP	Scandium	1	9999
23	0726	ICP	%	Ti ICP (Incomplete Digestion)	Titanium	0.01	1.00
24	0701	ICP	%	Al ICP (Incomplete Digestion)	Aluminum	0.01	9.99
25	0708	ICP	%	Ca ICP (Incomplete Digestion)	Calcium	0.01	9.99
26	0712	ICP	%	Fe ICP	Iron	0.01	9.99
27	0715	ICP	%	Mg ICP (Incomplete Digestion)	Magnesium	0.01	9.99
28	0720	ICP	%	K ICP (Incomplete Digestion)	Potassium	0.01	9.99
29	0722	ICP	%	Na ICP (Incomplete Digestion)	Sodium	0.01	5.00
30	0719	ICP	%	P ICP	Phosphorus	0.01	5.00

EN=Envelope # RT=Report Style CC=Copies IN=Invoices Fx=Fax(1=Yes 0=No) Totals: 2=Copy 2=Invoice 0=3 1/2 Disk
DL=Download 3D=3 1/2 Disk EM=E-Mail BT=BBS Type BL=BBS(1=Yes 0=No) ID=C030901

BC Certified Assayer: David Chiu

CERTIFICATE (ANALYSIS

iPL 97F0447

2036 Columbia St
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Client : Northern Analytical Laboratories
Project: W.O. 7778

27 Samples
27=Pulp

[044716:25:08:79060997]

Out: Jun 09, 1997
In : Jun 03, 1997

Page 1 of 1
Section 1 of 1

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bt ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
L1 - 1	0.2	12	38	28	<	<	<	2	<	<	1.0	3	13	66	<	17	16	40	3	25	<	<	0.01	0.32	0.33	0.67	0.14	0.03	0.03	0.04
L1 - 2	0.3	5	94	71	10	<	<	1	<	<	0.5	1	2	93	<	2	2	45	<	31	<	<	<	0.07	0.65	0.11	0.05	0.07	0.02	0.06
L1 - 3	0.3	20	44	61	10	<	<	2	<	<	1.5	5	13	173	<	6	7	1125	5	80	1	1	<	0.34	2.42	0.40	0.14	0.05	0.02	0.11
L1 - 4	0.1	13	11	36	6	<	<	1	<	<	0.1	6	29	70	<	44	36	99	7	8	<	1	0.03	0.85	0.09	1.52	0.50	0.04	0.02	0.03
L1 - 5	0.1	41	15	91	<	<	<	3	<	<	0.9	24	93	222	<	109	65	1177	19	26	1	4	0.06	1.48	0.80	3.55	1.41	0.09	0.02	0.08
L1 - 6	0.3	20	8	37	<	<	<	1	<	<	0.5	6	24	118	<	24	25	132	9	23	<	<	0.01	0.71	0.36	1.28	0.30	0.04	0.02	0.07
L1 - 7	0.3	11	8	30	<	<	<	1	<	<	0.3	10	9	154	<	9	18	827	5	26	<	<	0.02	0.47	0.58	0.87	0.19	0.04	0.03	0.05
L1 - 8	0.2	21	8	44	<	<	<	1	<	<	1.0	4	16	184	<	7	14	617	5	32	<	<	0.01	0.46	0.60	0.67	0.11	0.04	0.03	0.05
L1 - 9	<	21	23	76	<	<	<	1	<	<	0.9	2	17	167	<	5	3	239	3	119	3	1	<	0.36	3.91	0.29	0.40	0.06	0.03	0.12
L1 - 10	<	23	27	72	<	<	<	2	<	<	0.3	10	32	107	<	31	23	576	7	50	1	1	0.01	0.88	1.21	1.67	0.62	0.06	0.02	0.08
L1 - 11	0.2	43	68	94	20	<	<	2	<	<	0.9	20	31	111	<	21	27	1423	7	44	1	1	0.02	0.68	0.77	1.90	0.24	0.05	0.03	0.07
L2 - 1	0.2	48	106	28	23	<	<	1	<	<	0.4	3	23	169	<	13	16	252	9	55	1	<	0.01	0.74	1.50	0.71	0.18	0.03	0.03	0.08
L2 - 2	<	27	19	80	9	<	<	4	<	<	<	26	119	147	<	157	86	514	10	26	1	7	0.10	1.91	0.67	3.56	1.89	0.10	0.02	0.06
L2 - 3	0.1	18	14	49	7	<	<	1	<	<	0.6	7	29	180	<	32	22	328	4	59	1	1	0.02	0.68	1.92	1.04	0.44	0.05	0.03	0.06
L2 - 4	<	33	65	70	11	<	<	2	<	<	1.8	4	33	152	<	12	10	641	5	115	2	<	0.01	0.55	3.95	0.54	0.30	0.05	0.02	0.13
L2 - 5	0.2	9	78	39	7	<	<	1	<	<	0.5	<	5	106	<	2	2	35	<	40	1	<	<	0.10	1.40	0.14	0.05	0.03	0.02	0.05
L2 - 6	0.2	4	136	51	10	<	<	<	<	<	0.2	<	2	52	<	<	<	14	<	20	<	<	<	0.06	0.59	0.08	0.04	0.02	0.02	0.02
L2 - 7	<	17	17	60	<	<	<	2	<	<	0.4	10	32	101	<	36	28	463	6	33	<	1	0.02	0.72	0.79	1.43	0.53	0.05	0.03	0.07
L2 - 8	0.1	15	6	39	<	<	<	1	<	<	0.1	6	24	59	<	29	25	108	4	16	<	1	0.02	0.56	0.33	1.15	0.36	0.03	0.02	0.03
L2 - 9	<	26	20	83	9	<	<	2	<	<	1.4	7	28	125	<	18	13	894	7	107	2	<	0.01	0.70	2.82	1.07	0.64	0.05	0.02	0.11
L2 - 10	0.1	31	14	53	5	<	<	1	<	<	1.6	4	24	99	<	10	13	156	3	58	<	<	0.01	0.39	1.14	0.64	0.19	0.03	0.03	0.06
L2 - 11	<	22	17	63	<	<	<	2	<	<	0.2	14	54	70	<	66	42	403	21	32	1	2	0.03	1.24	0.51	2.64	0.91	0.06	0.02	0.08
Cottoneau #1	0.4	128	80	19	9	6	<	1	<	<	<	4	17	39	<	170	6	201	<	58	<	1	<	0.18	0.68	0.79	0.13	0.03	0.02	<
Cottoneau #2	0.2	131	51	13	<	5	<	<	<	<	<	1	4	7	<	189	2	49	<	2	<	<	<	0.03	0.04	0.36	0.03	0.01	0.02	0.01
Lake Crk Camp	0.4	46	21	12	6	<	<	2	<	<	<	3	7	32	<	181	2	255	10	8	7	<	<	0.11	0.85	0.92	0.07	0.06	0.02	0.01
Lake Crk Qte	<	15	17	24	<	<	<	1	<	<	<	4	9	40	<	174	5	178	6	5	3	1	<	0.19	0.14	1.08	0.10	0.04	0.02	<
Livingstone Crk V.M.	<	23	15	68	<	<	<	6	<	<	<	9	10	94	<	19	16	2690	8	384	6	6	0.01	0.33	8.16	5.02	2.20	0.05	0.04	0.33

Min Limit 0.1 1 2 1 5 5 3 1 10 2 0.1 1 1 2 5 1 2 1 2 1 1 1 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
Max Reported* 99.9 20000 20000 20000 9999 999 9999 999 999 9999 99.9 9999 9999 9999 999 9999 9999 9999 9999 9999 9999 9999 9999 1.00 9.99 9.99 9.99 9.99 9.99 5.00 5.00
Method ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP
---No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % P=Pulp

10/07/97

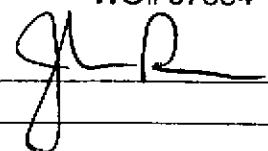
Assay Certificate

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Larry Carlyle

WO# 07834

Certified by



Sample #	Au ppb
LIV - 1	<5
LIV - 2	<5
LIV - 3	<5
LIV - 4	<5
LK CR VM - 2	175
L3 - 1	<5
L3 - 2	<5
L3 - 3	<5
L3 - 4	<5
L3 - 5	7
L3 - 6	<5
L3 - 7	11
L3 - 8	6
L3 - 9	<5
L3 - 10	11
L3 - 11	6
L4 - 1	<5
L4 - 2	194
L4 - 3	52
L4 - 4	129
L4 - 5	17
L4 - 6	8
L4 - 7	<5
SC - 1	25
SC - 2	60
SC - 3	25
SC - 4	18
SC - 5	8





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Phone (604) 879-7878

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Client : Northern Analytical Laboratories

Project: W.O. 7834

28 Samples

 $28\pi Pu1p$

[061711:29:02:79072397]

Out: Jul 23, 1997

In : Jul 17, 1997

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Section 1 of 1

Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
LIV - 1	P	<	13	5	69	<	<	<	3	<	<	0.2	12	46	21	<	119	41	1104	14	132	4	5	<	1.55	3.28	3.60	2.47	0.04	0.02	0.15
LIV - 2	P	<	49	3	184	<	<	<	4	<	<	<	55	300	16	<	289	114	1140	14	437	2	13	0.01	2.51	4.42	7.09	5.89	0.02	0.02	0.22
LIV - 3	P	<	10	<	32	13	<	<	3	<	<	0.5	3	11	46	<	46	15	542	5	105	5	3	<	0.20	1.17	1.03	5.77	0.04	0.02	0.04
LIV - 4	P	<	6	3	15	<	<	<	2	<	<	0.7	1	9	256	<	100	4	119	2	64	4	1	<	0.08	5.51	0.43	1.67	<	0.02	0.04
LK CR VM - 2	P	0.9	4	110	5	<	<	<	<	<	<	<	2	5	284	<	148	4	175	2	10	1	1	<	0.05	0.16	0.53	0.03	0.01	0.02	0.05
L3 - 1	P	<	19	3	38	<	<	<	1	<	<	0.2	13	63	108	<	75	51	222	7	29	1	4	0.06	1.09	0.77	2.13	0.93	0.03	0.04	0.08
L3 - 2	P	<	18	4	28	<	<	<	1	<	<	<	7	29	91	<	33	32	160	6	37	1	1	0.04	0.68	0.97	1.31	0.40	0.01	0.04	0.07
L3 - 3	P	<	58	3	99	6	<	<	2	<	<	1.3	11	83	286	<	52	28	580	13	98	2	2	0.02	0.96	2.68	1.48	0.67	0.05	0.03	0.11
L3 - 4	P	<	21	7	78	<	<	<	2	<	<	<	20	97	92	<	132	78	309	15	22	2	5	0.09	1.70	0.52	3.34	1.54	0.06	0.02	0.10
L3 - 5	P	<	26	4	44	<	<	<	1	<	<	0.4	15	59	80	<	77	56	353	11	20	2	5	0.07	1.14	0.56	2.42	1.00	0.07	0.03	0.08
L3 - 6	P	<	12	4	29	<	<	<	1	<	<	<	11	35	39	<	49	42	205	8	15	1	2	0.07	0.74	0.31	1.71	0.61	0.04	0.03	0.07
L3 - 7	P	<	25	5	56	<	<	<	1	<	<	0.4	14	59	116	<	68	46	365	24	26	2	3	0.04	1.33	0.52	2.84	0.93	0.05	0.02	0.09
L3 - 8	P	<	21	9	60	<	<	<	2	<	<	1.6	20	71	92	<	94	65	662	14	20	2	4	0.09	1.48	0.43	3.00	1.20	0.09	0.02	0.07
L3 - 9	P	<	16	<	28	<	<	<	1	<	<	0.1	6	25	56	<	26	25	159	8	24	1	1	0.03	0.53	0.47	1.04	0.38	0.02	0.04	0.10
L3 - 10	P	<	17	9	55	<	<	<	1	<	<	0.5	15	62	87	<	79	52	504	16	31	2	3	0.05	1.22	0.67	2.46	0.99	0.04	0.02	0.15
L3 - 11	P	<	18	5	46	<	<	<	1	<	<	0.3	9	34	90	<	39	30	505	10	56	2	2	0.02	0.97	1.54	1.72	0.68	0.03	0.03	0.12
L4 - 1	P	<	11	8	40	<	<	<	2	<	<	0.3	11	30	77	<	40	46	339	14	13	2	2	0.07	1.06	0.25	2.32	0.63	0.10	0.02	0.02
L4 - 2	P	<	24	9	62	<	<	<	2	<	<	<	18	60	90	<	74	64	320	20	15	5	4	0.09	1.75	0.30	3.65	1.27	0.20	0.02	0.05
L4 - 3	P	0.2	36	12	45	<	<	<	1	<	<	0.5	9	28	203	<	23	17	304	24	58	7	2	0.02	0.84	1.65	2.11	0.52	0.07	0.02	0.05
L4 - 4	P	0.3	63	64	40	<	<	<	1	<	<	0.3	12	34	280	<	41	40	879	25	25	2	3	0.03	1.22	0.48	2.55	0.59	0.06	0.02	0.08
L4 - 5	P	0.1	19	4	39	<	<	<	2	<	<	0.3	7	16	73	<	6	11	172	46	11	5	1	<	0.39	0.07	2.04	0.10	0.08	0.02	0.02
L4 - 6	P	0.1	20	3	38	<	<	<	2	<	<	0.3	8	23	88	<	23	29	234	17	14	1	1	0.03	0.85	0.18	2.08	0.39	0.07	0.02	0.05
L4 - 7	P	<	29	21	61	13	<	<	3	<	<	<	16	37	190	<	42	92	357	18	20	2	4	0.05	1.96	0.28	3.89	1.02	0.09	0.02	0.04
SC - 1	P	0.3	85	12	70	50	<	<	7	<	<	<	27	71	273	<	58	65	613	19	50	3	4	0.07	1.66	1.65	3.93	1.27	0.33	0.02	0.11
SC - 2	P	0.4	97	9	80	27	<	<	2	<	<	0.1	13	32	355	<	22	36	976	17	38	3	4	0.02	1.13	1.45	3.48	0.51	0.14	0.02	0.10
SC - 3	P	0.4	95	16	95	26	<	<	2	<	<	0.1	19	55	259	<	46	50	805	18	34	4	4	0.04	1.73	0.99	3.51	1.08	0.24	0.02	0.10
SC - 4	P	0.1	66	11	88	21	<	<	3	<	<	<	25	89	422	<	95	79	730	16	36	3	6	0.09	1.90	0.98	3.84	1.32	0.40	0.02	0.12
SC - 5	P	<	24	10	46	10	<	<	2	<	<	0.3	16	46	202	<	56	50	428	18	21	4	4	0.06	1.49	0.41	2.98	0.85	0.16	0.02	0.04

Min Limit	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Max Reported*	99.9	20000	20000	20000	9999	999	9999	999	999	9999	99.9	9999	9999	9999	999	9999	9999	9999	9999	9999	9999	9999	1.00	9.99	9.99	9.99	9.99	5.00	5.00	
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	
--No Test	Ins=Insufficient Sample				Del=Delay				Max=No Estimate		Rec=ReCheck				m=x1000		Z=Estimate %		P=Pulp								ICP		ICP	

23/07/97

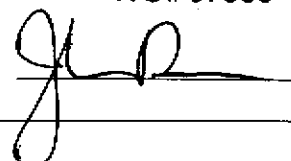
Assay Certificate

Page 1

Larry Carlyle

WO#07850

Certified by



Sample #	Au ppb
CC - 1	36
CC - 2	10
CC - 3	<5
CC - 4	5
CC - 5	16
CC - 6	154
CC - 7	<5
CC - 8	<5
CC - 9	20
CC - 10	5
CC - 11	14
CC - 12	12
CC - 13	10
CCR - 1	<5
LC - 1	5
LC - 2	6
LC - 3	6
LC - 4	7
LC - 5	5
LC - 6	<5
LC - 7	<5
LC - 8	<5
LC - 9	<5
LC - 10	<5
LC - 11	6
LC - 12	6
LC - 13	<5
LC - 14	<5
Lk Cr Pit	14
LS - 1	<5



23/07/97

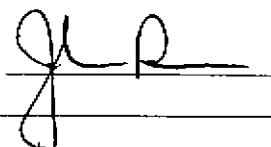
Assay Certificate

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Larry Carlyle

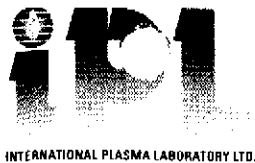
WO#07850

Certified by



Sample #	Au ppb
LS - 2	6
LS - 3	<5
LS - 4	6
LS - 5	5
LS - 6	<5
Prime SC - 1	5
Prime SC - 2	12
Prime SC - 3	13
Prime SC - 4	898
SCV - 1	45
SCV - 2	<5
SCV - 3	<5





INTERNATIONAL PLASMA LABORATORY LTD.

CERTIFICATE OF ANALYSIS
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Fax (604) 879-7898Client : Northern Analytical Laboratories
Project: WO# 785042 Samples
42=PuIp

[067313:54:35:79073097]

Out: Jul 30, 1997
In: Jul 28, 1997Page 1 of 2
Section 1 of 1

Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
CC - 1	P	<	53	14	47	16	<	<	3	<	<	0.6	16	41	119	<	38	43	481	16	25	3	4	0.05	1.05	0.80	2.60	0.74	0.17	0.02	0.06
CC - 2	P	0.1	46	13	35	16	7	<	2	<	<	0.4	12	34	78	<	28	32	315	15	34	3	3	0.03	0.78	1.72	2.08	0.59	0.13	0.02	0.07
CC - 3	P	<	17	9	30	10	<	<	2	<	<	0.3	10	24	78	<	28	33	274	8	10	2	2	0.04	0.76	0.16	2.05	0.42	0.12	0.02	0.02
CC - 4	P	<	29	9	29	13	<	<	1	<	<	0.2	12	29	87	<	31	37	196	14	14	2	3	0.04	0.77	0.26	2.15	0.41	0.08	0.02	0.05
CC - 5	P	<	17	10	24	13	<	<	2	<	<	0.3	10	24	110	<	28	39	169	9	12	3	2	0.04	0.85	0.17	2.08	0.36	0.06	0.02	0.02
CC - 6	P	<	41	13	52	21	<	<	3	<	<	<	18	54	202	<	47	67	488	19	19	3	6	0.07	1.56	0.38	3.20	0.80	0.16	0.02	0.04
CC - 7	P	<	18	11	33	15	<	<	2	<	<	0.2	13	31	177	<	36	46	207	8	12	2	3	0.05	1.04	0.19	2.42	0.51	0.10	0.02	0.02
CC - 8	P	<	28	13	38	18	<	<	2	<	<	0.5	13	35	121	<	35	45	304	13	15	2	3	0.05	1.03	0.28	2.36	0.50	0.13	0.02	0.04
CC - 9	P	0.1	70	11	79	25	<	<	3	<	<	<	20	58	167	<	55	55	655	22	73	5	5	0.05	1.49	2.37	3.34	1.39	0.10	0.03	0.09
CC - 10	P	<	40	13	51	18	<	<	2	<	<	0.5	14	41	157	<	37	37	649	18	23	3	3	0.03	1.13	0.48	2.53	0.60	0.20	0.02	0.07
CC - 11	P	<	65	17	72	31	<	<	3	<	<	<	20	64	158	<	58	50	673	25	23	7	5	0.04	1.57	0.48	3.53	1.01	0.31	0.02	0.07
CC - 12	P	<	57	13	68	27	5	<	3	<	<	<	20	65	149	<	60	48	716	24	30	5	4	0.03	1.51	0.77	3.47	1.07	0.24	0.02	0.08
CC - 13	P	0.3	155	11	62	26	<	<	3	<	<	<	17	52	254	5	50	54	783	22	22	4	5	0.04	1.65	0.51	3.24	0.80	0.39	0.02	0.07
CCR- 1	P	0.2	60	7	40	19	5	<	2	<	<	<	9	16	85	<	77	32	244	2	21	1	2	0.04	0.90	0.37	1.93	0.68	0.07	0.03	0.04
LC - 1	P	0.2	44	10	61	23	<	<	3	<	<	<	17	46	113	<	55	59	564	17	21	4	6	0.05	1.56	0.47	3.25	1.04	0.13	0.02	0.05
LC - 2	P	0.1	64	16	74	20	<	<	3	<	<	0.1	17	48	191	<	46	46	712	17	41	5	4	0.03	1.48	2.07	3.08	1.14	0.16	0.02	0.07
LC - 3	P	0.1	62	14	73	48	5	<	4	<	<	0.2	20	50	166	<	43	54	642	18	61	4	5	0.03	1.31	2.55	3.36	0.92	0.15	0.02	0.09
LC - 4	P	0.2	72	17	72	25	5	<	3	<	<	<	18	54	140	<	49	49	702	20	30	4	5	0.04	1.53	1.15	3.30	1.04	0.17	0.02	0.05
LC - 5	P	<	56	14	82	22	<	<	3	<	<	0.7	16	41	225	<	38	49	801	15	39	4	4	0.03	1.36	1.29	2.82	0.89	0.19	0.02	0.08
LC - 6	P	<	35	16	49	19	<	<	2	<	<	0.2	14	38	155	<	36	36	564	17	17	5	3	0.04	1.25	0.38	2.66	0.68	0.14	0.02	0.02
LC - 7	P	<	33	12	50	20	<	<	3	<	<	0.5	14	36	73	<	38	34	414	16	10	3	3	0.03	1.21	0.20	2.73	0.66	0.09	0.02	0.02
LC - 8	P	<	27	15	29	13	<	<	3	<	<	0.5	10	20	170	<	23	31	376	14	12	6	3	0.04	1.04	0.46	2.02	0.34	0.14	0.02	<
LC - 9	P	<	26	12	32	11	<	<	2	<	<	0.4	11	26	96	<	29	32	270	21	16	7	4	0.04	1.00	0.70	2.21	0.46	0.11	0.02	0.02
LC - 10	P	<	13	12	27	13	<	<	2	<	<	<	8	15	164	<	18	27	309	8	12	2	2	0.03	0.86	0.31	1.59	0.31	0.10	0.02	0.02
LC - 11	P	0.1	45	13	48	21	<	<	2	<	<	0.4	15	43	60	<	40	40	392	25	15	5	5	0.05	1.27	0.33	2.84	0.75	0.10	0.02	0.02
LC - 12	P	0.1	45	13	49	18	<	<	2	<	<	0.5	12	36	93	<	26	27	478	13	56	4	2	0.02	0.91	4.24	2.05	1.19	0.06	0.02	0.07
LC - 13	P	<	20	12	44	14	<	<	2	<	<	0.4	10	24	180	<	28	36	515	13	19	3	3	0.03	1.25	0.86	2.46	0.67	0.13	0.02	0.02
LC - 14	P	<	25	9	34	17	<	<	2	<	<	<	9	20	128	<	20	27	395	10	21	2	2	0.03	0.97	0.62	1.73	0.49	0.11	0.03	0.04
LKCR PIT	P	<	8	<	18	16	<	<	4	<	<	0.3	2	12	550	<	109	7	2944	13	11	7	3	<	0.10	0.07	1.01	0.02	0.02	0.01	0.02
LS - 1	P	0.1	26	8	48	11	<	<	2	<	<	<	11	26	141	<	24	27	1087	14	32	3	2	0.03	0.98	0.62	1.96	0.53	0.04	0.02	0.08
LS - 2	P	0.1	24	12	67	12	<	<	1	<	<	0.5	11	30	131	<	31	30	581	15	41	2	2	0.03	1.21	0.78	2.07	0.65	0.08	0.02	0.07
LS - 3	P	0.1	30	32	79	15	<	<	2	<	<	0.3	11	38	114	<	38	29	552	18	61	3	2	0.02	1.21	0.98	2.10	0.69	0.05	0.02	0.07
LS - 4	P	0.1	26	13	68	16	<	<	2	<	<	0.3	13	43	100	<	47	34	414	22	34	3	3	0.02	1.36	0.54	2.47	0.79	0.06	0.02	0.09
LS - 5	P	<	19	12	66	12	<	<	2	<	<	0.1	11	33	87	<	38	29	387	17	48	2	2	0.02	1.13	0.73	2.07	0.66	0.05	0.02	0.07
LS - 6	P	<	28	13	80	11	<	<	2	<	<	0.4	13	40	117	<	41	34	618	19	48	2	3	0.03	1.33	0.82	2.32	0.75	0.07	0.02	0.08
PRIME SC - 1	P	0.1	62	12	64	20	<	<	3	<	<	0.7	15	46	159	<	43	41	541	16	68	5	4	0.03	1.47	3.15	2.83	1.34	0.12	0.02	0.06
PRIME SC - 2	P	0.1	50	17	75	24	8	<	3	<	<	0.1	22	63	202	<	61	50	786	20	29	5	4	0.04	1.52	0.71	3.36	1.11	0.24	0.02	0.08
PRIME SC - 3	P	<	37	6	100	<	<	<	4	<	<	0.2	40	80	406	<	42	82	943	24	134	3	4	0.03	1.21	5.73	4.61	1.11	0.32	0.02	0.31
PRIME SC - 4	P	0.3	85	13	56	59	<	<	4	<	<	<	52	119	183	<	43	31	1776	22	73	10	2	0.02	0.98	2.62	4.50	0.85	0.16	0.02	0.15

Min Limit 0.1 1 2 1 5 5 3 1 10 2 0.1 1 1 2 5 1 2 1 2 1 1 1 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
Max Reported* 99.9 20000 20000 20000 9999 999 9999 999 999 9999 99.9 9999 9999 9999 999 9999 9999 9999 9999 9999 9999 9999 9999 9999 9999 1.00 9.99 9.99 9.99 9.99 9.99 5.00 5.00
Method ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP
—No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % P=PuIp



CERTIFICATE OF ANALYSIS
iPL 97G0673

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Client : Northern Analytical Laboratories
Project: WO# 7850

42 Samples
42=Pulp

[067313:54:35:79073097]

Out: Jul 30, 1997
In : Jul 28, 1997

Page 2 of 2
Section 1 of 1

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
SCV- 1	P 0.4	178	4	57	<	<	<	2	<	<	<	11	17	198	<	50	27	924	6	28	4	4	0.01	0.58	1.33	3.64	0.62	0.21	0.02	0.09
SCV- 2	P 0.2	28	<	27	<	5	<	1	<	<	<	6	16	60	<	104	7	141	13	4	3	<	<	0.18	0.08	1.11	0.05	0.09	0.02	0.02
SCV- 3	P 0.1	44	7	56	12	<	<	4	<	<	0.4	9	25	1070	<	47	17	1271	9	90	5	2	<	0.27	6.62	3.38	0.40	0.10	0.02	0.02

Min Limit 0.1 1 2 1 5 5 3 1 10 2 0.1 1 1 2 5 1 2 1 2 1 1 1 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
Max Reported* 99.9 20000 20000 20000 9999 999 9999 999 999 9999 99.9 9999 9999 9999 999 9999 9999 9999 9999 9999 9999 9999 9999 1.00 9.99 9.99 9.99 9.99 9.99 5.00 5.00
Method ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP
---No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % P=Pulp

07/08/97

Assay Certificate

Page 1

Larry Carlyle

WO# 07864

Certified by

Sample #	Au ppb
LAKE-1	74
MCR-1	<5
MCR-2	<5
MCR-3	<5
MCR-4	<5
O/C LK-1	82
SUMMIT-4	1446
LAK-1	5
LAK-2	<5
LAK-3	<5
LAK-4	46
LAK-5	149
LAK-6	87
LAK-7	118
LAK-8	<5
LAK-9	8
LAK-10	8
LAK-11	6
LVC-1	5
LVC-2	<5
LVC-3	6
LVC-4	<5
LVC-5	<5
LVC-6	<5
LVC-7	<5



INTERNATIONAL PLASMA LABORATORY LTD.

CERTIFICATE C ANALYSIS

iPL 97H0737

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Client : Northern Analytical Laboratories
Project: W0# 7864

25 Samples
25=Pulp

[073710:58:25:79081197]

Out: Aug 11, 1997
In : Aug 07, 1997

Page 1 of 1
Section 1 of 1

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
LAK - 1	P 0.1	7	9	26	9	<	<	1	<	<	<	7	11	89	<	18	34	248	6	10	<	1	0.04	0.81	0.17	1.36	0.29	0.02	0.02	0.02
LAK - 2	P 0.1	12	10	29	6	<	<	1	<	<	<	6	12	162	<	22	37	258	8	16	<	2	0.05	1.09	0.25	1.41	0.36	0.03	0.02	0.02
LAK - 3	P <	13	13	37	8	<	<	1	<	<	0.1	9	19	102	<	26	38	208	11	12	1	2	0.04	1.04	0.17	2.26	0.39	0.05	0.02	0.04
LAK - 4	P 0.3	15	15	44	11	<	<	1	<	<	<	8	15	214	<	24	41	192	10	17	1	2	0.04	1.35	0.29	1.77	0.37	0.03	0.02	0.01
LAK - 5	P 0.2	9	9	29	5	<	<	<	<	<	<	6	11	83	<	23	44	165	8	13	1	2	0.07	1.00	0.21	1.64	0.37	0.05	0.02	0.01
LAK - 6	P 0.2	21	8	28	<	<	<	1	<	<	<	8	17	122	<	18	27	493	28	14	<	1	0.02	0.82	0.14	1.80	0.29	0.05	0.02	0.03
LAK - 7	P 0.2	56	15	65	26	<	<	2	<	<	<	19	67	179	<	62	50	669	23	26	3	5	0.04	1.49	0.54	3.40	0.94	0.10	0.02	0.07
LAK - 8	P 0.3	16	9	36	8	<	<	1	<	<	<	9	24	126	<	29	34	223	14	11	1	2	0.03	1.03	0.19	1.99	0.46	0.05	0.02	0.02
LAK - 9	P 0.2	42	10	58	13	<	<	1	<	<	0.1	16	54	139	<	52	43	549	22	29	4	4	0.04	1.28	0.76	2.95	0.85	0.10	0.03	0.10
LAK - 10	P 0.2	53	13	70	21	<	<	1	<	<	<	20	68	137	<	65	54	671	28	31	4	5	0.05	1.56	0.66	3.66	1.11	0.17	0.02	0.11
LAK - 11	P 0.3	31	6	40	10	<	<	<	<	<	<	12	29	150	<	25	31	532	12	52	2	2	0.03	0.68	1.40	1.96	0.59	0.06	0.02	0.11
LAKE - 1	P 0.1	16	2	17	19	<	<	1	<	<	<	5	10	132	<	71	6	721	19	7	5	2	<	0.25	0.10	0.79	0.07	0.08	0.04	<
LVC - 1	P 0.1	41	9	38	9	<	<	1	<	<	<	12	36	76	<	33	36	300	16	15	2	4	0.05	0.97	0.29	2.24	0.64	0.17	0.02	0.04
LVC - 2	P 0.1	16	7	29	<	<	<	<	<	<	<	9	18	92	<	21	29	391	7	14	1	2	0.03	0.86	0.22	1.58	0.40	0.08	0.03	0.03
LVC - 3	P 0.1	46	7	55	6	<	<	1	<	<	0.2	15	48	144	<	45	45	521	17	29	3	4	0.05	1.26	0.93	2.73	0.95	0.15	0.03	0.07
LVC - 4	P 0.1	16	5	29	<	<	<	<	<	<	<	12	43	71	<	57	37	223	5	15	1	2	0.06	0.84	0.28	1.91	0.72	0.10	0.02	0.03
LVC - 5	P <	10	<	19	<	<	<	1	<	<	<	7	17	90	<	18	23	198	5	13	1	1	0.04	0.51	0.21	1.08	0.26	0.06	0.03	0.02
LVC - 6	P 0.2	38	6	39	6	<	<	1	<	<	<	12	29	125	<	28	37	541	14	23	2	3	0.06	1.13	0.59	2.17	0.58	0.25	0.03	0.04
LVC - 7	P 0.1	25	8	45	9	<	<	1	<	<	0.1	14	29	112	<	37	45	434	13	18	3	4	0.06	1.32	0.37	2.60	0.72	0.23	0.02	0.02
MCR - 1	P 0.2	56	8	140	<	<	<	11	<	<	<	13	28	403	<	56	78	1719	19	108	5	5	<	0.44	1.22	5.22	3.16	0.03	0.08	0.45
MCR - 2	P 0.1	5	23	92	25	<	<	15	<	<	0.5	6	16	39	<	77	33	562	11	86	3	4	<	0.58	3.94	2.80	1.11	0.04	0.03	0.69
MCR - 3	P 0.2	71	10	222	<	<	<	5	<	<	<	49	89	274	<	41	105	597	23	73	1	16	0.03	3.48	1.50	9.14	1.19	0.15	0.03	0.22
MCR - 4	P 0.2	73	5	25	<	<	<	4	<	<	0.1	8	10	108	<	122	39	273	15	42	1	2	0.12	0.35	0.31	2.63	0.32	0.30	0.05	0.06
O/C LK - 1	P 0.3	6	<	19	<	<	<	<	<	<	<	3	9	125	<	116	7	268	11	5	6	1	<	0.22	0.04	0.91	0.13	0.06	0.04	0.01
SUMMIT - 4	P 1.1	18	3	11	143	<	<	1	<	<	<	10	31	75	<	116	39	160	10	169	2	4	0.03	0.54	0.52	4.80	0.37	0.44	0.15	0.18

Min Limit 0.1 1 2 1 5 5 3 1 10 2 0.1 1 1 2 5 1 2 1 2 1 1 1 1 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
 Max Reported* 99.9 20000 20000 20000 9999 999 9999 999 999 9999 99.9 9999 9999 9999 999 9999 9999 9999 9999 9999 9999 9999 9999 9999 1.00 9.99 9.99 9.99 9.99 9.99 9.99 5.00 5.00
 Method ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP
 —No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % P=Pulp

19/08/97

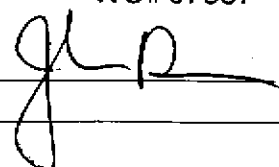
Assay Certificate

Page 1

Larry Carlyle

WO# 07887

Certified by



Sample #	Au ppb
CC"20	52
CC"21	<5
CC"22	6
CC"23	38
CC"24	15
CC"25	9
SC"1	22
SC"2	12
SC"3	62
SC"4	20
SC"5	33
SC"6	16
MC 1	<5
MC 2	10
MC 3	<5
MC 4	<5
MC 5	<5
MC 6	<5
MC 7	<5
MC 8	<5
LII 1	<5
LII 2	5
LII 3	7
LII 4	8



CERTIFICATE OF ANALYSIS

iPL 97H0797

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Client : Northern Analytical Laboratories
Project: W.O. 7887

24 Samples
24=Pulp

[079713:02:44:79082197]

Out: Aug 21, 1997
In : Aug 18, 1997

Page 1 of 1
Section 1 of 1

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
CC"20	P 0.3	29	10	36	11	<	<	2	<	<	0.4	14	36	143	<	37	43	279	12	14	3	3	0.04	1.01	0.28	2.44	0.52	0.10	0.02	0.03
CC"21	P 0.2	11	5	18	<	<	<	2	<	<	<	5	11	134	<	17	31	147	5	14	1	1	0.03	0.71	0.29	1.46	0.26	0.06	0.02	0.02
CC"22	P 0.1	39	12	47	10	<	<	1	<	<	0.5	15	48	149	<	41	55	355	16	16	2	5	0.05	1.28	0.35	2.97	0.73	0.17	0.02	0.04
CC"23	P <	29	8	39	5	<	<	2	<	<	0.4	14	39	157	<	38	46	289	11	11	2	3	0.04	1.06	0.29	2.62	0.60	0.10	0.02	0.03
CC"24	P 0.3	70	14	62	14	<	<	3	<	<	<	20	64	125	<	61	57	550	23	21	4	5	0.04	1.51	0.47	3.58	0.97	0.25	0.02	0.05
CC"25	P 0.2	28	8	40	10	<	<	2	<	<	0.3	12	32	143	<	38	44	427	10	16	2	3	0.04	1.16	0.28	2.56	0.57	0.24	0.02	0.02
SC"1	P <	45	4	104	<	5	<	3	<	<	<	32	113	361	<	126	90	929	22	92	2	5	0.06	2.12	2.52	4.33	2.45	0.38	0.02	0.21
SC"2	P 0.2	65	11	82	15	<	<	2	<	<	0.2	22	78	236	<	93	58	816	19	56	4	3	0.03	1.76	2.29	3.52	1.51	0.29	0.02	0.17
SC"3	P 0.3	137	8	76	13	<	<	2	<	<	<	21	75	243	<	79	56	983	15	40	3	3	0.03	1.51	0.99	3.30	1.16	0.19	0.02	0.14
SC"4	P 0.2	57	14	75	24	<	<	3	<	<	0.3	17	51	194	<	47	43	770	12	59	6	3	0.03	1.38	2.54	3.06	1.66	0.19	0.02	0.08
SC"5	P 0.3	76	9	60	10	<	<	2	<	<	0.8	15	41	214	<	31	33	577	9	50	3	3	0.01	0.92	2.76	2.87	0.60	0.09	0.02	0.07
SC"6	P 0.3	145	8	60	7	<	<	1	<	<	0.3	13	15	147	<	14	29	952	22	22	2	3	0.02	1.36	0.50	2.35	1.09	0.14	0.02	0.08
LII 1	P 0.2	40	15	59	12	<	<	1	<	<	0.5	16	43	153	<	47	39	696	17	17	4	3	0.02	1.29	0.36	2.98	0.74	0.16	0.02	0.03
LII 2	P 0.1	55	15	70	13	<	<	2	<	<	0.6	16	43	154	<	37	42	741	16	24	4	3	0.03	1.35	0.60	2.94	0.86	0.20	0.02	0.06
LII 3	P 0.3	78	14	85	16	<	<	3	<	<	0.3	17	48	183	<	41	48	691	16	66	5	5	0.03	1.52	3.02	3.21	1.49	0.07	0.03	0.07
LII 4	P 0.2	70	15	84	18	<	<	3	<	<	0.1	16	48	165	<	45	46	715	16	55	5	4	0.03	1.46	2.28	3.17	1.26	0.14	0.02	0.08
MC - 1	P 0.1	26	6	66	6	<	<	2	<	<	0.6	12	20	232	<	24	43	723	17	30	2	3	0.06	1.29	0.42	2.40	0.65	0.36	0.02	0.07
MC - 2	P 0.1	22	8	65	10	<	<	2	<	<	0.6	15	24	202	<	31	48	572	17	25	2	4	0.07	1.43	0.37	2.80	0.74	0.38	0.02	0.05
MC - 3	P 0.1	22	8	51	<	<	<	1	<	<	0.4	12	22	171	<	25	38	504	11	20	1	2	0.05	1.11	0.28	2.24	0.61	0.27	0.02	0.05
MC - 4	P 0.1	26	9	64	<	<	<	2	<	<	0.3	14	26	211	<	29	48	525	15	22	2	3	0.06	1.30	0.31	2.68	0.72	0.36	0.02	0.06
MC - 5	P 0.2	23	7	57	<	<	<	2	<	<	0.5	13	23	224	<	27	42	559	22	19	2	3	0.06	1.18	0.32	2.50	0.54	0.30	0.02	0.05
MC - 6	P 0.4	108	9	94	<	<	<	3	<	<	<	32	47	260	<	40	73	465	5	68	1	2	0.23	1.80	1.13	4.44	1.08	0.84	0.04	0.17
MC - 7	P 0.1	81	9	96	<	<	<	3	<	<	<	33	43	483	<	28	56	744	9	47	1	2	0.11	1.75	0.71	3.77	1.04	0.82	0.03	0.16
MC - 8	P 0.2	39	12	118	<	<	<	3	<	<	0.5	19	39	339	<	40	61	734	17	25	2	3	0.07	1.46	0.36	3.01	0.77	0.52	0.02	0.07

Min Limit 0.1 1 2 1 5 5 3 1 10 2 0.1 1 1 2 5 1 2 1 2 1 1 1 1 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
Max Reported* 99.9 20000 20000 20000 9999 999 9999 999 999 9999 99.9 9999 9999 9999 999 9999 9999 9999 9999 9999 9999 9999 9999 1.00 9.99 9.99 9.99 9.99 9.99 5.00 5.00
Method ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP
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22/09/97

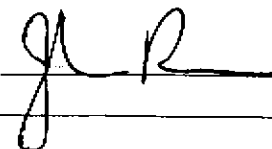
Assay Certificate

Page 1

Larry Carlyle

WO# 07922

Certified by



Sample #	Au ppb
LK-1	26
LK-2	32
LK-3	23
LK-4	38
LK-5	58
LK-6	51
LK-7	75
SMR	44





INTERNATIONAL PLASMA LABORATORY LTD.

CERTIFICATE OF ANALYSIS

iPL 97I0958

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Client : Northern Analytical Laboratories
Project: W.O. 7922

8 Samples

[095814:45:43:79100297]

Out: Oct 02, 1997
In : Sep 25, 1997

Page 1 of 1
Section 1 of 1

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
LK - 1	<	18	14	31	<	<	<	1	<	<	0.3	9	20	86	<	22	34	241	10	11	1	2	0.03	0.87	0.16	1.79	0.36	0.11	0.02	0.02
LK - 2	<	13	6	20	5	<	<	2	<	<	0.3	6	13	80	<	14	29	251	7	11	<	1	0.03	0.61	0.16	1.25	0.23	0.05	0.02	0.02
LK - 3	<	10	9	24	<	<	<	2	<	<	0.3	6	13	93	<	20	42	156	7	14	1	1	0.06	0.81	0.23	1.62	0.32	0.06	0.02	0.01
LK - 4	<	12	10	29	5	<	<	1	<	<	<	8	18	120	<	22	33	493	9	16	<	1	0.03	0.98	0.25	1.76	0.37	0.06	0.02	0.02
LK - 5	<	25	6	33	<	<	<	1	<	<	<	10	28	95	<	26	26	546	14	16	1	1	0.02	0.85	0.39	1.93	0.42	0.05	0.02	0.06
LK - 6	<	26	11	29	<	<	<	2	<	<	<	10	18	118	<	16	27	763	13	52	2	2	0.02	0.69	1.01	1.71	0.29	0.07	0.03	0.06
LK - 7	0.1	36	11	48	<	<	<	2	<	<	0.7	15	32	181	<	27	49	579	18	45	2	3	0.03	1.23	0.88	2.77	0.72	0.11	0.02	0.06
SMR	0.1	26	18	14	15	<	<	3	<	<	0.1	7	13	553	<	91	3	715	4	15	5	2	<	0.16	0.06	1.64	0.02	0.05	0.01	0.04

Min Limit 0.1 1 2 1 5 5 3 1 10 2 0.1 1 1 2 5 1 2 1 2 1 1 1 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
 Max Reported* 99.9 20000 20000 20000 9999 999 9999 999 999 9999 99.9 9999 9999 9999 999 9999 9999 9999 9999 9999 9999 9999 9999 9999 1.00 9.99 9.99 9.99 9.99 9.99 5.00 5.00
 Method ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP ICP
 --No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % NS=No Sample

APPENDIX D

**INVOICES SUPPORTING
STATEMENT OF COSTS**

Larry Carlyle, Geologist
 74 Tamarack Drive
 Whitehorse, YT Y1A 4Y6
 403-633-3910

WAGES WILL SKITMORE

July & August Wages @ \$125/per diem

July & August Wages @ \$125/per diem			Gross	CPP	EI	Deduct.	Net
Gross wages	(Week of June 29 - July 5/97)	Days Worked: July 3 to 5	\$ 375.00	\$ 9.00	\$ 10.88	\$ 19.88	\$ 355.12
	(Week of July 6 - 12/97)	Days Worked: 7 days	\$ 875.00	\$ 23.59	\$ 25.38	\$ 48.97	\$ 826.03
	(Week of July 13 - 19/97)	Days Worked: 7 days	\$ 875.00	\$ 23.59	\$ 25.38	\$ 48.97	\$ 826.03
	(Week of July 20 - 26/97)	Days Worked: 7 days	\$ 875.00	\$ 23.59	\$ 25.38	\$ 48.97	\$ 826.03
	(Week of July 27 - Aug. 2/97)	Days Worked: July 27 to 31	\$ 625.00	\$ 16.31	\$ 18.13	\$ 34.44	\$ 590.56
	(Week of Aug. 3 - 9/97)	Days Worked: Aug. 5 to 9	\$ 625.00	\$ 16.31	\$ 18.13	\$ 34.44	\$ 590.56
	(Week of Aug. 10 - 16/97)	Days Worked: Aug. 10 to 12	\$ 375.00	\$ 9.00	\$ 10.88	\$ 19.88	\$ 355.12
Sub-Totals:			\$ 4,625.00	\$ 121.39	\$ 134.16	\$ 255.55	\$ 4,369.45
Holiday Pay:	4% of \$4,625		\$ 185.00	\$ 3.44	\$ 5.37	\$ 8.81	\$ 176.19
Totals:			\$ 4,810.00	\$ 124.83	\$ 139.53	\$ 264.36	\$ 4,545.64

Note: Employee is Tax Exempt - Code "E"

Less Advances:	Ch. #006	July 3/97	
	Ch. #011	Aug. 1/97	\$ 200.00
			\$ 500.00
			<u>\$ 700.00</u>
	Ch. #016	Aug. 12/97	
			<u>\$ 3,845.64</u>

Invoice for Analytical Services

To:

Invoice Date: 22/09/97

Larry Carlyle

WO# 07922

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
7	Sample Preparation: Rock/D.C. Sample Preparation	5.00	35.00
1	Soil/Sediment Sample Preparation	2.00	2.00
8	Analyses: Au + 30	16.00	128.00
Subtotal			165.00
GST @7% (R 121285662)			11.55
Total due on receipt of invoice			\$176.55

2% per month charged on overdue accounts

PAID CK#213 



Invoice for Analytical Services

To:

Larry Carlyle

Invoice Date: 19/08/97

WO# 07887

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
24	Sample Preparation: Soil/Sediment Sample Preparation	2.00	48.00
24	Analyses: Au + 30	16.00	384.00
Subtotal			432.00
GST @7% (R 121285662)			30.24
Total due on receipt of invoice			\$462.24

2% per month charged on overdue accounts



Invoice for Analytical Services

To:

Larry Carlyle

Invoice Date: 07/08/97

WO# 07864

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
7	Sample Preparation: Rock/D.C. Sample Preparation	5.00	35.00
4	Sample Drying	2.50	10.00
18	Soil/Sediment Sample Preparation	2.00	36.00
25	Analyses: Au + 30	16.00	400.00
Subtotal			481.00
GST @7% (R 121285662)			33.67
Total due on receipt of invoice			\$514.67

2% per month charged on overdue accounts

PAID CK#014 



Invoice for Analytical Services

To:

Larry Carlyle

Invoice Date: 23/07/97

WO# 07850

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
5	Sample Preparation:		
	Rock/D.C. Sample Preparation	5.00	25.00
37	Soil/Sediment Sample Preparation	2.00	74.00
	Analyses:		
42	Au + 30	16.00	672.00
Subtotal			771.00
GST @7% (R 121285662)			53.97
Total due on receipt of invoice			\$824.97

2% per month charged on overdue accounts

PAID CK# 008 



Invoice for Analytical Services

To:

Larry Carlyle

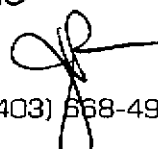
Invoice Date: 10/07/97

WO# 07834

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
5	Sample Preparation:		
23	Rock/D.C. Sample Preparation	5.00	25.00
	Soil/Sediment Sample Preparation	2.00	46.00
28	Analyses:		
	Au + 30	16.00	448.00
Subtotal			519.00
GST @7% (R 121285662)			36.33
Total due on receipt of invoice			\$555.33

2% per month charged on overdue accounts

PAID CK#008




Invoice for Analytical Services

To:

Larry Carlyle

Invoice Date: 03/06/97

WO# 07778

QTY	DESCRIPTION	UNIT PRICE	AMOUNT
5	Sample Preparation:		
22	Rock/D.C. Sample Preparation	5.00	25.00
	Soil/Sediment Sample Preparation	2.00	44.00
26	Analyses:		
1	Au + 30	16.00	416.00
	ICP - 30	7.75	7.75

Subtotal

492.75

GST @7% (R 121285662)

34.49

Assay Coupons (20)

(\$187.50)

Total due on receipt of invoice

\$339.74

2% per month charged on overdue accounts

PAID CK# 003 JR



GST REGISTRATION NO

Whitehorse, Y.T. Y1A 4S2

(403) 667-2488

DATE Aug 3 19 97

M

Charles Livingstone	150	00
---------------------	-----	----

[illegible]

Year	Percentage of Population Aged 65 and Over
1950	7%
1960	10%
1970	12%
1980	14%
1990	16%
2000	18%
2010	19%
2020	20%

SUBTOTAL	150	00
----------	-----	----

GST	10	5
-----	----	---

SUBTOTAL		
----------	--	--

26	PST	✓
	TOTAL	1729

REDIFORM. 58525E MCP* PATENTED 1983, 1985, 1979

ATV Flown in and
out estimated at
\$200.00

STATEMENT DATE	ACCOUNT NO.
7/31/97	

DATE PAID Aug 20 1977

CHEQUE NO. 370

AMOUNT 1,178.07

TRANSACTION DATE	INVOICE NO.	DESCRIPTION	AMOUNT	BALANCE
7/4/97	9450	Invoice		417.30
7/5/97	9540	Invoice		253.59
7/11/97	9651	Invoice		253.59
7/21/97	9513	Invoice		253.59
AGE	Current	31-60	Over 60	TOTAL
AMOUNT	1,178.07	0.00	0.00	1,178.07

BIG SALMON AIR

668-4608

P.O. Box 6001

Whitehorse, Yukon Y1A 5L7

CHARTER TICKET

No 1743

AC CESSNA 206 TSP DATE June 30, 97NAME LIVINGSTONE PLACERADDRESS WHITEHORSE

From	Miles	Hours	Cargo	Passenger-Remarks
To <u>XY</u>				
<u>LIV</u>				
<u>XY</u>				

Special Instructions

at Per Hour

at Per Mile 21.00

Waiting Time at Per Hour

Fuel gals @ Per Gallon

GST # R126985522 14.00TOTAL CHARGES \$224.00

David Young
Pilot's Signature

Base

Max Fresh
Charterer's Authorization

w Printers

BIG SALMON AIR

668-4608

P.O. Box 6001

Whitehorse, Yukon Y1A 5L7

CHARTER TICKET

No 1740

AC CESSNA 206 TSP DATE June 27, 97NAME LIVINGSTONE PLACERADDRESS WHITEHORSE

From	Miles	Hours	Cargo	Passenger-Remarks
To <u>XY</u>				
<u>LIV</u>				
<u>XY</u>				

Special Instructions

at Per Hour

at Per Mile 21.00

Waiting Time at Per Hour

Fuel gals @ Per Gallon

GST # R126985522 14.00TOTAL CHARGES \$224.00

David Young
Pilot's Signature

Base

Max Fresh
Charterer's Authorization

Willow Printers

668-4608
P.O. Box 6001
Whitehorse, Yukon Y1A 5L7

CHARTER TICKET
No 1744

ACCESS NO. 2015 DATE June 30, 97
NAME LIVINGSTONE PLACER
ADDRESS WHEATBURIE

[illegible]


Pilot's Signature

Charterer's Authorization

new Printers

668-4608
P.O. Box 6001
Whitehorse, Yukon Y1A 5L7

CHARTER TICKET
No 1870

AC C-GSSR DATE June 18/97
NAME LIVESTON PLACER
ADDRESS _____

[illegible]

Capt. [Signature]
Pilot's Signature

Charterer's Authorization

Willow Printers

BIG SALMON AIR

668-4608

P.O. Box 6001

Whitehorse, Yukon Y1A 5L7

CHARTER TICKET
No 1512

AC CESSNA 206 SSR DATE July 30, 97
NAME LARRY CARLYLE
ADDRESS WHITEHORSE

From	Miles	Hours	Cargo	Passenger-Remarks
To <u>XY</u>				
<u>LIV</u>				
<u>XY</u>				
<i>Paul Douglas</i>				
Special Instructions			at	Per Hour
			at	Per Mile
Waiting Time			at	Per Hour
Fuel			gals @	Per Gallon
GST # R126985522				
TOTAL CHARGES				

David Yang
Pilot's Signature

Base

Charterer's Authorization

Willow Printers

BIG SALMON AIR

668-4608

P.O. Box 6001

Whitehorse, Yukon Y1A 5L7

CHARTER TICKET
No 1901

AC C-GSSR DATE July 3/97
NAME Larry Carlyle
ADDRESS 14 Tamarack Rd. Whitehorse

From	Miles	Hours	Cargo	Passenger-Remarks
To <u>XY</u>				
<u>LUGN</u>				
<u>XY</u>				
<i>Will Skitmore Larry Carlyle</i>				
Special Instructions			at	Per Hour
			at	Per Mile
Waiting Time			at	Per Hour
Fuel			gals @	Per Gallon
GST # R126985522				
TOTAL CHARGES				

Pickup

XY
LUGN
XY

Phone call for
Pickup approx
July 12 to 14

Paul

Craig
Pilot's Signature

Base

Charterer's Authorization

Willow Printers

Cheque # ~~005~~

CHARTER TICKET
No 1951

668-4608

P.O. Box 6001

Whitehorse, Yukon Y1A 5L7

ACCESSINA 206 JSR DATE Aug 30, 97

NAME LARRY CARLWIE

ADDRESS WHITE HURST

[illegible]

fly out
4 wheel.

Rand Young
Pilot's Signature

Base

Larry K. Cable
Charterer's Authorization

TUTCHONE AIR

Box 5018

Whitehorse, Y.T. Y1A 4S2

(403) 657-2488

DATE Sept 12 1997

NAME Arroyo Carhyle

ADDRESS

SOLD BY		C.O.D.	CHARGE	ON ACCT.	ACCT.FWD
1	Charter - Livingston			150	00
2	C150				
3	1.5 Swain @ 30.00			45	00
4	Rd by				
5	ROA C# 189				
6	208 ⁶⁵				
7					
8					
9					
10					
				195	00
TAX REG. NO:				6 ST	13 65
41		TOTAL		208	65
SIGNATURE					

BLUELINE 63NCR-2

TOTAL

174	2
175	22
176	71



411D Strickland Street
Whitehorse, Yukon
Y1A 2K3
Phone : (403) 667-4639
Fax : (403) 668-2734

INVOICE No.: 41276

YUKON'S COMPLETE QUALITY PRINTING CENTRE

CUSTOMER : Larry ~~Allen~~ Carlyle

ADDRESS : _____

DATE IN : July 29/97

DATE REQ'D : _____

RUSH : ☐

JOB OR PROJ. NO.: _____

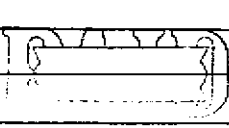
CONTACT : _____ PHONE : _____ P.O. NO.: _____

DIAZO

PHOTOCOPY 2520

LASER

SUPPLIES / OTHER

DRAWING TITLE OR JOB NO.	NO. OF ORIG'S	NO. OF COPIES	DESCRIPTION	SIZE	SQ FT/ TOTALS	UNIT PRICE	TOTAL PRICE
			BLACK / BLUE LINE				
			BLACK / BLUE LINE				
			DILAR BLK SEPIA				
			STAPLE / TAPE				
			FOLDED				
			BOND / VELLUM / FILM				
			SS DS				
			SS DS				
			SS DS				
			CERLOXBOUND				
			COVERS Card Acetate				
			OHP.				
			SLIDE / NEG. SET UP				
Box of hip chain thread							49.50
flagging					12	1.45	17.40
 by VISA							

G.S.T. REG. NO. R102500287

TERMS : Net 30 Days from Date of Invoice 2% Per Month

Charged on Overdue Accounts

Docket No. _____

SUB TOTAL

G.S.T.

TOTAL

66.96

4.68

71.58



BARRY MCCALLAN BLDG MAT LTD.
BEAVER LUMBER
2281-2ND AVENUE
WHITEHORSE
Y1A 1C9
(403) 667-4478

PAGE 1 OF 1

DATE TIME TRANSACTION # CLERK

20-JUN-1997 11:19:40 429100 LIX

GST NUMBER 13896 4606RT

*** REGISTER SALE ***

TENDER TAKEN:
CASH 5.34

SHIP TO:

PST EXEMPT #

QUANTITY	UNIT	DESCRIPTION	PRICE	EXTENDED
1	EA	888364 WIRE TIE:PEBAR 16G BLK 3-17/8LB CL	4.99YY	4.99

FILLED BY _____ ORDERED BY _____
DELIVERED BY _____ RECEIVED BY _____

SUB TOTAL	TAXABLE	P.S.T.	G.S.T.	GRAND TOTAL
4.99	0.00	0.00	0.35	5.34

REC'D FOR RETN NO RETNS ON SPEC/ORD

DATE Sept. 15 19 97

TAX REG NO _____

NAME Larry Carlyle

ADDRESS _____

SOLD BY	C.O.D.	CHARGE	ON ACCT.	ACCT. FWD.
1		Return Helmet	59	95
2		Phone Card	5.	00
3		Owners Man.	41.	97
4				
5				
6				
7				
8				
9			106	92
10		G.S.T.	7	48
			114	40

219961 SIGNATURE ME

Brown Sports Rentals
(Dartmouth North)
DATE July 29 19 97

TAX REG NO _____

NAME Larry Carlyle

ADDRESS _____

SOLD BY	C.O.D.	CHARGE	ON ACCT.	ACCT. FWD.
1		Rental for Aug		850.00
2		G.S.T. for last month		55.61
3				
4				
5				
6				
7				
8				
9				
10		G.S.T.		63.39
		Cheque # 9		969.00

219958 SIGNATURE _____

ATV Rental

VIEW MY CUSTOMER
 Bike Rental
 DATE Sept. 5 1997
 TAX REG. NO. _____
 NAME Larry Carlyle
 ADDRESS _____

SOLD BY	C.O.D.	CHARGE	CH. ADCT.	ADCT. PWD.
1				
2		Rental		
3				222 45
4		Equipment		
5				
6				
7				
8				
9				
10				
				222 45

219960 SIGNATURE Larry H. Carlyle

BLUELINE DC 41

ATV Rental

TRANSACTION RECORD 970995/10:57

VENTURES NORTH LTD
120 B INDUSTRIAL RD
WHITEHORSE YUKON TERRITORY
Y1A2T9

ATV Rental

TERM ID: 02358286

MID: 496165

CARD # 4518409427444

EXP: 11 97

ACCT TYPE: VISA

REFUND

KEYED

REF NO: 0000067 AMOUNT: \$265.39 REFUND

(001) APPROVED - THANK YOU

Larry H. Carley
MERCHANT SIGNATURE

HORWOOD'S OFFICE SUPPLY (1990 LTD.)
107 MAIN STREET
WHITEHORSE, YUKON
Y1A 2A7
(403)-667-4359

REG# A

TRANS # 1623 DATE: Tue 29 Jul 97
STORE # 01 TIME: 11:52
STAFF # 700 HEATHER

SALE 9471117P1
VELLUM PAD 11X17 1 X 34.00
-----> 34.00
SUB-TOTAL \$ 34.00
GST \$ 2.38
***** TOTAL ***** \$ 36.38

PAID BY: VISA \$ 36.38

THIS IS YOUR INVOICE, NET 30 DAYS
2% PER MONTH ON OVERDUE AMOUNTS

** GST REGISTRATION NUMBER R102398930 **
ENTER P/O # AND SIGN BELOW THIS LINE
*

SHOPPERS DRUG MART #299
211 MAIN STREET, WHITEHORSE, YUKON

38 10 0287 299 012

CARNATION PWD 1N 9.49
TOTAL 9.49

DBIT CHEQUING 9.49
4519 0194 3002 1705 2607

051 ALTERNATE TENDER REQUIRED

DBIT CHEQUING 9.49
4519 0194 3002 1705 2727

051 ALTERNATE TENDER REQUIRED

CARNATION PWD 1N 9.49-VOID
JIFFY MARKER SML 1G 2.99
JIFFY MARKER SML 1G 2.99
JIFFY MARKER SML 1G 2.99
JIFFY MARKER SML 1G 2.99
SUBTOTAL 11.96

7% GST .84

TOTAL 12.80

CASH 13.00 CHANGE .20

4 ITEMS

EVERYTHING YOU WANT IN A DRUGSTORE !

G.S.T. # R101271963

JULY 1, 1997 5:18 PM

TRANSACTION RECORD 670000-11112

VENTURES NORTH LTD
122 E INDUSTRIAL RD
WHITEHORSE YUKON TERRITORY
Y1A2T9

TERM ID: 00350000

NO: 456156

CARD # 4519409427404

ACT TYPE: VISA

REF NO: 0000012

(001) APPROVED - THANK YOU NOTE 0000045

CARDHOLDER AGREES TO PAY ISSUED AMT
TOTAL IN ACCORDANCE WITH ISSUERS
AGREEMENT WITH CARDHOLDER

CARDHOLDER SIGNATURE

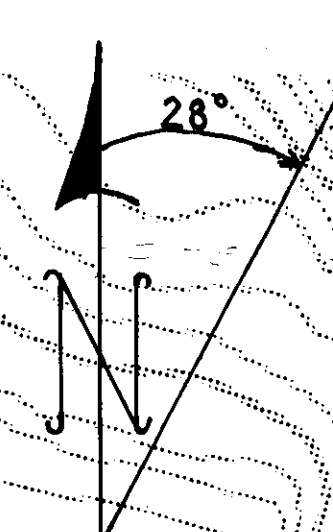
Deposit
monthly Rental

ATV
Rental

1:50,000
Topo
105 E/8

10-06-97
1* 10-40
2* 8.45
1 0.59TX
9.040
9.10CA
0.06CG
1*006211-

CAM CLAIMS
NTS MAP 105 E/8
SCALE: 1:10,000
1997 WORK PROGRAM



SAMPLE NUMBER
GOLD VALUE(ppb)

MENDOCINA

DYER CREEK ROAD

VIOLET CREEK

CREEK

B I G

SAMPLE NUMBER
GOLD VALUE(ppb)

CREEK

COTTONEVA

WAGON ROAD

RIVER

LIVINGSTONE

AIRFIELD

LAKE

SUMMIT

CREEK

CREEK

LIVINGSTONE CREEK

SAMPLE NUMBER
GOLD VALUE(ppb)

LIVINGSTONE

MAG LINES

MAG LINES

ROAD

ROAD

ROAD

NOTE
SL 20 = VLF LINE

SL 1

SL 2

SL 3

SL 4

SL 5

SL 6

SL 7

SL 8

SL 9

SL 10

SL 11

SL 12

SL 13

SL 14

SL 15

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