

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS
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REPORT OF WORK

HAT PROJECT

Lat. 58 12', Long. 131 34'

ATLIN MINING DIVISION

NTS 104-J/4E

NORTHWESTERN BRITISH COLUMBIA

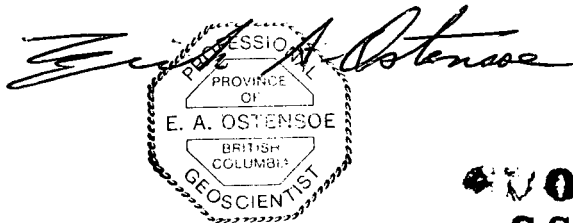
Work Done in Period July 9 to 29, 1995.

Work Done by: Erik Ostensoe, P. Geo.
Thomas E. Lisle, P. Eng.

Report Prepared by: Erik Ostensoe, P. Geo.

Date of Report: January 10, 1996.

FILMED



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

24,388

CONTENTS

	page
O.O SUMMARY AND RECOMMENDATIONS	1
1.0 INTRODUCTION	1
1.1 Introduction	1
1.2 Location and Access	2
1.3 Property	2
1.4 History	2
2.0 GEOLOGY OF THE HATCHAU LAKE AREA	3
2.1 Introduction	3
2.2 Geology	4
2.3 Magnetism and VLF-EM Data	5
3.0 1995 WORK PROGRAM	5
3.1 Introduction	5
3.2 Field Work	5
3.3 Work in "Gossan" Creek Area	6
3.4 Work in Hoey Showings Area	8
4.0 DISCUSSION OF DATA OBTAINED FROM 1995 WORK	9
TABULATIONS	
Table 1 - Claims - Hat Project	2
APPENDICES	follow page 9
Appendix 1 - Geochemical Data Sheets	
Appendix 2 - Certificates of Analysis	
Appendix 3 - Statements of Qualifications	
Appendix 4 - Statements of Expenditures	
ILLUSTRATIONS	
Figure 1 - Location Map	follows p. 2
Figure 2 - Claims and Locations of Work	follows p. 2
Figure 3 - Geology - Gossan Creek. Scale 1:2500	in pocket
Figure 4 - Geochemistry - Gossan Creek. Scale 1:2500	in pocket
Figure 5 - Sampling - Hoey Area. Scale 1:2500	in pocket
Figure 6 - Belt Chain and Compass Traverse - Hoey Area	follows p. 8
Figure 7 - Sketch of Talus Fines Sampling - "Big" Creek Area	follows p. 8

0.0 SUMMARY AND RECOMMENDATIONS

Erik Ostensoe and Thomas E. Lisle completed a program of prospecting, mapping and sampling at Hatchau Lake, north of Telegraph Creek, B. C., during July, 1995. Strong hydrothermal alteration in a major fracture zone was investigated at "Gossan" Creek and fracture controlled gold-sulphide mineralization was sampled at "Hoey" Creek.

Gossan Creek is believed to represent a high level alteration suite imposed on sheared and brecciated arenaceous rocks that may be situated on the flanks of a stratovolcano. Substantial gold and copper values were obtained from the Hoey Creek area where gabbroic rocks are fractured and sheared. Other mineralized areas were examined in less detail.

Further work in the Hatchau Lake area is strongly recommended. The broad zone of alteration at Gossan Creek should be further mapped and sampled. Mineralogical studies should be completed in order to determine if the zone represents a weakly mineralized capping overlying a classic epithermal environment that may host a bonanza-type gold deposit. The Hoey mineral zones should be mapped, possibly using plane-table methods, to determine if mineralization is epithermal or volcanogenic in origin. The remainder of the Hat and Cap claims should be mapped in reconnaissance fashion with particular efforts directed to a search for evidence of porphyry copper deposit type environments.

1.0 INTRODUCTION

1.1 Introduction

A program of prospecting, geological mapping, soil sampling and rock chip sampling was completed on the Hat property at Hatchau Lake, north of Telegraph Creek, B. C. in the period July 9 - July 29, 1995. Work was done by Mssrs. Erik Ostensoe, P. Geo. and T. E. Lisle, P. Eng., geologists, with partial but substantial financial assistance provided by the Prospectors Assistance Program of the Ministry of Energy, Mines and Petroleum Resources, reference no. 95-96-P067.

Work was done under terms of Section 10, Mines Act, and Approval No. SM 1-95-0101459-147 (letter - Darryl Hanson, P. Eng., Inspector of Mines).

This report summarizes the 1995 work program. A discussion of the project is presented and further work is recommended.

1.2 Location and Access

The Hat Project is located in Atlin M. D. at Hatchau Lake, 40 km north of Telegraph Creek and 95 km southwest of Dease Lake, British Columbia (Figure 1).

Access to the project in 1995 was by float-equipped Otter aircraft from Dease Lake. The road that connects the Dease Lake-Telegraph Creek road to the Golden Bear mine passes about eight kilometres south of the property and may in future facilitate work in the area.

1.3 Property

The Hat Project comprises 59 claim units in four four-post and two two-post claims as detailed in Table 1 and illustrated in Figure 2.

Claim	Record No.	Size	Units	Owner	Expiry Date
Bob 1	338097	5 X 4	20	E. Ostensoe	July 12, 1996
Bob 2	338096	5 X 4	20	T. E. Lisle	July 12, 1996
Bob 3	338098	2 post	1	T. E. Lisle	July 25, 1996
Bob 4	338099	2 post	1	E. Ostensoe	July 25, 1996
Hat 3	326685	3 X 3	9	T. E. Lisle	June 12, 1996
Hat 4	326782	2 X 4	8	E. Ostensoe	June 12, 1996

TABLE 1. Claims - Hat Project

1.4 History

The gossaned carbonate alteration zones prominently displayed along the hillsides north of the Kennicott - Hatchau Lake and Hackett River valley undoubtedly have attracted the attention of prospectors since the earliest explorations of the area. The Hoey showings may have been discovered in 1963 by Frank Hoey, a prospector from eastern Canada with financing provided by a syndicate of mining companies.

Atled Resources Ltd., Colorado Corporation (a unit of King Resources), Newconnex Canadian Exploration Ltd., and United Cambridge Resources Ltd., a VSE junior company, variously carried out work on porphyry copper prospects near the west end on the valley in the period 1968 to 1988. Utah Mines Ltd. explored claims (Ski 1 - 6 claims) in the immediate Hat Project

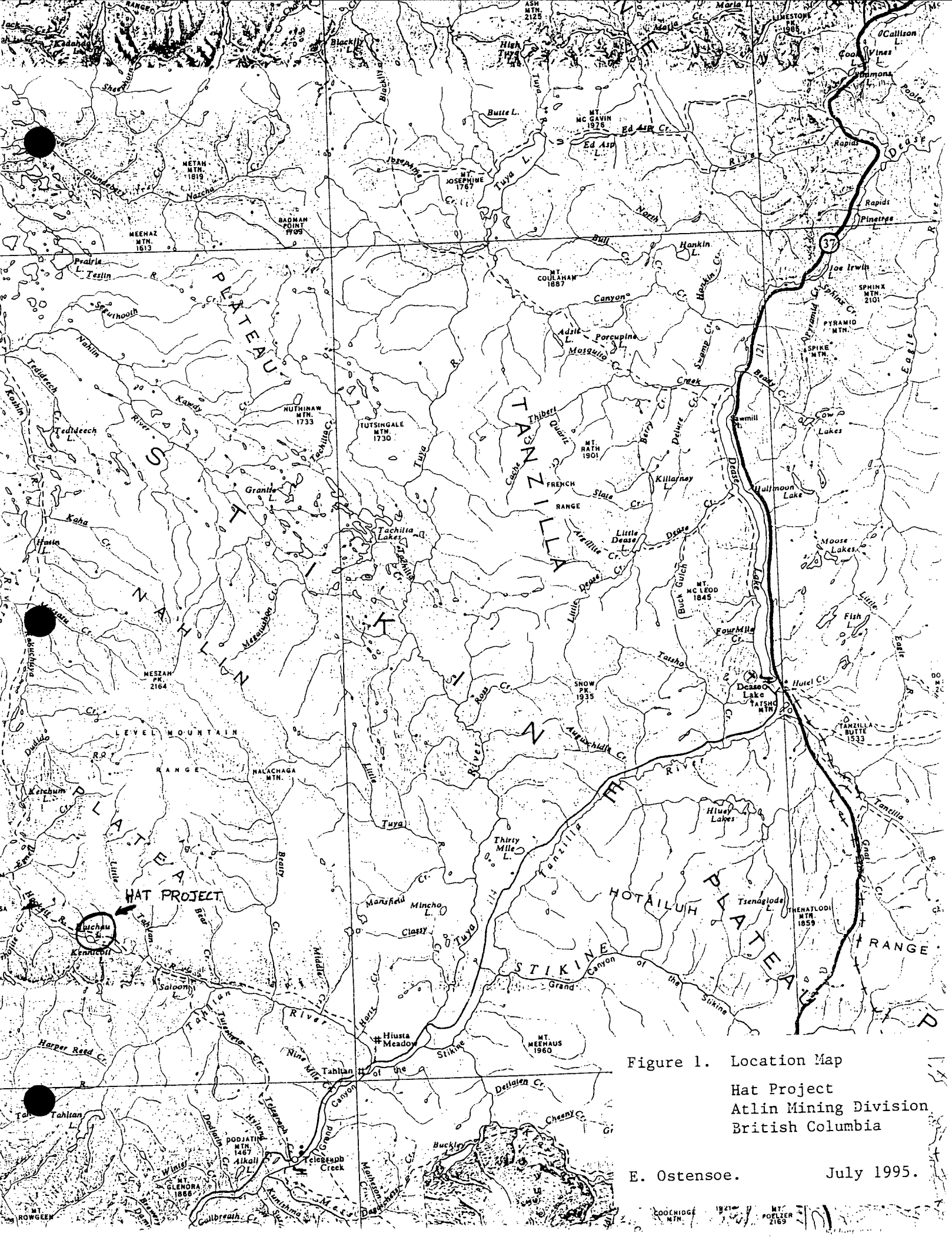
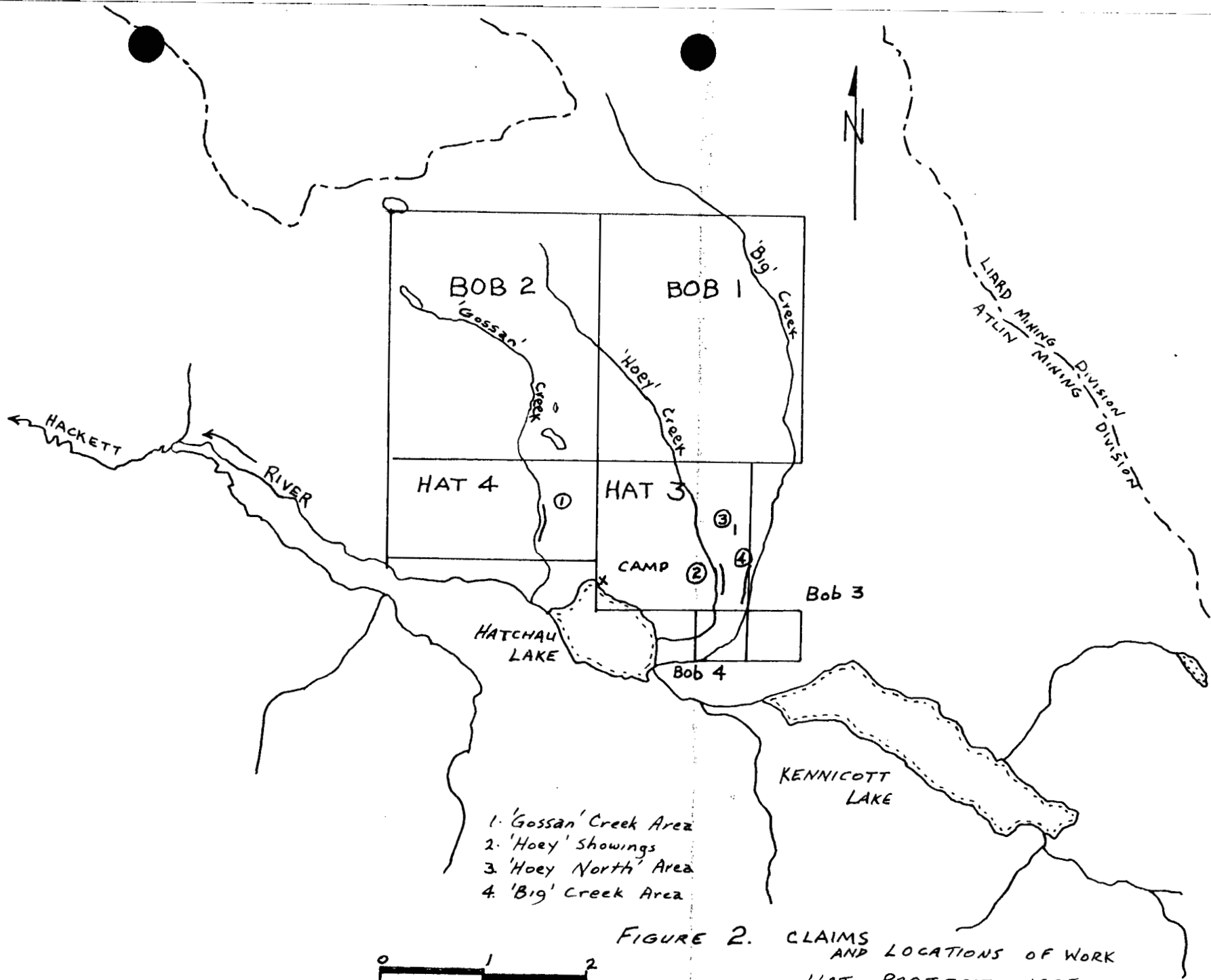


Figure 1. Location Map
 Hat Project
 Atlin Mining Division
 British Columbia

E. Ostensoe. July 1995.

COOCHIDGE MTH. 1841
 MT. POELZER 2169



area in the period 1977 through 1980 (MEMPR assessment report 6835), established an 144 kilometre line grid, conducted induced polarization and magnetic surveys, bulldozer trenching, and analysed almost 2000 soil samples for copper. More recent work in the area known to the writer includes airborne magnetic and VLF-EM surveys by United Cambridge Mines Limited in the Hatchau Lake area during 1987 and regional scale airborne surveys in the Hackett River valley directed by Golden Ring Resources Ltd. during 1991 (MEMPR assessment report 22100).

2.0 GEOLOGY OF THE HATCHAU LAKE AREA

2.1 Introduction

The Hatchau Lake area is located at the southwest edge of the Nahlin Plateau, a sub-division of the Stikine Plateau in the Intermontane Belt of northwestern British Columbia, immediately east of the Coast Mountains. It is south of Level Mountain, a Plio-Pleistocene plateau volcano, and north and west of the Grand Canyon of Stikine River. Elevations vary from 625 to 1200 metres above sea level. Streams flow westerly via Hackett River into Sheslay River, a tributary of the Taku River system.

Prevailing structural trends are those of the Cordillera - northwest with strong northerly disruptions. Dominant lithologies are pre-Triassic age Cache Creek formation sedimentary rocks and Late Triassic-Early Jurassic age Stuhini Group volcanoclastic rocks. Granitic intrusive rocks, including the Kaketsa stock ten kilometres west of Hatchau Lake, have been dated as Late Triassic age.

Stuhini Group rocks are related to Takla and Nicola Group formations that are extensive in British Columbia and that are hosts to most of Canada's porphyry copper deposits. Low grade copper deposits have been explored in the vicinity of the Kaketsa stock, at Dick Creek and at Copper Creek in the Sheslay area and, in the Hat Project area, north of Hatchau Lake. Gold occurrences include the Wolverine deposit that has been explored at Kilometre 44, eight kms south of Hatchau Lake, and at Hoey, north of that lake. Large brightly coloured carbonate altered zones that occur along the east-west valley of Hackett River appear to be related to north-trending structural zones. Superficial Quaternary gravel and clay deposits present along the north side of the valley occasionally exhibit depths in excess of three metres.

2.2 Geology

No systematic geological mapping was undertaken as part of the 1995 program of work and the following observations are in large part based on previously recorded information, in particular the work of Utah Mines Ltd. (MEMPR assessment reports 6835, 7482).

The Hat Project area lies at the south edge of the Plio-Pleistocene age Level Mountain volcano. Massive dark grey to black basaltic flows from that source are present in the northern parts of the claims. The principal Stuhini Group rocks are porphyritic augite andesites, with basalt, chert, siltstone and tuffaceous sedimentary members. Alteration in many variations is widespread, comprising pyritization, chloritization, argillization, and, to a limited extent, potash feldspathization. Monzonitic intrusive rocks are present in the uplands immediately north of Hatchau Lake where they were excavated in bulldozer trenches and in small outcroppings near the point of emergence of Hoey Creek into the Hatchau Lake valley. Small amounts of disseminated magnetite, pyrite and chalcopyrite accompany the intrusions.

Carbonate altered rocks exposed in "Gossan" Creek northwest of Hatchau Lake are strongly fractured sedimentary units, principally tuffs, siltstone, claystone and probably rocks of primary carbonate origin.

A broad north-striking fault zone occupies the deeply incised valley of "Gossan" Creek where it is exposed throughout over a distance of one kilometre, weakening and disappearing at the canyon headwall near where the transition from sedimentary terrain to igneous rocks occurs.

Air photographs that cover the Hatchau Lake area show strong linear features: both northwesterly, conforming in a general way not only to the principal drainage direction but also to Cordilleran trends, and northerly, approximating the trends of the Shesley River- Dudidontu River valley, a few kilometres to the west, and Beatty Creek to the east. Relating such structures to the fundamental fractures that support the major volcanoes in the regional is an intriguing but wholly speculative exercise. Similarly speculative is the concept that the area of work is one the flank of a broad stratovolcano that has existed through considerable geologic time and that now forms the platform on which the Level Mountain volcano has been built.

The Wolverine gold prospect, located eight kilometers south of the Hat project, and explored by Homestake in 1989-91, is located in proximity to a north striking lineament that, if projected, would pass through the project area and, incidentally, into the heart of Level Mountain.

2.3 Magnetism and VLF-EM Data

The airborne magnetometer and VLF-EM survey of the Moon claims, predecessors of the Hat project claims, in 1987 confirmed that the southern portion of the claims is mainly sedimentary whereas the northern portion is mainly volcanic in character (Mark and Cruikshank, 1987). The geophysicists, on the basis of magnetic patterns, postulated that a large gabbroic-diorite stock is present in the northwest quadrant of the project area. They also postulated from VLF-EM data, the presence in the same general area of a sulphide-bearing shear zone with strike direction (northerly) similar to that of the "Gossan" Creek shear zone. However, the locations of neither the latter nor the Hoey zone were obvious from their data.

3.0 1995 WORK PROGRAM

3.1 Introduction

Erik Ostensoe, P. Geo. and T. E. Lisle, P. Eng., in spring, 1995, applied to the Prospectors Assistance Program for funding in support of a proposed program of prospecting work on the Hat Property. The application was successful and work was undertaken in the period July 9 - July 29, 1995. The prospectors were visited in the field on July 25 by P. J. Wojdak, P. Eng., district geologist, Ministry of Energy, Mines and Petroleum Resources.

Work included prospecting and reconnaissance on the "Gossan" Creek and Hoey showings, geochemical sampling and rock chip sampling. Crude survey grids and traverses were established by belt-chain and compass methods. One hundred and twenty-four samples were taken and subsequently were analysed by induced coupled plasma methods for 30 elements and by graphite furnace/atomic absorption for gold. Eighteen soil samples taken between 10 W and 19W on line 8+00 North were not analysed but are in storage for possible future analysis.

3.2 Field Work

Mssrs. Ostensoe and Lisle travelled to Dease Lake, B.C. by vehicle (1795 km) and thence to Hatchau Lake by chartered aircraft operated by BC Yukon Air Service. A tent camp was set up on the shore of the lake. The constant and annoying attention of a black bear necessitated innovative methods to protect the food supply but even so the sleeping tent was slashed and almost totally destroyed. Work (Figure 2) was divided between the "Gossan" Creek zone where the brightly orange-coloured canyon walls highlight a zone of intense shearing and accompanying

carbonate alteration and the Hoey showings where a zone of gold-bearing sulphide mineralization has been shredded by a complex of fractures. Some secondary areas of interest were also checked. The prospectors left the field site on July 27, 1995.

A grid of soil samples was established across the canyon of "Gossan" Creek and, following prospecting, several of the mineral zones were chip sampled (Figures 3 and 4). Old trenches at the Hoey site were refreshed, enlarged, mapped and sampled in detail and adjacent areas were prospected (Figures 5 and 6). Two nearby, possibly related, mineralized areas were investigated: a bulldozer trench about 500 metres north of Hoey, and the lower canyon of "Big" Creek, the stream that enters Kennicott Lake-Hatchau Lake valley immediately east of Hoey (Figure 7).

Rock chip samples were placed in plastic bags which were identified by numbered paper tags. Soil samples were taken from 'B' and 'C' horizon soils and placed in standard kraft paper envelopes identified by marker pen notations. Sample details were recorded on prepared data sheets (Appendix 1). Certain samples from non-critical areas were not analysed: due in part to financial limitations but also pending receipt of other, presumed more pertinent, analytical data.

Thirty-three rock chip samples, 75 soil samples, 2 stream sediment samples, and 14 talus fines samples were submitted to Acme Analytical Laboratories Ltd. 0.5 gram samples of dried soil or crushed rock materials were digested in hot aqua regia and analysed for 30 elements by standard ICP-ES (induced coupled plasma emission spectrometry) methods. Gold determinations were performed on 10 gram samples with aqua regia digestion, MIBK extraction and graphite furnace atomic absorption analysis. Gold detection limit by this method is 2 ppb.

Geochemical analysis certificates are included in Appendix 2 of this report.

3.3 WORK IN "GOSSAN" CREEK AREA

Eighteen man-days were devoted to work in the "Gossan" Creek area. A series of east-west grid lines were extended across parts of the canyon and where terrain and conditions permitted, soil samples were taken at 50 metre intervals (Figures 3 and 4). Line 8+00S was extended westerly to 19+00W where it was ended close to Hackett River. Soil samples from 10+00 W to 19+00W on Line 8+00S were not analysed, and, pending further financing, remain in storage.

"Gossan" Creek flows southerly in a steep, narrow canyon into the Hackett River valley where it disperses into the gravel beds. The canyon is developed in a series of bedded rocks, mostly tuffs, that are strongly sheared. Intense silica and carbonate alteration accompanies mylonitized and gougy strands of a broad fault zone and several areas of carbonate-cemented

breccia were noted. Similar brightly coloured altered and brecciated rocks were found along the hillside for a distance of one kilometre west of the canyon. Rocks to the north in the canyon are more competent and are somewhat less intensely faulted, perhaps in response to proximity to the transition that is believed to exist northerly from sedimentary rocks into primarily volcanic and intrusive rocks that underlie the upland terrain.

Dominant rock types are andesite, which is present as bedded tuff and as more massive beds, possibly flows, and various sedimentary rocks. Finely banded tuffs and narrow layers of chert are indicative of a sedimentary environment and the abundance of calcareous alteration minerals suggest that limestones or limey sediments may have been present but were absorbed and re-distributed by faulting and shearing.

Small amounts of monzonite are present in the upper part of "Gossan" Creek canyon and large areas of flatter ground to the north are known to be of similar intrusive character. It is speculated that the small occurrences found in the canyon are slices caught up in the faulting. The outcroppings of intrusives were altered approximately to the same degree as were nearby bedded rocks.

Figure 3 illustrates several zones of shearing and faulting, the most dominant directions of which are northwest and northeast. A gently northwest dipping, northeast striking, zone of shearing in the vicinity of 3+50S/7+75W is consistent with gold and copper geochemical patterns that are suggestive of the presence of layered structures that have been disrupted by steeper angled north-trending faulting.

Figure 4 illustrates partial geochemical data from the "Gossan" Creek area. Only gold and copper values are shown and other analyses are available from geochemical certificates included in Appendix 2 of this report. Further study of the analyses is required, with particular attention to data for cobalt, arsenic, and zinc. Manganese is present in significant amounts.

Eight rock chip samples from "Gossan" Creek canyon area were analysed for 30 elements plus gold. Locations of samples are plotted on Figure 3 and sample numbers have been underlined. Rock analyses returned low gold and copper values.

A compilation of all available data from previous work in the Hatchau Lake area is in progress but to date no conclusions regarding the potential of the "Gossan" Creek area have been reached. The strong overprinting of ferruginous carbonate and argillic alteration is similar to that found in acid sulphate clay-silica cappings in the upper levels of epithermal systems, as described by Panteleyev (in Ore Deposit Models, Geoscience Canada, 1988) and by Buchanan (presentation, 1980 Geoscience Forum, Whitehorse). Substantial gold deposits may be expected to occur at shallow depths below such environments.

3.4 WORK IN HOEY SHOWINGS AREA

Fourteen man-days were directed to work in the vicinity of the "Hoey" showings. This area is located along the east side of a steep-walled canyon formed by the incision of Hoey Creek into the south-facing slope of the Hatchau Lake-Kennicott Lake valley.

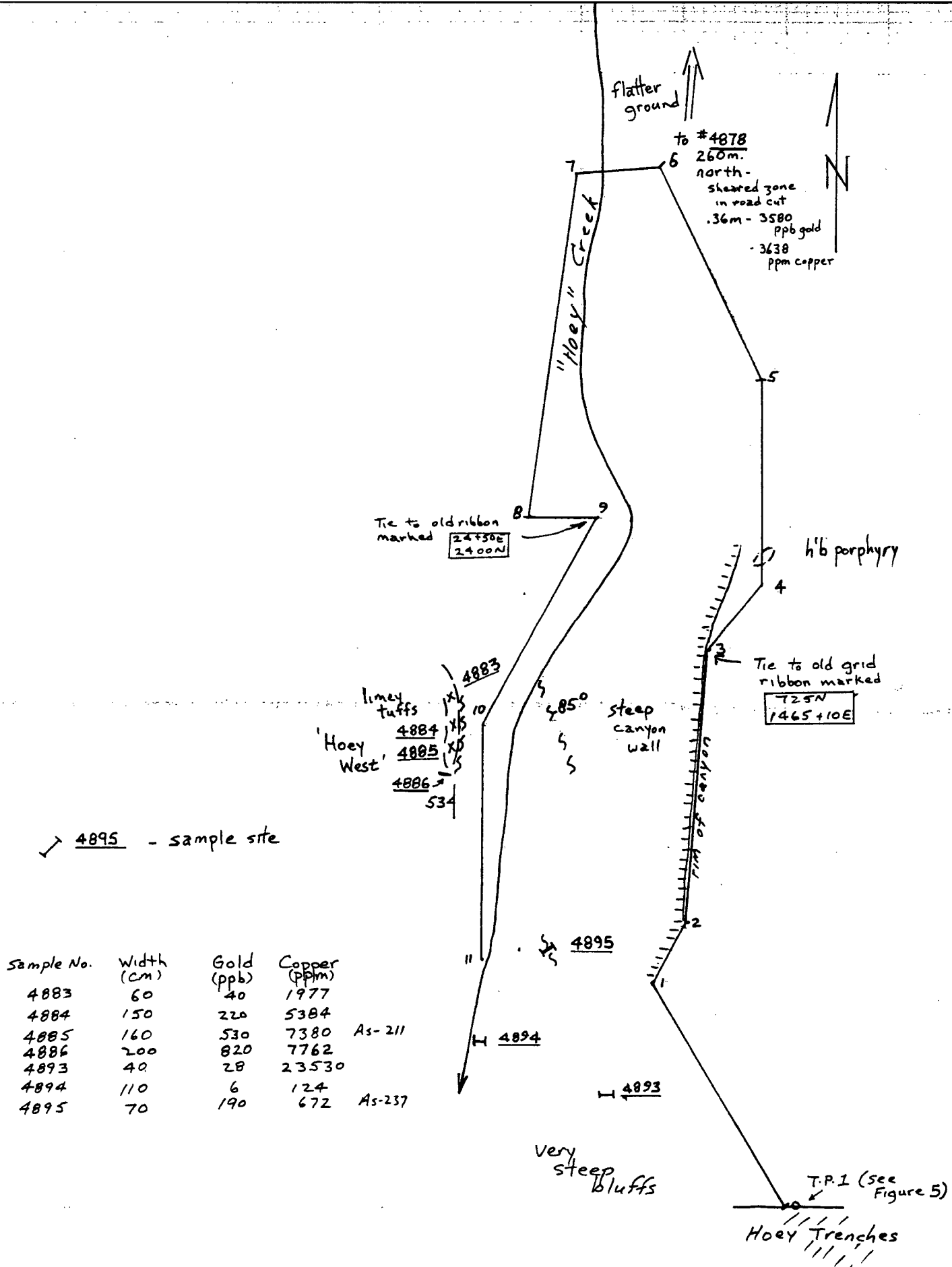
First known work in this area is believed to have been done in 1963. Several small follow-up programs of work are evidenced by several small hand-dug trenches developed on mineralized structures in strongly fractured dark rocks of volcanic origin. The mineralized structures are narrow layers of deeply oxidized specular hematite, pyrite, and minor chalcopyrite. Secondary minerals are present to the depth of the trenches.

Work in 1995 included refreshing, deepening and extending the old trenches and new digging on other nearby showings. A simple belt-chain and compass survey was established over the mineralized area as a basis for taking chip samples from the various strands of metallic minerals (Figure 5). Twelve chip samples were submitted for analyses.

A belt-chain and compass traverse from the north end of the trenched area followed the east rim of the canyon, crossed the creek to the west side and then ran southerly (Figure 6). The purpose was to provide a crude means of relating samples from the "Hoey West" area to the main area. Four chip samples were taken from a prominent carbonate bluff located close to the creek bottom. Three additional samples were taken from narrow strands of mineralization located on the lower east side of the canyon. Sample no. 4878 was taken from a shear zone exposed in an old roadcut situated about 260 metres north of the north end of the traverse ("Hoey North"). Figure 7 illustrates a line of talus fines samples that were taken from the west side of "Big" Creek. Big Creek occupies a valley located about 600 metres east of the Hoey area.

Samples at the main Hoey area were taken from nine different strands of mineralization, all of which had similar characteristics but the degree of shearing and oxidation varied considerably. Gold analyses varied from 220 to 8110 ppb and copper values, from 779 to 22041 ppm. The carbonate bluff west of Hoey Creek ("Hoey West") returned lower gold and copper values than did the main area, from 40 to 820 ppb gold, and 1977 to 7762 ppm copper. The "Hoey North" sample returned 3580 ppb gold and 3638 ppm copper. Talus fines samples from "Big Creek", east of Hoey, contain background to anomalous amounts of gold but the number of samples is probably insufficient to be more than marginally indicative of mineral potential in the area.

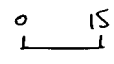
Sampling in the Hoey area has revealed strongly anomalous gold and copper values over moderate to narrow widths and distributed from the rim of the canyon to creek level, a vertical separation of about 100 metres. Rocks that host the mineral zones are andesitic to gabbroic in composition and are both sheared and oxidized. Dominant structures trend northerly to



↗ 4895 - sample site

Sample No.	Width (cm)	Gold (ppb)	Copper (ppm)	
4883	60	40	1977	
4884	150	220	5384	
4885	160	530	7380	As-211
4886	200	820	7762	
4893	40	28	23530	
4894	110	6	124	
4895	70	190	672	As-237

Figure 6. Belt chain and Compass Traverse to Tie from Hoey Area to 'Hoey West' Area



Scale 1:1500

July 1995.

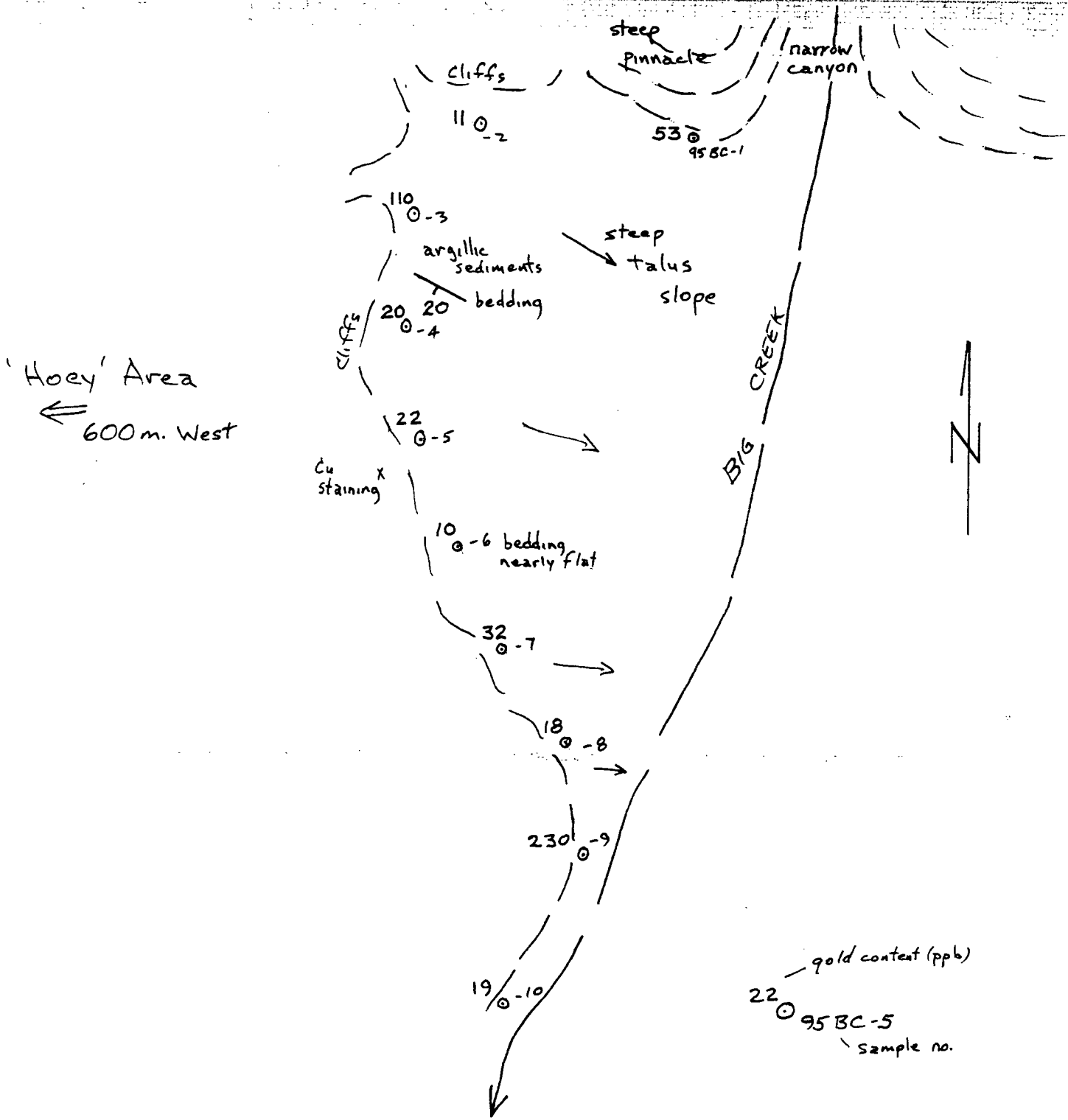


Figure 7. Sketch of
TALUS FINES Sampling
'Big' Creek Area
HAT PROJECT
EAO. July 1995.
Diagrammatic
scale approx 1:2500.

northeasterly and dip steeply to the east. Interpretation of results is speculative due to the difficulties of mapping structures that are disrupted by fractures and to the possible distortions of values that may be introduced by oxidation.

Further work is required to help determine if worthwhile amounts of precious metals are present.

4.0 DISCUSSION OF DATA OBTAINED FROM 1995 WORK

Work in the Hat Project area during 1995 confirmed the presence of strongly altered and fractured bedded rocks in an area that extends from west of Gossan Creek to Big Creek (informal names) on the Hat 3 and 4 claims. Substantial gold and copper values were returned from various samples that were analysed.

It is postulated that at Gossan Creek a high level epithermal system has introduced carbonate and metallic minerals into epiclastic rocks (Stuhini Group). This model implies fracturing and brecciation followed by argillic alteration with development of colloform banding, crustification structures, and cementation of the breccia and introduction of fine grained metallic minerals, including chalcopyrite, pyrite, and tetrahedrite.

At Gossan Creek the wide zone of intense shearing/faulting has been excavated by stream erosion, exposing weakly mineralized bedded rocks, apparently tuffs and arenites. Soil and rock chip sampling indicate that this area may be fitted into the upper level of an hypogene environment. Bonanza type gold deposits often are present at shallow depths below such zones.

The Hoey mineral zone is a complex of gougy fractures developed in mafic volcanic rocks. Specular hematite and fine to coarse grained sulphide minerals are present in fragments of narrow bands that may be either flow top structures or sheared zones. Gangue minerals are only sparsely present, comprising sparry calcite and patchy quartz. Some of the hand-dug trenches did not extend beneath the surface oxidation effects.

Hoey mineralization is characterized by a substantial gold content and the presence of massive, gabbroic host rocks. The controlling fracture system is narrower than that found at Gossan Creek and the rocks do not show evidence of alteration by magmatic hydrothermal fluids. Further exploration should include drilling in search of stronger, less disjointed mineral bands.

APPENDIX I.

Geochemical Data Sheets

GEOCHEMICAL DATA

LOCATION		NTS UTM GRID		Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
NORTH	SOUTH	EAST	WEST												
1		8+50S	8+00W	Soil Rock	.25	C	Yellow+ br	Residual Soil Colluvium	15		15	20	40	10 100	Bedrock - mostly soft, with 9abbaic andesite, sh'd zones, son. (Qta)
2				Rock											see notebook
3		8+00S	8+00W	S	.4	B	Dk br	Co	10	5	25	30	30		on slope to Cr. (50m E)
4			8+50W	S	.4	B	Dk br	Co		5	20	40	35		almost flat asper
5			9+00W	S	0.55	B	med br	Co			25	50	25		" " flat
6			9+50W	S	0.35	B	med br			5	20	40	35		" " rocky soil
7			10+00W	S	0.35	B	dk br			5	20	60	15		Fine soil
8			10+50W	S	0.25	B	br		15	5	20	30	20		Gravelly soil + rocks
9			11+00W	S	0.45	B	med br	soil	10	5	20	50	15		Good Edge of soil, slope w to Cr.
10			11+50W	S	0.4	B	br	soil	15	5	15	50	15		Good soil. Gentle slope to SW.

DEPTH; Measured in meters.

HORIZON; Marked A, B, or C

COLOUR: Br. Brown. Bl. Black. R. Red. G. Grey. O. Orange. Dk. Dark. Lt. Light.

MATERIAL; T Till; Co. Colluvium. A. Alluvium. F. Fluvial. GF. Glaciofluvial. O. Organic.

ORGANICS; Visual estimate of organic content.

GRAVEL; Estimate of Gravel sized fragments.

CLAY-SILT-SAND. Low to moderate to high estimates.

PROJECT: HAT

DATE: July 13, 1995

Sampler: E.A.O.

GEOCHEMICAL DATA

LOCATION		NTS UTM GRID		Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
NORTH	SOUTH	EAST	WEST												
1		L 8+00S	12+00W	Soil	0.4	?	Brown	Gravel sand	25%	10	25	25	35		stream worked material with soil developed
2			12+50W	S	0.25	?	Brown	fine gravel	20	10	5	40	25		E slope of stream valley. Sorted mat'l + soil
3			13+00W	S	0.25	B?	Brown	fluvial	15	5	10	50	20		Sidehill slope 25°S Traction mat'l. Fair to good.
4			13+50W	S	0.35	B	med br	Soil	0	5+	10	45	40		Sidehill. Good soil med to dk brown
5			14+00W	S	0.4	B	med br	Soil	0	5	15	45	35		
6			14+50W	TR	0.25	Rock	Yellow brown	Colluvium broken bedrock						v. f. gv v. sil.	No soils - just organic layer and rx frags.
7			15+00W	S	0.4	B	dk br	Soil	0	5	15	50	30		Good soil. 20° slope to south. Aspens.
8			15+50W	S	0.35	B	dk br	soil	(2)	5	15	45	35		Aspens.
9			16+00W	S	0.4	B	Yellow br	soil	20	5	20	30	25	limonite st. tuff	Rocky
10			16+50W	S	0.4	B	Yellow to med br.	Gravelly soil	20	5	15	35	25		Rocky

DEPTH; Measured in meters.

HORIZON; Marked A, B, or C

COLOUR: Br. Brown. Bl. Black. R. Red. G. Grey. O. Orange. Dk. Dark. Lt. Light.

MATERIAL; T Till; Co. Colluvium. A. Alluvium. F. Fluvial. GF. Glaciofluvial. O. Organic.

ORGANICS; Visual estimate of organic content.

GRAVEL; Estimate of Gravel sized fragments.

CLAY-SILT-SAND. Low to moderate to high estimates.

GEOCHEMICAL DATA

LOCATION		NTS UTM GRID		Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
NORTH	SOUTH	EAST	WEST												
1		LB+00S	17+00W	Soil	0.4	B	Reddish brown	Soil	2	5	15	60	20		Flat. Aspens.
2			17+50W	S	0.4	B	Yellow brown	Soil Colluvium	20		20	30	30	Dark Porphyry	Slope 25° S.
3			18+00W	S	0.4	Lwr A	Choc br.	Soil minor Co	10	15	15	30	30		Slope 20° S
4			18+50W	S	0.3	B	Med br	Soil + talus	20	5	10	25	40	Dk Porphyry	Telegraph Trail at Δ
5			19+00W	S	0.2	?	Yellow br	Soil + detritus	25	5	5	3.5	30	Calcd Silic porphyry	Lge pinnacle of yellow/orange limonite stained bxxd frmn with pyrite, mal. cpy.
6				Hackett Rv	is	about	80m S	and 30m lower	in elevn.						
7															
8															
9															
10															

DEPTH; Measured in meters.
 HORIZON; Marked A, B, or C
 COLOUR; Br. Brown. Bl. Black. R. Red. G. Grey. O. Orange. Dk. Dark. Lt. Light.
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 CLAY-SILT-SAND. Low to moderate to high estimates.

GEOCHEMICAL DATA

LOCATION		NTS UTM GRID		Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
NORTH	SOUTH	EAST	WEST												
1		10+00S	5+00W	S	.3	Lvr A	Choc br	Soil Co	10	5	10	50	25	Unk.	25° slope South soil + talus.
2			5+50W	S	.5	Lvr A	Choc br	Soil	5	15	10	50	20	Unk	Soil only. Poor mat'l
3			6+00W	S	.65	B	Green Grey	Till? Alluv.	10	?	10	40	40	Unk	Surface material is alluvial, underlain by green sandy soil. This is
4			6+50W	Stream soil	.10	N/A	Orange black	Alluv.	30	?	5	25	40		on shoulder of Gossan Cr. in slope SW toward cr. From active stream channel coarse sand
5			7+00W	S	.35	B	Br.	Co.	30	5	10	30	25	Andesite	steep slope to E. Rocky angular.
6		9+00S	6+00W	S	.40	B?	Lt br.	Co	25	5	15	25	30		Top of steep slope W to Gossan Cr. floor.
7			5+50W	S	.3	B?	Dk br	Co	25	5	10	35	25		side hill. Surface soil is dk, underlain by rocky tal.
8			5+00W	S	.3	B	Dk br	Co	20	5	10	35	30		As above. Steep slope to S. Poor soil develop.
9		8+50S	5+00W	S	.3	B	Dk br	Co	15	5	10	40	30	Bladed fs π	Better soil. Rocky talus.
10		8+00S	5+00W	S	.3	B	Lt yel br	Co	20	?	10	35	35	"	Better soil - under dk br. soil layer.

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HAT PROJECT
 July 14, 1995.
 EAO + TEL.

GEOCHEMICAL DATA

	LOCATION		NTS UTM GRID	Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
	NORTH	SOUTH													
1	8400	S	5150W	S	.35	Lwr A	DK-Med br	Soil few vx	15	5	5	35	40	And.	Good soil but too rocky to reach good 'B'.
2			6100W	S	.4	B	Yellow br	Soil + rock frags	20	?	5	40	35		FAIR but rocky soil.
3			6+50W	S	.45	B	Lt br	Soil + vx frags	15		10	50	25		Uppermost B- on steep slope to S-30°.
4			7+00W	S	.35	B	Orange- Yellow br	Sandy Soil. Alluv.?	10	?	5	35	50		steep slope SW to Gossan Cr.
5			* 7+43W	S	.25	B	Yellow br	Sandy	20	v. low	v low	med	high		Taken in East of creek slough material off slope
6			7+50W	stream sed.			Orange Yellow	Silt + sand	20	-	-	40	40		Discard? Spl of active channel of Gossan Cr
7	7+50S		5+00W	S	.4	B?	DK br	Soil + rt	10	10	10	50	20		May be lower A. Not a good sample.
8	7+00S		5+00W	S	.45	B	Red br	Soil + vx	15	10	10	35	30		Better sample. Rocky. Under 'A'.
9			5+50W	S	.4	B?	DK br	Soil	20	10	10	30	30	F ₃ π	FAIR SAMPLE
10			6+00W	S	.25	B	Red br	Rocky Soil	30	10	10	25	25		Angular vx frags.

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HAT PROJECT.
 July 14/95
 EO + TEL

GEOCHEMICAL DATA

	LOCATION		NTS UTM GRID		Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
	NORTH	SOUTH	EAST	WEST												
1		L7+00S	6+50W		S	.35	LWR A	Dk br	Soil PEBBLES	15	10	10	40	25	π	Poor soil Some red brown-B?
2			7+00W		S	.3	B	Olive green	SOIL	0	0	25	40	35	?	Good soil. On slope to Gossan Cr.
3			7+41W		R			Yellow br.								Limonite tr. mal. in sh. zone. Width 1 shov!
4			7+50W		SOILS + Talus fines	.2	B	Br	Granular Talus fines	45	5	15	20	15	π	Fines from steep + 6 inc slope - does not include previo
5		L6+50S	5+00W		S	.35	B(?)	Red brown	Soil + Angular frags	5	5	15	40	35	-	CR. at 7+30W. sh. zone. Aspens. Mod. slope.
6		L6+00S	5+00W		S	.5	B	Yellow brown	Soil	5	-	20	40	35		As above. Good soil
7																
8																
9																
10																

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5.47m depth
 Tilt, 10°
 5.10m depth

HAT PROJECT
 July 16, 1995
 EAO + TEL

⑦

GEOCHEMICAL DATA

LOCATION		NTS UTM GRID		Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
NORTH	SOUTH	EAST	WEST												
1		5+55	5+00W	S	.35	A/B	Med br	S	15	5	20	40	30		Fair
2		5+00S	5+00W	S	.5	B	Pale br	Co Till?	25	0	20	30	25		Good - see below
3			5+50W	S	.4	C	Red br	Br	40	0	15	25	20		Broken rock angular. Little trace
4			6+07W	S	.4	B?	Yell br	Alluv?	30	-	20	35	15		Shoulder of soil Gossan Cr.
5			6+50W	S	.2	B	Yell orange	All?	20	-	20	35	25		on v steep slope cr at 7+07W
6		4+50S	5+00W	S	.4	B	Yell Br	Soil	20		20	30	30		S-LI at 7+00W
7		4+00S	5+00W	S	.4	B	Yell br	Clay soil	15		25	20	40		Sandy gravel good
8			5+50W	S	.4	B	med br	GF	15		25	40	20		Fair
9			6+00W	S	.4	B	Yell br	SAND	5		5	30	60		At shoulder of slope to Gossan Cr.
10			6+50W	S	1.3	B	Yellow br	Alluv	5		15	30	50		on v steep slope Gossans every here

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GEOCHEMICAL DATA

	LOCATION				Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
	NORTH	SOUTH	EAST	WEST												
1			4+03 S	6+50 W	Rockchip	S	R	Orange red	beddy vein						Tf	2 ft chip across flat vein
2			4+06.25	6+88 W±	T. fines	S		"	Sand silt						Tuff	Spl. of material on slope
3			4+12 W	6+88 ±	T. fines	S		"	"						Tuff	Similar to above
4																
5																
6																
7																
8																
9																
10																

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GEOCHEMICAL DATA

LOCATION		NTS UTM GRID		Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
NORTH	SOUTH	EAST	WEST												
1		L 3+50S	3+00W	SOIL	0.5	B	Yellow brown	Co + Soil	25	-	15	45	15	-	Good soil. Upper slopes
2		L 3+00S	5+00W	S	0.4	B	Brown med.	Co + Soil	20		15	45	20	-	Possibly till?
3			5+50W	S	0.4	B	Med. br.	Sandy Soil	15		20	40	25		Some rx. Possibly some alluvium near break in slope
4			6+00W	S	0.9	B	Lt br	Rocky ALLUV.	20		20	35	25	-	In a drainage. Deep A' with steep. Gravel beneath
5			6+50W	S	0.25	B	Lt-med brown	Talus soil	20		20	40	20	Tuff	Better soil than expected
6			6+64W	Str. Sed	-	-	Mixed yellow br + dk br	Fluv.	40		5	20	35	-	Mixed material - light colors from nearby slides, dk from higher upstream. Not much silt or clay
7			7+00W	S	.3	B	Yellow br-gr.	L.F. + SOIL	25		20	35	20	-	Colour zone, steep slope - likely in motion
8			7+50W	S	.6	B	Yellow br.	SOIL GF?	10		35	35	20	-	Good soil. Gentle slopes. No otp. Clayey.
9			8+00W	S	.4	B	med br.	Soil GF?	15		35	35	15		Good soil.
10			8+50W	S	.5	Lwr A/B	DK br	Rocky soil	30 TFs		15	50	10		Rocky soil. Silty tuff in otp nearby.

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HAT PROJECT

July 18, 1995

EAO + TEL

GEOCHEMICAL DATA

LOCATION		NTS UTM GRID		Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
NORTH	SOUTH	EAST	WEST												
1		L 3+00S	9+00W	S	.45	B	med br	Rocky soil	25		25	35	15		Good soil. Aspen groves ↓
2			9+50W	S	.35	B	Dk br	Rocky soil	20		25	40	15		Good. Possibly a lower A horizon
3			10+00W	S	.35	B	Dk br	Soil only	—		50	40	10		END OF LINE
4		L 3+50S	10+00W	S	.4	B	med br	Rocky soil	20		45	30	5		Stoney ground pea-gravel + coarser
5		L 4+00S	10+00W	S	.35	B	Yellow br	Soil	20		30	30	20		Good but stoney
6			9+50W	S	.3	B	Lt brown	Talus soil + Co	25		10	45	20		Tuff + stubby fs gran. II
7			9+00W	S	.3	B	Reddish brown	Co	25		10	40	25		Stoney ground - colluvium. Approaching edge of canyon? - 842
8			8+50W	S	.55	B	Dk brown	Co	15		20	40	25		FAIR SOIL
9			8+00W	S	.4	B	med/ve br.	Sandy soil	10		20	40	30		Alluvial?
10			7+50W	S	.35	B	Yellow brown	Alluv + talus?	15		15	45	25		top of steep slope to creek - CO ₃ /SiO ₂ zone EOL

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July 18, 1995

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GEOCHEMICAL DATA

	LOCATION		NTS UTM GRID	Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
	NORTH	SOUTH													
1				S	.20	B	Yel blk	Tuff	25		20	30	25	Tuff	on open slide
2				S	.3	B	Yel blk	GF stovey	20		10	35	25		Flat ground. Poor?
3				S	.35	B	Yel blk	Desif Soil	10		70	30	30		Flat. In drainage.
4				S	.4	B	Yel blk	Desif Soil	5		35	40	20		Flat. Wet. E.O.L.
5															
6															
7															
8															
9															
10															

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HAT PROJECT
July 18, 1995
EAO + TEL

GEOCHEMICAL DATA

LOCATION		NTS UTM GRID		Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
NORTH	SOUTH	EAST	WEST												
1	6+00S	8+00W		S	.3	B	Orange yellow	T.F. + Gravel	50	-	10	25	15	Tuffs	Very steep slope to E. May be slightly slumped.
2		8+50W		S	.55	A	Dk brown	Soil	5	10	20	45	20	-	Flat. Deep soil.
3		9+00W		S	.5	B	Khaki brown	Soil	5	5	35	35	20	-	" " "
4		9+50W		S	.4	B	Med brown	T.H	5	5	40	35	15	-	" " E.O.L.
5	6+50S	9+50W		S	.35	B	Med brown	Soil	10	5	45	25	15	-	" "
6	7+00S	9+50W		S	.35	B(A)	Med brown	Soil	10	5	40	30	15	-	Steep slope SWly.
7		9+00W		S	.25	B	SANDY yellow br	Soil + Sand	15	5	25	30	25	-	on an E-W low ridge like bluffs present. G.F.?
8		8+50W		S	.5	B	red-brown	SANDY soil	5	1	20	40	35	-	Approaching top of steeply slope to GOSSAN Cr
9	6+50S	7+68W		Talus fines	-	-	yellow brown	Talus fines + clay	60	-	15	20	5	-	W side of valley below coloured zone
10	6+80S	7+60W		Talus fines	-	-	yellow brown	Talus fines + det	65	0	10	20	5	Tuff	From E side of valley below prominent bluffs

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HAT PROJECT
 July 19, 1975
 620-1786

GEOCHEMICAL DATA

Talus fines

LOCATION		NTS UTM GRID		Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
NORTH	SOUTH	EAST	WEST												
1		7-20-1		Talus fines	.20	"B"	med brown	Angular chips & soil	60	-	-	15	25	Tuffs	Taken across 7 m. width of light coloured colluvium
2		July 26/95 4+005	7+00W	soil	.25	B	Lt brown	Sandy soil	20	5	25	25	25	alt'd tuffs	18 m. W of creek. Good spl. in alt'd zone.
3		7-26-1		str. sed.											
4		July 27/95 (Big Creek)													
5		95 BC - 1		Talus fines			dk grey	t.f. seds							immediately W of high bluff at entrance to canyon elev. 2250 ft
6		-2		"			med brown	diorite + argillif seds							In basin W of 95 BC. Fairly good fines. See notebook for survey loc.
7		-3	50 m at 217° from 2	"			dk brown	argillif seds							Fair spl.
8		-4	50 m at 184° from 3	"			black	arg seds							Coarse mat'l.
9		-5	50 m at 174° from 4	"			dk grey	arg seds					alt. 2350'		Copper stained flat bed about 20m SW.
10		-6	50 m at 160° from 5	"			v. dk brown	seds					alt. 2260'		Flat bddg. Fair spl.

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GEOCHEMICAL DATA

LOCATION		NTS		Survey-type	Depth	Horizon	Colour	Material	% Gravel	% Organic	Clay	Silt	Sand	Bedrock	Remarks
NORTH	SOUTH	UTM	GRID												
							nearly black	seeds						2215'	Coarse talus fines
							"	"							
							black	seeds						2090'	beside 'Big' Creek
							dk grey	mixed volcanic clastics and monzonite						2050'	" " "

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PROJECT: HAT PROJECT
 CLAIM: HAT 3
 DATE: July 27, 1995.

APPENDIX II.

Geochemical Analysis Certificates



GEOCHEMICAL ANALYSIS CERTIFICATE



Erik Ostensoe PROJECT HAT File # 95-2709 Page 1

4306 West 3rd Ave., Vancouver B.C. V6R 1M7

Table with columns for SAMPLE#, Mo, Cu, Pb, Zn, Ag, Ni, Co, Mn, Fe, As, U, Au, Th, Sr, Cd, Sb, Bi, V, Ca, P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W, Au*. Rows include various sample IDs like L3+00S 10+00W, L4+00S 9+50W, RE L4+00S 9+50W, and STANDARD C/AU-S.

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB

- SAMPLE TYPE: P1 TO P3 SOIL P4 SS/P5 TF P6 TO P7 ROCK AU* - IGNITED, AQUA-REGIA/NBCK EXTRACT, GF/AA FINISHED.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 4 1995

DATE REPORT MAILED: Aug 12/95

SIGNED BY: [Signature] D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppb
L6+00S 9+50W	<1	139	17	73	.5	119	31	955	6.14	22	<5	<2	<2	44	<.2	4	<2	151	1.00	.037	12	141	1.58	63	.18	6	3.23	.02	.37	<2	11
L6+00S 9+00W	1	85	13	135	.5	95	27	1010	5.70	23	<5	<2	<2	39	<.2	5	4	133	.91	.096	12	118	1.23	87	.20	10	2.97	.02	.46	<2	5
L6+00S 8+50W	<1	119	14	170	.5	103	33	1426	6.35	15	<5	<2	<2	30	<.2	<2	<2	138	.92	.140	11	124	1.26	116	.18	8	3.33	.02	.45	<2	7
L6+00S 8+00W	1	351	<3	50	.3	64	36	1082	6.86	38	<5	<2	<2	58	<.2	3	<2	124	1.78	.095	15	46	.49	24	.02	5	2.21	.01	.19	<2	23
L6+00S 5+00W	<1	262	<3	91	<.3	109	30	1214	6.39	12	<5	<2	<2	37	<.2	3	<2	140	1.01	.116	14	118	1.35	90	.18	4	3.38	.02	.26	<2	11
L6+50S 9+50W	1	167	21	150	.5	130	32	1010	6.29	31	<5	<2	<2	35	<.2	3	<2	141	.96	.129	13	131	1.43	96	.18	8	3.13	.03	.35	<2	12
L6+50S 5+00W	<1	223	5	90	.3	88	29	1182	6.38	10	<5	<2	<2	32	.2	<2	<2	140	.95	.115	11	107	1.08	86	.14	5	3.24	.02	.39	<2	6
L7+00S 9+50W	<1	266	5	85	.3	65	44	1040	6.46	55	<5	<2	<2	42	<.2	2	<2	143	1.10	.106	15	83	.95	63	.14	7	2.96	.02	.50	<2	56
L7+00S 9+00W	9	168	<3	54	<.3	34	33	1667	7.80	36	<5	<2	<2	36	.6	4	2	125	.85	.179	24	29	.35	95	.01	5	1.28	.01	.13	<2	8
L7+00S 8+50W	1	327	18	82	<.3	52	29	850	6.69	40	<5	<2	<2	33	.6	<2	<2	119	.95	.107	13	53	.72	46	.09	3	1.61	.02	.13	<2	14
L7+00S 7+50W	3	1397	29	133	1.9	55	142	1686	8.81	41	<5	<2	<2	28	1.1	<2	<2	137	2.53	.181	19	15	.75	20	.01	4	1.68	.01	.09	<2	31
L7+00S 7+00W	<1	284	7	102	.3	105	36	1084	6.29	20	<5	<2	<2	62	.6	3	<2	137	1.28	.072	12	107	1.27	85	.16	5	2.98	.02	.25	<2	12
L7+00S 6+50W	<1	211	4	119	<.3	66	26	821	6.80	9	<5	<2	<2	30	1.5	5	<2	135	.97	.114	13	85	.91	73	.11	9	3.36	.02	.30	<2	27
L7+00S 6+00W	<1	331	4	70	<.3	48	33	997	6.96	7	<5	<2	<2	22	1.7	3	<2	135	.96	.096	10	42	.67	44	.06	8	2.46	.01	.22	<2	5
L7+00S 5+50W	1	190	3	127	<.3	92	27	1140	6.58	10	<5	<2	<2	31	1.6	5	<2	138	.84	.095	12	126	1.03	112	.16	4	3.65	.02	.35	<2	4
L7+00S 5+00W	<1	209	4	125	<.3	84	28	1051	6.72	16	<5	<2	2	31	1.9	3	2	139	1.02	.136	11	102	1.05	109	.13	9	3.46	.02	.40	<2	6
L7+50S 5+00W	<1	123	<3	19	<.3	24	12	325	1.89	3	<5	<2	<2	1204	.7	<2	2	33	19.03	.099	2	12	.36	16	<.01	9	.77	.01	.05	<2	1
L8+00S 10+00W	<1	91	22	242	.3	74	33	1166	5.93	16	<5	<2	<2	47	1.4	3	<2	118	1.01	.148	12	97	.98	162	.22	6	3.11	.03	.31	<2	13
L8+00S 9+50W	1	113	13	145	.3	75	39	968	6.11	37	<5	<2	<2	32	1.4	2	<2	120	.85	.129	12	103	.95	126	.17	5	2.90	.02	.30	<2	11
L8+00S 9+00W	<1	105	6	162	<.3	91	29	1090	5.85	7	<5	<2	<2	33	1.4	2	<2	126	.99	.135	11	110	1.24	143	.17	7	3.16	.02	.41	<2	4
L8+00S 8+50W	<1	136	17	123	<.3	124	33	937	6.44	23	<5	<2	<2	37	1.5	3	<2	151	1.03	.076	11	145	1.49	75	.17	8	3.38	.02	.43	<2	3
L8+00S 8+00W	1	232	17	105	<.3	124	33	1305	6.41	22	<5	<2	<2	51	1.7	4	<2	125	1.74	.090	12	116	1.35	66	.09	3	2.29	.02	.21	<2	10
L8+00S 7+50W	1	263	5	51	.3	52	37	1513	5.93	48	<5	<2	<2	54	1.0	<2	<2	102	2.44	.149	14	34	.82	29	.01	4	1.19	.02	.08	<2	44
L8+00S 7+43W	1	400	16	71	.6	46	49	1965	7.24	13	<5	<2	2	44	.3	<2	<2	117	2.98	.177	18	20	.75	23	.01	3	1.35	.01	.09	<2	30
L8+00S 7+00W	1	240	12	67	.4	81	33	1340	5.57	11	<5	<2	<2	70	.2	2	<2	114	3.62	.112	13	59	1.38	73	.07	5	1.79	.02	.12	<2	11
L8+00S 6+50W	1	287	<3	65	.5	121	36	997	5.10	22	<5	<2	<2	114	<.2	2	2	102	4.69	.105	13	81	1.75	56	.08	17	2.27	.02	.28	<2	7
L8+00S 6+00W	<1	205	5	95	.4	119	29	1124	6.53	17	<5	<2	<2	39	<.2	2	<2	160	1.09	.065	12	122	1.39	97	.20	7	3.55	.02	.27	<2	28
L8+00S 5+50W	<1	168	6	133	.3	122	30	1243	6.26	14	<5	<2	<2	36	<.2	<2	<2	150	1.03	.119	12	134	1.32	140	.22	9	3.43	.02	.49	<2	5
L8+00S 5+00W	<1	188	6	113	.4	201	37	1242	7.17	26	<5	<2	<2	29	<.2	2	<2	149	.94	.098	12	172	1.47	65	.17	7	3.29	.02	.38	<2	3
L8+50S 8+00W	1	792	3	46	.7	17	113	1730	6.19	69	<5	<2	<2	24	1.1	<2	<2	84	1.01	.135	8	5	.77	20	<.01	<3	.66	.02	.04	<2	210
L8+50S 5+00W	<1	311	6	121	.3	86	32	1561	6.82	9	<5	<2	<2	44	.8	2	<2	142	1.33	.124	9	90	.95	88	.14	10	3.85	.01	.62	<2	3
L9+00S 6+00W	1	283	7	62	.6	574	57	1324	5.66	115	<5	<2	<2	117	.4	2	<2	128	3.82	.071	4	381	3.67	28	.16	6	2.75	.02	.06	<2	13
L9+00S 5+50W	1	296	9	108	.4	105	28	1292	5.86	14	<5	<2	<2	52	.5	2	3	137	1.42	.088	10	108	1.24	110	.15	8	3.14	.02	.41	<2	5
L9+00S 5+00W	1	187	8	116	.3	123	30	1265	5.89	10	<5	<2	<2	35	.5	2	<2	132	1.05	.122	11	136	1.22	141	.17	9	3.13	.02	.55	<2	4
RE L7+00S 8+50W	1	318	22	78	.4	52	28	821	6.55	42	<5	<2	2	31	1.0	<2	<2	116	.92	.105	13	52	.70	45	.08	3	1.55	.02	.13	<2	26
STANDARD C/AU-S	18	60	36	122	6.9	69	31	1044	3.91	43	16	7	32	47	19.1	16	20	66	.50	.091	40	61	.89	175	.08	29	1.86	.06	.16	10	53

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



ACRE ANALYTICAL

Erik Ostensoe PROJECT HAT FILE # 95-2709

Page 3



ACRE ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L10+00S 7+00W	2	256	485	1017	1.8	789	102	1948	9.96	195	7	<2	4	57	4.1	<2	3	127	1.64	.087	5	366	3.61	147	.10	<3	3.29	.02	.22	<2	37
L10+00S 6+50W	1	278	23	114	<.3	106	52	1422	5.66	38	<5	<2	2	73	<.2	<2	<2	85	3.39	.098	8	73	1.21	41	.02	<3	.92	.01	.06	<2	28
L10+00S 6+00W	<1	206	<3	62	.8	101	37	941	3.51	17	<5	<2	3	77	<.2	<2	<2	63	8.18	.099	10	113	1.47	10	.01	<3	1.36	.01	.01	<2	3
L10+00S 5+50W	<1	214	<3	108	<.3	86	31	1233	6.56	10	<5	<2	2	38	.4	<2	3	139	1.10	.084	9	90	1.15	69	.09	6	2.43	.02	.43	<2	6
L10+00S 5+00W	<1	193	3	107	<.3	78	27	970	5.59	18	<5	<2	4	42	1.0	<2	4	128	.99	.064	9	98	1.14	91	.17	4	2.60	.02	.50	<2	5
7-20-01	<1	133	<3	26	<.3	89	36	1457	4.99	12	<5	<2	4	106	<.2	<2	<2	109	7.84	.084	7	56	1.79	13	.04	<3	1.59	.01	.14	<2	6

Sample type: SOIL.



ACHE ANALYTICAL



ACHE ANALYTICAL

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L3+00S 6+64W	3	143	6	50	<.3	98	46	1441	4.77	36	<5	<2	3	71	<.2	<2	<2	75	4.46	.082	7	88	1.67	25	.02	<3	.85	.02	.06	<2	10
7-26-1	<1	194	15	75	.3	90	42	1657	5.21	20	<5	<2	2	82	<.2	<2	<2	83	3.52	.079	6	82	1.53	34	.03	<3	1.40	.02	.08	<2	15
RE 7-26-1	<1	201	27	75	<.3	93	42	1654	5.29	20	<5	<2	4	84	<.2	<2	<2	84	3.59	.081	6	84	1.58	35	.04	<3	1.45	.03	.08	<2	10

Sample type: STREAM SED.. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
L4+05S 6+88W	1	184	7	50	<.3	93	63	1468	5.42	19	<5	<2	4	74	<.2	<2	<2	88	4.29	.075	8	81	1.36	33	.03	<3	1.95	.01	.11	<2	54
L4+062S 6+88W	1	517	8	41	<.3	70	81	1348	6.26	55	<5	<2	3	84	<.2	<2	<2	83	3.05	.107	7	31	.88	21	.01	<3	1.52	.01	.06	<2	41
L6+50S 7+68W	1	456	34	86	.6	40	43	1212	5.24	92	<5	<2	2	34	<.2	<2	<2	74	1.73	.125	10	23	.50	14	<.01	<3	.70	.01	.04	<2	28
L6+80S 7+60W	1	543	34	111	.8	62	45	1676	5.62	16	<5	<2	3	41	.5	<2	<2	82	2.37	.100	10	36	.65	13	<.01	<3	1.09	.01	.04	<2	45
95-BC-1	1	679	5	35	<.3	47	71	846	7.13	43	<5	<2	3	71	<.2	<2	<2	175	2.42	.085	1	91	2.71	27	.18	<3	2.56	.02	.44	<2	53
95-BC-2	3	510	5	74	<.3	93	72	1888	7.39	67	<5	<2	5	90	<.2	<2	<2	146	2.36	.074	13	78	2.13	31	.15	<3	2.37	.02	.20	<2	11
95-BC-3	5	611	9	52	<.3	135	109	1646	7.59	172	<5	<2	7	158	<.2	<2	4	136	5.73	.064	13	66	1.59	19	.14	<3	1.93	.02	.10	<2	110
95-BC-4	5	750	21	150	.8	172	139	2780	9.04	42	<5	<2	8	89	<.2	<2	3	183	3.88	.092	9	59	1.36	41	.15	5	2.01	.02	.08	<2	20
95-BC-5	4	481	9	87	<.3	77	67	1672	9.46	40	<5	<2	5	76	<.2	<2	2	175	2.39	.080	16	75	2.23	38	.19	4	2.54	.02	.38	<2	22
95-BC-6	1	733	3	87	<.3	58	95	3455	8.33	6	<5	<2	11	92	<.2	<2	3	170	2.84	.092	10	56	2.90	54	.10	<3	2.89	.01	.06	<2	10
95-BC-7	3	407	12	93	<.3	106	87	1853	7.72	48	<5	<2	5	133	<.2	<2	3	171	2.44	.067	11	78	2.43	40	.17	<3	2.50	.02	.08	<2	32
RE 95-BC-7	3	413	9	92	<.3	104	85	1858	7.61	56	<5	<2	5	132	<.2	<2	3	169	2.42	.067	11	78	2.40	40	.17	<3	2.44	.02	.08	<2	8
95-BC-8	2	1167	9	68	<.3	51	51	1503	6.36	35	<5	<2	4	266	.5	<2	3	198	2.29	.106	5	52	2.08	50	.25	<3	2.87	.02	.07	<2	18
95-BC-9	2	973	6	71	.5	61	62	1721	6.72	81	<5	<2	5	189	.2	<2	3	192	2.20	.090	10	70	2.03	39	.19	4	2.55	.02	.06	<2	230
95-BC-10	4	740	13	138	.3	84	89	2720	7.12	21	<5	<2	8	46	.3	<2	5	195	2.34	.088	8	59	1.79	63	.16	<3	2.34	.02	.08	<2	19
STANDARD C/AU-S	19	60	37	121	7.1	70	32	1069	3.78	44	18	7	40	54	19.0	17	22	59	.49	.089	44	57	.89	176	.08	26	1.61	.06	.14	10	47

Sample type: TALUS FINES. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*		
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb		
95E-1	2	171	<3	29	<.3	24	13	682	4.23	7	<5	<2	<2	53	.5	2	<2	105	3.15	.157	9	28	.81	32	.11	7	1.27	.04	.14	<2	10		
95E-2	6	584	3	24	.3	6	32	355	5.33	10	<5	<2	<2	29	.3	<2	<2	78	1.61	.195	11	2	.26	35	.08	11	1.54	.04	.11	<2	18		
X 4871	1	22041	4	53	3.2	39	149	410	10.01	13	<5	<2	<2	21	1.8	3	<2	202	1.23	.152	8	31	1.84	17	.35	<3	2.44	.03	.38	2	2020		
X 4872	5	4380	3	18	2.8	23	74	184	20.42	32	<5	6	<2	8	1.1	<2	<2	115	.29	.049	2	46	1.10	13	.17	<3	1.36	.03	.54	79	7130		
X 4873	1	779	<3	16	<.3	24	61	293	5.65	4	<5	<2	<2	7	.4	2	<2	98	.72	.073	2	75	1.73	11	.22	4	1.77	.06	.48	2	220		
X 4874	3	4089	<3	32	1.6	29	79	315	17.76	18	<5	2	<2	6	1.1	<2	<2	144	.36	.045	2	66	1.54	11	.19	<3	2.01	.04	.25	59	4360		
X 4875	1	8036	<3	63	1.0	48	109	464	10.71	10	<5	<2	<2	9	1.2	2	<2	145	.87	.063	3	94	2.46	10	.27	<3	2.75	.03	.29	13	2370		
X 4876	1	5529	<3	33	.9	50	170	565	10.89	11	<5	<2	<2	11	.9	<2	<2	131	.59	.068	3	89	2.29	13	.24	<3	2.24	.03	.28	20	2050		
X 4877	3	7688	<3	38	1.4	44	151	290	12.37	15	<5	<2	<2	5	.7	<2	<2	131	.46	.068	2	67	1.77	17	.23	<3	1.88	.04	1.05	33	4340		
X 4878	10	3638	5	23	1.5	76	391	580	30.13	42	<5	<2	2	68	.6	<2	<2	97	.66	.043	3	16	1.28	9	.13	<3	2.32	.01	.09	7	3580		
X 4879	4	3559	<3	24	2.9	33	55	320	13.56	43	<5	7	<2	7	<.2	<2	<2	139	.39	.059	2	67	1.76	25	.25	<3	1.99	.04	1.36	49	8110		
RE X 4879	4	3612	3	24	2.6	34	55	324	13.74	44	<5	5	<2	7	<.2	<2	<2	141	.40	.060	2	68	1.79	25	.25	<3	2.03	.03	1.39	49	8630		
RRE X 4879	4	3475	<3	24	2.5	33	54	325	13.28	42	<5	6	<2	7	.2	<2	<2	138	.39	.059	2	66	1.75	24	.25	<3	1.95	.03	1.34	49	8140		
X 4880	8	3409	77	17	3.3	20	410	120	30.75	252	5	<2	9	<.2	3	<2	<2	139	.21	.030	1	22	.41	8	.11	8	.11	3	1.36	.02	1.5	43	3030
X 4881	4	10490	4	36	2.1	34	147	360	10.70	17	<5	<2	<2	18	<.2	<2	<2	136	1.18	.064	2	71	1.54	12	.24	<3	1.74	.04	.61	9	2830		
X 4882	4	4164	<3	22	.8	65	762	459	14.64	52	<5	<2	<2	14	<.2	<2	<2	128	4.11	.037	<1	37	1.26	7	.12	<3	1.49	.02	.36	31	580		
X 4883	1	1977	<3	50	1.8	23	25	1233	10.59	10	<5	<2	<2	9	.3	2	<2	136	.74	.097	8	8	2.13	16	.23	4	3.87	.03	.10	3	40		
X 4884	<1	5384	<3	91	2.9	35	51	890	4.18	47	6	<2	<2	38	.9	2	<2	93	14.61	.084	8	3	.89	26	.17	4	1.30	.02	.16	<2	220		
X 4885	<1	7380	<3	141	4.6	47	163	932	2.18	211	<5	<2	<2	49	.8	<2	<2	35	29.20	.027	3	8	.34	4	.06	<3	.53	.01	.02	<2	530		
X 4886	1	7762	3	121	5.9	39	53	859	2.30	80	<5	<2	<2	49	.9	<2	4	25	30.50	.043	4	1	.27	5	.06	<3	.53	.01	.03	<2	820		
X 4887	4	39676	3	400	23.5	158	435	632	7.93	1603	7	4	<2	25	3.7	9	<2	33	10.91	.083	5	2	.29	10	.07	<3	.57	.01	.04	<2	1270		
X 4888	5	3484	<3	22	1.1	31	232	356	14.90	19	<5	<2	<2	12	.5	<2	<2	175	1.12	.093	4	37	1.59	7	.23	<3	1.78	.02	.10	55	880		
X 4889	3	6265	3	43	.9	43	284	575	14.43	9	<5	<2	<2	7	.2	<2	<2	105	.56	.083	2	30	1.79	13	.24	<3	2.11	.02	.24	39	2190		
X 4890	4	5114	3	26	1.0	28	212	347	15.06	25	<5	<2	<2	17	.7	<2	2	126	.75	.115	5	17	1.15	10	.21	<3	1.40	.02	.06	28	870		
X 4891	9	6910	<3	19	1.6	39	607	188	21.33	31	<5	4	<2	12	.3	<2	2	82	.49	.075	7	11	.51	12	.14	3	.96	.01	.05	32	3020		
X 4892	3	3981	<3	36	.5	31	116	602	11.38	8	<5	<2	<2	19	.6	<2	3	138	1.09	.119	5	39	1.70	9	.24	<3	2.10	.03	.06	13	520		
RE X 4892	2	3900	<3	37	.6	31	113	599	11.04	9	<5	<2	<2	19	<.2	<2	<2	134	1.08	.117	6	38	1.70	9	.23	<3	2.05	.03	.06	12	440		
RRE X 4892	2	3805	<3	36	.3	29	115	578	10.79	7	<5	<2	<2	18	.4	<2	<2	132	1.06	.114	6	37	1.65	9	.22	<3	2.01	.03	.05	10	390		
X 4893	1	23530	<3	56	.4	96	524	908	5.41	18	<5	<2	<2	33	1.5	2	3	139	3.02	.060	4	142	2.41	9	.21	4	2.42	.02	.07	<2	28		
X 4894	2	124	<3	6	<.3	9	5	150	2.87	26	<5	<2	2	11	<.2	<2	<2	35	.19	.055	8	16	.18	26	.05	5	.41	.06	.25	<2	6		
X 4895	2	672	<3	20	.4	26	139	482	3.47	237	<5	<2	<2	25	.3	<2	2	40	7.98	.060	12	24	.57	9	.05	4	.80	.03	.21	<2	190		
X 4896	5	190	<3	84	.4	108	24	2390	12.54	22	<5	<2	<2	38	.8	<2	<2	101	6.88	.056	4	18	3.21	10	<.01	<3	.28	.02	.02	<2	9		
X 4897	3	1429	<3	82	.6	81	21	1984	9.58	32	<5	<2	<2	30	.7	<2	<2	115	6.29	.060	8	32	2.92	9	<.01	<3	.28	.03	.02	<2	100		
X 4898	<1	84	<3	99	.3	89	15	2788	13.51	13	<5	<2	<2	37	.8	<2	<2	109	7.84	.028	3	19	3.68	9	<.01	<3	.19	.02	.01	<2	5		
X 4899	1	71	<3	55	<.3	40	10	1631	8.04	8	<5	<2	<2	32	.4	<2	<2	93	4.87	.062	9	37	2.30	12	.01	3	.50	.04	.05	<2	3		
LS+35S 7+10W	<1	53	<3	82	.4	88	17	2127	8.18	18	<5	<2	<2	50	.8	<2	<2	66	11.67	.016	3	46	4.26	8	<.01	<3	.20	.01	.01	<2	5		
L6+00S 7+00W	<1	31	<3	95	.3	91	16	2426	11.15	10	<5	<2	<2	38	.5	<2	<2	117	9.54	.021	2	12	3.82	11	<.01	<3	.33	.01	.03	<2	2		
STANDARD C/AU-R	18	57	35	126	7.3	68	29	1053	3.87	44	18	7	34	46	17.9	18	21	61	.48	.087	41	60	.89	171	.09	30	1.86	.06	.14	12	530		

Sample type: ROCK. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

APPENDIX III.

Personnel

1. Erik Ostensoe, P. Geo.
2. Thomas E. Lisle, P. Eng.

Personnel

The following persons carried out the field work described in the accompanying report:

1. Erik A. Ostensoe, P. Geo. - geologist (UBC, 1960)
 - more than thirty years experience in mineral exploration, principally in western North America
 - member of APEGBC, no. 18727
 - performed field work described in this report in period July 9 through July 29, 1995
 - principal author of the report.

2. Thomas E. Lisle, P. Eng. - geologist (UBC, 1964)
 - more than thirty years experience in mineral exploration, principally in western and northern Canada
 - member of APEGBC, Geol. Assoc. Canada, CIMM
 - performed field work described in this report in period July 9 through July 29, 1995.



APPENDIX IV.

Statement of Expenditures

Statement of Expenditures

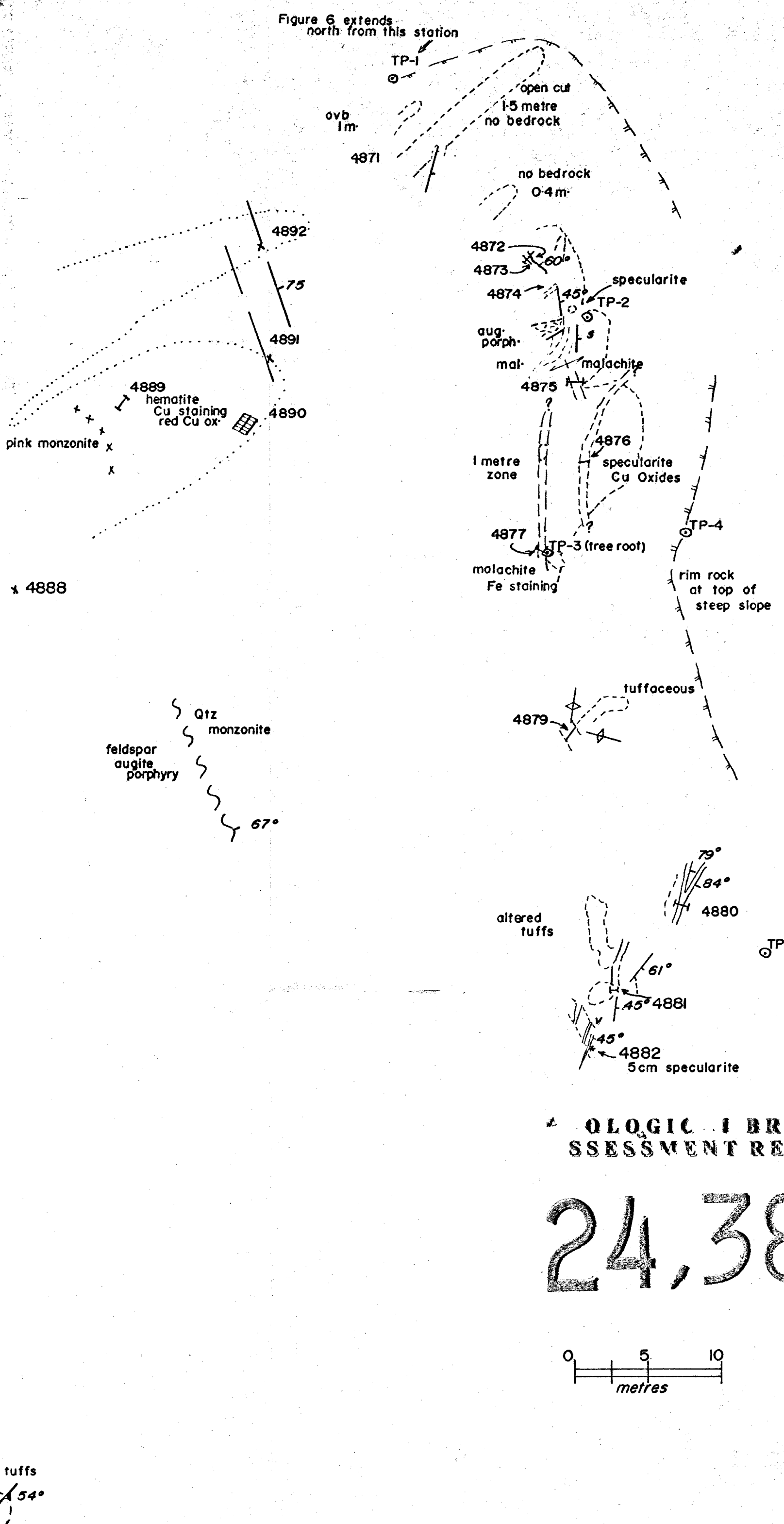
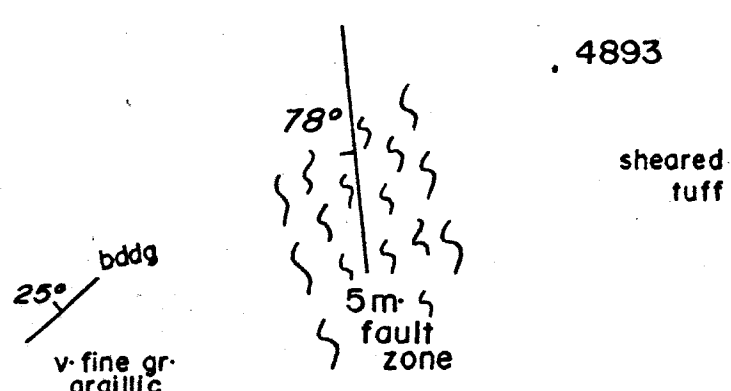
The following expenditures were incurred in carrying out the work described in the accompanying report: (GST where incurred is included)

	Cost (includes GST)
1. Truck rental - from T. E. Lisle - FWD Ford Bronco - 21 days @ \$30/day	\$ 674.10
mileage charges - 3590 km @ \$0.18	646.20
2. Gasoline -	405.81
3. Telephone calls -	12.15
4. Air Service - flight from Dease Lake to Hatchau Lake	
flight from Hatchau Lake to Dease Lake	1101.24
5. Analyses - Acme Analytical Laboratories Ltd. 141 @ \$12.84	1810.88
6. Supplies - Deakin Equipment Ltd. Invoice #32715 - tarp, flagging, notebooks,	
belt-chain thread, sample bags, soil envelopes, twist ties	292.37
- butane, tools, kitchen items,	161.11
7. Replacement tent -	218.87
8. Anakit - two shock kits for insect bites -	49.20
9. Groceries -	209.14
10. Meals -	162.73
11. Report costs - computer/word processor, printer, photocopies, supplies -	200.00
12. Labour - in field - 43 man-days @ \$250/man-day	10750.00
13. Labour - report preparation - 4 days @ \$250/day	<u>1000.00</u>
 Total expenditures -	 \$17,693.80

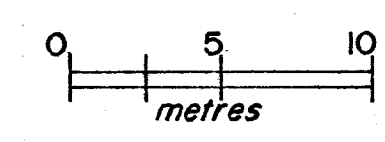
Sample No.	Width (cm)	Gold (ppb)	Copper (ppm)
4871	10	2020	22041
4872	56	7130	4380
4873	50	220	779
4874	85	4360	4089
4875	100	2370	8036
4876	60	2050	5529
4877	97	4340	7688
4879	110	8110	3559
4880	15	3030	3409
4881	40	2830	10490
4882	grab	580	4164
4888	grab	880	3484
4889	100	2190	6265
4890	panel 1x3x4m	870	5114
4891	100	3020	6910
4892	45	520	3981
4893	40	28	23530

Huey Creek



GEOLOGIC APPRAISAL
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24,388



W. A. Olsen

HAT PROJECT
ATLIN M.D., B.G.
Sampling-Hoey Area
<small>E. Ostensoe</small>
<small>Figure 5 July 1993</small>

900W

800W

700W

600W

300S

400S

500S

600S

700S

800S

900S

Sample No.	Width (cm)	Gold (ppb)	Copper (ppm)
95 E-1	800	10	171
95 E-2	300	18	584
4896	170	9	190
4897	panel 2m x 25m	100	1429
4898	100	5	84
4899	61	3	71
L5+355 7+0W		5	53
L6+005 7+00W		2	31

boulders
3 2 2
(x) (x) (x)
2a
0

15-20 m.
yellow-orange
gougy shear
with blocks of
country rock

LEGEND

- 5 Breccia
- 4 Monzonite-Diorite
- 3 Andesite, Porphyritic Andesite ± Augite
- 2 a- fine grained tuff
b- chert
- 1 Andesite tuff
- F Fault
- Q $\sqrt{30}$ Quartz veins
- C $\sqrt{80}$ carbonate veins
- $\sqrt{30}$ Fractures
- Bedding
- Mal - malachite
- Lim - limonite
- Py/Cpy - pyrite/chalcopyrite
- (x) Float
- Outcrop
- shear/shear zone
- sil - siliceous

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24,388

0 50 100
Metres
1:2500

HAT PROJECT

ATLIN M.D., B.G.

Geology - Gossan Creek

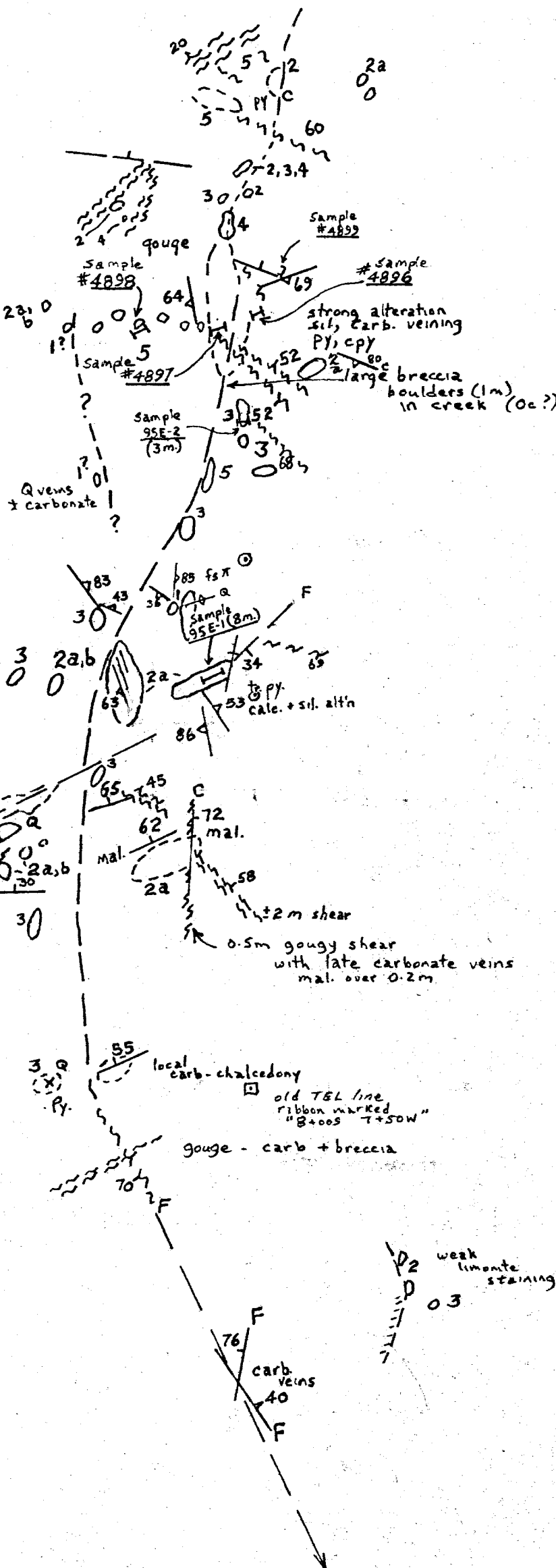
E. Ostensog

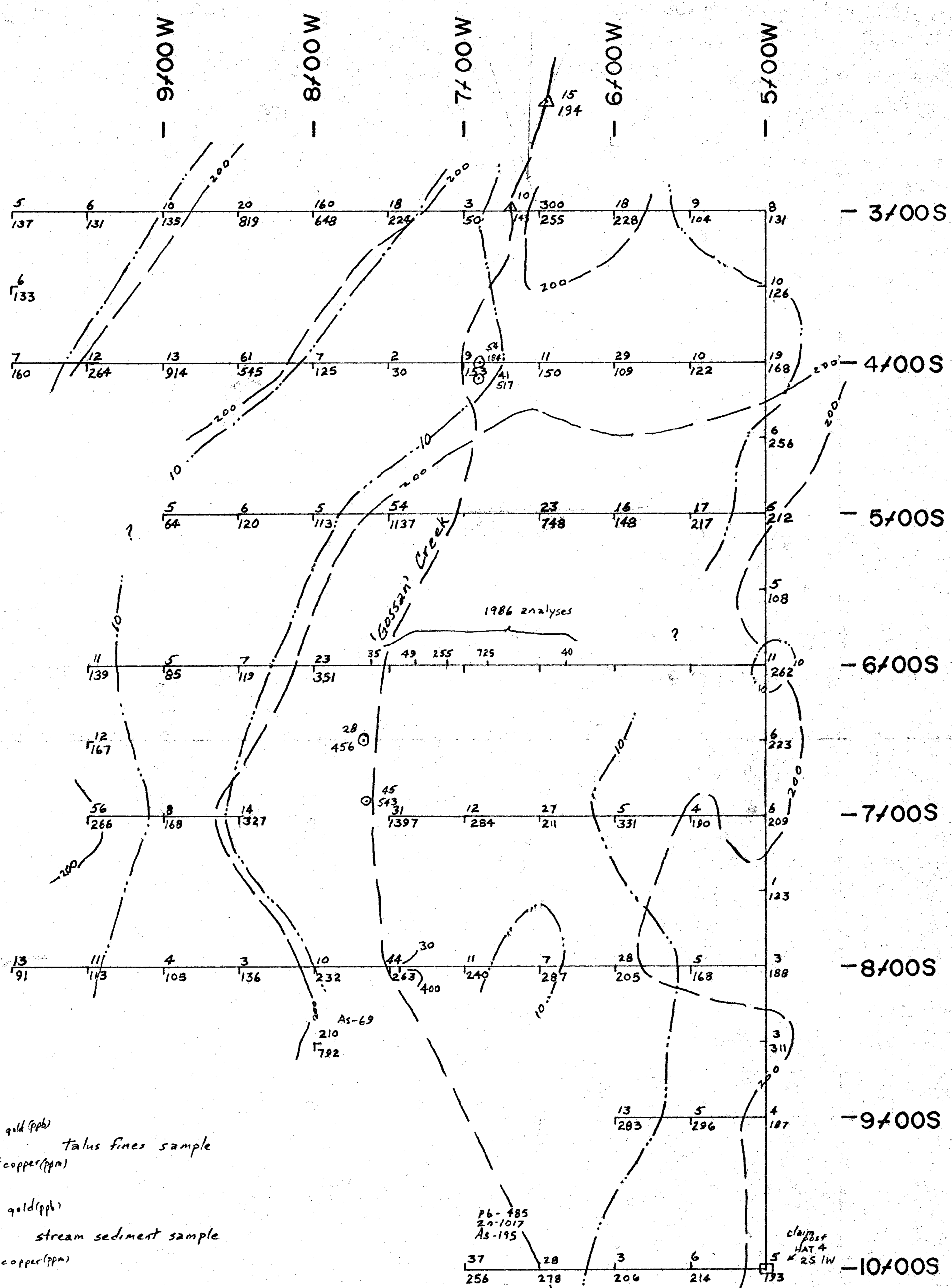
Figure 3.

July 1995

claim
line
post
HAT 4 claim
25-1W

weak
limonite
staining



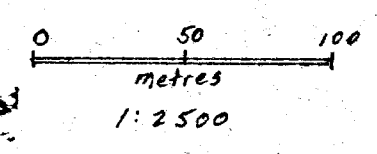


54 gold (ppb)
 talus fines sample
 184 copper (ppm)

15 gold (ppb)
 stream sediment sample
 194 copper (ppm)

8 14 Gold (ppb)
 168 327 copper (ppm) soil samples

10 10 ppb gold contour
 200 200 ppm copper contour



Erik A. Ostensgaard

HAT PROJECT	
ATLIN M.D., B.C.	
Geochemistry-Gossan Cr.	
E. Ostensgaard	July 1995

24,388

Figure 4.