REPORT ON PROSPECTING WORK IN THE DORSEY LAKE AREA NTS 105 B 4

YMIP CONTRIBUTION AGREEMENT 93-043

Location: 1.200 km SE of Whitehorse, Yukon
2.NTS 105 B/4
3.Latitude 60° 12' 11" N
Longitude 131° 38' 09" W

For: MR. HARRY KERN
P.O. Box 4338
Whitehorse, Yukon
Y1A 3T6

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December 29, 1993

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INTRODUCTION

This report was prepared at the request of Mr. Harry Kern, a prospector from Whitehorse, Yukon. The purpose is to report on prospecting activities in the Dorsey Lake Area (NTS 105 B-4), completed in 1993 and funded by YMIP Contribution Agreement No. 93-043. The author has not visited the work area but has inspected all rock samples collected by Mr. Kern.

The claims are located about 200 km southeast of Whitehorse, Yukon. The Alaska Highway is approximately 30 km south of the area.

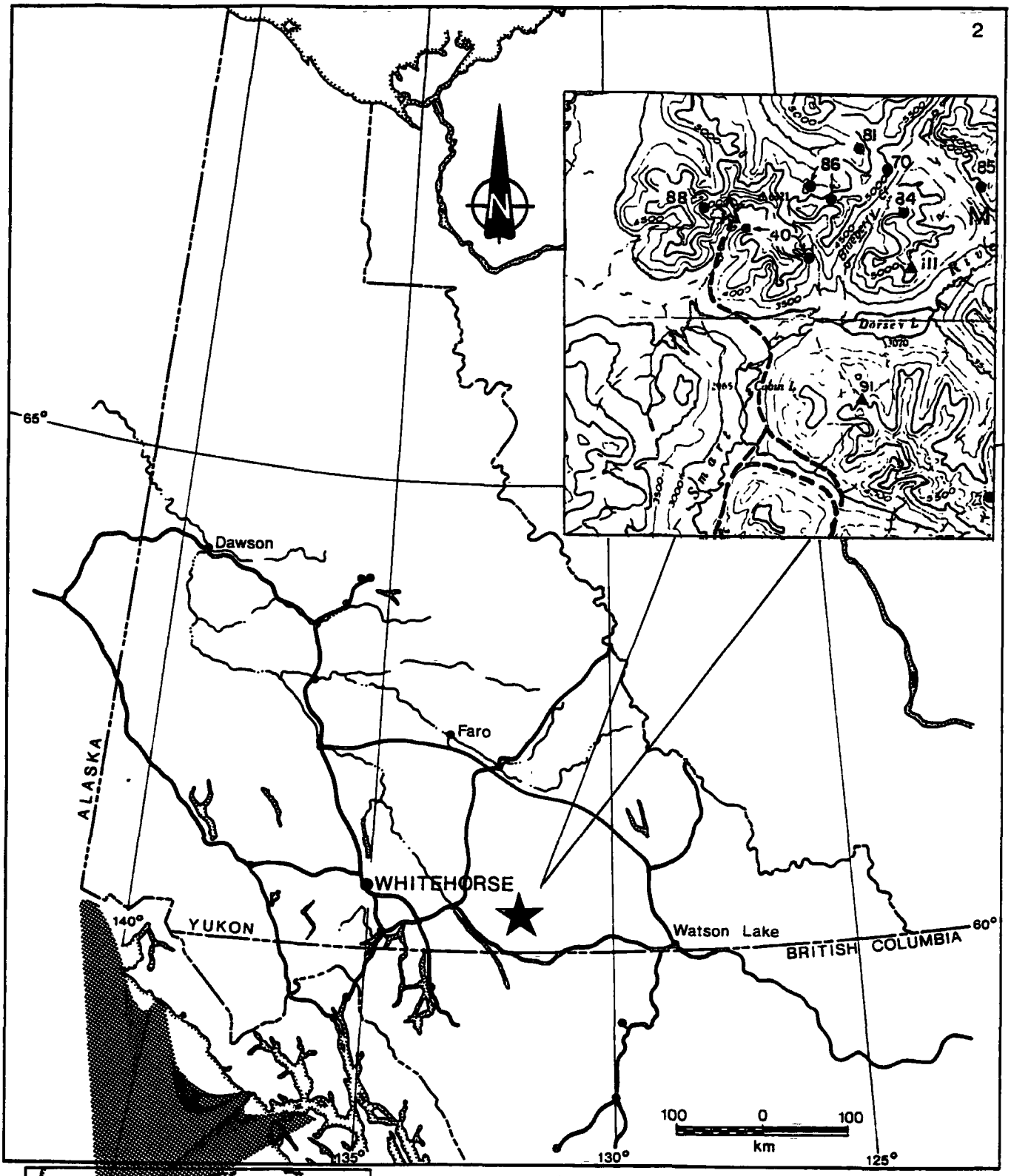
The area has seen some systematic exploration for tin and lead-zinc skarns associated with the contact zones of the Seagull Batholith.

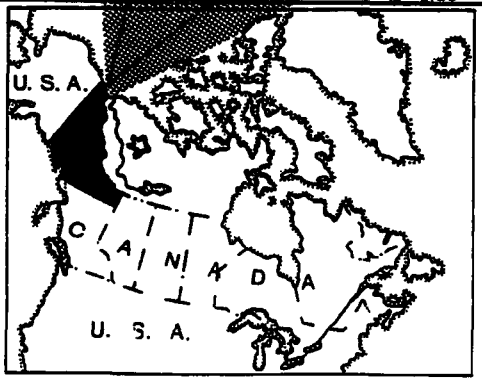
The cost of the 1993 work program was approximately $8,000. Funding for the 1993 prospecting activities was provided through the Yukon Government's Mining Incentive Program under Contribution Agreement 93-043.

LOCATION AND ACCESS

The prospecting area is located in southwestern Yukon, about 200 km southeast of Whitehorse, Yukon (Figure 1). The area of work is centred at 60° 12' 11" N latitude and 131° 38' 09" W longitude (NTS 105B/4).

Access to the area is by float plane to Dorsey Lake or by Helicopter to the centre of the area of interest. The Alaska Highway is located approximately 30 km south of the area. A winter road leads up the Swift River to the west and within a few kilometres of Dorsey Lake.





PROFESSIONAL ENGINEER
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R. A. DOHERTY
GEOSCIENTIST

DORSEY LAKE AREA

HARRY KERN

LOCATION

Aurum Geological Consultants Inc.			Date DEC 1993
NTS 105B 4	Drawn by JvR		Figure 1

HISTORY

Considerable exploration for tin skarns was completed in the area between 1977 and 1984, primarily by the DC Syndicate (Dome and Cominco) and the Klinkit JV (DuPont of Canada Exploration Ltd. and Duval Corp) who conducted regional and property scale exploration in the area between 1877 and 1984. According to Yukon Minfile, there are seven occurrences within the area of interest. Most occurrences were mapped, and had geochemistry, geophysics, trenching and limited diamond drilling completed as part of the property scale exploration. The Yukon Minfile Occurrence descriptions shown on Figure 1, are included in Appendix B, and are summarized below:

TABLE I: MINERAL OCCURRENCES IN DORSEY LAKE AREA
(SOURCE: YUKON MINFILE)

MINFILE NUMBER	NAME	COMMODITY	OTHER ELEMENTS	WORK	YEARS
105B 040	JC (VIOLA)	SN SKARN	Cu, Ag, Zn, W, F, Be	m,gc,t gp, dd	78-83
105B 070	CAN	SN SKARN	W, Zn, Cu, F	m,gc,t, pp,dd	78-81
105B 081	DUVAL	SN VEIN		m, gc, dd	78-81
105B 084	DU	SN VEIN	W	m, gc, dd	78-80
105B 086	CUSP	SN VEIN	Zn, Pb, Cu, F	m, gc, t, dd	78-81
105B 088	SMITH	SN SKN/VN	Cu, Zn, Pb, F, Ag, Ba, Topaz	m, gc, T, t, dd	78-81

CLIMATE, TOPOGRAPHY, AND VEGETATION

The climate in the area of Dorsey Lakes is variable with hot summers and long cold winters. Precipitation is moderate, averaging about 200 cm annually, with heavy snowfalls occurring during the winter months.

The area is situated on the western side of the Cassiar Mountains, which extend from northern B.C. into the southern Yukon. The area is mountainous with elevations ranging between 3000 and 6300 feet above sea level. The area has been greatly modified by Pleistocene glaciation, and such glacial features as U-shaped valleys, aretes and cirques are common. Vegetation consists of alpine shrubs and grasses with some stunted spruce and poplar in lower valleys.

GEOLOGY

Regional Geology

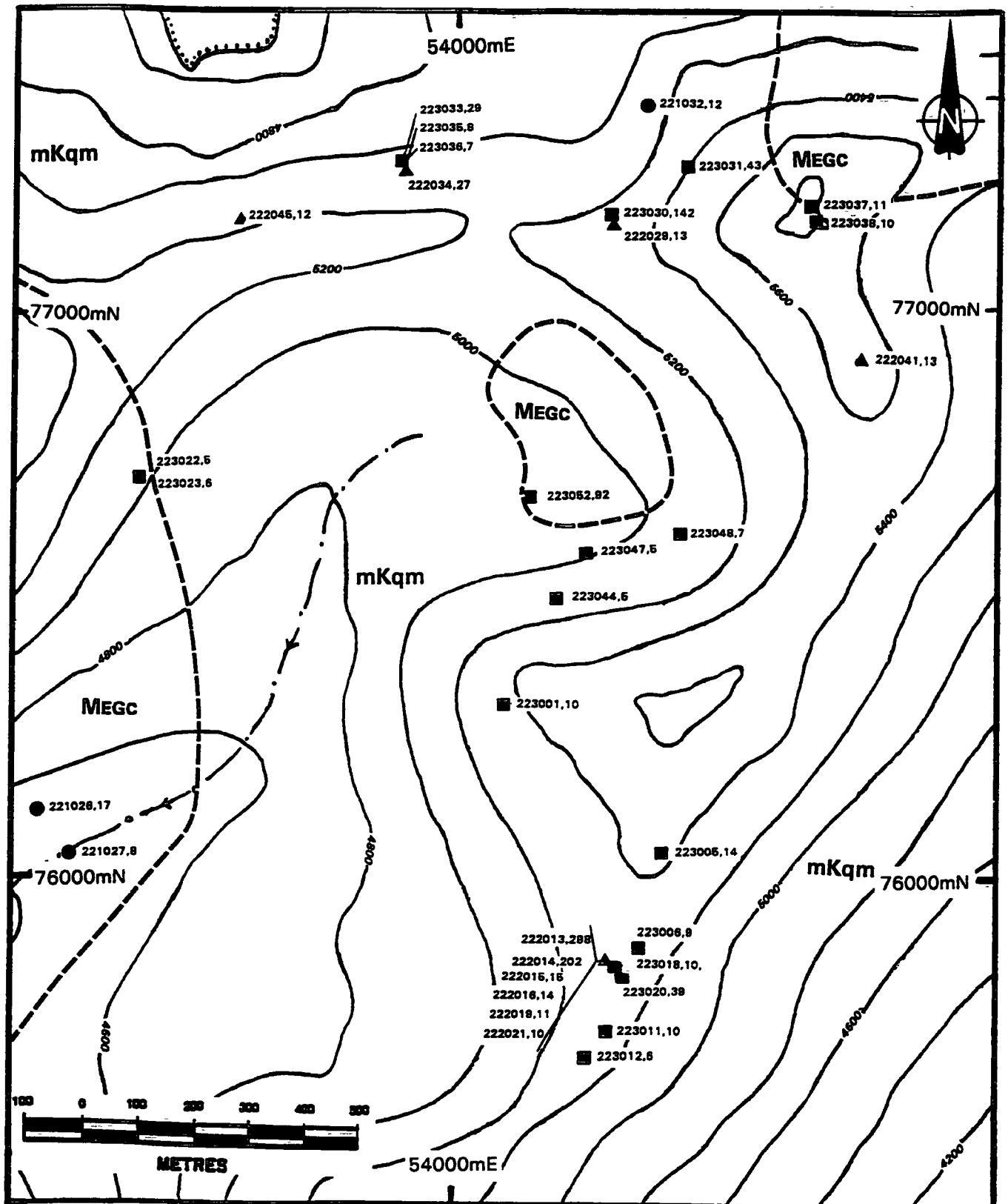
Dorsey Lake area is situated near the northern end of the Seagull Batholith which intrudes rocks of the Yukon Tannana Terrane, which in this area are comprised of the Englishman Group chert, hornfels, argillite, phyllite, quartzite and marbles. On the east side of the Seagull Batholith, and structurally underlying Englishman Group rocks are Devonian and Mississippian greenstones and chlorite schist which are intruded by the main Cassiar Batholith. The Seagull and Cassiar batholiths are mid Cretaceous (87-130 ma) grey and pinkish grey biotite quartz monzonite and granodiorite (Wheeler and McFeely 1985). The batholiths are mainly elongate, partly discordant plutons whose western margins are commonly sheared and altered to muscovite-quartz-feldspar mylonites.

Mineral occurrences associated with the Seagull Batholith are mostly Sn-skarns and veins which have a magmatic signature. Geochemically, the mineralization has a Sn, W, Cu, Pb, Zn, F, and Be enrichment. The area has not been extensively explored for gold and the possibility of locating intrusive hosted gold should not be discounted.

Property Geology

The area prospected and sampled during this program is outlined in Figure 2. The area is underlain primarily by mid-Cretaceous Seagull batholith which consists of biotite leuco-quartz monzonite and alaskite. The Seagull Batholith intrudes rocks of the Englishman Group which in this area consist of chert, hornfels, argillite, slate, phyllite, quartzite and marble. The marble horizons act as a suitable host for the development of skarn mineral assemblages which in this area are primarily tin skarns with associated W, Cu, Pb, and Zn. The quartz monzonites are also enriched in Fl, B, and Be. Tourmaline stockworks and breccias are common and at least one late magmatic hydrothermal vein hosts green beryl crystal clusters up to several centimetres in size.

The sedimentary rocks of the Englishman's Group have a dominant northwest strike and a shallow to moderate southwest dip. A strong hornfels zone extends from the intrusive contact for tens of metres into the sedimentary rocks.



LEGEND

CRETACEOUS
- mKqm — quartz monzonite

MISSISSIPPIAN Englishmen Group
- MEGC — chert, hornfels

GEOLOGIC CONTACT

6400 CONTOUR INTERVAL (200')

STREAM

LAKE

ROCK SAMPLE, ppb gold

SOIL SAMPLE, ppb gold

SILT SAMPLE, ppb gold

modified after Poole, et al. 1960

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DORSEY LAKE AREA
GEOLOGY
&
1993 SAMPLE LOCATIONS

Aurum Geological Consultants Inc.			Dec. 1993
NTS 105 B	Drawn: JvR	Scale 1:10,000	Figure 2

GEOCHEMISTRY

Over 52 samples were collected in the Dorsey Lake Area. Of these, 20 rock, 10 soil and three silt samples were analyzed by Northern Analytical Laboratories of Whitehorse for gold by a 10 g FA-AA and a 31 Element ICP analyses. Analytical data are presented in Appendix A. Sample locations and gold analyses are shown in Figure 2.

A number of samples returned anomalous Au and Ag, Pb, Zn, As, Bi, W, Fe, and Cd anomalies. Most samples were collected within the quartz-monzonite or alteration zones within the quartz-monzonite.

The following table lists samples with gold values greater than 25 ppb and other anomalous elements. Only anomalous elements are shown, blanks indicate that the element is at detection level.

TABLE II: GEOCHEMICAL ANOMALIES
(See Appendix A for complete results)

ID #	ID	Au ppb	Ag ppm	Pb ppm	Zn ppm	As ppm	Bi ppm	W ppm	Fe %
223020	R	39							
223030	R	142	0.7	18311	5508	427	0.2%	33	20
223031	R	43	1.3						
223033	R	29	14.9	726	1675	46	34	7	5.4
223052	R	92	0.7	160	2081	242	-	10	18
222013	S	298							
222014	R	202							
222034	R	27	35	1653	3964	37	114	16	7.2%

R = rock S = soil

Most anomalous samples collected in the Dorsey Lake area have geochemical signatures indicative of skarn-style mineralization. Three samples (223020, 222013 & 222014) have elevated to highly anomalous gold values but show no other associated anomalous elements. Two of these samples (222013 & 014) are soils with gold values of 298 and 202 ppb respectively. These anomalies are caused either by small grains of placer gold or by contamination in the laboratory.

CONCLUSIONS AND RECOMMENDATIONS

The Dorsey Lake area is underlain by mid-Cretaceous leuco-quartz monzonite that intrudes Englishman's Group sedimentary rocks that are part of the Yukon Tannana Terrane. A moderately wide contact aureole extends outward from the intrusive contact into the host sedimentary rocks. In areas where limestone lithologies are present, skarn mineral assemblages have developed with attendant skarn mineralization. Areas within the intrusion show strong sericitic alteration and quartz veining commonly following an east-west trend. One area, near samples 222014-222016, is underlain by fragments of late stage magmatic-hydrothermal quartz veins hosting well developed beryl crystals. This area should be further investigated for its gem-stone potential. Panning creeks draining this area may indicate if beryl occurrences are widespread as the mineral is very hard (7.5-8) and is resistant to weathering. Further geochemical sampling, mapping and prospecting should be completed to locate additional geochemically anomalous zones indicative of skarn mineralization. The leuco-quartz monzonite should be further prospected for quartz stockworks which could indicate intrusive hosted gold mineralization.

REFERENCES

DIAND, 1993. Yukon Minfile, WP 5.1 Version, 15 Feb/93. Exploration and Geological Services Division, Indian and Northern Affairs Canada.

Dick, L. A., 1979. Tungsten and base metal skarns in the Northern Cordillera; in Current Research, Part A, Geol. Surv. can. Paper 79- 1A p. 259-266

Poole, W. H., Roddick, J. A. and Green., L.W., 1960. Geology, Wolf Lake, Yukon Territory, Geol. Surv. Can., Preliminary Map 10-1960.

Wheeler, J. O. and McFeely, P. (comp.), 1991. Tectonic Assemblage Map of the Canadian Cordillera and adjacent parts of the United States of America; Geol. Surv. Can., Map 1712A

STATEMENT OF QUALIFICATIONS (RAD)

I, R. Allan Doherty, hereby certify that:

1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC., 205 - 100 Main Street, P.O. Box 4367, Whitehorse, Yukon, Y1A 3T5.

2. I am a graduate of the University of New Brunswick, with a degree in geology (Hons. B.Sc., 1977) and that I attended graduate school at Memorial University of Newfoundland, 1978-80. I have been involved in geological mapping and mineral exploration continuously since then.

3. I am a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia, Registration No. 20564 and of the CIMM.

4. I am the author of this report based on: information supplied by Mr. Harry Kern; an inspection of samples collected by Mr. Kern; and on referenced sources.

5. I have no direct or indirect interest in the properties or securities owned by Mr. Harry Kern.

6. I consent to the use of this report by Mr Harry Kern provided that no portion is used out of context in such a manner as to convey a meaning differing materially from that set out in the whole.

December 29, 1993

R. Allan Doherty, P.Geo.

PROFESSIONAL ENGINEER
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R. A. DOHERTY
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APPENDIX A
1993 Geochemistry

Northern Analytical Laboratories ltd.

25 Nov 00date | Assay Certificate | Page 1

Howwire Industries | WO 00389

Sample	Au ppb
223001	10
223005	14
223006	3
223011	10
223012	5
223018	10
223020	39
223022	5
223023	6
223030	142
223031	43
223033	29
223035	8
223036	7
223037	11
223039	10
223044	6
223047	5
223048	4
223052	62
222013	238
222014	202
222015	15
222016	14
222019	11
222021	10
222029	13
222034	27
222041	13
222045	12
221026	17
221027	8
221032	12

Certified by

105 Copper Road, Whitehorse, YT, Y1A 2Z7 Ph: (403) 668-4968 Fax: (403) 668-4890

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2036 [redacted] Vancouver, B C
Canada V5Y 3E1
Phone (604) 879-7878
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[redacted] CERTIFICATE OF ANALYSIS [redacted]

iPL 93K2911

Northern Analytical Laboratories — 33 Samples

Out: Dec 01, 1993 Project: WO#00389
In : Nov 29, 1993 Shipper:
PO#: Shipment: ID=C030901
Msg: ICP(AqR)30
Msg:

	0= Rock	0= Soil	0= Core	0=RC Ct	33= Pulp	0=Other	[067611:09:25:39120193]
Raw Storage:	--	--	--	--	12Mon/Dis	--	Mon=Month Dis=Discard
Pulp Storage:	--	--	--	--	12Mon/Dis	--	Rtn=Return Arc=Archive

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DL	3D	5D	BT	BL
0	0	0	1	0

Analytical Summary

##	Code	Method	Title	Limit Low	Limit High	Units	Description		Element	##
01	721P	ICP	Ag	0.1	100	ppm	Ag ICP		Silver	01
02	711P	ICP	Cu	1	20000	ppm	Cu ICP		Copper	02
03	714P	ICP	Pb	2	20000	ppm	Pb ICP		Lead	03
04	730P	ICP	Zn	1	20000	ppm	Zn ICP		Zinc	04
05	703P	ICP	As	5	9999	ppm	As ICP	5 ppm	Arsenic	05
06	702P	ICP	Sb	5	9999	ppm	Sb ICP		Antimony	06
07	732P	ICP	Hg	3	9999	ppm	Hg ICP		Mercury	07
08	717P	ICP	Mo	1	9999	ppm	Mo ICP		Molydenum	08
09	747P	ICP	Tl	10	999	ppm	Tl ICP	10 ppm	Thallium	09
10	705P	ICP	Bi	2	999	ppm	Bi ICP		Bismuth	10
11	707P	ICP	Cd	0.1	100	ppm	Cd ICP		Cadmium	11
12	710P	ICP	Co	1	999	ppm	Co ICP		Cobalt	12
13	718P	ICP	Ni	1	999	ppm	Ni ICP		Nickel	13
14	704P	ICP	Ba	2	9999	ppm	Ba ICP		Barium	14
15	727P	ICP	W	5	999	ppm	W ICP		Tungsten	15
16	709P	ICP	Cr	1	9999	ppm	Cr ICP		Chromium	16
17	729P	ICP	V	2	999	ppm	V ICP		Vanadium	17
18	716P	ICP	Mn	1	9999	ppm	Mn ICP		Manganese	18
19	713P	ICP	La	2	9999	ppm	La ICP		Lanthanum	19
20	723P	ICP	Sr	1	9999	ppm	Sr ICP		Strontium	20
21	731P	ICP	Zr	1	999	ppm	Zr ICP		Zirconium	21
22	736P	ICP	Sc	1	99	ppm	Sc ICP		Scandium	22
23	726P	ICP	Ti	0.01	1.00	%	Ti ICP		Titanium	23
24	701P	ICP	Al	0.01	9.99	%	Al ICP		Aluminum	24
25	708P	ICP	Ca	0.01	9.99	%	Ca ICP		Calcium	25
26	712P	ICP	Fe	0.01	9.99	%	Fe ICP		Iron	26
27	715P	ICP	Mg	0.01	9.99	%	Mg ICP		Magnesium	27
28	720P	ICP	K	0.01	9.99	%	K ICP		Potassium	28
29	722P	ICP	Na	0.01	5.00	%	Na ICP		Sodium	29
30	719P	ICP	P	0.01	5.00	%	P ICP		Phosphorus	30

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CERTIFICATE OF ANALYSIS
iPL 93K2911

Client: Northern Analytical Laboratories iPL: 93K2911 Out: Dec 01, 1993 Page 1 of 1 Section 1 of 1
Project: WO#00389 33 Pulp In: Nov 29, 1993 Certified BC Assayer: David Chiu

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 %
221026	0.7	55	173	1018	36	<	<	2	<	<	5.2	19	60	113	11	64	59	697	19	51	2	5	0.13	2.27	0.98	3.31	1.59	0.22	0.04	0.10
221027	0.2	14	46	535	19	<	<	2	<	<	0.8	7	19	55	<	28	28	425	33	10	1	2	0.06	1.70	0.18	1.69	0.34	0.08	0.02	0.05
221032	0.7	53	406	468	15	<	<	2	<	<	<	20	27	192	<	47	85	1319	21	29	1	9	0.12	2.53	0.35	4.08	1.37	0.50	0.03	0.07
222013	0.1	4	39	24	9	<	<	6	<	<	0.2	1	1	19	<	<	<	10	74	3	6	<	<	0.10	0.03	0.08	0.01	0.10	0.01	0.01
222014	<	8	46	102	41	<	<	4	<	<	<	8	11	36	6	13	22	288	127	10	3	3	0.05	0.81	0.10	2.20	0.20	0.07	0.02	0.04
222015	<	4	10	40	52	<	<	1	<	<	<	2	<	21	<	1	3	79	41	7	3	1	<	0.20	0.02	0.47	0.02	0.07	0.01	0.01
222016	<	5	41	64	379	6	<	2	<	<	0.6	3	3	27	<	3	6	246	53	7	2	2	0.01	0.31	0.06	0.74	0.06	0.10	0.02	0.01
222019	0.1	2	42	29	17	<	<	4	<	<	0.2	<	<	17	<	4	<	12	70	4	8	<	<	0.09	0.02	0.09	0.01	0.09	0.02	<
222021	<	5	30	58	56	<	<	10	<	<	<	2	3	55	5	4	5	65	83	20	3	2	0.01	0.41	0.04	1.13	0.05	0.07	0.02	0.02
222029	1.6	3	149	428	23	<	<	1	<	<	0.5	1	<	6	<	<	<	49	85	3	13	1	<	0.49	0.16	0.35	0.02	0.09	0.02	<
222034	35.0	37	1653	3964	37	<	<	9	<	114	2.0	6	5	13	16	2	7	1703	137	3	10	7	<	0.97	0.16	7.19	0.03	0.10	0.02	<
222041	0.2	5	45	77	<	<	<	1	<	2	0.5	4	2	309	<	2	7	3524	28	37	8	2	0.04	1.41	0.89	1.38	0.31	0.27	0.02	0.04
222045	0.3	48	49	94	<	<	<	<	<	<	0.3	3	1	18	<	1	3	266	18	10	1	2	<	0.79	0.44	1.52	0.31	0.07	0.01	0.01
223001	<	16	7	37	16	<	<	2	<	<	<	2	2	17	<	67	6	123	40	2	9	3	0.06	0.60	0.05	1.26	0.09	0.37	0.03	0.01
223005	<	5	8	25	25	<	<	2	<	<	<	2	1	13	<	57	5	93	57	1	9	3	0.04	0.46	0.04	0.92	0.05	0.32	0.04	0.01
223006	<	6	3	4	6	5	<	4	<	<	0.1	1	1	15	<	92	<	16	34	1	12	<	<	0.30	0.08	0.27	0.01	0.24	0.01	<
223011	<	6	<	2	<	<	<	4	<	<	<	1	2	5	<	125	<	73	3	<	<	<	<	0.05	<	0.20	<	0.06	0.01	<
223012	<	14	8	18	11	<	<	6	<	<	0.1	1	3	4	<	163	<	30	25	<	1	<	<	0.09	<	0.64	<	0.08	0.01	<
223018	<	6	9	6	11	<	<	3	<	2	<	<	1	29	<	95	<	15	19	32	1	<	<	0.13	0.01	0.17	<	0.12	0.01	<
223020	<	8	21	10	14	8	<	6	<	<	<	1	2	10	<	140	<	19	18	1	3	<	<	0.18	0.02	0.22	<	0.19	0.01	<
223022	<	19	12	53	28	<	<	4	<	<	<	6	6	114	<	61	13	345	6	19	1	8	0.05	1.53	0.47	2.35	0.56	0.34	0.07	0.01
223023	<	5	7	24	<	<	<	4	<	<	<	1	2	7	<	114	2	46	47	<	13	2	0.02	0.42	0.01	0.76	0.02	0.21	0.05	<
223030	0.1m	58	18311	5508	427	<	<	7	<	0.2%	4.7	16	8	15	33	7	18	1.6%	70	5	18	2	<	2.08	1.99	20%	<	0.73	0.02	<
223031	1.3	19	85	70	7	<	<	3	<	<	0.2	6	2	124	<	63	17	327	9	8	1	4	0.04	1.56	0.22	1.88	1.03	0.56	0.05	0.03
223033	14.9	22	726	1675	46	<	<	4	<	34	10.5	5	4	4	7	68	4	3130	25	1	4	1	<	0.86	0.04	5.46	0.02	0.16	0.01	<
223035	0.6	17	25	310	<	<	<	4	<	<	1.3	1	1	10	<	87	2	257	59	1	18	2	0.01	0.44	0.26	0.73	0.02	0.18	0.08	<
223036	2.5	10	226	3444	5	<	<	6	<	2	20.9	17	5	19	13	60	3	4446	64	2	3	2	<	0.39	0.03	6.99	<	0.21	0.01	<
223037	1.3	3	20	109	<	<	<	2	<	<	<	3	4	47	<	55	2	438	14	4	1	1	<	0.65	0.09	1.60	0.13	0.20	0.02	0.02
223038	0.8	4	18	44	<	<	<	2	<	<	0.2	2	1	39	<	84	2	294	13	2	8	<	0.01	0.33	0.25	0.48	0.08	0.13	0.03	0.02
223044	1.0	15	215	242	29	6	<	8	<	<	2.0	1	3	5	<	77	2	627	13	1	4	<	<	0.17	0.01	2.23	<	0.15	0.01	<
223047	<	4	13	56	16	<	<	3	<	<	0.1	2	2	4	8	85	2	92	80	1	13	2	0.03	0.54	0.15	1.07	0.03	0.28	0.05	<
223048	<	22	84	54	39	<	<	5	<	<	<	1	2	4	<	88	2	54	56	4	22	2	0.01	0.45	0.28	0.87	0.01	0.19	0.05	<
223052	0.7	7	160	2081	242	<	<	5	<	<	2.8	6	9	30	10	61	22	4674	21	16	43	3	0.01	0.94	1.17	18%	<	0.32	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	9999	9999	9999	999	999	99.9	999	999	9999	999	9999	999	9999	9999	9999	999	99	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

--=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

APPENDIX B
MINERAL OCCURRENCES

YUKON MINFILE
STANDARD REPORT
EXPLORATION AND GEOLOGICAL SERVICES DIVISION, DIAND
WHITEHORSE

NAME(S): JC (Viola)
MINFILE #: 105B 040
MAJOR COMMODITIES: Sn
MINOR COMMODITIES: Cu,Ag,Zn,W,F,Be
TECTONIC ELEMENT: Yukon Tanana Terrane
NTS MAP SHEET: 105 B 4
LATITUDE: 60°11'46"N
LONGITUDE: 131°42'10"W
DEPOSIT TYPE: Skarn
STATUS: Drilled prospect

CLAIMS (PREVIOUS AND CURRENT)

VIOLA, FXE, JC, FUR

WORK HISTORY

Staked as Viola cl (Y22485) in Dec/67 by Esansee EL and later transferred to Yucan Silver ML, which conducted bulldozer trenching in 1968. Restaked twice by Cypress EL, originally as FXE cl (Y64626) in Aug/72 when it performed minor sampling, and later as FIS cl (Y83111) in Jul/74 when it drilled two holes (38.1 m). Restaked as JC cl (YA25465) in Aug/77 by the DC Synd (Dome & Cominco), which explored with mapping and geochem sampling in 1978-80, trenching in 1978, mag surveys in 1979-80, 8 holes (804.7 m) in 1979, 14 holes (915.3 m) in 1980, and mapping, an aeromag survey and 9 holes (1673 m) in 1981. In 1982, DC Synd drilled another 8 holes (1527m) on the east end of the zone.

E. Johnson staked Fur cl (YA33778) to the south in Jul/78 and performed prospecting and sampling in 1978 and 1979.

GEOLOGY

Tin-bearing skarn has formed along the contact between a porphyritic lobe of the mid Cretaceous Seagull Batholith and a shallow dipping 30-35 m carbonate layer which occurs in a thick sequence of Mississippian quartzite. The original discovery was a diopside skarn band up to 6 m thick that is exposed for a length of over 850 m. It contains scattered patches of massive pyrrhotite and chalcopyrite up to a metre long and small patches of disseminated magnetite, arsenopyrite, pyrite and pyrrhotite. Surface assays were low and the best core assay was 2.7% Cu and 65.1 g/t Ag across the first 0.9 m of Hole 1 on claim FXE 2. Nickel and gold assays were all trace.

In 1977, DC Syndicate discovered tin mineralization associated with light calc-silicate skarn and dark skarn. The dark variety is composed of pyroxene, epidote, actinolite, garnet and calcite. Mineralization includes sphalerite, chalcopyrite, arsenopyrite, magnetite, scheelite and, locally, axinite, beryl, fluorite and apatite. A pipe-like lens or diatreme of breccia with axinite-fluorite mineralization is also present. Tin mineralization is associated with all types of skarn and consists of cassiterite with lesser amounts of malayaite, stannite and stanniferous tetrahedrite. The only assay reported, which was the best chip sample from the 1978 trenches, is 1.26% Sn, 0.4% Cu, 0.04% Zn and trace WO_3 across a true thickness of 2.6 m.

The 1980 and 1981 drilling, which was concentrated at the east end, reportedly defined a significant zone of tin mineralization, although grades generally average less than 0.2% Sn. The 1982 holes encountered structural complications.

Isotopic studies by Layne et al. (1991) clearly indicate a magmatic source for all of the sulphide minerals. Paragenetic and fluid inclusion studies show that cassiterite and fluorite are associated with quartz-biotite skarn formed in a narrow zone along the skarn-granite contact from a pulse of high temperature, high salinity magmatic fluid, during the fourth of six stages of skarn formation.

REFERENCES

CYPRESS RESOURCES LTD, Nov/72. Prospectus Report by R.S. Adamson.

DICK, L.A., 1980. A comparative study of the geology, mineralogy, and conditions of formation of contact metasomatic mineral deposits in the northeastern Canadian Cordillera. Unpublished PhD thesis, Queen's University, p. 8, 9, 165, 194, 205-16, 381, 392.

GEORGE CROSS NEWSLETTER, 10 Oct/74.

LAYNE, G.D. ET AL., 1991. The JC tin skarn deposit, Southern Yukon Territory. Economic Geology, Vol 86, p. 29-65.

MINERAL INDUSTRY REPORT, 1978, p. 57.

WESTERN MINER, Apr/80, p. 45-48.

YUKON GEOLOGY AND EXPLORATION 1979-80, p. 148-149.

YUKON EXPLORATION AND GEOLOGY 1981, p. 98; 1982, p. 97; 1983, p. 28-29.

YUKON MINFILE
STANDARD REPORT
EXPLORATION AND GEOLOGICAL SERVICES DIVISION, DIAND
WHITEHORSE

NAME(S): Can
MINFILE #: 105B 070
MAJOR COMMODITIES: Sn
MINOR COMMODITIES: W,Zn,Cu,F
TECTONIC ELEMENT: Yukon Tanana Terrane

NTS MAP SHEET: 105 B 4
LATITUDE: 60°13'00"N
LONGITUDE: 131°35'16"W
DEPOSIT TYPE: Skarn
STATUS: Drilled prospect

CLAIMS (PREVIOUS AND CURRENT)

CAN

WORK HISTORY

Staked as Can cl (YA21333) in Jul/77 by DC Synd (Dome & Cominco), which explored with mapping, mag and geochem surveys in 1978 and 1979, hand trenching in 1960, and 3 holes (182.3 m), mapping, a mag survey and hand trenching in 1981.

GEOLOGY

Cassiterite, malayaite and stanniferous garnet occur with magnetite and minor bornite, chalcopyrite, sphalerite and fluorite in a skarn zone developed in Devono-Mississippian clastic and carbonate rocks (Yukon Cataclastic Complex) at the margin of the Cretaceous Seagull Batholith. The mineralization occurs in skarn lenses that are up to 7 m thick and 200 m long within a black marble member.

The main mineralization occurs in magnetite-rich sections although traces of cassiterite were noted in an amphibole-rich section. Garnet skarn gives low tin assays. Hole 83-1 intersected 0.63% Sn over 3.5 m and 0.24% Sn over 5.8 m in skarn while Hole 81-1 cut 0.28% Sn, 6.9 g/t Ag and 0.5% Cu across 0.15 m in altered granite.

REFERENCES

BRENCHLEY, M.M., Apr/82. Geology of the Can claim group, Y.T., a tin skarn deposit. Unpublished B.A.Sc. Thesis, Queen's University.

DC SYNDICATE, Mar/82. Assessment Report #092936 by J.C. Stephen.

MINERAL INDUSTRY REPORT 1977, p. 78; 1978, p. 58.

YUKON GEOLOGY AND EXPLORATION 1979-80, p. 153-154.

YUKON EXPLORATION AND GEOLOGY 1981, p. 100.

YUKON MINFILE
STANDARD REPORT
EXPLORATION AND GEOLOGICAL SERVICES DIVISION, DIAND
WHITEHORSE

NAME(S): Duval
MINFILE #: 105B 081
MAJOR COMMODITIES: Sn
MINOR COMMODITIES:
TECTONIC ELEMENT: Yukon Tanana Terrane
NTS MAP SHEET: 105 B 4
LATITUDE: 60°14'00"N
LONGITUDE: 131°37'00"W
DEPOSIT TYPE: Vein
STATUS: Showing

CLAIMS (PREVIOUS AND CURRENT)

DU

WORK HISTORY

Staked as a large block of DU cl (YA28903) in Jun/78 by Klinkit JV (DuPont of Can EL & Duval Corp), which explored with mapping and geochem sampling in 1978-80 and drilled one hole (215 m) in 1981. The DuPont interest was transferred to CSA Mls Inc in 1984 and to Goldsearch Inc in 1985.

GEOLOGY

Narrow (1-4 cm), tin-bearing quartz veins are associated with a prominent gossan within the Cretaceous Seagull Batholith. Drilling encountered extensive greisen development but only low tin values.

REFERENCES

YUKON GEOLOGY AND EXPLORATION 1979-80, p. 151.

YUKON EXPLORATION AND GEOLOGY 1981, p. 99.

YUKON MINFILE
STANDARD REPORT
EXPLORATION AND GEOLOGICAL SERVICES DIVISION, DIAND
WHITEHORSE

NAME(S): Du
MINFILE #: 105B 084
MAJOR COMMODITIES: Sn
MINOR COMMODITIES: W
TECTONIC ELEMENT: Yukon Tanana Terrane
NTS MAP SHEET: 105 B 4
LATITUDE: 60°12'00"N
LONGITUDE: 131°34'00"W
DEPOSIT TYPE: Vein
STATUS: Showing

CLAIMS (PREVIOUS AND CURRENT)

DU

WORK HISTORY

Staked as part of a large block of DU cl (YA28903) in Jun/78 by Klinkit JV (DuPont of Can EL & Duval Corp), which explored with detailed mapping and geochem sampling in 1978-80 and one hole (243 m) in 1981. The DuPont interest was transferred to CSA Mls Inc in 1984 and to Goldsearch Inc in 1985.

GEOLOGY

Disseminated cassiterite and huebnerite occur in a vein swarm in roof pendants of Carboniferous sedimentary rocks (Yukon Cataclastic Complex) in a late phase of the Cretaceous Seagull Batholith. Selected specimens assayed up to 2% Sn but the best drill intersection assayed only 0.14% Sn over 1.0 m.

REFERENCES

GEOLOGICAL SURVEY OF CANADA 79-1A, p. 264-266. ✓

MINERAL INDUSTRY REPORT 1978, p. 58-59.

YUKON GEOLOGY AND EXPLORATION 1979-80, p. 151. ✓

YUKON EXPLORATION AND GEOLOGY 1981, p. 99. ✓

YUKON MINFILE
STANDARD REPORT
EXPLORATION AND GEOLOGICAL SERVICES DIVISION, DIAND
WHITEHORSE

NAME(S): Cusp (Eccles Ridge, Main Zone)
MINFILE #: 105B 086
MAJOR COMMODITIES: Sn
MINOR COMMODITIES: Zn,Pb,Cu,F
TECTONIC ELEMENT: Yukon Tanana Terrane
NTS MAP SHEET: 105 B 4
LATITUDE: 60°14'00"N
LONGITUDE: 131°84'00"W
DEPOSIT TYPE: Vein
STATUS: Showing

CLAIMS (PREVIOUS AND CURRENT)

DU, ZINC

WORK HISTORY

Staked as part of a large block of DU cl (YA28903) in Jun/78 by Klinkit JV (DuPont of Can EL & Duval Corp), which explored with detailed mapping and geochem sampling in 1978 and 1979, hand trenching in 1979, and 3 holes (600 m) in 1980 and 2 holes (314 m) in 1981. DC Synd (Dome & Cominco) tied on Zinc cl (YA33021) to the west in Jun/78 and performed mapping and geochem sampling later in the year. The DuPont interest was transferred to CSA Mls Inc in 1984 and to Goldsearch Inc in 1985.

GEOLOGY

Cassiterite occurs in a fracture stockwork cutting a flat aplite dyke near the ceiling of the Cretaceous Seagull Batholith and in a small hornfelsed roof pendant of Carboniferous clastic rocks of the Yukon Cataclastic Complex. The drilling tested a large zone of greisen alteration from which specimens have assayed about 0.5% Sn. Drilling intersected arsenopyrite, galena, pyrite, magnetite, cassiterite, fluorite and tourmaline in three zones. The best intersections were two 1 m intervals assaying 0.4 and 0.2% Sn.

Talus containing sphalerite, galena, chalcopyrite, fluorite and axinite was found on the Zinc group but was not traced to a source.

REFERENCES

GEOLOGICAL SURVEY OF CANADA, Paper 79-1A, p. 264-266.

MINERAL INDUSTRY REPORT, 1978, p. 58-59.

WESTERN MINER, Apr/80, p. 45-48.

YUKON EXPLORATION AND GEOLOGY 1981, p. 99.

YUKON GEOLOGY AND EXPLORATION 1979-80, p. 151, 158.

YUKON MINFILE
STANDARD REPORT
EXPLORATION AND GEOLOGICAL SERVICES DIVISION, DIAND
WHITEHORSE

NAMES): Smith (Swift)
MINFILE #: 105B 088
MAJOR COMMODITIES: Sn
MINOR COMMODITIES: Cu,Zn,Pb,F,Ag,Ba,Topaz
TECTONIC ELEMENT:

NTS MAP SHEET: 105 B 4
LATITUDE: 60°12'00"N
LONGITUDE: 131°44'00"W
DEPOSIT TYPE: Skarn/vein
STATUS: Drilled prospect

CLAIMS (PREVIOUS AND CURRENT)

MC, SWIFT, SLIDE, SLIP, PLUG

WORK HISTORY

Staked as 300 MC, Swift, Slide & Slip cl (YA33303) in Jun/78 by Welcome North ML and optioned to Klinkit JV (DuPont of Can EL & Duval Corp), which explored with mapping and geochem sampling in 1978 and 1979, extensive hand trenching and bulk sampling in 1979, 4 holes (952 m) in 1980 and 2 holes (418 m) in 1981. DC Synd (Dome & Cominco) tied on Plug cl (YA33037) on the west in Jun/78 and explored with mapping and geochem sampling later in the year. Klinkit JV performed more mapping, geochem and geophysical surveys in 1982, a detailed mag survey in 1983, and drilled 4 holes (218 m) in 1984 before dropping the option. The DuPont interest was transferred to CSA Mls Inc in 1984 and to Goldsearch Inc in 1985.

Restaked as Slip cl (YB262) in Jun/87 by McCrory Holdings Ltd.

GEOLOGY

Cassiterite is associated with fluorite and occasional barite in poorly developed vein, skarn and greisen zones developed in hornfelsed clastic and carbonate rocks of Carboniferous age (Yukon Cataclastic Complex) adjacent to aplite dykes related to the Cretaceous Seagull Batholith. The best showing consists of two zones 15 m apart, called Main and Sheeted Veins.

The Main Zone consists of irregular siliceous pyroxene skarn bounded by a steep quartz vein up to several m wide that contains cassiterite, chalcopyrite and sphalerite. The Sheeted Vein Zone is about 50 m across and consists of a crackle zone with some fractures which are mineralized with pyrite, chalcopyrite, sphalerite, galena, magnetite and cassiterite. Chip sampling indicated that grade is erratic. The best 1978 chip sample assayed 0.78% SnO_2 across 5 m. Bulk samples from a 7 m wide zone gave a tin assay of 0.42% and recovery of 80%.

The best 1980-81 drill results were from the Main Zone. It is well zoned and grades from a magnetite-cassiterite assemblage through a quartz-chalcopyrite-sphalerite-galena assemblage to a quartz-tourmaline assemblage. The skarn zone is located more than 500 m from the intrusive contact and is faulted off at depth. The best intersection in the 1984 drilling on the Swift group was 0.4% Sn, 2.0% Zn, 10.2 g/t Ag and 70 ppb Au across 2.0 m of quartz-actinolite-magnetite-pyroxene skarn.

No mineralization was found on the Plug group.

REFERENCES

GEOLOGICAL SURVEY OF CANADA, Paper 79-1A, p. 264-266.

MASER, M., Apr/81. Geology, mineralogy and geochronology of the MC property. Unpublished B.Sc. Thesis, University of British Columbia.

MINERAL INDUSTRY REPORT 1978, p. 57-58.

WESTERN MINER, Apr/80, p. 45-48.

YUKON EXPLORATION AND GEOLOGY 1981, p. 98-99; 1984, p. 55.

YUKON GEOLOGY AND EXPLORATION 1979-80, p. 150-151, 158.

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05-Aug-93date | Assay Certificate | Page3

Ivan J. Elash | WO 13994

Sample	Au ppb
213080	<5
213081	23
213093	12
213100	8
213101	<5
213105	<5
213107	73
213108	<5
113081	24
113082	<5
113083	<5
113088	<5
112090	1017
114091	<5

WOLF RIVER AREA

Wolf River Area

Wolf River
Harry Karl

Northern Analytical Laboratories ltd.

19-Jun-93date

Assay Certificate

Page1

Haywire Industries

WO13930

Sample #	Au ppb
Goldpan	9
111003	7
111006	7
111007	9
111008	19 ✓
111009	13
111010	21 ✓
111011	8
111012	10
111013	10
111014	9
111015	3
111017	3
111018	8
111019	16
111020	21 ✓
111028	1
111031	53 ✓
111032	8
111034	25 ✓
111035	7
111036	1
111037	9
111038	10
111039	5
111041	2
111042	0
111043	8 ✓
111044	16 ✓
111059	15
112002	16
112022	3
112023	4
112024	1
112025	7
112027	10
112029	13
112033	18
112040	12
112045	23 ✓
112046	56 ✓

Certified by

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19-Jun-93date

Assay Certificate

Haywire Industries

WO13930

Sample #	Au ppb
112047	4
112049	7
112061	12
112065	6
121003	7
121004	44
121005	304
121006	1
121007	163
121008	5
121009	4
121012	55
121014	4
121015	5

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iPL 93F1806

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55 Samples | 0= Rock | 0= Soil | 0= Core | 0=RC Ct | 55= Pulp | 0=Other | [019808:05:51:39062393]

Out: Jun 22, 1993 Project: WO 13930 | Raw Storage: -- -- -- -- 12Mon/Dis -- | Mon=Month Dis=Discard
In : Jun 18, 1993 Shipper: Norm Smith | Pulp Storage: -- -- -- -- 12Mon/Dis -- | Rtn=Return Arc=Archive
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Msg: ICP(AqR)30
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ATT: Norm Smith	Ph:403/668-4968				
	Fx:403/668-4890				

Analytical Summary

##	Code	Method	Title	Limit Low	Limit High	Units	Description	Element	##
01	721P	ICP	Ag	0.1	100	ppm	Ag ICP	Silver	01
02	711P	ICP	Cu	1	20000	ppm	Cu ICP	Copper	02
03	714P	ICP	Pb	2	20000	ppm	Pb ICP	Lead	03
04	730P	ICP	Zn	1	20000	ppm	Zn ICP	Zinc	04
05	703P	ICP	As	5	9999	ppm	As ICP 5 ppm	Arsenic	05
06	702P	ICP	Sb	5	9999	ppm	Sb ICP	Antimony	06
07	732P	ICP	Hg	3	9999	ppm	Hg ICP	Mercury	07
08	717P	ICP	Mo	1	9999	ppm	Mo ICP	Molydenum	08
09	747P	ICP	Tl	10	999	ppm	Tl ICP 10 ppm	Thallium	09
10	705P	ICP	Bi	2	999	ppm	Bi ICP	Bismuth	10
11	707P	ICP	Cd	0.1	100	ppm	Cd ICP	Cadmium	11
12	710P	ICP	Co	1	999	ppm	Co ICP	Cobalt	12
13	718P	ICP	Ni	1	999	ppm	Ni ICP	Nickel	13
14	704P	ICP	Ba	2	9999	ppm	Ba ICP	Barium	14
15	727P	ICP	W	5	999	ppm	W ICP	Tungsten	15
16	709P	ICP	Cr	1	9999	ppm	Cr ICP	Chromium	16
17	729P	ICP	V	2	999	ppm	V ICP	Vanadium	17
18	716P	ICP	Mn	1	9999	ppm	Mn ICP	Manganese	18
19	713P	ICP	La	2	9999	ppm	La ICP	Lanthanum	19
20	723P	ICP	Sr	1	9999	ppm	Sr ICP	Strontium	20
21	731P	ICP	Zr	1	999	ppm	Zr ICP	Zirconium	21
22	736P	ICP	Sc	1	99	ppm	Sc ICP	Scandium	22
23	726P	ICP	Ti	0.01	1.00	%	Ti ICP	Titanium	23
24	701P	ICP	Al	0.01	99.99	%	Al ICP	Aluminum	24
25	708P	ICP	Ca	0.01	99.99	%	Ca ICP	Calcium	25
26	712P	ICP	Fe	0.01	99.99	%	Fe ICP	Iron	26
27	715P	ICP	Mg	0.01	9.99	%	Mg ICP	Magnesium	27
28	720P	ICP	K	0.01	9.99	%	K ICP	Potassium	28
29	722P	ICP	Na	0.01	5.00	%	Na ICP	Sodium	29
30	719P	ICP	P	0.01	5.00	%	P ICP	Phosphorus	30

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CERTIFICATE OF ANALYSIS
iPL 93F1806

Client: Northern Analytical Laboratories iPL: 93F1806 Out: Jun 22, 1993 Page 1 of 2 Section 1 of 1
Project: WO 13930 55 Pulp In: Jun 18, 1993 Certified BC Assayer: David Chiu

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 %
13930 111003	<	15	14	54	<	<	<	1	<	<	0.1	8	20	163	<	21	25	377	16	34	1	2	0.04	0.98	0.71	1.76	0.51	0.08	0.02	0.07
13930 111006	<	12	11	48	<	<	<	1	<	<	0.1	7	17	146	<	20	24	336	16	34	1	2	0.04	0.89	0.69	1.55	0.45	0.08	0.02	0.07
13930 111007	<	14	11	47	7	<	<	<	<	<	<	8	19	163	<	22	25	864	16	36	2	2	0.04	0.94	0.74	1.76	0.51	0.09	0.02	0.07
13930 111008	<	8	8	36	<	<	<	1	<	<	<	6	15	106	<	20	27	278	17	24	1	2	0.05	0.76	0.51	1.54	0.45	0.06	0.02	0.06
13930 111009	0.1	6	9	33	<	<	<	<	<	<	0.1	6	13	103	<	18	21	235	14	22	1	2	0.04	0.73	0.46	1.36	0.41	0.06	0.02	0.05
13930 111010	0.1	10	10	37	<	<	<	1	<	<	0.1	7	15	110	<	20	23	268	14	26	1	2	0.04	0.79	0.52	1.45	0.45	0.07	0.02	0.07
13930 111011	<	7	3	30	<	<	<	1	<	<	0.1	6	12	87	<	17	22	191	14	21	1	1	0.04	0.66	0.43	1.28	0.38	0.05	0.02	0.06
13930 111012	<	14	11	43	<	<	<	<	<	<	<	7	18	141	<	21	25	309	13	34	2	2	0.05	0.92	0.68	1.58	0.50	0.08	0.02	0.06
13930 111013	<	8	9	32	<	<	<	1	<	<	0.1	6	13	98	<	17	22	282	12	23	1	1	0.04	0.69	0.48	1.32	0.39	0.06	0.02	0.06
13930 111014	<	12	11	36	<	<	<	1	<	<	0.2	7	16	112	<	19	23	248	13	29	1	2	0.04	0.82	0.59	1.41	0.44	0.07	0.02	0.06
13930 111015	<	8	9	38	10	<	<	1	<	<	<	7	16	87	<	25	33	365	20	18	1	2	0.06	0.78	0.36	1.89	0.45	0.07	0.02	0.06
13930 111017	0.1	10	10	46	9	<	<	2	<	<	<	8	17	114	<	26	37	498	25	22	<	2	0.07	0.91	0.45	2.06	0.47	0.08	0.02	0.08
13930 111018	<	8	8	45	7	<	<	1	<	<	<	8	17	94	<	33	39	462	22	21	1	2	0.07	0.85	0.41	2.21	0.50	0.09	0.02	0.06
13930 111019	<	7	7	37	6	<	<	1	<	<	<	6	14	83	<	19	24	445	16	17	<	1	0.05	0.70	0.34	1.46	0.41	0.06	0.02	0.05
13930 111020	<	5	2	24	<	<	<	<	<	<	<	5	12	83	<	15	19	165	14	22	1	1	0.05	0.60	0.41	1.06	0.33	0.05	0.02	0.06
13930 111031	<	7	9	42	<	<	<	1	<	<	<	7	16	79	<	23	28	186	15	17	1	2	0.05	0.73	0.37	1.60	0.43	0.06	0.02	0.07
13930 111032	<	8	9	46	<	<	<	<	<	<	0.1	7	17	76	<	22	32	193	15	16	1	2	0.05	0.72	0.35	1.77	0.44	0.07	0.02	0.06
13930 111034	0.2	8	10	45	<	<	<	1	<	<	0.1	7	17	84	<	23	28	211	16	17	<	2	0.05	0.75	0.35	1.62	0.44	0.07	0.02	0.07
13930 111035	0.2	8	11	43	<	<	<	<	<	<	0.1	7	17	78	<	22	24	182	14	16	1	2	0.04	0.72	0.35	1.46	0.44	0.07	0.02	0.06
13930 111036	0.2	7	9	46	<	<	<	1	<	<	0.2	7	15	75	<	24	31	184	14	15	1	1	0.05	0.68	0.36	1.75	0.43	0.06	0.02	0.07
13930 111037	<	17	13	48	6	<	<	1	<	<	0.1	9	24	104	<	26	34	257	17	21	2	2	0.07	0.96	0.36	2.15	0.53	0.10	0.02	0.07
13930 111038	<	12	11	57	<	<	<	1	<	<	0.1	8	20	122	<	26	30	196	16	22	1	2	0.06	0.91	0.43	1.67	0.49	0.08	0.02	0.07
13930 111043	0.1	8	9	31	5	<	<	<	<	<	0.2	7	17	94	<	22	30	251	16	24	1	2	0.05	0.69	0.67	1.59	0.50	0.06	0.02	0.07
13930 111044	<	8	7	32	<	<	<	<	<	<	0.1	7	17	98	<	25	33	255	19	23	1	2	0.06	0.73	0.64	1.75	0.50	0.06	0.02	0.07
13930 111059	0.1	11	8	39	5	<	<	1	<	<	0.1	8	18	139	<	21	26	586	12	26	1	2	0.05	0.89	0.53	1.79	0.50	0.08	0.02	0.07
13930 112002	0.1	43	17	73	5	<	<	2	<	<	<	13	47	290	<	43	46	471	18	36	5	5	0.08	1.73	0.67	2.98	0.99	0.16	0.03	0.07
13930 112016	0.1	9	8	39	7	<	<	1	<	<	0.1	7	16	96	<	24	31	400	20	17	<	2	0.06	0.80	0.34	1.79	0.44	0.08	0.02	0.07
13930 112022	<	22	12	50	5	<	<	1	<	<	<	9	27	154	<	28	35	350	16	25	5	3	0.07	1.15	0.51	2.11	0.65	0.11	0.02	0.07
13930 112023	<	15	9	38	5	<	<	1	<	<	0.2	6	21	120	<	24	29	257	13	21	3	2	0.06	0.94	0.37	1.74	0.51	0.08	0.02	0.06
13930 112024	<	29	13	59	7	<	<	1	<	<	<	11	32	186	<	34	40	390	17	28	5	4	0.08	1.41	0.61	2.44	0.79	0.14	0.02	0.07
13930 112025	<	4	3	48	<	<	<	<	<	<	0.2	4	5	49	<	14	33	463	8	9	<	1	0.07	0.58	0.14	1.22	0.15	0.05	0.02	0.02
13930 112027	0.1	9	11	43	6	<	<	1	<	<	0.2	10	21	105	<	29	42	277	16	14	1	2	0.07	1.04	0.27	2.17	0.45	0.07	0.02	0.06
13930 112028	<	9	11	45	7	<	<	1	<	<	<	8	17	119	<	23	30	438	18	21	<	2	0.06	0.99	0.40	1.86	0.50	0.08	0.02	0.06
13930 112029	0.3	40	23	144	10	<	<	2	<	<	<	18	56	545	<	49	61	787	27	37	2	6	0.10	2.96	0.59	3.71	0.91	0.16	0.03	0.07
13930 112033	<	13	13	69	6	<	<	<	<	<	0.1	10	23	107	<	29	33	422	15	19	1	2	0.06	0.91	0.43	2.12	0.49	0.12	0.02	0.08
13930 112039	<	7	7	41	<	<	<	<	<	<	0.2	6	15	81	<	18	21	193	13	17	<	1	0.04	0.70	0.34	1.32	0.41	0.05	0.02	0.06
13930 112040	0.2	9	11	50	<	<	<	<	<	<	0.1	8	19	98	<	22	25	259	13	19	1	2	0.05	0.86	0.36	1.58	0.52	0.08	0.02	0.07
13930 112041	<	7	7	41	<	<	<	1	<	<	<	7	16	70	<	21	25	193	13	15	1	1	0.05	0.72	0.32	1.57	0.44	0.05	0.02	0.06
13930 112042	<	7	10	42	<	<	<	1	<	<	<	7	16	89	<	19	21	237	11	16	1	2	0.04	0.74	0.31	1.45	0.46	0.06	0.02	0.05
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	9999	9999	9999	999	999	99.9	999	999	9999	999	9999	999	9999	9999	9999	999	99	1.00	99.99	99.99	99.99	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

---=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

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CERTIFICATE OF ANALYSIS
iPL 93F1806

Client: Northern Analytical Laboratories iPL: 93F1806 Out: Jun 22, 1993 Page 2 of 2 Section 1 of 1
Project: WO 13930 55 Pulp In: Jun 18, 1993 Certified BC Assayer: David Chiu

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 %
13930 112045	P	0.1	19	12	45	5	<	<	1	<	<	0.1	9	23	141	<	24	31	220	15	26	2	2	0.06	1.00	0.52	1.75	0.53	0.08	0.02	0.06
13930 112046	P	<	9	19	74	14	<	<	1	<	<	<	10	25	81	<	35	55	275	11	10	3	3	0.06	2.07	0.20	3.71	0.56	0.07	0.02	0.25
13930 112047	P	<	31	15	75	7	<	<	1	<	<	<	12	35	202	<	34	43	413	18	32	3	4	0.07	1.56	0.71	2.80	0.92	0.16	0.03	0.07
13930 112049	P	<	32	16	71	8	<	<	1	<	<	<	15	35	190	<	38	47	417	19	22	1	4	0.06	1.91	0.37	2.97	0.87	0.15	0.02	0.06
13930 112065	P	<	14	22	70	10	<	<	1	<	<	0.1	12	38	248	<	45	65	256	12	11	7	5	0.06	2.42	0.38	3.23	0.62	0.10	0.02	0.03
13930 121003	P	<	7	10	48	10	<	<	1	<	<	0.2	6	15	90	<	18	23	567	13	16	<	1	0.05	0.70	0.33	1.50	0.41	0.06	0.02	0.06
13930 121004	P	<	7	7	48	10	<	<	1	<	<	0.1	7	14	105	<	20	28	580	18	18	<	2	0.05	0.75	0.36	1.65	0.40	0.07	0.02	0.06
13930 121005	P	<	7	6	57	7	<	<	1	<	<	<	8	17	100	<	36	67	550	29	18	<	2	0.06	0.74	0.40	3.24	0.41	0.07	0.02	0.07
13930 121006	P	<	9	8	51	5	<	<	1	<	<	0.1	8	16	104	<	20	26	561	17	18	<	2	0.05	0.77	0.36	1.65	0.43	0.08	0.02	0.07
13930 121007	P	<	9	11	50	10	<	<	1	<	<	0.1	8	18	111	<	22	29	428	17	19	1	2	0.05	0.89	0.37	1.78	0.47	0.07	0.02	0.06
13930 121008	P	<	10	11	48	10	<	<	1	<	<	0.4	7	16	102	<	20	26	427	14	18	1	2	0.05	0.83	0.34	1.62	0.44	0.07	0.02	0.05
13930 121009	P	<	9	10	51	6	<	<	1	<	<	0.2	7	16	105	<	20	27	376	16	18	<	2	0.05	0.85	0.35	1.67	0.44	0.07	0.02	0.06
13930 121012	P	0.2	15	12	71	6	<	<	1	<	<	0.4	9	22	106	<	26	40	344	27	20	<	2	0.06	0.97	0.49	2.17	0.48	0.09	0.02	0.07
13930 121014	P	<	14	8	65	<	<	<	<	<	<	0.2	8	20	106	<	27	33	237	17	25	1	2	0.06	0.96	0.62	1.91	0.51	0.08	0.02	0.07
13930 121015	P	<	10	10	45	<	<	<	1	<	<	0.1	8	19	110	<	26	34	314	15	26	1	2	0.06	0.81	0.70	1.87	0.55	0.07	0.02	0.07
13930 Gold Pan	P	<	9	10	41	<	<	<	<	<	<	<	6	15	113	<	21	26	280	16	26	1	2	0.04	0.80	0.54	1.58	0.42	0.06	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Max Reported*		99.9	20000	20000	20000	9999	9999	9999	9999	999	999	99.9	999	999	9999	999	9999	999	9999	9999	9999	999	99	1.00	99.99	99.99	99.99	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

---=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

Northern Analytical Laboratories ltd.

Wolf River
Harvey Kane

19-Jun-93date

Assay Certificate

Page1

Haywire Industries

WO13937

Sample #	Au ppb
113004	1
113021	18
113048	1
113050	7
113062	1
123001	13
123002	1
123011	5
123013	2
123017	1
123018	22
123019	3
123020	1
123026	0
123053	2
153051	38

Certified by

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CERTIFICATE OF ANALYSIS
iPL 93F1809

Northern Analytical Laboratories

16 Samples

	0= Rock	0= Soil	0= Core	0=RC Ct	16= Pulp	0=Other
Raw Storage:	--	--	--	--	12Mon/Dis	--
Pulp Storage:	--	--	--	--	12Mon/Dis	--

[020108:19:10:39062393]
Mon=Month Dis=Discard
Rtn=Return Arc=Archive

Out: Jun 22, 1993 Project: WO 13937
In : Jun 18, 1993 Shipper: Norm Smith
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ATT: Norm Smith
Ph:403/668-4968
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Analytical Summary

##	Code	Method	Title	Limit Low	Limit High	Units	Description		Element	##
01	721P	ICP	Ag	0.1	100	ppm	Ag ICP		Silver	01
02	711P	ICP	Cu	1	20000	ppm	Cu ICP		Copper	02
03	714P	ICP	Pb	2	20000	ppm	Pb ICP		Lead	03
04	730P	ICP	Zn	1	20000	ppm	Zn ICP		Zinc	04
05	703P	ICP	As	5	9999	ppm	As ICP	5 ppm	Arsenic	05
06	702P	ICP	Sb	5	9999	ppm	Sb ICP		Antimony	06
07	732P	ICP	Hg	3	9999	ppm	Hg ICP		Mercury	07
08	717P	ICP	Mo	1	9999	ppm	Mo ICP		Molydenum	08
09	747P	ICP	Tl	10	999	ppm	Tl ICP	10 ppm	Thallium	09
10	705P	ICP	Bi	2	999	ppm	Bi ICP		Bismuth	10
11	707P	ICP	Cd	0.1	100	ppm	Cd ICP		Cadmium	11
12	710P	ICP	Co	1	999	ppm	Co ICP		Cobalt	12
13	718P	ICP	Ni	1	999	ppm	Ni ICP		Nickel	13
14	704P	ICP	Ba	2	9999	ppm	Ba ICP		Barium	14
15	727P	ICP	W	5	999	ppm	W ICP		Tungsten	15
16	709P	ICP	Cr	1	9999	ppm	Cr ICP		Chromium	16
17	729P	ICP	V	2	999	ppm	V ICP		Vanadium	17
18	716P	ICP	Mn	1	9999	ppm	Mn ICP		Manganese	18
19	713P	ICP	La	2	9999	ppm	La ICP		Lanthanum	19
20	723P	ICP	Sr	1	9999	ppm	Sr ICP		Strontium	20
21	731P	ICP	Zr	1	999	ppm	Zr ICP		Zirconium	21
22	736P	ICP	Sc	1	99	ppm	Sc ICP		Scandium	22
23	726P	ICP	Ti	0.01	1.00	%	Ti ICP		Titanium	23
24	701P	ICP	Al	0.01	99.99	%	Al ICP		Aluminum	24
25	708P	ICP	Ca	0.01	99.99	%	Ca ICP		Calcium	25
26	712P	ICP	Fe	0.01	99.99	%	Fe ICP		Iron	26
27	715P	ICP	Mg	0.01	9.99	%	Mg ICP		Magnesium	27
28	720P	ICP	K	0.01	9.99	%	K ICP		Potassium	28
29	722P	ICP	Na	0.01	5.00	%	Na ICP		Sodium	29
30	719P	ICP	P	0.01	5.00	%	P ICP		Phosphorus	30

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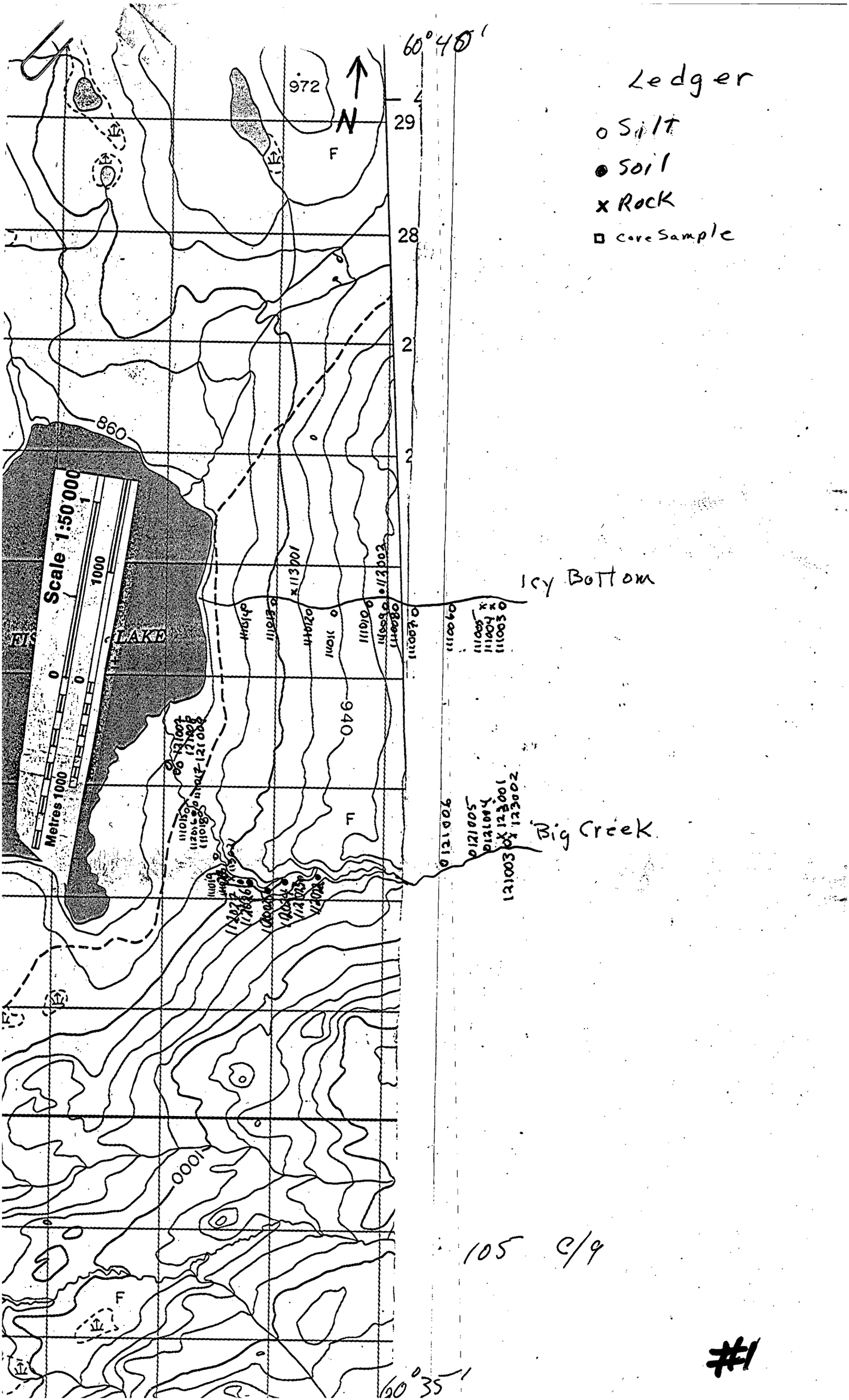
CERTIFICATE OF ANALYSIS
iPL 93F1809

Client: Northern Analytical Laboratories iPL: 93F1809 Out: Jun 22, 1993 Page 1 of 1 Section 1 of 1
Project: WO 13937 16 Pulp In: Jun 18, 1993 Certified BC Assayer: David Chiu

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 %
113004	P	<	5	19	15	<	<	<	2	<	<	<	3	5	74	<	75	2	262	23	22	1	<	<	0.33	0.37	0.71	0.17	0.13	0.02	0.02
113048	P	<	4	16	30	<	<	<	5	<	<	<	4	3	29	<	117	13	256	54	4	11	2	0.10	0.56	0.22	1.45	0.21	0.41	0.06	0.03
113050	P	3.1	79	409	711	<	79	<	4	<	<	2.8	9	18	58	<	161	43	363	10	18	4	6	0.16	1.40	0.38	2.37	0.64	0.66	0.10	0.03
113062	P	0.1	3	5	27	<	<	4	4	<	<	0.7	<	5	12	<	99	3	60	<	51	2	<	<	0.07	8.55	0.33	4.82	0.03	0.01	0.01
123001	P	0.1	2	6	21	<	<	<	2	<	<	<	2	3	27	<	80	7	286	5	87	<	1	0.02	0.54	3.36	0.80	0.14	0.08	0.06	0.02
123002	P	0.2	7	33	44	5	<	3	3	<	<	<	6	10	79	<	136	19	252	13	37	2	2	0.08	1.23	0.47	1.49	0.35	0.29	0.11	0.02
123011	P	0.1	5	11	9	5	<	<	2	<	<	<	2	1	29	<	87	13	133	11	10	4	2	0.07	0.53	0.10	0.90	0.27	0.13	0.03	0.01
123013	P	0.4	4	66	255	5	<	<	3	<	<	0.8	5	7	24	<	110	29	338	23	22	3	4	0.10	1.07	0.67	1.65	0.57	0.07	0.09	0.03
123017	P	0.2	52	13	57	<	<	<	4	<	<	<	23	19	94	<	158	36	234	5	80	1	7	0.17	4.59	2.16	4.31	1.23	0.90	0.27	0.07
123018	P	<	16	9	87	<	<	<	2	<	3	<	20	29	229	<	59	41	1436	24	6	8	5	0.22	2.92	0.08	5.01	1.28	2.03	0.02	0.03
123019	P	0.3	13	30	108	<	<	<	3	<	2	<	14	25	107	<	124	33	687	15	49	3	4	0.14	2.39	0.36	3.24	0.97	1.29	0.12	0.02
123020	P	0.3	6	33	70	<	<	<	3	<	<	<	8	13	29	<	122	30	567	18	48	5	4	0.10	1.82	0.53	2.33	0.61	0.37	0.16	0.03
123021	P	0.1	12	42	54	<	<	<	7	<	<	<	12	5	61	<	66	28	535	9	22	1	2	0.14	1.46	0.67	2.28	1.22	0.15	0.03	0.05
123026	P	<	2	4	7	<	<	<	4	<	<	0.3	1	2	4	<	145	<	31	<	17	1	<	<	0.03	2.78	0.20	1.18	0.01	0.01	0.01
123053	P	0.3	3	27	25	<	<	<	4	<	<	0.1	1	2	7	<	135	3	53	<	13	<	<	<	0.06	2.32	0.24	0.44	0.01	0.01	0.01
153051	P	0.2	4	14	26	6	<	<	4	<	<	0.2	1	2	444	<	126	3	53	5	7	2	<	0.01	0.12	0.02	0.43	0.02	0.06	0.02	0.01
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	9999	9999	9999	999	999	99.9	999	999	9999	999	9999	999	9999	9999	9999	999	99	1.00	99.99	99.99	99.99	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

--=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate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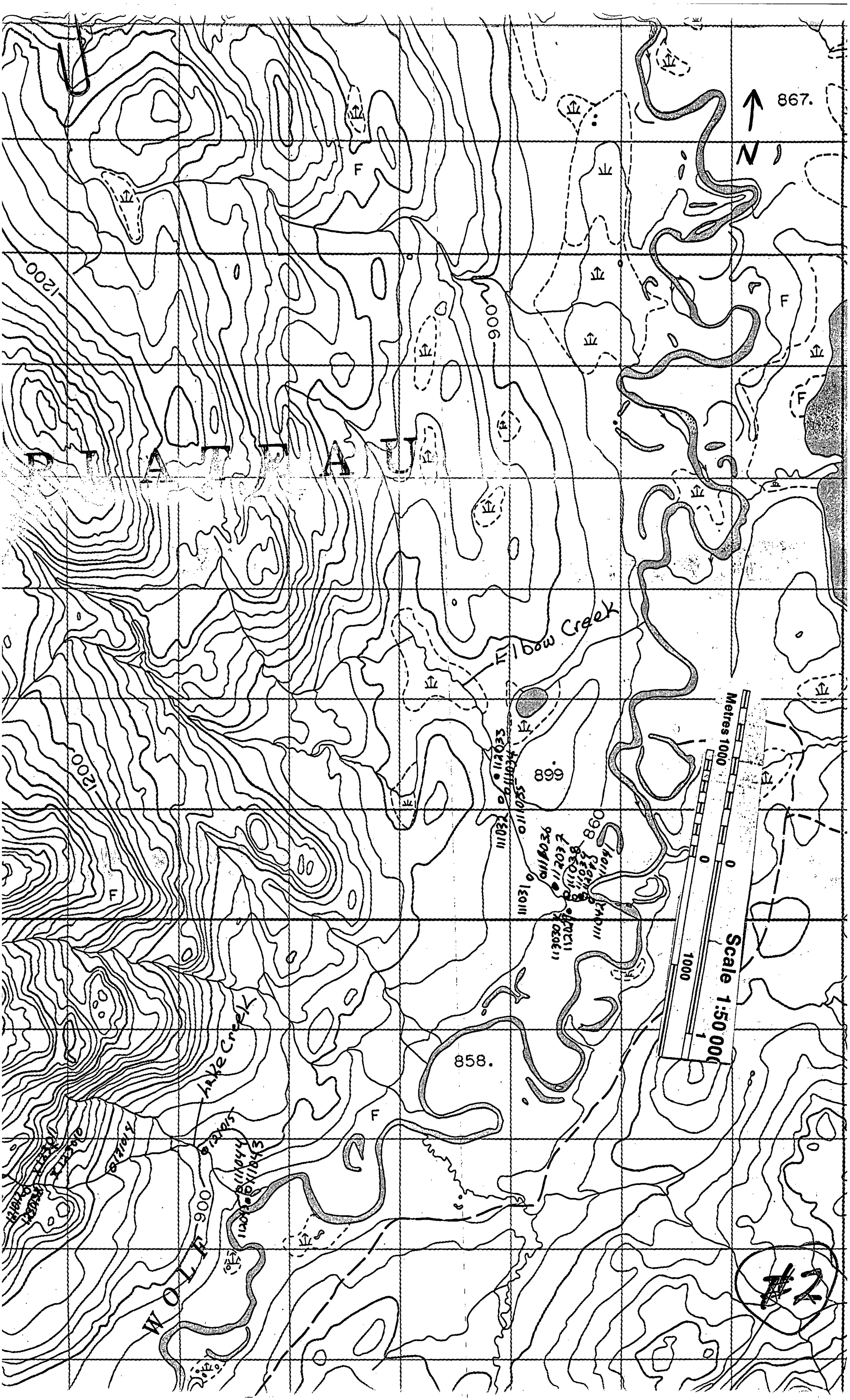
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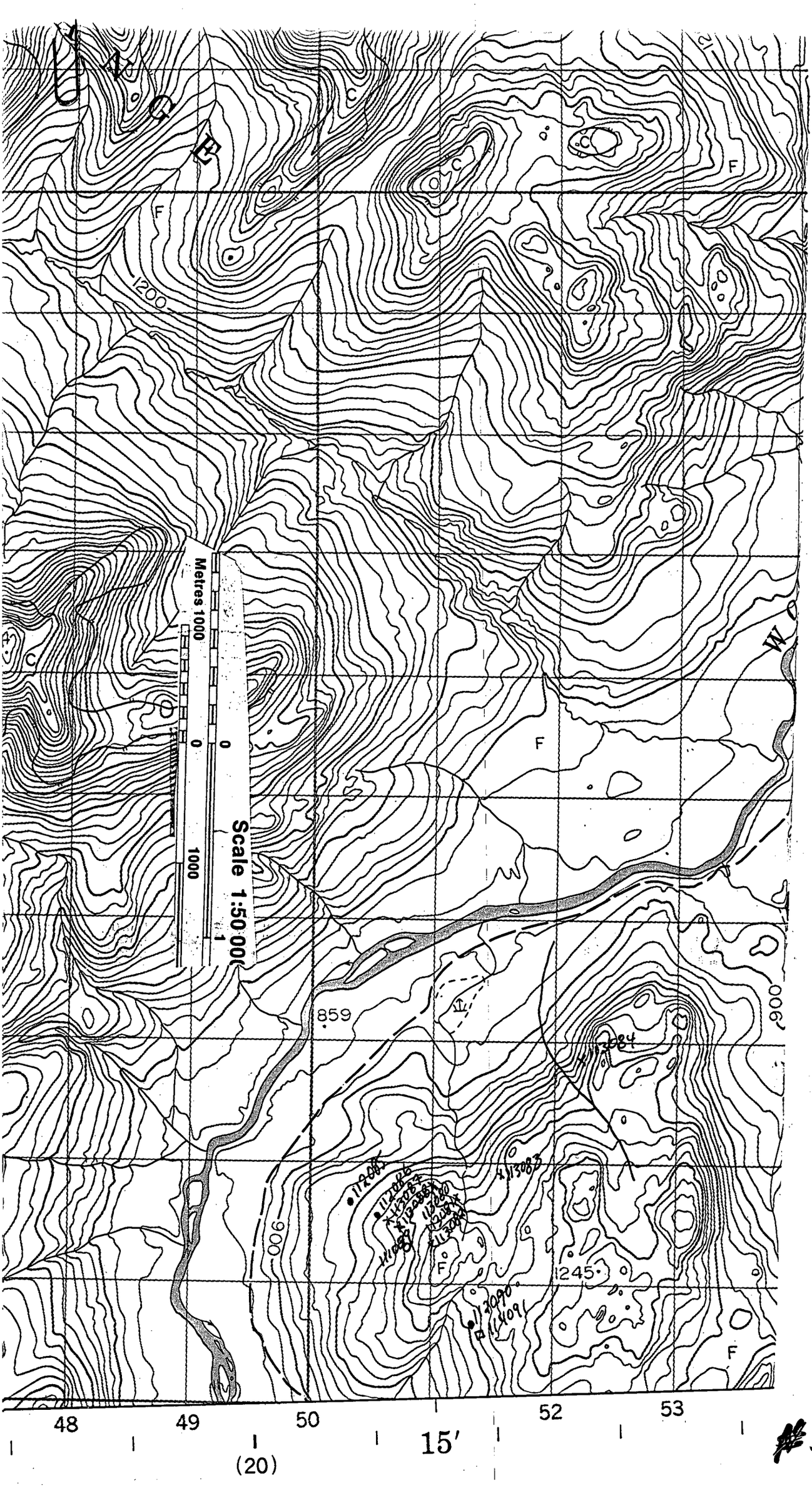
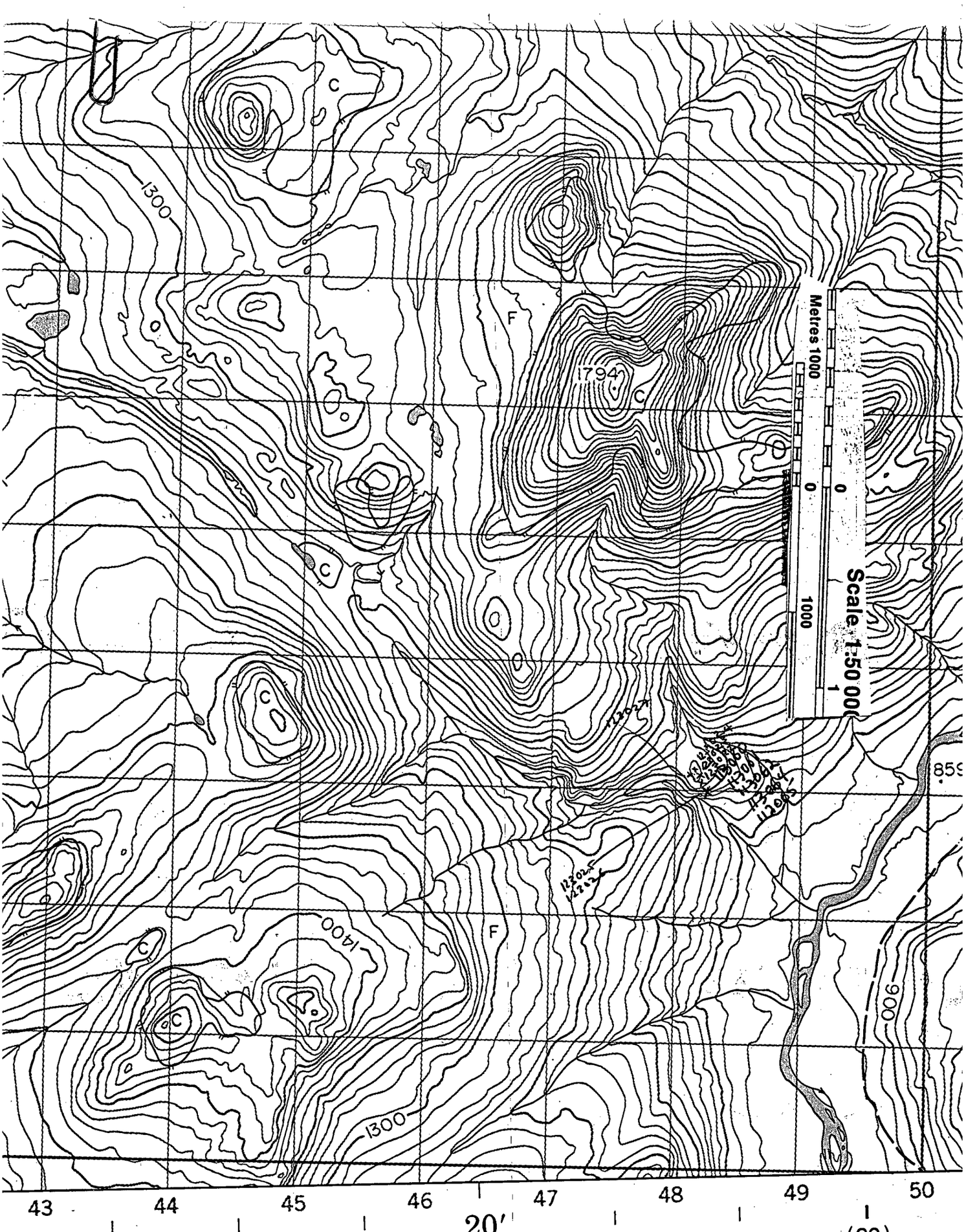
112031
111040
Metres 1000
0
1000
Scale 1:50 000
858.
Lake Creek
112015
111044
111043
900
WOLF
#2

N
899
860
858.
1200
900
1000
1245
WOLF
Scale 1:50 000
1
0
0
1000
Metres 1000
F
C


Metres 1000
0
0
1000
1
Scale 1:50 000
1200
859
900
1245
48
49
50
52
53
15'
(20)

#5



#6

VATIONS IN METRES ABOVE MEAN SEA LEVEL

NTOUR INTERVAL ..... 20 METRES

NORTH AMERICAN DATUM 1927

TRANSVERSE MERCATOR PROJECTION

INFORMATION CONCERNING BENCH MARKS AND HORIZONTAL SURVEY MONUMENTS CAN BE OBTAINED FROM GEODETIC SURVEY, SURVEYS AND MAPPING BRANCH, OTTAWA.

THIRT

YUKON TERRITO

Sc

Miles 1 0

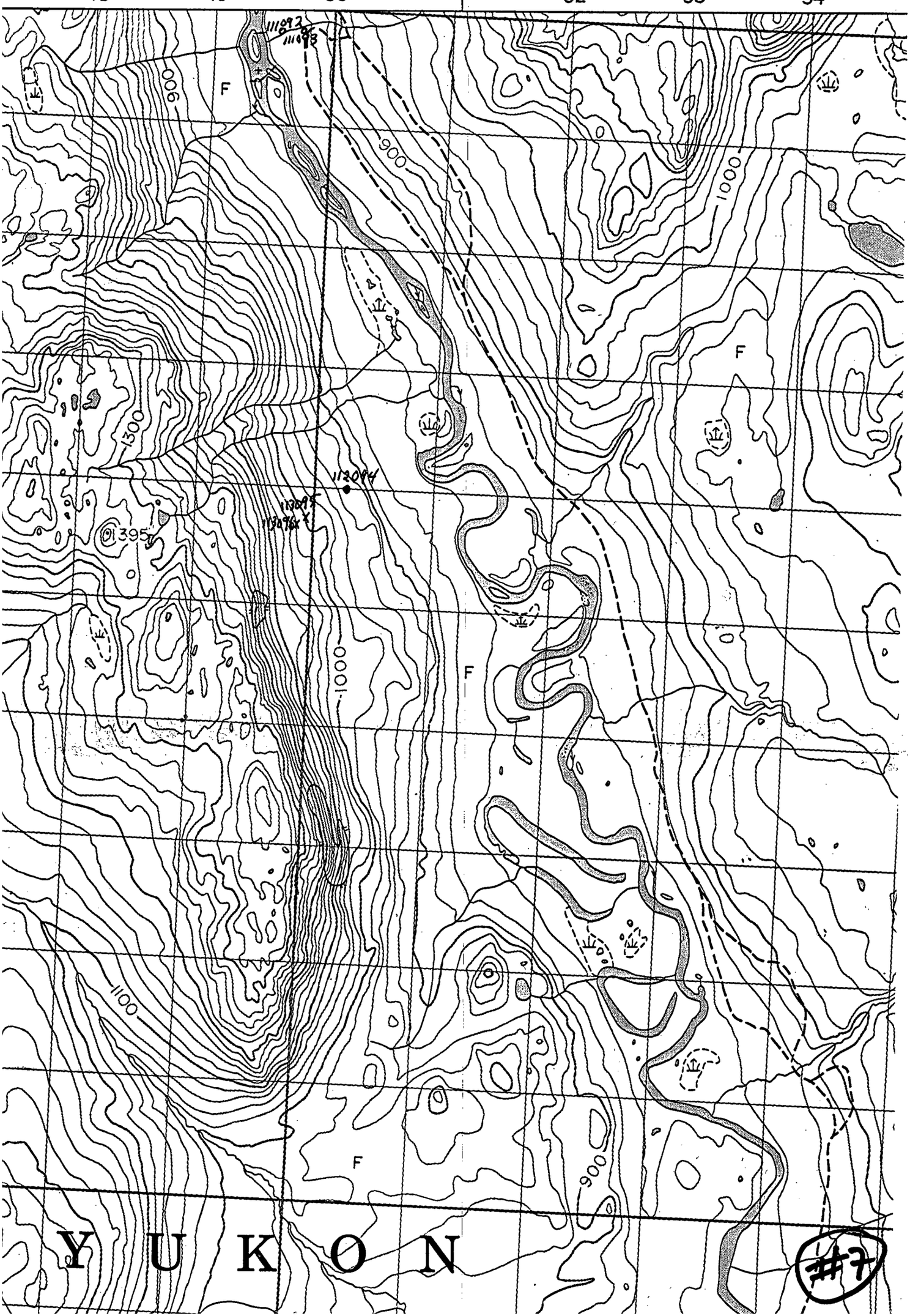
Metres 1000 0

105 C

Canada

(20)

48 49 50 52 53 54



YUKON

#7

NUMBERING

6+ AREA
SAMPLER
TYPE
NUMBER
NUMBER
NUMBER
NUMBER

123001

TESLIN
HARRY
ROCK
Number

1 - IVAN
2 - HARRY

1 - silt
2 - soil
3 - rock

FLYOVER DORSEY LAKE with Coyote Air [illegible]. ACCESS via Dorsey/Cabin lakes good. Still ice sound. Go out through smart [illegible] back to Highway good. Some [illegible] probable between Dorsey-Cabin lake. Smart is flat + [illegible] - good with loaded canoe. Region around lakes STEEP, lots of exposed rock. Denny pointed out various camps in area.

May 27/93

Flew into Fish Lake N. Teslin. Set up camp + did on site maps study - Sampling starts tomorrow morning.

123001 STRIKE 256° (May 28)
DIP 50° (NW)
host rock is sedimentary [illegible] ?
VEIN 4" wide

123002 STRIKE 256° / Dip 50° NW
vein 6" wide, more [illegible], same strike + dip - softer than sample 123001

These 2 samples on outcrop 2.00 [illegible]

121.003 - Sample 121.003 (grab) [illegible] 100 [illegible]

Creek # 11 [illegible]

This creek is large, 15 feet wide, lots of water. Begin with sample # 121003

Sample 121003 - North side creek in sandy residue at 000 m

Sample 121004 - north side creek in sandy residue - 100 metres.

Sample 121005 - N side 200 m.

Sample 121006 - N side 422 m

- Outcrop 100' from creek at metre 1641 shows same rock type [illegible]

No quartz visible. No sample taken. [illegible]

- metre Broken at 1643. [in both banks of creek]

marked the location of this on map as point 'A'. I can see lake from here. One monitor point is at 202° & Latimer fix position. 2004 paces from broken line to creek trail.

May 29 - Crossed lake but got rained out. RT. to camp. Very sore.

May 30 - same creek #, 678 m from mouth upstream [illegible] large bar dividing creek. No V.G. Did silt sampling across

bar North side to South [illegible] Sample # 121007 - 121009 inch.

Returned to lake to wait for Tom. Weather getting bad.

May 31 - Left Fish lake - departure delayed due to bad weather. Swamped canoe in creek leading to Wolf River. Refloated canoe, R+R gear + carried on down Wolf River to Elbow creek (#13). We were to go upriver but swamping canoe changed plans. Made camp here + tried to dry out my gear.

June 1/93 - Continued drying out my gear, especially firearms. Re-testing my rifle + .44 [illegible] Had to use olive oil. Headed further down creek after [illegible] get back from work. See [illegible] 'Elbow' creek (14 samples) wanted to get to 'Granite Rock' camp today but outcrop on west side stopped us at 14/15. It started raining ½ hour after we stopped. Tomorrow Tom will go up the Right (south) fork and I'll take the left one,

FIELD

trying to sample outcrop which is visible from here. From there I don't know which way I'm going. The outcrop heading ∠ 282° from camp.

June 2 3^{20} PM.
Started off 1^{30} today after Rain finally quit. Starting samples →
123010 — float at meter 1810 from camp on bearing 282. This sample sticking out of hillside. I completely exposed it to make sure it was not bedrock. It was not rounded at all, so assume it came from directly above hill of this spot.
123011 directly uphill from 12310 on bearing 335 at meter 1900. I broke lots of rock on the outcrop + took the sample as representative of total outcrop. Did not locate any veins or other type of rocks.
Returning to bearing 282° uphill from here. Intersected (assumed) same creek #5 for the third time at meter 2061.7. I assume I'm at the point where map grid #53 intersects the creek, which

means I've veered off to the south quite a bit. I'm changing my bearing to (354°) and following the ridge even upwards for a few more meters. Taking silt sample here first.
121012 — meter 2061.7, location as above. Creek flow 3 ft wide, 8' deep running fast.
123013 — next to silt sample #121012 Bedrock outcropping south side of creek. Took these before heading uphill. 200 meters more to 2262. Ran back to creek (2061). Can't find any more outcrop within reach. I don't know which way to try, it's getting late 6^{15} and I'm getting tired. I'm heading back from here at 140°, a little south of my ascent in the hope of finding more outcrops. - Reset meter to '0'.
meter 518. Back to creek again. Took silt sample 121014.
Crossed creek and stayed on 140° until meter 617, then changed to 100° heading in pine forest. Hiig! AT m 900 change

FIELD

164

heading to 50°, as a large hill has popped up right in front of me. Anyway, the dog seems to like that way too!! Sample 121015 at creek intercept close to compass meter #1686. I intersected my "up" chain at meter #1381 and lost it again about 100 meters back. Home again at 2279, 8^30 PM

Thursday June 3 - Moved camp to 'Knob'.

Friday, June 4/93

Started out at 192°. At 110 m changed heading to 232° and went up pine ridge. At 303 meters took two samples:

123016 in bedrock protruding.
123017 in float next to bedrock.

The float sample had some interesting colors and obviously came from near by. Juan says this type of rock much the same as Knobs he visited yesterday.

meter 345 change heading to 160°.
meter 432 change to 192°
meter 742 change to 180°
meter 952 reset to 0
Took sample 123018 here. This is next

outcrop to appear after m #432. This is sedimentary rock - dark with distinctive layering. Took picture of it (#5, second sample shot of 5 pics)

123019 - 25 meters uphill from 123018. This rock type same as 123016. Does not look sedimentary at all. Top of climb at 1117. Change bearing to 220°, go 100 meters to meter 1217 and sample rock #123020.

Twenty meters more to other side of Knob and sample 123021. This sample is an unusual 'gneiss' at top edge of drop off.

There is still some slate like sedimentary rock on top of the Knob, but it's predominantly chunk igneous rock. I broke a lot of rock in the area.

Weather turning iffy. We're heading back to camp 3^30 pm.

Sat, June 5. Up at 6, gone by 8 down to creek #4. Set compass west at creek to meter 1564, where we relocated 4:1, 4:2, 4:3 sample

FIELD

[illegible] last [illegible]
Sample "123022", same as last
[illegible] '4.5'; about 100 m above (heading 193) FIRST-
rock outcropping (AT M1564). Veins here
are running a heading of 287°.
Sample 123023 is another 100 m further
up hill on same heading
sample 123024 is from massive,
[illegible] outcrop showing, with a strike of
250° and a dip 38° down (near sample 123023 heading 300.
sample 123025 is right next (right) to large 8' wide vein at the M1564 mark.
It has fossils in it.
Sample 123026 Heart of 8' wide vein.
strike 7° at 17° off CTRL, heading 277°
sample 123027 – between sample 123022 and 123023, about midway + a little to the north of other 2 samples.

When we got to the beginning of the rock outcrop (sample 123026) [illegible] started taking samples of large + vein. I picked up my hammer + continued to wander uphill, chipping at random and looking for [illegible] flags.
I purposefully walked at 90° off the strike of the main vein outcrop to see what other veins may be occurring in a like direction. There were more uphill, smaller but still large, [illegible] for about 50 more meters, then veins started running the other direction, almost 90° to the original vein, at a heading of 289. These veins were less pre[illegible].

Sunday, June 6 – Return to creek [illegible] hampered by weather. It showered intermittently, heavily all day. Clothes got soaked, geologists got [illegible] + we chatted about what remains to be done.
[illegible] needs the following items brought in with the chopper + [illegible]:

- 2 doz eggs — coffee
- 6 [illegible] bags
- [illegible]
- [illegible] lunch
- detergent.
- Bukowski?

[illegible] return to [illegible] June 29, noon to pick up [illegible].

All sites not new June 10.
Following Rocks in June 16 Am:

112018	123001
123002	?113053 → maybe? 123053?
123013	123020
113050	123019
123026	123017
113004	113021
113048	113062
123021	

Wolf River

NOTES

Need for July Trip

water Proof Clothing pants and or Bib Overall <Aerial for S/W Radio)

Mattick Altimeter 1 cup Measure chain. or Locally <Dynamite shop> From Supplier out of Vancouver.

small propane tank & burner

Altimeter.

1 or 2 Large Tarps <return 8x10 for refund or replacement

(Fix Radios)

2 prs. good gloves < Lemon Pepper.

8 gal metal Pail. <Bathing & laundry> Alum. Foil.

Pens, Pencils, felt pens, Large plastic sample Bags

some sweets, Candies, chocolates, SuJubes> (at N.A.L)

Fishing Rod., More Bungee Cords

6" Plastic Rulers, Aerial maps

JOB. Ivan Elash

DATE. PAGE

May 27 - Float planed into Fish Lake and set up camp.

May 28 - set declenation on compass at 27°. We are gonna cover different areas around the lake. Sampling Schedule will be 1 1 3 001

Fishlake Ivan Rock Sample #

2-soil

1-Silt

Dropped Harry off at 10:15 A.M. Found what appears to be a pretty good creek and on the same heading as the outcrop I'm looking for.

PARTY CHIEF.

WEATHER.

wade

JOB.........

DATE May 28 .... PAGE ....

Flagging at Creek marking with
Trek 1 - Chaining up and taken
a heading of 82°. Winter road
at 167 m. Attempted soil sample
at 517 m but hit ice at 8". Another
Soil Sample attempt, Ice at 8" at
855 m. 2 Rock Samples at
1067 m Heading 82° #113001

112002 - Soil sample at
1604 m 82° Heading
<sampled from a sink hole>

PARTY CHIEF.........

WEATHER.........

JOB.........

2420
2282
138

DATE May 28 .... PAGE ....

Lunch Break 12:45 p.m. 2143 m
may have missed the outcrop.
changing heading to 200° to look for
creek at base of Trek 1. Flagged
off at 2282 m. Found the creek
at 2420 m. I will start chain at
Zero and sample creek every
300 m. Beginning at Zero with
sample # 111003. Tough creek
To follow constantly Disappears
Can see interesting colors. Taking a
gold pan sample at 134 and
flagging as such

113004 Rock Sample at 142 m.
appears to be off the wall of the
creek which is about 2 feet wide
& 10" Deep with steady flow
2-3" of H_2O

PARTY CHIEF.........

WEATHER.........

JOB.....

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111005 - 156 m loose rock
Samples from creek

111006 Silt at 3.75 m. missed the 30
due to willows
30' down from previous sample
my meter reads 436 m.

111007 - Meter 886m? call this ice
ice bottom. Difficult sampling
due to over Burden and ice.

111008 - 10.75 m.

111009 - Parallel crk at 1169 m
Herk sample

111010 - 1340 m. Slow water
area

PARTY CHIEF.....

WEATHER.....

wade

JOB.....

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111011 - 1745 m encountering
quite a bit of ice on
the entire creek to this
point. I have lost my Matlick

111012 - 1968 m. still encountering
ice

111013 - 2291 m

111014 - 2591 m Test
Creek reappears at 2672 m
test stat about 2600 m
Winter Road 2915 m.
Fishlake 3107
Same Creek as AM.

PARTY CHIEF.....

WEATHER.....

wade

JOB.....

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113-004 / This area seemed to be the
113-005 / only area of the entire creek
that contained rock samples.
The rest of the visible creek went
organic to sandy bank.
Have to plot this creek on grid
map.

May 29 - Going up the south side
of the creek Harry worked on
yesterday. Late night due to rain
and continued threat of rain.

The day was a write off due
to showers off and on.

Worked on yesterdays samples

May 30, Sunday

South side of Harry's creek Flagging
Traverse 11 @ zero on meter.
Taking a heading of 110°

PARTY CHIEF.....

WEATHER.....

wade

JOB.....

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Meter 240 out of swamp
still in swamp at 438m
Just above swamp area at 731m
Winter Road at 788m approx.
due to chain breaking but should
be very close on meters. Can't
see any cat trail but the under
brush shows signs of damage
Flagged Traverse 11 - 110°
Meter 869 Creek about 20-30'
Wide. I couldn't sample
south side at this location went
across creek on a log and sampled
This sample is 268° N of meter 869
Lots of tall dead trees at that location
111015 South Sample up creek
from meter 869

PARTY CHIEF.....

WEATHER.....

wade

JOB.....

DATE..... PAGE .....

Back at dead trees as above mentioned taking a heading of 110°

111016 Soil sample at 869 m

Sandy soil may have been a creek at one time

At meter 932 in the midst of a forest of dead fall and new pines 15-20' tall standing at

Dead, black trunk about 25'

111017 Meter 1061 intercept creek will sample then follow creek sampling sporadically

Creek varies from 5'-15' and gets quite fast moving.

111018 Meter 1336 good place for a silt sample. Bit of a dead spot in this magnificent creek Huge Compared to Icy Bay

PARTY CHIEF.....

WEATHER.....

wade

JOB.....

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So the creek wasn't enough now I have bad heading for me.

Run out of chain must have been quite recently meter read 1336 I am going back to reattach to it

At meter 1609 a range on hill is beginning on my right as I look from what I can see to the north and its range has already begun 200-300 yds North

The south one is about 150-200 yds. They appear to be narrowing to the creek up ahead.

Staged here 1609 m Traverse

This is a nice creek to follow the willows are just a bit of a problem

The dead fall is incredible. The creek is quite fast here at 1893 m.

PARTY CHIEF.....

WEATHER.....

wade

JOB...
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111019 - Silt sample at 1893 meter 2027 < Pointy hill on north side of Creek.

Ice at 2229 South of creek 50'-75'

111020 - Silt sample of what appears to be a Spring creek only. 2232m.

113021 - Rock Sample 100' ass above creek 2290 m. Dug Thru over burden to find them.

I'm going further uphill then heading South

PARTY CHIEF...
WEATHER...

JOB...
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Crested the hill to South of the creek 2425 m. ~~Taking~~ Taking new heading of 270° looking for outcrops. I can see Fish lake to my right attempted soil sample at 2575 m hit ice at about 10"

112022 near crest of hill over burden has slipped or ~~faulted away~~ Bare spot about 40' at top then narrowing very quickly. I may have soil sampled this earlier and lost

112023 same location 12 apart

112024 same location 12 apart South

PARTY CHIEF...
WEATHER...

JOB

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nearing the tip of this range that I saw earlier from the creek taking a soil sample at tree well

11 2025 Soil sample quite sandy.

11 30 26 Rock (Loose) sample Same location as above.

I can hear the creek below so I will head down to it and intercept Traverse 11

11 20 27 Soil sample from side of hill 2644 m. I can see the creek below at a heading of 80

(Sandy Soil

PARTY CHIEF

WEATHER

wade

JOB

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Picked up traverse 11

On my loop back at 2017 m

Flagged here looking down stream for next flag will follow chain out

Found flag marked

Traverse 11 1609 m 1950

11 028 - Silt at water Rd South side

This is a very impressive creek for size and speed lots of rock and sand with boulders the size of a V.W. Beetle and possibly bigger the higher up you go.

PARTY CHIEF

WEATHER

wade

JOB.......
DATE....... PAGE.......

Need for May 31 – Flagging Tape
Silt bags Double chek gear. Don't
forget 1 qut. water jug.

May 31 – Rain delayed till mid
afternoon, as we're moving
out of fish lake thru the creek
to Wolf River, One of the canoes
got swamped. I nixed the
idea of going up the Wolf.
We head down the Wolf to the
creek at the tight elbow. Spent
rest of day setting up camp an
drying out gear.

June 1 Heading up Elbow Cre
Calling it Traverse 111 I'm n
going to chain up but will
do so on the way down. Way
up looking for out cropping
This is swamp land I'm glad
its not any wetter
I'm digging thru overburden
and encountering rocks on

PARTY CHIEF.......
WEATHER.......

JOB.......
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Traverse 111 will flag ~~but not~~
and chain 2 am on a little hillock
can't see anything to get a bearing
forest here is very dense with young
trees about 15'-20' high.

112029 Soil Sample } 8"-10" above
113030 Rock Sample } Location

Chaining up and taking a
bearing of 22° to creek and
I will flag there this is the
north side of the creek.

Flagging Rock & Soil Samples
and chaining off at 79m. I am
going to wander south of the
creek again Creek location is a
tight hairpin with a dead log across
across the upstream side

PARTY CHIEF. using Short flags cause
WEATHER. I didn't bring enough.

JOB ....

DATE .... PAGE ....

The creek on Traverse 1(1) will be tough to sample usually 6-8' across not sure how deep but very fast. The creek is over a foot deep and as wide as 10'-12' saw some hair pins on north side that I can sample goin to look for a log to get me over, then head back.

111031 - Silt sample Short flag

South side of creek Chaining up and still looking to cross the creek. Nice little Bench on the south side of the creek. 118 m

111032 - Silt sample at 256 m, short flag, there is also a log a few yards upstream that I will cross the creek with. I will start chain at zero when I get across.

When I get back to camp I've got to find a place for day pack. The fallen log was a f--ing magnificent bastard. Chainz

PARTY CHIEF ....

WEATHER ....

JOB ....

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I can see 111032 at 9 m I will try and stay as close to the creek as possible for accuracy and short flags. I will silt sample sporadically where permissable.

112033 - Bench sample 47 m down stream from logs.

111034 - Silt sample at 97 m. upstream of hair pin

111035 - Silt right at the apex of the hair pin I can see my 212 m chain on the other side.

This creek is greater than creek four at 320 m I encountered flag 111031 across the creek from me.

111036 - Silt sample at 497 m Apex of Hair pin

Soapsuds in the water 641 m. lots of quartz in the creek <small>

PARTY CHIEF ....

WEATHER ....

JOB.......

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112037 Soil sample out of bench on North side of creek at 678 m.

111038 - Silt sample at 784 m.

Back in the swamp at 87 m.

111039 - Silt sample at 1118 m. nice little back eddie

My chain got bound up inside the meter at last chain at 1144. This is my back up spool gonna have to walk out with out a chain meter. I can't be too far camp. The time is 9:48 A.M.

112040 - Soil sample 3' from tree on game trail

111041 - Silt sample not to many places up to ~~at~~ this point in the creek to sample since last silt sample.

PARTY CHIEF... Sample Taken 10.09

WEATHER.......

JOB.......

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Not much swamp on this side 10:13

Got to call this ~~Bee Creek~~ Elbow creek. Because its fairly big and awfully windy

Back at camp by 11 A.M.

111042 - Silt sample at mouth of creek.

Need sample bags, chain, flag.

Attempting Lake creek.

Very wet & I am only going to take a couple of samples to give us an idea of what is above.

111043 - In swamp but creek is small and fast nice silt

~~112045 Soil Sampling an old creek wall ... was 4' deep~~

PARTY CHIEF.......

WEATHER.......

~~con't~~

JOB..........

DATE.......... PAGE..........

Just down stream from my camp at small lake, 20' in from the river. 300 yds from camp

111044 – Silt sample about 100' up stream from 111043

112045 – Soil sample of old creek that was about 5'-6' Deep. Took sample at about 4' from Top of Bank. Chk top of page

Heading up river to test old creek beds. I have to change meters. Everything I do now will be in feet. I may have fixed my meter, meter. Going down stream couldn't find anything for 650' up stream, but I [illegible] there are others than the one I sampled down stream.

Small lake empties into Wolf at 60 yds. from camp and another at 80 yds. I am going to have to backtrack to get around this [illegible]

PARTY CHIEF..........

WEATHER..........

JOB..........

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Clearing up again other side of creek.

June 3 (Thursday) moved camp down to granitic intrusion. Sampled fire place taking off a heading of 169° for approx 2 1/4 km. Drop along 40 m to the winter trail. Knob just to my left at 20 m. the bigger one ahead will veer slightly to the left. Glanced at my meter it was 150 m now its 66 m. Setting it at zero & flagging it at that spot.

112046 was soil sample at fire pit at camp.

112047 Soil sample in what appears to be old creek bed 2" organics then Sandy clay. 7 m from Rest Bearing 169°

PARTY CHIEF..........

WEATHER..........

JOB.

DATE. 30 m. PAGE

113048 Rock sample from intrusion on my right. a bigger knob than the last one on my left. It appears to be granitic.

112048 Soil sample at same location as above

113050 Small rock outcrops 69 m. flag hung from short Evergreen 5 feet

162 m. Wildflowers as big as 4-6" in diameter

I'm going to the knob on my right to find an easier passage. flagging here 195 m "To Knob"

at tailings of 2nd knob (Big one on the right) I'm gonna hang around here for samples. There's a lot of rust on the tailings

113051 - ~~with~~ Rocks sample within 2' of flag.

PARTY CHIEF

WEATHER

wade

JOB.

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113052 random samples of the knob. lots of quartz veins in limestone and possible calcite

3 pm heading never get as far as you want to

Starting meter at zero hopefully a more accurate reading on the way out

65 m from 113051 flag to "To Knob" flag

191 m to 113050

220 m to 113048 & 112049

253 m to 112047

260 m to rest break flag

594 m going to flag off and sample small knob.

PARTY CHIEF

WEATHER

wade

JOB.

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227 m to highest point of small Knob. Last year we could see Fish Lake. It must be raining there right now because it is all hazy with mist

113053 sporadic rock sample off small knob not much

Starting chain at zero at flag to "Small Knob" 0.

June 4 - Friday Taking a heading of 192°

At 110 m changed bearing to 232° up pine ridge.

At 330 m finding rust colored limestone. Harry got a ~~set~~ sample of samples

At 345 m changed bearing to 160°

PARTY CHIEF.

WEATHER.

JOB.

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At 365 m and 160° took a rock sample

113054 - Rock sample

At 431 m changed heading to ~~180~~° 192°

At 742 m stopped for rest break started scratching thru overburden found course granite as in little knob, quartz and a greenish quartz rich. Changed heading to 180°

At 952 m outcropping the same as what we sampled below. Had to reset meter to zero and flagging "Reset zero". Climbed to top of knob another 10' or so and took Sample at Crest

113055 Rock Sample

You can see Fish lake clear as a bell today.

PARTY CHIEF.

WEATHER.

JOB.....

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We've set up some poly expecting rain. Its pouring right across the river from us.

from top of Knob at 1117m distance to sampled out crop 123020 to is 100 m. at 220° Bearing and flagged

123021 - Rock sample massive quartz on ridge. Bearing 267° to Ravine at Creek #4, 50 m from last sample

113056 - Quartz sample on same ridge

113057 - Rock sample with thin vein attached Bearing 271° to Ravine at creek 4

113058 - Quartz Rock sample 30' from last sample at 230°

PARTY CHIEF.....

WEATHER.....

JOB.....

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June 5 - Saturday - Moved closer to Ck #4 Yahoo!!

Early afternoon heading up 4 to do some hard rock sampling - Finally made it to the out cropping 1542m the long way around

113060 - quartz sample at 1st out crop.

113061 - quartz sample with rose coloring just a couple of meters from last sample

113062 - rock sample of extruding outcrop quartz like vein

113063 - chip sample starting on the ~~east~~ west side working to the ~~West~~ East, Strike at 348° / 6' sample

113064 - 3 feet east of chip sample right side of little tree

PARTY CHIEF.....

WEATHER.....

JOB..........

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112065 - Soil sample 17 m from 113063

222 m back to original chain.

Rain started about 5 p.m. I hope its as brief as last nite night.

June 6 Sunday.

Harry is leaving at 7 A.M. Tomorrow, going to work on samples for him to take out. Whip company into shape and wash some clothes. It is mid afternoon and it has been raining off and on, the only advantage is that it has also been to cold for the damn mosquitos, notice as fells on the pages. Late afternoon still showering. Intermittent sunshine and whats unusual is the almost total lack of Bugs.

PARTY CHIEF..........

WEATHER..........

JOB..........

DATE.......... PAGE..........

June 7, Monday (one cold Son of a bitch last nite)

Harry pulled out at 7:40 am I got to the up river location by noon. Heres my bearings.

276° to open at [illegible] on creek #3

334° to V in mts to the west

155° to [illegible] of Fault [illegible] Mtn.

I am going to travel at a bearing of 146° which will put me between the top of the [illegible] Mtn. and Quartz Ridge. Right in the middle of the fault. I am going to stay longer than originally anticipated due to the [illegible] the river died on the out bound motor of the canoe. It appears to be less than 1 Km to the above destination. Will bring next load in when I bring out some samples. Also picked up my weight rocks and theres a dead stump at waters edge, roots in water and out and stump is about 2' high. That will change as the season progresses.

Winter Road 71 m. 1st Break 93 m heavy load. This part of the swamp is not to bad for walking. I've been in worst areas.

PARTY CHIEF..........

WEATHER..........

JOB.

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the meter reads 816 m, I doubt if that is correct, taking a break. Meter Reads 43 m. Sh!t. 119 m Biggest load and Toughest climb I have ever made, and the skeeters are a bastard, and the higher you go the worse the yellows become. I can see the river quite clearly, must be near the mid point of the area I am heading for. I could also see the river when the meter was at 86 m (I think). I have removed the chain.

113066 - Rock Sample } Same Vein Just inches apart
113067 - Rock Sample

from outcrop on face of mtn, just before where I am going. I will chain up from here and get some bearings and flag.

333° to the right the V in the MT
298° to the showing on crk 3
320° to the little island down stream from the canal
88° to lead showing above little lake

PARTY CHIEF
WEATHER

113068 Face of Skree random

JOB. Samples

DATE. PAGE

It took me 5 hrs to climb this Damn mountain. The skree is to the right and above the last sample 72 m. I'm gonna have a cup of tea then look for crk #1 and have a look over the back side of skree hill, I believe it is the tallest in these Faulty towers.

171 m to the top of the mtn at the back of the skree

113069 - Rock Sample first pounding and encountered about a 1" Diameter vein in Bed rock.

113070 - Just a few feet South a bed rock sample

June 8, Tuesday, moving from the skree area and I think as far as crk #2 I will try and home base out of that location it will have to be 2 trips due to samples. It's also a hell of a lot warmer this morning than it was yesterday. Something ate up 113069 last night you can still see where it was nibbling. Hanging new flag with 69 & 70 on it.

PARTY CHIEF
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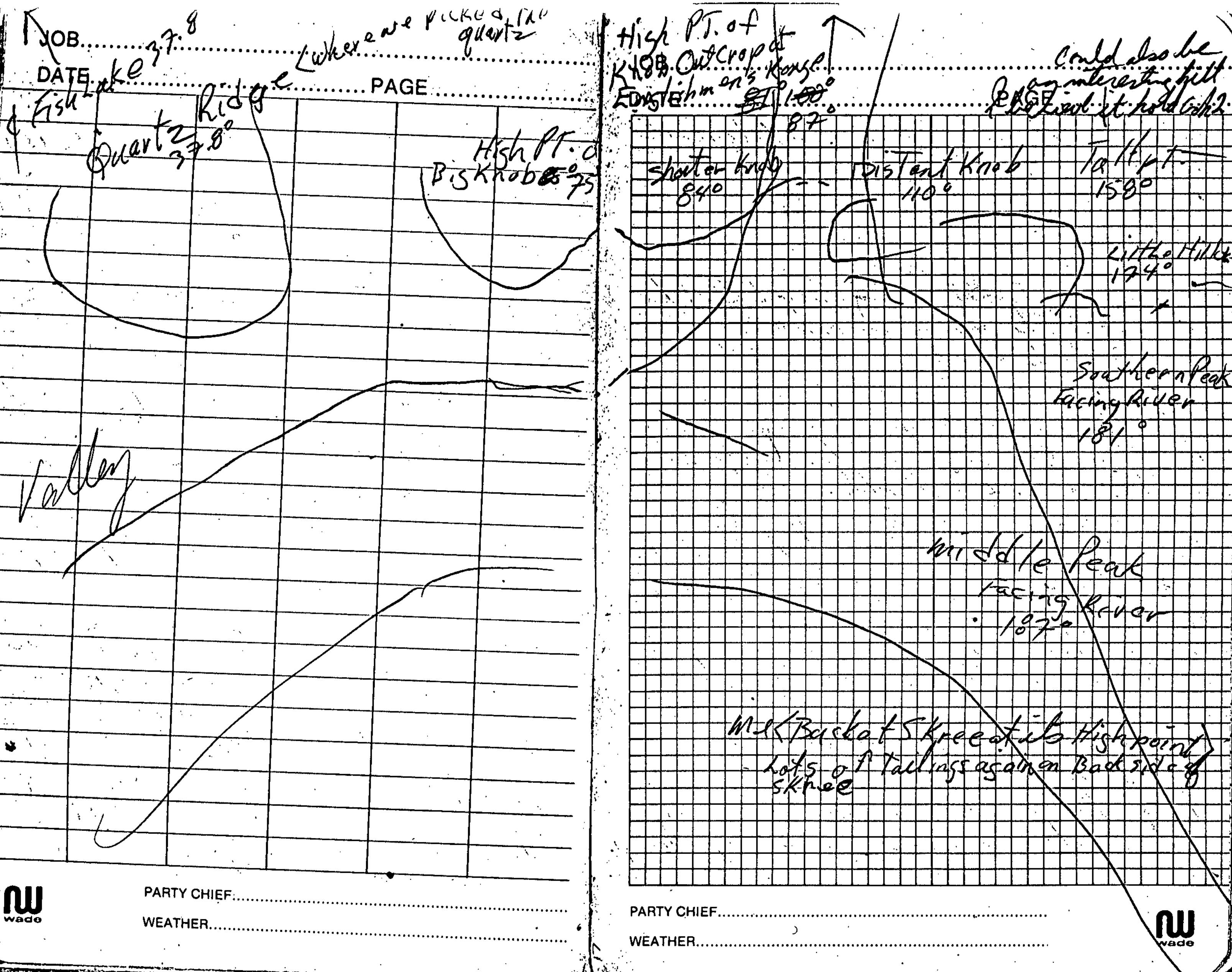

PARTY CHIEF.................

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PARTY CHIEF.................

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going to show up here and take the 1st
load over to Crk #2. I am atop the
big hill south of [illegible]
heres some bearings
12° to 113070
04° to Red showing above little lake
289.9° to showing on crk #3
265° to top of ravine on #4

There is a lot of veins running thru
the limestone on this hill, larger veins
and thus more noticable. Can only
take 1 sample pack is very heavy.
Found what might be a heli pad at
250 meters from last sample and
50' south of above bearings, going to do
some clearing. The main camp at
crk 4 is at an approx. bearing
of
252° to camp at #4.
I'll finish Faulty Towers Heli Pad
later, looks like bad weather coming
got to get to a creek and set up camp.

PARTY CHIEF..........

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30 10 210

JOB..........

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found a creek at 620m, I imagine this
is crk #1 from last year, it is not shown on
the top o maps.
111071 - Silt sample of underground
creek emptying into crk #1.

111072 - Silt sample upstream
from prev. sample
111073 Down stream from
previous 2 samples.
Found an old flag upstream on
the ground it also says start #1
Going to take a pan sample at 73.
There is a hillock at 25° that I
believe I just followed down. There
is another hillock visible from this
location to my left as I look for
creek 2 at 193° Crk #1 is 2' wide
and very fast. I am travelling at
217° Bearing looking for crk #2 on a
look back I can see Heli Pad Hill
no that is the hillock north of it, due to
dead trees, 30° Bearing.

PARTY CHIEF..........

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I think I'm going to high going to change my bearing a few degrees from 227° to 250°. Rough terrain, lots of windflaw and I decided to move everything in one load. Looking back can see Dead Tree Hill and Big Knob.

28° - To Dead Tree
47° - To Big Knob.

at 859 m, the meter seems fine today. Theres a little knob above at 920 m going up to figure out what happened to crk #2, I can still see the other land marks behind me. This socalled little Knob has some interesting out crops on it, one of which I'd a swore was granit fizzed with acid.

113074 - Rock sample looks like granite but fizzed with acid. I may be entering the contact zone Al talked about. You could almost describe this sample as diorite. The salt & Pepper rock

PARTY CHIEF.......
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Theres a nice vein a couple feet below in bedrock I'll try and sample, left my chisel [illegible] with the pack It spreads over quite a bit of the rock

113075 - Rock sample below 074 of a [illegible] vein to splotch on bedrock. Im not at the top yet but I can see the valley for crk #2 I've probably got a couple hundred metres or more to it, I'm at a 1076 m. The bedrock is intensely veined and in all sizes Not much reaction to acid up here taking a bearing

279° to Ravine on #4
09° To Rock showing above little lake
296° to Showing on Crk #3

I'm looking right into the Ravine at #4

PARTY CHIEF.......
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JOB Wednesday 250

DATE PAGE

113076 - Rock sample about [illegible] below
last sample [illegible]
interesting colors. 1278 m [illegible]
[illegible] are kicking the [illegible]
out of me for another day. Still look-
ing for crk #2 [illegible] for. Installed
new drain at 1423 must have
just run out recently. I have been
trying to keep an eye on it [illegible]
[illegible] in a lot of swamp [illegible]
gonna have to head for higher
ground. At 1525 m either I waded
over the creek without realizing it
which is possibly [illegible] to the above
as its still ahead [illegible] concerned
because I'm on high ground
again. Still travelling at 250° bearing
and just took the bearing on [illegible]
at crk [illegible] 784° finally found it and
the first thing I see [illegible] is a flag
something has removed the [illegible]
portion, 1922m. It is 3:30 pm I
left this morning at 7:40 Am.

PARTY CHIEF

WEATHER

JOB

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[illegible] the [illegible]
couldn't [illegible]
[illegible] down [illegible] the old
[illegible] than 2.1 looking for 2.2
at 2.2 found a [illegible] and took
a sample found 2 [illegible]
samples [illegible] up on the bank.
all sampled at 2.2 [illegible] creek #2

113077 - sampled 2.2
some large green rocks in creek 2.2
The original flag I found on 2 had
[illegible] 0 [illegible]
[illegible] its raining going to head
for [illegible] a pitch camp.
113078 sampled at 2.2
113079 Sampled at 2.2

PARTY CHIEF

WEATHER

JOB

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I've got to somehow sample the rest up #2 and move my camp up stream as well, could be a hell of a day tomorrow.

June 9 — Wednesday; frosty nite again last nite, moving upstream. Bearings for last nites camp:

319° ~~319°~~ - To tall peak above crk #4
12° - to red showing above little lake

I've been lucky so far no real rain yet, hopefully it will hold off for a couple more days. On a bearing of 130 degrees parallel to the creek. Chain broke 57 m on meter; changed bearing at about 100 m to 187°, heading for high ground and to get out of the willows. Here is a set of bearings that will locate me:

324.5° to mtn. top above crk #4
12° to red showing above little lake
35° to ℄ of fish lake

PARTY CHIEF

WEATHER

JOB 430 m from camp to summit of Kado;

DATE PAGE

Creek #2 is directly below fish lake bearing. I am going to do a couple rock tests and move on, staying high hopefully.

This knoll is made up of limestone as well, encounters with granite are becoming fewer. I think there was a tiny reaction to the acid, not 100% sure!! Can't take a sample here but can say that all these outcrops on the hills that I've climbed are made up of basically the same material limestone, calcite, quartz, and a small crop of granite (could be float). I think I see the old helicopter landing location to my right will go down and investigate it as well will leave some samples there, first I'll collect a few at this location.

113080 - This sample appears to have either been pushed out from inside of the mtn. or was floated in. Covers about a 4' area. It also has a good visible reaction to acid.

PARTY CHIEF

WEATHER

JOB 74-82

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113081 - Bedrock sample from face of N.E. side of knob, facing crk #2

113082 - Chipped on this showing and got a reaction to acid, just south of last sample still facing the creek.

I'm sure hoping that is the heli pad below, I'm taking samples down and going to climb hill on other side of meadow, thought I saw some color on the the south side when the pilot flew me in to [illegible] Lake. It is 11:45 A.M.

124 m to clearing will leave samples and go over hill. Just [illegible] clear a few little trees for the copter. Well I cleared it with the 2" blade on my pocket knife. Found an old [illegible] into this area, there's a camp a short distance away. Weathered limestone dotting the valley.

PARTY CHIEF ....

WEATHER ....

JOB Barite

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Changed my mind and decided to cover the north side of the hill from Creek #4 camp. Left samples for copter pick up, the weather seems to be closing in, I'll have a better look from the hill I came down. The helicopter valley leads out onto Creek #7 - I think I am going to take a heading of 42° across over creek # 2 and up the mtn range on the other side, this should give me a view of the back side of the [illegible] and the big fault valley. It is 1:07 pm better get going before the weather closes in on me.

At 307 on meter changed heading to 88° high ground quicker. I may have walked over crk #2, I just passed thru some mean swamp cover. I just went back to the swamp to fill my water jug, there is a lot of movement in the water and it's fairly cold. Have to go with it still better comes along.

PARTY CHIEF ....

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found an old piece of Blu + flagging tape wrapped around a willow. 484 m this side of the valley (meaning north) is as steep or steeper than the south side was coming down.

Oops another valley to do before I can observe fault valley.

Here's my bearings on top of this little knob. The lithologies I passed on the way up are consistent with all showings on this trek, but here at the top things look different

296° to middle of Ravine on crk #4
316° To summit of Big Mtn above Crk #4
11° to red showing above little lake.
319.9° to Northern tip of island we camped on last year.
222° - Abandoned mining camp.

There is a ridge running from 24° to 186° with binoculars all out crops appear consistent with limestone. going to take a heading of 35° to next knob

wade

PARTY CHIEF.........

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I believe it will be up from crk #1 I have to retrieve composite sample there. I've got a north east breeze blowing up here and it's cool.

Helen has screwed up again 262 m will start at zero from flag that says North side crk #2

Taking a heading of 35°, found a little pond at 128 m. Actually there are more than one of them. I just fell on my knee quite hard and had burning pains up right side of abdomen, but everything seems fine. Outcrop at 257 m great veining some 4"-6" wide at the bottom, but there's veins all over it.

113083 - 4"-6" vein in limestone out crop at 257 m.

As I'm looking at the out crop more large veins or pinches, the veining tends to run in every direction

PARTY CHIEF.........

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wade

JOB

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Bearings from top of outcrop for last sample.

219° to the last hill I was on
313° to big Mtn above crk #4
294° to ravine at Creek 4

Mother outcrop at 415 m on a bearing of 46°, same limestone bedrock and vein all over it same a wide as the one I sampled below. Logged at Outcrop above 113083

Snow just above me on the ridge

I'm on another knob again all I see is sandstone hosting veins of all sizes. New bearings are

309° to Big Mtn above crk #4
359.7 little island downstream from canoe.
33.9° to ℄ of Fish Lake.

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I'm looking down at rough location of Creek #1 and pond below Faulty Towers Heli Pad. Heading to pad is 15°
I just made a couple of snowballs because the condition of the snow was perfect. Well I went back over the top to see the rest of fault valley.

New Bearings
~~26~~ 31° to ℄ of Fish Lake.
316° to Big Mtn above Crk #4

This whole valley feeds creek #1 and probably little knob creek over by the granitic outcrop.
There is a pond below ~~and~~ [illegible]

There was some fresh bear shit on the way over here, so I have got to get movin. Heli is at 1040.
Pitchin camp at 1272m.

[illegible]

PARTY CHIEF

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Bearings for tonights camp

33° to ℄ of Fish Lake
312° to Big Mtn above Crk #4
09° To Knoll showing above little lake

Looks like rain to night

June 10 - Thursday a light rain is falling hopefully it will pass soon. 8 A.M., it's not stopping but becoming steadier. I have got equipment repairs to make when I get back to crk #4, and the chaffing on the instep of my feet is from the rubber boots. This rain will probably eat up the remaining snow up here. 11 A.M. still raining, its more of an off on type of rain, very light but constant when it is raining, it seems to run from 20-30 min then off for the same. Well its one thirty and I think I'm gonna be stuck in the mountain side, flea bag resort for another nite.

PARTY CHIEF..........
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Well it now 2:30 I have enough wood for 2 days, and the sun is slowly breaking thru the cloud, still a bit of rain - but I might make a dash for skree Mtn. I figure about 3 hrs is all I'll need to get there or at least at the base on crk #1 side. 2:40 weather changed for the worse, I'll have to wait and see what happens. Finally pulling out its 3:05 p.m. Reddi check altimeter Yesterdays reading 1272 m. Well I found the change from Tuesday, Last mine somewhere 3635 m anyway doesn't sound to accurate. Also creek and samples taken on Tuesday all at the same time

Bearings for hill looking down on Crk # 1 from North side.

304° To Big Mtn above Crk #4
319° To ℄ of Fish Lake
280° To Ravine at Crk #4

Made it to Mon. nite campsite by 5 p.m. now I gotta go back to hill on the hill for 2nd load.

PARTY CHIEF..........
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Finally pitched camp and let a puff. I'm looking down at the rivers and it looks a long ways away.

I found that maintaining a water supply has been a constant problem on this traverse, for instance right now I'd down to less than a quart, I have tea on and I'll make some soup later. That will leave me about a 1/2 quart for tonite and tomorrow till I get to the river. I have found that often out the traverse I was short of water, sometimes due to my own error by not loading up a full 2 quarts but that was due to a weight problem.

A couple of samples I picked up on the way over.

113084 - Above crk #1 from shree on south face of North Bank.

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I'm taking new bearings for this camp on better land marks for the top ridges, I believe:

303° to Big Mtn.
325° to Northern tip of Little island downstream from canoe
298° To Northern Tip of island we camped on last year
38.5° to ¢ of Fish Lake

9.25 p.m. what was a beautiful evening is closing in very quickly for a storm.

Friday June 11 another drizzly morning!!

Looking back at the Faulty I can see every peak that I was on and the valley's I walked threw. I got out of the swamp at 3:30 pm and into camp fairly 4:30 p.m.

PARTY CHIEF

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Saturday June 12: Gathering wood looks like Rain, more rain, yesterday at Faulty towers I could not see the top or even near top of the mtn's west of the Wolf river, yet on the east side where I pulled out in the afternoon everything was visible, as obvious by higher mtns. on the west side.

June 13, Sunday. Rained all nite, and continues to rain thru the day. One bright spot, its keeping the skeeters down to a minimum. I believe it was the same way last sunday. Incredible the amt of of rain to have dropped in the last 48 hrs., and they call this arid!!

What's really different about this rain is the intensity, it's not a lite shower which I've become accustomed to up here, this is more like a southern

PARTY CHIEF.........

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wade

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rain storm, yesterday it rained at one point for 1 hr e 40 min. straight and quite a hardrain as well. at least they sound that way under the tarp.

Christ am I ever glad I got out of them mtns. when I did on Friday!

June 14, Monday, It rained all night, a bit of rain this morning, but overcast again by 9 A.M. with a lite drizzle. Cold again today, very few mosquitos, I hope the weather changes later today or by tomorrow A.M., because I'm expecting Karen in here.

June 15, Tuesday, High clouds and mostly sunny, hopefully the copter comes in by noon. Karen arrived by 11 A.M. We flew over gossan showings on east side of of river and the limestone intrusion of faulty towers, we also went up crk #4 checked the ravine and the outcropping. It was determined that the chip sample was of a chert intrusion

PARTY CHIEF and chert nodules.

WEATHER.........

wade

JOB.......................
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June 16, Wednesday, rain off and on all bloody day long.

June 17, Thursday, crossed [illegible] [illegible] road at 500 m. Beautiful day. Bearing 109° to Heli pad

112085 – Soil sample on ridge at 109° Bearing from pt. above (crest)

816 m out crop? of conglomerate Volcanic Breccia Lithic Tuff.

833 m Karen picks sample left by Al to look at

112086 – 1307 m soil sample

11308~~7~~ – rock sample, lite greenish volcanic (altered) Basaltic? Veined calcite stringers with iron staining.

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1596 m large, barren quartz vein sev'l quartz stringers in Basaltic? Tuff.

1744 m checked veins running N-S – NW-SE: major silicification dip is vertical.

113088 – Rock sample of above 2"–3" veins down to stringers. The host rock is intensely silicified Black in color.

2238 m reached crest of mtn.

Bearings

323.9° to B.S. mt.

35° to F Fish lake

Heli pad at 2439 m

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went thru old camp and changed bearing to 282° looking for gossons at 2750 m.

2829 changed bearing to 250°

111089 silt at creek (unmarked)

Bearing

378° To Big Mtn ←
311° To mtn Just South
295° To Mtn Just South e Back

June 18, Friday, expecting Al Doherty in with chopper this morning. Will attempt gossons again, due to choosing wrong area of mountain yesterday, from the abandoned mining camp at 109° bearing from creek #14

112090 – Gosson sample

PARTY CHIEF..........
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DATE.......... Core Sample PAGE ....

11[illegible]091 25.10 m – 25.2 m

Pyritic Horizon

Yellowish grey – fine grain

Stringer zones galena, pyrite

Hole # 85 B-6

abandoned drilling area and very small camp, South face below main camp. What appears to be a large chair at above site, fair lot of core samples still sitting on site.

Met Donna e Bob Terry of coming down the Wolf River, they know Harty

June 19, Saturday – sampling creek about 2K South of crk #4

111092 – silt 150 m from river
Big Mtn 345°
Hill east of Crk #4 35°

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111093 - 400 m from River.

Pulled in at creek across from cut back. Major swamping can't go very far going to ~~try~~ go down river to the hair pin and cut back from ~~there~~.

→ ~~dam~~ double beaver damns creating major swamp.

Heading 212° to outcrop for sampling

112094 - Soil test 561 m.

663 m. Face of outcrop, quite steep, high in calcite visible reaction to acid. Scree contains a lot of quartz looking for that.

113095 - Bedrock sample from face 667 m.

34° to 1st inside corner of Hairpin

PARTY CHIEF..

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113° - to middle of island crossing from 2nd hairpin

113096 - Bedrock with 2 large quartz veins about 5 feet apart. The quartz goes through the host rock. ~~[illegible]~~ Calcite and reacts heavily to acid. Host is whitish reddish, indicating iron in the area. 113 in same bearing as above.

Interesting point how the quartz is left protruding through the host rock as is erodes. The quartz appears barren, but you never know.

Heading down, got to get out of the rain. Gives a couple of headings from face of above

350° B15 mtn

41° inside corner of hairpin

a large iron gossan at 18°

PARTY CHIEF..

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Bearings from inside curve of 1st Hair pin.

17° to orange gossan
346° to Big Mtn.

Saturday nite at 1st Hair pin.

11.5° To gossan sample
number 113090

My sleeping gear got pretty wet in the rain fall.

June 20, Sunday, cold and misarable I imagine the wet isn't far behind

The only difference between this trip and the one last september is the snow everything else is the same weatherwise. It's been raining virtually the entire day, and just when I thought it was over, the wind direction changes and I'm really getting dumped on now!

PARTY CHIEF...

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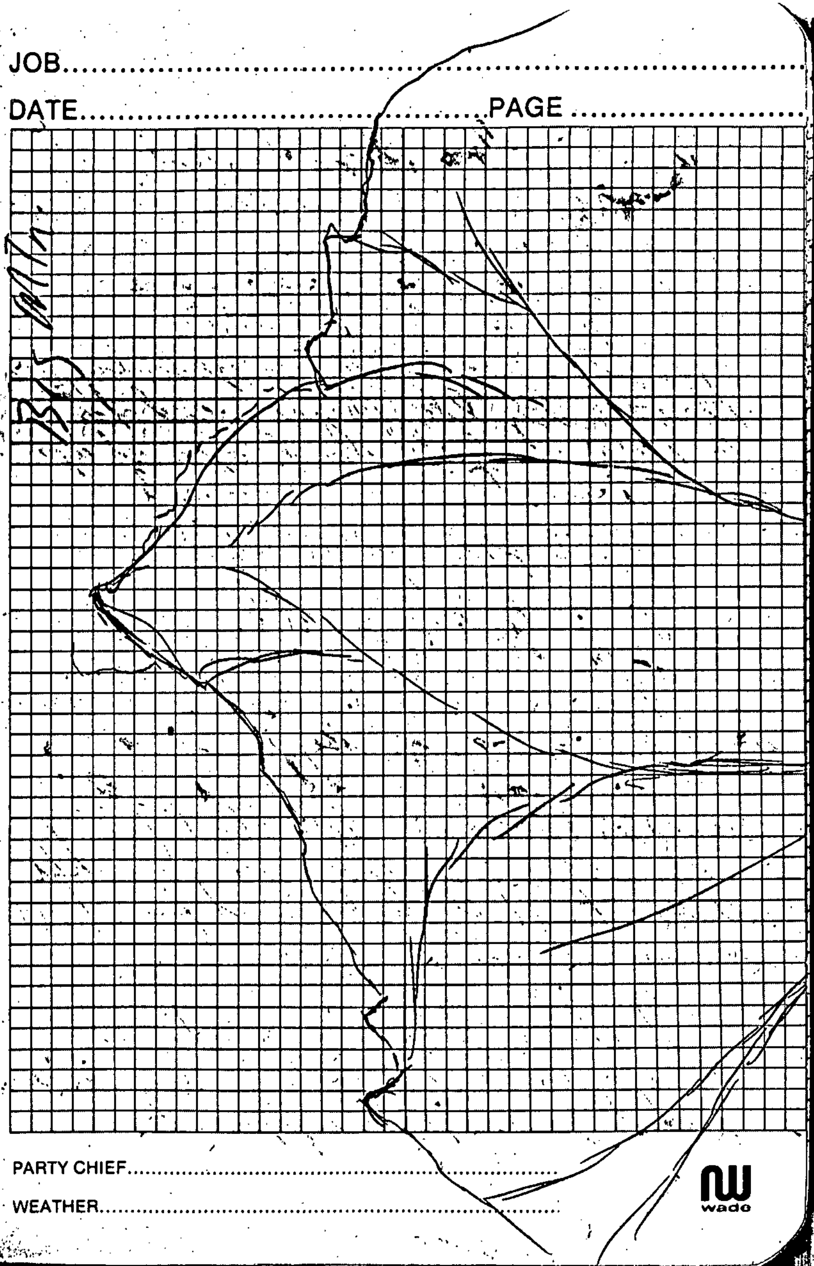

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June 21, Monday, shortest nite of the year, completely socked in. I feel like I could reach out and touch the clouds.

The same bullshit as yesterday, rain thru the day late afternoon wind change to N.N.W. and the clouds opened up real wide.

9:50 pm - Blue skies Breaking to the south.

A record had to be broken for rain fall these last three days.

June 22, Tuesday, talk about fog, I can see across the river and ~~[illegible]~~ that's it. Hell that's not fog it's the damn clouds.

I think I got given shy, the fog clouds started rolling in again and I shot for the pick up point.

PARTY CHIEF

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June 23, Wednesday.

$24.50

Pulled out at 11 AM.

To Teslin

PARTY CHIEF

WEATHER

JOB #2 | 1 001 # of Sample | Sample Type

JoJo Lake

DATE ~~JoJo Lake~~ Ivan | PAGE Declination 31.5°

July 11. Sunday

into JoJo lake, decided to work from south to north.

July 12 - Monday

South end of lake looking east at 2 out crops, possible more. Bearing to first is 103° and 200 ft. south of lake.

Course granitic boulders 300' ~~in stone~~ island

1st Out crop at 3640 F. All I'm seeing is granite and no visible veins.

213001 - 2" quartz vein in granite at 3700 ft. Granite is made up of large crystals

2nd out crops 3800, granite as the 1st one.

213002 30" Vein in granite perpendicular and about 20' above grd.

213003 - 2" Vein 10' North of last sample again perpendicular to the ground.

211004 - Silt in creek south of lake. "0" on meter. back side from out crops.

211005 - This is the creek - very fast, 3'-6' across varying depth 6" plus - 417 m.

211006 - 617 m small but impressive waterfall with test back of it.

211007 - 800 m some kind of creek. like a continuous slab of granite

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211008 - 20' below last sample also just realized the creek has split.

July 13 - Tuesday Altimeter 2920

directly across from camp at the narrows on a bearing of 93°

211009 - Silter on small creek coarse silt <1-3' wide and a couple inches deep>
800m. meter set back to zero.

211010 - 1100 m should be a good sample and seeing colors that could be a pyrite appears to be fairly lite in weight.

212011 - old creekbed at 90° south from sample creek 1130m.

211012 - about 1400 m / my meter is reading 1600 which is wrong. The creek is very slow here and lots of organics.

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212013 - start of traverse at bearing 204°

212014 - 228 m into traverse came across an old creek bed <willowed depression (found volcanics) at about 8" and fine sand at 18"-20"> I can see colors assuming a pyrite.

212015 - 500 m, there are outcrops and float all of which are granitic on the face of this mountain and that include yesterday's work. <No visible ~~rock~~ volcanics at the site> may not be deep enough.

212016 - 1000m - 8" Depth.

212017 - 016 but still running through. Just a trickle creek. Sample 6" above water on south ~~end~~ side.

212018 - another creek a bit faster have to ~~go upstream to sample~~
1235 reach down thru narrow opening for silt sample

PARTY CHIEF

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212019 - 1318 m. Dry Creek Bed

212020 - 1500 m soil sample

212021 - Active creek 1600 m

Just checked meter it's reading 1040 m

I'm going to guess 1800 m and start at zero

another very slow creek at 1850 m

212022 - 2000 m. soil sample

2260 m nice little creek.

211023 - above creek.

211024 - Found the creek I've been looking for at 2600 m ±. Will head upstream & sample. Lots of color in this creek

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211025 - 100 m upstream, again good colors very noticeable in the fine silt next to the bank. They appear to be light in weight which could mean a pyrite.

211026 - 200 m upstream colors still prevalent.

I can see a helicopter above my camp area. 3.40 p.m. He appears to be taking a pretty hard look at the creek above the camp.

And rain.

I'm at an out crop that looked granitic but turns out to be very soft, and materials (rocks) buried in it. They are soft as well

PARTY CHIEF

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The host rock appears to be granite but being so soft either something unusual got mixed with it or was left out, or neither of the above. The scattered small ½" ± about is base is not all that uncommon here.

213027
213028
213029
213030
213031
} same out crop.

Looking for original Traverse chain on Bearing 348° will stay there. Chained off at 212015 Heading out.

JOB.....

DATE.....

July 14 - Wednesday, heading up same creek as yesterday, will do the north side today and some hilltop along the creeks, with rock outcrops.

1 hr. 20 min. to Traverse #1

Altitude 3920 F

Chaining up and will climb 200-300' then take a heading 90° off creek.

212032 - small creek with colors 27 m above Traverse 1

212033 - 157 above ↑ main crk is dry will sample anyway. Sampled at base of 8' rock bluff (Former)

212034 - 270m above T1 last sample from this creek (Dry) crek is 4'-6' wide large rocks to massive (4' sq)

PARTY CHIEF

WEATHER

WEATHER

Bearing northerly at bearing 01°

213035 - approx. 1 cubic foot of quartz rock part of piece from above.

212036 - Soil sample at same location 25 m from creek on 01° heading

I'm finding a finer grain of granite on this side of the creek but the "elevation" as well as a coarse and the soft crumbly one I sampled late yesterday.

213037 - 112 m from creek 4340 FAIL This appears to be part of the host rock.

213038 - 1" Vein in granitic bedrock granite is fine grained and lite in color range weathering or alteration sounds like bedrock but can't be sure 330 m North of Creek

JOB.....

DATE.....

Hung flag at dead root system 15' above and 6' North A.T. 4340

~~213039~~ - 1/8" vein parallel to 1" but 1/2" apart, to close to separate

212039 - Soil sample at 502 m and 4280 F, been going down hill on same heading, outcropping weathered and lots of skree I'm hoping this quartz sample is host. Found a good 1" of volcanics or recent fine ash, off white in color almost tan. at about 6"

Changed bearing to 23° want to see what I'm looking at for tomorrow now be only about 40 m past last sample

PARTY CHIEF.....

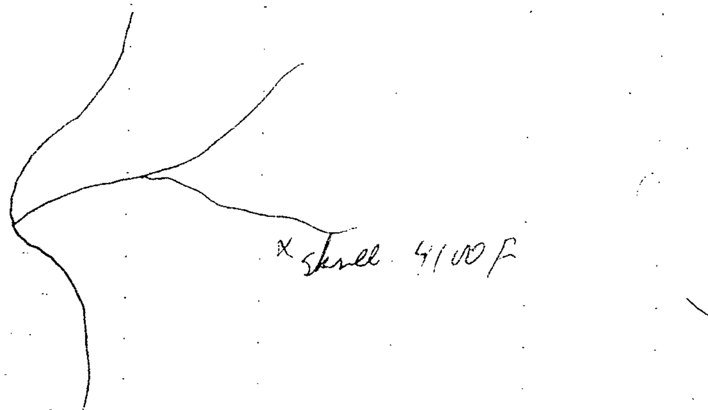
WEATHER.....

212040 – 1000 m soil sample found
ash as well

From where I'm standing up on the
bench the creek I'm looking at sound
worse than it appears. It looks
interesting though.

Changed my mind going to
sample it today, and on a second
thought will do it tomorrow, I'm be

Sampling a skree above tomorrow's
creeks



JOB..........................

DATE..........................

213041 – Skree rock sample
very fine grained, Tan to dark
appears to have multiple veins, very
small, or as mineral mixed in but
not broken down.

041 – is the bedrock, there is some
granite but very little compared
to the sample rock.

The skree is 30' long leading back
to the out crop.

211042 – Bearing 257° found a little
creek with some colors in it
will start chain and flag when
I intercept chain leading up to this
morning creek

211043 another creek same bearing
there's 2 of them lying ~~a little~~ a
~~bit further~~ 157 m from 042

211044 the creek just south 15'

PARTY CHIEF..........................

WEATHER..........................

687 metres to 041

flagged as 040 – 044

July 15 – Thursday

Feet are nagging, going to work on samples and plotting of some on claims maps.

A small plane flew over a couple of times in the afternoon 1:30 pm.

July 16 Friday

Going to sample creeks at ~~Nor~~ South end of the fault. Took a bearing of 57° from the lake.

212045 – 784 m from lake soil sample from bank of creek. Bank is 25' high sample at about 10' above creek.

JOB.....................

DATE.....................

1065 m to ~~For~~ lower fork in creek system. The 2 creeks are about 50' apart. The southerly is the lower of the two. I will sample the south side first.

211046 – 1st sample on south creek at 0 m. 3380 F

15' waterfall at 100 m.
10' " " at 190 m

211047 – 200 m. Steep incline and no growth on north side of creek. All exposed rock. South much more gradual an lots of vegetation.

PARTY CHIEF.....................

WEATHER.....................

J

213048 - Same location as 047 North side of creek, what appears to be limestone mixed in to granitic bedrock.

213049 - 1/4" - 1/2" quartz veen in granite bedrock on north side of creek same location as 047. There are other smaller veens as well

213050 - 3"+ veen in granite bedrock North side of creek 223 m. numerous other veens in all sizes, running in all directions. 6' from creek

211051 - 408 m silt, colors throughout the creek

213052 - sample from 16" veen, it comes out of the ground at 65° and breaks up about 25' away in all sizes. The dark mineral is perpendicular to the ground crossing through the large vein. Striations everywhere. Host rock is iron stained granite

JOB..........

DATE..........

213053 - 6" vein of dark mineral (could be limestone) in Granit bedrock at 462 m with striation

Found a larger vein seems material as 053 - 36" wide 478 m

213054 - 10' veen perpendicular iron stained 506 m North side of creek

211055 - 592 m bedrock on north side appears to be lime stone, south side is granitic, ~~15 apart~~ intruding limestone 15' apart

I'm at the crest between the 2 creeks 4020 F. I will try and find a way down to North Creek or have to back track.

PARTY CHIEF..........

WEATHER..........

213056 - bedrock from crest. granitic

213057 - bedrock bit north of 056 - appears to be diorite with a greenish background. This diorite appearing mineral is a vein in the granitic bedrock it runs on close to a 100'

212058 - Soil sample from gopher hole.

213059 - Vein 3/8-1/4 in granitic bedrock just up from gopher hole and looking down at Fork of 2 creeks to the north.

213060 - Lime stone intrusion 60' SW of 059.

213061 - Could be higher content of calcite 8' above 060. It almost flush with the granite

July 17 8

DATE July 17. Heading back across the lake to sample North leg of the fork I was working on yesterday. Weather doesn't look to good.

211062 - mouth of south cr

211063 - 200 m

211064 - 400 m

211065 - 600 m

211066 - mouth of North crk

211067 - 118 m

These notes are being made at 6 p.m. It was to wet to attempt writing earlier. Poor day to damn wet, take another shot at it tomorrow. lots of veins in bedrock found the 8'-10' vein

PARTY CHIEF that I saw on the south Fork

WEATHER

The north side of the creek has the exposed bedrock tiny veins to over 1 foot in width. I'll get samples tomorrow.

July 18 - Sunday - going up to finish north fork of creek system at south end of fault.

213068 - Interesting outcrop, lots of color, parts of it are very soft & crumbles easily, ca few inches away I'm having trouble breaking off a piece. 3960 F North of creeks, on side to Jo Jo's Pinnacle

213069 - Piece I was having trouble breaking off.

213070 - Piece of granite, same area. 20' NE of 068 & 069

JOB.....

DATE.....

068 & 069 encompass a fairly large weather area 60' across and then upwards 20-30' and it appears to head around to the west side, overburden takes over where I sampled 068. Heading down to the North fork for more rock samples

213071 - Perpendicular large vein 6"-1 ft. Quartz. North side of creek. Host rock is granite

213072 - Perpendicular 16' vein appears to be the same as the one on the south Fork About 40' up from last sample. No reaction to acid

213073 - Vein within above vein.

I'm finding pyrite in lot of the

PARTY CHIEF granitic float.

WEATHER.....

213074 – Iron stain quartz vein 20" wide perpendicular, hosted by granite other minor narrow vein paralleling the big one but not stained with iron, it jogs a bit to the west. 20' east of last sample

Time to get rain moving in.

211075 – Just south of 2 creeks above north fork. west side of creek.

212076 – soil sample just south of 075.

213077 – shear zone just below 076 along the face of the bank.

213078 – 6" quartz vein in granite bedrock.

JOB.....

DATE.....

211079 – about 200 m below last pit, again west side of creek.

The mention earlier of pyrite and granite, I believe is rain wash carried pyrite accumulating on the exposed surfaces of the granite.

213080 – either a granitic vein in quartz or a finer grained quartz vein in granite interspersed with granitic veins)

213081 – Quartz veins in granite 6" vein

211082 – last sample, no rain 20 sap. taken across from south fork creek

PARTY CHIEF.....

WEATHER.....

211083 - soil across from 082 west side of creek

when talk about a blast incredible rain followed by Hail.

This is amazing!!

July 19 - Monday - Just south of Camp going up west side of lake to 2 creeks, on a bearing of 288°

At approx 1100 m changed bearing to 300°. Lots of massive granitic out cropping very weathered including the crumbly type.

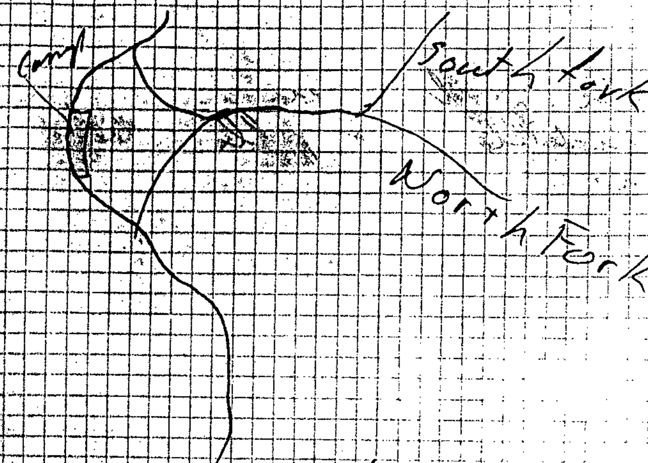
At about 1350 m took a heading 249° to get above tree line.

Found a fairly good sized stream and you can hear the underground creek running below 3700F

3700F ALT.

JOB.................................

DATE.................................



211084 - South fork, very fast creek not much silt here, but there are colors 0m

211085 - 175 m Top of 6' waterfall

211086 - 322 m Striations in granite. will get a sample as well

211087 - 435 m

PARTY CHIEF.................................

WEATHER.................................

211088 — going up crest to North creek found one on side of the crest very slow with sample ~~anyway~~ anyway.

come over the tops to north creek it is as impressive as the south and a 60' creek bed. Lots of scree on the west side.

211089 — silt on North creek colors.

211090 — 100 m down stream from 089

211091 — 200 m down from 089.

211092 — 434 m down from 089

Big creek massive boulders.

can you have granite veins in granite?

JOB.....

DATE.....

213093 — 1" quartz vein in granite near mouth of North creek West side perpendicular

542 m to Flag 211084

sampling every 200 m or 300 m meters from here to next Junction in creek

211094 — 300 m down from 211084

211095 — 610 m " " "

211096 — 900 m " " "

211097 — 1200 m " " "

211098 — Same location as 092 but a great fine silt just to see if there's a ~~bit~~ difference

PARTY CHIEF.....

WEATHER.....

July 20 - Tuesday - Rained out
worked on samples and
maps.

July 21 - Same as July 20

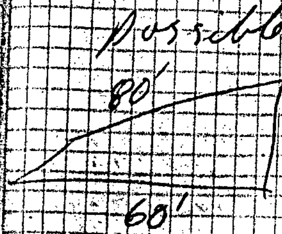
July 22 - Very high cloud going
to give it a couple of hours
and see what happens.
9 P.M. Also coming in from
the north wrapping around the mts,
being patient.

Stopped to load up my
water jugs and realized I'd
left my chain meter at camp.
Going at the [illegible] location of
that unusual outcrop [illegible]
[illegible]
[illegible] [illegible]

JOB..

DATE..PAGE

213099 - Grab samples from
possible VMS outcrop. It is



wedge shaped facing
south by south east.
not much vegetation in
the gossan area, a bit of granite
mixed in the outcrop

213100 - 6" quartz vein about
200 m below out crop 213099

213101 - quartz vein 40' below
213100 - this is a bit
questionable but I
grabbed it anyway. These last
3 samples were taken under
pretty heavy rain

213102 - Grab samples to give
[illegible] on Koen about.

PARTY CHIEF

WEATHER

The samples in 213092 are from the unusual outcropping

July 23 - Friday

Overcast again, going to stay here and do a couple of vein on the west side of the lake.

Taking a heading of 282°, going to do the North creek first. Coming off south creek will take a heading of 170

211103 very fast and steep difficult to sample here and colors.

211104 - 267 m from 103 upstream Granitic host bedrock massive lime stone veining 10'-15' across

213105 - Limestone vein e granite host -

101

JOB:

DATE: PAGE

211106 - 417 m Good sample

This is a hell of a creek, deeply eroded very steep, not much striation in the bed or walls as compared to the other side of the lake.

Heading over to south creek going to sample out crop of vein that visibly runs N-S on this side of the lake.

213107 - Three sample of vein below out cropping. The host is granitic

213108 - off of East face of outcrop looks like limestone

3780 FT ALT

Granite is the host rock and there must be a lot of iron in the limestone.

PARTY CHIEF

WEATHER

JOB

The west side of the outcrop is an granite orange to natural in color. The orange could be the iron. There is a space area to the west of the outcrop as well, may have been a creek bed or just eroded naturally. The granite is occurring all over the out crop. No visible veins or streakers

212109 – Soil sample at Top of out crop.

211110 – Pyrite all the way down the North bank. Silt sample

211111 – Granitic and lime-stone bedrock - 107 m from 110

211112 – 219 m from 211110

JOB.......................................

DATE.......................................PAGE

July 25 Saturday – rained off and on thru the nite, again thru the morning took a boat load of gear and samples to the take off point north end of lake.

The sky has been clear then cloudy, windy then quiet low and high clouds, it screwed up my day.

Steve Johnson

Geo Chem office

PARTY CHIEF.......................................

WEATHER.......................................

105 C/9 — EDITION 1 — METRIC — Canada — MÉTRIQUE — ÉDITION 1 — 105 C/9

Military users, refer to this map as: / Référence de cette carte pour usage militaire:	SERIES A 701 SÉRIE MAP 105 C/9 CARTE EDITION 1 MCE ÉDITION

LEGEND - LÉGENDE

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- DITCH ..... FOSSÉ
- CONTOURS ..... COURBES DE NIVEAU
- APPROXIMATE CONTOURS ..... COURBES DE NIVEAU APPROXIMATIVES
- DEPRESSION CONTOUR ..... COURBE DE CUVETTE
- CLIFF ..... FALAISE
- SPOT ELEVATION, APPROXIMATE: LAND; WATER ..... 965 590± POINT COTÉ, APPROXIMATIF: SUR TERRE ;SUR L'EAU
- ESKER ..... ESKER
- SAND, SAND DUNES, RAISED BEACHES ..... SABLE, DUNES DE SABLE ; PLAGES SURÉLEVÉES
- HISTORIC SITE ..... LIEU HISTORIQUE
- WOODED AREA, FOREST; CLEARED AREA ..... SURFACE BOISÉE, FORÊT; ESPACE DÉNUDÉ, CLAIRIÈRE

PHOTOGRAPHY PHOTOGRAPHIE

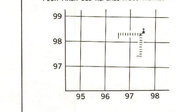
COMPILATION		RESTITUTION
16	A-22438	8/71 12
55	A-23590	9/73 59
17	A-23590	9/73 13

REVISION RÉVISION

GRID ZONE DESIGNATION: DÉSIGNATION DE LA ZONE DU QUADRILLAGE: 8V

100 000 m SQUARE IDENTIFICATION: IDENTIFICATION DU CARRÉ DE 100 000 m: PC

EXAMPLE OF METHOD USED TO GIVE A REFERENCE TO NEAREST 100 METRES
EXEMPLE DE LA MÉTHODE EMPLOYÉE POUR FIXER DES REPÈRES À 100 MÈTRES PRÈS



		(as above) (ci-dessus)
REFERENCE POINT / POINT DE REPÈRE	CHURCH - EGLISE	
EASTING: Read number on grid line immediately to left of point. ABSCISSE: Noter le chiffre de la ligne du quadrillage immédiatement à gauche du repère:		97
Estimate tenths of a square from this line eastward to point: Estimer le nombre de dixièmes de carré entre cette ligne et le repère en direction est:		5
		975
NORTHING: Read number on grid line immediately below point. ORDONNÉE: Noter le chiffre de la ligne du quadrillage immédiatement en dessous du repère:		98
Estimate tenths of a square from this line northward to point: Estimer le nombre de dixièmes de carré entre cette ligne et le repère en direction nord:		4
GRID REFERENCE:		984
RÉFÉRENCE AU QUADRILLAGE:		975984

Nearest similar grid reference 100 000 metres
La prochaine référence similaire est à 100 000 mètres

ONE THOUSAND METRE
UNIVERSAL TRANSVERSE MERCATOR GRID
ZONE 8
QUADRILLAGE DE MILLE MÈTRES
TRANSVERSE UNIVERSEL DE MERCATOR

105 C/15	105 C/16	105 B/13
105 C/10	105 C/9	105 B/12
105 C/7	105 C/8	105 B/5

The 1984 MAGNETIC BEARING is 27°52' (495 mils) EAST of GRID NORTH.

ANNUAL CHANGE DECREASING 7.4'

GRID NORTH is 2°24' (43 mils EAST of TRUE NORTH for centre of map.

Le REPÈRE MAGNÉTIQUE en 1984 est à 27°52' (495 mils) à l'EST du NORD DU QUADRILLAGE.

VARIATION ANNUELLE DÉCROISSANTE 7,4'

Le NORD DU QUADRILLAGE est à 2°24' (43 mils) à l'EST du NORD GÉOGRAPHIQUE au centre de la carte.

NOTE: GRID TICKS WITH NUMBERS IN BRACKETS OR WITHOUT NUMBERS INDICATE THE 1000 METRE U.T.M. GRID ZONE 9

NOTER: LES TRAITS NUMÉROTÉS ENTRE PARENTHÈSES OU SANS NUMÉRO INDIQUENT LE QUADRILLAGE DE 1000 MÈTRES T.U.M.

CONVERSION SCALE FOR ELEVATIONS
ÉCHELLE DE CONVERSION DES ALTITUDES

Metres 30 20 10 0 — 50 100 150 200 250 300 Mètres
Feet 100 50 0 — 100 200 300 400 500 600 700 800 900 1000 Pieds

PRODUCED BY THE SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES, OTTAWA. PUBLISHED IN 1984.

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ELEVATIONS IN METRES ABOVE MEAN SEA LEVEL

CONTOUR INTERVAL ..... 20 METRES

NORTH AMERICAN DATUM 1927

TRANSVERSE MERCATOR PROJECTION

INFORMATION CONCERNING BENCH MARKS AND HORIZONTAL SURVEY MONUMENTS CAN BE OBTAINED FROM GEODETIC SURVEY, SURVEYS AND MAPPING BRANCH, OTTAWA.

THIRTYMILE RANGE
YUKON TERRITORY TERRITOIRE DU YUKON

Scale 1:50 000 Échelle

Miles 1 0 1 2 3 Miles
Metres 1000 0 1000 2000 3000 4000 Mètres

ALTITUDES EN MÈTRES

ÉQUIDISTANCE DES COURBES ..... 20 MÈTRES

SYSTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRICAIN 1927

PROJECTION TRANSVERSE DE MERCATOR

POUR TOUT RENSEIGNEMENT CONCERNANT LES REPÈRES ET BORNES ALTIMÉTRIQUES, S'ADRESSER AUX LEVÉS GÉODÉSIQUES, DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, OTTAWA.

ÉTABLIE PAR LA DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA. PUBLIÉE EN 1984.

CES CARTES SONT EN VENTE AU BUREAU DES CARTES DU CANADA, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, OU CHEZ LE VENDEUR LE PLUS PRÈS.

THIRTYMILE RANGE
105 C/9
EDITION 1 ÉDITION

Energy, Mines and Resources Canada — Énergie, Mines et Ressources Canada

105 C/8 EDITION 1 **METRIC** Canada **MÉTRIQUE** 105 C/8 ÉDITION 1

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- PINGO — PINGO
- DITCH — FOSSÉ
- CONTOURS — COURBES DE NIVEAU
- APPROXIMATE CONTOURS — COURBES DE NIVEAU APPROXIMATIVES
- DEPRESSION CONTOUR — COURBE DE CUVETTE
- CLIFF — FALAISE
- SPOT ELEVATION, APPROXIMATE: LAND; WATER — 965 590± POINT COTÉ, APPROXIMATIF: SUR TERRE ;SUR L'EAU
- ESKER — ESKER
- SAND, SAND DUNES, RAISED BEACHES — SABLE, DUNES DE SABLE ; PLAGES SURÉLEVÉES
- HISTORIC SITE — LIEU HISTORIQUE
- WOODED AREA, FOREST; CLEARED AREA — SURFACE BOISÉE, FORÊT; ESPACE DÉNUDÉ, CLAIRIÈRE

YUKON PLATEAU ENGLISHMAN RANGE

RIVER · ENGLISH CREEK · WOLF CREEK · CARIBOU CREEK

PHOTOGRAPHY COMPILATION — PHOTOGRAPHIE RESTITUTION

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REVISION — RÉVISION

GRID ZONE DESIGNATION: DESIGNATION DE LA ZONE DU QUADRILLAGE:	100 000 m SQUARE IDENTIFICATION IDENTIFICATION DU CARRÉ DE 100 000 m
8V	PC 67 / PB

EXAMPLE OF METHOD USED TO GIVE A REFERENCE TO NEAREST 100 METRES
EXEMPLE DE LA METHODE EMPLOYÉE POUR FIXER DES REPÈRES À 100 MÈTRES PRÈS

REFERENCE POINT / POINT DE REPÈRE	CHURCH - ÉGLISE (as above / ci-dessus)
EASTING: Read number on grid line immediately to left of point: / ABSCISSE: Noter le chiffre de la ligne du quadrillage immédiatement à gauche du repère:	97
Estimate tenths of a square from this line eastward to point: / Estimer le nombre de dixièmes du carré entre cette ligne et le repère en direction est:	5
	975
NORTHING: Read number on grid line immediately below point: / ORDONNÉE: Noter le chiffre de la ligne du quadrillage immédiatement en dessous du repère:	98
Estimate tenths of a square from this line northward to point: / Estimer le nombre de dixièmes du carré entre cette ligne et le repère en direction nord:	4
GRID REFERENCE: / RÉFÉRENCE AU QUADRILLAGE:	984 / 975984

Nearest similar grid reference 100 000 metres
La prochaine référence similaire est à 100 000 mètres

ONE THOUSAND METRE
UNIVERSAL TRANSVERSE MERCATOR GRID
ZONE 8
QUADRILLAGE DE MILLE MÈTRES
TRANSVERSE UNIVERSEL DE MERCATOR

105 C/10	105 C/9	105 B/12
105 C/7	105 C/8	105 B/5
105 C/2	105 C/1	105 B/4

The 1984 MAGNETIC BEARING is 27°42' (493 mils) EAST of GRID NORTH.

ANNUAL CHANGE DECREASING 7.4'

GRID NORTH is 2°23' (42 mils) EAST of TRUE NORTH for centre of map.

Le REPÈRE MAGNÉTIQUE en 1984 est à 27°42' (493 mils) à l'EST du NORD DU QUADRILLAGE.

VARIATION ANNUELLE DÉCROISSANTE 7.4'

Le NORD DU QUADRILLAGE est à 2°23'(42 mils) à l'EST du NORD GÉOGRAPHIQUE au centre de la carte.

NOTE: GRID TICKS WITH NUMBERS IN BRACKETS OR WITHOUT NUMBERS INDICATE THE 1000 METRE U.T.M. GRID ZONE 9
NOTER: LES TRAITS NUMÉROTÉS ENTRE PARENTHÈSES OU SANS NUMÉRO INDIQUENT LE QUADRILLAGE DE 1000 MÈTRES T.U.M.

CONVERSION SCALE FOR ELEVATIONS
ECHELLE DE CONVERSION DES ALTITUDES

Metres 30 20 10 0 — 50 100 150 200 250 300 Mètres
Feet 100 50 0 — 100 200 300 400 500 600 700 800 900 1000 Pieds

PRODUCED BY THE SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES, OTTAWA. PUBLISHED IN 1984.

COPIES MAY BE OBTAINED FROM THE CANADA MAP OFFICE, DEPARTMENT OF ENERGY, MINES AND RESOURCES, OTTAWA, OR YOUR NEAREST MAP DEALER.

ELEVATIONS IN METRES ABOVE MEAN SEA LEVEL

CONTOUR INTERVAL ..... 20 METRES

NORTH AMERICAN DATUM 1927

TRANSVERSE MERCATOR PROJECTION

INFORMATION CONCERNING BENCH MARKS AND HORIZONTAL SURVEY MONUMENTS CAN BE OBTAINED FROM GEODETIC SURVEY, SURVEYS AND MAPPING BRANCH, OTTAWA.

ENGLISH CREEK
YUKON TERRITORY TERRITOIRE DU YUKON

Scale 1:50 000 Échelle

Miles 1 0 1 2 3 Miles
Metres 1000 0 1000 2000 3000 4000 Mètres

ALTITUDES EN MÈTRES

ÉQUIDISTANCE DES COURBES ..... 20 MÈTRES

SYSTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRICAIN 1927

PROJECTION TRANSVERSE DE MERCATOR

POUR TOUT RENSEIGNEMENT CONCERNANT LES REPÈRES ET BORNES ALTIMÉTRIQUES, S'ADRESSER AUX LEVÉS GÉODÉSIQUES, DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, OTTAWA.

ÉTABLIE PAR LA DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA. PUBLIÉE EN 1984.

CES CARTES SONT EN VENTE AU BUREAU DES CARTES DU CANADA, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA, OU CHEZ LE VENDEUR LE PLUS PRÈS.

ENGLISH CREEK
105 C/8
EDITION 1 ÉDITION

Energy, Mines and Resources Canada — Énergie, Mines et Ressources Canada

METRIC/MÉTRIQUE