Summary of Work
Hasselberg Lake Area
Yukon Territory, N.T.S. 105 A/13

for

Yukon Mining Incentives Program
Economic Development
Government of the Yukon
Box 2703, Whitehorse, Yukon Y1A 2C6

File Number 98-16

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& RESOURCES LIBRARY
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Whitehorse, Yukon Y1A 2C6

John Peter Ross, Prospector
November, 1998

TABLE OF CONTENTS

LIST OF FIGURES

Appendices

Chapter One: INTRODUCTION

1.1 Introductory Statement

The Hasselberg Lake (VIVI claim group) area, map sheet 105 A/13, was chosen because;

1. In the past, 4 government silt samples were anomalous for Au and either As or W, or both.
2. Claims were staked and recorded. Sampling confirmed 3 anomalies (4^{th} not checked out) for Au. One area was found to be anomalous for Au + Sb, one area for Au + As.
3. The VIVI 1-32 claims were recorded, but only VIVI 1-2, 11-12, 19-30 were kept.
4. The deposit type sought was unknown.
5. The area while expensive to access by helicopter is close to Watson Lake - Ross River (Robert Campbell) Highway.

1.2 Location and Access

Access was by TransNorth helicopter out of Watson Lake, approximately 65 miles (104.6 km) to the northwest.

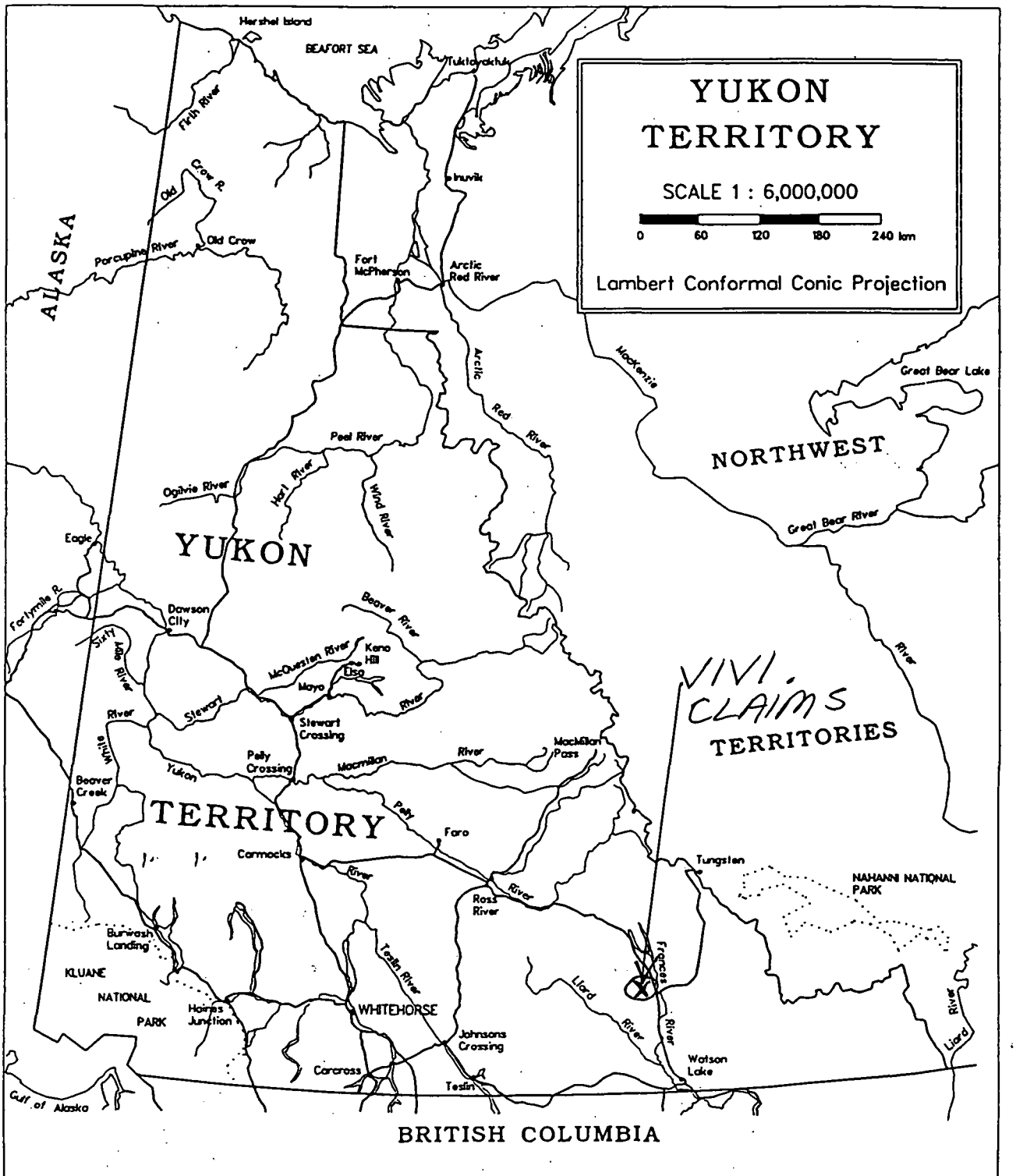

FIGURE #1

LOCATION MAP

VIVI-1, 2, 11, 12, 19-30

130° 00'
61° 00'
55'
50
5000
4000
4500
6000
6483
N
VIVI CLAIMS
RIVER
ITCH
EZ
VIVI
JASPER
SEL

FIGURE #2
CLAIM LOCATION MAP

WATSON LAKE MIN. DIST.
NTS 105 A 13
DATE 21 OCT 1998
DRAWN by JP ROSS
SCALE 1 : 31,680

130° 00'
61°00'
55'
50
RIVER
RIVER
5000
4000
4500
6000
6483
N
ITH
ITCH
VIVI
EZ
LAY SPER
SEL
FIGURE #3
GEOLOGY MAP / CLAIMS
WATSON LAKE MIN. DIST.
NTS 105 A 13
DATE 21 OCT 1998
DRAWN by JP ROSS
SCALE 1:31,680

MAP 1 - NTS 105A
SAMPLE LOCATION
STREAM SEDIMENT
GSC OPEN FILE 3293
SOUTHEASTERN YUKON 1996

GEOLOGICAL LEGEND

CENOZOIC

11 Felsic to intermediate volcanic rocks; minor tillite and limestone

10 Nonmarine clastic sediments; minor felsic volcanics

PALEOZOIC

9 Mafic to ultramafic rocks and associated marine carbonates and clastics

8 Intermediate to felsic volcanics and associated marine carbonates and clastics

7 Mainly marine carbonates and shales; minor siliceous sediments (chert)

6 Marine and nonmarine clastic sediments; minor limestone and coal

PROTEROZOIC

5 Mainly clastic marine sediments; minor limestone and basalt

4 Mainly siliceous and carboniferous sediments; minor evaporite, mafic volcanics, and iron formation

PLUTONIC ROCKS

3 Granite, leucogranite, alaskite, quartz monzonite, granophyre

2 Granodiorite, leucogranodiorite, quartz monzonite, quartz diorite, tonalite

1 Ultramafic rocks

—— Geological Boundary

Geological base modified from Map 1712A, Tectonic Assemblage Map of the Canadian Cordillera, digital map series.

FIGURE #4

FLOAT SAMPLE LOCATION

WATSON LAKE MIN. DIST.

NTS 105 A 13

- FLOAT SAMPLE

DATE 21 OCT 1998

DRAWN BY JP ROSS

SCALE 1 : 15 840

N

4500

6000

6000

5000

EZ

VIVI

YB91242 YB91241 YB91240 YB91239 YB91238 YB91237 YB91236 YB91235 YB91234 YB91233 YB91232 YB91231 YB91230 YB91229 YB91228 YB91227 YB91226 YB91225 YB91224 YB91223 YB91222 YB91221 YB91220 YB91294 YB91295 YB91304 YB91306 YB91308 YB91310 YB91312 YB91311 YB91309 YB91307 YB89423 YB89424 YB89425 YB89426 YB89427 YB89428 YB89429 YB89430 YB89431 YB89432 YB89433 YB89434 YB89435 YB89436 YB89437 YB89438 YB89421 YB89422 YB89439 YB89440 YB89441 YB89442 YB89443 YB89444 YB89445 YB89446 YB89447 YB89448 YB89449 YB89450

WL9 WL10 WL11 WL12 WL13 WL14 WL15, 15A, 15B WL16 WL17 WL18, 19 WL1, 2, 3, 4, 5 WL20 TENT

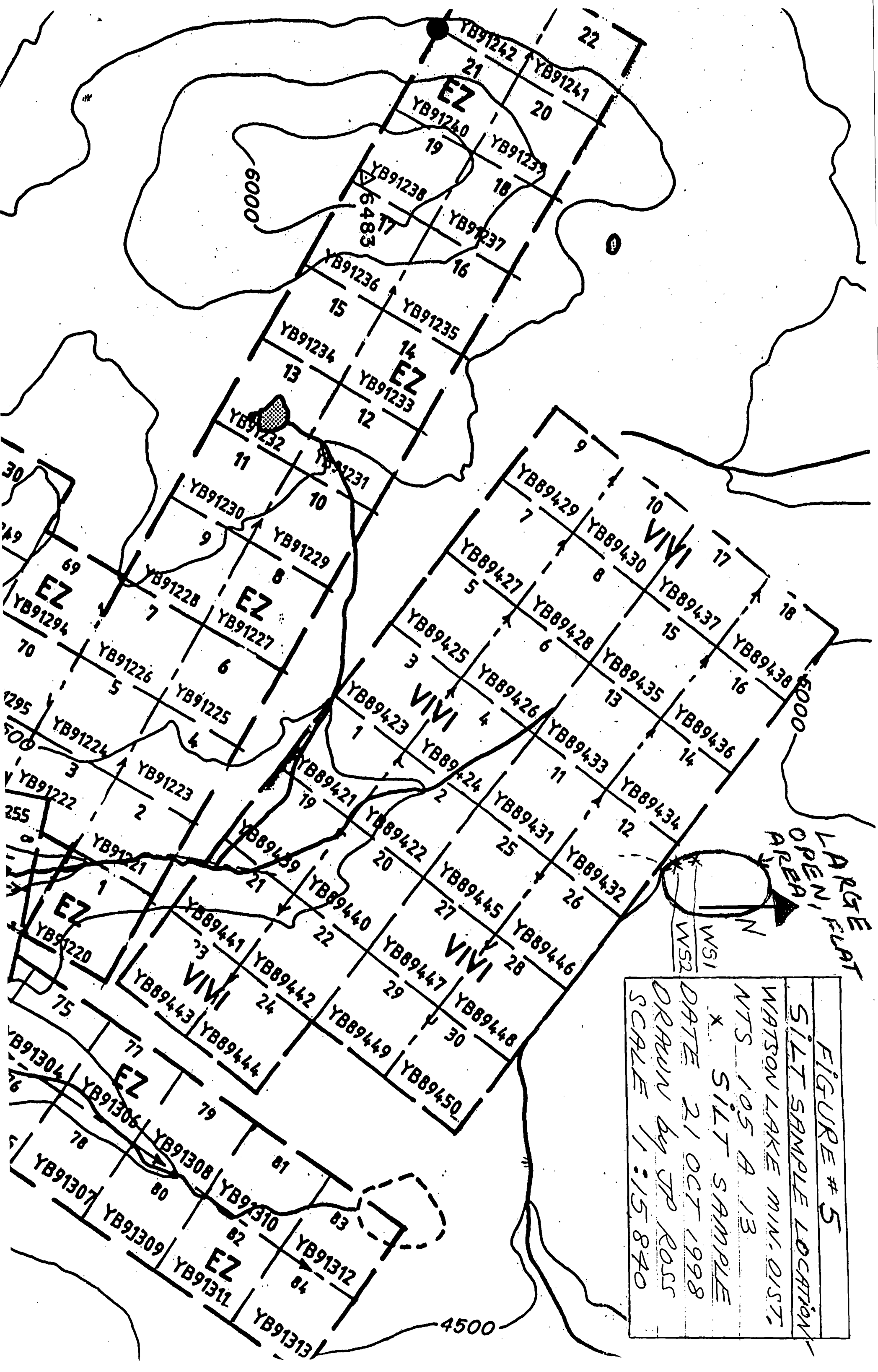

FIGURE # 5
SILT SAMPLE LOCATION
WATSON LAKE MIN. DIST.
NTS 105 A 13
* SILT SAMPLE
DATE 21 OCT 1998
DRAWN BY JP ROSS
SCALE 1:15 840

FIGURE # 6

SOIL SAMPLE LOCATION

WATSON LAKE MIN. DIST.

NTS 105 A 13

— SOIL SAMPLE

DATE 21 OCT 1998

DRAWN by JP ROSS

SCALE 1:15,840

N

A

B

C

D

E

ANOMOLOUS GOLD

??

6000

6483

4500

VIVI

EZ

Chapter Two: SUMMARY

The VIVI 1-2, 11-12, 19-30 claims were kept.

Two hundred (200) tons of high-grade Jade has been mined to the south. Five - six pieces of nephrite jade were seen piled on large boulders in the stream just north of the camp. One small trench was seen 100 feet east of the camp.

Twenty-one (21) float rock samples were taken and tested.

Two (2) silt samples were taken and tested.

One hundred and seventeen (117) soil samples were taken along the claim line starting from #2 posts VIVI 11+12 to #2 posts of VIVI 29+30. Then a soil line at an angle of 195 degrees approximately. Intervals were at 75 feet but only every second sample was tested. Stations at claim posts were A, B, C, D, E.

Silt and float samples were marked by ribbon. Soils samples were taken from a depth of 12 - 24 inches or more in order to get a good sample.

Rock chips were examined, some were tested; rock samples were marked with blue and yellow flagging tape. A wooden lath with a tag was hammered or placed in a hole nearby.

Viceroy Resources paid for all samples in exchange for a right of first refusal on the claims.

No float samples were anomalous. Two silt samples were anomalous. Most of 15 soil samples in a row were anomalous.

Dates worked were July 23-31 and August 1-8, 1998.

Silt Samples
Highlighted values are Au >= 10 ppb, Cr >= 500 ppm, Fe >= 4.0%, Mn >= 1000 ppm, Ni >= 300 ppm.

	Au ppb	Cr ppm	Fe %	Mn ppm	Sb ppm
WS 1	--	619	4.55	5340	519
WS 2	300	1065	4.94	930	532

Soil Samples

Highlighted values are Au >= 10 ppb, Cr >= 500 ppm, Fe >= 4.0%, Mn >= 1000 ppm, Ni >= 300 ppm.

	Au ppb	Cr ppm	Fe %	Mn ppm	Sb ppm
A+900SE	105	855	3.57	550	376
A+1050SE	175	1135	6.12	1135	470
A+1200SE	20	508	5.04	1215	266
A+1350SE	10	848	7.30	2620	488
B	80	640	4.95	1225	315
B+150SE	125	683	4.04	820	321
B+300SE	50	846	5.78	1185	313
B+450SE	10	495	3.86	410	213
B+600SE	755	1215	12.05	3590	624
B+750SE	105	687	4.98	915	424
B+900SE	70	632	3.90	530	356
B+1050SE	--	547	2.85	210	167
B+1200SE	400	515	2.42	185	152
B+1350SE	--	613	3.17	305	186
C+75SE	60	248	2.73	145	91

Chapter Three: GEOCHEMICAL SURVEY

3.1 Float Rock Geochemistry

Twenty-one (21) float rock samples were taken and tested for Au 30g and 32 element ICP.

3.2 Silt Geochemistry

Two (2) silt samples were passed through and 8 mesh screen and put into a bag, tested for -80 mesh; Au 30g fire assay and 32 element ICP.

3.3 Soil Geochemistry

Fifty-nine (59) soil samples were tested for -80 mesh Au 30g fire assay and 32 element ICP.

3.4 Interpretation

The area prospected and soil sampled is covered by glacial till. A linear (now dry) stream goes through B+675SE - B+750SE at an angle of 18 - 20 degrees and heads towards the large flat area shown in Figure 5 and the location of silt sample WS1. The geology of the area is Unit 8 (Paleozoic intermediate to felsic volcanic rocks and associated marine carbonates and clastics). The boundary between Unit 8 and Unit 1 (Ultramafic plutonic rocks) is not known.

An anomalous gold zone from A+900SE to C+75SE (a distance of 2,025 feet) averages 131 ppb Au in 15 samples. The mineral association is Au ± Cr, Fe, Mn, Ni. The anomalous area extends to WS1 and WS2, and possibly beyond these points. The angle, width and length of the zone is unknown. It is possibly a motherlode Au deposit or an ultramafic sill(s) or dyke(s) according to Ken Galambos (Mineral Development Geologist, Yukon Geology Program).

Chapter Four: PROSPECTING

At present all 16 claims will be kept, 9 years of work was done on 16 claims. The 59 soil samples not tested are stored in a dry location.

In the future, more claims should be staked and recorded to cover the northern extension of the Au zone. ***Testing for Pt*** series in the future will be done on the stored (alternate) soil samples.

It is possible the anomaly could be up to 1 claim length (1500 feet) wide and up to 4 claims lengths (6000 feet) long. Other anomalous areas may be located.

STATEMENT OF QUALIFICATIONS

I, John Peter Ross, do hereby certify that I:

1. am a qualified prospector with mailing address;

   Box 4842
   Whitehorse, Yukon
   Canada. Y1A 4N8

2. graduated from McGill University in 1970 with a B.Sc. General Science

3. have attended and finished completely the following courses;

   1974 -- BC & Yukon Chamber of Mines, Prospecting Course
   1978 -- United Keno Hill Mines Limited, Elsa, Yukon, Prospecting Course
   1987 -- Yukon Chamber of Mines, Advanced Prospecting Course
   1991 -- Exploration Geochemistry Workshop, GSC Canada
   1994 -- Diamond Exploration Short Course, Yukon Geoscience Forum
   1994 -- Yukon Chamber of Mines, Alteration and Petrology for Prospectors
   1994 -- Applications of Multi-Parameter Surveys (Whitehorse), Ron Shives, GSC
   1994 -- Drift Exploration in Glaciated and Mountainous Terrain, BCGS
   1995 -- Applications of Multi-Parameter Surveys, (Vancouver) Ron Shives, GSC
   1995 -- Diamond Theory and Exploration, Short Course # 20, GSC Canada
   1996 -- New Mineral Deposit Models of the Cordillera, MDRU
   1997 -- Geochemical Exploration inTropical Environments, MDRU
   1998 -- Metallogeny of Volcanic Arcs, Cordilleran Roundup Short Course

4. did all the work and the writing of this report

5. have been on the Yukon Prospectors' Assistance and Yukon Mining Incentive Program 1986 - 1998

6. have been on the British Columbia Prospectors' Assistance Program 1989 - 1990

7. have a 100% interest in the claims described in this report at the present time

John Peter Ross
27 NOV -1998

Appendix 1

References

GSC Open File 3293, NTS 105A, SE Yukon, 1996.

Geophysical Paper, Map 1352G, Hasselberg Lake, NTS 105 A/13.

New Mineral Deposit Models of the Cordillera, Short Course MDRU 1997. (Gold skarns, motherlode deposits, Carlin Type deposits, epithermal deposits).

Personal Communication;
John Kowalchuk, Geologist, NU-LITE Resources, Vancouver, BC.
Trevor Bremner, Geologist, DIAND
Watson Lake Mining Recorder

John Sinkankas., Vol. 3, p. 190, 1997, Gemstones of North America

Ross, J.P., 1997, Summary of Work Hasselberg Lake Area Yukon Territory, N.T.S. 105 A/13: for Yukon Mining Incentives Program, Economic Development, Government of the Yukon, Box 2703, Whitehorse, Yukon Y1A 2C6. File Number 97-13.

Metallogeny of Volcanic Arcs, Cordilleran Roundup 1998 short course.

YUKON MINFILE
YUKON GEOLOGY PROGRAM
WHITEHORSE

NAME(S): Howard
MINFILE #: 105A 034
MAJOR COMMODITIES: -
MINOR COMMODITIES: -
TECTONIC ELEMENT: Yukon Tanana Terrane
NTS MAP SHEET: 105 A 13
LATITUDE: 60°55'00"N
LONGITUDE: 129°55'00"W
DEPOSIT TYPE: Unknown
STATUS: Uncertain

CLAIMS (PREVIOUS AND CURRENT)

HOWARD, TIM, CHEN, MAYLING, SEL, ITCH.

WORK HISTORY

Staked as Howard cl (YA56487) in Sep/80 by Alex Black. Restaked in Sep/86 as Tim cl (YA91552) by T. Liverton. Jiyu Chen staked a single Chen cl (YB35009) 2 km to the southeast in Aug/92, and trenched in Aug/93. S. Hearty staked the Mayling 1-5 cl (YB35306) 1 km to the east in Jan/93, performing bulldozer trenching, prospecting and road building on the claims from July to Sept/93.

In July/94 Cominco Ltd. staked the Sel cl 1-17 (YB50088) 3 km to the east and the Itch cl 1-84 (YB50151) 4 km to the northeast. In Aug/94 Cominco carried out geological mapping, prospecting and soil sampling on both claim groups.

S. Hearty staked Jasper cl 1-8 (YB60248) just north of the occurrence in Aug/95.

GEOLOGY

The rocks underlying this area have been assigned to the Yukon-Tanana Terrane (YTT) and the Slide Mountain Terrane (SMT). Cominco reported generally poor outcrop exposure on the Itch claim block. The best exposure are in creeks located along the west side of the property and consist of grey to black, variably carbonaceous mudstone and silty mudstone with minor interbedded quartzite and siltstone. No outcrop exposure was noted on the Sel claim block.

Cominco staked the claims to cover airborne geophysical targets identified during a survey flown in early 1994. The results from this survey were not filed for assessment credit. Two lines of soil samples (101 samples) and 4 silt samples were collected from the Itch property. A single soil line (35 samples) was collected across the center part of the Sel property.

REFERENCES

COMINCO LTD, JUN/95. Assessment Report #093330 by P. MacRobbie.

MORTENSEN, J. K., 1983a. Age and Evolution of the Yukon-Tanana Terrane, Southeastern Yukon [Ph.D. Thesis]; Santa Barbara, University of California, 115 p.

APPENDIX 2

Rock Geochemistry - Assay Results

Chemex Labs Ltd.

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Y1A 4L2

A9828529

Comments: ATTN: RICK DIMENT

CERTIFICATE A9828529

(OQN) - VICEROY EXPLORATION (CANADA), INC.

Project: 4340-03
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 31-AUG-1998.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	21	Geochem ring to approx 150 mesh
226	21	0-3 Kg crush and split
3202	21	Rock - save entire reject
229	21	ICP - AQ Digestion charge
* NOTE	1:	

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	21	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
2118	21	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
2119	21	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	21	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	21	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	21	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	21	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	21	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	21	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	500
2126	21	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	21	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	21	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	21	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	21	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
20	21	Hg ppb: HNO3-HCl digestion	AAS-FLAMELESS	10	100000
2132	21	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	21	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	21	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	21	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	21	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	21	Na %: 32 element, soil & rock	ICP-AES	0.01	10.00
2138	21	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	21	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	21	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	21	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	21	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	21	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	21	Ti %: 32 element, soil & rock	ICP-AES	0.01	10.00
2145	21	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	21	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	21	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	21	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	21	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000

Chemex Labs Ltd.

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Project : 4340-03
Comments: ATTN: RICK DIMENT

Page : 1-A
Total : 1
Certificate Date: 31-AUG-1998
Invoice No. : I9828529
P.O. Number :
Account : OQN

CERTIFICATE OF ANALYSIS A9828529

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
WL 2	205	226	15	< 0.2	0.24	38	10	1.5	< 2	0.01	< 0.5	45	1120	9	2.54	< 10	< 10	< 0.01	< 10	2.82	245
WL 3	205	226	< 5	< 0.2	0.17	34	20	0.5	< 2	< 0.01	< 0.5	28	525	4	2.97	< 10	< 10	< 0.01	< 10	2.94	260
WL 4	205	226	< 5	< 0.2	0.13	10	10	0.5	< 2	< 0.01	< 0.5	18	382	7	1.37	< 10	< 10	< 0.01	< 10	1.63	250
WL 5	205	226	70	< 0.2	0.13	40	10	< 0.5	< 2	0.01	< 0.5	24	578	2	2.23	< 10	< 10	< 0.01	< 10	2.21	375
WL 6	205	226	< 5	< 0.2	0.34	20	10	0.5	< 2	< 0.01	< 0.5	59	928	4	3.61	< 10	< 10	< 0.01	< 10	9.42	300
WL 7	205	226	< 10	< 0.2	0.28	8	160	< 0.5	< 2	0.03	< 0.5	41	1145	< 1	3.18	< 10	< 10	< 0.01	< 10	3.70	1830
WL 8	205	226	< 5	< 0.2	0.24	6	90	< 0.5	< 2	0.03	< 0.5	38	1105	< 1	2.89	< 10	< 10	< 0.01	< 10	3.45	1420
WL 9	205	226	10	< 0.2	0.28	< 2	40	< 0.5	< 2	0.03	< 0.5	38	1210	< 1	3.72	< 10	< 10	< 0.01	< 10	3.82	895
WL 10	205	226	< 5	< 0.2	0.16	6	40	< 0.5	< 2	0.04	< 0.5	50	941	< 1	3.83	< 10	< 10	< 0.01	< 10	5.44	1160
WL 11	205	226	< 5	< 0.2	0.30	8	80	< 0.5	< 2	0.03	< 0.5	59	966	5	4.82	< 10	< 10	< 0.01	< 10	4.15	1545
WL 12	205	226	55	< 0.2	0.12	< 2	10	< 0.5	< 2	0.01	< 0.5	29	1200	4	4.19	< 10	< 10	< 0.01	< 10	1.66	395
WL 13	205	226	< 5	< 0.2	0.06	< 2	< 10	< 0.5	< 2	0.03	< 0.5	36	1520	1	4.17	< 10	< 10	< 0.01	< 10	5.08	520
WL 14	205	226	45	< 0.2	0.06	< 2	90	< 0.5	< 2	< 0.01	< 0.5	20	187	2	0.76	< 10	< 10	< 0.01	< 10	0.31	760
WL 15	205	226	< 5	< 0.2	0.36	24	40	0.5	< 2	0.01	< 0.5	49	788	3	2.55	< 10	< 10	< 0.01	< 10	3.51	605
WL 15A	205	226	< 5	< 0.2	0.23	14	10	< 0.5	< 2	< 0.01	< 0.5	34	530	9	2.00	< 10	< 10	< 0.01	< 10	2.56	445
WL 15B	205	226	< 5	< 0.2	0.06	< 2	10	< 0.5	< 2	< 0.01	< 0.5	8	89	3	0.36	< 10	< 10	< 0.01	< 10	0.30	220
WL 16	205	226	< 5	< 0.2	0.17	32	20	< 0.5	< 2	< 0.01	< 0.5	22	471	3	2.79	< 10	< 10	< 0.01	< 10	1.74	325
WL 17	205	226	< 5	< 0.2	0.27	20	40	0.5	< 2	< 0.01	< 0.5	58	1080	5	2.85	< 10	< 10	< 0.01	< 10	4.74	800
WL 18	205	226	< 5	< 0.2	0.04	2	10	< 0.5	< 2	0.02	< 0.5	7	161	2	0.29	< 10	< 10	< 0.01	< 10	0.22	135
WL 19	205	226	< 5	< 0.2	0.05	< 2	30	< 0.5	< 2	< 0.01	< 0.5	7	170	2	0.37	< 10	< 10	< 0.01	< 10	0.27	265
WL 20	205	226	< 5	< 0.2	0.12	10	50	0.5	< 2	0.04	< 0.5	41	433	1	3.01	< 10	< 10	< 0.01	< 10	7.76	1220

CERTIFICATION: Hartfichler

Chemex Labs Ltd.

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Total : 1
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P.O. Number :
Account : OQN

CERTIFICATE OF ANALYSIS A9828529

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
WL 2	205	226	< 1	< 0.01	795	60	16	< 2	4	< 1	< 0.01	< 10	< 10	16	< 10	42
WL 3	205	226	1	< 0.01	455	30	6	< 2	2	< 1	< 0.01	< 10	< 10	11	< 10	16
WL 4	205	226	1	< 0.01	333	20	8	< 2	1	< 1	< 0.01	< 10	< 10	6	< 10	12
WL 5	205	226	< 1	< 0.01	288	40	< 2	< 2	5	< 1	< 0.01	< 10	< 10	4	< 10	16
WL 6	205	226	< 1	< 0.01	1085	10	2	2	6	< 1	< 0.01	< 10	< 10	25	< 10	32
WL 7	205	226	< 1	< 0.01	368	90	2	< 2	4	< 1	< 0.01	< 10	< 10	16	< 10	64
WL 8	205	226	< 1	< 0.01	330	100	2	< 2	6	< 1	< 0.01	< 10	< 10	13	< 10	40
WL 9	205	226	< 1	< 0.01	332	50	2	< 2	7	< 1	< 0.01	< 10	< 10	22	< 10	24
WL 10	205	226	< 1	< 0.01	370	70	4	2	8	1	< 0.01	< 10	< 10	18	< 10	58
WL 11	205	226	< 1	< 0.01	357	90	6	< 2	6	1	< 0.01	< 10	< 10	27	< 10	100
WL 12	205	226	< 1	< 0.01	272	20	< 2	< 2	4	< 1	< 0.01	< 10	< 10	38	< 10	16
WL 13	205	226	< 1	< 0.01	444	10	< 2	< 2	2	< 1	< 0.01	< 10	< 10	23	< 10	8
WL 14	205	226	1	< 0.01	117	30	2	< 2	< 1	< 1	< 0.01	< 10	< 10	5	< 10	8
WL 15	205	226	< 1	< 0.01	666	50	< 2	< 2	5	1	< 0.01	< 10	< 10	19	< 10	24
WL 15A	205	226	< 1	< 0.01	585	40	< 2	< 2	3	< 1	< 0.01	< 10	< 10	16	< 10	16
WL 15B	205	226	< 1	< 0.01	148	10	< 2	< 2	< 1	< 1	< 0.01	< 10	< 10	3	< 10	8
WL 16	205	226	3	< 0.01	439	50	< 2	< 2	1	< 1	< 0.01	< 10	< 10	12	< 10	18
WL 17	205	226	< 1	< 0.01	877	50	< 2	< 2	5	< 1	< 0.01	< 10	< 10	17	< 10	40
WL 18	205	226	3	< 0.01	87	10	< 2	2	< 1	< 1	< 0.01	< 10	< 10	2	< 10	8
WL 19	205	226	< 1	< 0.01	87	20	< 2	< 2	< 1	< 1	< 0.01	< 10	< 10	2	< 10	8
WL 20	205	226	< 1	< 0.01	402	60	2	< 2	3	1	< 0.01	< 10	< 10	9	< 10	22

CERTIFICATION: Ian Fischer

APPENDIX 3

Rock Sample Descriptions (all samples are float)

Sample Number	Description
WL2	felsic volcanics + chalcedony stringers
WL3	greenish quartz with sulphide stringers
WL4	large angular complex rock
WL5	similar to WL2
WL6	felsic volcanics, large chalcednony vein + chalcedony stringers
WL7	felsic volcanics with Mn stain and sulphides
WL8	similar to WL7
WL9	similar to WL7
WL10	felsic volcanics + sulphides
WL11	similar to WL10
WL14	very strange quartz, many holes and some sulphides
WL15	large rock, nice sulphides, few as chunks in a small area
WL15a	large rock, nice sulphides, few as chunks in a small area
WL15b	large rock, nice sulphides, few as chunks in a small area
WL16	interesting quartz, with holes and sulphides (brown and orange)
WL17	felsic volcanics + chalcedony stringers
WL18	interesting quartz - white, with holes and almost no sulphides
WL19	interesting quartz, blue and white zones, orange and brown zones
WL20	felsic volcanics and crumbly blue zones

APPENDIX 4

Silt Geochemistry - Assay Results

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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VICEROY EXPLORATION (CANADA), INC

20 MACDONALD RD.
WHITEHORSE, YT
Y1A 4L2

A9828520

Comments: ATTN: RICK DIMENT

CERTIFICATE A9828520

(OQN) - VICEROY EXPLORATION (CANADA), INC.

Project: 4340-03
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 29-AUG-1998.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	2	Dry, sieve to -80 mesh
202	2	save reject
229	2	ICP - AQ Digestion charge
* NOTE	1:	

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	2	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
100	0	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
2118	2	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
2119	2	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	2	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	2	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	2	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	2	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	2	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	2	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	500
2126	2	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	2	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	2	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	2	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	2	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
20	2	Hg ppb: HNO3-HCl digestion	AAS-FLAMELESS	10	100000
2132	2	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	2	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	2	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	2	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	2	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	2	Na %: 32 element, soil & rock	ICP-AES	0.01	10.00
2138	2	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	2	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	2	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	2	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	2	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	2	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	2	Ti %: 32 element, soil & rock	ICP-AES	0.01	10.00
2145	2	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	2	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	2	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	2	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	2	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000

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Project : 4340-03
Comments: ATTN: RICK DIMENT

Page : 1-A
Total : 1
Certificate Date: 29-AUG-1998
Invoice No. : I9828520
P.O. Number :
Account : OQN

CERTIFICATE OF ANALYSIS A9828520

SAMPLE	PREP CODE		Au ppb FA+AA	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %
WS-1	201	202	< 5	-----	< 0.2	1.40	18	290	< 0.5	< 2	0.16	1.0	95	619	15	4.55	< 10	40	0.05	< 10	1.99
WS-2	201	202	300	-----	< 0.2	1.29	28	110	< 0.5	< 2	0.15	< 0.5	35	1065	14	4.94	< 10	20	0.04	< 10	2.27

CERTIFICATION:

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Total : 1
Certificate Date: 29-AUG-1998
Invoice No. : I9828520
P.O. Number :
Account : OQN

CERTIFICATE OF ANALYSIS A9828520

SAMPLE	PREP CODE		Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
WS-1	201	202	5340	< 1	0.01	519	1480	8	< 2	1	16	0.01	< 10	< 10	43	< 10	136
WS-2	201	202	930	< 1	0.01	532	940	6	< 2	4	12	0.03	< 10	< 10	47	< 10	120

CERTIFICATION:

APPENDIX 5

Soil Geochemistry - Assay Results

Chemex Labs Ltd.

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Comments: ATTN: RICK DIMENT

CERTIFICATE A9828522

(OQN) - VICEROY EXPLORATION (CANADA), INC.

Project: 4340-03
P.O. # :

Samples submitted to our lab in Vancouver, BC.
This report was printed on 29-AUG-1998.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	59	Dry, sieve to -80 mesh
202	59	save reject
229	59	ICP - AQ Digestion charge
* NOTE	1:	

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	59	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
100	0	Au ppb: Fuse 10 g sample	FA-AAS	5	10000
2118	59	Ag ppm: 32 element, soil & rock	ICP-AES	0.2	100.0
2119	59	Al %: 32 element, soil & rock	ICP-AES	0.01	15.00
2120	59	As ppm: 32 element, soil & rock	ICP-AES	2	10000
2121	59	Ba ppm: 32 element, soil & rock	ICP-AES	10	10000
2122	59	Be ppm: 32 element, soil & rock	ICP-AES	0.5	100.0
2123	59	Bi ppm: 32 element, soil & rock	ICP-AES	2	10000
2124	59	Ca %: 32 element, soil & rock	ICP-AES	0.01	15.00
2125	59	Cd ppm: 32 element, soil & rock	ICP-AES	0.5	500
2126	59	Co ppm: 32 element, soil & rock	ICP-AES	1	10000
2127	59	Cr ppm: 32 element, soil & rock	ICP-AES	1	10000
2128	59	Cu ppm: 32 element, soil & rock	ICP-AES	1	10000
2150	59	Fe %: 32 element, soil & rock	ICP-AES	0.01	15.00
2130	59	Ga ppm: 32 element, soil & rock	ICP-AES	10	10000
20	59	Hg ppb: HNO3-HCl digestion	AAS-FLAMELESS	10	100000
2132	59	K %: 32 element, soil & rock	ICP-AES	0.01	10.00
2151	59	La ppm: 32 element, soil & rock	ICP-AES	10	10000
2134	59	Mg %: 32 element, soil & rock	ICP-AES	0.01	15.00
2135	59	Mn ppm: 32 element, soil & rock	ICP-AES	5	10000
2136	59	Mo ppm: 32 element, soil & rock	ICP-AES	1	10000
2137	59	Na %: 32 element, soil & rock	ICP-AES	0.01	10.00
2138	59	Ni ppm: 32 element, soil & rock	ICP-AES	1	10000
2139	59	P ppm: 32 element, soil & rock	ICP-AES	10	10000
2140	59	Pb ppm: 32 element, soil & rock	ICP-AES	2	10000
2141	59	Sb ppm: 32 element, soil & rock	ICP-AES	2	10000
2142	59	Sc ppm: 32 elements, soil & rock	ICP-AES	1	10000
2143	59	Sr ppm: 32 element, soil & rock	ICP-AES	1	10000
2144	59	Ti %: 32 element, soil & rock	ICP-AES	0.01	10.00
2145	59	Tl ppm: 32 element, soil & rock	ICP-AES	10	10000
2146	59	U ppm: 32 element, soil & rock	ICP-AES	10	10000
2147	59	V ppm: 32 element, soil & rock	ICP-AES	1	10000
2148	59	W ppm: 32 element, soil & rock	ICP-AES	10	10000
2149	59	Zn ppm: 32 element, soil & rock	ICP-AES	2	10000

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Total : 2
Certificate Date: 29-AUG-1998
Invoice No. : I9828522
P.O. Number :
Account : OQN

CERTIFICATE OF ANALYSIS A9828522

SAMPLE	PREP CODE		Au ppb FA+AA	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %
A	201	202	< 5	-----	< 0.2	3.32	12	80	< 0.5	< 2	0.22	< 0.5	24	244	52	3.88	< 10	10	0.15	< 10	1.66
A+150SE	201	202	< 5	-----	< 0.2	2.36	8	60	< 0.5	< 2	0.14	< 0.5	17	271	29	3.82	< 10	< 10	0.07	< 10	1.15
A+300SE	201	202	< 5	-----	< 0.2	2.60	6	70	< 0.5	2	0.18	< 0.5	23	345	33	4.45	< 10	10	0.07	< 10	1.46
A+450SE	201	202	< 5	-----	< 0.2	1.05	8	40	< 0.5	< 2	0.09	< 0.5	33	1270	22	4.57	< 10	10	0.03	< 10	1.29
A+600SE	201	202	< 5	-----	< 0.2	1.57	6	60	< 0.5	< 2	0.15	< 0.5	19	377	14	3.58	< 10	< 10	0.04	10	1.41
A+750SE	201	202	< 5	-----	< 0.2	1.20	10	50	< 0.5	< 2	0.07	< 0.5	34	963	9	4.67	< 10	< 10	0.03	< 10	1.03
A+900SE	201	202	105	-----	< 0.2	0.93	6	40	< 0.5	< 2	0.05	< 0.5	32	855	9	3.57	< 10	< 10	0.02	< 10	1.18
A+1050SE	201	202	175	-----	< 0.2	1.24	8	60	< 0.5	< 2	0.08	< 0.5	53	1135	13	6.12	< 10	< 10	0.03	< 10	1.38
A+1200SE	201	202	20	-----	< 0.2	1.74	18	100	0.5	< 2	0.06	< 0.5	39	508	10	5.04	< 10	10	0.06	10	1.02
A+1350SE	201	202	10	-----	< 0.2	1.61	40	120	0.5	< 2	0.08	< 0.5	82	848	18	7.30	< 10	< 10	0.04	10	2.28
B	201	202	80	-----	< 0.2	1.41	20	90	< 0.5	< 2	0.09	< 0.5	45	640	11	4.95	< 10	10	0.04	10	1.34
B+150SE	201	202	125	-----	< 0.2	1.03	22	70	< 0.5	< 2	0.08	< 0.5	37	683	10	4.04	< 10	< 10	0.04	10	1.00
B+300SE	201	202	50	-----	< 0.2	1.09	8	80	< 0.5	< 2	0.09	< 0.5	53	846	19	5.78	< 10	< 10	0.05	10	1.55
B+450SE	201	202	10	-----	< 0.2	1.50	10	80	< 0.5	< 2	0.11	< 0.5	24	495	13	3.86	< 10	< 10	0.05	10	0.90
B+600SE	201	202	755	-----	< 0.2	1.71	88	130	0.5	< 2	0.07	< 0.5	130	1215	20	12.05	< 10	30	0.04	< 10	1.77
B+750SE	201	202	105	-----	< 0.2	1.20	88	90	< 0.5	< 2	0.08	< 0.5	37	687	15	4.98	< 10	< 10	0.04	10	1.04
B+900SE	201	202	70	-----	< 0.2	1.13	36	50	< 0.5	< 2	0.08	< 0.5	29	632	12	3.90	< 10	< 10	0.03	10	0.78
B+1050SE	201	202	< 5	-----	< 0.2	1.22	4	60	< 0.5	< 2	0.09	< 0.5	15	547	8	2.85	< 10	< 10	0.04	10	0.82
B+1200SE	201	202	400	-----	< 0.2	1.18	6	60	< 0.5	< 2	0.10	< 0.5	13	515	6	2.42	< 10	< 10	0.03	10	0.93
B+1350SE	201	202	< 5	-----	< 0.2	1.74	14	70	< 0.5	< 2	0.14	< 0.5	20	613	24	3.17	< 10	< 10	0.03	10	1.55
C+75SE	201	202	60	-----	< 0.2	1.97	8	70	< 0.5	< 2	0.09	< 0.5	13	248	20	2.73	< 10	< 10	0.04	10	0.91
C+225SE	201	202	< 5	-----	< 0.2	2.70	6	60	< 0.5	< 2	0.09	< 0.5	18	199	117	3.16	< 10	< 10	0.04	10	1.45
C+375SE	201	202	< 5	-----	< 0.2	2.53	< 2	70	< 0.5	< 2	0.09	< 0.5	14	163	45	2.80	< 10	< 10	0.04	10	1.15
C+525SE	201	202	< 5	-----	< 0.2	2.11	2	110	< 0.5	< 2	0.16	< 0.5	15	157	34	2.79	< 10	< 10	0.05	10	1.27
C+675SE	201	202	< 5	-----	< 0.2	2.21	< 2	70	< 0.5	< 2	0.15	< 0.5	14	184	40	2.92	< 10	10	0.04	10	1.17
C+825SE	201	202	< 5	-----	< 0.2	1.93	4	80	< 0.5	< 2	0.21	< 0.5	20	343	46	3.04	< 10	< 10	0.02	10	1.78
C+975SE	201	202	< 5	-----	< 0.2	1.86	8	80	< 0.5	< 2	0.15	< 0.5	19	277	37	2.70	< 10	< 10	0.03	10	1.47
C+1125SE	201	202	< 5	-----	< 0.2	1.97	8	50	< 0.5	< 2	0.09	< 0.5	9	164	18	1.89	< 10	< 10	0.03	10	0.79
C+1275SE	201	202	< 5	-----	< 0.2	2.09	8	70	< 0.5	< 2	0.11	< 0.5	13	219	29	2.52	< 10	10	0.03	10	1.08
D	201	202	5	-----	< 0.2	3.75	8	120	< 0.5	< 2	0.11	< 0.5	12	198	52	3.01	< 10	< 10	0.05	10	1.02
D+150SE	201	202	< 5	-----	< 0.2	1.92	12	90	< 0.5	< 2	0.17	< 0.5	13	216	34	2.33	< 10	< 10	0.03	10	1.23
D+300SE	201	202	< 5	-----	< 0.2	2.23	< 2	70	< 0.5	< 2	0.10	< 0.5	7	128	17	1.68	< 10	10	0.04	20	0.63
D+450SE	201	202	< 5	-----	< 0.2	2.36	2	100	< 0.5	< 2	0.16	< 0.5	15	212	30	2.71	< 10	10	0.05	20	1.12
D+600SE	201	202	< 5	-----	< 0.2	2.56	10	90	< 0.5	< 2	0.11	< 0.5	8	131	18	2.30	< 10	20	0.06	20	0.65
D+750SE	201	202	< 5	-----	< 0.2	1.60	< 2	80	< 0.5	< 2	0.13	< 0.5	18	339	27	2.51	< 10	< 10	0.02	10	1.40
D+900SE	201	202	< 5	-----	< 0.2	2.47	< 2	70	< 0.5	< 2	0.11	< 0.5	10	158	19	2.52	< 10	< 10	0.04	10	0.68
D+1050SE	201	202	15	-----	< 0.2	2.04	10	80	< 0.5	< 2	0.12	< 0.5	23	372	27	2.92	< 10	10	0.03	10	1.33
D+1200SE	201	202	5	-----	< 0.2	1.86	6	60	< 0.5	< 2	0.07	< 0.5	9	205	13	2.19	< 10	10	0.03	10	0.70
D+1350SE	201	202	< 5	-----	< 0.2	1.36	2	100	< 0.5	< 2	0.14	< 0.5	17	257	19	2.43	< 10	< 10	0.03	20	1.04
E+75S	201	202	< 5	-----	< 0.2	1.76	10	70	< 0.5	< 2	0.09	< 0.5	10	195	15	2.19	< 10	20	0.04	10	0.82

CERTIFICATION:

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VICEROY EXPLORATION (CANADA), INC

20 MACDONALD RD.
WHITEHORSE, YT
Y1A 4L2

Project : 4340-03
Comments: ATTN: RICK DIMENT

Page : 1-B
Total : 2
Certificate Date: 29-AUG-1998
Invoice No. : I9828522
P.O. Number :
Account : OQN

CERTIFICATE OF ANALYSIS A9828522

SAMPLE	PREP CODE		Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
A	201	202	295	< 1	0.03	134	290	4	< 2	8	6	0.14	< 10	< 10	95	< 10	66
A+150SE	201	202	245	< 1	0.01	131	280	10	< 2	6	7	0.12	< 10	< 10	82	< 10	64
A+300SE	201	202	305	< 1	0.02	199	300	6	< 2	7	6	0.15	< 10	< 10	82	< 10	70
A+450SE	201	202	455	< 1	< 0.01	470	240	< 2	< 2	9	5	0.04	< 10	< 10	43	< 10	36
A+600SE	201	202	325	< 1	< 0.01	185	260	6	< 2	5	9	0.10	< 10	< 10	51	< 10	56
A+750SE	201	202	550	< 1	< 0.01	363	270	2	< 2	7	5	0.04	< 10	< 10	38	< 10	36
A+900SE	201	202	550	< 1	< 0.01	376	210	< 2	< 2	6	4	0.04	< 10	< 10	29	< 10	28
A+1050SE	201	202	1135	< 1	< 0.01	470	350	2	< 2	11	5	0.05	< 10	< 10	46	< 10	44
A+1200SE	201	202	1215	< 1	< 0.01	266	550	12	< 2	9	8	0.04	< 10	< 10	43	< 10	62
A+1350SE	201	202	2620	< 1	< 0.01	488	550	6	< 2	12	8	0.04	< 10	< 10	50	< 10	64
B	201	202	1225	< 1	< 0.01	315	400	8	< 2	9	8	0.05	< 10	< 10	45	< 10	56
B+150SE	201	202	820	< 1	< 0.01	321	230	2	< 2	7	7	0.04	< 10	< 10	33	< 10	42
B+300SE	201	202	1185	< 1	< 0.01	313	480	6	< 2	10	7	0.04	< 10	< 10	42	< 10	46
B+450SE	201	202	410	< 1	< 0.01	212	310	8	< 2	6	9	0.07	< 10	< 10	45	< 10	56
B+600SE	201	202	3590	< 1	< 0.01	624	1020	2	< 2	16	6	0.04	< 10	< 10	54	< 10	134
B+750SE	201	202	915	< 1	< 0.01	424	350	4	< 2	9	8	0.04	< 10	< 10	35	< 10	52
B+900SE	201	202	530	< 1	< 0.01	356	280	4	< 2	6	7	0.05	< 10	< 10	34	< 10	54
B+1050SE	201	202	210	< 1	< 0.01	167	180	6	< 2	4	9	0.06	< 10	< 10	37	< 10	48
B+1200SE	201	202	185	< 1	< 0.01	152	150	2	< 2	4	9	0.05	< 10	< 10	42	< 10	40
B+1350SE	201	202	305	< 1	0.01	186	140	4	< 2	6	9	0.04	< 10	< 10	72	< 10	46
C+75SE	201	202	145	< 1	< 0.01	91	210	4	< 2	4	9	0.05	< 10	< 10	64	< 10	50
C+225SE	201	202	210	< 1	< 0.01	80	190	2	< 2	5	7	0.05	< 10	< 10	72	< 10	48
C+375SE	201	202	225	< 1	< 0.01	71	230	6	< 2	4	9	0.05	< 10	< 10	57	< 10	48
C+525SE	201	202	300	< 1	< 0.01	80	240	2	< 2	5	12	0.07	< 10	< 10	58	< 10	54
C+675SE	201	202	245	< 1	< 0.01	99	280	6	< 2	4	11	0.07	< 10	< 10	58	< 10	58
C+825SE	201	202	340	< 1	< 0.01	183	140	2	< 2	6	10	0.08	< 10	< 10	67	< 10	42
C+975SE	201	202	295	< 1	< 0.01	155	160	2	< 2	5	10	0.06	< 10	< 10	55	< 10	46
C+1125SE	201	202	125	< 1	< 0.01	70	200	6	< 2	3	8	0.05	< 10	< 10	44	< 10	32
C+1275SE	201	202	235	< 1	< 0.01	114	180	6	< 2	4	9	0.05	< 10	< 10	48	< 10	46
D	201	202	180	< 1	< 0.01	154	380	6	< 2	5	10	0.06	< 10	< 10	58	< 10	56
D+150SE	201	202	210	< 1	< 0.01	103	100	2	< 2	4	12	0.07	< 10	< 10	47	< 10	42
D+300SE	201	202	120	< 1	< 0.01	51	320	6	< 2	1	11	0.04	< 10	< 10	40	< 10	34
D+450SE	201	202	255	< 1	< 0.01	113	210	6	2	5	13	0.07	< 10	< 10	49	< 10	56
D+600SE	201	202	160	< 1	< 0.01	65	310	6	< 2	3	11	0.05	< 10	< 10	43	< 10	50
D+750SE	201	202	265	< 1	< 0.01	219	110	4	< 2	4	10	0.06	< 10	< 10	40	< 10	40
D+900SE	201	202	170	1	< 0.01	90	440	6	< 2	3	9	0.04	< 10	< 10	35	< 10	60
D+1050SE	201	202	300	< 1	< 0.01	252	230	6	< 2	4	10	0.05	< 10	< 10	43	< 10	52
D+1200SE	201	202	145	< 1	< 0.01	99	250	2	< 2	3	7	0.04	< 10	< 10	34	< 10	42
D+1350SE	201	202	275	< 1	< 0.01	177	140	4	< 2	3	12	0.06	< 10	< 10	35	< 10	46
E+75S	201	202	160	< 1	< 0.01	104	230	6	< 2	3	8	0.05	< 10	< 10	39	< 10	44

CERTIFICATION: Hawthuchler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

VICEROY EXPLORATION (CANADA), INC

20 MACDONALD RD.
WHITEHORSE, YT
Y1A 4L2

Project : 4340-03
Comments: ATTN: RICK DIMENT

Page : 2-A
Total : 2
Certificate Date: 29-AUG-1998
Invoice No. : I9828522
P.O. Number :
Account : OQN

CERTIFICATE OF ANALYSIS A9828522

SAMPLE	PREP CODE		Au ppb FA+AA	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %
E+225S	201	202	< 5	-----	< 0.2	1.22	4	110	< 0.5	< 2	0.17	< 0.5	20	340	15	2.64	< 10	< 10	0.04	20	1.43
E+375S	201	202	10	-----	< 0.2	1.38	6	80	< 0.5	< 2	0.11	< 0.5	15	289	11	2.20	< 10	< 10	0.03	10	1.30
E+525S	201	202	< 5	-----	< 0.2	1.97	8	90	< 0.5	< 2	0.10	< 0.5	13	256	13	3.05	< 10	10	0.05	20	1.07
E+675S	201	202	< 5	-----	< 0.2	2.15	8	110	< 0.5	< 2	0.12	< 0.5	18	139	16	2.80	< 10	10	0.07	20	0.83
E+825S	201	202	< 5	-----	< 0.2	2.23	6	100	< 0.5	< 2	0.14	< 0.5	16	202	17	2.96	< 10	30	0.06	10	0.97
E+975S	201	202	5	-----	< 0.2	1.44	6	130	< 0.5	< 2	0.16	< 0.5	18	348	21	2.73	< 10	< 10	0.03	30	1.44
E+1125S	201	202	40	-----	< 0.2	2.05	4	90	< 0.5	< 2	0.11	< 0.5	14	214	16	2.43	< 10	10	0.05	10	1.04
E+1275S	201	202	< 5	-----	< 0.2	1.37	8	80	< 0.5	< 2	0.11	< 0.5	16	274	19	2.18	< 10	< 10	0.02	10	1.19
E+1425S	201	202	< 5	-----	< 0.2	1.33	6	80	< 0.5	< 2	0.12	< 0.5	21	355	22	2.51	< 10	< 10	0.02	10	1.44
E+1575S	201	202	< 5	-----	< 0.2	1.38	4	70	< 0.5	< 2	0.09	< 0.5	9	197	10	1.79	< 10	< 10	0.03	10	0.85
E+1725S	201	202	< 5	-----	< 0.2	1.41	8	90	< 0.5	< 2	0.13	< 0.5	17	248	23	2.32	< 10	< 10	0.03	10	1.17
E+1875S	201	202	< 5	-----	< 0.2	1.29	2	90	< 0.5	< 2	0.16	< 0.5	21	377	29	2.63	< 10	< 10	0.03	10	1.55
E+2025S	201	202	< 5	-----	< 0.2	1.57	2	50	< 0.5	< 2	0.10	< 0.5	9	192	29	1.83	< 10	< 10	0.03	10	0.96
E+2175S	201	202	< 5	-----	< 0.2	2.55	10	80	< 0.5	< 2	0.12	< 0.5	21	331	75	2.84	< 10	10	0.04	10	2.05
E+2325S	201	202	< 5	-----	< 0.2	2.01	< 2	50	< 0.5	< 2	0.10	< 0.5	16	281	52	2.35	< 10	< 10	0.02	10	1.80
E+2475S	201	202	< 5	-----	< 0.2	3.47	6	100	< 0.5	< 2	0.07	< 0.5	12	241	95	2.84	< 10	20	0.05	10	1.35
E+2625S	201	202	< 5	-----	< 0.2	2.73	8	80	< 0.5	< 2	0.10	< 0.5	11	166	65	2.25	< 10	10	0.03	10	1.13
E+2775S	201	202	< 5	-----	< 0.2	4.16	6	130	< 0.5	< 2	0.11	< 0.5	19	322	172	2.99	< 10	20	0.03	< 10	2.15
E+2925S	201	202	5	-----	< 0.2	3.17	< 2	80	< 0.5	< 2	0.11	< 0.5	12	174	53	2.51	< 10	20	0.05	10	1.31

CERTIFICATION: Hawthornthwaite

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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Page : 2-B
Total : 2
Certificate Date: 29-AUG-1998
Invoice No. : I9828522
P.O. Number :
Account : OQN

CERTIFICATE OF ANALYSIS A9828522

SAMPLE	PREP CODE		Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
E+225S	201	202	305	< 1	< 0.01	249	160	6	< 2	3	15	0.06	< 10	< 10	35	< 10	48
E+375S	201	202	215	< 1	< 0.01	192	150	8	< 2	3	11	0.05	< 10	< 10	36	< 10	42
E+525S	201	202	225	< 1	< 0.01	141	250	4	< 2	3	11	0.06	< 10	< 10	46	< 10	68
E+675S	201	202	235	< 1	< 0.01	164	310	8	< 2	3	12	0.05	< 10	< 10	39	< 10	76
E+825S	201	202	205	< 1	< 0.01	162	370	6	< 2	4	12	0.05	< 10	< 10	43	< 10	62
E+975S	201	202	305	< 1	< 0.01	244	120	6	< 2	4	15	0.07	< 10	< 10	40	< 10	52
E+1125S	201	202	170	< 1	< 0.01	164	310	6	< 2	3	11	0.05	< 10	< 10	40	< 10	52
E+1275S	201	202	225	< 1	< 0.01	188	140	6	< 2	3	9	0.04	< 10	< 10	34	< 10	40
E+1425S	201	202	300	< 1	< 0.01	271	120	6	< 2	3	10	0.05	< 10	< 10	35	< 10	40
E+1575S	201	202	150	< 1	< 0.01	115	170	6	< 2	2	9	0.04	< 10	< 10	33	< 10	36
E+1725S	201	202	250	< 1	< 0.01	190	130	6	< 2	3	12	0.05	< 10	< 10	35	< 10	48
E+1875S	201	202	300	< 1	< 0.01	258	150	4	< 2	3	13	0.06	< 10	< 10	39	< 10	42
E+2025S	201	202	155	< 1	< 0.01	96	190	6	< 2	3	9	0.04	< 10	< 10	34	< 10	36
E+2175S	201	202	225	< 1	< 0.01	275	200	2	< 2	4	10	0.04	< 10	< 10	44	< 10	48
E+2325S	201	202	225	< 1	< 0.01	117	60	< 2	< 2	3	8	0.05	< 10	< 10	43	< 10	40
E+2475S	201	202	170	1	< 0.01	114	230	8	< 2	4	8	0.04	< 10	< 10	59	< 10	54
E+2625S	201	202	155	< 1	< 0.01	78	290	2	< 2	3	8	0.04	< 10	< 10	41	< 10	42
E+2775S	201	202	210	< 1	0.01	164	220	< 2	< 2	5	6	0.05	< 10	< 10	62	< 10	46
E+2925S	201	202	205	< 1	< 0.01	78	290	8	< 2	5	9	0.05	< 10	< 10	51	< 10	48

YUKON ENERGY, MINES
& RESOURCES LIBRARY
P.O. Box 2703
Whitehorse, Yukon Y1A 2C6

CERTIFICATION: Hawthornthwaite

Summary of Work
Stewart River Area
Yukon Territory, N.T.S. 115 P/8

for

Yukon Mining Incentives Program
Economic Development
Government of the Yukon
Box 2703, Whitehorse, Yukon Y1A 2C6

File Number 98-016

John Peter Ross, Prospector
November, 1998

TABLE OF CONTENTS

LIST OF FIGURES

Appendices

Chapter One: INTRODUCTION

1.1 Introductory Statement

The Stewart River (ET claim group) area, map sheet 115 P/8, was chosen because;

1. Discussions with Ken Galambos, Mineral Development Geologist (Yukon Geology Program) has made me aware of the potential of the area.
2. One can drive to the area on a 2-wheel drive highway.
3. Yukon MINFILE #42, McGuinty, suggests a possible gold deposit is present. Three streams ran 124 ppb Au, 102 ppb Au, 273 ppb Au in -200 mesh silt samples; 103 ppb Au, 2665 ppb Au, 1438 ppb Au in pan concentrate samples.
4. The area is at the southeast end of a 25 km trend of linears (northwest to southeast). To the southeast of the Stewart River, the trend bends (?).
5. The Geology and mineralization may be similar to the Brewery Creek deposit.
6. Most of the economic placer gold bar deposits on the Stewart River are found downstream of this location. (Bob Stirling, personal communication).

1.2 Location and Access

Access was by truck on an all-season road (Silver Trail) about 15 miles northeast of Stewart Crossing.

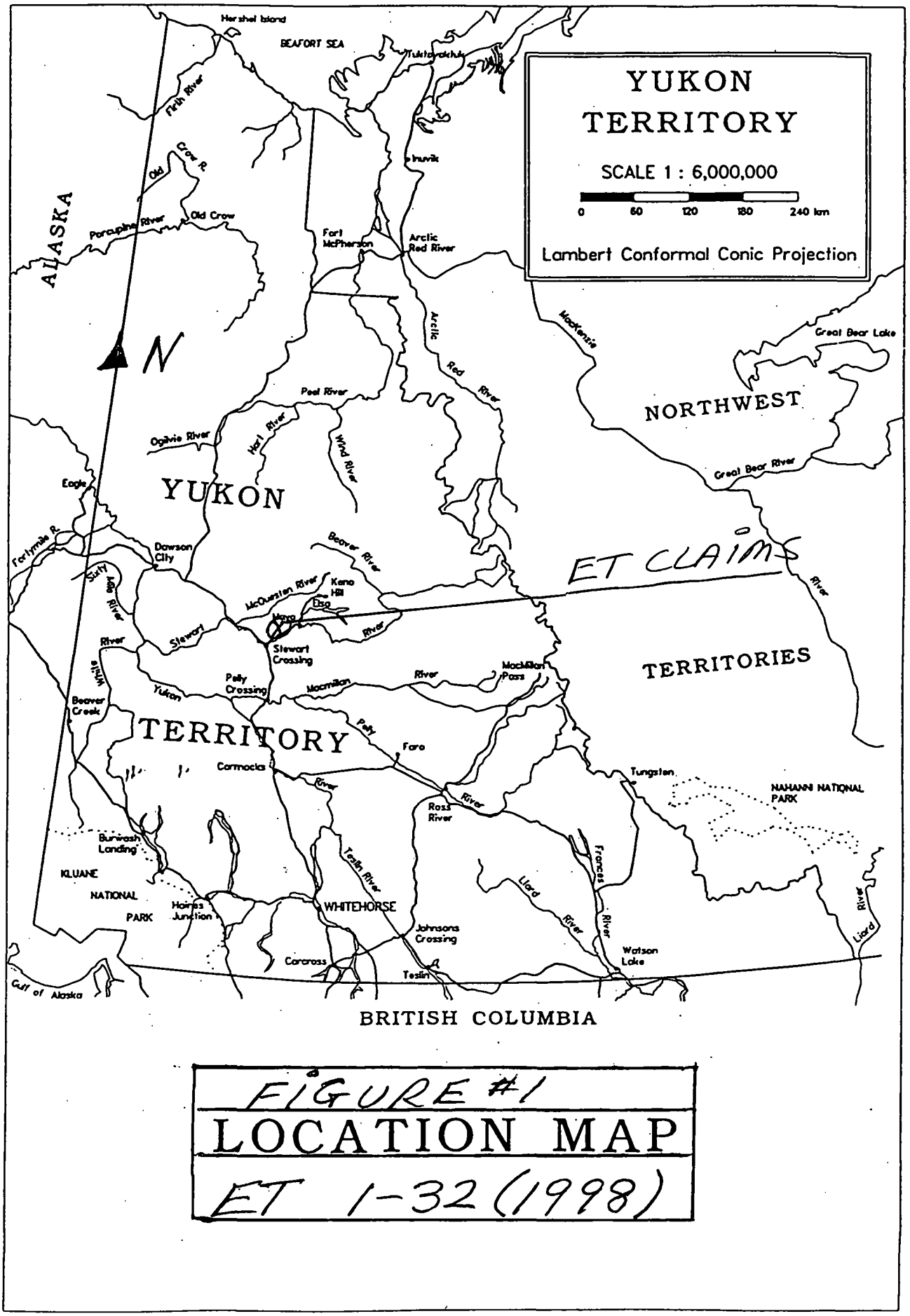

FIGURE #1

LOCATION MAP

ET 1-32 (1998)

WHITEHORSE 5 AUG 98

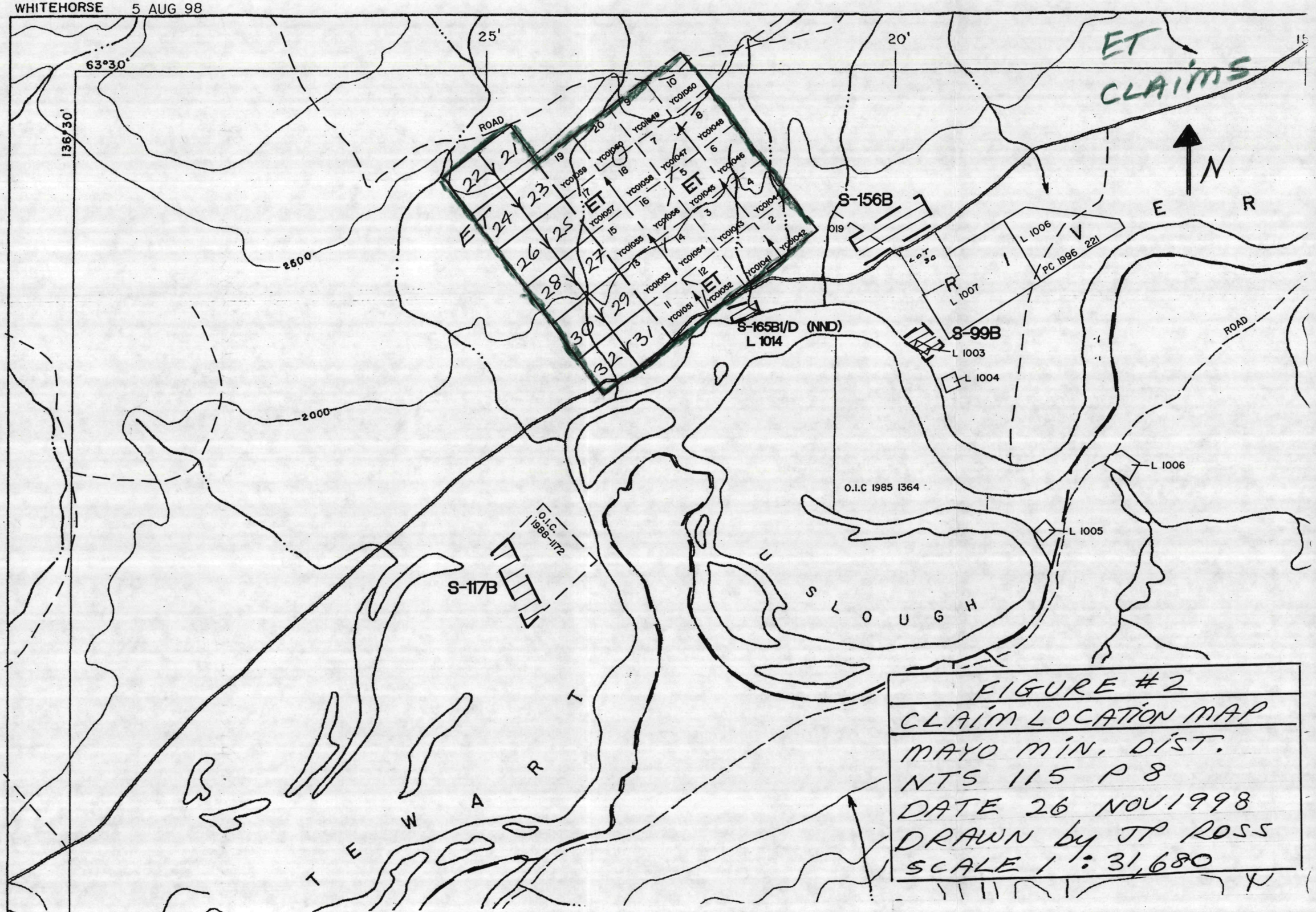

FIGURE #2

CLAIM LOCATION MAP

MAYO MIN. DIST.

NTS 115 P 8

DATE 26 NOV 1998

DRAWN by JP ROSS

SCALE 1 : 31,680

25'

20'

N

ROAD

2500

2000

ET

ET42

ET22,25,26,48,50,51

ET 28,30,33,34,36

ET11

ET6

S-156B

S-165B1/D (NND)
L 1014

LOT 30

FIGURE # 3
FLOAT SAMPLE LOCATION
MAYO MIN. DIST.
NTS 115 P 8
• FLOAT SAMPLE
DATE 26 NOV 1998
DRAWN by JP ROSS
SCALE 1 : 15,840

25'

20'

N

ROAD

2500

2000

21

22

23

24

25

26

27

28

29

30

31

32

ET

mm3

mm2

mm1

19

20

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

YC01059

YC01060

YC01057

YC01058

YC01055

YC01056

YC01053

YC01054

YC01051

YC01052

YC01049

YC01050

YC01047

YC01048

YC01045

YC01046

YC01043

YC01044

YC01041

YC01042

S-156B

019

LOT 30

R

L 10

S-

L 1(

S-165B1/D (NND)

L 1014

FIGURE #4

MOSS MAT SAMPLE LOCATION

MAYO MIN. DIST.

NTS 115 P 8

● MOSS MAT SAMPLE

DATE 26 NOV 1998

DRAWN by JP ROSS

SCALE 1: 15,840

25'

20'

N

ROAD

2600

2000

21

22

23

24

25

26

27

28

29

30

31

32

19

20

17

18

15

16

13

14

11

12

10

9

8

7

6

5

4

3

2

1

ET

YC01059

YC01060

YC01049

YC01050

YC01048

YC01047

YC01058

YC01057

YC01056

YC01046

YC01045

YC01044

YC01043

YC01042

YC01055

YC01054

YC01053

YC01041

YC01052

YC01051

S6

S5

S4

S3

S2

S1

ES2

ES1

S-156B

019

LOT 30

R

L 10

S-165B1/D (NND)

L 1014

FIGURE #5

SILT SAMPLE LOCATION

MAYO MIN. DIST.

NTS 115 P 8

● SILT SAMPLE

DATE 26 NOV 1998

DRAWN by JP ROSS

SCALE 1:15,840

Chapter Two: SUMMARY

The ET 1-20 and ET 21-32 claims were staked and recorded by J.P. Ross.

On the second trip; fourteen (14) rock samples (12 bedrock and 2 float rock), three (3) moss mat, and eight (8) silt samples were taken and tested. All of the analyses were paid for by Viceroy Resource Corporation in return for a right of first refusal on the claims.

All of the rock samples ran <5 ppb Au. The 3 moss mat samples ran, 75 ppb Au, 10 ppb Au, 30 ppb Au.

All of the silt samples were highly anomalous, ranging from 175 ppb Au to 2550 ppb Au.

Dates worked in 1998 were April 23-30, May 1-4, August 19-31 and September 1-12.

Chapter Three: GEOCHEMICAL SURVEY

3.1 Soil Geochemistry

No soil samples were taken.

3.1 Rock Geochemistry

Fourteen (14) rocks were tested for Au 30g fire assay and 32 element ICP. All rocks returned very low gold values (<5 ppb Au). Sample locations were marked with flagging tape ± paint.

3.3 Moss Mat Geochemistry

Three (3) moss mat samples were taken. MM1 at 0+000 feet (bottom of stream), MM2 at 0+500' upstream and MM3 at 0+1000'. It was quite difficult to get samples so only 3 were taken. The 3 samples were weakly anomalous for gold. The samples (from several local locations) were passed through a -8 mesh screen into a 20 l. pail in order to get 2 bags full. The samples were tested for -80 mesh Au 30g fire assay and 32 element ICP. Sample locations were marked with flagging tape.

3.4 Silt Geochemistry

Eight (8) silt samples were taken. The samples (from 5-6 or more locations) were passed through a -8 mesh screen into a 20 l. pail to get 2 bags full. The samples were tested for -80 mesh Au 30g fire assay and 32 element ICP. The sample locations were marked with flagging tape. S1 was taken at 0+000 feet (bottom of the stream), S2 at 0+500' upstream, S3 - 0+1000', S4 - 0+1500', S5 - 0+2000', S6 - 0+2500'.

ES1 was taken in fast water above an agricultural dam; ES2 about 50 feet above ES1 in slower water. I am not sure where ES1 and ES2 are on the map.

All 8 silt samples are highly anomalous for gold and weakly anomalous for As and Ba.

3.5 Interpretation

The geology of the area is mapped as Late Proterozoic -Early Cambrian as schist, quartzite and phyllite. Mineralizaton here would be Brewery Creek Au type or similar to the Wayne deposit which is located near Elsa and the United Keno Hill mines.

I concentrated on this small creek because;

1. it is short and has bedrock exposures
2. a -200 mesh silt sample ran 269 ppb Au
3. it has 3-4 times as much water as a much longer stream and the source is a sink hole like I have seen on television (Florida-Louisiana) where houses fall into collapsed ground.

The high -80 mesh values for Au (170 to 2550 ppb) surprised me and Viceroy Resources as well, because there seems to be no indicator elements present (or they may be subdued).

A calcite precipitate was seen on bedrock between sample S1 to S3 and also about 50' down from the bridge on the hill beside the creek, about 1500 feet of exposure.

Leaf and twig imprints are seen in the precipitate. The calcite (in float) was observed beside a stream bend on ET19, in the stream by the highway on ET1 and in the stream at samples ES1 and ES2.

Only three creeks along the highway in this area were found to be anomalous for -200 mesh Au. Some old-timers thought this might be a source of the Stewart River bar gold. No magnetic anomalies are present. Buried intrusions may be present. Northwest-southeast trending air photo linears pass through this area. The calcium precipitate is coming from a limy horizon not yet located.

The target area may be up to 30 km^2 or more. The target deposit type is unknown.

Viceroy Resources plans to screen all remaining silt samples to -200 mesh and test for Au 30g fire assay. It is possible that the gold comes from a placer deposit.

The ET claims have enough work to hold them for 1 year. The claims are on the road and I plan to keep all claims and do further work. I am not sure what I should do in the future as to work.

STATEMENT OF QUALIFICATIONS

I, John Peter Ross, do hereby certify that I:

1. am a qualified prospector with mailing address;

   Box 4842
   Whitehorse, Yukon
   Canada. Y1A 4N8

2. graduated from McGill University in 1970 with a B.Sc. General Science

3. have attended and finished completely the following courses;

   1974 -- BC & Yukon Chamber of Mines, Prospecting Course
   1978 -- United Keno Hill Mines Limited, Elsa, Yukon, Prospecting Course
   1987 -- Yukon Chamber of Mines, Advanced Prospecting Course
   1991 -- Exploration Geochemistry Workshop, GSC Canada
   1994 -- Diamond Exploration Short Course, Yukon Geoscience Forum
   1994 -- Yukon Chamber of Mines, Alteration and Petrology for Prospectors
   1994 -- Applications of Multi-Parameter Surveys (Whitehorse), Ron Shives, GSC
   1994 -- Drift Exploration in Glaciated and Mountainous Terrain, BCGS
   1995 -- Applications of Multi-Parameter Surveys, (Vancouver) Ron Shives, GSC
   1995 -- Diamond Theory and Exploration, Short Course # 20, GSC Canada
   1996 -- New Mineral Deposit Models of the Cordillera, MDRU
   1997 -- Geochemical Exploration inTropical Environments, MDRU
   1998 -- Metallogeny of Volcanic Arcs, Cordilleran Roundup Short Course

4. did all the work and the writing of this report

5. have been on the Yukon Prospectors' Assistance and Yukon Mining Incentive Program 1986 - 1998

6. have been on the British Columbia Prospectors' Assistance Program 1989 - 1990

7. have a 100% interest in the claims described in this report at the present time

John Peter Ross

28 / Nov / 1998

APPENDIX 1

References

Assessment Report 093206, Sleeper 10-29, 115 P/8 by Ken Galambos.

Yukon MINFILE 115 P 042, McGuinty

Personal Communication

Ken Galambos, Mineral Development Geologist, Yukon Geology Program
Bob Stirling, Stewart River placer miner
Assistant Mining Recorder, Mayo Mining District.

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

NAME(S): McGuinty
MINFILE #: 115P 042
MAJOR COMMODITIES: -
MINOR COMMODITIES: -
TECTONIC ELEMENT: Selwyn Basin
NTS MAP SHEET: 115 P 8
LATITUDE: 63°28'47"N
LONGITUDE: 136°23'00"W
DEPOSIT TYPE: Unknown
STATUS: Uncertain

CLAIMS (PREVIOUS AND CURRENT)

DAVID, HALONA, PAN, SLEEPER

WORK HISTORY

Staked as David & Halona cl (YA41512) in Nov/79 by C. Charette and as Pan cl (YA43488) in Jan/81 by S. Schmidt. The Sleeper 10-29 cl (YB29730) were staked 2.5 km to the northwest in May/93.

GEOLOGY

The earlier claims are probably underlain by Late Proterozoic-Early Cambrian schist, quartzite, and phyllite and may have been staked to protect surface rights.

Bulk silt (-200 mesh) samples and pan concentrates collected in 1992 returned values of 273 ppb and 2665 ppb gold, respectively.

REFERENCES

K.D. Galambos, Mar/94. Assessment Report #093206 by K.D. Galambos.

APPENDIX 2

Rock Geochemistry - Assay Results

Chemex Labs Ltd.

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212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: VICEROY EXPLORATION (CANADA), INC

20 MACDONALD RD.
WHITEHORSE, YT
Y1A 4L2

Project : ET CLAIMS
Comments: ATTN: RICK DIMENT

Page Number :1-A
Total Pages :1
Certificate Date: 14-NOV-1998
Invoice No. :19835494
P.O. Number :
Account :OQN

CERTIFICATE OF ANALYSIS A9835494

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
ET-6	205	226	< 5	< 0.2	1.06	2	90	< 0.5	< 2	0.05	< 0.5	6	165	14	1.89	< 10	< 10	0.11	10	0.38	430
ET-11	205	226	< 5	< 0.2	0.12	< 2	110	< 0.5	< 2	>15.00	0.5	< 1	18	13	0.19	< 10	10	0.08	< 10	0.40	35
ET-22	205	226	< 5	< 0.2	1.73	< 2	130	< 0.5	< 2	0.17	< 0.5	7	97	63	3.02	< 10	< 10	0.42	40	0.59	210
ET-25	205	226	< 5	< 0.2	1.50	< 2	110	< 0.5	< 2	0.54	< 0.5	14	99	43	2.85	< 10	< 10	0.36	40	0.51	250
ET-26	205	226	< 5	< 0.2	2.55	2	80	< 0.5	< 2	0.41	< 0.5	18	182	63	3.80	< 10	< 10	0.29	40	1.42	445
ET-28	205	226	< 5	< 0.2	1.76	< 2	20	< 0.5	< 2	0.05	< 0.5	9	144	25	3.07	< 10	< 10	0.04	10	0.79	365
ET-30	205	226	< 5	< 0.2	1.44	< 2	60	< 0.5	< 2	0.03	< 0.5	7	127	15	2.11	< 10	< 10	0.14	10	0.75	280
ET-33	205	226	< 5	< 0.2	1.56	< 2	30	< 0.5	< 2	0.01	< 0.5	11	161	26	2.72	< 10	< 10	0.03	10	0.69	365
ET-34	205	226	< 5	< 0.2	3.28	2	30	< 0.5	< 2	1.25	< 0.5	27	326	78	3.34	< 10	20	0.06	< 10	3.02	655
ET-36	205	226	< 5	< 0.2	2.11	< 2	90	< 0.5	< 2	0.05	< 0.5	10	79	48	3.65	< 10	< 10	0.20	40	0.74	385
ET-42	205	226	< 5	< 0.2	0.75	< 2	40	< 0.5	< 2	0.04	< 0.5	8	193	22	1.46	< 10	10	0.04	< 10	0.26	225
ET-48	205	226	< 5	< 0.2	0.26	< 2	100	< 0.5	< 2	1.42	< 0.5	3	121	2	0.41	< 10	30	0.16	10	0.07	710
ET-50	205	226	< 5	< 0.2	0.13	< 2	20	< 0.5	< 2	0.03	< 0.5	3	210	4	0.39	< 10	10	0.04	< 10	0.04	35
ET-51	205	226	< 5	< 0.2	0.07	< 2	20	< 0.5	< 2	0.04	< 0.5	< 1	207	1	0.23	< 10	< 10	0.05	< 10	< 0.01	45

CERTIFICATION: Hartt Richler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
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Total Pages :1
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Invoice No. :19835494
P.O. Number :
Account :OQN

CERTIFICATE OF ANALYSIS A9835494

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
ET-6	205	226	1	0.01	16	140	6	< 2	1	10	< 0.01	< 10	< 10	11	< 10	28
ET-11	205	226	3	< 0.01	2	100	6	< 2	< 1	330	< 0.01	< 10	10	4	< 10	18
ET-22	205	226	1	0.01	17	360	< 2	< 2	1	12	< 0.01	< 10	< 10	8	< 10	52
ET-25	205	226	1	0.01	30	390	8	< 2	1	22	< 0.01	< 10	< 10	9	< 10	60
ET-26	205	226	1	0.01	57	300	10	< 2	3	19	0.01	< 10	< 10	26	< 10	74
ET-28	205	226	1	< 0.01	39	70	10	< 2	< 1	14	< 0.01	< 10	< 10	10	< 10	70
ET-30	205	226	< 1	0.02	18	110	4	< 2	1	8	< 0.01	< 10	< 10	12	< 10	36
ET-33	205	226	< 1	< 0.01	54	70	6	< 2	< 1	18	< 0.01	< 10	< 10	9	< 10	64
ET-34	205	226	< 1	0.05	192	1070	14	2	4	58	0.23	< 10	< 10	46	< 10	132
ET-36	205	226	1	0.02	19	200	6	< 2	1	22	0.01	< 10	< 10	12	< 10	80
ET-42	205	226	1	0.02	27	100	12	< 2	< 1	4	< 0.01	< 10	< 10	5	< 10	36
ET-48	205	226	2	0.01	7	240	2	< 2	< 1	72	< 0.01	< 10	< 10	3	< 10	18
ET-50	205	226	1	< 0.01	9	30	< 2	< 2	< 1	1	< 0.01	< 10	< 10	1	< 10	6
ET-51	205	226	1	< 0.01	5	40	2	< 2	< 1	2	< 0.01	< 10	< 10	1	< 10	< 2

CERTIFICATION:

APPENDIX 3

Rock Sample Descriptions

Sample Number	Description
ET6	in glacial till; silicious / cherty sediment, possible replacement; compositional layering, minor bull quartz veining
ET11	bedrock; vuggy carbonate calcite pumice texture, some areas had twig and leaf imprints
ET22	bedrock; schistose phyllite-very calcareous, MnO_2 stain along the bedding, vuggy in places
ET25	bedrock; similar to ET26, more calcareous
ET26	bedrock; well laminated, schistose phyllite, no carbonate, weakly calcareous
ET28	bedrock; silicious phyllite / quartzite, well developed foliation, minor disseminated pyrrotite
ET30	bedrock; well foliated silicious quartzite/phyllite
ET33	bedrock; well foliated silicious quartzite/phyllite
ET34	bedrock; micro fractured / stockworked grit - meta-greywacke
ET36	bedrock; well laminated silicious phyllite, schistose
ET42	float; (similar to ET6) silicious / cherty sediment, possible replacement; compositional layering, minor bull quartz veining
ET48	bedrock; well foliated silicious quartzite/phyllite
ET50	bedrock; bull quartz vein, MnO_2 stains
ET51	bedrock; bull quartz vein, MnO_2 stains

APPENDIX 4

Moss Mat Geochemistry - Assay Results

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
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British Columbia, Canada V7J 2C1
PHONE: 604-984-0221. FAX: 604-984-0218

To: VICEROY EXPLORATION (CANADA), INC

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Invoice No. :19835495
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CERTIFICATE OF ANALYSIS A9835495

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
MM1	201	202	75	< 0.2	0.48	8	200	< 0.5	< 2	0.55	< 0.5	4	11	13	1.29	< 10	< 10	0.04	10	0.26	225
MM2	201	202	10	< 0.2	0.53	8	240	< 0.5	< 2	0.50	< 0.5	4	13	12	1.30	< 10	10	0.04	10	0.27	200
MM3	201	202	30	< 0.2	0.54	6	240	< 0.5	< 2	0.69	< 0.5	5	13	15	1.24	< 10	30	0.04	10	0.29	270

CERTIFICATION: Ivan Richler

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

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Y1A 4L2

Project : ET CLAIMS
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Page Number :1-B
Total Pages :1
Certificate Date: 14-NOV-1998
Invoice No. :I9835495
P.O. Number :
Account :OQN

CERTIFICATE OF ANALYSIS A9835495

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
MM1	201	202	1	< 0.01	13	520	6	< 2	< 1	22	0.01	< 10	< 10	15	< 10	52
MM2	201	202	1	< 0.01	14	550	2	< 2	1	24	0.01	< 10	< 10	17	< 10	50
MM3	201	202	1	< 0.01	14	540	8	< 2	1	30	0.01	< 10	< 10	16	< 10	60

CERTIFICATION: Hawthickler

APPENDIX 5

Silt Geochemistry - Assay Results

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: VICEROY EXPLORATION (CANADA), INC

20 MACDONALD RD.
WHITEHORSE, YT
Y1A 4L2

Project : ET CLAIMS
Comments: ATTN: RICK DIMENT

Page Number :1-A
Total Pages :1
Certificate Date: 14-NOV-1998
Invoice No. :19835496
P.O. Number :
Account :OQN

CERTIFICATE OF ANALYSIS A9835496

SAMPLE	PREP CODE		Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb	K %	La ppm	Mg %	Mn ppm
ES-1	201	202	335	< 0.2	0.63	12	590	< 0.5	< 2	0.77	< 0.5	7	24	17	2.52	< 10	10	0.04	30	0.43	300
ES-2	201	202	470	< 0.2	0.67	14	1020	< 0.5	< 2	0.75	< 0.5	8	38	20	3.78	< 10	10	0.04	50	0.41	380
S-1	201	202	1070	< 0.2	0.53	8	310	< 0.5	2	0.49	< 0.5	5	20	12	2.30	< 10	20	0.03	40	0.25	225
S-2	201	202	905	< 0.2	0.48	8	340	< 0.5	< 2	0.33	< 0.5	6	24	12	2.72	< 10	10	0.03	40	0.24	215
S-3	201	202	2550	< 0.2	0.51	10	290	< 0.5	< 2	0.34	< 0.5	5	18	12	2.20	< 10	10	0.03	30	0.24	225
S-4	201	202	760	0.6	0.56	10	410	< 0.5	< 2	0.36	< 0.5	6	22	13	2.51	< 10	10	0.03	40	0.27	240
S-5	201	202	1070	< 0.2	0.53	10	560	< 0.5	< 2	0.42	< 0.5	6	21	15	2.29	< 10	30	0.03	30	0.30	240
S-6	201	202	175	< 0.2	0.55	8	260	< 0.5	< 2	0.42	< 0.5	6	19	15	2.17	< 10	10	0.03	10	0.36	250

CERTIFICATION:

Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221 FAX: 604-984-0218

To: VICEROY EXPLORATION (CANADA), INC

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Certificate Date: 14-NOV-1998
Invoice No. :19835496
P.O. Number :
Account :OQN

CERTIFICATE OF ANALYSIS A9835496

SAMPLE	PREP CODE		Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
ES-1	201	202	1	< 0.01	23	850	4	< 2	1	37	0.03	< 10	< 10	41	< 10	80
ES-2	201	202	1	< 0.01	25	1010	6	< 2	1	44	0.06	< 10	< 10	69	10	84
S-1	201	202	1	< 0.01	16	610	6	< 2	1	21	0.05	< 10	< 10	36	< 10	54
S-2	201	202	1	< 0.01	16	650	8	< 2	1	20	0.04	< 10	< 10	45	10	52
S-3	201	202	< 1	< 0.01	16	560	6	< 2	1	19	0.05	< 10	< 10	34	< 10	50
S-4	201	202	1	< 0.01	17	720	12	2	1	22	0.06	< 10	< 10	41	< 10	56
S-5	201	202	1	< 0.01	17	720	6	< 2	1	23	0.04	< 10	< 10	37	< 10	58
S-6	201	202	1	< 0.01	19	660	6	< 2	1	21	0.03	< 10	< 10	28	< 10	66

CERTIFICATION:

Summary of Work
Bedrock Creek Area
Yukon Territory, N.T.S. 115 N/15

for

Yukon Mining Incentives Program
Economic Development
Government of the Yukon
Box 2703, Whitehorse, Yukon Y1A 2C6

File Number 98-016

John Peter Ross, Prospector
November, 1998

TABLE OF CONTENTS

LIST OF FIGURES

Appendices

Chapter One: INTRODUCTION

1.1 Introductory Statement

The Bedrock Creek (ERNI claim group) area, map sheet 115 N/15, was chosen because;

1. Placer gold occurs in this area.
2. Regional geochemical survey, silt samples no. 1031/32 are on Bedrock Creek and on the ERNI 19 claim (approximate). Sample 1031: Cu 38 ppm, Zn 240 ppm, Pb 10 ppm, Ba 1590 ppm, Au 59 ppb, Hg 70 ppm, As 10 ppm. Sample 1032: Au 18 ppb.
3. A magnetic anomaly similar to one on the UNI and CICI claim groups on 116 C/2 is present. The UNI and CICI claim groups have been under option to Madrona Mining Ltd. of Calgary for 3 years now. Madrona spent $120,000 on an airborne geophysical survey and a limited soil sampling program.
4. One can drive to the site on a rough mining road.
5. The target was thought to be a Cu Mo Au porphyry similar to CASINO or TAURUS, 15 miles to the southwest in Alaska, USA, or a gold rich VMS similar to ESKAY CREEK in British Columbia.

1.2 Location and Access

Access was by truck about 75 miles west of Dawson City; Top of the World Highway and then a rough mining road sometimes requiring 4-wheel drive.

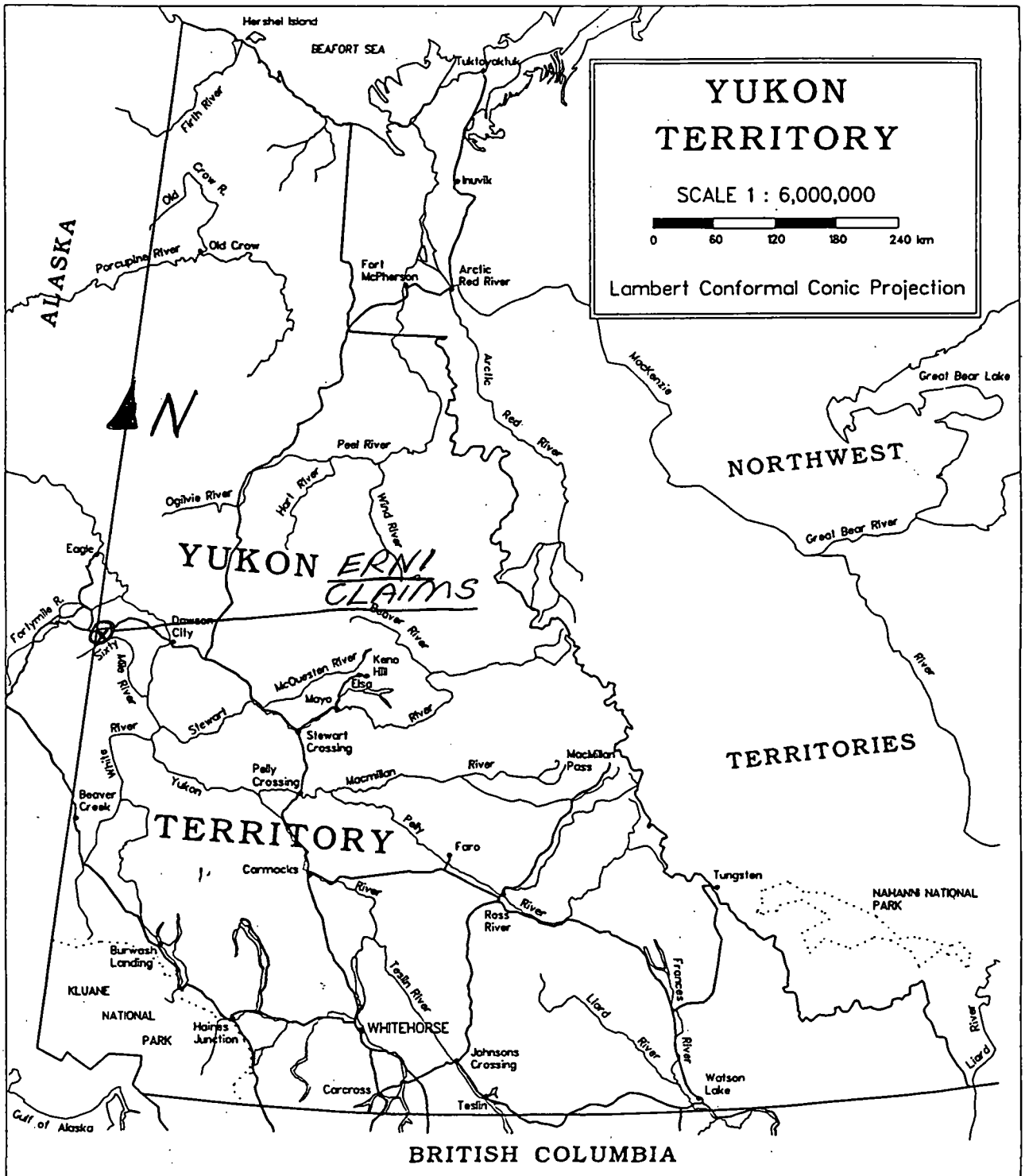


FIGURE #1

LOCATION MAP

ERNI 1-80(1998)

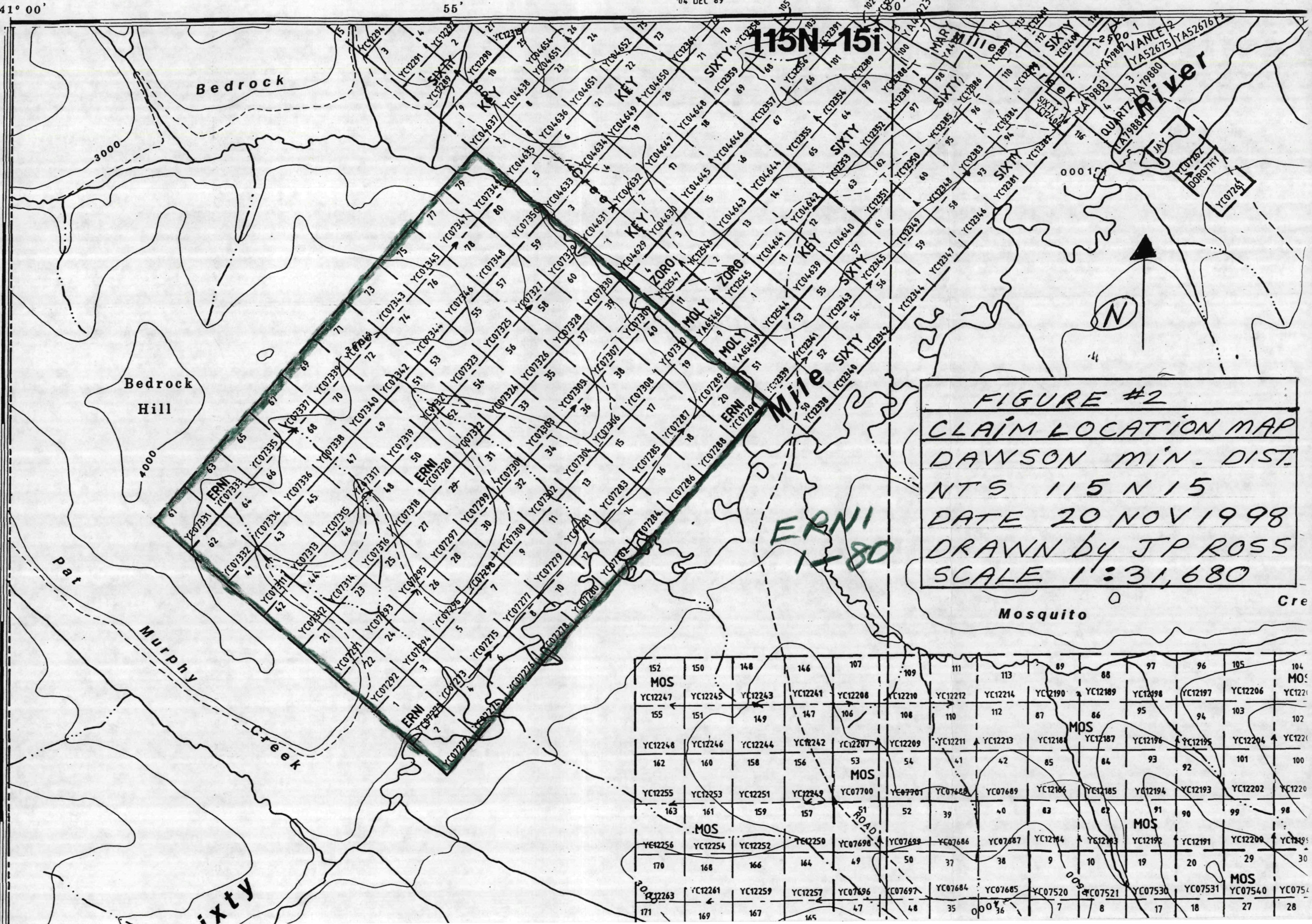


FIGURE #2
CLAIM LOCATION MAP
DAWSON MIN. DIST.
NTS 115 N 15
DATE 20 NOV 1998
DRAWN by J P ROSS
SCALE 1:31,680
ERNI 1-80
115N-15i
25 APR 90
04 DEC 89
141° 00'
64° 00'
55'
50'
N
Sixty Mile River
Miller Creek
Bedrock
Bedrock Hill
Pat Murphy Creek
Mosquito
Cre
ROAD
3000
4000
1000
SIXTY
KEY
ZORO
MOLY
ERNI
MOS
QUARTZ
VANCE
MARY
JAY
DOROTHY

141°00'

55'

50'

40'

64°00'

4269G "Sixtymile"

ERNI CLAIMS

BEDROCK HILL

Sixty Mile River

ALASKA

YUKON (TERRITORY)

57,500

57,600

57,700

57,800

58,000

58,200

58,400

57,580

57,600

57,900

57,700

3000

2500

3500

4000

4500

5000

500

N

FIGURE #3

CLAIMS / MAGNETIC DATA

GEOPHYSICS PAPER 4268

NTS 115 N 15

DATE 20 NOV 1998

DRAWN by JP ROSS

SCALE 1:50,000

ERNI CLAIMS

FIGURE #4
CLAIMS/GEOLOGY
NTS 115 N 15
DATE 20 NOV 1998
DRAWN by JP ROSS
SCALE 1:50,000

GEOLOGICAL LEGEND

NASINA Assemblage

Late (?) Devonian to Early Mississippian

DMasc medium to dark weathering chlorite (+- biotite) schist, amphobolite and garnet amphibolite

DMsqc graphitic Nasina Assemblage undifferentiated (mainly pale to dark gray weathering, fine grained quartzite, quartz-muscovite (+-chlorite) schist, locally garnetiferous)

DMs medium to coarse grained mica schist, commonly garnetiferous, amphibolite, minor quartzite

Meta Plutonic Rocks

Middle to Late Permian

DMgg Moderately to strongly foliated K-feldspar augen-bearing quartz monzonite to granite gneiss (S. Fifty Mile Batholith, Mt. Burnham orthogneiss)

Klondike Schist Assemblage

Late Devonian to Early Mississippian

Psqm rusty weathering quartz-muscovite schist

▲▲▲▲?▲ thrust contact (defined, approximate,assumed)

△△△△?△ low-angle normal (?) fault (defined, approximate,assumed)

• 123 Minfile Occurrence

Summary of Work - Bedrock Creek Area		
GEOLOGICAL LEGEND from Open File 1996-1(G)		
J.P. Ross		
SCALE:	FILE: legend	DATE: 98.12.29
NTS: 105 C	DRAWN:	FIGURE 5

Chapter Two: SUMMARY

The ERNI 1-80 claims were staked and recorded by Paulo Ouellett of Dawson City. I was unable to stake them as I had to add to my UNI and CICI claim groups (under option to Madrona Mining Ltd.) on 116 C/2.

No float, rock, silt or soil samples were taken.

I planned to visit the area in the fall for prospecting but bad weather and schedule problems prevented it.

Paulo Ouellet worked from June 8 - June 24, 1998. He had problems with bears, weather (rain), his truck, porcupines/dogs etc. The claims were recorded on June 24, 1998.

Chapter Three: GEOCHEMICAL SURVEY

3.1 Soil Geochemistry

No soil samples were taken.

3.2 Silt Geochemistry

No silt samples were taken.

3.3 Rock Geochemistry

No rock samples were taken.

3.4 Interpretation

Even with no data on my part, interest in the ERNI claims is high because it may be similar to gold deposits in Alaska, where recent successes at FT. KNOX, TRUE NORTH and POGO have awakened mining exploration companies to potential in the Yukon.

From courses and talks at the 1998 Geoscience Forum I can list good points about the ERNI Claims;

1. placer gold is present in the area, the claims are in the heavily promoted TINTINA gold belt
2. the claims have road access
3. a magnetic high with a bulls-eye center is present, i.e.) a possible non-magnetic cretaceous pluton and a magnetic altered zone around it
4. a thrust fault is present - good source of broken up rock
5. schist in the area contains amphibolite, this means it is from a deep seated source; it was metamorphosed at high temperatures; potentially an environment similar to the POGO gold deposit in Alaska.

The deposit type is still not known.

Chapter Four: PROSPECTING

In 1999, if there is no option deal on the ERNI claims, I will prospect the area and take many silt samples in streams and analyze for Au + 32 element ICP. Maybe a gold and trace element association will be seen.

All claims will be kept. However, it is likely that a deal can be made in the winter of 1999 as interest is high in this area now for gold deposits.

STATEMENT OF QUALIFICATIONS

I, John Peter Ross, do hereby certify that I:

1. am a qualified prospector with mailing address;

   Box 4842
   Whitehorse, Yukon
   Canada. Y1A 4N8

2. graduated from McGill University in 1970 with a B.Sc. General Science

3. have attended and finished completely the following courses;

   1974 -- BC & Yukon Chamber of Mines, Prospecting Course
   1978 -- United Keno Hill Mines Limited, Elsa, Yukon, Prospecting Course
   1987 -- Yukon Chamber of Mines, Advanced Prospecting Course
   1991 -- Exploration Geochemistry Workshop, GSC Canada
   1994 -- Diamond Exploration Short Course, Yukon Geoscience Forum
   1994 -- Yukon Chamber of Mines, Alteration and Petrology for Prospectors
   1994 -- Applications of Multi-Parameter Surveys (Whitehorse), Ron Shives, GSC
   1994 -- Drift Exploration in Glaciated and Mountainous Terrain, BCGS
   1995 -- Applications of Multi-Parameter Surveys, (Vancouver) Ron Shives, GSC
   1995 -- Diamond Theory and Exploration, Short Course # 20, GSC Canada
   1996 -- New Mineral Deposit Models of the Cordillera, MDRU
   1997 -- Geochemical Exploration inTropical Environments, MDRU
   1998 -- Metallogeny of Volcanic Arcs, Cordilleran Roundup Short Course

4. did all the work and the writing of this report

5. have been on the Yukon Prospectors' Assistance and Yukon Mining Incentive Program 1986 - 1998

6. have been on the British Columbia Prospectors' Assistance Program 1989 - 1990

7. have a 100% interest in the claims described in this report at the present time

John Peter Ross
27/Nov/98

APPENDIX 1

References

Geophysical paper/map, 4269G, Sixty Mile, 116 C/2.

Geophysical paper/map, 4268G, Crag Mountain, 115 N/15.

GSC Open File #1364, Geochemical Survey, NTS 115 N (E ½), 115 O

TAURUS - CIM special volume #46. Porphyry deposits of the northwest Cordillera p. 451-457.

Metallogeny of Volcanic Arcs. 1998 MRDU Short Course (2 days).

Intrusion Related Au Mineralization - Alaska and Yukon. 1998 Geoscience Forum Workshop.

Personal Communication: Craig Hart, Yukon Geology Program. John Kowalchuck, NuLite, Vancouver, BC.

Open File 1996-1 (G). Geological compilation maps of north Stewart River area, Klondike and Sixty Mile districts. Maps 115 N/15,16; 115 O/13,14; 115 O 15,16. Jim Mortensen.

YUKON MINFILE
YUKON GEOLOGY PROGRAM
WHITEHORSE

NAME(S): Lerner
MINFILE #: 115N 039
MAJOR COMMODITIES: Ag,Pb
MINOR COMMODITIES: Au,Zn
TECTONIC ELEMENT: Yukon Tanana Terrane
NTS MAP SHEET: 115 N 15
LATITUDE: 63°55'29"N
LONGITUDE: 140°48'52"W
DEPOSIT TYPE: Vein
STATUS: Open pit past producer

CLAIMS (PREVIOUS AND CURRENT)

CCL, JACK, REX, LUBRA, JUDY, PRA, HAR

WORK HISTORY

Staked as CCL, Jack, etc cl (87620) in Aug/65 by J. Lerner & M. Chefkoi and optioned to A. Moisey, who enlarged the property and conducted geochem sampling and bulldozing in 1965. The claims were transferred to a new company, Sixty Mile Mg CL, which conducted additional bulldozing and EM surveys in 1966-67 and shipped about 9 tonnes of hand-cobbed ore from the No. 3 Vein in 1966. Mt Crag ML tied on Rex & Lubra cl (Y15162) to the west in Jun/67 but filed no work.

Connaught ML optioned the property early in 1968 and explored with mapping and geochem sampling, extensive bulldozer trenching and 2 holes (112.8 m) in 1968-69. J. Lerner restaked the No. 3 Vein as Judy 2 cl (Y82496) in May/74 and mined and shipped about 191 tonnes in 1974-76. In Jan/81, he restaked the Rex-Lubra as Judy cl (YA55162), transferred the property to Judy Mg Synd, and sold it to Lougheed Res Inc, which performed mapping and trenching later in the year.

The property was transferred to Bethex E Inc and optioned by Madre Mg L in 1983, and transferred to Judy Res Inc in 1984 and Cumo Res L and X-Pat Dev L in 1986. In 1988, the Judy cl were optioned to Shakwak Exp CL.

Croesus Res Inc partially restaked the property and tied on PRA & HAR cl (YA89110) in Apr/87 and performed mapping, geochem and geophysical surveys and bulldozer trenching later in the year and drilled 10 diamond drillholes (315.8 m) in 1988. The Pra & Har cl were transferred in May/89 to Walhala EL. Tombstone Exploration Ltd conducted a drilling program on the Pra cl in 1993.

GEOLOGY

North-northeast-striking, mesothermal(?) quartz-carbonate-sulphide veins cut Nasina Assemblage schists (unit DMs) and Early Mississippian granitic augen gneiss (unit DMgg) south of Mosquito Creek.

Most of the work has been performed at the northwest locality, called No. 3 Vein. Galena and arsenopyrite, with minor sphalerite, tetrahedrite and boulangerite, form lenses over 12.1 m long and 0.9 - 1.2 m thick in quartz veins up to 2.1 m thick in a complex en echelon vein system. The 1966 and 1974-76 shipments were made from a single lens and averaged about 2228.5 g/t Ag, 60% Pb and 1.03 g/t Au. The best 1969 intersection was 130.3 g/t Ag and 2.7% Pb across 0.7 m.

The southeast locality, called the No. 2 and No. 7 Veins, has received less work and is more weakly mineralized.

Glasmacher and Friedrich (1992) recognized three stages of vein formation: (1) quartz-pyrite; (2) arsenopyrite-galena (3) quartz-pyrite-sphalerite-chalcopyrite-freibergite. Precious metals were deposited during the second stage. Fluid inclusion and microprobe studies show that the veins formed from high salinity, low pH fluids at temperatures which were initially as high as 330°C.

GEOLOGY (CONTINUED)

The Tony and Pra claims cover the contact between quartzite, limestone and skarn of the Nasina Series, quartz monzonite and Pelly Gneiss intruded by Cretaceous granite.

Altered quartz monzonite on the property returned anomalous Cu and Mo values, and magnetite-quartz-carbonate and diopside skarn returned anomalous values in Bi, Au, As, Ag with Pb, Zn and Cu.

REFERENCES

GEOLOGICAL SURVEY OF CANADA, Paper 67-40, p. 29.

GEOLOGICAL SURVEY OF CANADA, Paper 68-68, p. 32-33.

GEORGE CROSS NEWSLETTER, 3 Jun/88.

GLASMACHER, U., and FRIEDRICH, G., 1992. Gold-sulphide enrichment processes in mesothermal veins of the Sixtymile River area, Yukon Territory, Canada. In: Yukon Geology Vol. 3, Exploration and Geological Services Division, DIAND, p. 292-311.

KELON RESOURCES AND CROESUS RESOURCES INC., Nov/88. Yukon Exploration Incentive Program Report #093109 by B.J. Price (EIP88-036).

LOUGHEED RESOURCES INC., Feb/81. Engineer's Report by R.T. Heard.

MINERAL INDUSTRY REPORT 1969-70, p. 32-33.

MORTENSEN, J.K., Geological Compilation Maps of the Northern Stewart River map area Klondike and Sixtymile Districts (115N/15,16; 115O/13,14 and parts of 115O/15,16). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open file 1996-1 (G).

YUKON GEOLOGY PROGRAM AND EXPLORATION 1981, p. 224.

YUKON MINFILE
YUKON GEOLOGY PROGRAM
WHITEHORSE

NAME(S): The
MINFILE #: 115N 115
MAJOR COMMODITIES: -
MINOR COMMODITIES: -
TECTONIC ELEMENT: Yukon Tanana Terrane
NTS MAP SHEET: 115 N 15
LATITUDE: 63°57'04"N
LONGITUDE: 140°50'17"W
DEPOSIT TYPE: Unknown
STATUS: Uncertain

CLAIMS (PREVIOUS AND CURRENT)

THE, AIME

WORK HISTORY

Staked as The cl (Y15906) in Jun/69 by Klondike EL, which bulldozer trenched in 1969-71. The property was transferred in 1972 to E. Faucher, L. Grimard & J. Trottier, who trenched in 1973, 1976 and 1980 and enlarged the property in 1979. In Aug/84 M. Grimard restaked the claims as Aime cl (YA87694) and performed trenching in 1986 and mapping and geochem sampling in 1987.

GEOLOGY

The claims are underlain by Nasina Assemblage schist and amphibolite (units DMs and DMasc) and have been explored for gold and silver veins.

REFERENCES

MORTENSEN, J.K., Geological Compilation Maps of the Northern Stewart River map area Klondike and Sixtymile Districts (115N/15,16; 115O/13,14 and parts of 115O/15,16). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open file 1996-1 (G).

YUKON MINFILE
YUKON GEOLOGY PROGRAM
WHITEHORSE

NAME(S): Bedrock
MINFILE #: 115N 123
MAJOR COMMODITIES: Ag
MINOR COMMODITIES: Cu,Au
TECTONIC ELEMENT: Yukon Tanana Terrane

NTS MAP SHEET: 115 N 15
LATITUDE: 63°58'31"N
LONGITUDE: 140°53'15"W
DEPOSIT TYPE: Vein
STATUS: Showing

CLAIMS (PREVIOUS AND CURRENT)

MOLY, SAPPO, NEY

WORK HISTORY

Staked as Moly cl (YA65451) in May/83 by Piedmont EL and Last Frontier Ent L, which added Sappo cl (YA88192) to the SW and NE in Oct/86. L. Mollot tied on MM cl (YA88208) to the northwest in Oct/86 and performed mapping and geochemical sampling in 1987 and 1988.

The Ney cl (YB4742) were tied on north of the Sappo claims in Feb/88 and were explored by mapping, geochem sampling and trenching before being transferred to J. Bergvinson in Feb/89. The Moly claims were transferred to Last Frontier Ent L in May/88.

GEOLOGY

A south-dipping thrust fault is inferred to cross the area, separating Nasina Assemblage schist and amphibolite (units DMs and DMasc) in the hangingwall from rusty-weathering quartz-muscovite of the Permian Klondike Schist Assemblage (unit Pks) in the footwall. A thrust-fault-bounded lens of serpentinite occurs along the fault to the east of the occurrence. A vuggy quartz carbonate vein containing no visible sulphides outcrops in the hangingwall of the fault: It is 1 m wide, strikes 140 and dips 38 S. A specimen from the vein assayed 992.5 g/t Ag with 310 ppb Au and 1140 ppm Cu.

REFERENCES

MORTENSEN, J.K., Geological Compilation Maps of the Northern Stewart River map area Klondike and Sixtymile Districts (115N/15,16; 115O/13,14 and parts of 115O/15,16). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open file 1996-1 (G).

Summary of Work
McQuesten River Area
Yukon Territory, N.T.S. 115 P/11

for

Yukon Mining Incentives Program
Economic Development
Government of the Yukon
Box 2703, Whitehorse, Yukon Y1A 2C6

File Number 98-016

John Peter Ross, Prospector
November, 1998

TABLE OF CONTENTS

LIST OF FIGURES

Appendices

Chapter One: INTRODUCTION

1.1 Introductory Statement

The McQuesten River Project, map sheet 115 P/11, was chosen because;

1. Minfile Moose Ridge, 115 P 016 (Ag Pb F). F is reported to occur in limy bands up to 7.6m wide and up to 411.4 g/ton Ag. Possibly Au was not tested in the samples. F is associated with many Au epithermal deposits.
2. One can drive almost to the area by 2-wheel drive and then a short walk on an old bulldozer trail. A trench was noted on an aerial photograph.
3. An epithermal or Carlin type Au deposit may be present.
4. Talks with Ken Galambos have alerted me to the potential of this under-explored area.

1.2 Location and Access

Access was by 2-wheel drive highway (North Klondike Highway) and a short walk, about 40 km northwest of Stewart Crossing.

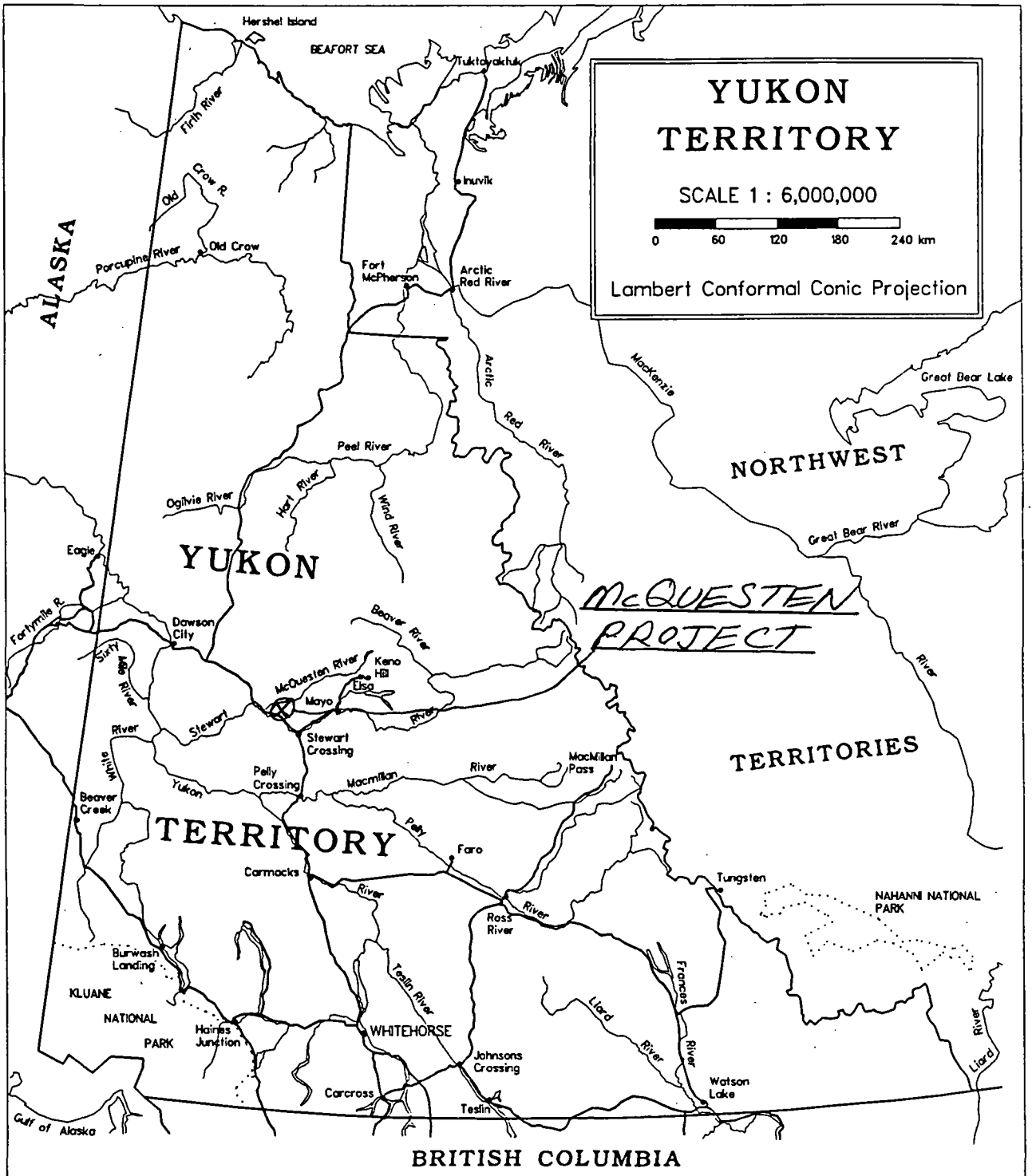


FIGURE #1

LOCATION MAP

McQUESTEN RIVER PROJECT

FIGURE #2

McQUESTEN PROJECT LOCATION

MAYO MIN. DIST
NTS. 115 P 11
DATE 26 NOV 1998
DRAWN by JP ROSS
SCALE 1 : 31,680

N

3500
2500
3000
2500
1500
2000

MAN
YC01585
YC01586
YC01588

MIN FILE 115P016

OUTCROP IN TILL

CAMP

ROAD

DISTRICT

DISTRICT

1 MILE

2 MILE

3rd TIER

5 MILE

012

013

KLONDIKE HIGHWAY

AREA PROSPECTED

× 1S10

× 35

× 25 gout SILT SAMPLE ppb Au

Chapter Two: SUMMARY

The McQuesten River Project was not completed. No float, silt or moss mat samples were taken. Dates worked were July 2-4, 1998.

Chapter Three: GEOCHEMICAL SURVEY

3.1 Soil Geochemistry

No soil samples were taken.

3.2 Silt Geochemistry

No silt samples were taken.

3.3 Rock Geochemistry

No rock samples were taken.

3.3 Moss Mat Geochemistry

No moss mat samples were taken.

Chapter Four: PROSPECTING

Work consisted of driving up and down the highway and walking trails off the highway, checking out sandy glacial bluffs for outcrop and streams where regional geochemical survey silt samples were taken.

The trails seem to go mostly to the Stewart River and lakes and swamps for hunting I would say. No outcrop was seen. However one interesting (?) outcrop was seen north of a very swampy area, about 80-90% of the way up a steep bluff. No water was in the streams except at a geochem sample site area in a dry grassy depression.

Problems were numerous. It was so hot I could not sleep well, the ground was so dry a forest fire could easily start, it took me a day and a half to find the trail to (X2). I went up the trail, quite overgrown, cut some trees and eventually gave up and just walked up a good distance.

Bears were a problem. On July 2, 2 small bears were seen northwest of (X1510) seemed not afraid of me or my truck or the noise. At my camp on July 4, a large black bear woke me up at 5 am and chewed up a water container, so only 3 days were spent on this project.

On October 2 I passed through the area on my way south to Whitehorse from Dawson City. It was snowing and -10 degrees C so I did not stop.

Chapter Five: INTERPRETATION

The geology is Late Proterozoic to Early Cambrian, schist, quartzite and phyllite. Deposit type in the area is unknown and may be Au, Ag epithermal.

Someone staked the MAN 1-4 claims on the Minfile occurrence in September 1998.

In future more work should be done. I can hike up to check out the strange outcrop (?) in till, do some silt sampling up stream, especially at (X1510) and (X35), (X25).

No one has yet located the source of Stewart River bar gold deposits. The area has great potential for gold.

Because of bear hazards, one should be very careful of food storage, carry a whistle, bear spray and a shotgun at all times! A small Thaltan bear dog such as Rob Berdahl's would be very helpful here.

STATEMENT OF QUALIFICATIONS

I, John Peter Ross, do hereby certify that I:

1. am a qualified prospector with mailing address;

   Box 4842
   Whitehorse, Yukon
   Canada. Y1A 4N8

2. graduated from McGill University in 1970 with a B.Sc. General Science

3. have attended and finished completely the following courses;

   1974 -- BC & Yukon Chamber of Mines, Prospecting Course
   1978 -- United Keno Hill Mines Limited, Elsa, Yukon, Prospecting Course
   1987 -- Yukon Chamber of Mines, Advanced Prospecting Course
   1991 -- Exploration Geochemistry Workshop, GSC Canada
   1994 -- Diamond Exploration Short Course, Yukon Geoscience Forum
   1994 -- Yukon Chamber of Mines, Alteration and Petrology for Prospectors
   1994 -- Applications of Multi-Parameter Surveys (Whitehorse), Ron Shives, GSC
   1994 -- Drift Exploration in Glaciated and Mountainous Terrain, BCGS
   1995 -- Applications of Multi-Parameter Surveys, (Vancouver) Ron Shives, GSC
   1995 -- Diamond Theory and Exploration, Short Course # 20, GSC Canada
   1996 -- New Mineral Deposit Models of the Cordillera, MDRU
   1997 -- Geochemical Exploration inTropical Environments, MDRU
   1998 -- Metallogeny of Volcanic Arcs, Cordilleran Roundup Short Course

4. did all the work and the writing of this report

5. have been on the Yukon Prospectors' Assistance and Yukon Mining Incentive Program 1986 - 1998

6. have been on the British Columbia Prospectors' Assistance Program 1989 - 1990

7. have a 100% interest in the claims described in this report at the present time

John Peter Ross

29 Nov 1998

APPENDIX 1

References

Personal Communication

Ken Galambos, Mineral Development Geologist, Yukon Geology Program
Bob Stirling, Stewart River placer miner

Assessment Report 093206, SLEEPER Claims, Ken Galambos

Minfile 115 P 016, MOOSE RIDGE

YUKON MINFILE
YUKON GEOLOGY PROGRAM
WHITEHORSE

NAME(S): Moose Ridge
MINFILE #: 115P 016
MAJOR COMMODITIES: Ag,Pb,F
MINOR COMMODITIES: -
TECTONIC ELEMENT: Selwyn Basin

NTS MAP SHEET: 115 P 11
LATITUDE: 63°33'49"N
LONGITUDE: 137°10'39"W
DEPOSIT TYPE: Unknown
STATUS: Showing

CLAIMS (PREVIOUS AND CURRENT)

HOPE, KING, CON, CML, HILL

WORK HISTORY

First staked as Hope cl (82362) in Sep/62 by Dualco Syndicate (Highland Bell, Area ML, Dome ML, Ventures L and Lake Expanse), which explored with hand trenching in 1963. Restaked as King cl (Y6637) in Apr/67 by G. King and O. Hutton and later as Con cl (Y32508) in Jun/69 by C. Klippert, who explored by bulldozer trenching in 1967 and 1970. Dennis McCrae staked the CML cl (Y69473) about 2.4 km to the south in Jul/73.

The showing was restaked as Hill cl (YA39753) in Apr/79 by Amax Potash, which explored with mapping and geochem sampling later in the year.

GEOLOGY

The claims are underlain by Paleozoic? metasedimentary rocks, which are cut by a strongly altered and bleached granitic dyke or small stock. Fluorite is reported to occur in limy bands up to 7.6 m wide and galena assaying up to 411.4 g/t Ag is also said to be present.

1/6

(1998 GRASS ROOTS)

(4) STEWART RIVER PROJECT

The project consists of areas close to the STEWART RIVER. They are in Mayo Mining District on Maps 115 P 7, 8, 9, 10, 11.

One can drive to areas on well-maintained all season roads. D access is by mining road and a cat track. All of high priority areas by foot.

Potential mineralized trends. areas of higher priority.

Discussions with Ken Gallambos, YMIP geologist, have made me more aware of this area, which is under explored.

→ A TARGET

a) Minfile #42, McQuinty. Bulk silt samples in 3 streams returned ppm 124, 102, 273 and pan conc 103, 2665, 1438. These values suggest a gold source is nearby.

(2) The area is at the SOUTH-EAST end of a 25 km trend of lineaments (NW to SE), SE of River, the trend bends?

(3) The GEOLOGY and mineralization may be similar to that of the BREWERY CREEK GOLD DEPOSIT.

2/6 (4)

(4) According to Bob STIRLING, STEWART RIVER PLACER MINER, economic gold placers do not exist above here.

(5) Hugh BOSTOCK famous YUKON geol., in memoirs has said gold pans show colours below Mayo River and none above (on Stewart R.)

(6) Old timers thought this area was the source of the Stewart R. gold.

(7) No one has done a thorough search for S.t R. gold using 90's ideas.

(8) 20 "ET" claims were staked and recorded.

(9) So far 4 companies have seen the data and listened to my ideas. They like the idea.

(10) At present "Brewery Creek" type gold deposits are in.

— A target is on the way to Dawson City or to Mayo; where I have 98 Y.M.P. approved projects.

— Future work in 98 will be more detailed silt samples, soil samples and prospecting.

— The lack of indicator elements with the gold is a puzzle, but GOLD (ALONE) deposits seem to be few in number. In future more

3/16 (4)

should be found.

→ B + C TARGETS

(1) A belt may be present here Ag, Pb, F occurrence, minfile #16 moose ridge may be an epithermal deposit. According to Ken Galambos.

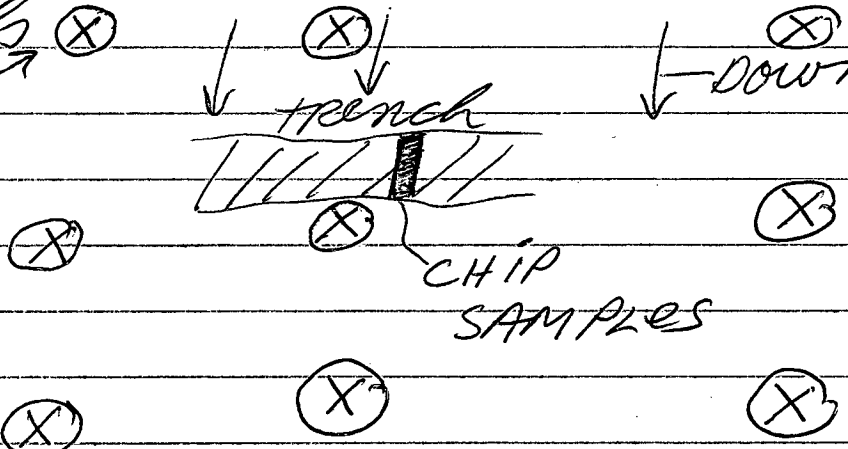
(2) Cat roads go to this area and a trench was seen in aerial photos.

(3) An epithermal or Carlin type GOLD deposit may be present.

(4) * MAYBE no test for GOLD was done, latest staking was AMAX (1979) potash (prob. not a "GOLD" company).

- I plan to stop + try to find B target while travelling to Mayo or Dawson City for other project.

- If trench is located, chip samples will be taken. Also some soils.



- Soils may sound wasteful but gold grades may be quite erratic, from 0 to high grade over short distances in epithermal

4/6 (4)

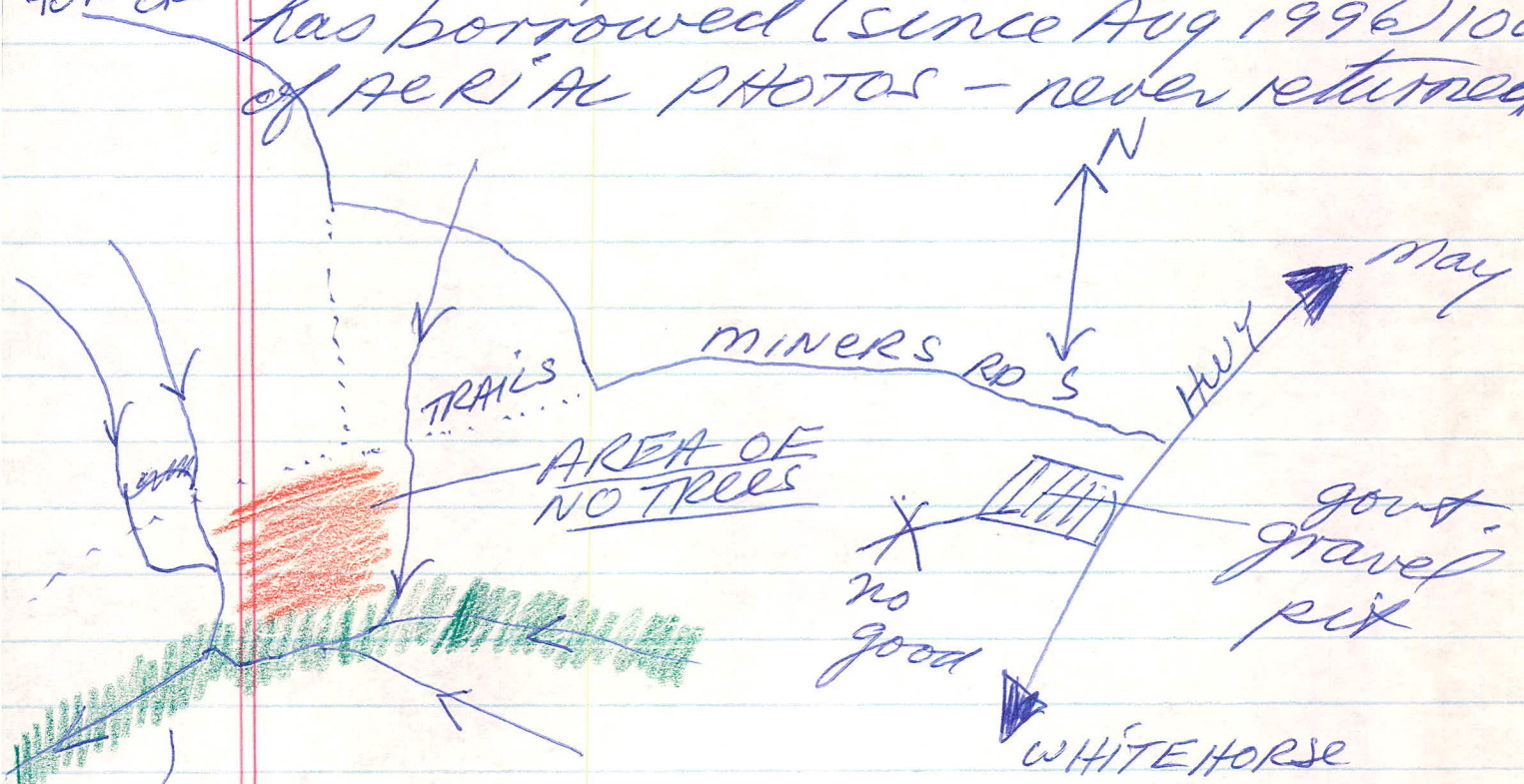
gold deposits - C target may be similar to B TARGET.

→ D TARGET

(1) This is an area of no trees by a known placer occurrence (unstaked)

(2) This may be a kill zone, by some metal.

(3) No aerial photo of area could be observed, * The MAYO NATIVE BAND has borrowed (since Aug 1996) 100's of AERIAL PHOTOS - never returned.



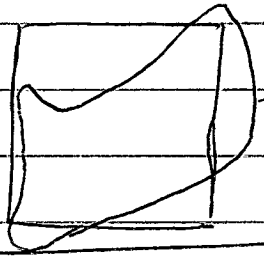
PLACER GOLD

- MINERS RD is to an active placer area (acc to ass. min. rec. Mayo).
- ..... TRAILS are cat trails.
- I hope to do this in August or September when miners Road is dry.

5) – In past, 1996, on YMIP-non claims; I was shown a strange zone by a gold placer miner. The trees were small, yellowish and moss was a strange colour. Ever since I am more aware of possibility of vegetation altered by ~~[redacted]~~ metals.

– I have a 4 foot long soil auger I have never used. This is a good time to use it to do a soil grid over this area.

KM
XKM



area of no trees ?!?!

These projects are all low budget, on or close to a road and balance (& wise) my Mayo-Rainbow Cr + Watson Lake-Hasselberg Lake.

References

(1) PROPERTY REPORT on Sleeper (10-29) asses. #093206 (YB29730 - 749) by Kenneth Galambos

(2) 115.P MAP. minfile # 16 Moose Ridge
#18 Reverse
#42 McGinty

(3) Personal communication MAP
Ken Galambos, Bob Stirling, ass. min. ec.

6/6 (4)

BUDGET PROPOSED (1998)

STEWART RIVER PROJECT

AERIAL PHOTOS for AREAS NOW ORDERED

A TARGET

700 KM	.46 gas	$ 320
10 Days	35 diem	350
up to 20 SILTS (-200m)	25	500
up to 100 SOILS	$ (20)	2000
	→	$ 3170

B TARGET

700 KM	gas	$ 320
5 Days	diem	175
10 Rock samples	$22	220
9 SOILS	$20	180
	→	$ 895

D TARGET

700 KM	gas	$ 320
6 Days	diem	210
up to 30 SOIL x 20		600
		$ 1130

A, B, D	total	$ 5195
	misc	300
		$ 5500

YUKON MINFILE
YUKON GEOLOGY PROGRAM
WHITEHORSE

NAME(S): McGuinty
MINFILE #: 115P 042
MAJOR COMMODITIES: -
MINOR COMMODITIES: -
TECTONIC ELEMENT: Selwyn Basin

NTS MAP SHEET: 115 P 8
LATITUDE: 63°28'47"N
LONGITUDE: 136°23'00"W
DEPOSIT TYPE: Unknown
STATUS: Anomaly

CLAIMS (PREVIOUS AND CURRENT)

DAVID, HALONA, PAN, SLEEPER

WORK HISTORY

Staked as David & Halona cl (YA41512) in Nov/79 by C. Charette and as Pan cl (YA43488) in Jan/81 by S. Schmidt. K. Galambos staked the Sleeper 10-29 cl (YB29730) 2.5 km to the northwest in May/93 and later carried out a geological sampling program in May/94.

GEOLOGY

The earlier claims are probably underlain by Late Proterozoic-Early Cambrian schist, quartzite, and phyllite and may have been staked to protect surface rights.

Bulk silt samples (-200 mesh) and pan concentrates collected in 1992 returned anomalous values of gold.

REFERENCES

K.D. Galambos, Mar/94. Assessment Report #093206 by K.D. Galambos.

YUKON MINFILE
YUKON GEOLOGY PROGRAM
WHITEHORSE

NAME(S): Conservative
MINFILE #: 115P 050
MAJOR COMMODITIES: -
MINOR COMMODITIES: -
TECTONIC ELEMENT: Selwyn Basin

NTS MAP SHEET: 115 P 9
LATITUDE: 63°33'37"N
LONGITUDE: 136°23'38"W
DEPOSIT TYPE: Unknown
STATUS: Uncertain

CLAIMS (PREVIOUS AND CURRENT)

BILL

WORK HISTORY

Staked as Bill cl (YA77734) in Jul/84 by L. Brown.

GEOLOGY

The claims are underlain schist, quartzite, phyllite and limestone of the by Late Proterozoic-Early Cambrian Hyland Group.

YUKON MINFILE
YUKON GEOLOGY PROGRAM
WHITEHORSE

MINFILE #: 115P 018
MAJOR COMMODITIES: -
MINOR COMMODITIES: -
TECTONIC ELEMENT: Selwyn Basin

NTS MAP SHEET: 115 P 7
LATITUDE: 63°29'02"N
LONGITUDE: 136°58'02"W
DEPOSIT TYPE: Unknown
STATUS: Uncertain

CLAIMS (PREVIOUS AND CURRENT)

IH, HH

WORK HISTORY

Staked as IH, HH, etc cls (Y27030) in Sep/68 by O. Hutton and associates.

GEOLOGY

Claims cover a stock of granodiorite in contact with Paleozoic? metasedimentary rocks.

YUKON MINFILE
YUKON GEOLOGY PROGRAM
WHITEHORSE

NAME(S): Moose Ridge
MINFILE #: 115P 016
MAJOR COMMODITIES: Ag,Pb,F
MINOR COMMODITIES: -
TECTONIC ELEMENT: Selwyn Basin

NTS MAP SHEET: 115 P 11
LATITUDE: 63°33'49"N
LONGITUDE: 137°10'39"W
DEPOSIT TYPE: Unknown
STATUS: Showing

CLAIMS (PREVIOUS AND CURRENT)

HOPE, KING, CON, CML, HILL

WORK HISTORY

First staked as Hope cl (82362) in Sep/62 by Dualco Syndicate (Highland Bell, Area ML, Dome ML, Ventures L and Lake Expanse), which explored with hand trenching in 1963. Restaked as King cl (Y6637) in Apr/67 by G. King and O. Hutton and later as Con cl (Y32508) in Jun/69 by C. Klippert, who explored by bulldozer trenching in 1967 and 1970. Dennis McCrae staked the CML cl (Y69473) about 2.4 km to the south in Jul/73.

The showing was restaked as Hill cl (YA39753) in Apr/79 by Amax Potash, which explored with mapping and geochem sampling later in the year.

GEOLOGY

The claims are underlain by Paleozoic? metasedimentary rocks, which are cut by a strongly altered and bleached granitic dyke or small stock. Fluorite is reported to occur in limy bands up to 7.6 m wide and galena assaying up to 411.4 g/t Ag is also said to be present.

YUKON MINFILE
YUKON GEOLOGY PROGRAM
WHITEHORSE

NAME(S): Sether
MINFILE #: 115P 021
MAJOR COMMODITIES: -
MINOR COMMODITIES: -
TECTONIC ELEMENT: Selwyn Basin

NTS MAP SHEET: 115 P 8
LATITUDE: 63°20'10"N
LONGITUDE: 136°12'19"W
DEPOSIT TYPE: Unknown
STATUS: Anomaly

CLAIMS (PREVIOUS AND CURRENT)

OSLO

WORK HISTORY

Staked as Oslo, etc cl (16274) in Oct/26 by O. Sether, who explored with shallow shafts until 1934.

GEOLOGY

Probably staked as a gold prospect. Bostock noted that large quartz veins are found here cutting Paleozoic? metasedimentary rocks and that a minor gold placer occurs in a north-flowing stream.

REFERENCES

GEOLOGICAL SURVEY OF CANADA Paper 48-25, p. 12.

YUKON MINFILE
YUKON GEOLOGY PROGRAM
WHITEHORSE

NAME(S): Ethel
MINFILE #: 115P 027
MAJOR COMMODITIES: Pb
MINOR COMMODITIES: -
TECTONIC ELEMENT: Selwyn Basin

NTS MAP SHEET: 115 P 8
LATITUDE: 63°19'37"N
LONGITUDE: 136°06'26"W
DEPOSIT TYPE: Unknown
STATUS: Showing

CLAIMS (PREVIOUS AND CURRENT)

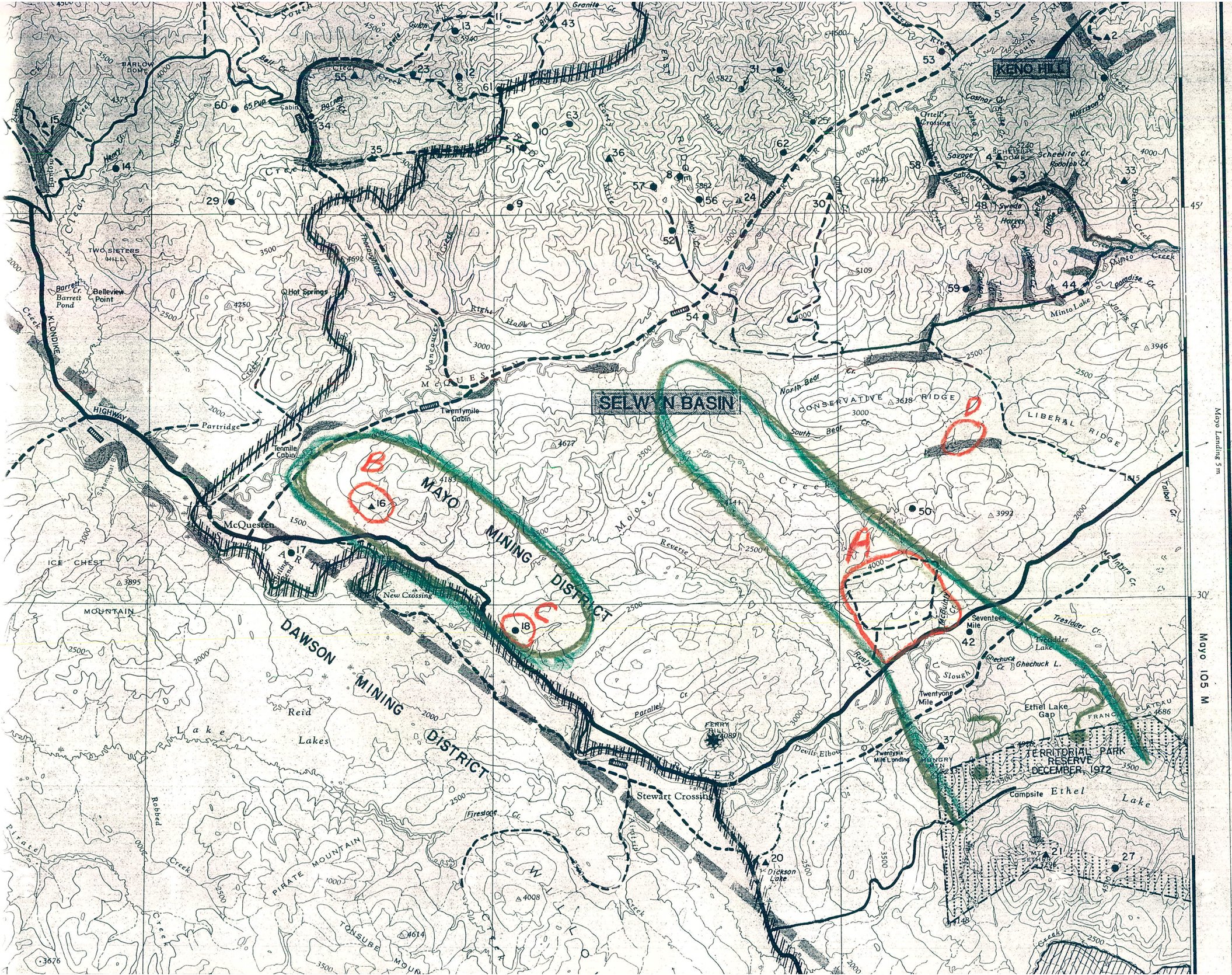
ETHEL, DAY, JOY

WORK HISTORY

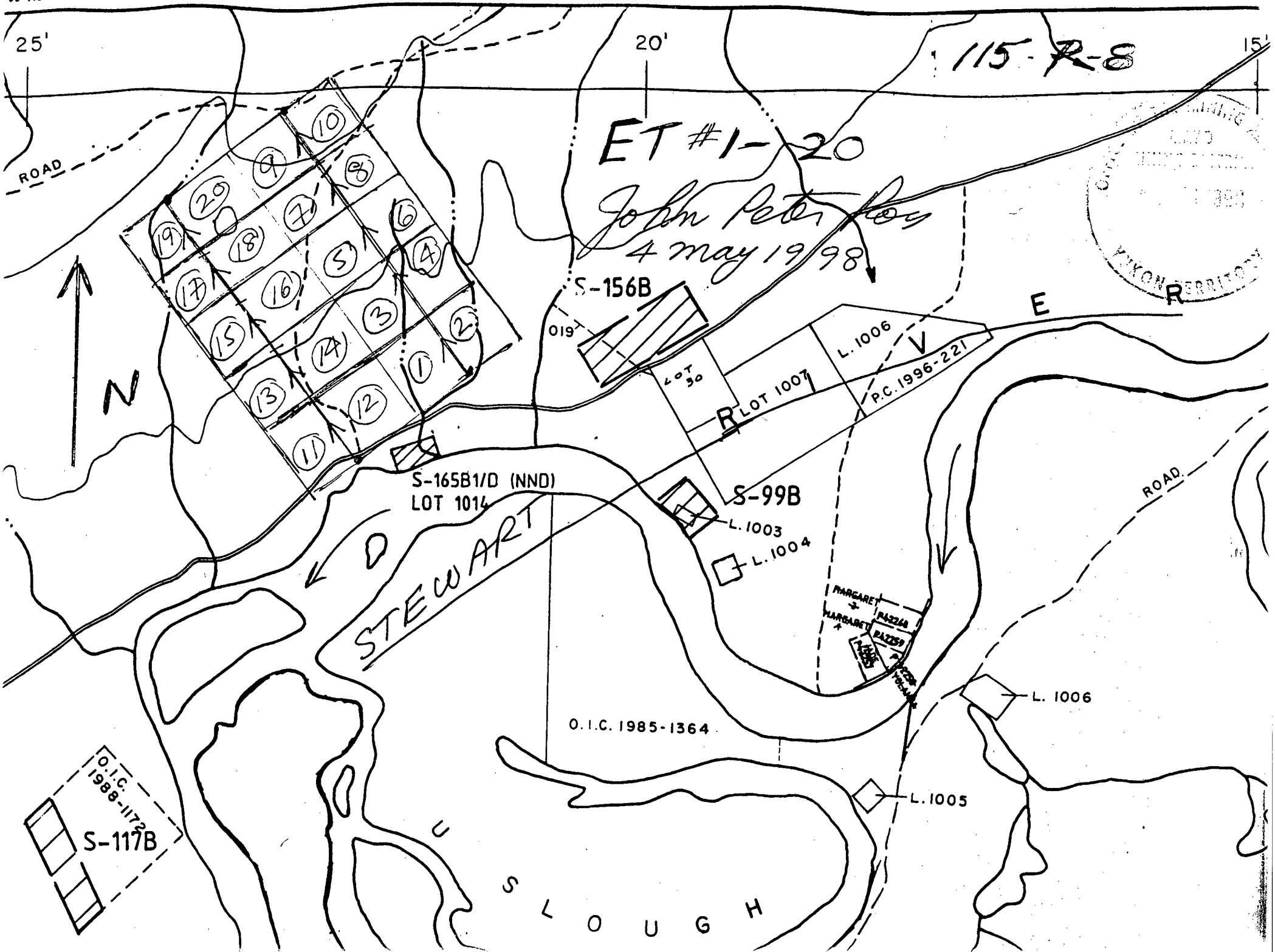
Staked as Ethel cl (Y98332) in Aug/75 by G. Nicloux & K. Smeeton who added Day cl (YA5565) in Jun/76 and explored with trenching in 1977. Restaked as Joy cl (YA83496) in Jun/87 by J.B. O'Neill.

GEOLOGY

The claims are underlain by Paleozoic? limestone, schist and gneiss and were staked on a galena showing.



1. JAYBEE (Ag, Pb — Vein)
2. SEATTLE (Pb, Ag — Vein)
3. HAWTHORNE (Sb, Ag — Vein)
4. SCHEELITE DOME (W — Skn)
5. RODIN
6. HOBO (Au, Ag — Vein)
7. SPRAGUE (Pb, Cu — Vein)
8. EAST RIDGE (Sn, Pb, Ag, Zn — Vein, Skn)
9. LUGDUSH (W, Ag — Skn)
10. RIDGE (Ag, Pb — Vein)
11. JOSEPHINE (Au — Vein)
12. RHOSGOBEL (W — Ppy)
13. PUKELMAN (W, Au, Ag — Ppy, Vein)
14. CLEAR CREEK (Th — Un)
15. BARLOW
16. MOOSE RIDGE (Ag, Pb, F — Un)
17. ELIZABETH
18. REVERSE
19. ROSEBUD (Asbestos)
20. FLEGEL
21. SETHER
22. PEARL
23. LEWIS (Au — Vein, Form)
24. BOULDER (Cu — Vein)
25. TOTH
26. ORTELL
27. ETHEL (Pb - Un)
28. SECRET
29. THOROUGHFARE
30. OLIVER (Sn, Ag - Vein)
31. BIX (Sn — Un)
32. MOZI
33. HIGHET (Au — Vein)
34. BARNEY (Sn - Vein)
35. CLEMENT
36. BANDER (Pb - Vein)
37. TWENTYSIX
38. FIREBIRD
39. PHOENIX
40. FIONA
41. SYENITE
42. Mc GUINTY
43. CORTIN
44. SAVY
45. OMEGA (Ba - Form)
46. WEIZ
47. ZETA (Ag, Pb — Vein)
48. POTTER
49. PIRATE (Au - Un)
50. CONSERVATIVE
51. JABBERWOCK (Sn - Un)
52. MAYGOLD


25'
20'
15'
115-R-8
ROAD
ET #1-20
John Peter Low
4 may 1998
S-156B
019
LOT 1007
L. 1006
P.C. 1996-221
LOT 30
E
R
V
N
S-165B1/D (NND)
LOT 1014
S-99B
L. 1003
L. 1004
STEWART
D
ROAD
MARGARET 3
MARGARET 4
PAZ248
PAZ249
PAZ250
L. 1006
O.I.C. 1985-1364
L. 1005
O.I.C. 1988-1172
S-117B
SLOUGH
YUKON TERRITORY

5 pages - all

DEAR JOHN 11 MAY 98.

Here is BLOWN up ① topo of AREA with

As result

	1	2	3
SILT -200m	124	102	273
PPB			
PAN CONC	103	2665	1438

my --- are my ideas of lineans.
Notice silt #3 has streams closer to-
gether. And a structurally more
complex area.

May 15/98 FAX (12+) KM should be
(25+) KM.

② = area of govt. geophysical. PAID by
private enterprise ▨ DON MURPHY is
STILL at YUKON EDA

③ Dawson Mayo area map

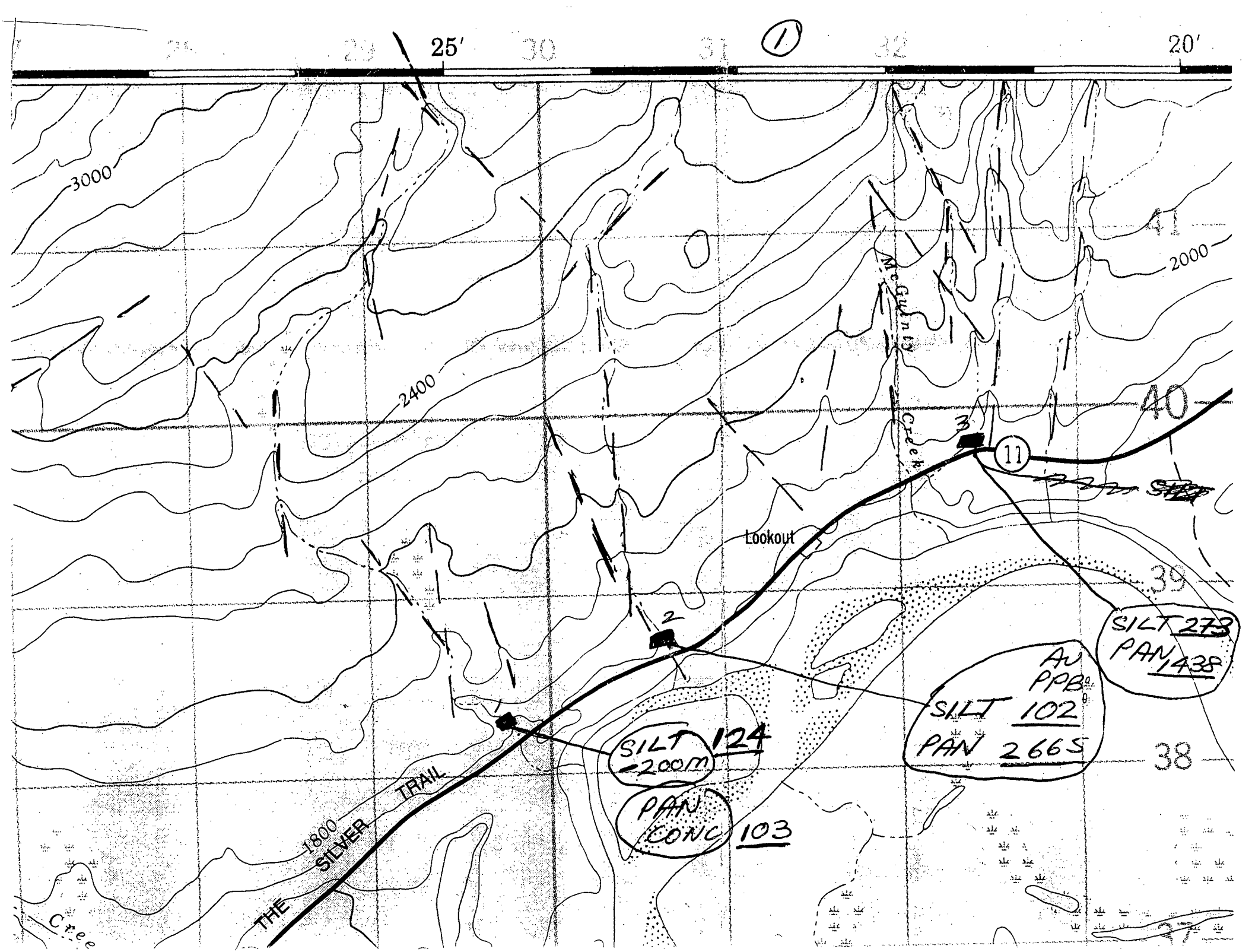
④ Dawson Mayo — FAULTS + DATA
ADDED by KEN GALAMBOS

I will BE here at 867-668-7985
for a period ~~of~~ 20-30 minutes

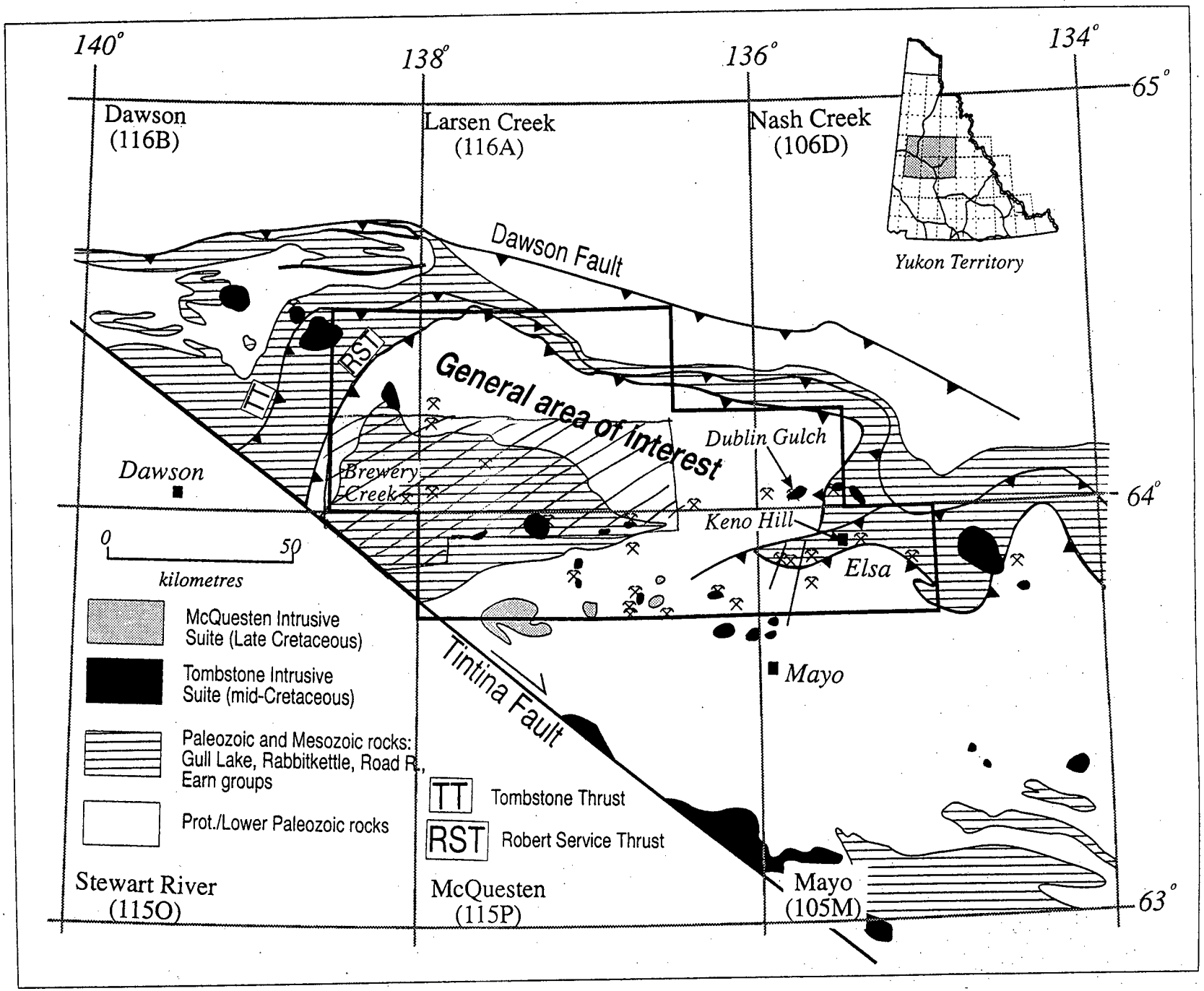
Peter Lon "EL GWAPO".

DEAR MIKE MARCHAND: 5 MAY 1998

(1) STAKED 1-20 ET CLAIMS (100 Pts)
(2) ON ROAD TO MAYO.
(3) OLD-TIMERS CONSIDER THIS AREA TO BE SOURCE OF STEWART RIVER GOLD. (N+S of RIVER?)
(4) LOT OF GLACIAL SAND.
(5) GEOLOGY SIM TO BREWERY CR.
- LOT OF GLACIAL SANDS
- SE end of ~~25~~ (+)KM of NW/SE linears 25
- STREAMS have eroded sands (CONFIRMED 3X) +3 STREAMS in AREA are ANOMOLOUS in -200 mesh Au (NOTHING ELSE) ALSO PAN CONC.
- IN PAST 1 SOIL LINE WAS DONE +2 SOILS BELOW 1 LINEAR WERE WEAKLY-MOD. ANOMOLOUS
- GOUT. SILTS suggest LINEARS MAY be GOLD BEARING on other side of MT.
(6) GOLD NOT ECONOMIC ABOVE this AREA +BOSTOCK? SAID NONE ABOVE MAYO RIVER! PLACER
(7) LARGE AMOUNTS OF CALC TUFA FRAGMENTS IN STREAM suggest Recent +possible EPITHERMAL ACTIVITY
(8) NEVER EXPLORED PAST THIS.
(9) *NO As Sb in STREAMS. POGO CR = Avalone, BREWERY creek only a fine GOLD ANOM. +Au not related to As/Sb?? GALAMBOS!!


25'
20'
3000
2400
2000
McGuinty Creek
Lookout
THE SILVER TRAIL
1800
SILT 124
-200m
PAN
CONC 103
AU PPB
SILT 102
PAN 2665
SILT 273
PAN 1438
40
39
38
37
11
3
2

GEOPHYSICAL SURVEY (2)



The Canada/Yukon Geoscience Office and the Geological Survey of Canada are soliciting industrial partners for a regional airborne multiparameter (gamma ray spectrometry,

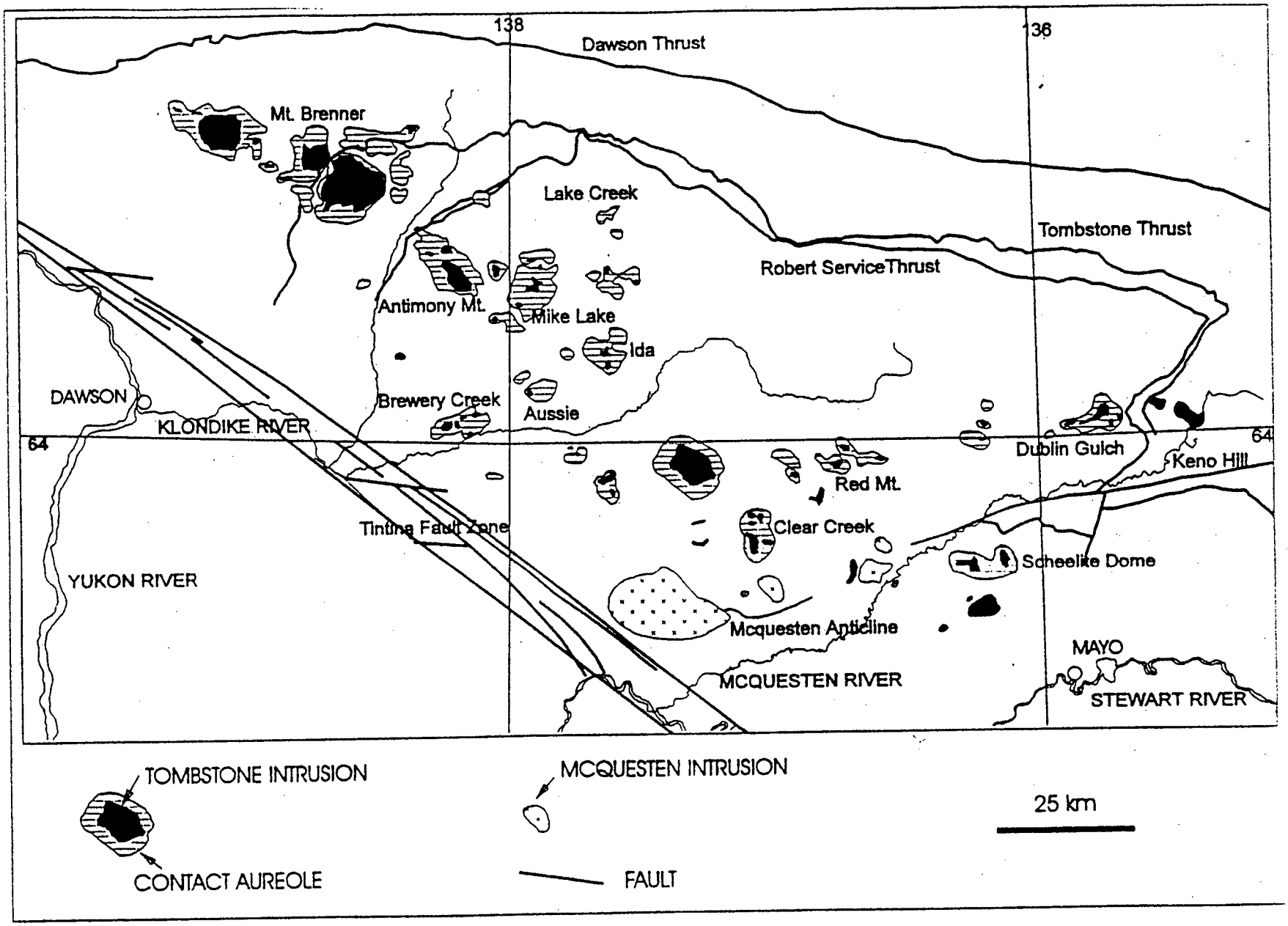


Figure 1. *Sketch map of the main geological features in the Dawson-Mayo area, Yukon and of the locations of areas containing gold mineralization.*

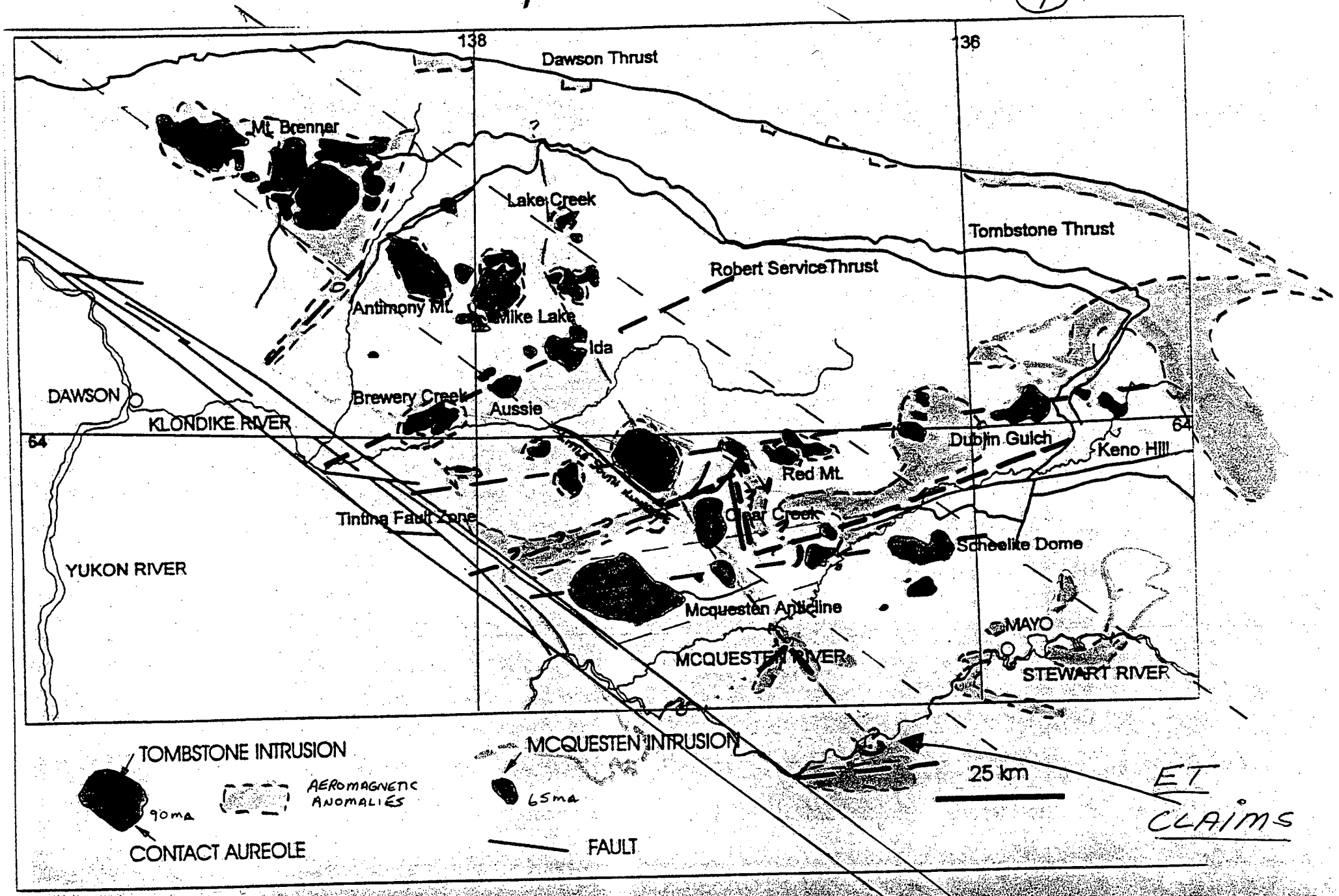


Figure 1. *Sketch map of the main geological features in the Dawson-Mayo area, Yukon and of the locations of areas containing gold mineralization.*

needs approval

Copy

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

NAME(S): McGuinty
MINFILE #: 115P 042
MAJOR COMMODITIES: -
MINOR COMMODITIES: -
TECTONIC ELEMENT: Selwyn Basin

NTS MAP SHEET: 115 P 8
LATITUDE: 63°28'47"N
LONGITUDE: 136°23'00"W
DEPOSIT TYPE: Unknown
STATUS: Uncertain

CLAIMS (PREVIOUS AND CURRENT)

DAVID, HALONA, PAN, SLEEPER

WORK HISTORY

Staked as David & Halona cl (YA41512) in Nov/79 by C. Charette and as Pan cl (YA43488) in Jan/81 by S. Schmidt. The Sleeper 10-29 cl (YB29730) were staked 2.5 km to the northwest in May/93.

GEOLOGY

The earlier claims are probably underlain by Late Proterozoic-Early Cambrian schist, quartzite, and phyllite and may have been staked to protect surface rights.

Bulk silt (-200 mesh) samples and pan concentrates collected in 1992 returned values of 273 ppb and 2665 ppb gold, respectively.

REFERENCES

K.D. Galambos, Mar/94. Assessment Report #093206 by K.D. Galambos.

MAP NO: 115P/08

ASSESSMENT REPORT X
PROSPECTUS
CONFIDENTIAL
OPEN FILE

DOCUMENT NO: 093206
MINING DISTRICT: MAYO
TYPE OF WORK: PROSPECTING

REPORT FILED UNDER: KENNETH D. GALAMBOS

DATE PERFORMED: 1993 **DATE FILED:** MAY 16, 1994

LOCATION: **LAT.:** 63°29' **AREA:** STEWART CROSSING

LONG.: 136°23' **VALUE $:** 2,000

CLAIM NAME & NO.: SLEEPER 10-29 (YB29730-49)

WORK DONE BY: KENNETH D. GALAMBOS

WORK DONE FOR: KENNETH D. GALAMBOS

DATE TO GOOD STANDING:	

REMARKS: NW-SE STRUCTURES PASSING THROUGH CLAIMS. BULK SILT SAMPLES AT 200- MESH RETURED GOLD VALUES.

PROPERTY REPORT

ON

SLEEPER 10 - 29 CLAIMS

(YB29730-YB29749)

MAYO MINING DISTRICT

N.T.S.: 115/P8

LATITUDE: 63 deg. 29'N

LONGITUDE: 136 deg. 23'W

RECEIVED
MAY 16 1994
MINING RECORDER
MAYO, Y.T.
LA & N.D.

093206

093206

OWNER: Kenneth D. Galambos
P.O. Box 5625
Whitehorse, Yukon Y1A 5H4
Tel: (403)633-6729

Report by:
Kenneth D. Galambos P.Eng
March 18, 1994

SUMMARY

The discovery of very fine gold in creeks draining into the Stewart River suggests a possible hardrock source for the vast amounts of flower gold which has been mined for decades from its point bars and back channels. This area has been staked as the Sleeper 10 - 29 claims.

The Sleeper Property consists of 20 contiguous quartz mineral claims situated in the Mayo Mining district approximately 20 km NE of Stewart Crossing and the Tintina Trench. The claims straddle the Silver Trail Highway.

The claims were staked to cover an area drained by creeks highly anomalous in fine gold. Bulk silt (-200 mesh) and pan concentrate samples collected during the 1992 season returned values of up to 273 ppb and 2665 ppb gold respectively. These anomalies are not evident from the - 80 mesh silt samples collected for the 1987, GSC Open File 1650 which showed the same creeks to carry no gold. Previous bulk sampling in 1990 returned similar and higher gold values from the same area.

Air photo analysis suggests a number of strong NW - SE structures trending through the area, some of which can be traced for up to 25 km. A large amount of calc tufa fragments indicate recent and possible past epithermal activity in the area.

Considering the above evidence, it is believed that there exists good potential for finding an economic gold deposit within the area covered by or in the immediate vicinity of the Sleeper Claims.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

CHAPTER ONE

INTRODUCTION

1-1: Introductory Statement

The Sleeper claims are located approximately 20 km NE of Stewart Crossing, Yukon. The claims were staked in May, 1993 to cover an area drained by creeks highly anomalous in gold. To date there appears to have been no activity in the area.

1-2: Location and Access

The property is situated in the Mayo Mining District, 20 km NE of the Tintina Trench, at 63 deg. 29′ N and 136 deg. 23′ W on the 115 P/8 mapsheet. Access is by the all weather asphalt Silver Trail Highway from Stewart Crossing.

1-3: Physiography and Vegetation

The claims lie within the southern reaches of the Ogilvie Mountains in an area partially glaciated by the Reid (Nistling) advance. The claim group is located on a gentle to moderate sloping, south eastern facing hill side overlooking the Stewart River. Elevations range from 1600′ to 2700′.

Vegetation consists of primarily open mixed forest comprised of spruce, pine and aspen with some dense spruce and alder stands in swampier areas.

1-4: History of Claims

The Sleeper 10 - 29 claims (YB29730-749) were staked on May 8, 1993 and registered of May 17, 1993. Upon acceptance of this report, the claim group will remain in good standing until May 17, 1995.

1-5: Previous Exploration

The area does not appear to have undergone any recent exploration other than the bulk silt sampling program conducted by Noranda Exploration during 1990. It is sure to have been explored in the early part of the century by miners on their way to Mayo and Keno City, but probably passed by as there is little visual evidence of gold enrichment present.

1-6: Work Program

Three days were spent evaluating the property by MacKay Falkiner and Associates. Traverses were run through the property and one rock sample was collected and analyzed. In addition, a number of bulk silt samples and one rock sample collected in 1992 were sent for analysis by the owner of the property.

CHAPTER TWO

GEOLOGY

2-1: Regional Geology

The area has been mapped as graphitic phyllite and quartzite of Hadrynian age, previously known as part of the Yukon Group metamorphic rocks. These rocks are bounded to the south west by the Tintina Trench, a large Tertiary strike-slip fault system. Lower Cretaceous aged quartz monzonite, granodiorite and alaskite intrude the area as small stocks and plugs.

These intrusions, such as those present at Scheelite Dome and Minto Lake, do not have any significant magnetic signature. The magnetic signature of the region in question is relatively flat with the exception of a few small magnetic highs in the Moose Creek and Liberal Ridge areas.

The author believes that there are a number of large NE - SW trending extensional faults situated beneath the Stewart and McQuesten Rivers and Moose Creek with a younger NW - SE offsetting fault system which extends from the Sleeper Property and the Stewart River at least 25 km to the north east. This is suggested by breaks in topography as well as offset magnetic trends such as the magnetic high on Moose Creek.

2-2: Property Geology

Air photo analysis suggests a number of strong NW - SE trending structures through the area, some of which can be traced

for up to 25 km to the north east. Further evidence of these structures is indicated by the presence of calc tufa fragments containing organic leaf material. This indicates possible recent and past epithermal activity in the area.

Only a few outcrops were noted during the staking of the property. These have invariably been phyllitic in nature with minor to heavy quartz veining present.

TABLE OF FORMATIONS

UNIT	
QUATERNARY	
21	Surficial deposits undivided
20	Stream deposits, alluvium
TERTIARY	
19	Stream deposits, alluvium; 19a "White Channel Gravel"
17	17a, rhyolite, trachyte; 17b, granite and syenite porphyries, trachyte
JURASSIC AND/OR CRETACEOUS	
14	Granite, granodiorite, quartz monzonite
13	Syenite, monzonite
ORDOVICIAN OR EARLIER	
(YUKON GROUP)	
4	Schist, quartzite, phyllite, limestone

CHAPTER THREE

GEOCHEMISTRY

3-1: Silt Geochemistry

Silt samples collected for the GSC OPEN FILE 1650 show a number of creeks in the region anomalous in gold. Of importance in the general area are two creeks draining the backside of the large hill on which the Sleeper Claims were staked. These returned values of 54 (14) and 40 (95) ppb gold. The numbers in parentheses represent repeat analysis. As well, another creek which drains the south western slope returned a value of 46 ppb gold. The creeks draining the claim block did not register any significant values from traditional -80 mesh sampling. Two other samples of note flank the offset magnetic high situated on Moose Creek which is also on strike with suspected structures which pass through the claim block. These returned values of 31 and 17 ppb gold.

As mentioned above, the creeks draining the Sleeper Property do not appear to carry any gold when sampled using traditional -80 mesh silt sampling techniques. This is however not the case when bulk samples are collected and the -200 mesh fraction is analyzed. Using this methodology, bulk samples and pan concentrate samples were collected in 1992 from creeks accessible from the Silver Trail Highway. Samples BS-92004, BS-92006 and BS-92010 returned values of 102, 124 and 273 ppb gold respectively from the -200 mesh fraction of silt collected from these creeks. Pan concentrate samples H-92003 and H-92009 returned highly anomalous values of

2665 and 1438 ppb gold respectively from two of the creeks. Sample H-92009 contained a number of small colours while H-92003 showed no visual evidence of gold enrichment. The author believes that the sample containing visible gold is closer to the structural source. Similar bulk sampling by Noranda in 1990 returned similar or higher gold values from the same general area. Follow up sampling showed the anomalous values to be repeatable and the creeks to contain elevated fine gold values at least 4 km up stream.

One sample from Rusty Creek (BS-92008) also returned anomalous arsenic values of 56ppm, which is greater than the 95th percentile for the mapsheet. This is contrary to the values obtained in the GSC OPEN FILE.

3-2: Soil Geochemistry

Seventy-eight soil samples were collected in the vicinity of the property in 1990 by Noranda Exploration. Of the analysis received from the company to date one area appears to be slightly anomalous in gold values. This area although off of the claim block is situated immediately down slope from one the suspected structures which run through the property.

3-3: Rock Geochemistry

Two rocks have been collected from the property and analyzed by Chemex Labs Ltd. and Northern Analytical/International Plasma Ltd.. They consisted of a limy quartz-rich phyllite and white quartz vein material. Both returned background values.

CHAPTER FOUR

CONCLUSIONS & RECOMMENDATIONS

The discovery of fine gold in creeks draining into the Stewart River indicates a possible hardrock source for the vast amounts of fine placer gold which has been mined for decades from its point bars and back channels. This area has been staked as the Sleeper 10 - 29 claims.

The Sleeper Property consists of 20 contiguous quartz mineral claims situated in the Mayo Mining district approximately 20 km NE of Stewart Crossing and the Tintina Trench. The claims partially straddle the Silver Trail Highway.

The claims were staked to cover an area drained by creeks highly anomalous in fine gold. Bulk silt (-200 mesh) and pan concentrate samples collected during the 1992 season returned values of up to 273 ppb and 2665 ppb gold respectively. Previous bulk sampling in 1990 returned similar or higher gold values from the same area.

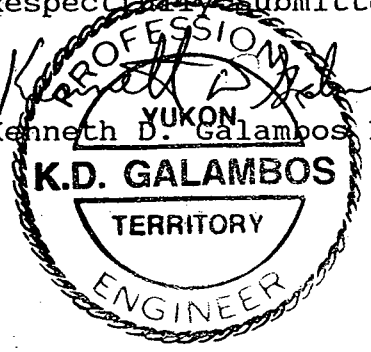
Air photo analysis suggests a number of strong NW - SE structures trending through the area, some of which can be traced for up to 25 km.

The area also contains evidence of possible recent and past epithermal activity as indicated by the presence of a large amount of calc tufa fragments in the creeks.

It is believed that there exists a good possibility for finding an economic gold deposit within the area covered by or in the immediate vicinity of the Sleeper Claims.

It is recommended that, upon option of the Sleeper Property, he claim group be expanded to cover possible mineralized extensions to the north east as far as the withdrawn block #R-22B situated immediately north of Moose Creek. Further investigations should include soil and geophysical surveys (magnetometer and EM) in the vicinity of suspected structures followed by trenching and drilling of the anomalies discovered.

Respectfully Submitted,



Kenneth D. Galambos, P.Eng.

APPENDIX A

SILT SAMPLE RESULTS

SILT SAMPLE RESULTS

1992 SAMPLING

Sample #	Gold(ppb)	Arsenic(ppm)
BS 92004	102	na
BS 92006	124	nd
BS 92008	26	56
BS 92010	273	na
BS 92012	<5	nd

na - not analyzed

nd - not detected

1990 SAMPLING

Sample #	Gold (ppb)
FS 137548	results not available
FS 137549	results not available
FS 139276	269
FS 139278	92
FS 139280	110
FS 138388	9
FS 138390	53
FS 138392	107

APPENDIX B

PAN CONCENTRATE RESULTS

PAN CONCENTRATE RESULTS

1992 SAMPLING

Sample #	Gold (ppb)
H 92003	2665
H 92005	103
H 92007	240
H 92009	1438
H 92011	205

APPENDIX C

SOIL SAMPLE RESULTS

SOIL SAMPLE RESULTS

1990 SAMPLING

Sample #	Gold (ppb)
P 142551-575	results not available
P 143961	<5
P 143962	7
P 143963	31
P 143964	<5
P 143965	16
P 143966	<5
P 143967	<5
P 143968	<5
P 143969	5
P 143970	<5
P 143971	<5
P 143972	36
P 143973	18
P 143974	7
P 143975	<5
P 139001-038	results not available

APPENDIX D

ROCK SAMPLE RESULTS

ROCK SAMPLE RESULTS

1993 SAMPLING

Sample #	Gold (ppb)
R 93001	<5
R 82001	<5

LIST OF EXPENDITURES

MFA Professional Services	$1850.00
Sample analyses	25.00
Prospector analyses	117.25
Report writing, drafting, etc.	600.00
total:	**2592.25**

STATEMENT OF QUALIFICATIONS

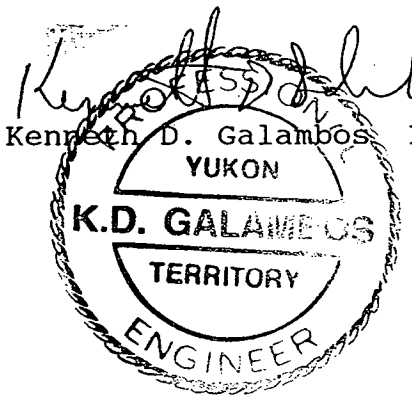
I have a Bachelor of Engineering degree in Geological Engineering from the University of Saskatchewan, 1982.

I am a member of the Association of Professional Engineers of Yukon Territory.

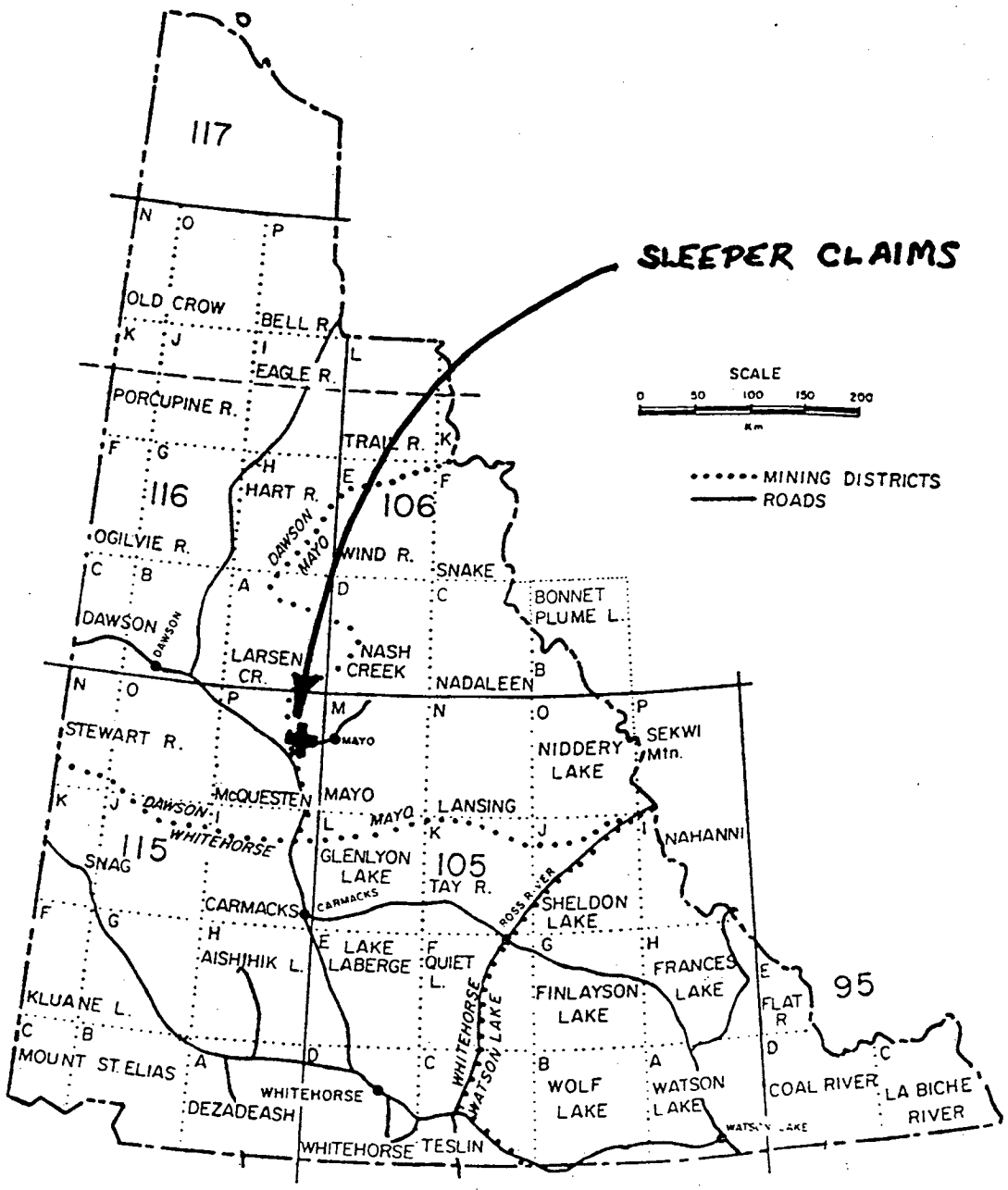
I have worked in the mineral exploration and mining industries in northern Canada since 1975.

I reside at Km 10.5 of the North Klondike Highway, and have been a resident of the Yukon Territory since 1985.

I hold 100% interest in the Sleeper Claims.



Kenneth D. Galambos P. Eng.


SLEEPER CLAIMS
SCALE
0 50 100 150 200
Km
MINING DISTRICTS
ROADS
117
116
106
115
105
95
OLD CROW
BELL R.
EAGLE R.
PORCUPINE R.
TRAIL R.
HART R.
DAWSON
MAYO
OGILVIE R.
WIND R.
SNAKE
BONNET PLUME L.
DAWSON
LARSEN CR.
NASH CREEK
NADALEEN
STEWART R.
MAYO
SEKWI Mtn.
NIDDERY LAKE
McQUESTEN
MAYO
LANSING
DAWSON
WHITEHORSE
SNAG
GLENLYON LAKE
TAY R.
NAHANNI
CARMACKS
ROSS RIVER
SHELDON LAKE
AISHIHIK L.
LAKE LABERGE
QUIET L.
FRANCES LAKE
FLAT R.
KLUANE L.
FINLAYSON LAKE
WHITEHORSE
WATSON LAKE
MOUNT ST. ELIAS
DEZADEASH
WOLF LAKE
WATSON LAKE
COAL RIVER
LA BICHE RIVER
WHITEHORSE
TESLIN

115 P/8 EDITION 2 Canada

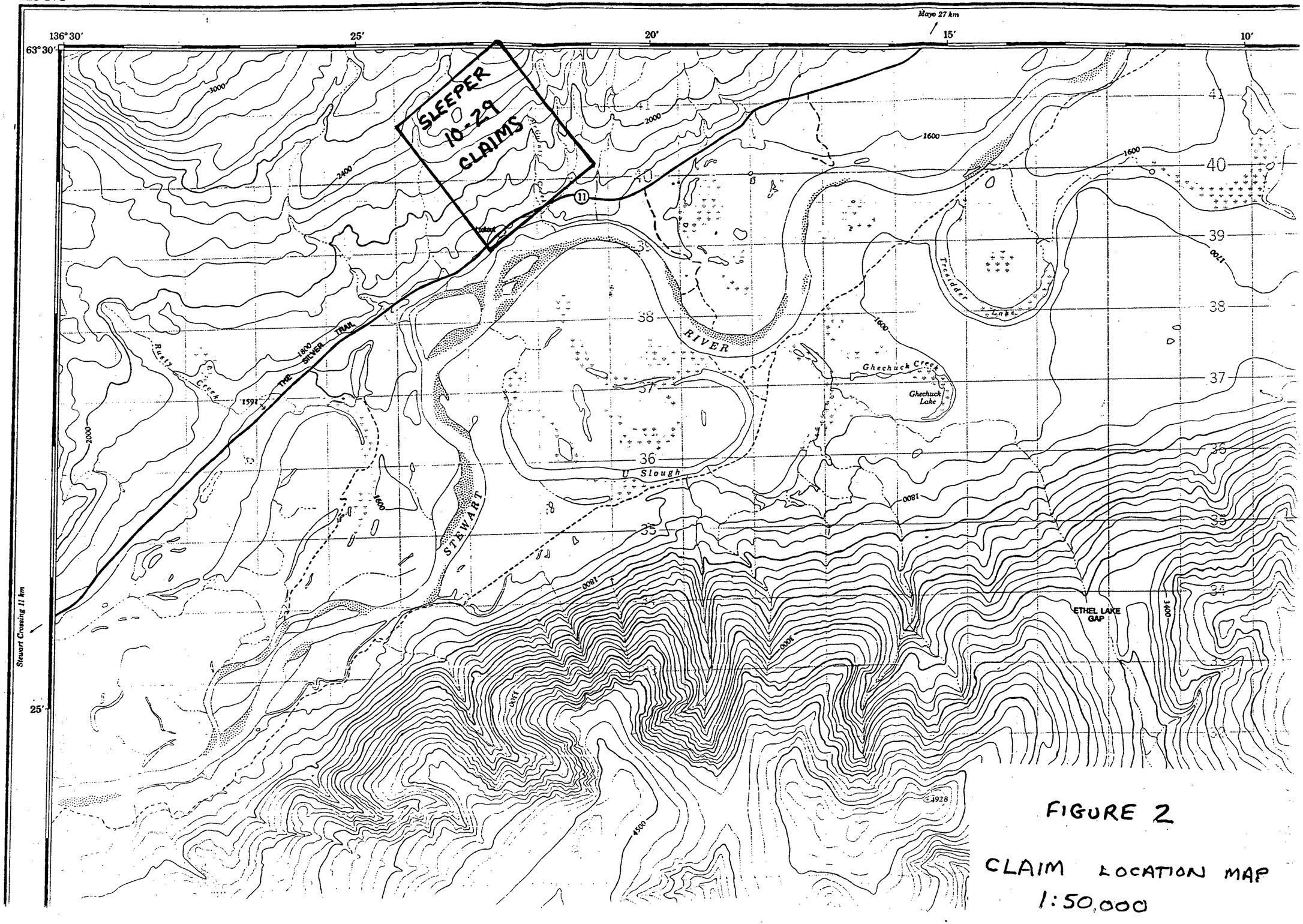


FIGURE 2

CLAIM LOCATION MAP

1:50,000

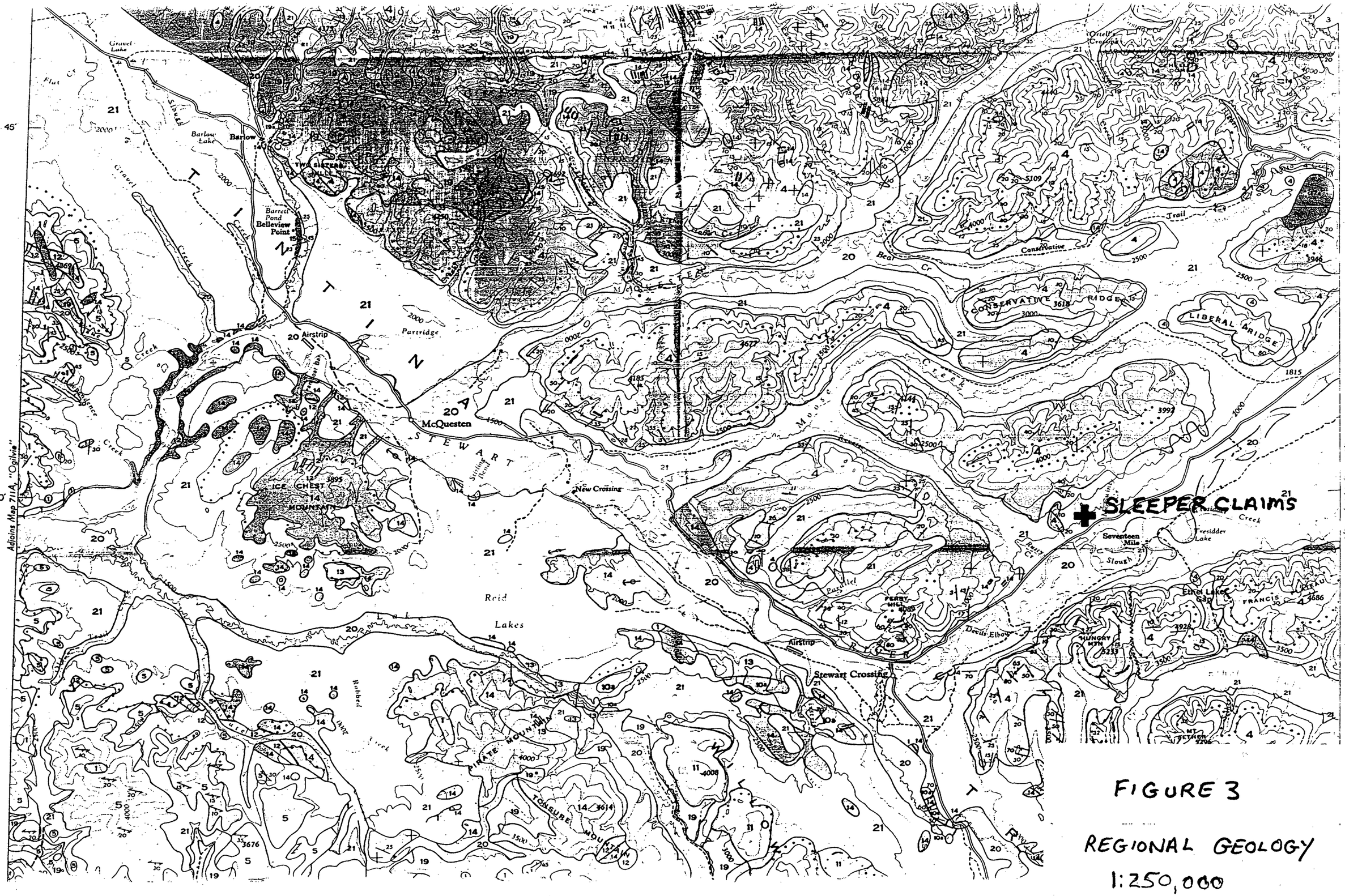


FIGURE 3

REGIONAL GEOLOGY

1:250,000

FIGURE 4
AIRPHOTO INTERPRETATION
1:30,000

BEST ATTAINABLE

A12183-90

FIGURE 4
AIRPHOTO INTERPRETATION
1:30,000

BEST ATTAINABLE IMAGE

A12183-90

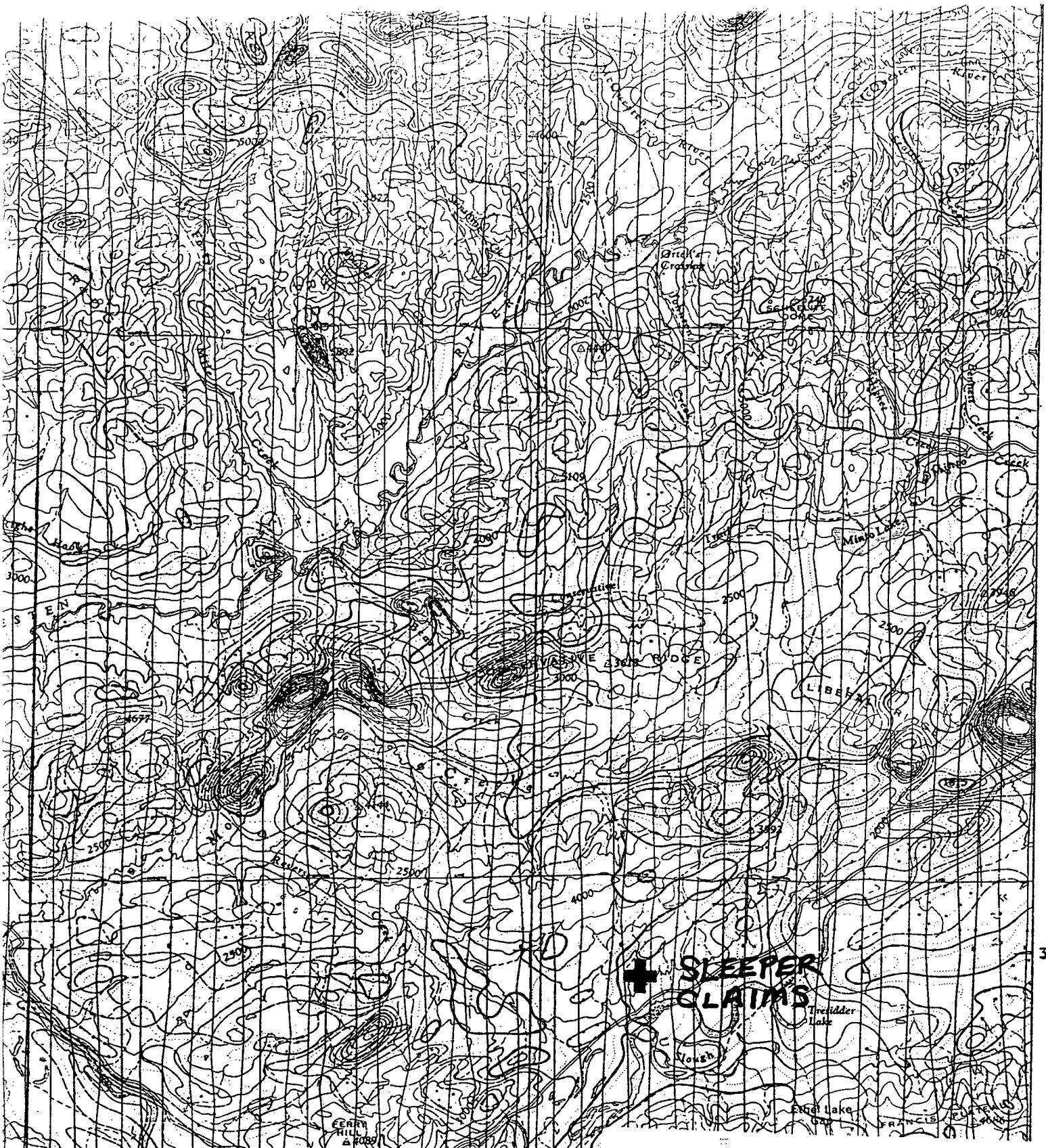


FIGURE 5

AIRBORNE MAGNETICS

1:253,440

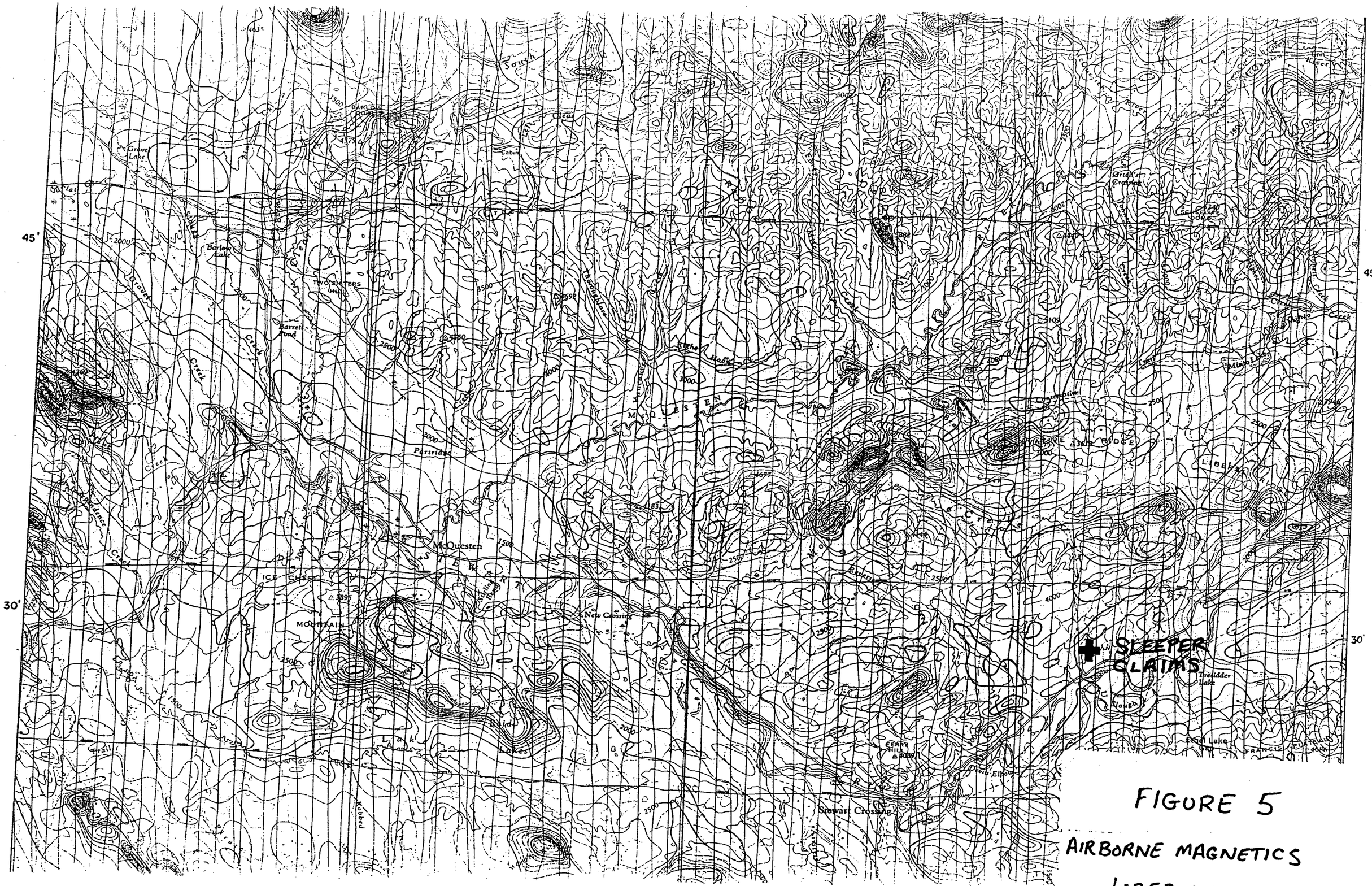


FIGURE 5

AIRBORNE MAGNETICS

1:253,440

LEGEND

- SLEEPER CLAIMS
- AIRPHOTO LINEARS
- (H) AIRBORNE MAGNETIC ANOMALIES
- X GOLD SILT ANOMALIES
- • GOLD SOIL ANOMALIES

FIGURE 6

COMPILATION
1:250,000

BEST ATTAINABLE IMAGE

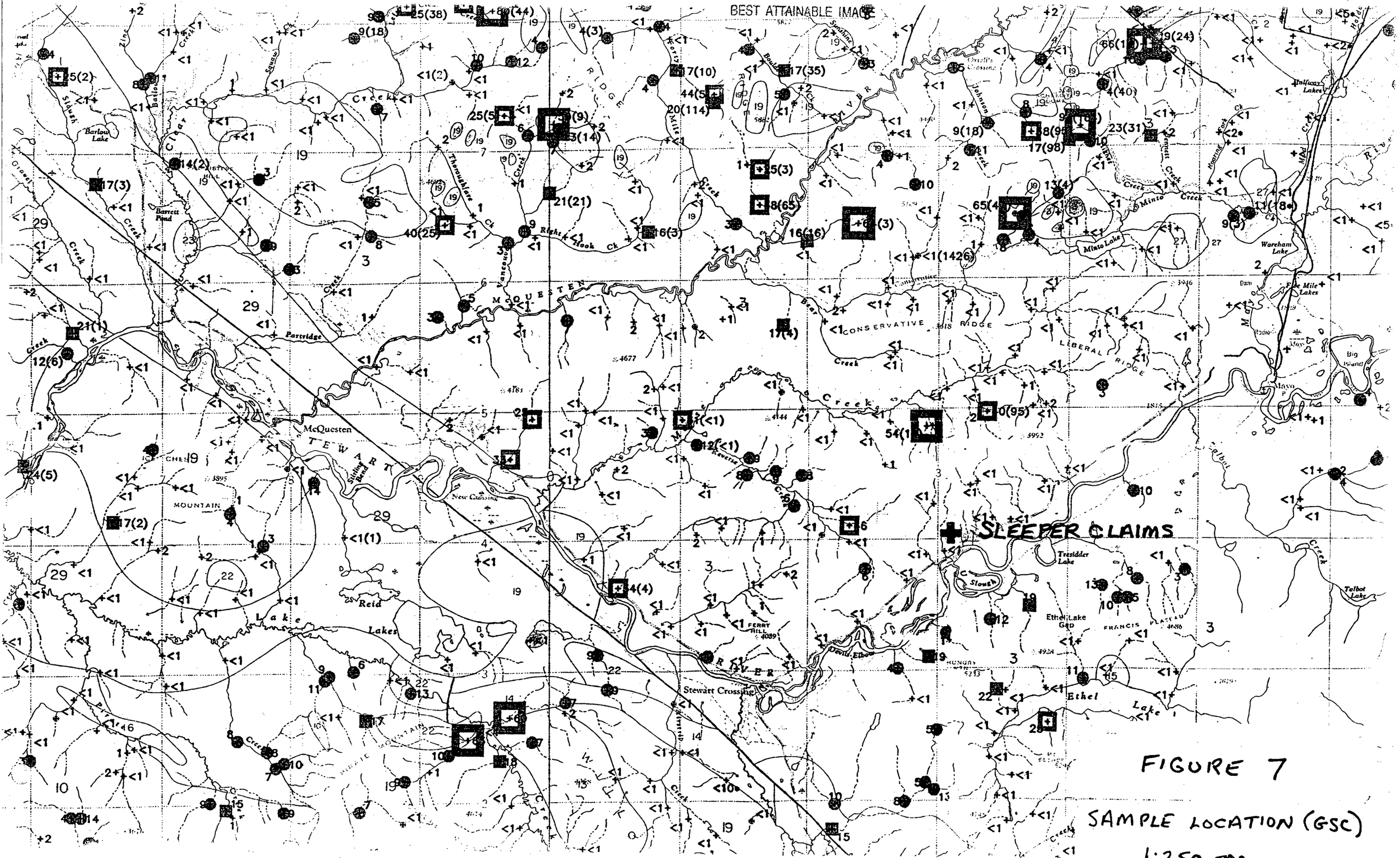


FIGURE 7

SAMPLE LOCATION (GSC)

1:250,000

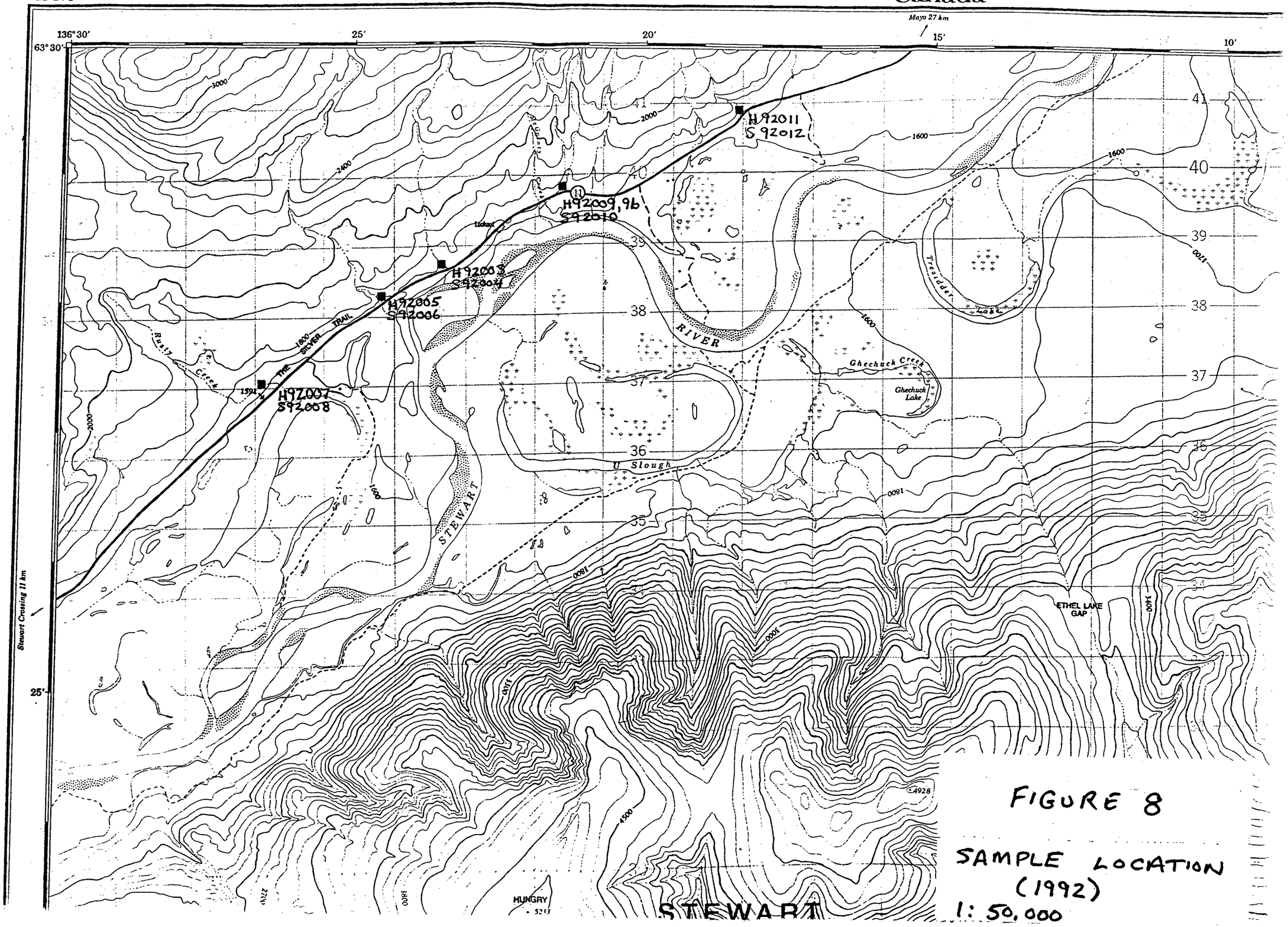


FIGURE 8

SAMPLE LOCATION (1992)

1: 50,000

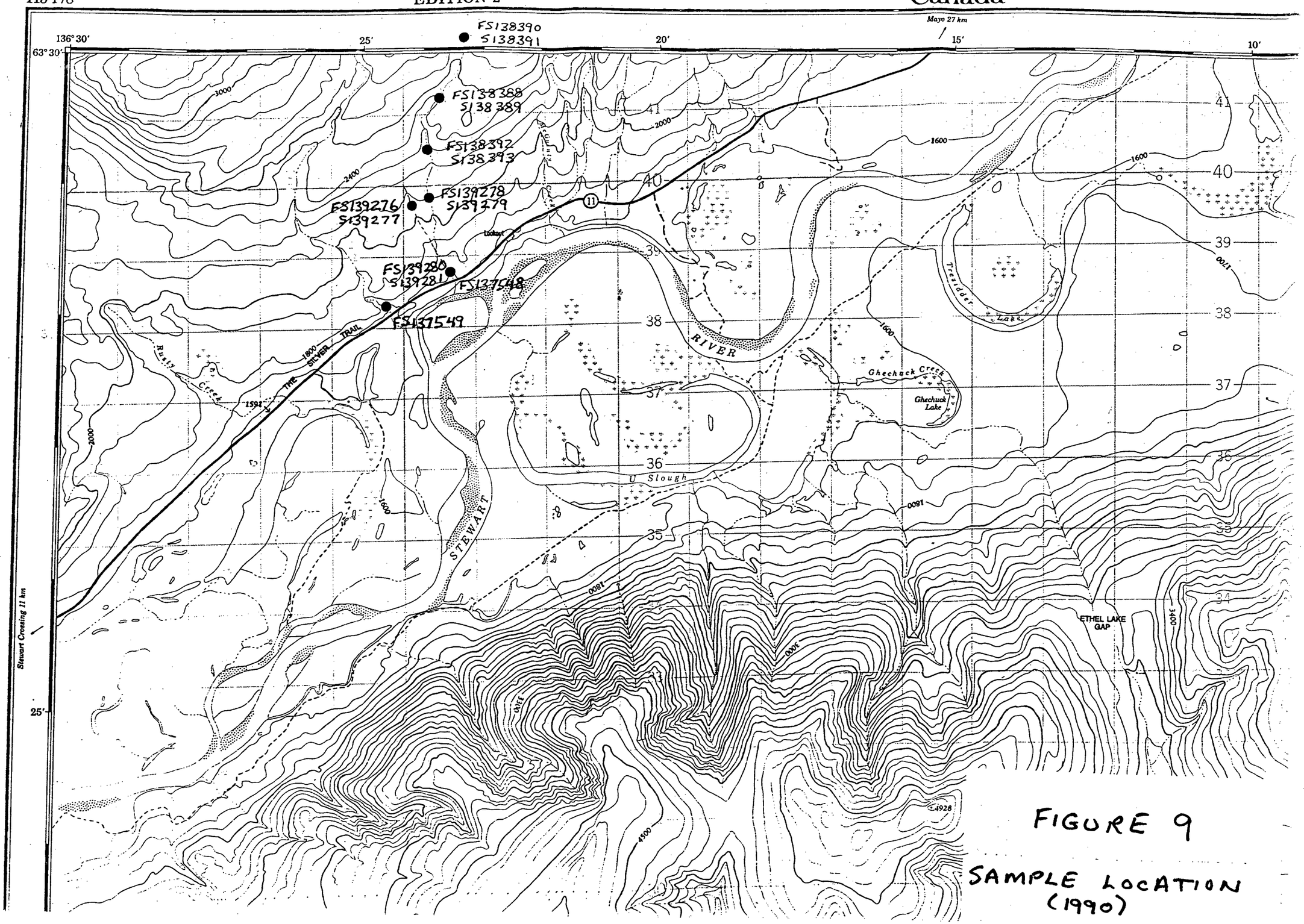


FIGURE 9

SAMPLE LOCATION (1990)

115P/09

115P/08

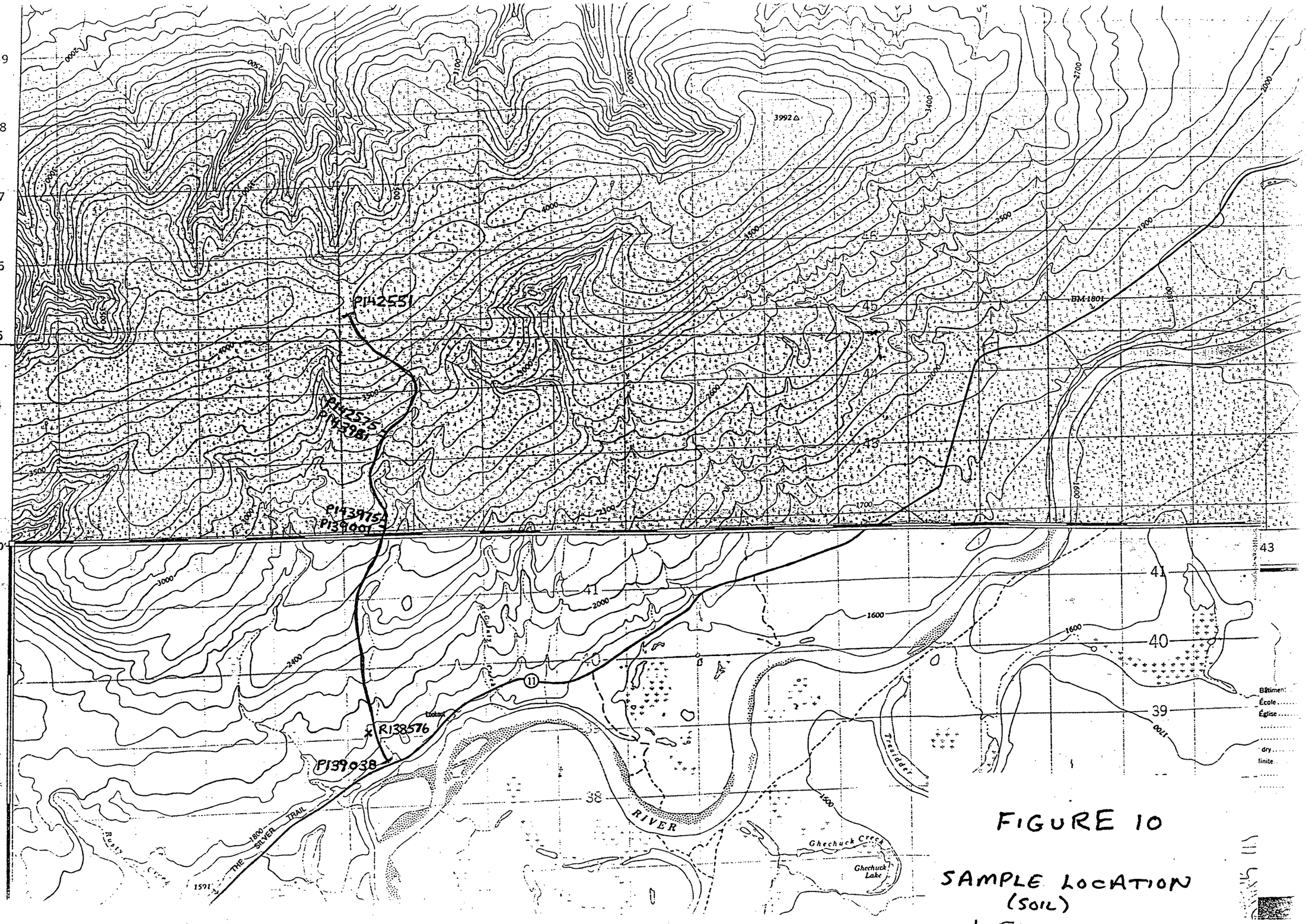
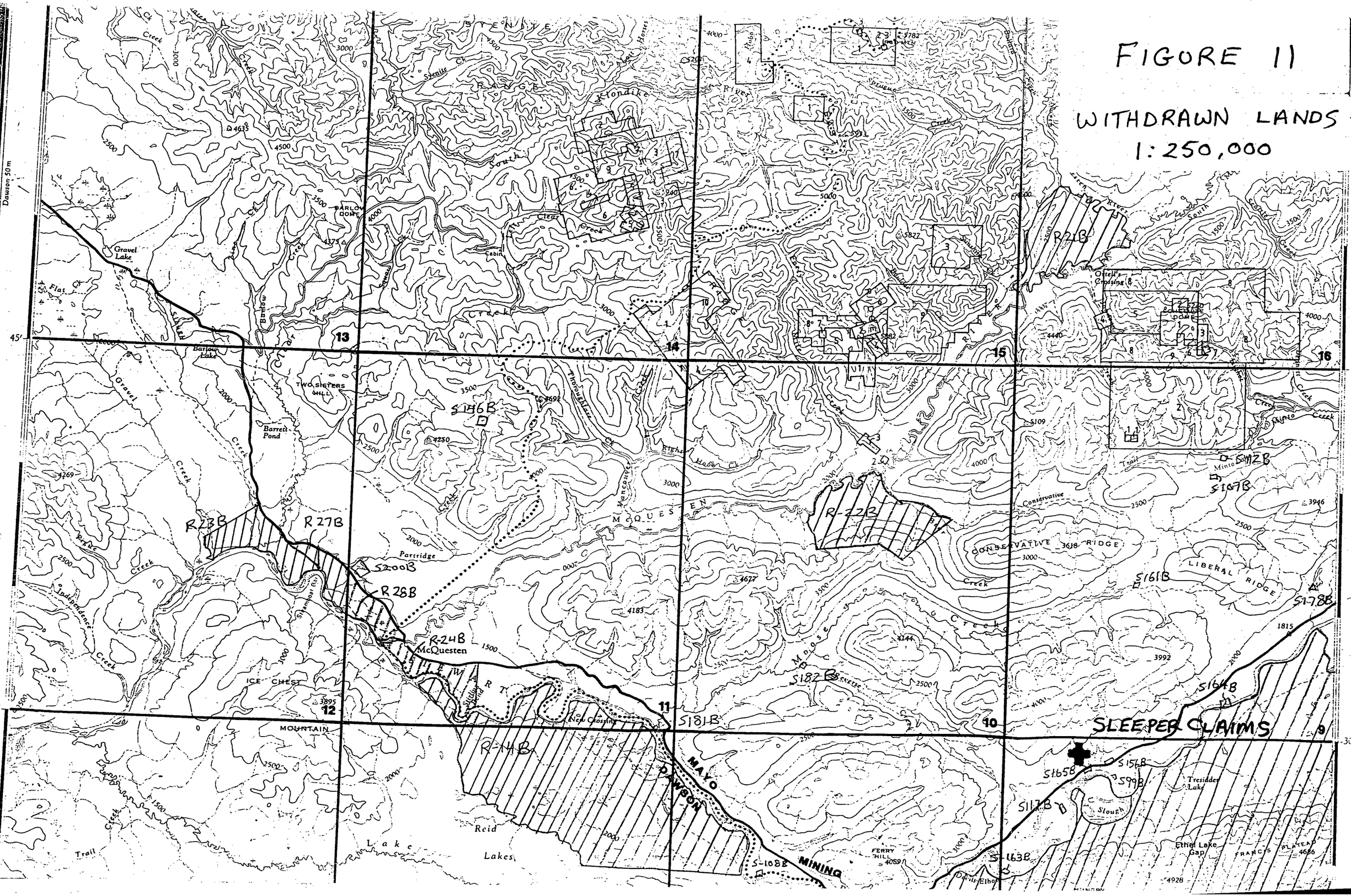


FIGURE 10

SAMPLE LOCATION
(SOIL)
1:50,000

FIGURE 11

WITHDRAWN LANDS
1:250,000



(3) / HASSELBERG LAKE PROJECT (1998 GRASS ROOTS)

The project is 63 miles northwest of WATSON LAKE. It is in the WATSON LAKE MINING DISTRICT on MAP 105A 13. One can drive to WATSON LAKE on a well maintained highway. Then by helicopter to area.

My target is an epithermal GOLD deposit. But it is possible also an ANTIMONY deposit may be present. My area of project is marked by ○.

My reasons are as follows.

(1) In past a government geochem silt survey showed 4 samples to be anomalous in Au, 3 of these in As, 3 of these in W.

(2) 30 VIVI claims were staked + recorded.

(3) 3 of the anomalies were confirmed

(4) a large area may be anomalous. As + Sb zoning may be present.

eg. VM 4 Au Sb anomoly
VS 9 Au Sb "
VS 10 Au Sb "
VS 7 ~~Au~~ - As "
VS 8 Au - As " ?

(5) Hydrothermally altered (felsic volcanics with quartz veining = similar to GOLD epithermal deposits are present.

BEDROCK OUTCROP WAS LOCATED.

(3) VS-VIS. According to Jim McFaul,
2 local geologist in FLOAT. However, no gold was found.

(6) a major fault is present. Epith. deposits are linked to faults.

(7) The ~~spring~~ STRING BOG intrigues me. but I can not test it. Is it a recessive mineralized breccia or ??

(8) According to an article on Au Sb in NFLD. If Sb is found, the gold is located below it at depth or closer to a mineralizing pluton.

(9) Stream sampling (moss and silt) should be very effective here!!

(10) Sb anomolies over 10 ppm are significant.

I plan to go to 2 locations and stake 8 more claims, redo VM4, VS7, VS8, VS9, VS9 and do more moss mat + SILT sampling below + above these areas. I will do more prospecting and look for more hydrothermally altered areas like VS-VIS.

Hopefully with more samples in streams the anomolous area(s) can be more defined.

I have discussed this area with John Kowalchuk and Craig Hart.

(3) REFERENCES

3

(1) GSC OPEN FILE 3293
NTS 105A13 SE YUKON 96

(2) SUMMARY OF WORK
HASSELBERG LAKE AREA
YUKON TERR NTS 105A13
JOHN PETER ROSS

(3) ORE DEPOSITS
VOLUME #1 NFLD - GOUT
Sb deposit ??? (I have misplaced Heartick, it is now at my house)

(4) PERSONAL COMMUNICATION
JOHN KOWALCHUK - Nu-Lite / VAN
- Kenrich / BC
JIM McFaul - YUKON geologist
CRAIG HART - YUKON EDA GEOL.

(3) 4 BUDGET HASSELBERG LAKE PROJECT (1998 GRASS ROOTS)

115 A 13

GAS (GMC TRUCK)
WH → WL → WH $460
1000KM × $.46/KM

Helicopter
→ Δ 1 $ 1200
→ Δ 2 1200
Out 1200

DIEM Δ1 10) 24 × $35 $ 805
Δ2 14)

SITES 30 × $20 600
MOSS MATS 10 × $30 $ 300
Rocks 20 × $22 440

RADIO $300/month × 25% $ 75
SEC OWNED

MISC + GEAR $ 500

total $6,780

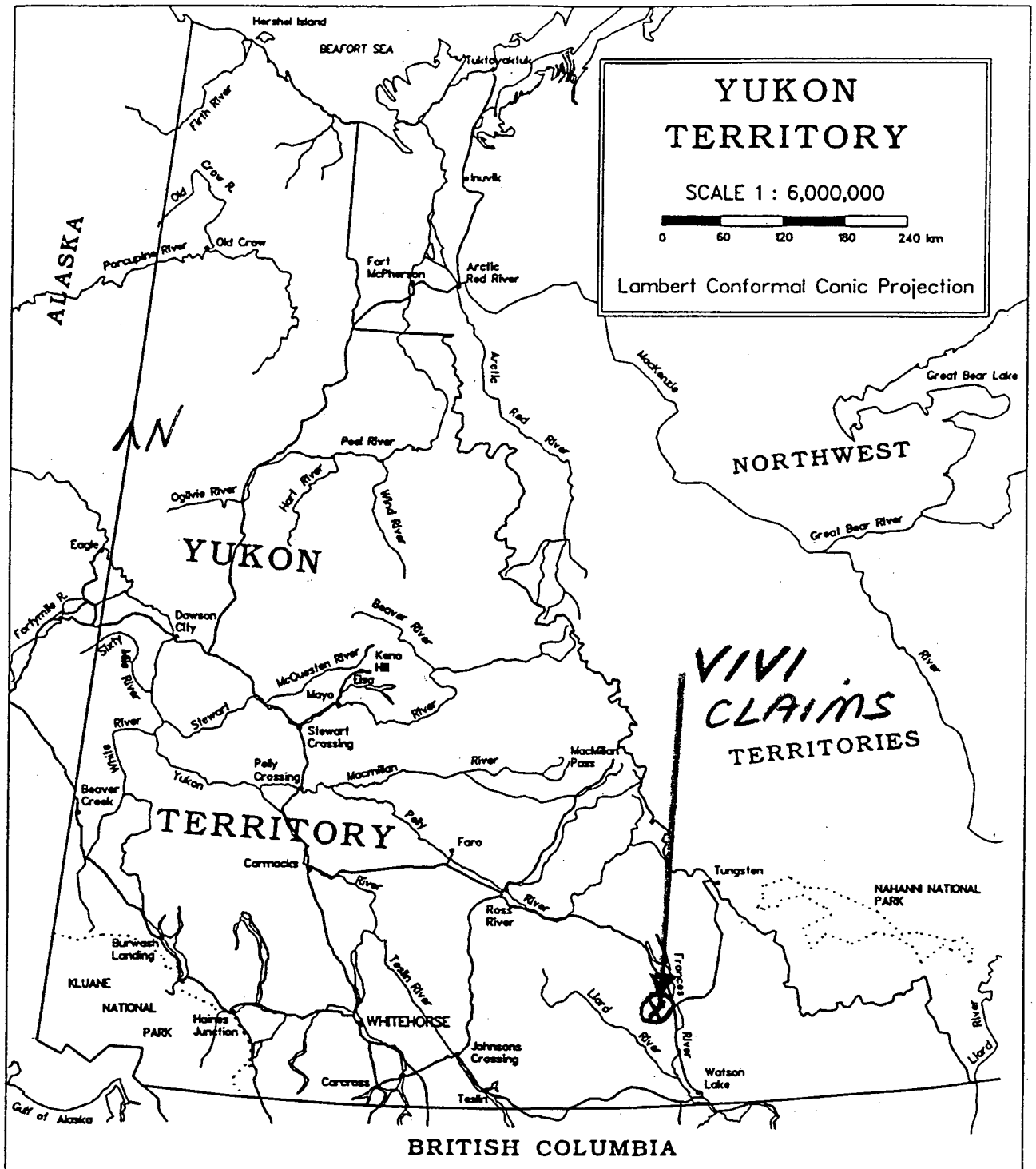


FIGURE #1

LOCATION MAP

VIVI 1-30 (~~1997~~)

(1998)

FIGURE #3

GEOLOGY MAP/CLAIMS

WATSON LAKE MIN. DIST.

NTS 105 A 13

DATE 28 NOV 1997

DRAWN by JP ROSS

SCALE 1:31,680

AREA OF INTEREST

MAJOR FAULT

ALTERED BEDROCK

STRING??

PROPOSED PROJECT

NEW CLAIMS

130° 00'

61°00'

55'

50'

RIVER

VIVI

ITCH

JASPER

MAP 1 - NTS 105A
SAMPLE LOCATION
STREAM SEDIMENT
GSC OPEN FILE 3293
SOUTHEASTERN YUKON 1996

GEOLOGICAL LEGEND

CENOZOIC

11 Felsic to intermediate volcanic rocks; minor tillite and limestone

10 Nonmarine clastic sediments; minor felsic volcanics

PALEOZOIC

9 Mafic to ultramafic rocks and associated marine carbonates and clastics

8 Intermediate to felsic volcanics and associated marine carbonates and clastics

7 Mainly marine carbonates and shales; minor siliceous sediments (chert)

6 Marine and nonmarine clastic sediments; minor limestone and coal

PROTEROZOIC

5 Mainly clastic marine sediments; minor limestone and basalt

4 Mainly siliceous and carboniferous sediments; minor evaporite, mafic volcanics, and iron formation

PLUTONIC ROCKS

3 Granite, leucogranite, alaskite, quartz monzonite, granophyre

2 Granodiorite, leucogranodiorite, quartz monzonite, quartz diorite, tonalite

1 Ultramafic rocks

—— Geological Boundary

Geological base modified from Map 1712A, Tectonic Assemblage Map of the Canadian Cordillera, digital map series.

130° 00'
61°00'
55'
50

#1209
Au 32 ppb
As 8.9 ppm
W 1 ppm
Sb .3 ppm

#1214
LOW
VALUES

#1215
LOW
VALUES

#1230
Au 10 ppb
As 25 ppm
W 2 ppm
Sb .6 ppm

#1199
Au 36 ppb
As 49 ppm
W 2 ppm
Sb 1.9 ppm

#1246
Au 22 ppb
As 152 ppm
W 7 ppb

MAJOR FAULT

N

FIGURE #5
GOVT SILT SAMPLE LOC.
WATSON LAKE MIN DIST
NTS 105 A 13
• GSC SILT SAMPLE
DATE 28 NOV 1997
DRAWN by JP ROSS
SCALE 1:31,680

5000
4500
4000
6000
△6483

YB89421 YB89422 YB89423 YB89424 YB89425 YB89426 YB89427 YB89428 YB89429 YB89430 YB89431 YB89432 YB89433 YB89434 YB89435 YB89436 YB89437 YB89438 YB89439 YB89440 YB89441 YB89442 YB89443 YB89444 YB89445 YB89446 YB89447 YB89448 YB89449 YB89450
VIVI

YB60251 YB60252 YB60253 YB60254 YB60255
JASPER

YB71113 YB71111 YB71109 YB71110 YB71108 YB71106 YB71145 YB71143 YB71142
RIVER

YB50105 YB50106 YB50107 YB50108 YB50109 YB50110 YB50111 YB50112 YB50113 YB50114 YB50116 YB50117 YB50118 YB50119 YB50120 YB50121 YB50122 YB50123 YB50124 YB50125 YB50126 YB50127 YB50128 YB50129 YB50130 YB50131 YB50132 YB50133 YB50134 YB50135 YB50136 YB50137 YB50138 YB50139 YB50140 YB50141 YB50142 YB50143 YB50144 YB50145 YB50146 YB50147 YB50148 YB50149 YB50150 YB50151 YB50152 YB50153 YB50154 YB50155 YB50156 YB50157 YB50158 YB50159 YB50160 YB50161 YB50162 YB50163 YB50164 YB50165 YB50166 YB50167 YB50168 YB50169 YB50170 YB50171 YB50172 YB50173 YB50174 YB50175 YB50176 YB50177 YB50178 YB50179 YB50180 YB50181 YB50182 YB50183 YB50184 YB50185 YB50186 YB50187 YB50188
ITCH

FIGURE #6

SILT SAMPLE LOCATION

WATSON LAKE MIN DIST

NTS 105 A 13

● SILT SAMPLE

DATE 28 NOV 1997

DRAWN by JP ROSS

SCALE 1:31,680

130° 00'

55'

50

N

VS1

VS2

VS3

VS4

VS5

VS6

VS7

VS8

VS9

VS10

VIVI

ITCH

RIVER

JASPER

SEL

5000

4000

4500

6000

△6483

130° 00'
61°00'
55'
50
5000
4000
6000
4500
△6483
N
MATOR FAULT
VM1
VM2
VM3
VM4
VM5
VM6
VM7
VM8
VM9
VM10
VIVI
RIVER
ITCH
JASPER
MILE 9467
SEL

FIGURE #7
MOSS MAT SAMPLE LOC.
WATSON LAKE MIN. DIST.
NTS 105 A 13
● MOSS MAT SAMPLE
DATE 28 NOV 1997
DRAWN by JP ROSS
SCALE 1:31,680

p.21 The PROSPECTOR JAN/FEB 98

Eg. of Sb mine in NFLD.

canadian digs

Drilling increasing antimony reserves at Beaver Brook

Roycefield Resources Ltd. (RYC:TSE) released the updated results of its diamond drill program on its Beaver Brook, Newfoundland, antimony property. The company, previously announced an increase in reserves in the property's East Zone to approximately 1,862,876 tonnes of over 3 per cent Sb using a 1.5 per cent Sb cut off. Prior drill programs had indicated Central and East Zone reserves of 1,379,908 tonnes grading 4.49 per cent antimony, with 1,220,239 tonnes grading 4.38 per cent antimony being located in the East Zone.

The company now announces that as a result of its ongoing drill program reserves for the East Zone of the property have been increased to a total of 2,112,145 tonnes grading 4.42 per cent Sb, using a 2.0 per cent Sb cut off, and 2,388,078 tonnes grading 4.08 per cent Sb using a 1.5 per cent cut off. The drill program has therefore indicated further substantial reserves.

The zone is still open on strike and at depth, and the values indicated continue to be in a strong altered zone considered a favorable host for additional deeper reserves.

Relating to start up of operations, mill construction and equipment installation at the site is now complete. Mill commissioning of crushing and other milling equipment has been in progress, and the mill is currently processing at 400 tonnes of ore grade material per day.

The first shipments to purchasers, amounting to over 100 tonnes of concentrate, have now been shipped.

Exploration drilling results from the King of Kings

Royalstar Resources Ltd. (RYQ:VSE) announced the results of the fall drilling program on the King of Kings property in Montana. Five diamond drill holes totaling 2,454 feet tested teh Columbine deformation zone (CDZ), a complex fault structure, which is reported to be mineralised on the adjoining property.

The initial two holes tested the CDZ 2,500 feet southwest of the reproted mineralised hole. A brecciated gneiss was intersected in hole RK 97-11. The best mineralised interval returned 0.257 opt gold, and 1.47 opt silver over 2.8 feet. Hole 12 designed to test the zone 200 feet north of 97-11, intersected an unmineralised part of the shear zone.

Holes RK 97-13, -14 and -15 tested the intersection of the interpreted CDZ with the Flathead Quartzite, 2,000 feet south west of holes 97-11 and 97-12, close to a previouslydrilled reverse circulation hole which ended in 20 feet of 0.091 opt gold. The deepest hole, 97-14 drilled beneath 97-13, intersected a repeated sequence of the quartzite, which was extensively brecciated, silicified and oxidized. Intercepts include 11.5 feet of 0.091 opt au from 118.5 to 130.0 feet, and 22.0 feet of 0.045 opt au from 171.0 to 193.0 feet. Silver values were not significant.

A lower interval of oxidized quartzite intersected from 262.5 to 348.0 feet contained minor amounts of gold ranging from 0.001 to 0.057 opt gold. The unoxidized pyritic quartz-

ite intersected from433.0 to : ranged from 0.002 to 0.060 the best of which returned gold over 10 feet.

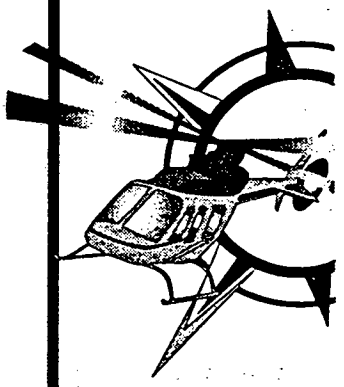
The company says that th indicates that the area is m structurally complex than p thought.

Lloyd Geofisic
Campeche 188, Col. San B
Hermosillo, Sonora, Mexic
Tel: (62) 10-75-10 Tel/Fax

•Interpretation of Airborne
•Ground Magnetic and Elect
•Induced Polarization Surve
•Data Processing and Colou

Lloyd Geophysi
455 - 409 Granville Street
Vancouver, B.C., Canada
Ph (604) 688-5813 Fax(6

DISCO HEL



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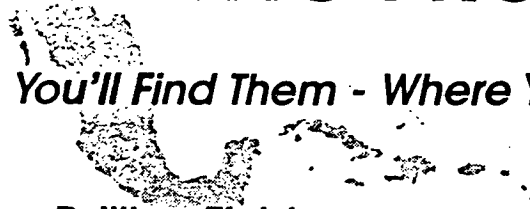
BAROID INDUSTRIAL DRILLING PRODUCTS



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Cutting Heac

Distributes, Assemb

(1)
1

BEDROCK CR. PROJECT (1998 GRASS ROOTS)

The project is 50 air miles west of DAWSON CITY. It is in Dawson Mining District on Map 115 N-15. One drives on a well-maintained gravel road (TOP of the WORLD HWY), then one turns off at road to 60 mile area. After MILLER CREEK, the road is rough (2 or 4 WD ?) and ends at BEDROCK Creek. Roads or access past BEDROCK creek is not certain; most likely by WALKING.

RED BOUNDARY OF PROJECT.

My target is a Cu Au Mo porphyry like the one at Casino - 100 mile west of Carmacks. A second target may be a gold rich VMS such as ATNA's WOLVERINE LAKE.

I have discussed this area with CRAIG HART (YUKON EGA), JOHN KOWALCHUK (ex PLACER, YUK. EGA, now KENRICH/NU-LITE - VANCOUVER BC) and JIM MORTENSON (UBC PROFESSOR + MDRU group).

The area is not understood very well due to rocks heavily leached (60 million years plus of no glaciation), permafrost and low levels of mapping and explor-

(1) ation compared to other areas.
2 Gold production has been high (placer); mining occured before the Klondike.

My reasons are as follows.

(1) In 95 I staked and recorded the UNI-CICI claims to the north. Madrona Mining Ltd of Calgary optioned the claims; performed a helicopter geophysical survey in 96, soil samples in 97 and at present want to continue the option. That area and my 98 project are similar.

(2) Both areas have similar magnetic anomolies from govt. geophysical surveys.

(3) The geology is YUKON-TANANA terrane - popular now for VMS exploration. Mostly schist here.

(4) Road access is very close.

(5) 2 interesting areas nearby - the TIDERS Cu Mo Au porphyry and the BORED PbZnCu VMS??? I think the location data on BORED is wrong. Jim Mortenson says epithermal veins with base metals have been seen in bedrock in 60 mile R. valley. Tom Bundtzen of Alaska persuaded the State of Alaska to select for STATE

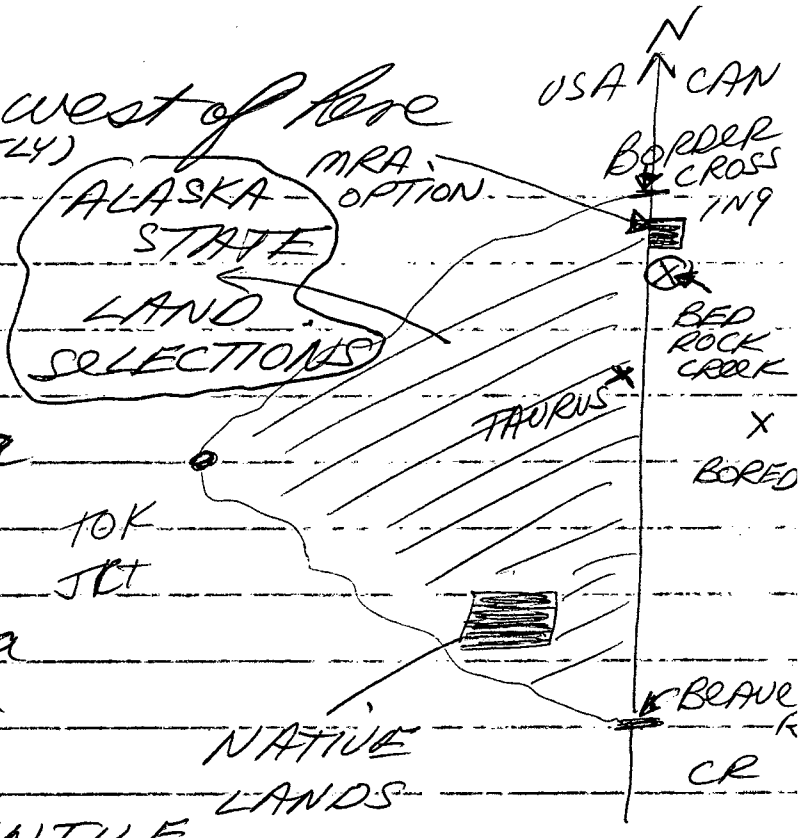
(1) (3) Lands the area west of here for porphyry (MOSTLY) potential.

(6) Interest in the area may rise if Madrona obtains more results.

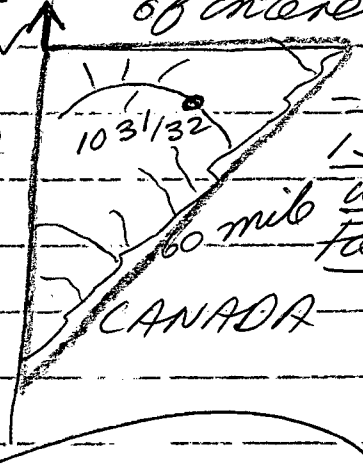
(7) One silt in area is significant

1031/32

	PPM	PERCENTILE
Cu	38	98
Zn	240	+98
Pb	10	70
Ba	1590	+95
Au	59/8(ppb)	+98
Hg	70	+90
As	10	+90
W	4	98
Sb	—	—
Ni	54	+98
Mo	2	98

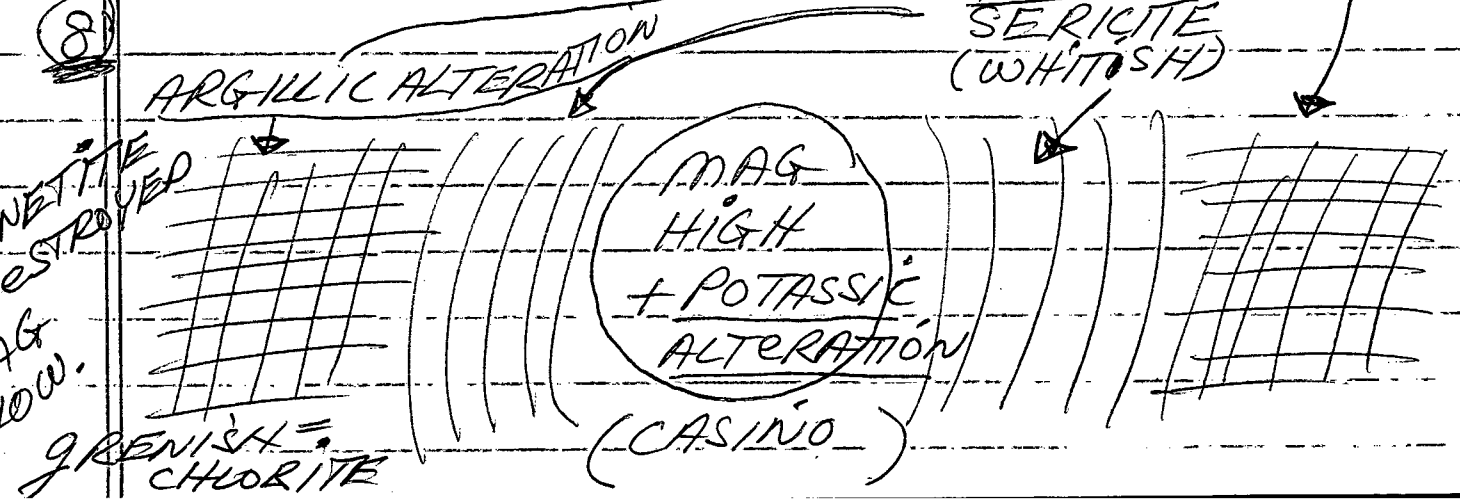


NB. In area of interest



only 1 silt was taken -

(8)



* BOTH TAURUS PORPHYRY ZONES are MAG HIGHS.

(1) The description (last page) is of an
4 alkali porphyry like Casino. According to John Kowalchuk a mag high + POTASSIUM High is present on MADRONA'S geophysical data, similar to Casino.

A large Cu Mo Au porphyry may be present at Bedrock Creek. Lots of interest in area and only 1 silt sample in the area but mag. anomoly, and placer gold and 1 silt sample encourage me to do this project.

My plan is stake 60+ claims to cover the magnetic HIGH anomoly and surrounding ground.

MAG HIGH

* Edge of magnetic anomoly may be inexact - I would like to get 1 or 2 claims outside of the magnetic anomoly on all sides if possible.

Later I plan to take 40-50 silts and test them for Au (30gm) and 30 element ICP. While doing this I will look for float + bedrock - particularly alteration. The 2 streams draining the magnetic high will get the most attention. Hopefully geochemical anomolies will be found.

① REFERENCES

5

① GEOPHYSICAL PAPER MAP 4269G
SIXTY MILE
MAP 116C2

② GEOPHYSICAL PAPER MAP 4268G
CRAG MT.
MAP 115N15

③ GSC OPEN FILE # 1364
GEOCH. SILT SURVEY
NTS 115N (E 1/2) 1150

④ METALLOGENY OF VOLCANIC ARCS
1998 MDRU SHORT
COURSE (2 OAKS)

⑤ MADRONA MINING LTD
COMPANY BROCHURES

⑥ PERSONAL COMMUNICATION
- CRAIG HART - EDA YT
- JOHN KOWALCHOK - NU-LITE
- KENRICH
- JIM MORTENSON - UBC PROF.
- MDRU.
- TOM BUNDTZEN - ALASKAN
GEOLOGIST

⑦ TAURUS - CIM SPECIAL VOLUME
#46 - PORPHYRY DEPOSITS
OF NW CORDILLA p. 451-57.

(1) 6

BUDGET

(BEDROCK CREEK PROJECT)

1998 - 115 N 15

- GAS (GMC 4x4)
  WH → DC → BC → DC → WH
  2 TIMES = 2000 MILES
  = 3100 KM X .46/KM = $1425

- DIEM ($35/day - 4T Rate)
  1ST = 25 day/trip 2ND = 30 day/trip
  55 days X $35/day = $1925

- Radio
  $300/month X 2 month = $150
  X 25% (SELF OWNED)

- Silt $50 silt X $20/silt = $1000

- Rocks 40 rocks X $23/rock = $920

- GEAR + MISC $500

TOTAL $5920

Madroña MINING LIMITED MRA - ASE
300, 840 - 6 Avenue S.W. Calgary, AB T2P 3E5 CANADA
Tel: 001-403-205-4666 Fax: 001-403-265-3783 email: marchand@ibm.net

Poker Creek, Yukon Territory

Primary Target: Volcanogenic Massive Sulphide (Zn-Cu-Pb-Au)
Secondary target: Porphyry Copper-Gold

Location: West Central Yukon along Alaska Border
NTS: 116-C-2 Lat: 64° 03' Lat: 140°55'
Dawson Mining Division Claim Sheet: 116C-2c

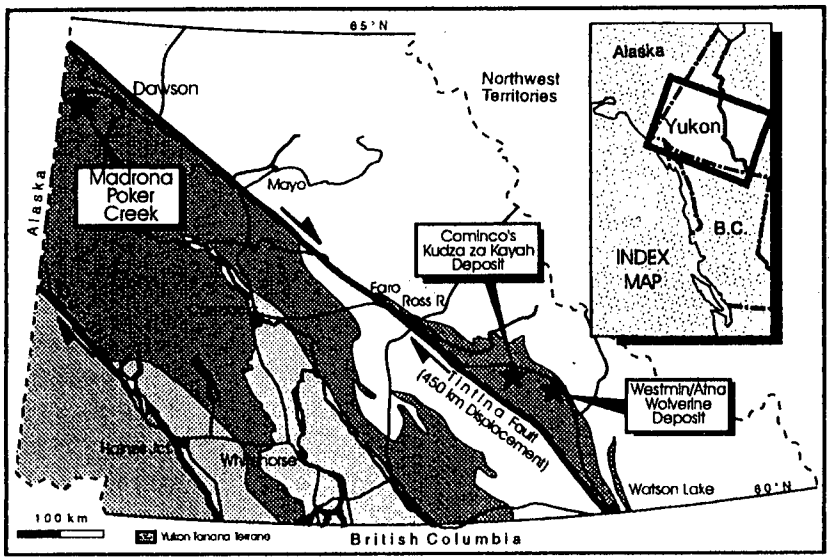
Claims: UNI, CICI and CREEK Claims. These claims are owned by prospector J. Peter Ross of Whitehorse and are under option to Madrona Mining Limited. Madrona can earn 100% subject to a 2.5% NSR

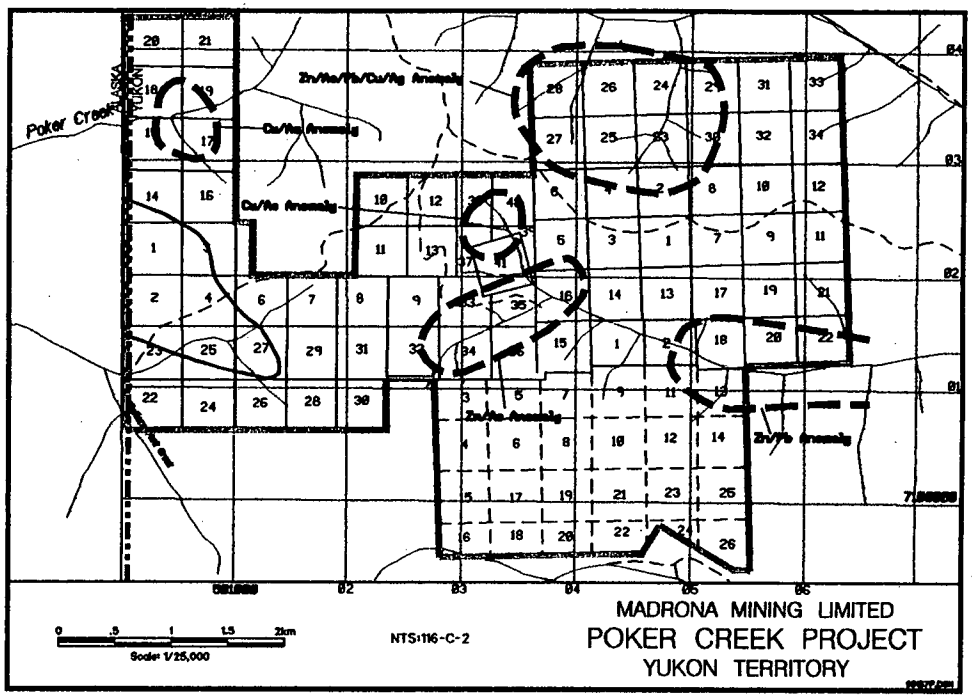
Terms: Madrona will option out a 50% interest in the claims for repayment of monies already expended on the property, a block of stock, assumption of all option payments and a work program with expenditures of $500,000 in 1998, $1,000,000 in each of 1999 and 2000. Madrona can operate if desired.

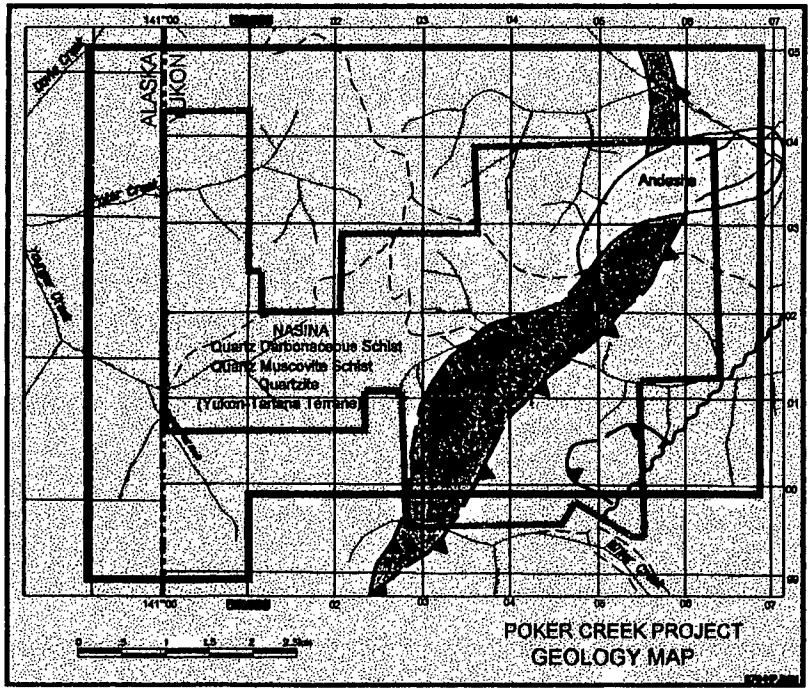
Madronna acquired the Poker Creek Prospect in 1996. The property consists of 98 mineral claims with an area of 1900 ha and lies west of Dawson city along the Alaska Border in Yukon. The property was acquired on the basis of patterns of base metal geochemical anomalies occurring downstream from magnetic high on the government magnetic map. The area lies with the Yukon-Tanana Terrane, a geologic region which contains the same suite of rock units that host Cominco's Kudza za Kayah, Columbia Gold's Kona and Atna/Westmin's Wolverine volcanogenic massive sulphide deposits in Southern Yukon. Prior to the 450 km. displacement along the Tintina Fault, the Poker Creek prospect was situated close to those deposits.

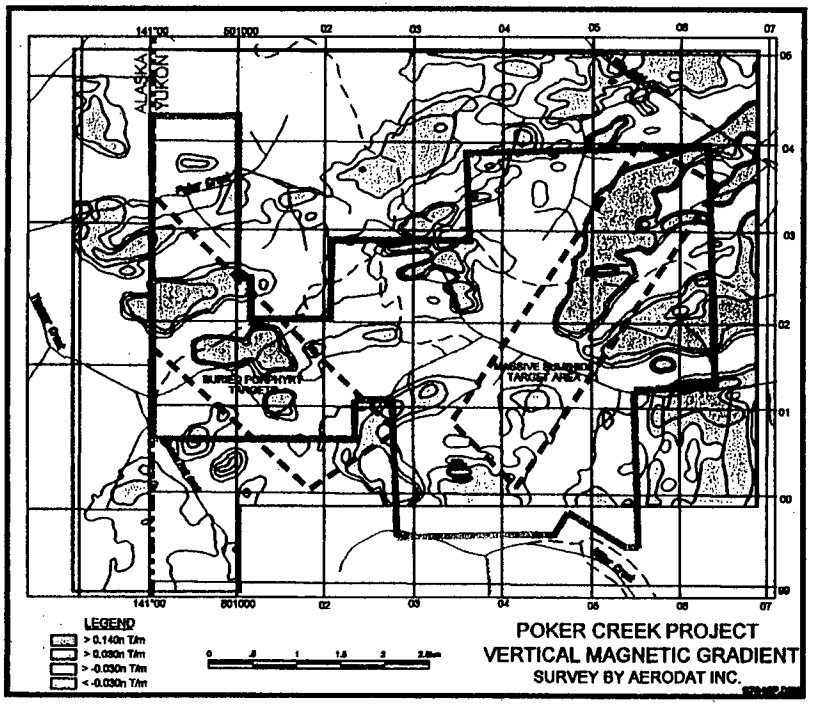
Madrona contracted for an airborne geophysical survey in the Fall of 1996 to enhance and define the magnetic feature observed on the government map and to help define the property geology. The area is heavily covered by overburden with few rock outcrops. A soil geochemical survey of 1700 samples was carried out in 1997 over portions of the property with results still pending. The results from the airborne geophysical survey show a very strong positive magnetic feature over the old government survey feature and it corresponds with a favourable rock unit (Nasina Metavolcanics) identified in recent geological mapping of the area. This indicates the potential for a base metal deposit. In other portions of the claim block, the magnetic signature suggest the possibility of buried intrusive, potential porphyry copper-gold targets.

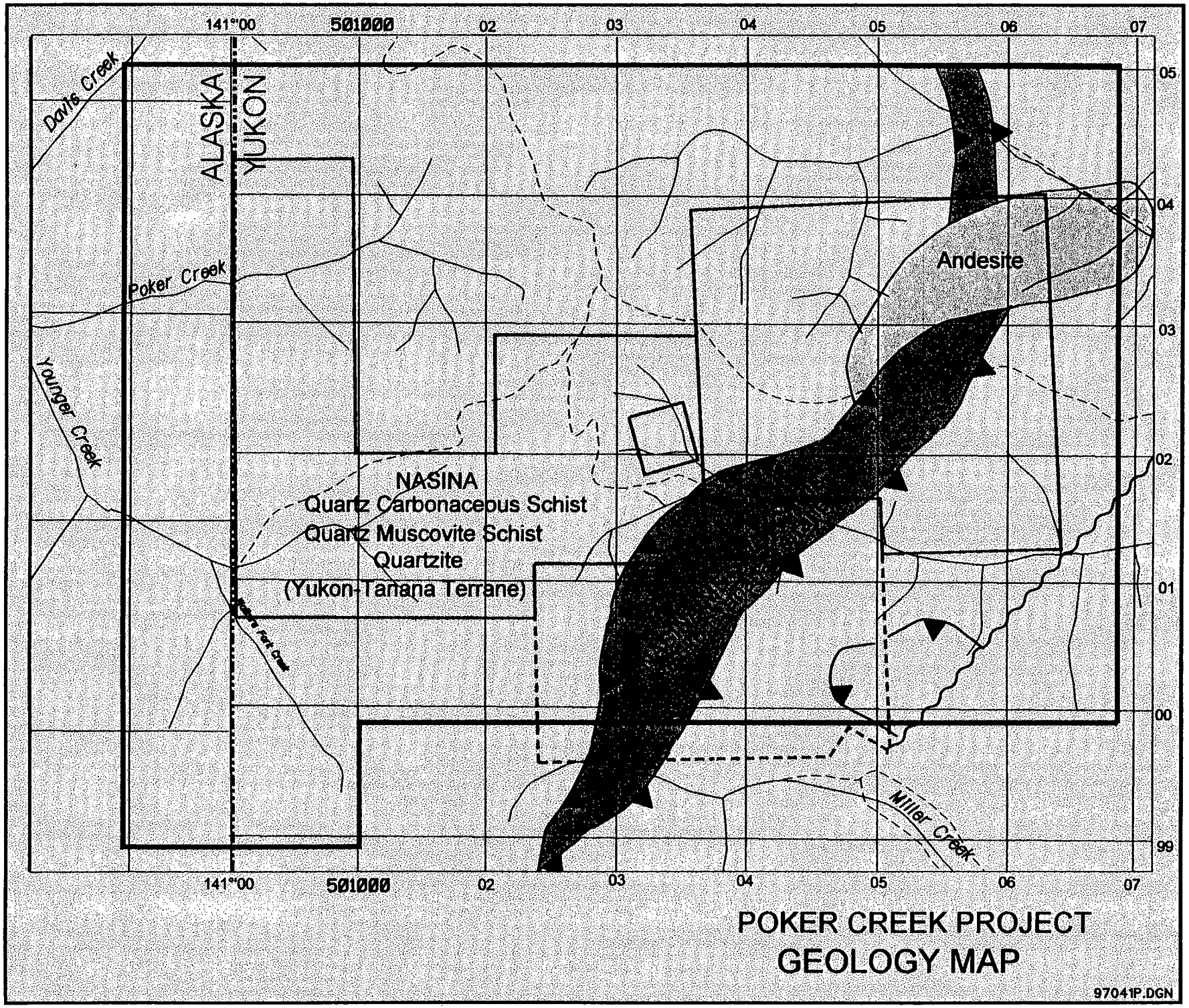
For further information contact: Dr. Michael Marchand, VP Exploration


65° N
Dawson
Northwest Territories
Alaska
Yukon
B.C.
INDEX MAP
Madrona Poker Creek
Mayo
Cominco's Kudaz za Kayah Deposit
Faro
Ross R.
Tintina Fault (450 km Displacement)
Westmin/Atna Wolverine Deposit
Watson Lake
60° N
100 km
Yukon Tanana Terrane
British Columbia


Poker Creek
ALASKA
YUKON
Zn/Ag/Pb/Cu/Ag Anomaly
Cu/Ag Anomaly
Cu/Ag Anomaly
Zn/Ag Anomaly
Zn/Ag Anomaly
0 .5 1 1.5 2km
Scale 1/25,000
NTS:116-C-2
MADRONA MINING LIMITED
POKER CREEK PROJECT
YUKON TERRITORY


ALASKA
YUKON
Andesite
NASINA
Quartz Carbonaceous Schist
Quartz Muscovite Schist
Quartzite
(Yukon Tanana Terrane)
POKER CREEK PROJECT
GEOLOGY MAP


ALASKA
YUKON
BURIED PORPHYRY TARGET
MASSIVE SULPHIDE TARGET AREA
LEGEND
> 0.140n T/m
> 0.030n T/m
> -0.030n T/m
< -0.030n T/m
POKER CREEK PROJECT
VERTICAL MAGNETIC GRADIENT
SURVEY BY AERODAT INC.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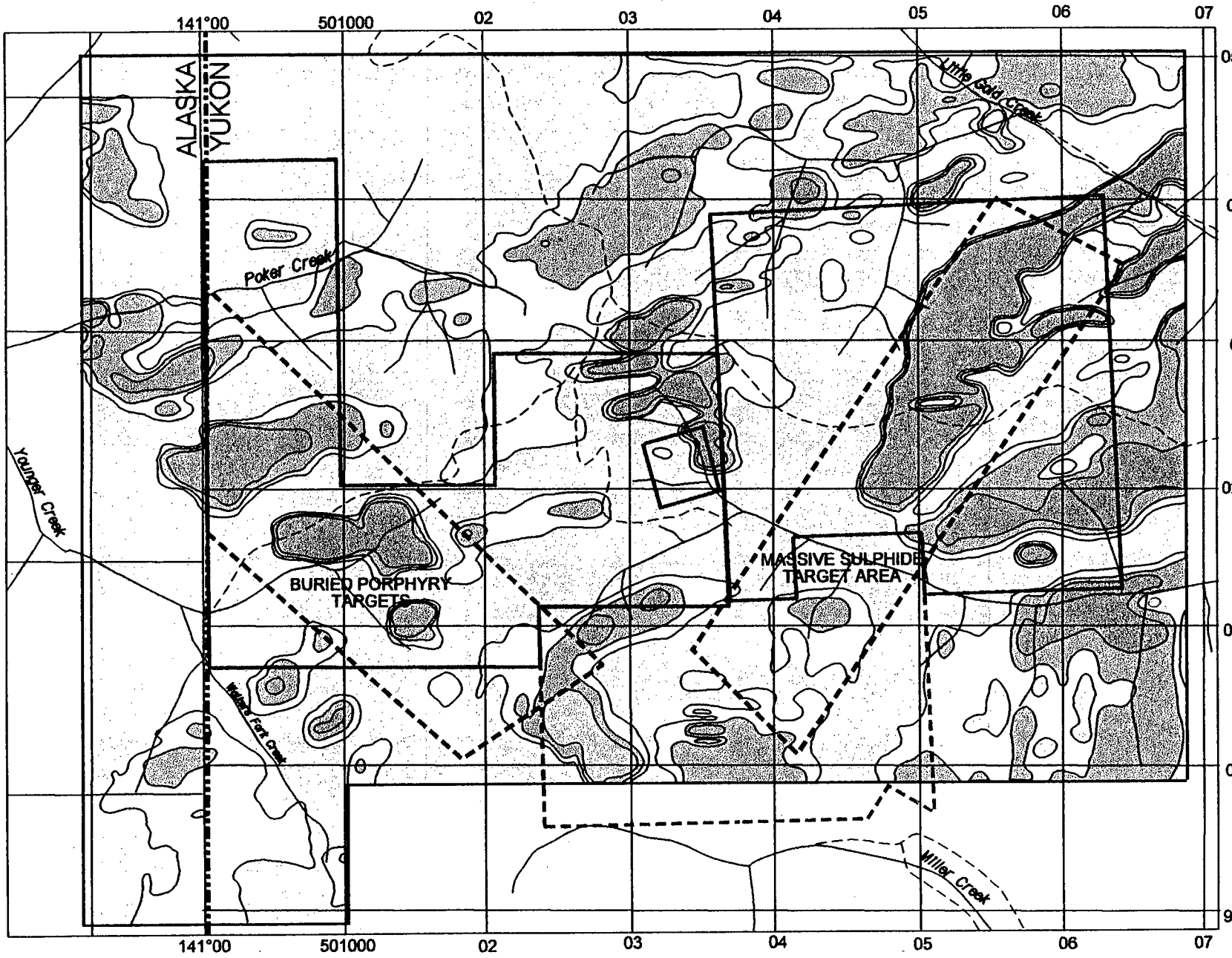
Davis Creek
ALASKA
YUKON
Poker Creek
Younger Creek
Andesite
NASINA
Quartz Carbonaceous Schist
Quartz Muscovite Schist
Quartzite
(Yukon-Tanana Terrane)
Miller Creek
POKER CREEK PROJECT
GEOLOGY MAP
97041P.DGN



LEGEND

- > 0.140n T/m
- > 0.030n T/m
- > -0.030n T/m
- < -0.030n T/m

POKER CREEK PROJECT
VERTICAL MAGNETIC GRADIENT
SURVEY BY AERODAT INC.

97040P.DGN

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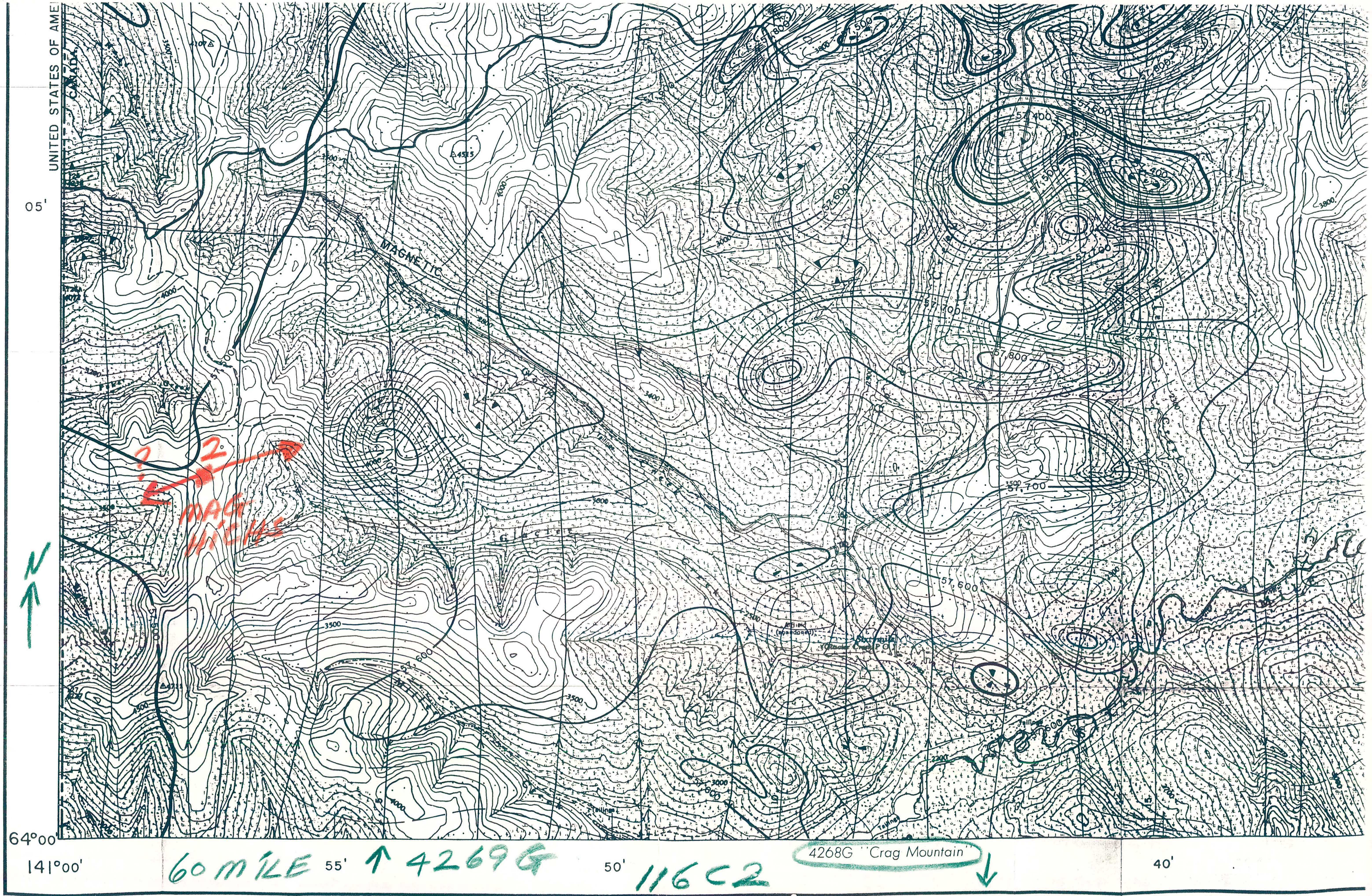
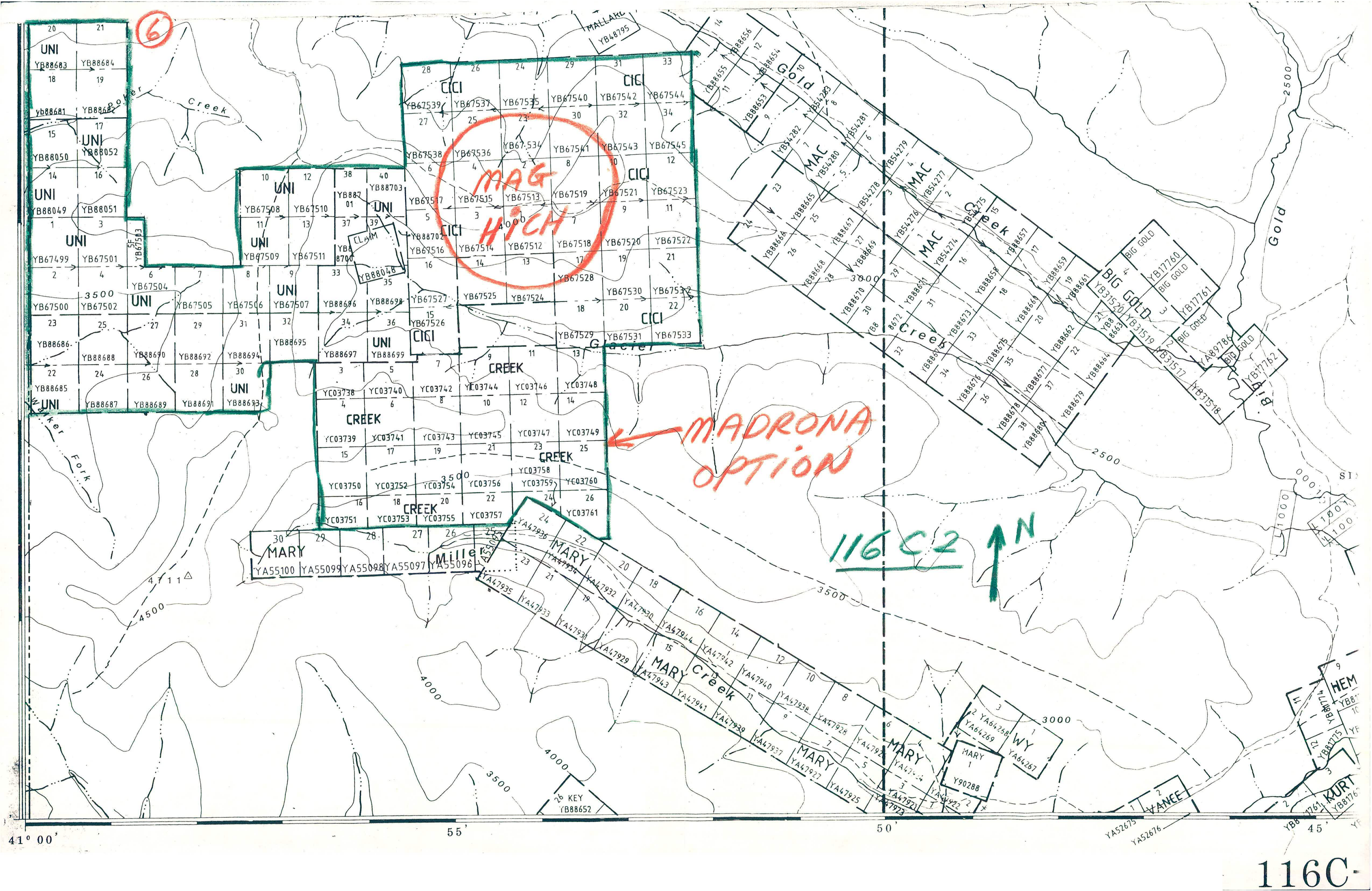

UNITED STATES OF AME
CANADA
05'
MAGNETIC
Tailings
Sixtymile
57,600
57,700
57,800
57,400
57,500
3500
4000
3000
3800
? 2
MAG HIGHS
N
64°00'
141°00'
60 MILE
55'
4269G
50'
116C2
4268G "Crag Mountain"
40'



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YB17760
YB17761
YB17762
YA89786
YB81774
YB81775
41° 00'
55'
50'
45'
116C-

(7)

115N IS ↑N

DAWSON 28 JULY 89.

28 MAR 91
21 NOV 90
25 APR 90
04 DEC 89

141° 00'

55'

4° 00'

115N-1

Bedrock

3000

KEY

BABE

MOLY

ROCK

AIME

Bedrock Hill

4000

3500

BEDROCK CK PROSPECT AREA

Pat Murphy Creek

Sixty Mile

PROJECT AREA

3000

55'

(7)

141°00'

64°00'

55'

55'

50'

40'

4268G-CRAG mt 115 N/S ↑N MAG MAP.

4269G "Sixtymile"

BEDROCK HILL

ALASKA
YUKON TERRITORY

Sixty Mile

Mile River

MOUNT NOLAN

Boucher

57,500

57,600

57,700

57,800

58,000

58,200

58,400

57,580

3000

2500

3500

4500

4000

141°00′ 501000m. E. 02 03 115N 55′ 15 05 06 07 50′

64°00′

7096000m. N.

MADRONA-ROSS 5KM AREA OF INFLUENCE

APROXIMATE VALID HARD ROCK CLAIMS

1031/32

GOVT. SILT SAMPLE

POSSIBLE CAMP

MAG LOW

MAG. HIGH

BEDROCK CR PROJECT AREA

PLACER CLAIMS

Bedrock

Creek

Pat Murphy Creek

Mile Sixty

River

Mosq

BEDROCK HILL

128 3824

129 3822

130 2622

132 3457

UNITED STATES OF AMERICA

CANADA

3000 3400 4000 2600 2800 3100 3600 3300

96 95 94 93 92 91 90 89 88 87 86 85 84 83

EA

9

(10)

N [12] NASINA; GRAPHITIC QUARTZITE, SCHIST (PALEOZOIC)

DEPARTMENT OF ENERGY, MINES AND RESOURCES
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES

115N (E 1/2) 115O

GSC OPEN FILE #1364

[5] QUARTZ MUSCOVITE SCHIST

CARBONIFEROUS + PERMIAN

(PALEOZOIC) [7]

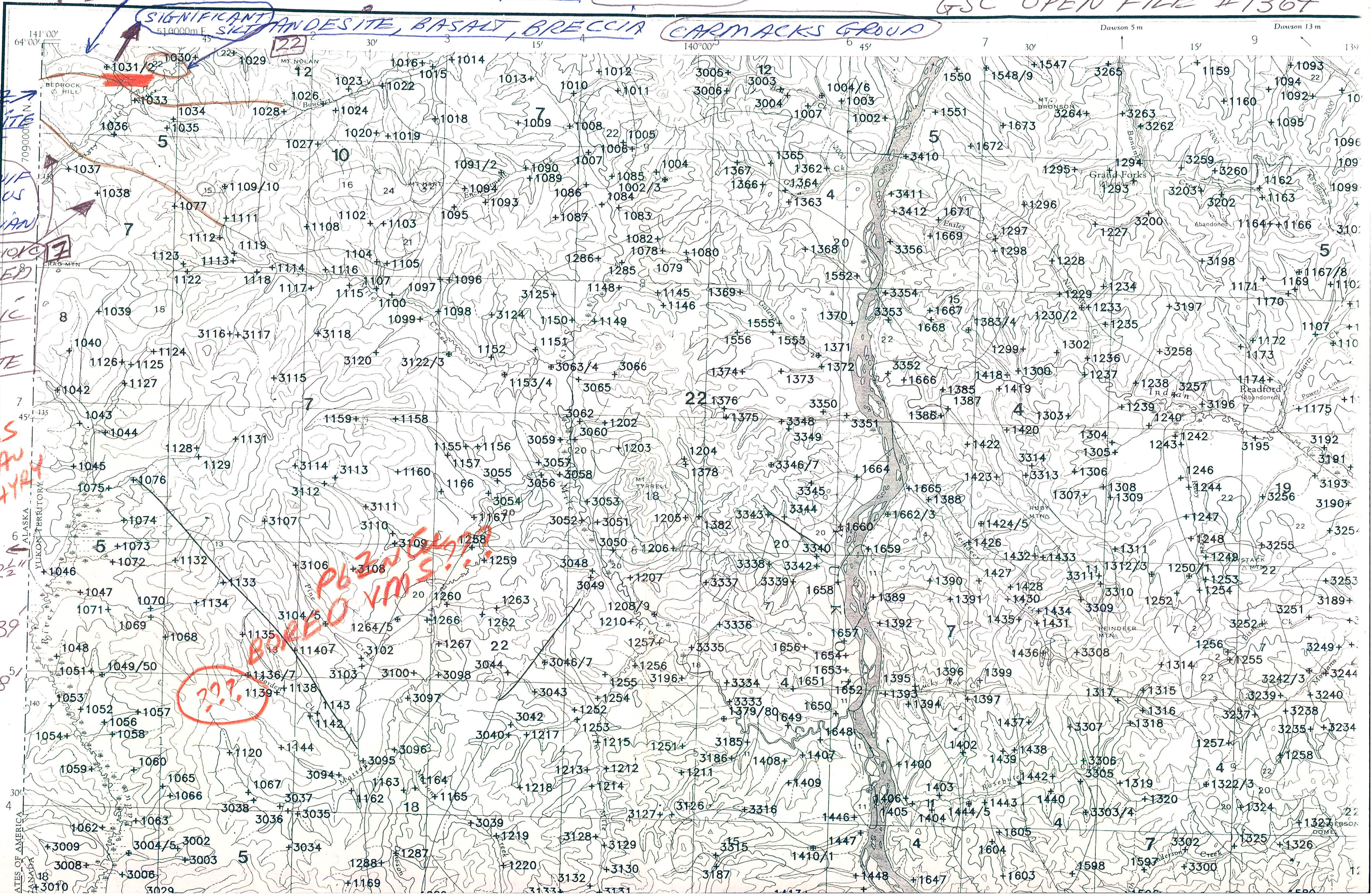
FOLIATED TO GNEISSIC GRANODIORITE

TAURUS Cu Mo Au PORPHYRY *

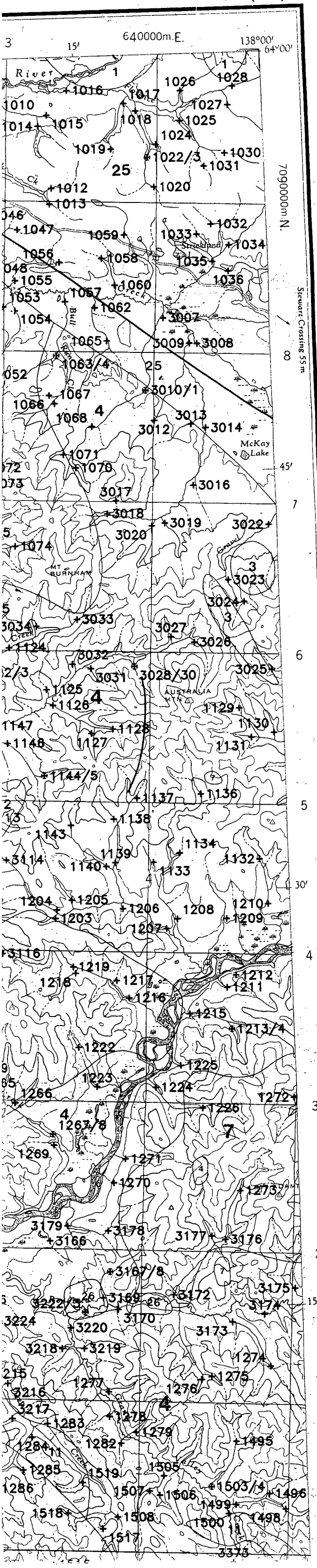
2½"

LAT. 63° 39'

LONG 141° 18'



115N(E½),O



LEGEND

GSC OPEN FILE #1364 (115N(E½) 1150

QUATERNARY

RECENT

SELKIRK GROUP

26	RS 64*	Basalt, andesite flows, breccia, tuff

PLEISTOCENE AND RECENT

25	QS 64	Glacial and surficial deposits

TERTIARY

24	TDI 57	Diorite

OLIGOCENE AND MIOCENE

23	OMA 61	AMPHITHEATRE: Sandstone, conglomerate, shale, coal

CARMACKS GROUP

22	OMCV 61	Andesite, basalt, breccia
21	OMD 61	DONJEK: Tuff, breccia

OLIGOCENE

CARMACKS GROUP

20	OCS 60	Conglomerate, sandstone, shale

LOWER TERTIARY

19	LTS 58	Conglomerate, sandstone, shale
18	TVR 58	Rhyolite, quartz feldspar porphyry

EARLY TERTIARY

ETF 57 Granite and syenite porphyry, rhyolite

CRETACEOUS

16	KY 52	Syenite, monzonite
15	KQM 52	Quartz monzonite, granodiorite; CASSIAR quartz monzonite alaskite

TRIASSIC

14	TGDN 42	Foliated hornblende granodiorite, quartz

PALEOZOIC AND MESOZOIC UNDIVIDED

13	PMUB 40	Ultramafic rocks

PALEOZOIC UNDIVIDED

12	PN 09	NASINA: Graphitic quartzite, schist
	PC 09	Limestone
10	PTV 09	Chert, volcanic rocks, slate
9	PV 09	Greenstone, amphibolite
8	PQMN 09	Foliated muscovite quartz monzonite
7	PGDN 09	PELLY GNEISS: Foliated to gneissic granodiorite

PERMIAN

SKOLAI GROUP

6	PS 36	Andesite, basalt, ultramafics, pyroclastics, phyllite, chert limestone, conglomerate

CARBONIFEROUS AND PERMIAN

5	CPS 35	Quartz - muscovite schist
4	CPSN 35	Schist, gneiss, includes BIG SALMON METAMORPHIC COMPLEX
3	CPUB 35	Serpentinite, diorite, pyroxenite, peridotite

DEVONIAN

2	DC 25	Limestone, marble

ORDOVICIAN, SILURIAN AND LOWER DEVONIAN

1	OSDR 19	ROAD RIVER: Black graptolitic shale, chert

REGIONAL STREAM SEDIMENT AND WATER GEOCHEMICAL RECONNAISSANCE DATA, YUKON 1986, GSC-OF 1364, NGR 100-1986, NTS 115N(E1/2), 1150

MAP	ID	ROCK TYPE	AGE	RPST	ZN	CU	PB	NI	CO	AG	MN	AS	MO	FE	HG	LOI	U	F	V	CD	SB	W	BA	SN	AU	AU-R	AU WT1	DL 1	AU WT2	DL 2
115N	861002	PGDN	09	10	71	13	5	13	9	0.2	170	2	<2	1.85	35	5.2	4.8	320	32	<0.2	0.2	2	830	7	2		10.0	1		
115N	861003	PGDN	09	20	65	12	6	14	9	<0.2	160	1	<2	1.70	25	5.2	5.1	260	32	<0.2	0.6	2	880	10	<1		10.0	1		
115N	861004	PGDN	09	00	70	15	8	15	10	<0.2	260	2	<2	1.90	45	6.0	4.3	320	33	<0.2	0.6	2	910	3	2		10.0	1		
115N	861005	OMCV	61	00	89	23	9	23	12	<0.2	1600	4	<2	3.23	45	12.4	4.9	260	52	<0.2	0.5	2	950	2	3		10.0	1		
115N	861006	OMCV	61	00	92	31	10	27	11	<0.2	720	3	<2	2.98	55	14.6	4.1	245	53	<0.2	0.6	2	930	1	5		10.0	1		
115N	861007	PGDN	09	00	70	16	6	10	10	<0.2	250	2	<2	1.88	35	5.6	3.2	200	37	<0.2	0.5	2	790	1	1		10.0	1		
115N	861008	PGDN	09	00	86	21	8	23	12	<0.2	440	3	<2	2.69	55	9.8	3.1	195	49	<0.2	0.4	2	1030	1	3		10.0	1		
115N	861009	PGDN	09	00	78	22	9	21	11	<0.2	225	3	<2	2.32	80	9.4	3.2	245	43	0.2	0.8	2	970	1	6		10.0	1		
115N	861010	PGDN	09	00	76	17	6	30	9	0.2	235	2	<2	2.02	30	4.0	2.6	250	35	<0.2	0.4	2	1010	1	<1		10.0	1		
115N	861011	OMCV	61	00	85	21	7	17	11	0.2	330	2	<2	3.05	55	12.0	2.9	280	46	<0.2	<0.2	2	900	3	<1		10.0	1		
115N	861012	PGDN	09	00	64	18	5	41	9	<0.2	200	1	<2	1.84	35	7.0	2.8	300	33	<0.2	<0.2	2	840	2	2		10.0	1		
115N	861013	PGDN	09	00	68	13	6	15	8	<0.2	152	2	<2	1.80	35	5.4	3.1	270	35	<0.2	0.5	2	740	2	<1		10.0	1		
115N	861014	PGDN	09	00	93	15	12	17	11	<0.2	500	5	<2	2.61	45	6.6	3.3	300	46	<0.2	1.0	2	970	1	4		10.0	1		
115N	861015	PGDN	09	00	77	15	8	15	9	0.2	400	3	<2	1.96	45	4.4	4.6	260	34	<0.2	0.7	2	900	2	1		10.0	1		
115N	861016	PN	09	00	102	19	19	15	10	<0.2	300	8	<2	2.44	35	5.6	3.3	335	37	0.2	1.0	2	880	2	<1		10.0	1		
115N	861018	PGDN	09	00	68	13	8	14	9	<0.2	350	3	<2	2.00	40	4.6	4.5	340	32	<0.2	0.5	2	885	1	5		10.0	1		
115N	861019	PTV	09	00	72	13	12	12	11	<0.2	460	3	<2	2.33	35	6.6	4.1	360	49	0.2	0.5	2	820	2	11	7	10.0	1	10.0	1
115N	861020	PTV	09	00	77	24	23	14	10	0.2	260	4	<2	2.57	45	8.8	3.8	270	46	0.5	0.5	2	810	2	1		10.0	1		
115N	861022	PTV	09	00	84	17	11	12	9	<0.2	340	4	<2	2.46	55	6.0	2.7	360	42	<0.2	0.5	2	850	<1	<1		10.0	1		
115N	861023	PN	09	00	85	22	12	24	10	<0.2	300	4	<2	2.43	35	7.6	3.0	450	36	<0.2	0.5	2	720	<1	6		10.0	1		
115N	861024	PTV	09	00	83	21	21	13	6	<0.2	270	6	2	2.36	45	7.4	4.6	320	40	<0.2	<0.2	4	920	1	2		10.0	1		
115N	861026	PN	09	00	144	20	27	25	12	<0.2	300	9	<2	2.50	25	4.6	3.7	310	37	<0.2	1.2	2	790	1	1		10.0	1		
115N	861027	PTV	09	00	87	21	35	12	5	<0.2	350	11	6	2.07	45	7.4	10.2	400	38	<0.2	<0.2	2	970	2	2		10.0	1		
115N	861028	CPS	35	00	370	25	52	32	9	<0.2	830	15	<2	2.09	25	4.4	5.1	420	27	1.7	0.6	2	1050	1	2		10.0	1		
115N	861029	OMCV	61	00	67	19	7	29	11	<0.2	220	2	<2	2.13	25	5.6	3.1	360	37	<0.2	<0.2	2	668	2	6		10.0	1		
115N	861030	PN	09	00	91	17	15	25	9	<0.2	230	3	<2	2.62	390	5.4	2.7	500	38	<0.2	<0.2	2	780	<1	<1		10.0	1		
115N	861031	PN	09	10	210	38	10	54	13	0.2	780	10	2	2.88	70	4.8	3.4	320	33	0.9	<0.2	4	1590	2	59	8	10.0	1	2.50	4
115N	861032	PN	09	20	212	38	10	53	13	0.6	790	9	<2	3.00	45	5.2	3.5	460	34	0.8	0.9	2	1640	1	2	1	10.0	1	2.50	4
115N	861033	CPS	35	00	107	20	52	14	6	0.4	172	15	<2	1.90	25	5.4	9.3	420	27	<0.2	0.8	24	900	<1	15	15	10.0	1	5.00	2
115N	861034	CPS	35	00	185	26	44	22	7	0.3	720	8	<2	2.05	45	6.2	8.2	320	28	0.5	0.2	2	1130	<1	4		10.0	1		
115N	861035	CPS	35	00	139	29	106	9	6	0.5	435	19	<2	1.88	35	5.3	7.5	480	19	0.8	1.1	12	865	2	<1		10.0	1		
115N	861036	CPS	35	00	40	4	35	4	5	<0.2	128	12	<2	0.81	25	5.6	5.5	440	10	<0.2	0.4	2	966	2	4		10.0	1		
115N	861037	PGDN	09	00	440	9	11	11	7	<0.2	235	2	<2	1.73	25	6.8	10.8	660	24	<0.2	<0.2	8	942	<1	<1		10.0	1		
115N	861038	PGDN	09	00	81	10	8	14	9	0.2	430	2	<2	2.04	205	4.2	18.2	440	30	0.3	0.3	2	1030	1	<1		10.0	1		
115N	861039	PGDN	09	00	102	15	21	14	5	0.2	460	2	<2	2.03	45	12.0	54.0	410	26	0.4	0.4	2	648	<1	4		10.0	1		
115N	861040	PQMN	09	00	149	12	14	13	11	0.2	510	2	<2	2.56	45	12.4	20.1	520	35	<0.2	0.3	2	648	1	4		10.0	1		
115N	861042	PQMN	09	00	59	8	8	9	6	0.3	290	2	<2	1.60	25	5.0	15.6	500	21	0.2	0.3	2	559	<1	<1		10.0	1		
115N	861043	CPS	35	00	71	8	31	11	6	<0.2	140	2	<2	1.46	60	4.2	7.1	460	23	<0.2	4.4	2	595	<1	<1		10.0	1		
115N	861044	PGDN	09	00	79	10	12	14	10	<0.2	520	2	<2	1.98	30	8.0	11.3	280	29	<0.2	3.3	2	808	1	<1		10.0	1		
115N	861045	CPS	35	00	77	10	26	9	6	0.2	210	2	<2	1.46	35	4.0	4.1	290	25	<0.2	0.3	2	626	2	<1		10.0	1		
115N	861046	CPS	35	00	67	17	10	16	7	<0.2	126	1	<2	1.78	45	8.2	3.2	420	38	<0.2	<0.2	2	735	1	<1		10.0	1		
115N	861047	CPS	35	00	65	12	11	15	9	<0.2	168	2	<2	1.58	45	4.8	5.6	300	27	<0.2	0.2	2	792	4	19	2	10.0	1	10.0	1
115N	861048	CPS	35	00	83	22	11	17	11	<0.2	470	2	<2	2.19	45	13.6	2.2	280	34	<0.2	0.3	2	798	2	6		10.0	1		
115N	861049	CPS	35	10	55	16	8	18	9	<0.2	280	2	<2	1.99	35	5.4	3.4	390	28	<0.2	0.3	2	788	2	<1		10.0	1		
115N	861050	CPS	35	20	55	17	10	15	8	0.3	270	12	<2	1.99	35	5.8	3.2	380	29	<0.2	0.4	2	836	1	3		10.0	1		
115N	861051	CPS	35	00	65	16	9	16	12	<0.2	1280	2	<2	6.51	45	15.3	2.2	290	51	0.2	0.5	2	820	1	1		10.0	1		
115N	861052	CPS	35	00	79	21	12	19	9	<0.2	380	2	<2	2.30	35	6.6	3.8	380	35	<0.2	0.4	2	913	2	3		10.0	1		
115N	861053	CPS	35	00	96	12	9	15	7	0.2	390	2	<2	1.72	35	5.6	2.7	280	31	0.2	0.3	2	687	2	<1		10.0	1		
115N	861054	CPS	35	00	63	12	9	14	6	<0.2	280	4	<2	1.55	25	6.0	2.3	240	25	<0.2	0.9	2	804	1	3		10.0	1		
115N	861056	CPS	35	00	58	16	12	13	5	0.4	260	3	<2	1.55	35	4.8	4.9	220	25	<0.2	0.2	2	703	1	<1		10.0	1		

(13)

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

NAME(S): Bored
MINFILE #: 115N 100
MAJOR COMMODITIES: -
MINOR COMMODITIES: -
TECTONIC ELEMENT: Yukon Tanana Terrane

NTS MAP SHEET: 115 N 10
LATITUDE: 63°31'22"N
LONGITUDE: 140°26'23"W
DEPOSIT TYPE: Unknown
STATUS: Anomaly

THESE COORDINATES ARE WRONG!

CLAIMS (PREVIOUS AND CURRENT)

BORD, BOR, SHE, LODE

WORK HISTORY

Staked as BORD cl (YA10591) in Sep/77 by Moose Creek ECL (Inco & Kennco), which explored with mapping and geochem sampling in 1977 and 1978. An affiliated company, Ocean Home EC, tied on Lad and Mat cl (YA31090) in Jun/78 and explored with geochem and Turam EM surveys in 1978 and 1979.

In Jun/90, the property was restaked as the Bor claims (YB30561) by Archer, Cathro & Associates (1981) Ltd and sold to YGC Resources Ltd, which performed line cutting, grid soil sampling and prospecting. In Jun/91, YGC added more Bor cl (YB48005) to extend the west boundary of the claim block, and performed additional soil sampling over the new claims. The property was extended to the east with more Bor cl (YB40858) in Jun/92. Kennecott Canada Inc. optioned the property in 1992 and explored with soil sampling, geophysics, and 796.1 m of diamond drilling in 5 holes, before dropping its option.

A. and S. Savage tied on 32 She (YB41198) and 113 Lode cl (YB41134) to the east and south in Jul/92, and conducted a trenching program on the Lode claims in Jul/93.

GEOLOGY

The claims were staked on a lead-zinc geochemical anomaly underlain by metasedimentary and metavolcanic rocks assigned to the Klondike Schist (Permian). A limonite gossan and disseminated pyrite occur in quartz-muscovite-sericite schist which is interpreted as a metamorphosed rhyolite. No mineralization was found.

YGC outlined a 7 km long lead-zinc-copper soil anomaly which parallels compositional layering in the schist. Boxwork-textured schist float was found containing oxidized disseminated sulphides. Kennecott's 1992 drilling intersected low grade sulphide mineralization.

REFERENCES

GEORGE CROSS NEWSLETTER, 8 Jun/92; 5 Aug/92; 23 Dec/92.

MINERAL INDUSTRY REPORT 1978, p. 27

YGC RESOURCES LTD, 1990. Assessment Report #092953 by K. Sax and R.C. Carne.

YGC RESOURCES LTD, 1991. Assessment Report #093000 by R.C. Carne.

YGC RESOURCES LTD, 1993. Assessment Report #093099 by R.C. Carne.

REFERENCES (CONTINUED)

YUKON EXPLORATION AND GEOLOGY 1992, p. 3, 5.

YUKON GEOLOGY AND EXPLORATION 1979-80, p. 271.

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115
N15

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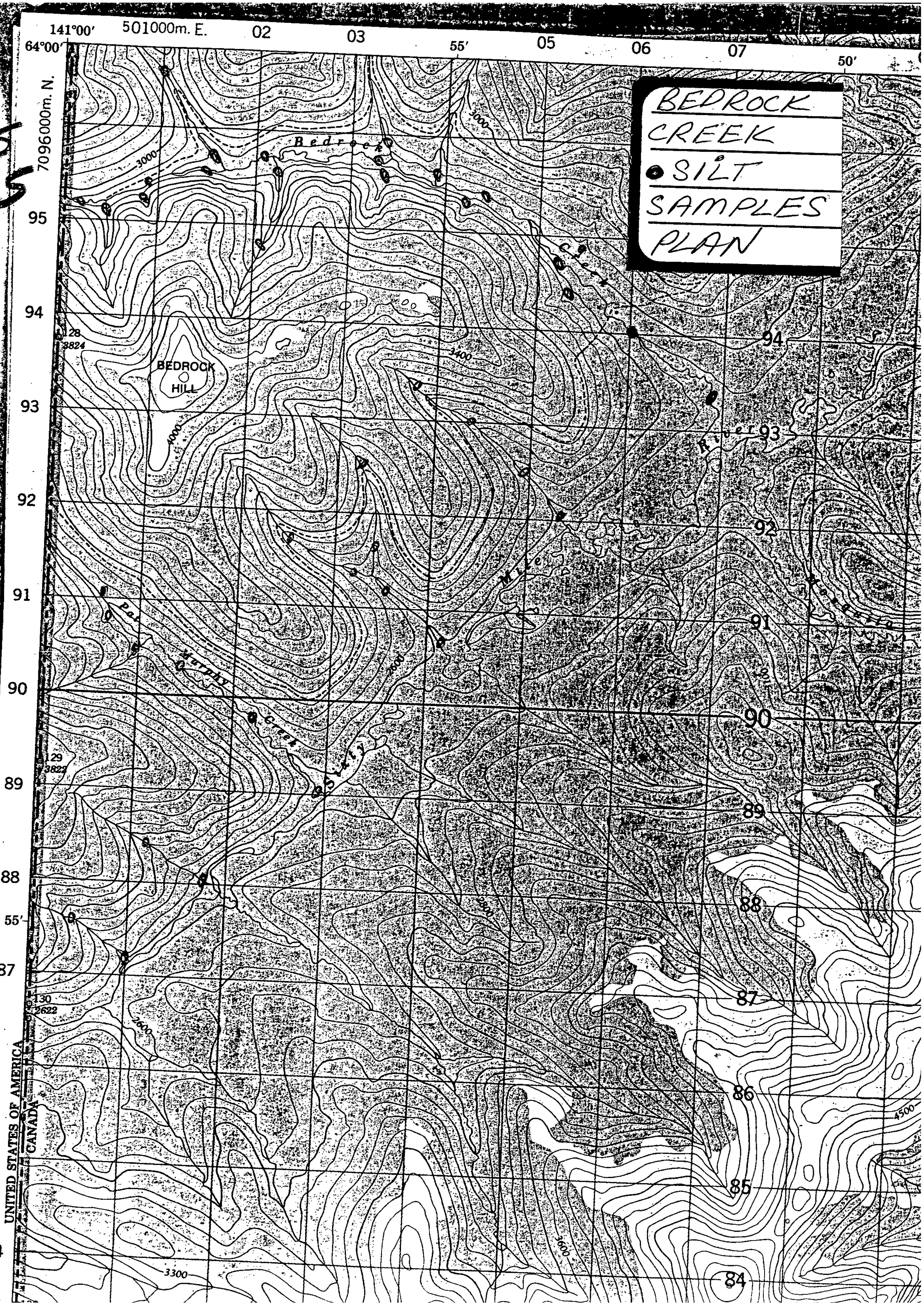
BEDROCK
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55'
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84
3000
Bedrock
Creek
BEDROCK
HILL
128
3824
3400
4000
River
Mile
Sixty
Pat
Murphy
Creek
2600
129
3822
130
2622
UNITED STATES OF AMERICA
CANADA
3300
2800
3600
4500
86
85

(2) / RAINBOW CREEK PROJECT (1998 GRASS ROOTS)

The project is about 120 miles east of MAYO. It is in the MAYO mining DISTRICT on map 105N-12. Access is by well maintained highway (all seasons) to Mayo. Then one goes by helicopter, a 1.6 hour flight according to Charlie Roots.

My target is a VMS ZnPbCu(AuAg) similar to NOU'S MARG VMS deposit. The boundary of my project is.

I have discussed this project with Charlie Roots (YUKON-EDA geologist) and John Kowalchuk (KENRICH-NU-LITE mkr. of VANCOUVER BC)

My reasons are as follows.

1. Article by Charlie Roots 1996 suggests potential for massive sulphides in area.

Marg VMS sits on same side of Robert Service Thrust. The Earn group here is PYRITIC and locally BARITIC - potential here for VMS or SEDEX. The TOM + JASON (SEDEX at McMillan Pass) and MARG (VMS) occur in this unit. The area is remote and has dense forests and one must camp far from areas of interest due to steep terrain (ie.

(2) no nearly helicopter landings). The 2 red alteration intrigues me — from VMS ?? or ?? or ?? I silt below areas of interest #3351 is anomalous and I silt above is not. #3349. Charlie Root to the area to me.

(2) Recommends

	Below area #3350	PERCENTILE	Above area #3349	PERCENT.
Zn	245	+70%	138	+50
Cu	78	+90	26	—
Pb	46	+95	12	—
Ni	56	+70	23	—
Co	13	70	5	—
Ag	.7	+70	.4	70
Hg	391	+90	171	+50
Mo	12	+12	2	50
As	720	MAX	8.7	—
Ba	5200	+90	2700	+70
Sb	11	+95	1.2	—
Au	9 PPB	+70	3	—
Fe	5.09	+95	2.80	—

#3351 is anomalous for Zn, Cu, Pb, Ni, Co, Ag, Hg, Mo, As, Ba, Sb, Au, Fe + elevated in RARE EARTHS (at 70%)

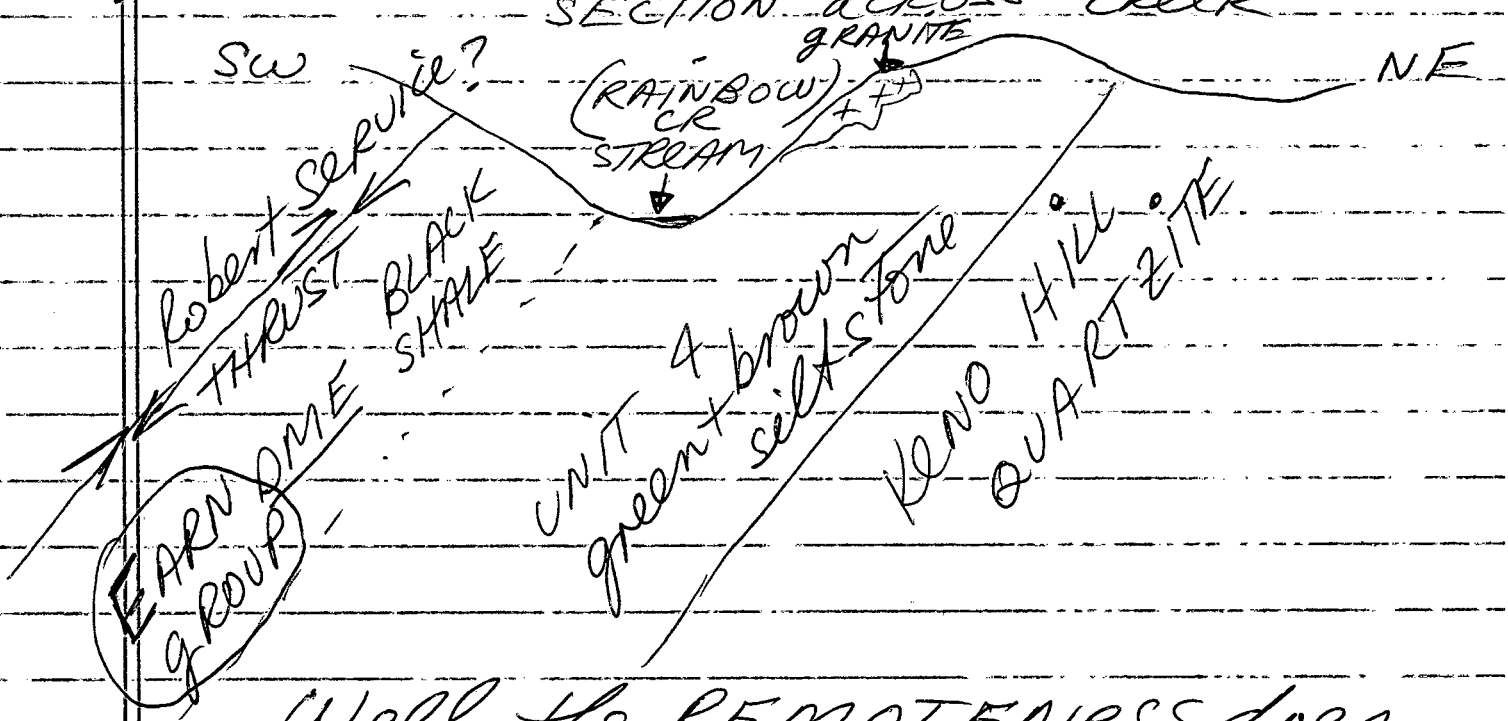
#3349 is anomalous in Ag, Ba (at 70%)

The area according to C. Root is covered in glacial till.

#3351 is 1½-2 Km out into a valley covered in till. * Where sample was taken, the stream

(acc. to OPEN File)

(2) bottom in red brown. John Kowalchuk
3 tells me many VMS + Sedex form
gossans in S Fream (the MAR does).



Well, the REMOTENESS does bother me somewhat! Charlie Roots says the anomoly is caused by
A High EARN Group Background geochemistry.
or B SKARN related to GRANITE, but no limey rocks mapped (? or yet)
or C a VMS!

But VMS occur in groups! ? find one, and more nearby!!! S Fream may expose fresh massive sulphides on steep hills! or float! #1335 silt may be diluted at 1½-2 km out into glacial till. Or enhanced!?!? by ice??? I think this area has great potential!!!

(2)
4

My plan is to camp at ▲1 and stake claims along claim line and get out a camp at ▲2. I will look for gossans and float while doing this. 30+ claims will be staked along stream bottom which is on a boundary or contact of GEOLOGICAL UNITS.

Later on second trip, I will do silt samples and more prospecting. I will find where #3351 was and sample below it for 1-1½ km and upstream to #3349 and above on EAST + WEST FORKS. Side streams will also be done. Seeps and gossans will also be done. Intervals will be about 300-600'. They will be tested for Au (30 gm) and 30 element ICP. I will also prospect for float.

Hopefully a dom bloqs silt or float will be found.

(2) 5

REFERENCES

(1) ROOTS, CHARLIE YUKON EXPLORATION and GEOLOGY 1996 p. 138-146 - UPPER PALEOZOIC STRATA WITH POTENTIAL FOR MASSIVE SULPHIDE MINERALIZATION NW LANSING MAP AREA (105 N) YUK ON.

(2) GSC OPEN FILE #2363 1991 MAP NTS 105 N

(3) GEOPHYSICAL PAPER MAP 4358 G MAP 105 N 12

(4) METALLOGENY OF VOLCANIC ARCS 1998 2 DAY MDRU SHORT COURSE

(5) PERSONAL COMMUNICATION JOHN KOWALCHUK (KENRICH ~~Ale~~ TNULITE VAN BC)
CHARLIE ROOTS (YUKON EDA)
DOUG EATON (ARCHER CATHRO)

(2) 6

BUDGET (RAINBOW CR PROJECT)

1998 - 105N12

GAS (gmc truck)
WH - MAYO - WH
2 times × 280 miles × 2 × 100 km / 62 miles $830
1800 km × .46 / km

Helicopter
1.6 HR × 4 trips × $850 / HR $5440

Diem
1st trip 21) 51 × $35 $1800
2nd " 30)

Sites 80 × $20 / site $1600
Rocks 40 × $22 / Rock 880

Radio 2 month × $300 / m × 25% owned $150

Misc + gear $500

total $11,200

Upper Paleozoic strata with potential for massive sulphide mineralization, northwestern Lansing map area (105N), Yukon

Charlie F. Roots[1]
Yukon Geology Program

ROOTS, C. F., 1997. Upper Paleozoic strata with potential for massive sulphide mineralization, northwestern Lansing map area (105N), Yukon In: Yukon Exploration and Geology, 1996, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 138-146

ABSTRACT

Northwestern Lansing map area, 120 km east of Mayo, lacks known mineral occurrences yet contains Upper Paleozoic stratigraphic units similar to those at volcanic-hosted and sedimentary exhalative deposits such as Marg and Macmillan Pass. Pyritic and locally baritic Earn Group and (previously unmapped) younger strata underlie most of the area. The sedimentary rocks are cleaved and folded but less strained than equivalent rocks in adjacent Mayo map area, and most contain abundant iron sulphide laminae, nodules, and replacements. A muscovite granite intrudes the grey-green phyllite. The Robert Service Thrust at the southern boundary of the Upper Paleozoic units, appears offset by steep, northwest-trending faults.

RÉSUMÉ

La région de la carte du nord-ouest de Lansing, située à 120 km à l'est de Mayo, ne contient aucune occurrence de minéraux connue, mais renferme des unités stratigraphiques du Paléozoïque supérieur semblables à celles des gisements exhalatifs sédimentaires et inclus dans des roches volcaniques, à Marg et dans le col Macmillan. Le Groupe pyritique et, par endroits, barytinique d'Earn, et les couches plus récentes, non cartographiées jusqu'alors, constituent la plus grande partie du sous-sol de la région. Le siltstone phylliteux gris-vert, peut-être d'origine volcanique, a une nette signature aéromagnétique. Les roches sédimentaires sont clivées et plissées, mais moins déformées que les roches équivalentes de la région voisine de la carte de Mayo, et la plupart regorgent de lames, nodules et matériaux de substitution constitués de sulfure de fer. Un granite à muscovite pénètre l'unité phylliteuse gris-vert. La faille inverse Robert Service, qui forme la limite sud des unités du Paléozoïque supérieur, semble compensée par des failles abruptes de direction nord.

[1] *Geological Survey of Canada, Vancouver Division*

INTRODUCTION

Lansing map area, midway between the mineral districts of Elsa-Keno Hill and Macmillan Pass, contains 30 mineral occurrences (Yukon Minfile, 1996), surprisingly few for an area of its size within Selwyn Basin. The area is distant from road-accessible settlement, and many of these occurrences were discovered during large grass-roots exploration programs. The Hess Project (a 1967-69 joint venture between Atlas Exploration Ltd., Quebec Cartier Mining Ltd and Phillips Bros.) discovered at least 12 occurrences. One of these became the Plata-Inca property which produced 2800 tonnes of high grade silver-lead ore between 1976 and 1985 (Abbott, 1986). Follow-up of reconnaissance silt geochemistry anomalies (Friske et al, 1990) and favourable Earn Group stratigraphy by Kennecott Exploration Ltd. in 1991 and 1992 led to 6 new mineral occurrences. No mineral occurrences are known in the northwest quarter of the map area, southeast and on trend with the Marg volcanogenic massive sulphide deposit (Turner and Abbott, 1990) and Upper Devonian metavolcanic and baritic strata (Abbott, 1990a; Gordey, 1990a). This area is probably worth careful search for sedimentary and volcanic exhalative mineralization. A lack of geological information and maps, coupled with poor exposure, hamper this search.

The Geological Survey of Canada began systematic regional mapping of Lansing (105N) map area in 1993 with the cooperation of the Canada-Yukon Geoscience Office and initial funding from the Canada-Yukon Economic Development Agreement (1991-96). Interim reports and maps include Roots and Brent, (1994 a, b, c) and Roots et al. (1995 a, b). In 1996 many outcrops in the northwest quadrant (covered by 1:50,000 scale maps 105N/11, 12, 13 and 14) were examined during foot traverses with logistical support by float-plane, helicopter and river-boat. Highlights of mapping included delineation of a previously unknown, 30 km long, up to 3 km wide exposure of Keno Hill quartzite, a granitic intrusion, as well as numerous exposures of green-grey phyllitic siltstone.

This report contains an overview of regional structure and summary lithological descriptions for three Upper Paleozoic rock units (no stratigraphic sections are exposed), as well as two localities which have implications for mineral exploration and structural interpretation. Correlations are tentative, rock analyses and age determinations are in progress, and this report will be supplanted by a final manuscript and map for Lansing map area.

REGIONAL STRATIGRAPHY AND STRUCTURE

Lansing map area lies near the northern edge of the Selwyn Basin, which is the outer part of the Lower Paleozoic miogeocline of ancestral North America (Gordey and Anderson, 1993). Stratigraphic units in the Lansing area are summarized in Table 1. The Late Proterozoic off-shelf depositional environment accumulated grit succeeded by shale and chert. This regime was disrupted by Late Devonian block faulting, deposition of Earn Group

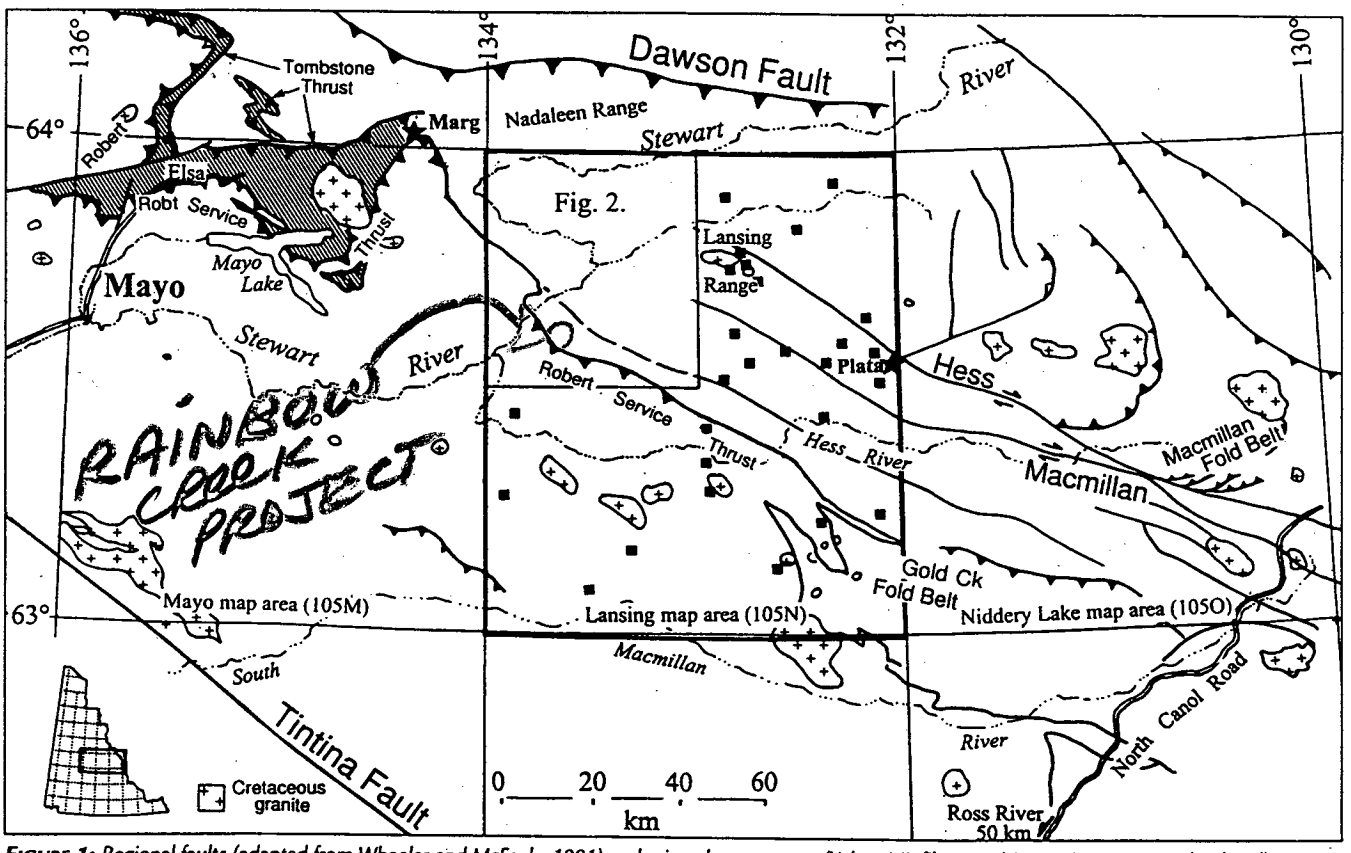


FIGURE 1: Regional faults (adapted from Wheeler and McFeely, 1991) and mineral occurrences (Yukon Minfile, 1996) in Lansing map area (outlined). Tombstone thrust panel is hachured.

1990). In Lansing map area iron-coated streambeds, zinc, lead and silver silt anomalies, and stratiform barite constitute 10 mineral occurrences (Yukon Minfile, 1996) in Earn Group rocks. An important feature of the Earn Group, particularly along the Stewart River shoreline from Ortell Creek mouth to Seven Mile Canyon, are abundant iron sulfide nodules, concretions and laminated strata; these are not present or not mentioned at any known mineral occurrences. The nodules consist of fine-grained masses or agglomerated crystals with the marcasite habit. Nodules range from pea-size to 2 cm thick x 5 cm long (Fig. 3) and may be packed in accumulations up to 1 m in diameter, or dispersed and comprise perhaps 1% of large outcrops. Laminated pyritic strata

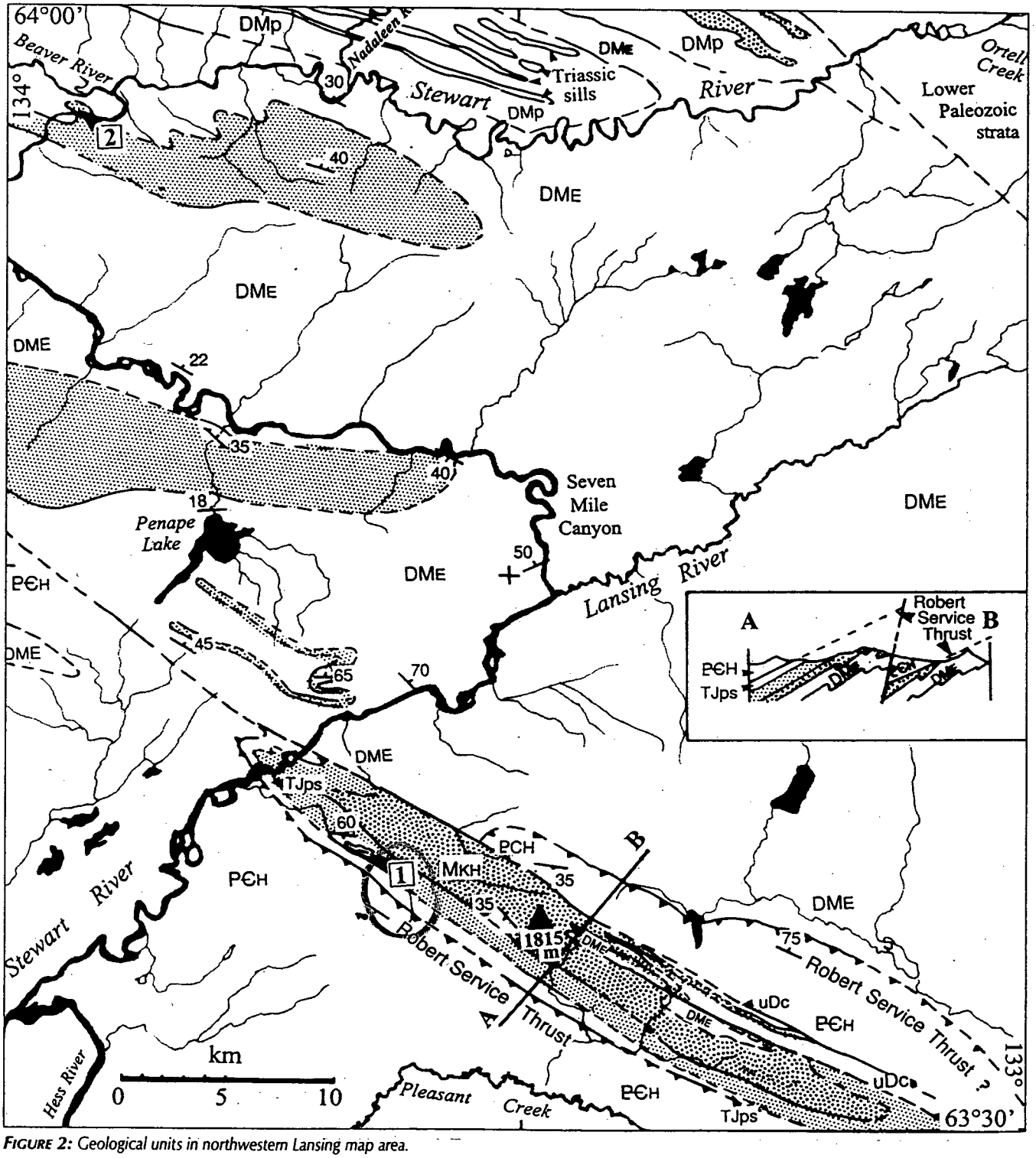


FIGURE 2: Geological units in northwestern Lansing map area.

Age (or ages) are unknown, and among the sparse exposures only two contacts with other units were seen. The southern belt overlies Keno Hill quartzite stratigraphically; it may correlate with either the Permian Mount Christie Formation (Gordey and Anderson, 1993), or an un-named Carboniferous-Permian unit recognized in eastern Lansing map area (Roots et al., 1995b). The greenish cast of the rocks in the northern belts may result from chloritic alteration of mafic minerals; if so these rocks could be distal to metavolcanic rock of either Upper Devonian or Lower Carboniferous (Gordey, 1990a,b; Turner and Abbott, 1990) age. Less likely is that these are older rocks thrust over the Earn Group; they might be Steel Formation (Gordey and Anderson, 1993) of Silurian age. The formations mentioned above contain fine-grained, grey-green strata. Until the age is known correlations are speculative, but the rock is described to provoke its recognition by others, perhaps leading to new conclusions about its age and origin.

The most southerly belt is flanked to the northeast by Keno Hill quartzite. Weathering brown with shades of pink or beige, this light green, waxy to flaky textured, siliceous mudstone is distinctive. Iron sulphide nodules up to 1 cm thick are common. Near Locality 1 (next section) gradations between siltstone and fine sandstone laminae indicate upright bedding. Because adjacent Keno Hill quartzite forms an anticlinal structure, the grey-green phyllite probably overlies it.

North of the Stewart River thin-bedded and laminated grey to green and yellow indurated argillite is exposed in two parallel cliff bands, one about 100 vertical metres above the other, 13 km southwest of the confluence of Lansing River. The similar rock type, appearance and approximate thickness revealed by the two cliffs suggest an isoclinal repetition. The regional aeromagnetic map (Teskey, 1995) shows prominent, linear positive anomalies coincident with these cliff bands, perhaps reflecting the abundant disseminated iron sulphide noted many samples. This belt is therefore interpreted as a syncline of younger rocks within Earn Group. The absence of Keno Hill quartzite suggests the phyllite could be as old as Lower Carboniferous, and the age may be resolved if identifiable microfauna are yielded by the thin, discontinuous grey limestone on the ridgetop.

A third area underlain by grey-green cherty argillite and phyllite is interpolated from widely spaced exposures north and west of Penape Lake, as well as along the Stewart River west of Seven Mile Canyon. Bedding in each of four exposures is uncertain, but slaty cleavage dips gently to moderately northeastward. The interpolated map width of this unit is at least 1 km. The best exposure flanks the outlet stream north of Penape Lake, where green and pinkish-brown weathering, greenish yellow indurated phyllite contains abundant weathered-out iron sulphide pockets. At this locality the phyllite appears to structurally overlie Earn Group exposed farther south. The contact between similar rock and Earn Group is exposed farther east on the south shore of the Stewart River 2 km west of the entrance to Seven Mile Canyon. Green-brown phyllite with gently north dipping slaty cleavage is observed at low water levels directly overlain by south dipping beds of black shale and chert. Although a disconformable relationship is possible, expected rip up clasts or coarse-grained basal layer are absent. Instead the contact is interpreted as a minor fault. In Seven Mile Canyon the Earn Group is contorted in large chevron folds with gently south-dipping axes. Minor layer-parallel thrust faults are consistent with this structural style.

The fourth area, possibly the most extensive of grey-green phyllite, comprises high hills several kilometres south of Stewart River, south of the Nadaleen River confluence. Tops of the hills expose flaggy pink-brown and green-grey weathering, dark grey and green argillite and phyllitic siltstone; iron sulphide nodules are common. Thick, moderately north-dipping layering is locally discernible; more prominent is a poorly developed foliation, defined by flattened silicate minerals, that dips moderately northeast. This rock type extends down the flanks into talus at the base of slope, where a buried contact is suspected because carbonaceous silty argillite (Earn Group) is exposed at the heads of streams draining north and south from the hills. Topographically the grey-green phyllite overlaps the Earn Group. Ten kilometres westward these two units are in direct contact, as described for Locality 2 (next section).

In summary the four belts of grey-green phyllite are lithologically similar, although contact relations are insufficent to determine stratigraphic relations. If it is as young as Permian (Mount Christie Formation) which it most resembles, the absence of Keno Hill quartzite from all but the southern belt is puzzling. Alternatively the unit may represent volcanic-derived sediment distal to the discontinuous metavolcanic units of Upper Devonian (unit DMv of Gordey, 1990b) or Mississippian (unit DMvs of Turner and Abbott, 1990) age. No grains or coarse grained sedimentary layers were seen despite a thorough search. Volcanic parentage cannot be proven. Nevertheless the lateral extent, common alteration and iron sulphide content of the unit, along structural trend from the Marg volcanogenic massive sulphide deposit, requires further investigation.

LOCALITIES OF INTEREST

Locality 1

is a prominent orange weathering rock cliff facing southwest into "Rainbow Creek" (local name) which drains northwest into the Stewart River east of '1815 m mountain'. Located at 63°37'N 133°40'W, this locality is protected by steep, dense forest and a lack of nearby helicopter landing sites. The covered surface trace of the Robert Service Thrust trends northwest, roughly parallel to the creek on its south side of the valley. The footwall Earn Group, consisting of black mudstone laced with white quartz and lesser brown phyllite which results in iron-stained seeps, is exposed in the floor of the steep-walled creek. The northeast side is brush-covered talus surmounted by 200 m high vertical cliffs. Rusty weathering green, grey and brown interlaminated siltstone and fine sandstone, commonly silicified, occurs at the west end and atop the cliffs. This rock, considered part of the southern belt of the grey-green phyllite described above, has a map width of 2

km to a possible stratigraphic contact with Keno Hill quartzite In at least several places the siltstone is deeply oxidized and clay-altered. The cliff, when viewed from a vantage point across "Rainbow Creek", reveals a reticulate pattern of granitic dykes, up to 30 m wide, vertically and horizontally on the face. Talus blocks consist of medium grained, leucocratic, muscovite granite, and contain up to 1% interstitial sulphide blebs (probably pyrrhotite). This granite has not been described or shown on earlier maps. Because the exposure is steep, the plan view of this intrusion is minute, yet it is probably 1300 m long.

No indication of previous exploration or economic mineralization was encountered during a rapid traverse of the area in 1996. The reconnaissance stream sediment geochemical survey (Friske et al., 1991; sites 3351 and 3349) sampled "Rainbow Creek" 3 km downstream from the cliff. Site 3351 is highly anomalous in As, Ba, Sb, Rb and most REE; Cu, Ag, Hg and Cr are above background values. All metallic elements show large increases when compared to another site (3349) on the same creek 2 km above locality 1. The newly-discovered intrusion, prospective stratigraphic units and abundant red alteration are worthy of follow-up.

Locality 2,

a small rock island and adjacent shoreline of the Stewart River 2 km southwest of the mouth of the Beaver River, exposes a contact which may be critical to understanding the regional structure. The locality (63°57'N 133°54.5W) is on southeastward extrapolation of the Tombstone Thrust (Abbott, 1990a,b). Carbonaceous shale and siltstone (probably Earn Group) containing abundant iron sulphide nodules are exposed northeast and southwest of the locality. In these outcrops cleavage is subordinate to generally northeast dipping bedding, although isolated exposures reveal southeast, and northwest dips, suggesting regional open folds with east-trending axes. At the locality north of the island, a steep (75° N) dipping succession of similar black shale with 2 cm thick grey siltstone interbeds (Earn Group), is structurally overlain by grey-green phyllitic mudstone(Fig. 5). At the contact, exposed along 15 m of shoreline at low water levels, is a 5 cm thick, grey silicified and tectonized layer. This rock appears to represent recrystallized fault gouge, dips about 35° northeast, and contains streaky white quartz which defines a stretching lineation gently plunging toward 100° azimuth.

The rock above the tectonized layer is exposed on both sides of the river for about 500 m as well as on the small island. Most common is a papery-cleaved, locally slaty or crumbly, phyllitic grey mudstone, although 5 cm thick brown sandstone interbeds on the island exhibit poorly preserved ripples which could be interpreted as inverted. About 100 m upstream from the island a brightly coloured (alteration with iron reduction fronts) outcrop contains bedding dipping gently northeast, coplanar with cleavage and the underlying tectonized layer.

The significance of a fault contact between the two principal rock units of the area is unclear. The overlying rock unit exhibits more structural fabric and alteration than the underlying Earn Group. If

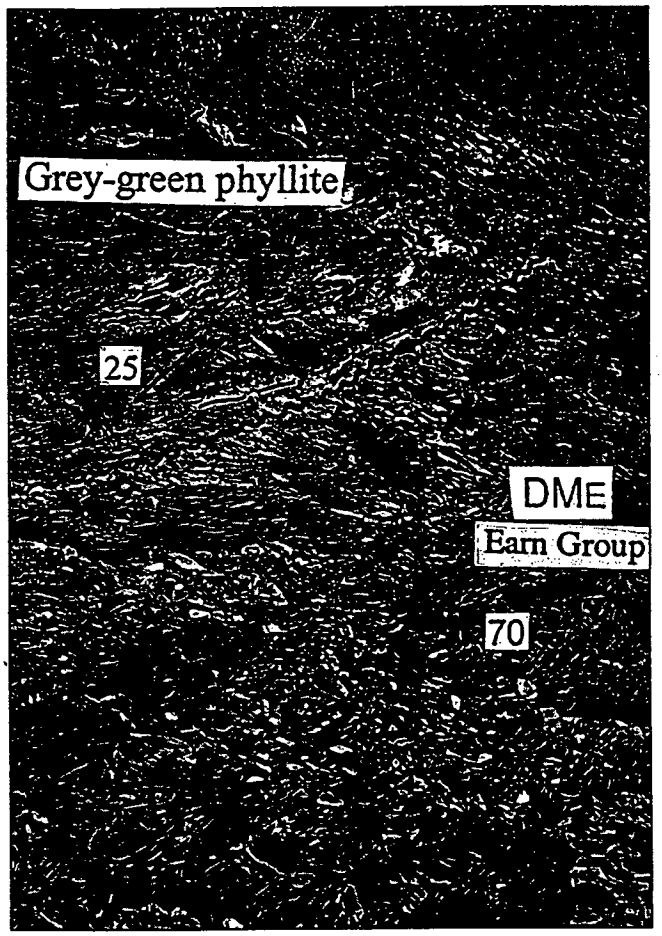
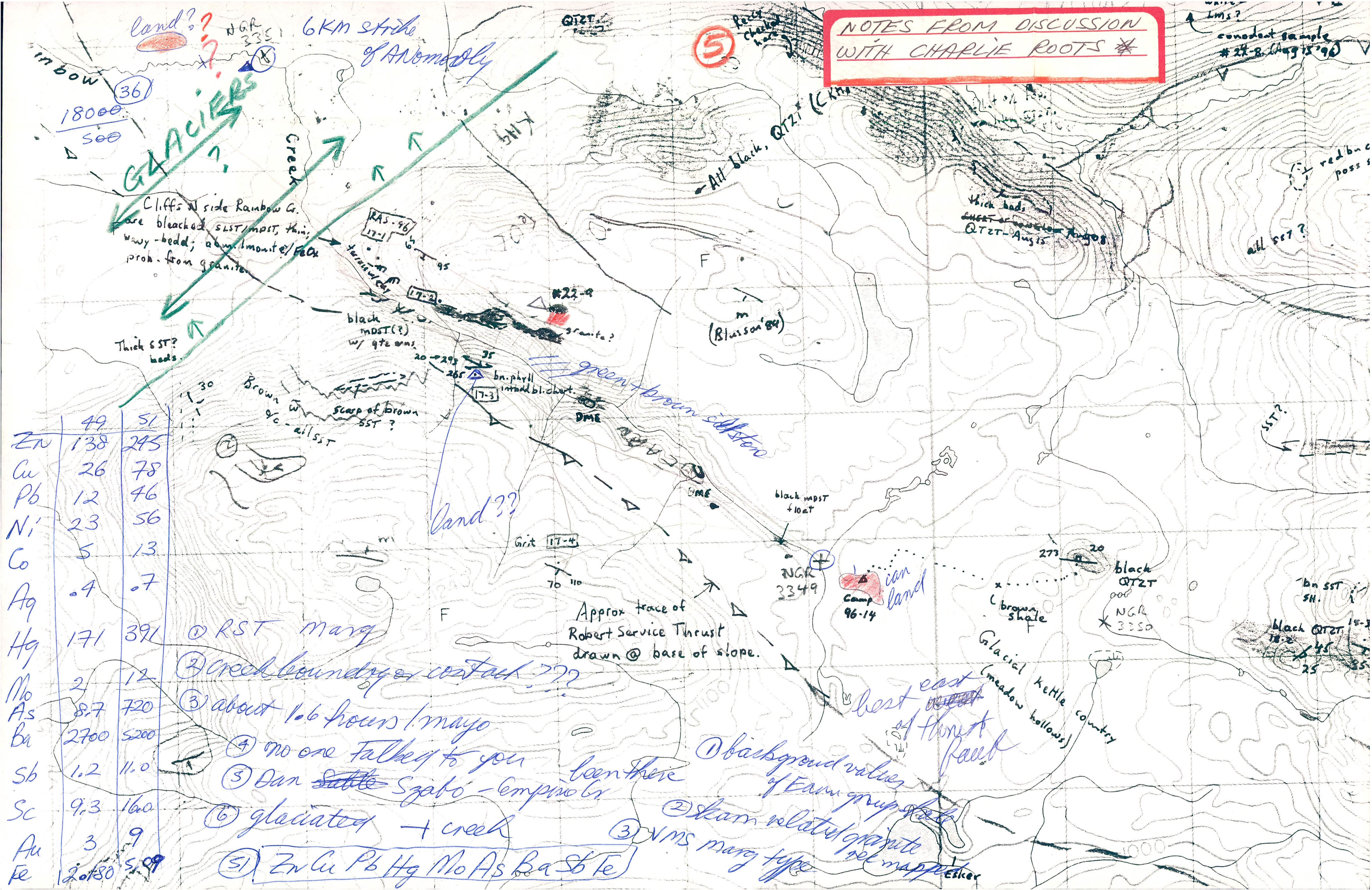


FIGURE 5: North bank outcrop on the Stewart River 1.7 km southwest of the mouth of Beaver River (Locality 2, discussed in text). Dark grey, thin bedded siltstone (Earn Group) in lower half is separated from lighter, altered phyllite by a 5 cm thick, light grey tectonized layer. The contact may be a low-angle thrust.the same width as the standard text columnns

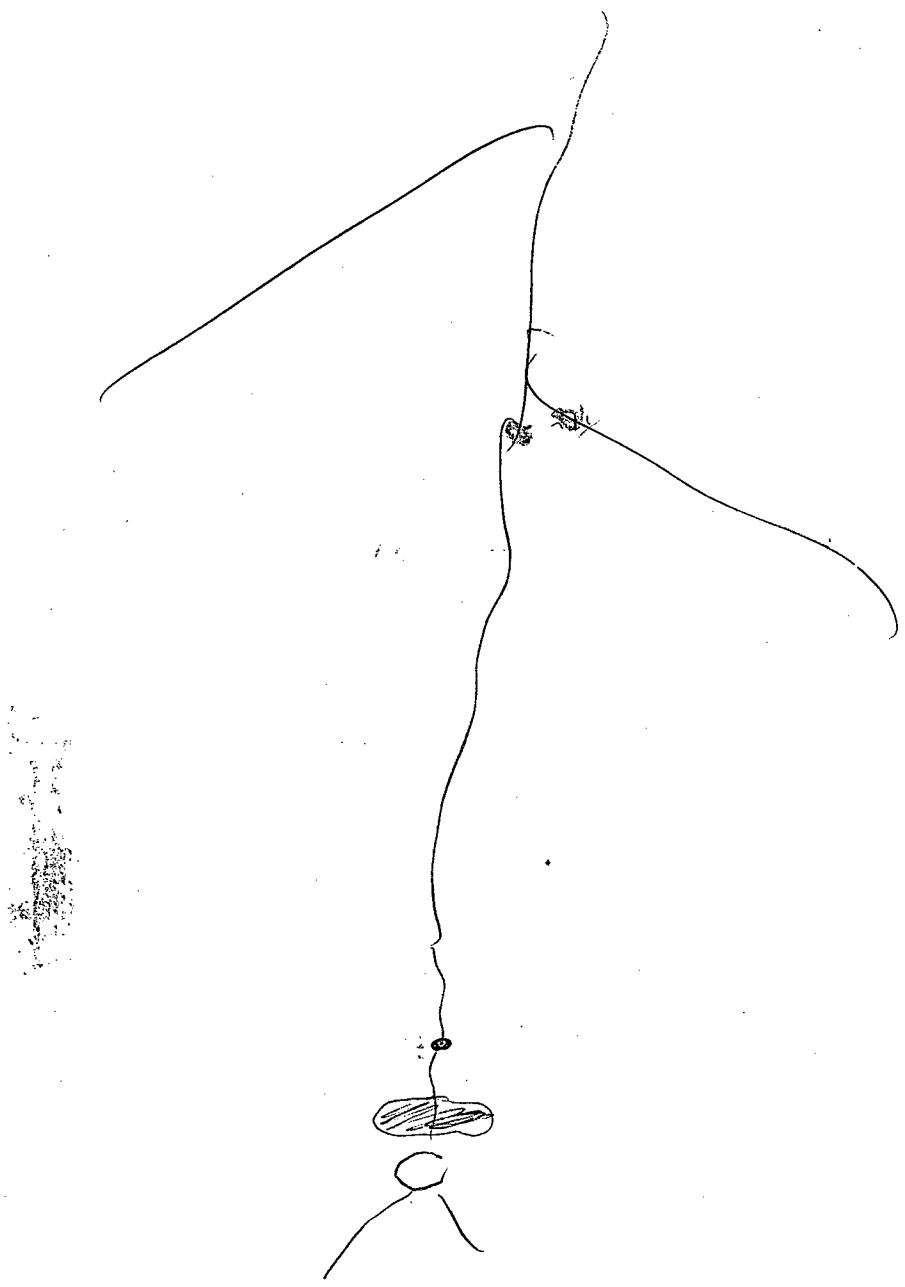
correlated with the grey-green phyllite that caps the high hills directly east of the locality, it may be tectonically emplaced on low angle faults. The fault could be a splay of the Tombstone Thrust. Alternatively the contact at Locality 2 may be merely a competency contrast between black siltstone and grey shale with a tectonized boundary layer. This quite pleasant stretch of Stewart River shoreline deserves further examination by structural geologists.

ACKNOWLEDGMENTS

The stimulating field assistance of Diane Brent and Bruce Mitford, the gracious hospitality of Beth Hunt and family at the historic Lansing Post site, and capable flying of Ernie Onafreychuk and Pat Damian contributed to an excellent field season. Dr. A.E.H. Pedder of GSC Calgary identified the Upper Devonian corals. Don Murphy, Grant Abbott, Maurice Colpron and Dave Caulfield discussed field relationships with me, but flaws in the interpretation remain my own. The manuscript was improved by Dirk Tempelman-Kluit.



	49	51
Zn	138	245
Cu	26	78
Pb	12	46
Ni	23	56
Co	5	13
Ag	.4	.7
Hg	171	391
Mo	2	12
As	8.7	720
Ba	2700	5200
Sb	1.2	11.0
Sc	9.3	16.0
Au	3	9
Fe	1.2080	5.99



1:30,000

A12328-198 upper end Freem

A23485-50 big one

A12230-402 to west

mag map
topo map
geolem map
photo copy (article)
aerial photo

3350
3348
3353
1170
1170

3135
3136 (3133)
3340

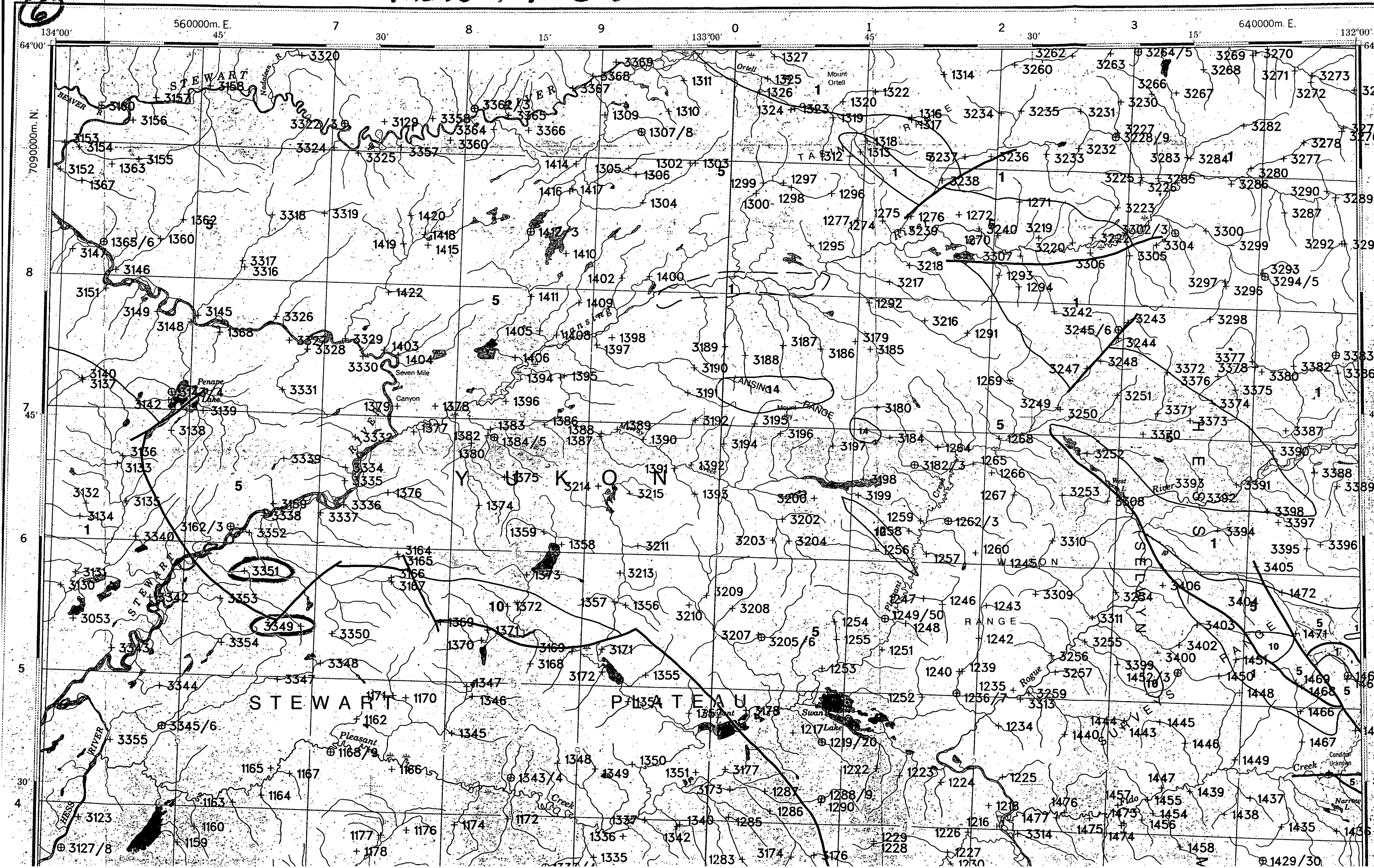
Energy, Mines and Resources Canada

Énergie, Mines et Ressources Canada

OPEN FILE 2363

NTS 105N

(6)



GEOLOGY LEGEND

CENOZOIC				
	Tertiary			
15		**ITs**	**58**	conglomerate, sandstone, shale
MESOZOIC				
	Cretaceous			
14		**Kqm**	**52**	quartz monzonite, granodiorite; alaskite
13		**KSF**	**52**	South Fork; andesite, dacite, basalt
PALAEOZOIC				
	Carboniferous and Permian			
12		**CPcs**	**35**	cherty dolomite, quartzite, shale
	Devonian and Mississippian			
11		**DMS**	**29**	Sylvester Group: shale, chert arenite, conglomerate, basic volcanic rocks
10		**DME**	**29**	Earn Group: undivided shale, chert arenite, conglomerate
9		**DMss**	**29**	sandstone, conglomerate, shale
	Devonian			
8		**DEl**	**25**	Earn Group (lower): slate, quartzite, limestone
7		**Dp**	**25**	shale, siltstone
	Middle Devonian			
6		**mDpc**	**27**	shale, limestone (may include older)
6a		**mDc**	**27**	limestone, dolomite, shale (Arnica, Landry, Natla, Headless, Nahanni)
	Silurian and Devonian			
6b		**SDc**	**24**	Delorme, Camsell, Sombre: dolomite, limestone, shale
	Ordovician, Silurian and Lower Devonian			
5		**OSDR**	**19**	Road River: black graptolitic shale, chert (may include older; may not include **Devonian**)
	Ordovician and Silurian			
5a		**OSc**	**19**	limestone, shale (includes Rockslide, Brokenskull, Sunblood)
	Cambrian and Ordovician			
4		**COc**	**14**	dolomite, limestone, siltstone (includes Rockslide, Brokenskull, Sunblood)
4a		**COp**	**14**	shale, limestone
	Lower Cambrian			
4b		**ICS**	**11**	Sekwi: dolomite, limestone, quartzite
4c		**ICBR**	**11**	Backbone Ranges: quartzite, slate
3		**ICHq**	**11**	Harvey Group: quartzite, schist
2		**ICp**	**11**	siltstone, shale
PROTEROZOIC				
	Hadrynian			
1		**Hqp**	**07**	gritty quartzite, argillite, shale, phyllite (may include **Lower Cambrian**)

~ GEOL. BOUNDARY

— FAULT

OPEN FILE 2363

105 N LANSING

1991

National Geochemical Reconnaissance Stream Sediment and Water Geochemical Data, Yukon, 1991. GSC OF 2363, NGR 155-1991. NTS 105N
Field Data

Map Sheet	Sample ID	Rep Stat	UTM Zn	Easting	Northing	Rock Unit	Age	Sample Type	Stream Width	Depth	Sample Cont.	Bank Type	Water Colour	Stream Flow	Sample Colour	Comp	Bottom Pcpt	Bank Pcpt	Stream Physiog.	Drainage	Stream Type	Stream Class	Source
105N	903322	10	08	570905	7092062	OSDR	19	Sed/Water	0015	002	None	Colluv	Clear	Modert	Gy-Blu	121	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903323	20	08	570905	7092062	OSDR	19	Sed/Water	0015	002	None	Colluv	Clear	Modert	Gy-Blu	121	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903324	00	08	570159	7090226	OSDR	19	Sed/Water	0025	002	None	Colluv	Clear	Modert	Gy-Blu	121	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903325	00	08	571991	7089883	OSDR	19	Sed/Water	0020	001	None	Colluv	Clear	Slow	Rd-Bn	021	Rd-Bn	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903326	00	08	566299	7077316	OSDR	19	Sed/Water	0025	002	None	Colluv	Clear	Slow	Gy-Blu	221	Rd-Bn	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903327	00	08	567358	7075546	OSDR	19	Sed/Water	0005	001	None	Colluv	BnTrans	Slow	Gy-Blu	031	None	None	Swamp	Dendrc	Permnt	Pri'ary	Ground
105N	903328	00	08	568758	7074906	OSDR	19	Sed/Water	0010	002	None	Colluv	BnTrans	Slow	Gy-Blu	021	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903329	00	08	571551	7075788	OSDR	19	Sed/Water	0020	002	None	Colluv	Clear	Modert	Gy-Blu	121	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903330	00	08	572908	7074513	OSDR	19	Sed/Water	0008	002	None	Colluv	Clear	Modert	Gy-Blu	121	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903331	00	08	566961	7071793	OSDR	19	Sed/Water	0005	001	None	Colluv	BnTrans	Slow	Gy-Blu	021	None	None	Swamp	Dendrc	Permnt	Pri'ary	Ground
105N	903332	00	08	572557	7068368	OSDR	19	Sed/Water	0004	001	None	Colluv	BnTrans	Slow	Gy-Blu	021	None	None	Swamp	Dendrc	Permnt	Pri'ary	Ground
105N	903334	00	08	571920	7065998	OSDR	19	SedOnly			None	Colluv			Gy-Blu	120	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903335	00	08	571903	7065010	OSDR	19	Sed/Water	0015	003	None	Colluv	Clear	Modert	Gy-Blu	121	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903336	00	08	571900	7063176	OSDR	19	Sed/Water	0007	002	None	Colluv	Clear	Slow	Gy-Blu	221	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903337	00	08	570194	7062508	OSDR	19	Sed/Water	0008	002	None	Colluv	BnTrans	Slow	Gy-Blu	121	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903338	00	08	565924	7062164	OSDR	19	Sed/Water	0030	003	None	Colluv	Clear	Modert	Gy-Blu	220	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903339	00	08	567273	7066538	OSDR	19	Sed/Water	0010	002	None	Colluv	BnTrans	Slow	Gy-Blu	031	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903340	00	08	556352	7060286	Hqp	07	Sed/Water	0003	001	None	Colluv	BnTrans	Slow	Gy-Blu	031	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903342	00	08	557586	7055704	Hqp	07	Sed/Water	0010	002	None	Colluv	Clear	Slow	Rd-Bn	021	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903343	00	08	554840	7051807	Hqp	07	Sed/Water	0010	001	None	Colluv	Clear	Slow	Gy-Blu	022	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903344	00	08	558512	7049088	Hqp	07	Sed/Water	0010	001	None	Colluv	Clear	Slow	Rd-Bn	121	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903345	10	08	558790	7046030	Hqp	07	Sed/Water	0025	002	None	Colluv	Clear	Modert	Gy-Blu	021	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903346	20	08	558790	7046030	Hqp	07	Sed/Water	0025	002	None	Colluv	Clear	Modert	Gy-Blu	021	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903347	00	08	567377	7049824	Hqp	07	Sed/Water	0015	002	None	Colluv	Clear	Slow	Gy-Blu	121	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903348	00	08	570571	7051155	Hqp	07	Sed/Water	0015	003	None	Colluv	Clear	Slow	Gy-Blu	121	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903349	00	08	569009	7053887	Hqp	07	Sed/Water	0008	004	None	Colluv	BnTrans	Slow	Gy-Blu	032	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903350	00	08	571356	7053400	OSDR	19	Sed/Water	0010	002	None	Colluv	BnTrans	Slow	Gy-Blu	031	None	None	Swamp	Dendrc	Permnt	Pri'ary	Ground
105N	903351	00	08	564596	7057925	OSDR	19	Sed/Water	0025	002	None	Colluv	Clear	Slow	Gy-Blu	121	Rd-Bn	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903352	00	08	564850	7060833	OSDR	19	Sed/Water	0015	002	None	Colluv	Clear	Slow	Gy-Blu	221	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903353	00	08	562839	7055803	Hqp	07	Sed/Water	0020	003	None	Colluv	Clear	Modert	Gy-Blu	131	None	None	Moun/M	Dendrc	Permnt	Pri'ary	Ground
105N	903354	00	08	563035	7052496	OSDR	19	Sed/Water	0010	002	None	Colluv	Clear	Slow	Gy-Blu	131	None	None	Moun/M	Dendrc	Permnt	Pri'ary	Ground
105N	903355	00	08	554977	7044851	Hqp	07	Sed/Water	0010	003	None	Colluv	Clear	Slow	Gy-Blu	221	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903356	00	08	554430	7034100	Hqp	07	Sed/Water	0008	001	None	Colluv	Clear	Slow	Gy-Blu	120	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903357	00	08	575203	7090424	OSDR	19	Sed/Water	0025	004	None	Alluv	Clear	Modert	Brown	122	None	None	Moun/M	Dendrc	Permnt	Pri'ary	Ground
105N	903358	00	08	577492	7092693	OSDR	19	Sed/Water	0030	004	None	Alluv	Clear	Modert	Gy-Blu	122	None	None	Moun/M	Dendrc	Permnt	Pri'ary	Ground
105N	903360	00	08	578887	7091101	OSDR	19	SedOnly	30		None	Alluv	*	*	Gy-Blu	121	None	None	Hill	Dendrc	Permnt	Sec'ary	Ground
105N	903362	10	08	580609	7093502	OSDR	19	Sed/Water	0025	005	None	Alluv	Clear	Modert	Gy-Blu	122	None	None	Moun/M	Dendrc	Permnt	Pri'ary	Ground
105N	903363	20	08	580609	7093502	OSDR	19	Sed/Water	0025	005	None	Alluv	Clear	Modert	Gy-Blu	122	None	None	Moun/M	Dendrc	Permnt	Pri'ary	Ground
105N	903364	00	08	582087	7091970	OSDR	19	Sed/Water	0030	005	Burn	Alluv	Clear	Modert	Gy-Blu	121	None	None	Hill	Dendrc	Permnt	Pri'ary	Ground
105N	903365	00	08	583125	7093060	OSDR	19	Sed/Water	0035	006	None	Alluv	Clear	Modert	Gy-Blu	120	None	None	Moun/M	Dendrc	Permnt	Pri'ary	Ground

(9)

National Geochemical Reconnaissance Stream Sediment and Water Geochemical Data, Yukon, 1991. GSC OF 2363, NGR 155-1991. NTS 105N
Analytical Data

Variable:			Zn	Cu	Pb	Ni	Co	Ag	Mn	Fe	Hg	F	V	Cd	Sn	LOI	Mo	As	Ba	Br	Co	Cr	Cs	Fe
Units:			ppm	ppm	ppm	ppm	ppm	ppm	ppm	pct	ppb	ppm	ppm	ppm	ppm	pct	ppm	ppm	ppm	ppm	ppm	ppm	ppm	pct
Detection Limit:			2	2	2	2	2	0.2	5	0.02	10	20	5	0.2	1.0	1.0	2	0.5	50	0.5	1	5	1	0.01
Analytical Method:			AAS	AAS	AAS	AAS	AAS	AAS	AAS	AAS	AAS	ISE	AAS	AAS	AAS	GRAV	AAS	INA	INA	INA	INA	INA	INA	INA
105N	903322	10	195	63	16	57	13	0.8	547	3.45	195	508	29	1.8	10	6.8	9	14.0	1300	<	14.0	120.0	5.0	3.680
105N	903323	20	192	62	16	56	13	0.7	565	3.28	186	491	30	1.7	9	7.4	8	13.0	1400	1.5	14.0	120.0	5.0	3.660
105N	903324	00	127	54	14	34	9	0.3	526	2.60	154	328	26	<	2	6.5	2	14.0	3200	1.8	9.0	81.0	3.0	2.8
105N	903325	00	140	46	25	36	17	<	1380	3.60	139	371	26	<	10	7.0	2	13.0	2200	<	18.0	89.0	5.0	4.150
105N	903326	00	120	34	17	36	12	0.3	518	3.06	208	476	23	<	7	4.8	4	16.0	1600	<	12.0	84.0	5.0	3.610
105N	903327	00	106	25	15	26	9	<	481	2.65	176	511	20	<	4	11.6	2	10.0	1600	1.8	10.0	81.0	6.0	2.990
105N	903328	00	142	34	18	36	13	<	1043	3.57	243	498	24	<	6	10.8	3	16.0	2400	3.7	13.0	99.0	6.0	4.090
105N	903329	00	120	31	13	29	8	0.2	575	2.86	110	442	25	0.2	4	5.4	2	13.0	2000	<	10.0	69.0	3.0	3.080
105N	903330	00	141	28	20	28	11	<	670	2.89	95	488	30	0.3	10	4.0	3	12.0	1300	1.3	12.0	82.0	3.0	3.650
105N	903331	00	93	36	16	25	8	0.2	259	2.83	183	468	24	<	3	15.0	2	11.0	1200	2.2	9.0	76.0	4.0	2.810
105N	903332	00	131	35	16	28	11	<	1031	2.80	227	425	24	0.7	4	9.3	3	26.0	1800	2.1	12.0	70.0	4.0	3.1
105N	903334	00	148	41	17	31	11	<	876	3.11	274	533	24	0.4	7	4.7	3	23.0	2000	1.5	13.0	77.0	4.0	3.580
105N	903335	00	199	38	17	34	12	0.3	1800	3.35	293	535	30	0.9	4	9.5	3	27.0	1900	2.5	14.0	74.0	4.0	3.7
105N	903336	00	125	33	13	25	7	0.2	524	2.69	243	480	25	0.2	3	4.8	4	21.0	2700	<	8.0	62.0	3.0	2.780
105N	903337	00	136	30	15	26	8	<	722	2.75	183	536	26	0.3	3	6.2	3	18.0	2200	<	10.0	72.0	3.0	3.120
105N	903338	00	123	33	13	30	9	0.2	659	2.73	261	433	30	0.6	3	5.6	3	16.0	3000	1.1	11.0	72.0	3.0	2.990
105N	903339	00	148	55	13	49	8	0.4	718	2.38	271	358	32	2.3	5	31.7	3	24.0	1500	6.9	10.0	58.0	4.0	2.350
105N	903340	00	109	32	14	25	7	0.2	400	2.55	221	406	28	0.5	1	6.3	3	16.0	2400	1.0	8.0	57.0	3.0	2.670
105N	903342	00	167	40	24	35	12	<	1120	2.98	117	405	33	0.7	15	5.3	3	18.0	1100	<	14.0	79.0	3.0	4.060
105N	903343	00	135	40	20	35	11	0.4	935	3.40	135	476	31	0.6	11	4.6	3	18.0	1900	<	13.0	81.0	5.0	3.770
105N	903344	00	92	38	20	26	9	0.2	624	2.95	129	350	21	<	2	9.1	2	42.0	1200	2.0	11.0	56.0	2.0	3.160
105N	903345	10	83	30	21	25	10	<	724	3.04	69	325	19	<	3	5.2	2	11.0	1100	1.6	11.0	56.0	3.0	3.2
105N	903346	20	84	31	22	25	10	<	825	3.14	66	324	19	<	3	6.2	2	9.2	980	1.5	12.0	58.0	3.0	3.320
105N	903347	00	111	32	20	26	8	0.3	654	2.55	141	379	20	0.4	<	12.9	2	8.6	1500	4.1	11.0	68.0	4.0	2.770
105N	903348	00	99	37	15	31	8	0.7	1840	3.26	241	393	23	1.1	1	15.8	2	9.0	2100	3.8	11.0	74.0	4.0	3.080
105N	903349	00	138	26	12	23	5	0.4	270	2.12	171	474	28	0.7	5	8.3	2	8.7	2700	2.7	8.0	70.0	3.0	2.180
105N	903350	00	202	39	19	56	9	0.9	773	3.71	260	331	26	2.3	5	28.3	2	11.0	2100	6.5	11.0	87.0	5.0	3.320
105N	903351	00	245	78	46	56	13	0.7	616	3.67	391	612	22	2.0	14	4.4	12	720.0	5200	<	19.0	110.0	7.0	5.090
105N	903352	00	140	30	19	30	9	<	784	2.68	82	516	30	0.4	11	4.5	3	12.0	1100	1.4	12.0	64.0	3.0	3.2
105N	903353	00	118	43	25	33	9	0.3	848	2.82	168	482	29	0.6	4	10.5	3	25.0	2000	2.0	13.0	78.0	6.0	2.980
105N	903354	00	82	25	16	21	6	<	439	2.46	141	370	18	<	5	7.0	2	16.0	1000	1.7	8.0	55.0	3.0	2.440
105N	903355	00	174	36	16	34	9	0.4	413	2.48	142	459	39	1.1	1	7.0	3	13.0	2100	2.5	11.0	60.0	3.0	2.680
105N	903356	00	129	25	12	26	5	<	1120	0.96	73	339	31	1.9	38	4.4	7	8.7	1100	1.1	7.0	34.0	2.0	1.420
105N	903357	00	164	41	21	38	14	0.2	746	3.54	110	424	32	0.9	8	7.0	2	13.0	1500	1.1	16.0	80.0	4.0	4.070
105N	903358	00	116	43	14	29	8	0.2	941	2.34	89	339	28	0.7	9	19.2	2	9.7	1900	3.7	10.0	54.0	3.0	2.670
105N	903360	00	365	38	20	70	29	1.2	1280	3.09	202	436	39	4.4	6	19.0	3	14.0	3000	5.5	31.0	78.0	5.0	3.320
105N	903362	10	147	32	23	33	13	0.2	1320	4.14	73	426	28	0.3	7	5.7	2	14.0	990	1.7	17.0	82.0	4.0	4.590
105N	903363	20	148	34	24	33	14	0.2	1460	3.74	76	464	29	0.3	6	5.5	2	12.0	800	1.7	15.0	71.0	4.0	3.920
105N	903364	00	125	27	18	32	10	0.2	637	2.97	131	504	25	0.4	5	11.0	2	11.0	1200	1.8	12.0	81.0	5.0	3.340
105N	903365	00	128	41	24	30	12	0.2	814	3.09	85	447	29	0.3	13	5.7	2	11.0	1100	2.0	16.0	75.0	4.0	3.950

(10)

National Geochemical Reconnaissance Stream Sediment and Water Geochemical Data, Yukon, 1991. GSC OF 2363, NGR 155-1991. NTS 105N
Analytical Data

Variable:		Hf	Na	Rb	Sb	Sc	Ta	Th	U	W	La	Ce	Nd	Sm	Eu	Tb	Yb	Lu	Au	Wt	Au1	Au1/Wt	pH	U-W	F-W
Units:		ppm	pct	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	gm	ppb	gm	-	ppb	ppb
Detection Limit:		1	0.01	5	0.1	0.1	0.5	0.2	0.5	1	0.5	3	5	0.1	0.2	0.5	0.2	0.05	2	0.01	2	0.01	-	0.05	20
Analytical Method:		INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	-	INA	-	GCM	LIF	ISE
105N	903322 10	7.0	0.72	78.0	1.8	13.0	1.0	11.0	4.4	<	53.0	100.0	41.0	7.6	2.0	1.2	4.5	0.67	7.0	18.92	6.	14.830	8.1	0.40	120.
105N	903323 20	7.0	0.70	95.0	1.7	13.0	1.0	12.0	4.4	<	54.0	100.0	47.0	7.9	2.1	1.4	4.6	0.65	10.0	17.07	7.	15.070	8.1	0.20	130.
105N	903324 00	7.0	0.54	47.0	0.9	8.9	0.9	9.4	2.6	<	35.0	70.0	27.0	5.4	1.5	1.0	3.6	0.56	5.0	20.16	-	-	8.1	0.12	70.
105N	903325 00	7.0	0.55	90.0	1.1	12.0	0.7	15.0	3.4	<	47.0	97.0	38.0	6.4	1.7	1.3	3.8	0.57	4.0	18.21	-	-	8.0	0.12	60.
105N	903326 00	11.0	0.61	74.0	1.2	11.0	1.3	13.0	4.4	<	57.0	110.0	47.0	8.4	2.2	1.6	5.2	0.73	<2.0	18.96	-	-	8.1	0.10	110.
105N	903327 00	8.0	0.74	87.0	0.9	11.0	0.9	11.0	2.6	<	44.0	88.0	33.0	6.6	1.7	1.2	3.9	0.58	4.0	18.14	-	-	7.2	<	50.
105N	903328 00	10.0	0.66	110.0	1.1	12.0	1.0	13.0	4.3	<	50.0	100.0	40.0	7.1	2.0	1.3	4.5	0.70	3.0	15.60	-	-	8.0	0.15	40.
105N	903329 00	7.0	0.50	60.0	1.4	8.9	0.6	10.0	3.2	2.0	37.0	76.0	27.0	5.5	1.5	1.0	3.2	0.49	<2.0	21.08	-	-	8.1	0.30	60.
105N	903330 00	8.0	0.51	82.0	1.2	10.0	1.2	12.0	3.8	<	44.0	91.0	33.0	5.9	1.6	0.9	3.3	0.52	2.0	21.07	-	-	8.0	<	40.
105N	903331 00	8.0	0.65	77.0	1.0	10.0	<	11.0	4.0	<	38.0	80.0	30.0	5.5	1.6	1.0	3.7	0.57	5.0	18.22	-	-	7.8	<	30.
105N	903332 00	7.0	0.53	63.0	2.2	9.2	0.7	9.5	3.4	<	32.0	66.0	24.0	5.0	1.4	1.0	3.3	0.53	4.0	21.25	-	-	7.7	<	90.
105N	903334 00	6.0	0.39	73.0	1.8	9.5	1.0	9.6	4.0	<	36.0	72.0	28.0	4.7	1.4	0.9	3.0	0.45	3.0	19.63	-	-	ns	ns	ns
105N	903335 00	6.0	0.44	83.0	2.1	11.0	1.2	10.0	3.9	<	39.0	75.0	29.0	5.8	1.3	0.7	2.7	0.52	6.0	19.57	-	-	8.1	0.19	70.
105N	903336 00	6.0	0.39	72.0	2.7	9.2	0.6	8.1	2.9	<	34.0	64.0	22.0	5.3	1.1	<	2.3	0.43	6.0	20.47	-	-	7.9	4.00	60.
105N	903337 00	7.0	0.46	85.0	2.0	10.0	1.0	10.0	4.1	<	39.0	74.0	29.0	6.1	1.3	0.7	2.8	0.45	3.0	18.75	-	-	8.1	0.81	80.
105N	903338 00	7.0	0.57	84.0	2.0	10.0	1.4	9.8	3.9	1.0	37.0	69.0	24.0	5.7	1.1	0.7	2.6	0.46	4.0	19.54	-	-	8.2	1.25	80.
105N	903339 00	5.0	0.39	68.0	2.0	9.0	0.6	7.5	7.5	<	29.0	56.0	22.0	4.6	1.1	0.7	2.4	0.40	4.0	16.05	-	-	7.1	<	60.
105N	903340 00	6.0	0.41	59.0	2.4	8.5	0.7	7.6	3.1	<	30.0	59.0	20.0	4.9	1.1	0.6	2.4	0.44	7.0	21.15	-	-	7.2	<	40.
105N	903342 00	6.0	0.56	87.0	1.6	12.0	1.1	11.0	3.2	<	42.0	81.0	30.0	6.3	1.3	0.9	3.0	0.54	<2.0	18.07	-	-	8.1	3.40	70.
105N	903343 00	5.0	0.54	120.0	2.2	13.0	1.3	12.0	3.7	1.0	46.0	87.0	31.0	6.5	1.3	<	2.9	0.51	4.0	21.03	-	-	8.0	2.10	70.
105N	903344 00	7.0	0.54	74.0	1.4	9.0	<	12.0	3.5	<	55.0	110.0	31.0	7.8	1.6	<	2.5	0.49	7.0	20.78	-	-	8.2	0.85	60.
105N	903345 10	14.0	0.67	85.0	0.9	9.5	1.4	20.0	4.7	1.0	95.0	180.0	66.0	14.0	2.4	1.5	4.1	0.70	20.0	20.49	<2.	14.780	8.1	1.70	60.
105N	903346 20	13.0	0.61	78.0	0.8	9.5	1.1	21.0	4.5	<	89.0	170.0	72.0	12.0	2.6	1.3	4.0	0.67	6.0	20.11	15.	12.000	8.1	2.00	60.
105N	903347 00	9.0	0.55	96.0	1.1	11.0	0.9	13.0	4.3	<	49.0	96.0	37.0	6.8	1.5	0.7	3.3	0.56	6.0	18.93	-	-	8.1	0.50	70.
105N	903348 00	7.0	0.50	69.0	1.0	11.0	1.0	9.3	4.2	<	32.0	63.0	27.0	4.8	1.3	0.7	3.1	0.54	6.0	17.49	-	-	8.1	0.15	80.
105N	903349 00	7.0	0.44	54.0	1.2	9.3	0.8	8.4	3.9	<	32.0	60.0	29.0	4.7	1.1	0.6	2.8	0.46	3.0	19.43	-	-	8.0	0.25	90.
105N	903350 00	6.0	0.32	65.0	0.9	12.0	1.2	9.3	5.9	<	31.0	63.0	24.0	4.9	1.3	0.7	3.1	0.38	4.0	14.08	-	-	7.5	<	110.
105N	903351 00	11.0	0.35	130.0	11.0	16.0	1.7	13.0	6.8	<	52.0	100.0	40.0	8.0	1.9	1.1	4.9	0.79	9.0	17.45	-	-	8.2	<	90.
105N	903352 00	6.0	0.43	60.0	1.0	10.0	0.8	9.2	2.8	1.0	36.0	67.0	26.0	4.9	1.2	0.7	2.5	0.44	<2.0	19.88	-	-	8.1	0.88	110.
105N	903353 00	7.0	0.47	89.0	2.1	11.0	<	12.0	4.0	<	40.0	77.0	31.0	5.6	1.3	0.8	2.7	0.37	<2.0	20.83	-	-	8.4	9.00	80.
105N	903354 00	10.0	0.66	75.0	0.9	9.3	<	15.0	3.2	<	89.0	160.0	63.0	11.0	2.1	1.1	3.0	0.46	2.0	29.39	-	-	8.2	1.38	70.
105N	903355 00	9.0	0.52	79.0	1.8	9.5	0.7	12.0	3.0	2.0	47.0	88.0	38.0	6.4	1.4	0.9	3.2	0.55	3.0	29.80	-	-	8.3	0.40	50.
105N	903356 00	3.0	0.26	39.0	1.4	5.0	0.7	5.3	4.5	<	19.0	36.0	13.0	2.5	0.6	0.5	1.5	<	4.0	27.02	-	-	8.0	3.75	120.
105N	903357 00	7.0	0.55	91.0	1.5	13.0	1.1	13.0	4.0	<	45.0	85.0	33.0	6.2	1.4	0.8	3.3	0.40	<2.0	23.37	-	-	8.0	0.45	220.
105N	903358 00	6.0	0.53	55.0	1.5	9.9	0.9	8.5	3.2	<	29.0	57.0	23.0	4.5	1.2	0.7	2.8	0.45	3.0	22.85	-	-	7.9	<	70.
105N	903360 00	6.0	0.45	79.0	3.7	12.0	0.8	9.6	4.8	<	35.0	66.0	27.0	5.5	1.4	0.8	3.4	0.55	7.0	19.57	-	-	ns	ns	ns
105N	903362 10	9.0	0.59	110.0	1.2	14.0	1.1	17.0	4.2	<	55.0	100.0	39.0	7.3	1.7	1.2	4.2	0.64	3.0	23.25	-	-	8.0	<	60.
105N	903363 20	8.0	0.50	87.0	1.0	12.0	0.6	14.0	3.3	<	46.0	87.0	32.0	6.1	1.5	0.8	3.2	0.55	3.0	24.99	-	-	8.1	<	50.
105N	903364 00	8.0	0.57	85.0	1.1	12.0	0.7	11.0	4.6	<	40.0	78.0	33.0	6.1	1.5	1.0	3.7	0.59	<2.0	23.01	-	-	7.9	0.15	50.
105N	903365 00	7.0	0.52	94.0	1.0	13.0	1.1	14.0	3.3	3.0	44.0	83.0	30.0	5.9	1.4	0.7	3.3	0.53	6.0	23.36	-	-	8.2	0.46	60.

11

680

SILT 3354

AREA OF INTEREST

2

F

700

1000

12

F

1100

CLAIM LINE

1

3349

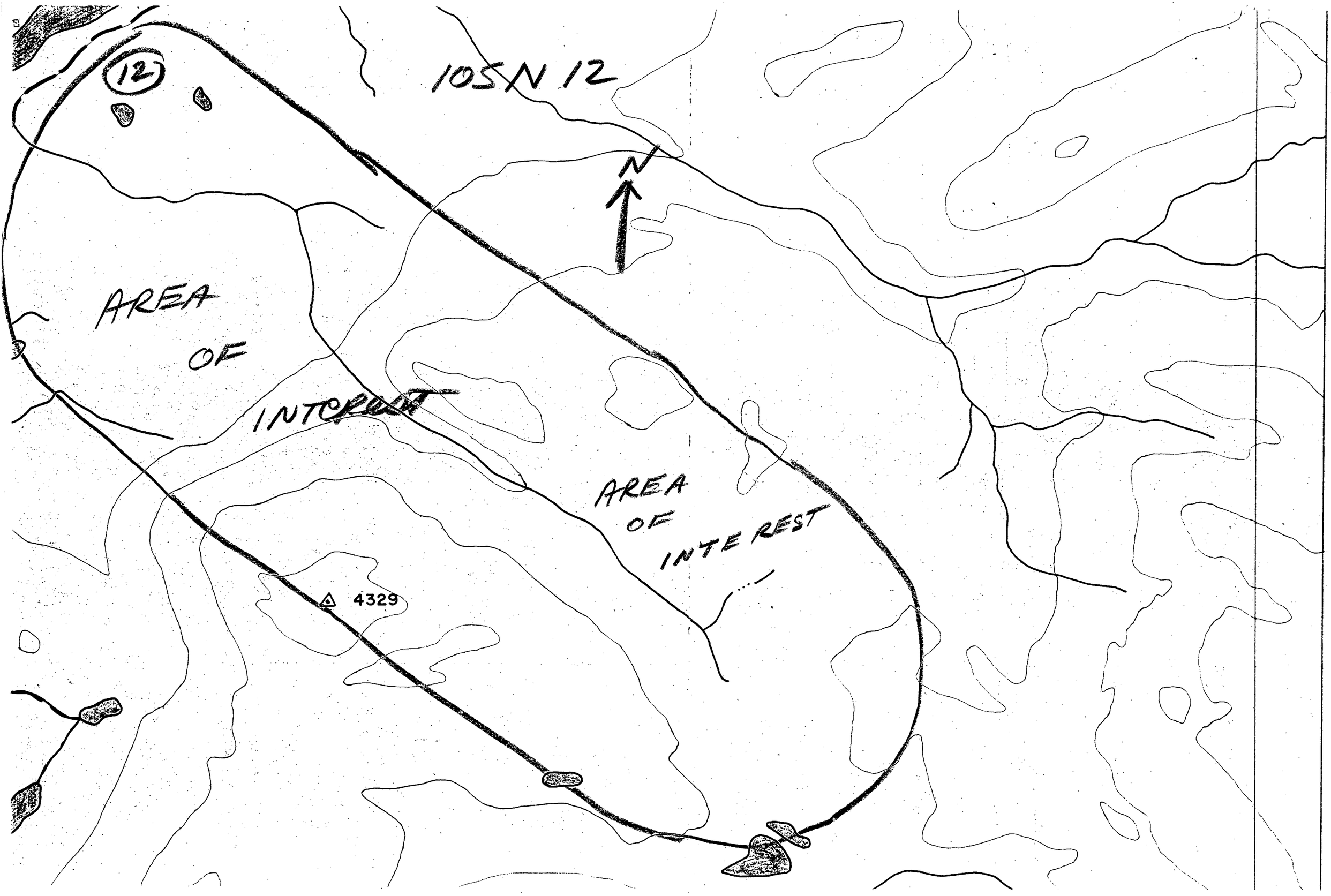
1240

F

1100

1060

F


12
105N 12
N
AREA
OF
INTEREST
AREA
OF
INTEREST
4329

(13)

134°00'

55'

50'

4359G "Penape Lake

40'

35'

133°30'

63°45'

GEOPHYSICAL PAPER 4358 G

N

58,370

3000

58,320

58,400

58,300

2500

58,380

3500

3000

2500

58,360

CONTROL

RIVER

LINE 6000

58,400

58,390

40

MAGNETIC

58,200

58,300

58,500

58,800

58,600

58,310

3351

58,340

58,400

3500

3000

AREA OF INTEREST

3349

4000

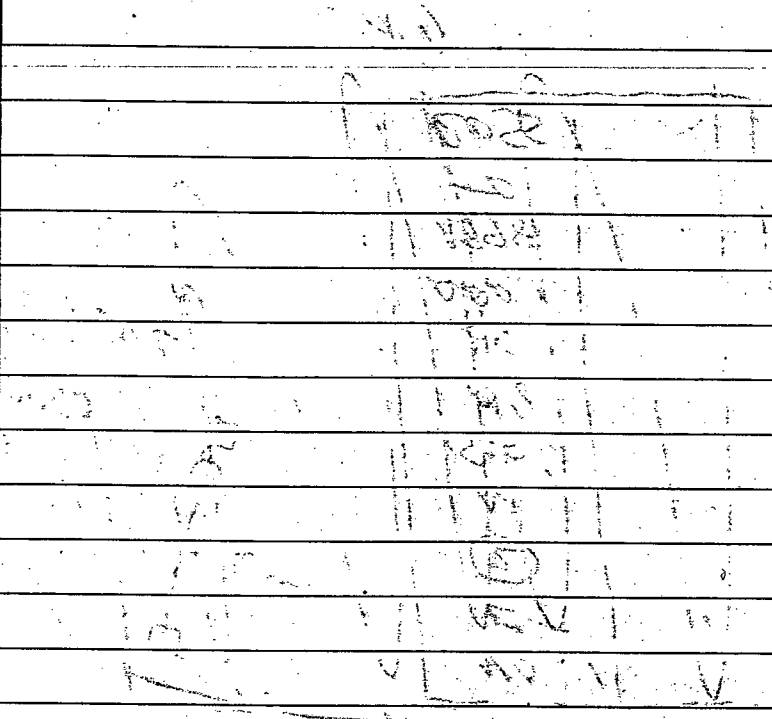
4308G "Lansing"

40'

98-016

23
APRIL 98

LEFT WH for Stewart
Crossing AREA
mileage 198,468

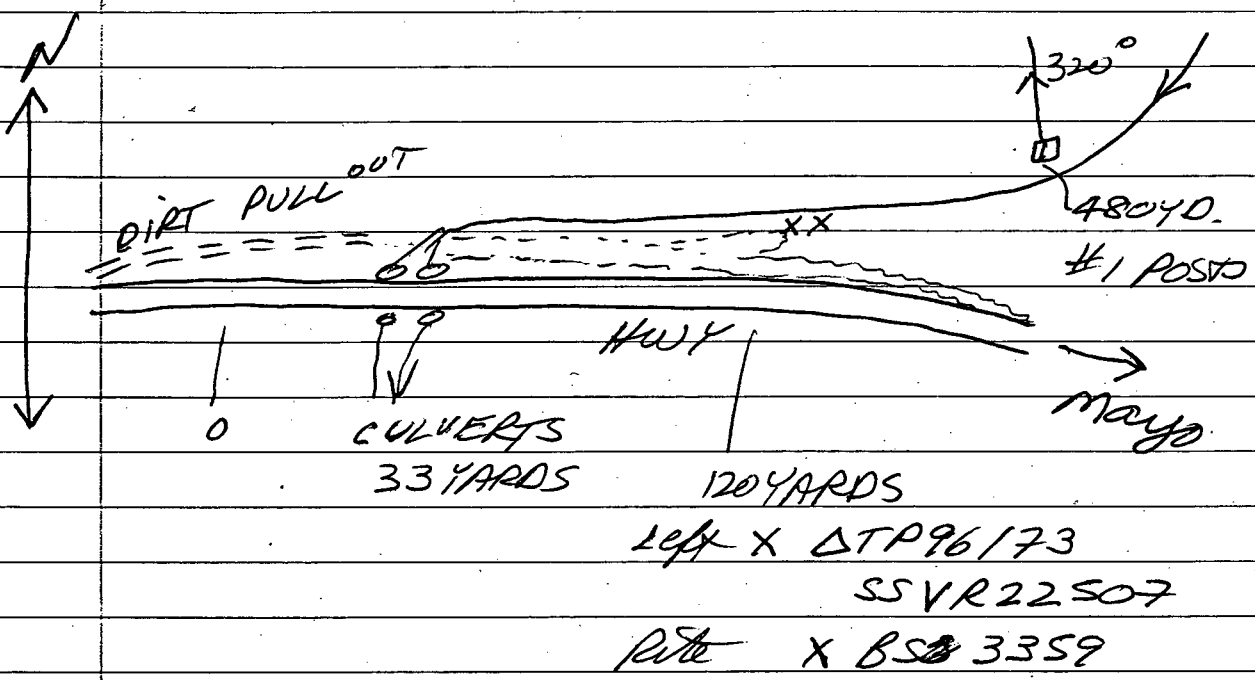


24
APRIL 98

JUST DROVE AROUND + CHECKED
PLACES OUT + DISTANCES

25

APRIL 98



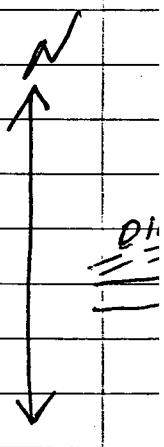
left X ΔTP96173

SSVR22507

Rite X BS 3359

no float seen or outcrop.

25 APRIL 98



NO.2	NO.2
ET	ET
①	②
25	25
APRIL	APRIL
1998	1998
JP	JP
ROSS	ROSS

Wd 9

320°
480 YD

PASS	PASS
JP	JP
1998	1998
APRIL	APRIL
25	25
0,0	0,0
8,005	8,005
N	N
①	②
ET	ET
NO.1	NO.1

3:00 PM

26
APRIL 98

SNOW in early morning. Some on ground to 12 or 2 o'clock Did not go out.

27
APRIL 98

Went into Mayo. Mining recorder, Madrona phone call, grub, etc. Got weather forecast.

28.
APRIL 98

Went out and did claims.

NORTH END

NO.2 ET (5)	NO.2 ET (6)
28	28
APRIL	APRIL
1998	1998
JP	JP
ROSS	ROSS
7 30 PM	7 30 PM

485 yards
320°

NO.2 ET (3)	NO.2 ET (4)
28	28
APRIL	APRIL
1998	1998
JP	JP
ROSS	ROSS
4 30 PM	4 30 PM

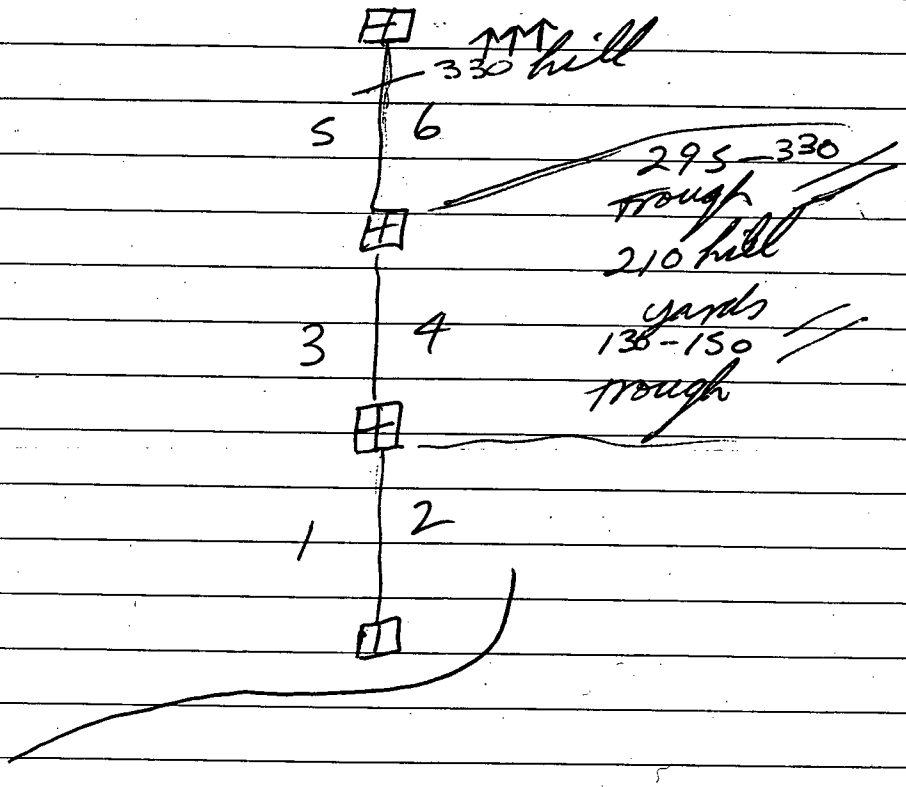
485 yds 320°

SOUTH END

NO.1 ET (3) N	NO.1 ET (4) N
28	28
APRIL	APRIL
1998	1998
JP	JP
ROSS	ROSS

12 00 PM

28 April 98

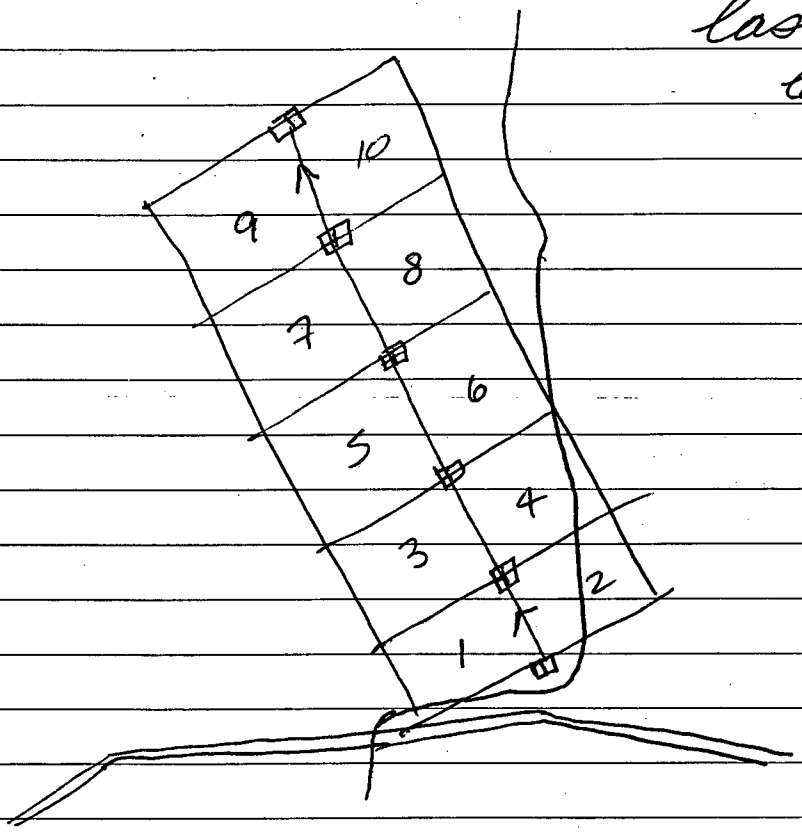


29
APRIL 98

Error fixed. 28 april - date was put as 27 april - now changed. ~~to~~ 28 APRIL

Did ET (7) - (10).

ET claim 7-8
last line 9-10
bit patches of snow



SOUTH END

NO.1	NO.1
ET	ET
(8)	(7)
N	N
1500'R	1500'L
0'L	0'R
29	29
APRIL	APRIL
1998	1998
JP	JP
ROSS	ROSS
2:15 PM	2:15 PM

320° 485yd

NO.2	NO.2
ET	ET
(8)	(7)
29	29
APRIL	APRIL
1998	1998
JP	JP
ROSS	ROSS
5:25 PM	5:25 PM

NO.1	NO.1
ET	ET
(10)	(9)
N	N
1500'R	1500'L
0'L	0'R
29	29
APRIL	APRIL
1998	1998
JP	JP
ROSS	ROSS
5:40 PM	5:40 PM

29
APRIL 98

√ photos

320° 485 yd

NO.2	NO.2
ET	ET
(10)	(9)
29	29
APRIL	APRIL
1998	1998
JP	JP
ROSS	ROSS
7:25 PM	7:25 PM

30
APRIL 98

Went to Mayo. Phoned up MADRONA, Rock Res, IVAN; saw Recorder.

/

MAY 98

NO.2	NO.2
ET	ET
(13)	(14)
/	/
MAY	MAY
1998	1998
JP	JP
ROSS	ROSS
7 50 PM	7 50 PM

320° 485 90.

NO.2	NO.2
ET	ET
(11)	(12)
/	/
MAY	MAY
1998	1998
JP	JP
ROSS	ROSS
4 38 PM	4 38 PM

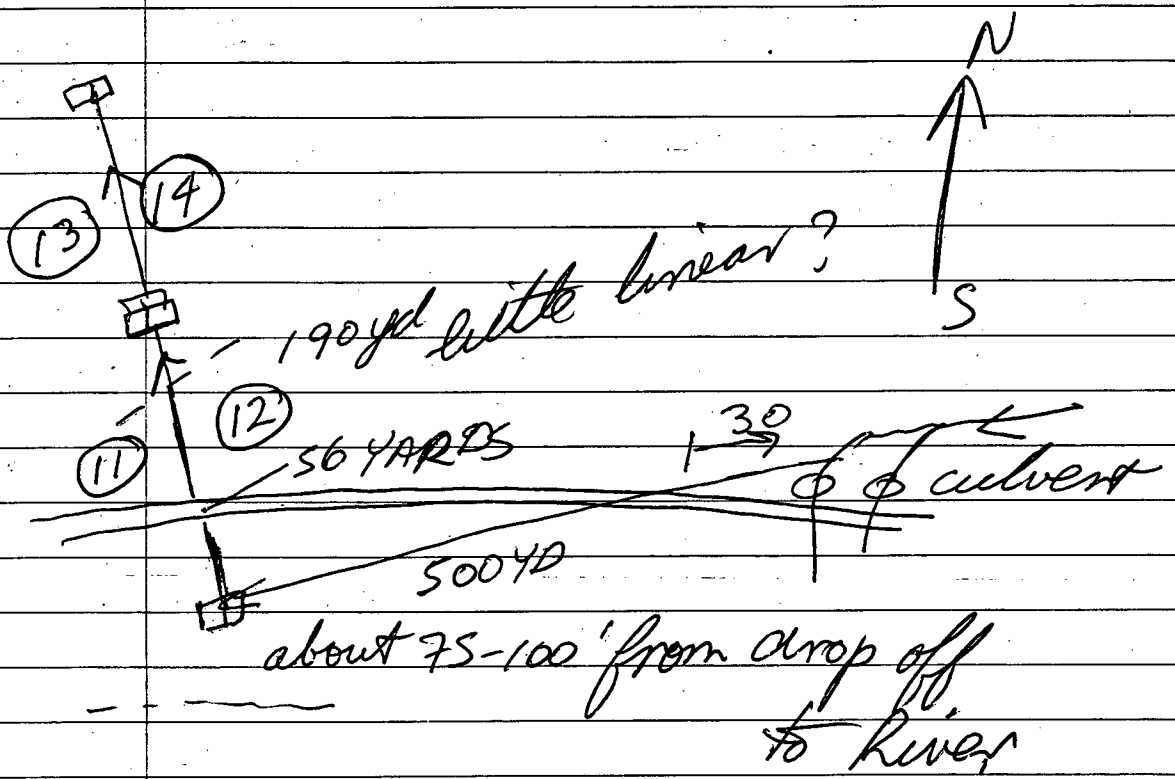
NO.1	NO.1
ET	ET
(13)	(14)
/	/
MAY	MAY
1998	1998
JP	JP
ROSS	ROSS
4 38 PM	4 38 PM

NO.1	NO.1
ET	ET
(11)	(12)
/	/
MAY	MAY
1998	1998
JP	JP
ROSS	ROSS
12 10 PM	12 10 PM

485 YD
320°

SOUTH END

1 May 1998



320°

2
MAY 98

GOT up early.

Rain (drizzle) start 2 30 PM

Cleared up at site.

Found LEATHERMAN TOOL & McGINTY CR by CULVERT.

NO.2	NO.2
ET	ET
(15)	(16)
2	2
MAY	MAY
1998	1998
JP	JP
ROSS	ROSS
3 30 PM	3 30 PM

330° ↑	485yd
12 10 PM	12 10 PM
ROSS	ROSS
JP	JP
8661	8661
MAY	MAY
2	2
2,0	2,0
2,005'	2,005'
N	N
(15)	(16)
ET	ET
NO.1	NO.1

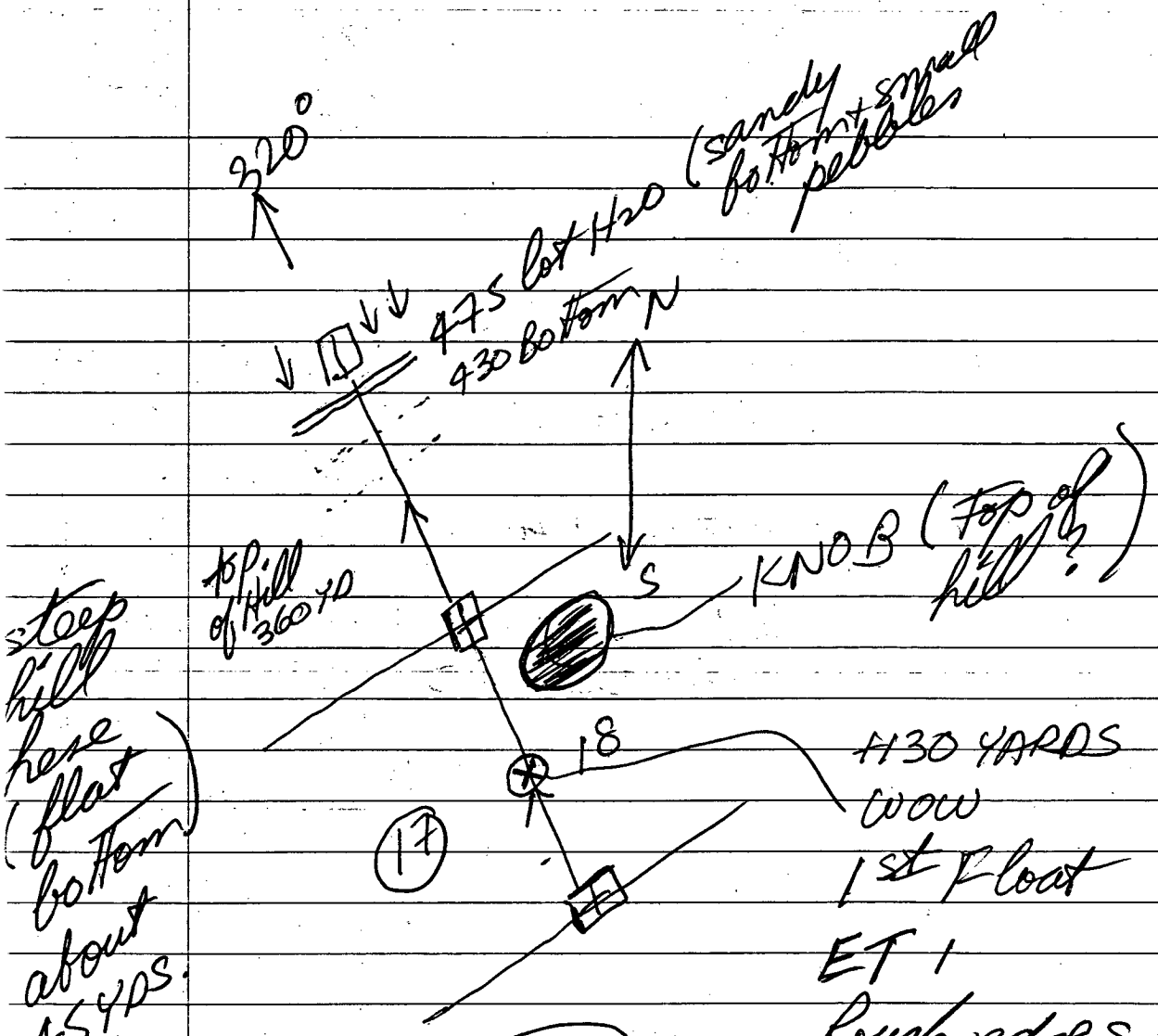
SOUTH END

3

MAY 1998

NO.2
ET
19
3
MAY
1998
JP
ROSS
6:40 PM
NO.2
ET
20
3
MAY
1998
JP
ROSS
6:40 PM
490 YD
320°
NO.2
ET
17
3
MAY
1998
JP
ROSS
4:20 PM
NO.2
ET
18
3
MAY
1998
JP
ROSS
4:20 PM
NO.2
ET
16
3
MAY
1998
JP
ROSS
4:20 PM
NO.2
ET
20
3
MAY
1998
JP
ROSS
4:20 PM
320°
485
NO.2
ET
15
3
MAY
1998
JP
ROSS
4:20 PM
NO.2
ET
21
3
MAY
1998
JP
ROSS
4:20 PM
NO.2
ET
NO.2
ET

3 May 1998



NO
ET
(19)
3
MA
199
JP
RO
6 P

4

MAY 98

Back ÷ white horse.

199,586

- 8,468

1,068 KM

25 APRIL 98

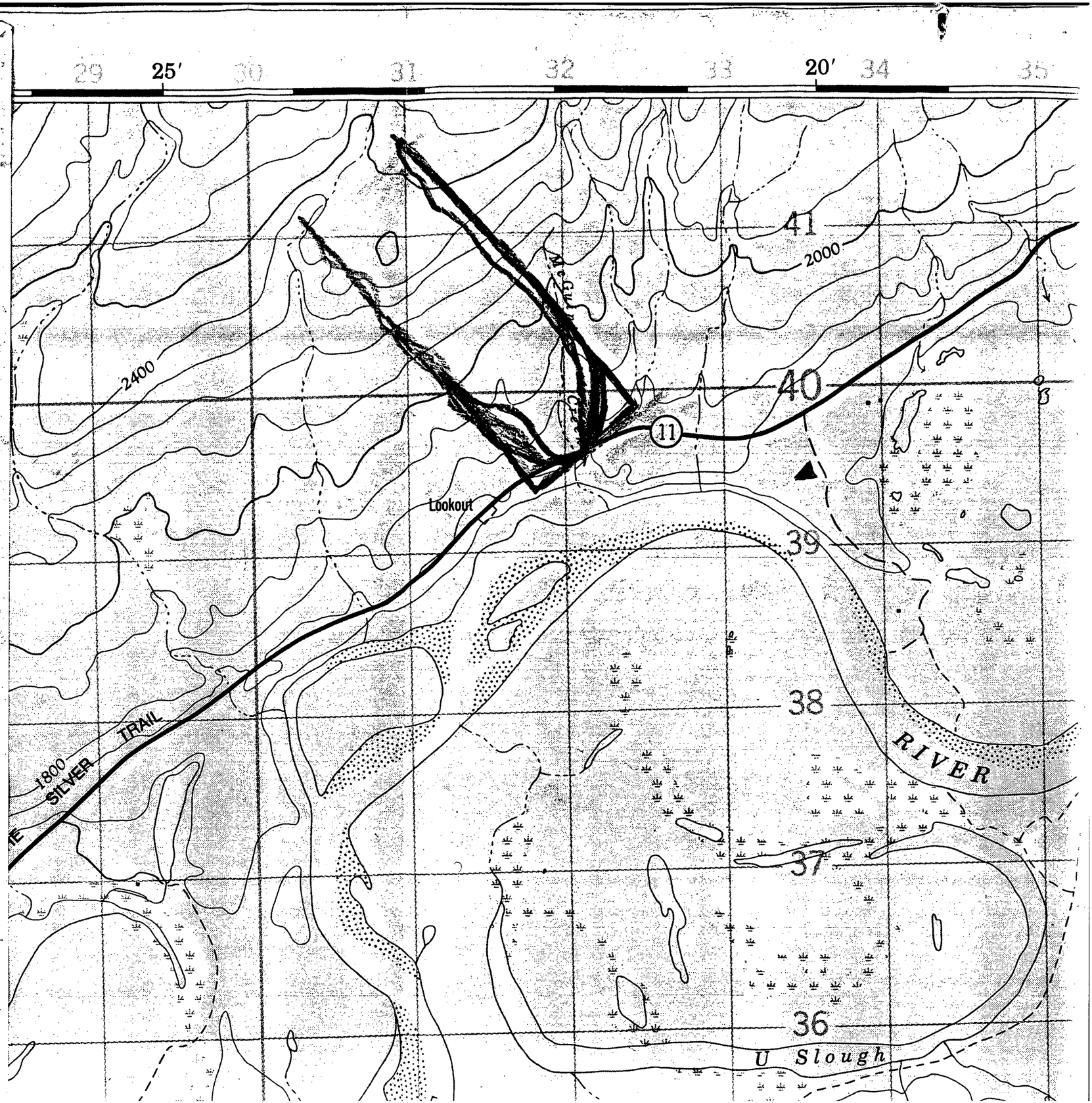
28 APRIL 98

29 APRIL 98

1 MAY 98

2 MAY 98

3 MAY 98

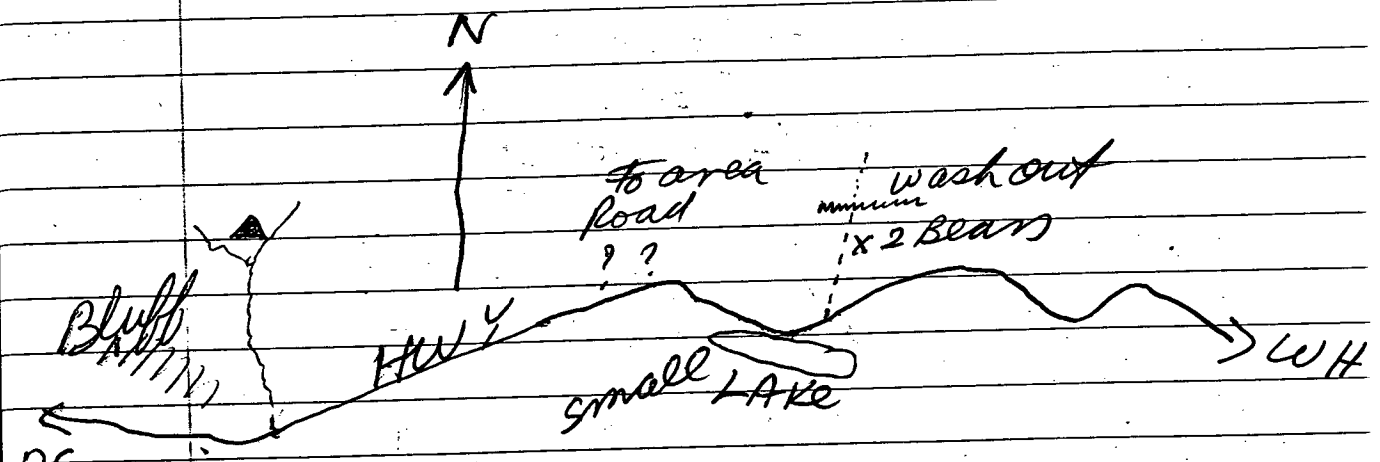


3 JULY 98

Drove out to new area —

McQuestion R. area

202, 193



2 - 1 year old - Black bears on old road - took time to leave after horn + motor noise - came back again

So drove about 4 km to sleep

Road to area is not well marked.

3 JULY 98

These 2 bears, I think, will be a problem; eventually.

Quite hot, so hot one tires quickly - close to 100°F ???

July 1 in Dawson City was a lot of fun...!!!

Trees out here at ▲ are very large.

JULY 98

Tried to find road to bench. Took long time - overgrown. Cut some trees. At road, overgrown + no marks. 9n it clears up at about 200' or so. No fire marks. Lates → trees - I cut some + then came to corner + just too many.

Walked up a good distance - come back lates.

JUST too hot to do much.

4
July 98

AM 5:00 am had a bear problem. Put hole à my H20 container.

Almost no sleep - just too hot. Windows closed because of bugs.

drove around back
Roads in 1st gear
Bluffs no outcrop
5 JULY 98

ates in it

now FOX LAKE fire + no access to CW H
Went to moose creek, HARD to find, took
long time

DITCH
overgrown by road
ditch no sign
upper = lesser
overgrown

????
trench

2 Av

2 Bears

Av 15/0
(st. crossing
996-2506
DATA - gravel pit
on

25 Av

35 Av

013

culvert
ry
end

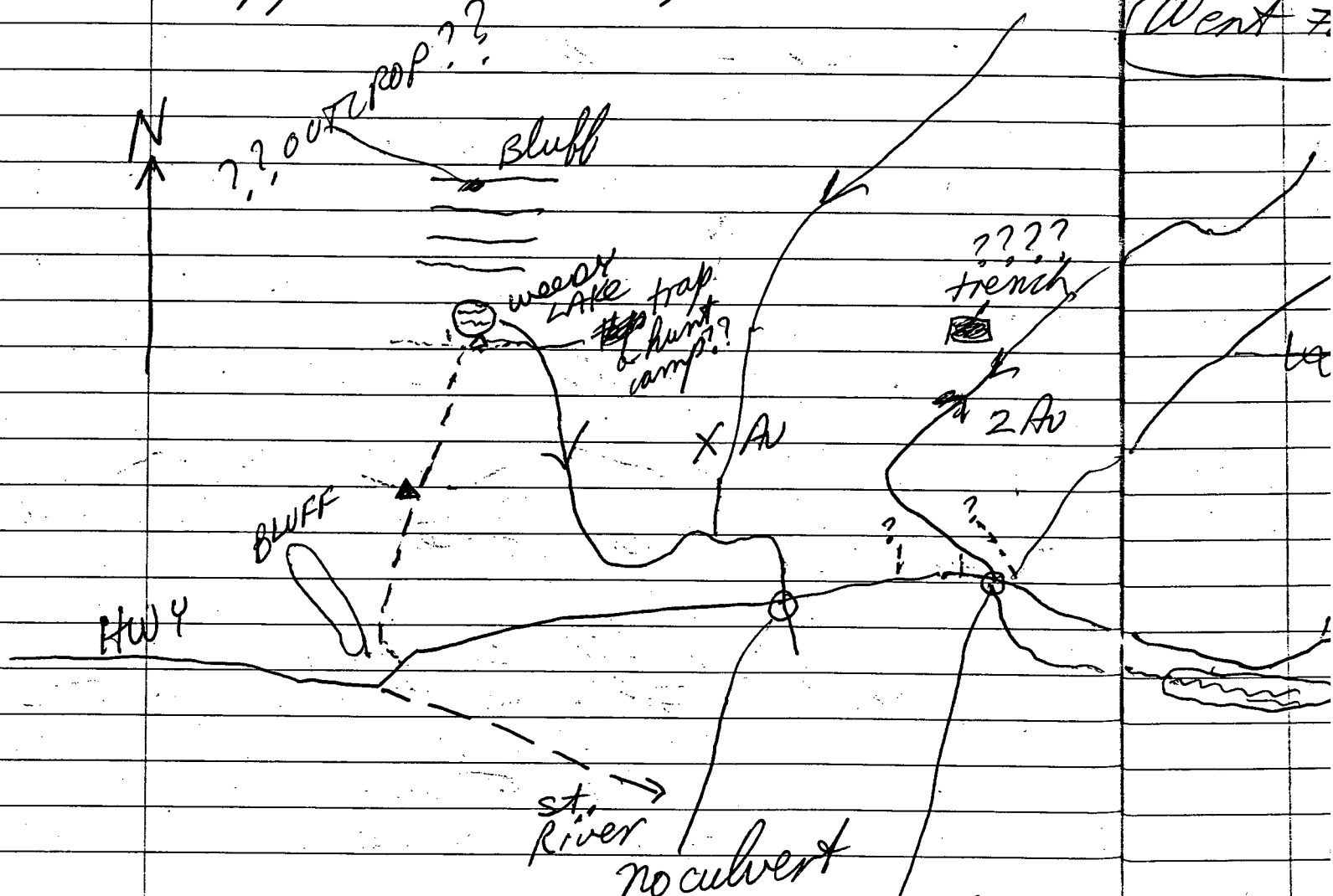
st river

culvert
dry
+ grassy.

small road
to here

culvert
squashed bit
lot of water
sm round boulders

geochem × Au - where is site ?
2 Au - how far up ?
1510 - how far up
low 35 - upper 25 - only St 1 waters in it



Hot weather - so get it
& unpleasant
+ tiring.

5

JULY 98

Drove back to WH. Saw Al Kapty at Braborne.

Drove thru fire at Fox Lake.— a strange experience.

Gas at Braeburn = almost empty

704 =202,704

-193

511 dl — Braeburn

? ___ Braeburn — WH

~~60~~

about 680 km

23

JULY 98

Drove to Watson Lake.

203,430 KM

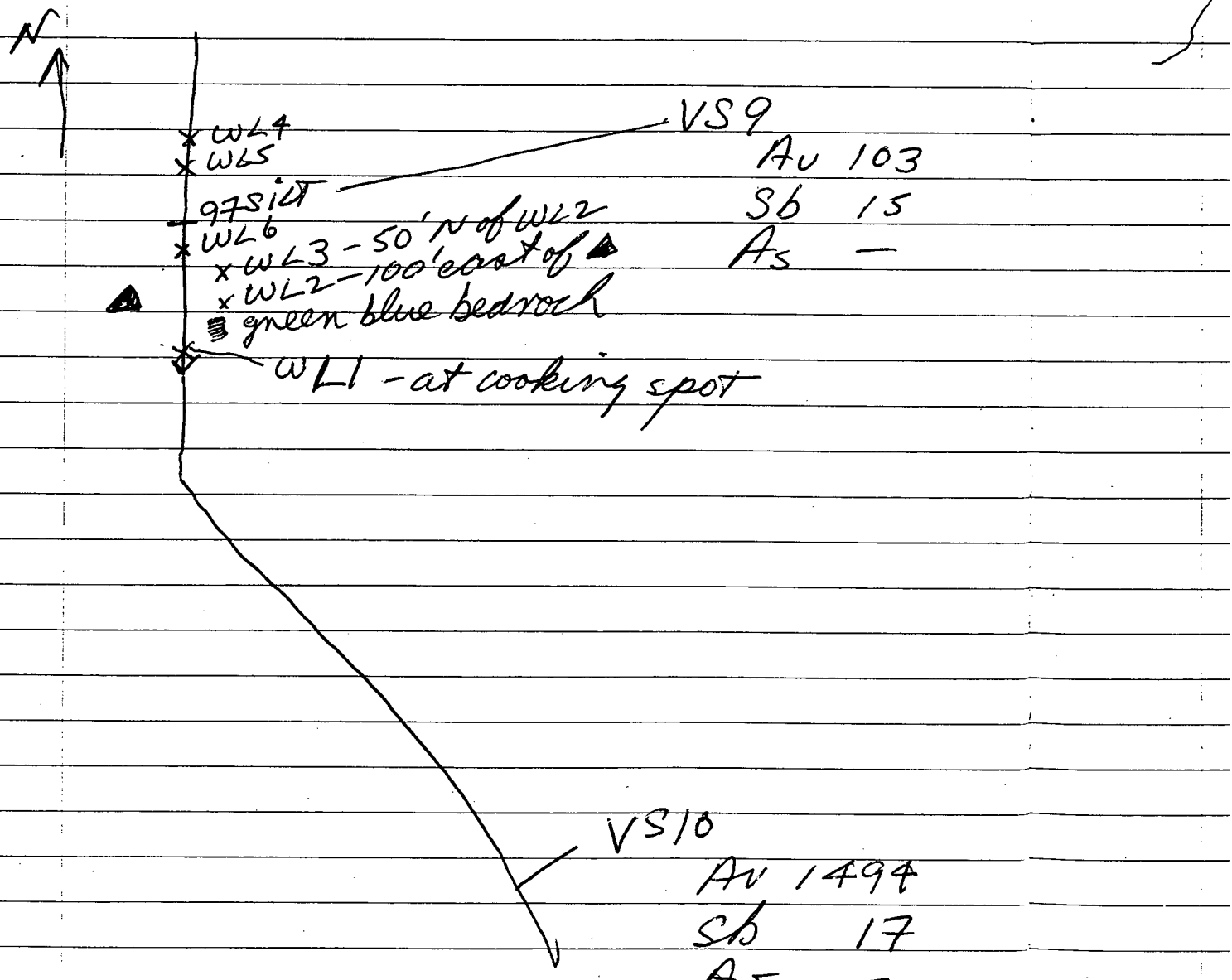
24

JULY 98

Flew to site. Good campsite right beside a 97 silt sample. Raining now at nite. At least no flies.

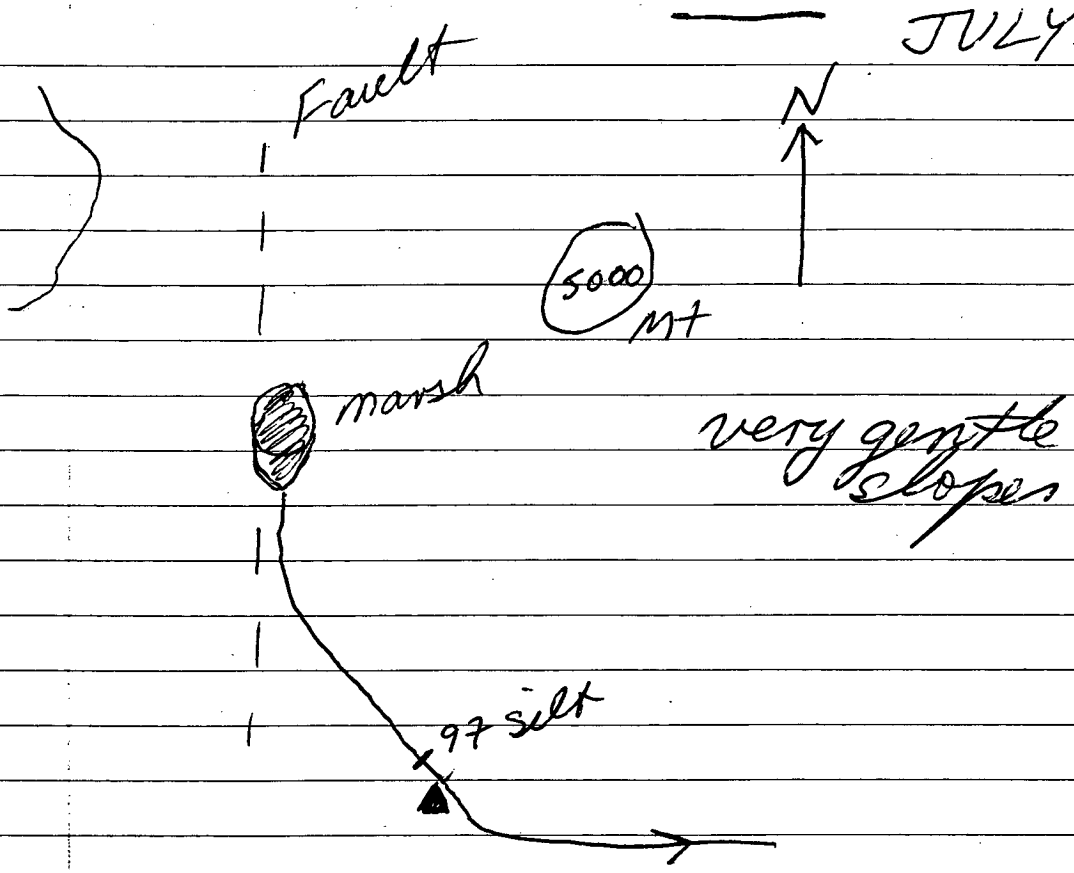
The claims to south of me seem to be very small posts from air.

25 JULY 98


N
WL4
WL5
975 ict
WL6
WL3 - 50' N of WL2
WL2 - 100' east of ▲
green blue bedrock
WL1 - at cooking spot
VS9
Au 103
Sb 15
As —
VS10
Au 1494
Sb 17
As —

25

JULY 98



103
15
—

494
17
—

26 JULY 98

SOILS = yellow brown
where noted

87'
at 250' on left = mafic
volcanic
outcrop

at 580' " " = "
"
"

holes = about 12" deep
= 75' apart on claim line
= not quite on Ridge
but close to it
= yellow + blue ribbon
eg A + 75SE
+ both + lil tag
put in hole or
hammered in

N

26
JULY 98

11 | 12 #2 (A)

VIVI VIVI

×A+75 SE

×A+150 SE

×A+225 SE

×A+300 SE

×A+375 SE

×A+450 SE

×A+525 SE

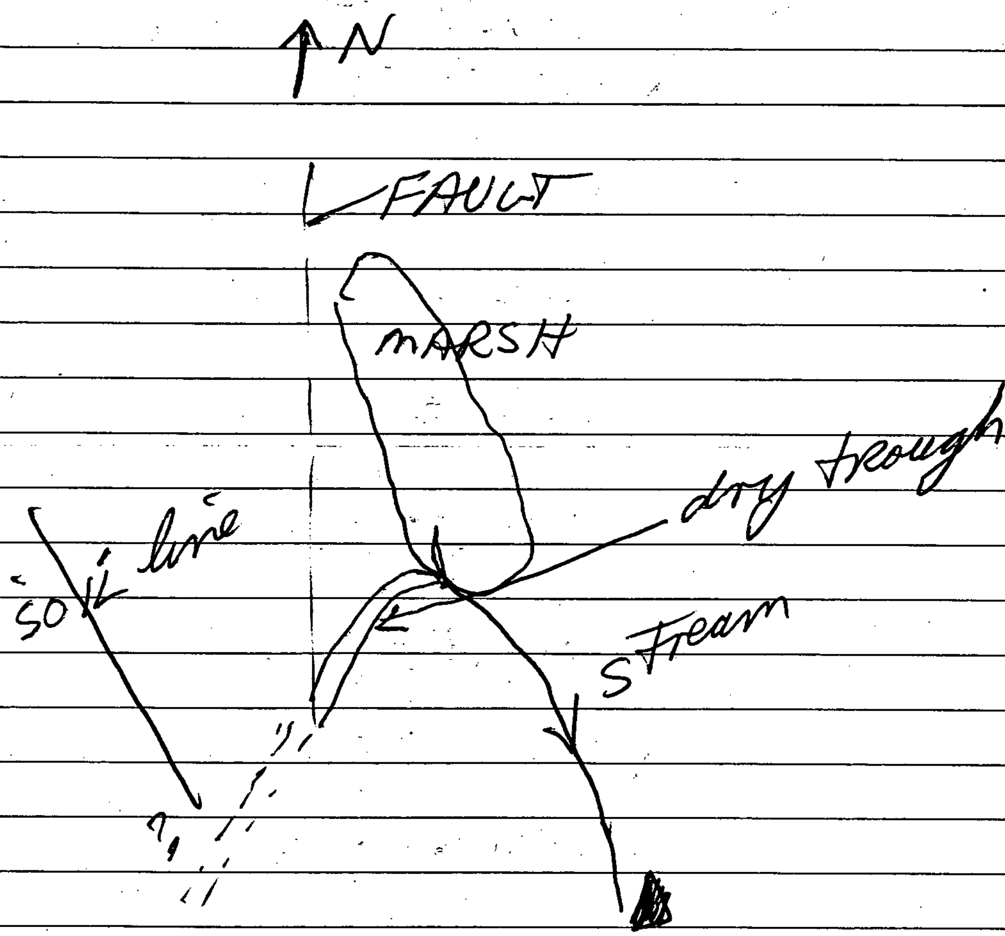
×A+600 SE

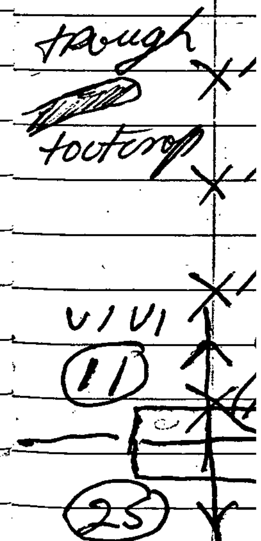
×A+675 SE blacksoil

×A+750 SE

×A+825 SE very stoney

27 JULY 98





27
JULY 98

XA+825 SE (26 JULY)

mafic / felsic ? Bdy

XA+900 SE

XA+975 SE

XA+1050 SE

XA+1125 SE

Mn stain felsic

WL-7 + sulphide

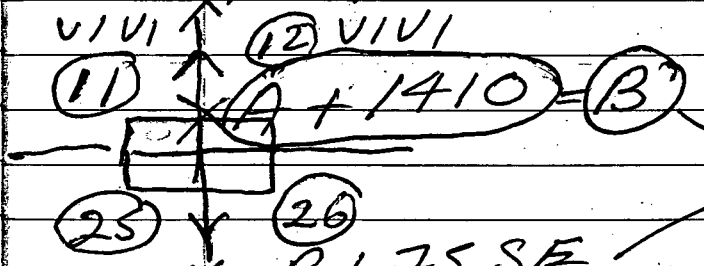
rough

XA+1200 SE — WL-8 Sim WL 7

rough footwall

XA+1275 SE

XA+1350 SE — WL-9 ??



on hill edge going down

XB+75 SE

XB+150 SE

XB+225 SE

XB+300 SE

(25) VIVI ↓ (26) VIVI

28 JULY 98

B+375 SE

B+450 SE — Some MV Rock look blue = ? alteration

B+525 SE

B+600 SE — soil dry + sandy volcanic rock has large flakes? edge of bottom

B+675 SE — damp clay

B+750 SE

B+825 SE

B+900 SE

B+975 SE

B+1050 SE

B+1125 SE

B+1200 SE

a saw yg caribou i morning

flat ??

— flat

28 JULY 98

B + 300 SE = WL 10
Sulfides

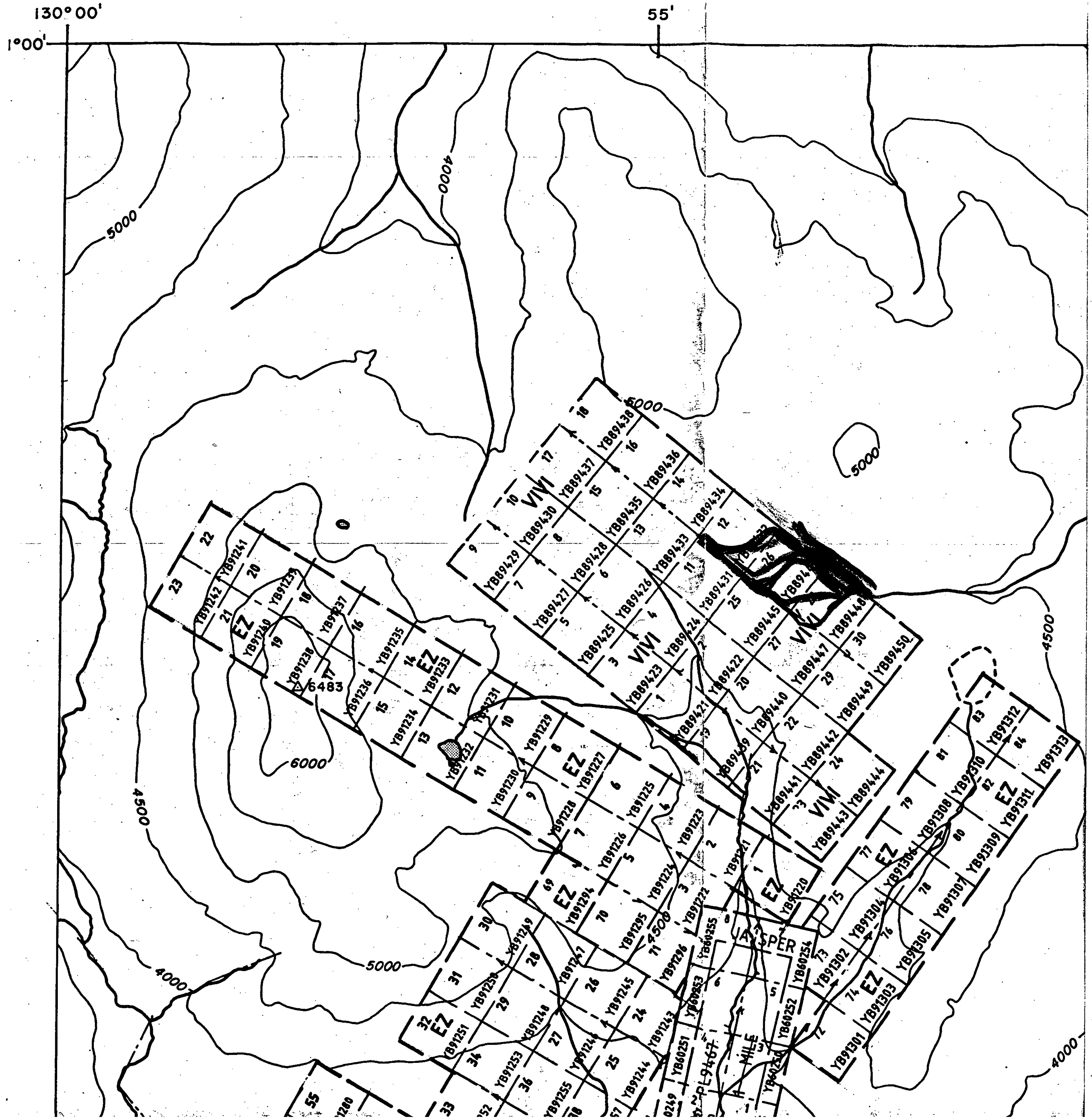
(25)
VIVI

B + 375 SE = WL 11

B + 600 SE = WL 12 large flat flakes??

B + 750 SE = WL 13
large heavy blue rock in hole interesting zones + sulphides

meadow
+ linear 18-20°
+ dry stream
+ quite flat



25 JULY 98

26 JULY 98

27 JULY 98

28 JULY 98

29 JULY 98

(c) close to or at Top of Ridge

(25) VIVI

(27) VIVI

Rain hard at 7:30 pm

+got quite damp

JULY 98

↗ N

× B+1275 SE

× B+1350 SE

(25) VIVI (26) VIVI

× (B+1425) = ©

at © + after start to see mafic volcanics

(27) VIVI (28) VIVI

× C+75 SE

× C+150 SE

× C+225 SE

× NOT DONE due to Rain C+300 SE done 30 JULY 98

× C+375 SE

× C+450 SE

× C+525 SE

× C+600 SE

× C+675 SE — on top of long gentle hill

30 JUL 98

Did C+ 300 SE

easy meadow to go to posts !!!

VIVI

(27)

(29)

VIVI

30
JULY 98

↗ N

C + 750 SE

C + 825 SE — saw caribou & Amagam

C + 900 SE

C + 975 SE

C + 1050 SE — after here - lots of wet - jello like clay + few rocks

C + 1125 SE

C + 1200 SE — to D + 150 SE

C + 1275 SE

C + 1350 SE

VIVI (27) (28) VIVI

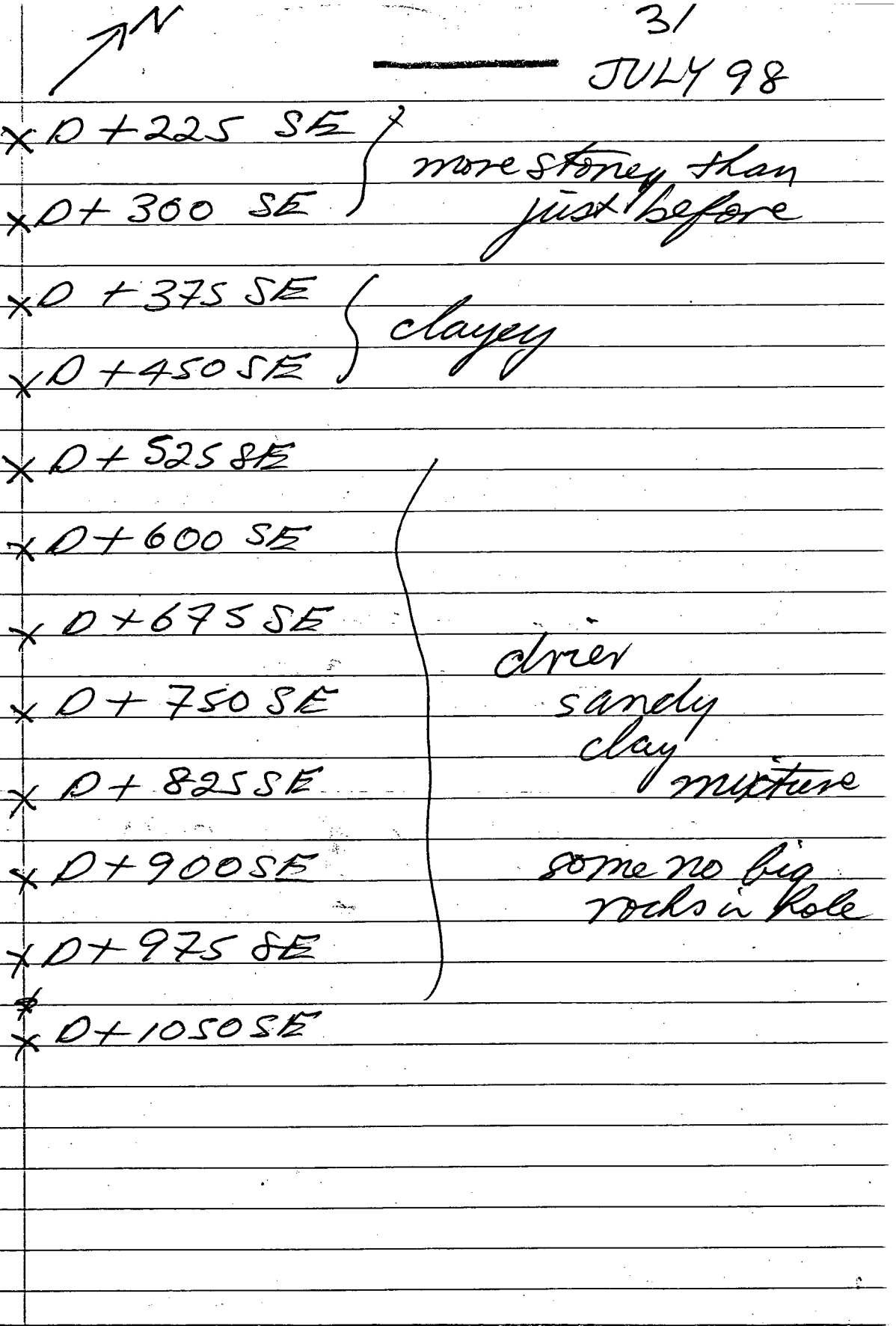
(C + 1410) → (D) dryer + stones

(29) VIVI (30) VIVI

D + 75 SE

D + 150 SE

JULY 98


N
D+225 SE
D+300 SE
more stoney than just before
D+375 SE
D+450 SE
clayey
D+525 SE
D+600 SE
D+675 SE
D+750 SE
D+825 SE
D+900 SE
D+975 SE
D+1050 SE
drier sandy clay mixture
some no big rocks in hole

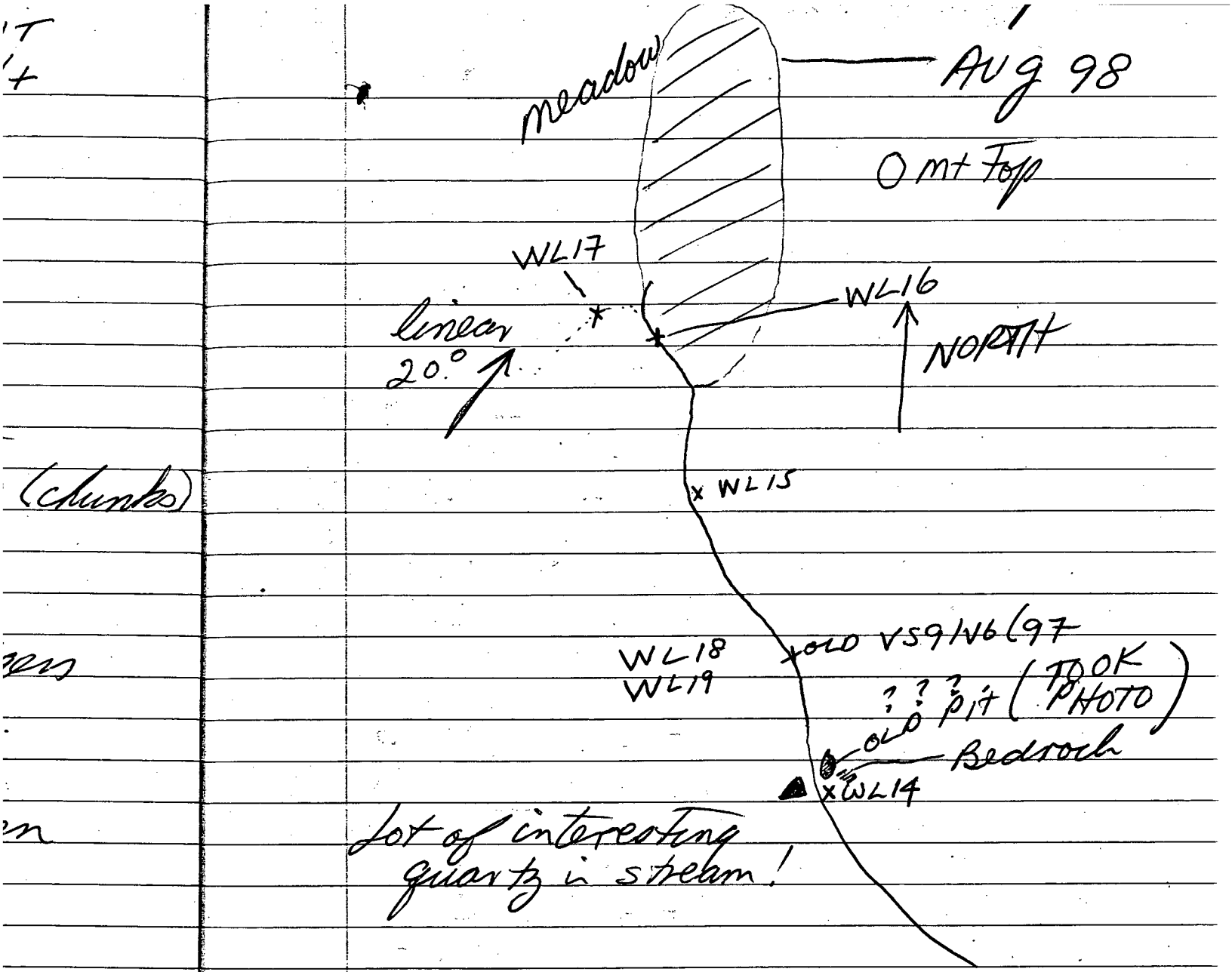
1 AUG 98

last nite ABOUT
Rain at about 10 or 11 1"+
hard, lightning
+ thunder
not much sleep

Bags / soil / all wet

WL 14 very strange quartz
WL 15 nice sulphides + few w (chunks)
area
WL 16 sulphides
WL 17 felsic volcanics
+ Chalcedony stringers
WL 18 interesting quartz
WL 19 quartz

** some one has put 7-8 green
rocks on top of 2 boulders
just north of US 9


meadow
Aug 98
Omt Top
WL17
WL16
linear
20°
NORTH
(chunks)
WL15
WL18
WL19
OLD VS9/V6(97
??? pit (TOOK PHOTO)
OLD
Bedrock
WL14
lot of interesting quartz in stream!

29 JULY 98

30 JULY 98

31 JULY 98

1 AUG 98

130° 00'

55'

00'

5000

4000

6000

4500

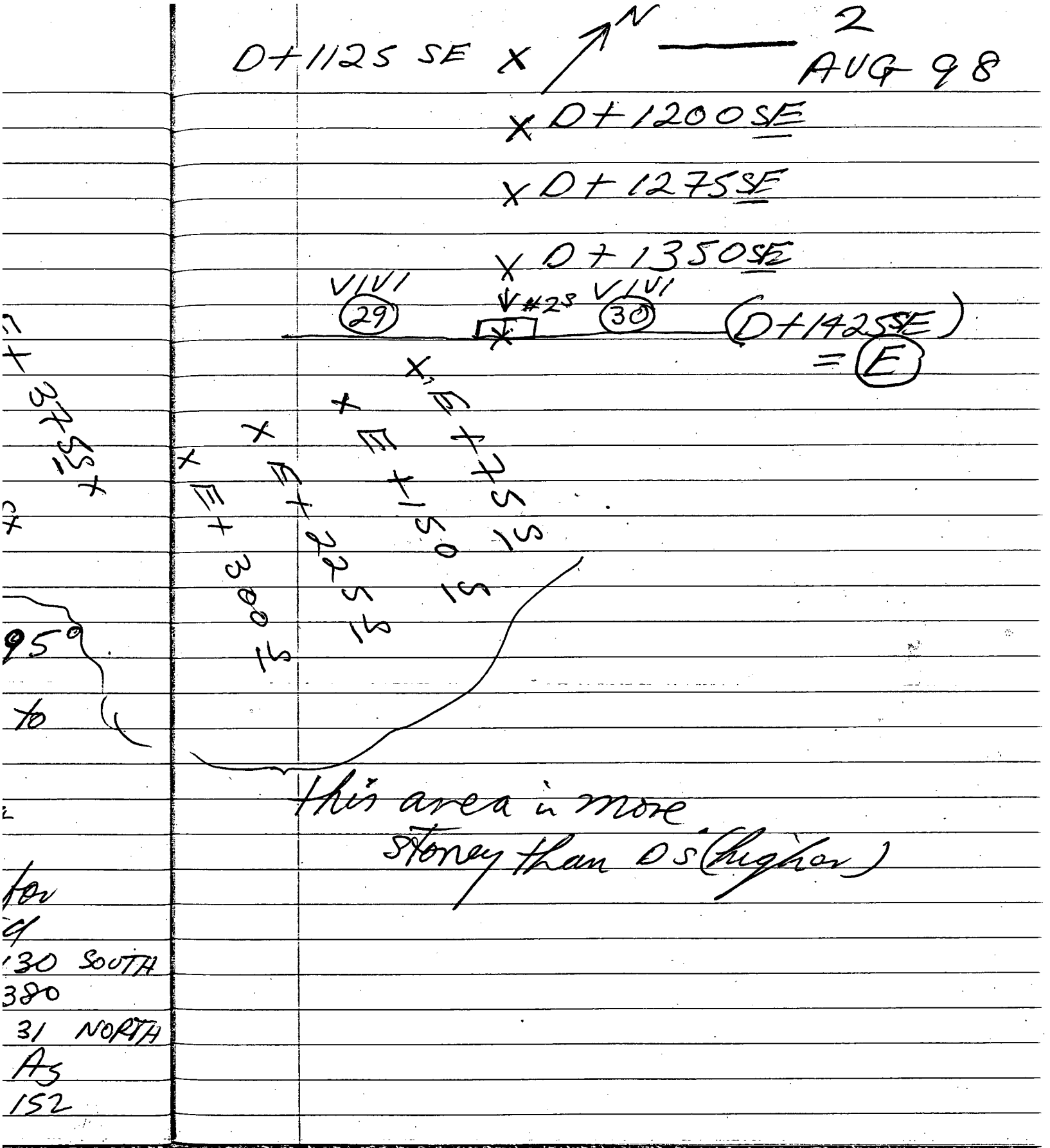
6483

EZ

VIVI

JASPER

MILE


D+1125 SE
N
2
AUG 98
D+1200SE
D+1275SE
D+1350SE
VLVI
29
#25
VLVI
30
(D+1425SE)
= E
95°
to
this area is more
stoney than DS (higher)
for
130 SOUTH
380
31 NORTH
AS
152

2 Aug 98

D+

E+375S+

E+450S+

E+525S+

×E+

×E+300s

Angle in 195°

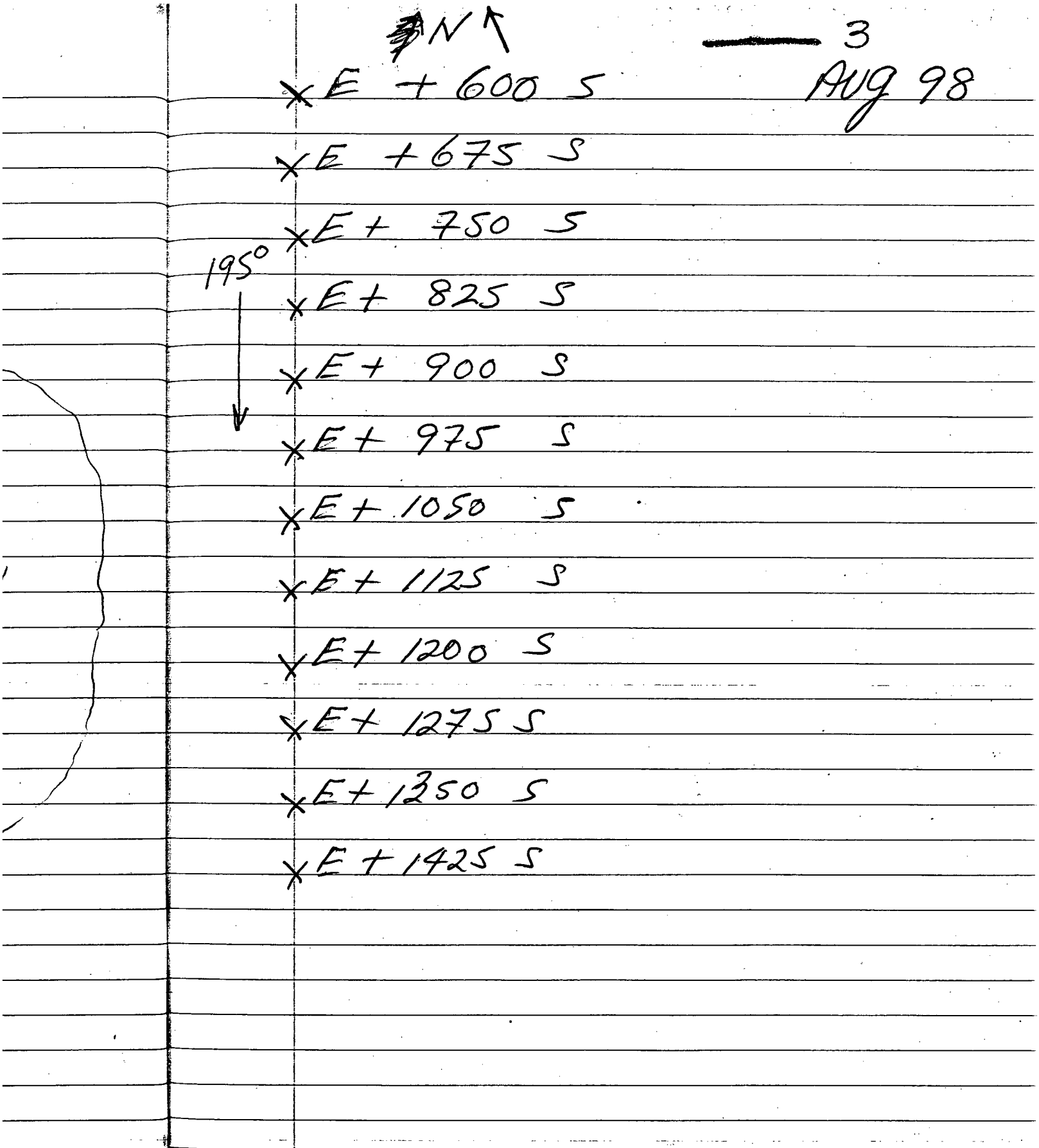
(try to go to

#2 POST)

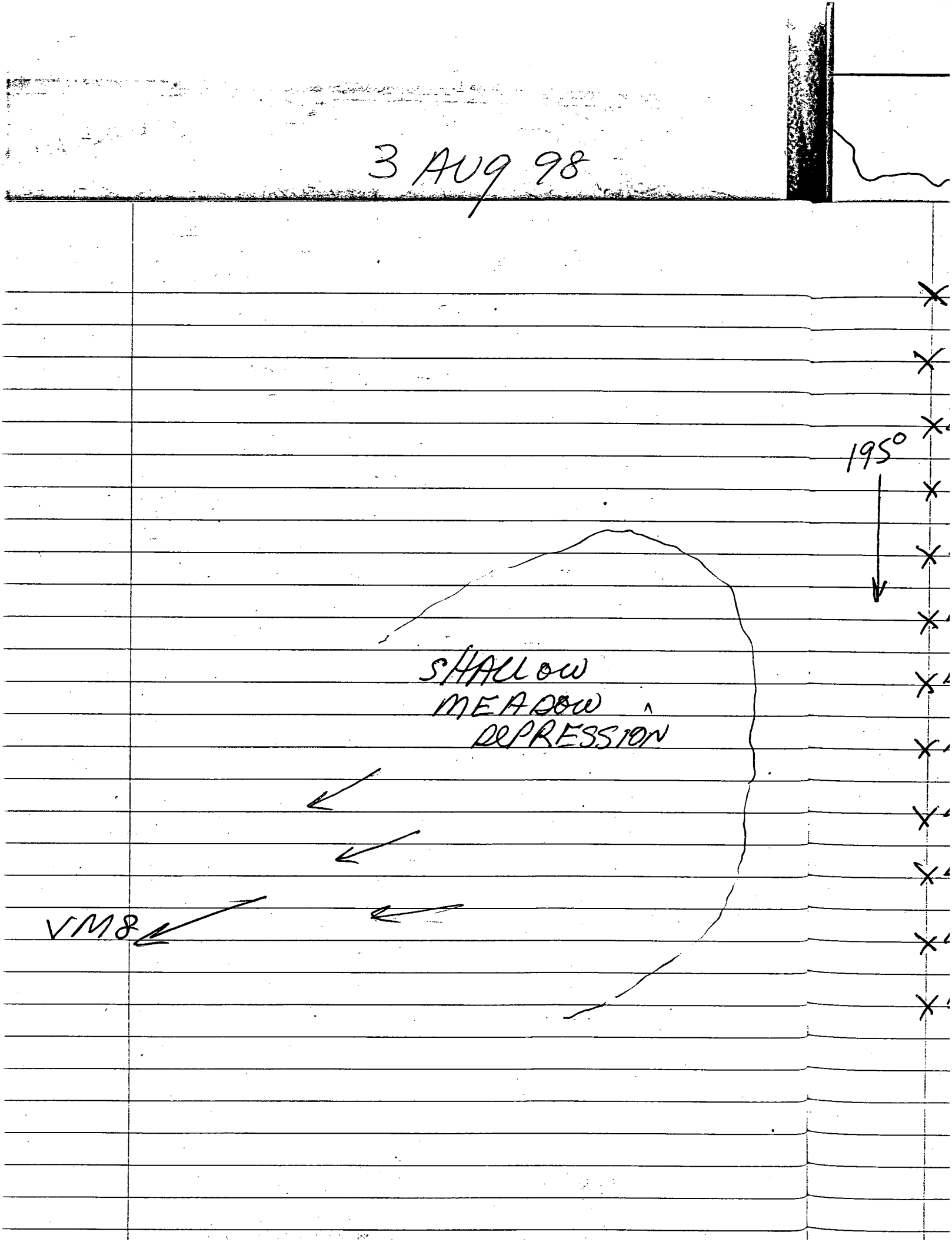
VIVI 23,24

"FISHING" now for
AuAs zone detected
i 1997 VS7 – 130 SOUTH
VS8 431 380
VM8 7 31 NORTH
Au As
plus gpc sample 22 152.

AUG 98


N
E + 600 S
E + 675 S
E + 750 S
195°
E + 825 S
E + 900 S
E + 975 S
E + 1050 S
E + 1125 S
E + 1200 S
E + 1275 S
E + 1350 S
E + 1425 S

3 AUG 98



N

4

Aug 98

E+1500 S

195° E+1575 S

E+1650 S

E+1725 S

E+1800 S

E+1875 S

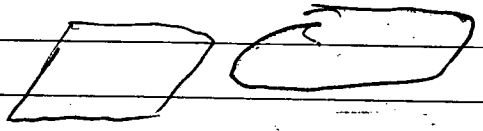
NOT quite flat but close to it

E+1950 S

E+2025 S

E+2100 S

E+2175 S



E+2250 S flat green rocks in hole

E+2325 S

5

Aug 98

N ↑

E+2400 S

195° E+2475 S

E+2550 S

E+2625 S

E+2700 S

E+2775 S

E+2850 S

E+2925 S

E+3000 S

at 9:00 pm a caribou came by my tent - about 10-20' away + scared the hell out of me!

Fresease on top of the Ridge

*It seems my soil line altho along the ridge (E line) did not come too close to my target.

Still it should detect the Ag Au gone, if it is here!

5AUG 98

Rain at 6 30 or so

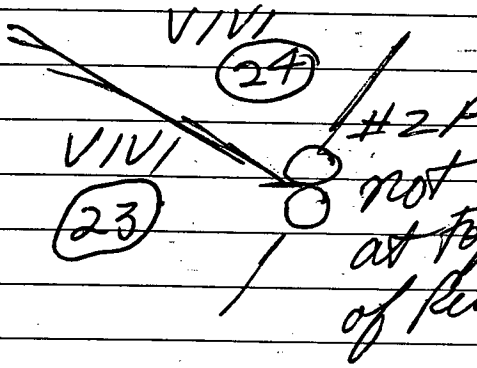
now all soils wet again - left out to dry - when will I learn??

about 70°

5 minute walk to 2250 S Et

195°

TOOK along time to find the #2 POST



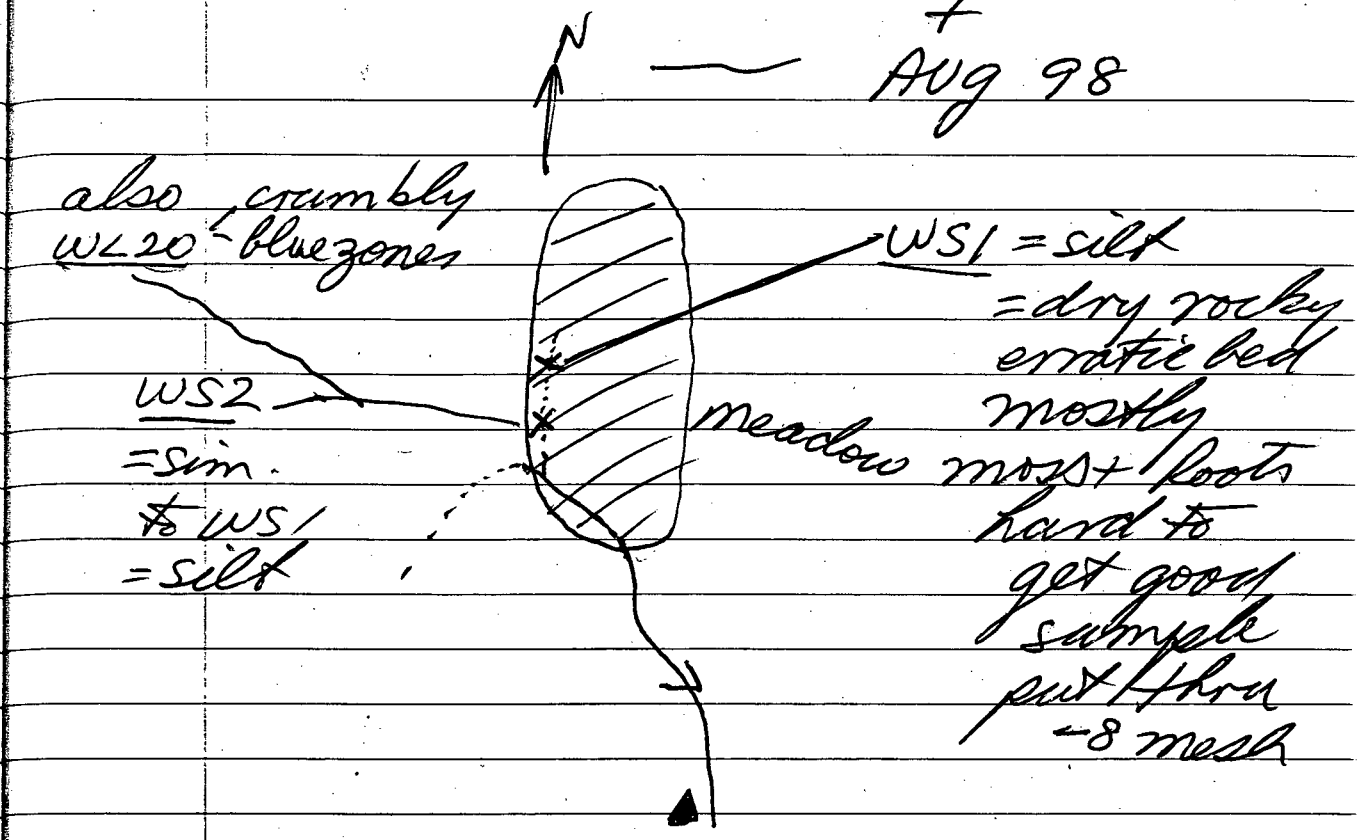
NOT much fun taking soil samples under a TARP!!!

But I am happy rain came at nite so I could do all my planned work!

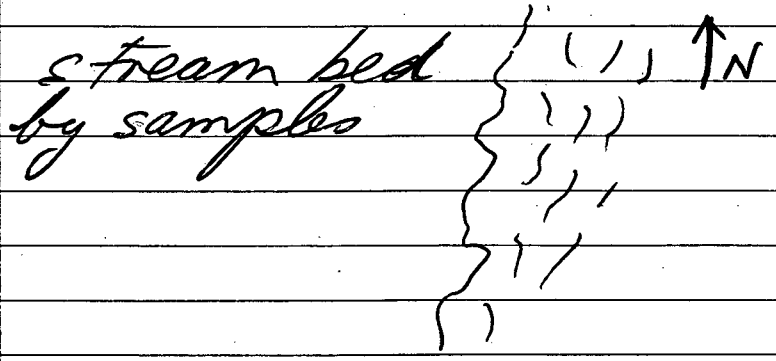
6
AUG 98

Did not go out. Camp day.
Looked bad in morning - rained
hard at about 2^00 + on + off.

7
Aug 98



not detect
could linear north of
bend ???



130° 00'

55'

1°00'

5000

4000

6000

4500

6483

VIVI

EZ

JASPER

MILE

2 AUG 98

3 AUG 98

4 AUG 98

5 AUG 98

7 AUG 98

8
Aug 98

Back in White horse

204,420 KM

4 3/4 20
- 3430
990 Km
Round
trip

19
AUG 98

Left WH early.

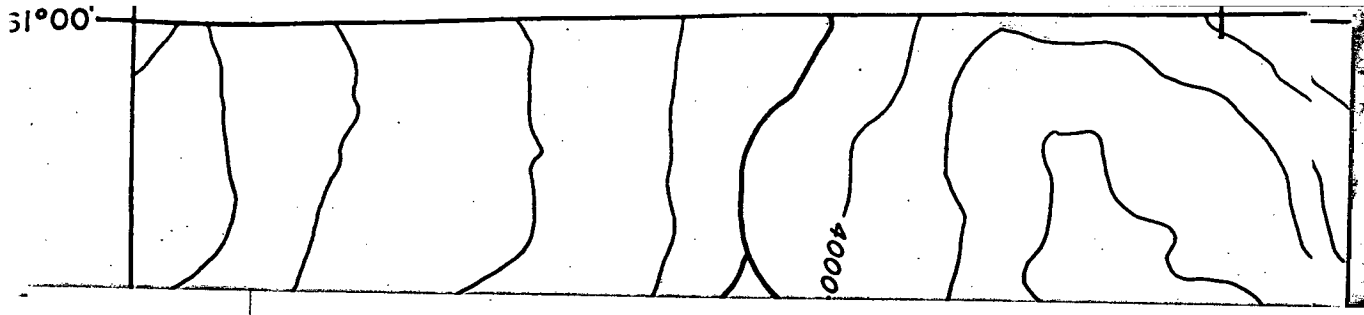
204,609.

Early came to be 1 pm.

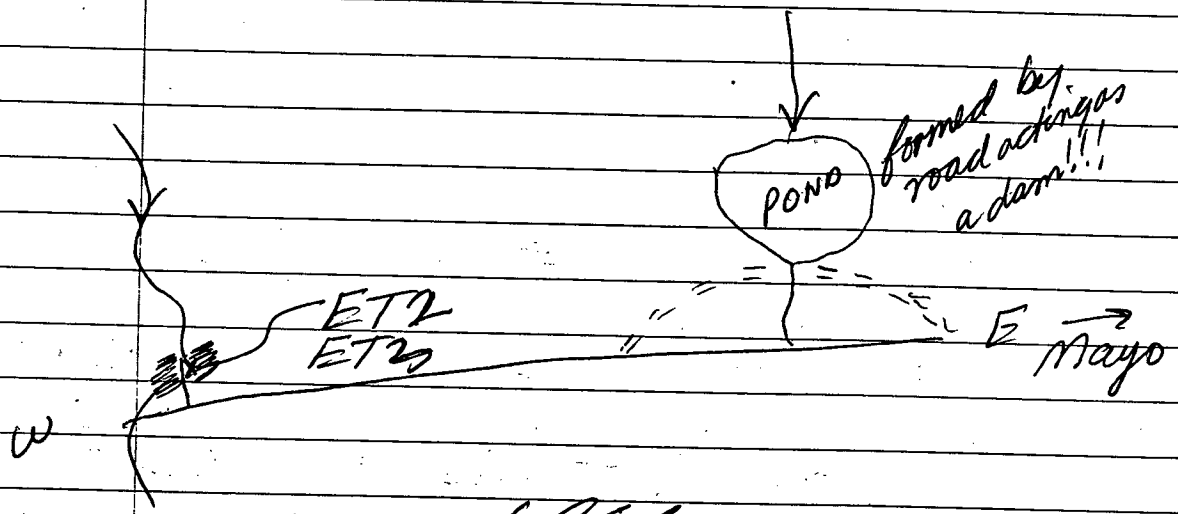
Got to site about 7 pm. Went to camp at Rusty Creek. Don't want to get stuck at nite.

Willow Hill - scu of St.

Crossing has fire. Some smoke.



20 Aug 98



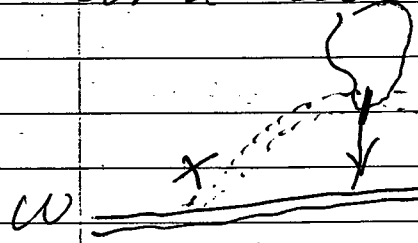
CANYON 30' high
3 pipes/~~or~~ culverts under road
No access to it
Black wire (2x) up about 100'
+ thru culvert!??!/winter/!??
+ ice /?

ET2 = bedrock
ET3 = quartz on foliation in bedrock

NB. Not much sand on top of canyon bedrock to west.
Surprised!

20
AUG 98

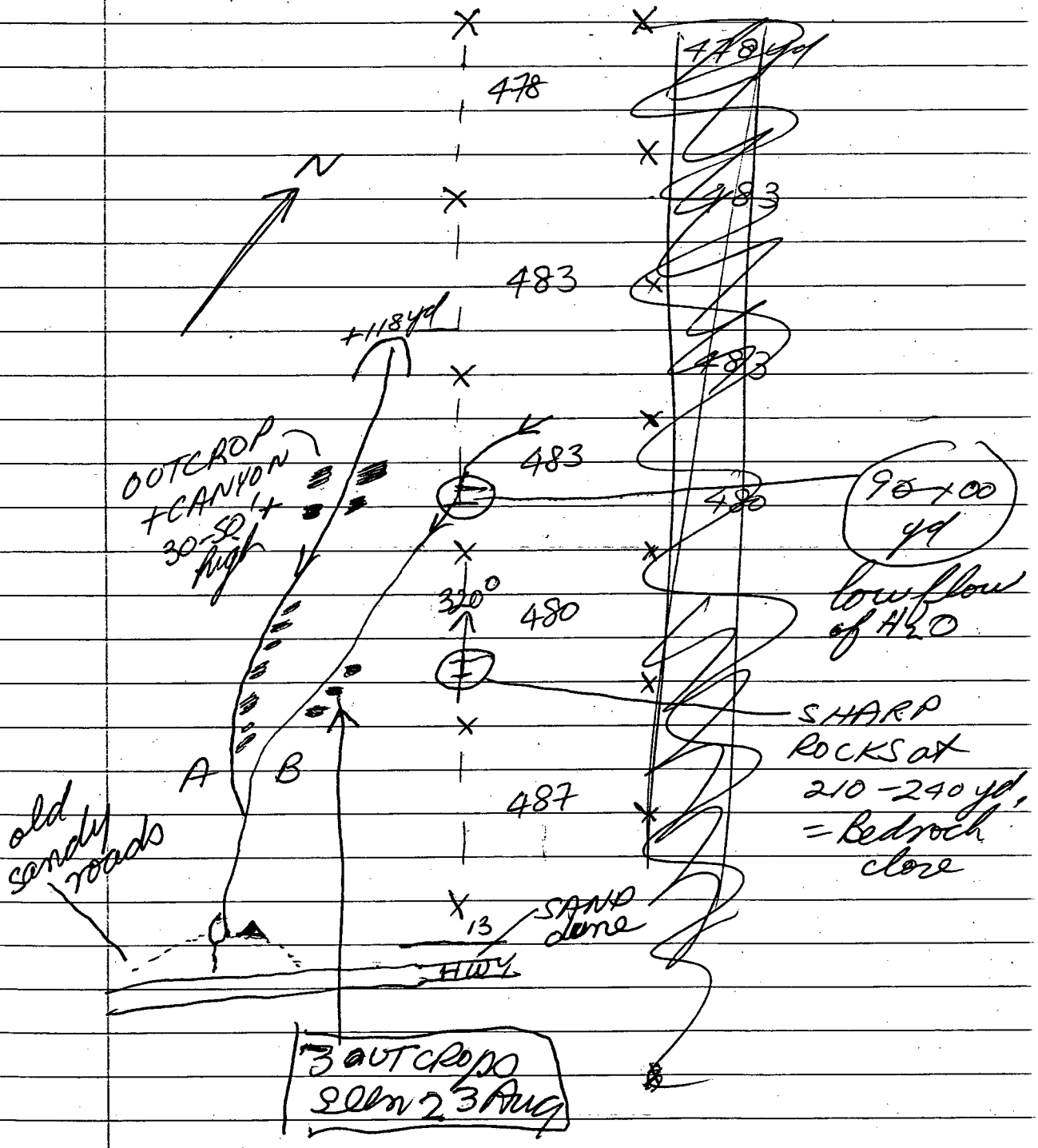
Marked off 950 YARDS from 98may post along road for next lig. By a large sand dune.
Walked along (½ some places down ½ way) on ridges in area of lookout. All sand dunes - no big rocks or bedrock
Checked out 2 roads by 40. One is narrow + 1 tree at front.
Checked out road to river, no outcrop - on back roads for 2 hours. Couple of farm fields.
Went to a site and used binoculars to glass hills. part. area around LOOKOUT. Fault goes thru it??
Sandy hills or trees only.
Walked down to fish camp area - all dunes. Native fellow says, Past - bar miners in area. can get in from east only

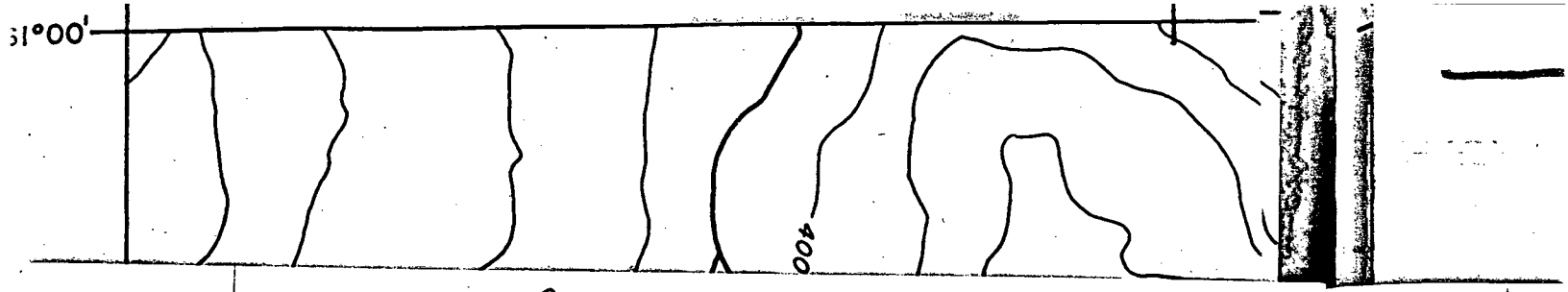


Rather hot today

21
AUG 98

almost got stuck in side road - Sandy mostly - needed 4×4.





21 Aug 98

underground here

water A > B = 3x - 4x

water coming out of bottom of very steep sandy hill

lot of mud in bottom

steep V sides

+ logs in bottom

very tough to walk on bottom

Is A stream coming off a tough like fault zone?

Enormous amt of water for a ground seepage.

Could not find old ribbon / sample

This stream had best silt

FS 139276 (1990) 269 Au ppb

-200m

- not checked out
- not mentioned in Sleeper report by Ken Galambos

old sendtl road

22
AUG 98

Drizzle from 12-2, Rain from 6-8 on + off, now at 8 it's larger drops. Last few days = smokey.

My back was a little sore, today. So, as well, good for a break.

X Did not go out

23
Aug 98

NO.1	NO.1
ET	ET
(22)	(21)
SE	SE
1500'R	1500'L
0'L	0'R
23	23
Aug	Aug
1998	1998
JP	JP
ROSS	ROSS
3:45 PM	3:45

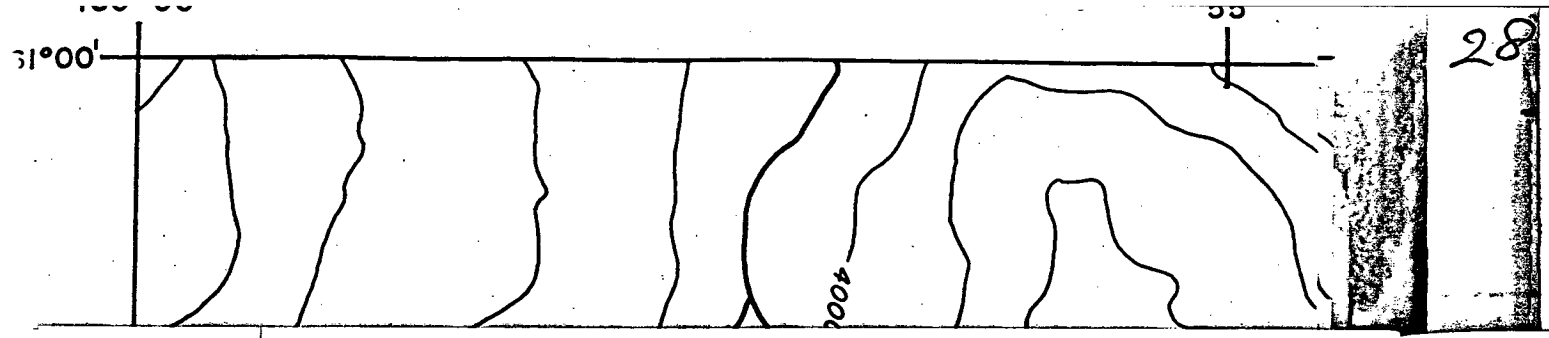
490 yd | 140°

NO.2	NO.2
ET	ET
(23)	(24)
23	23
Aug	Aug
1998	1998
JP	JP
ROSS	ROSS
8:00 PM	8:00 PM

YD
478

140°

NO.2	NO.2
ET	ET
(24)	(23)
SE	SE
1500'R	1500'L
0'L	0'R
23	23
Aug	Aug
1998	1998
JP	JP
ROSS	ROSS
6:30 PM	6:30 PM



23 Aug 98

Saw 3 outcrops - east of stream
- put in at 21 Aug

Walked along eastern side
of canyon
can not see unless very close
bedrock
took 3 photos of it

gear left at 21, 22, 23, 24
? Bear ?
chewed up all bags
" few rolls of tape
scattered wires
+ chewed off most of tapes
over 500 distance???
did not touch my
hip chain

Bears eating orange berries
bearberry
or soapberries??
droppings - seems swallowing
whole + not chewing!

TIRed = good days work!

24
AUG 98

Rain + drizzle just before noon to about 2.

SHOULD have gone out. It cleared up.

Did not go out

25
Aug 98

Heavy rain 8^{30} – 11^{30} went out from $1-9^{30}$ pm

No. 1	No. 1
ET	ET
(26)	(25)
SE	SE
1500'R	1500'L
0'L	0'R
25	25
Aug	Aug
1998	1998
JP	JP
Ross	Ross
4^{00} PM	4^{00} PM

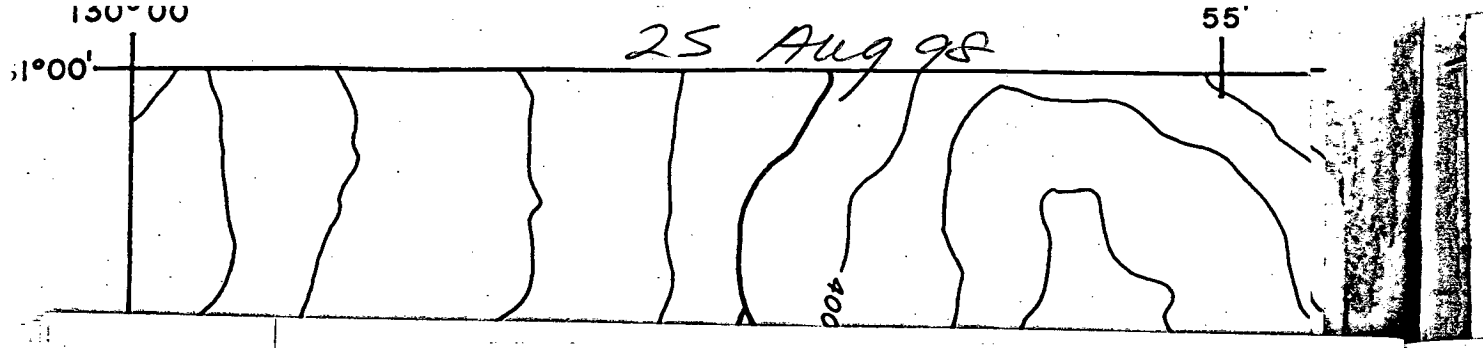
483 yd
140°

No. 1	No. 2
ET	ET
(28)	(27)
SE	SE
1500'R	1500'L
0'L	0'R
25	25
Aug	Aug
1998	1998
JP	JP
Ross	Ross
7^{00} PM	7^{00} PM

140°
483 yd

No. 1	No. 2
ET	ET
(28)	(27)
25	25
Aug	Aug
1998	1998
JP	JP
Ross	Ross
8^{30} PM	8^{30} PM

no photos of last posts



25 Aug 98

SLUMP area ≈ 400' across Took few photos of it

N

ET 4 = loose bedrock channel

ET 28

ET 27

to east colluvium

dry linear

ET 4

100 ± Troughs before creek + dry linear

HWY

? Hard to tell where I was + little dark + late at nite

26
AUG 98

got
ites

rock ??

et line

1 funnel
along
about
350 yd
guess

Rock
Stang
ET-6
sand
ark

NO. 1	NO. 1
ET	ET
(28)	(27)
SE	SE
1500'R	1500'L
0'L	0'R
26	26
AUG	AUG
1998	1998
JP	JP
ROSS	ROSS
3 15 PM	3 15 PM
140°	480 yd

NO. 2	NO. 2
ET	ET
(30)	(29)
SE	SE
1500'R	1500'L
0'L	0'R
26	26
AUG	AUG
1998	1998
JP	JP
ROSS	ROSS
6 00 PM	6 00 PM

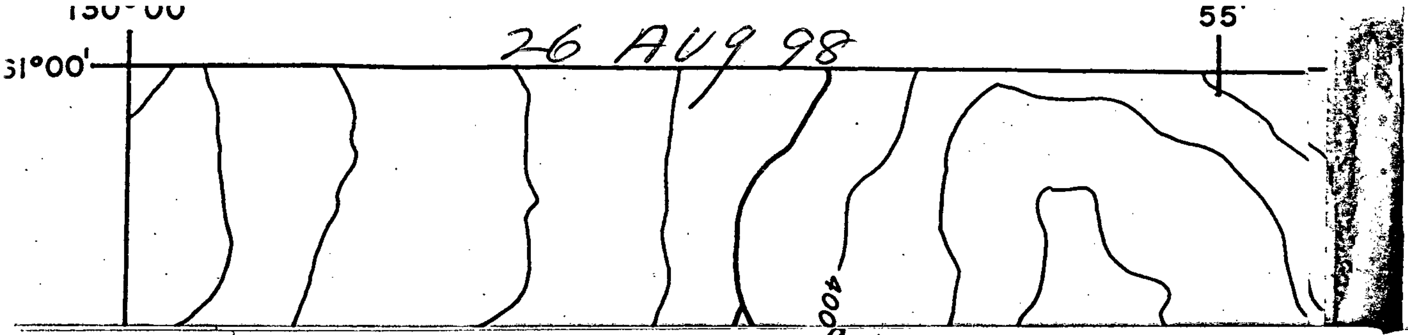
NO. 1	NO. 1
ET	ET
(32)	(31)
SE	SE
1500'R	1500'L
0'L	0'R
26	26
AUG	AUG
1998	1998
JP	JP
ROSS	ROSS
6 15 PM	6 15 PM

487
140°

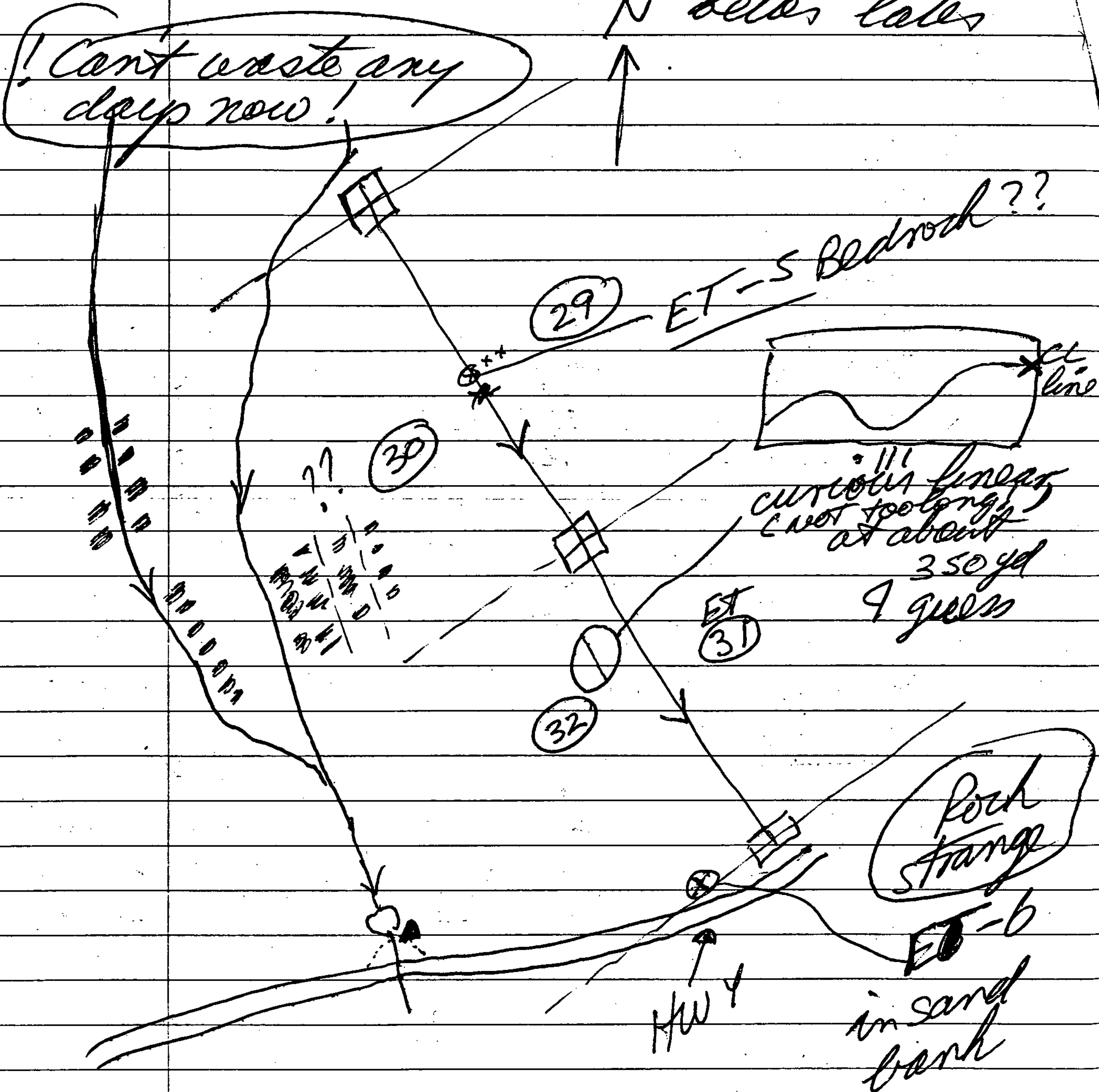
NO. 2	NO. 2
ET	ET
(32)	(31)
26	26
AUG	AUG
1998	1998
JP	JP
ROSS	ROSS
8 00 PM	8 00 PM

Rock

26 AUG 98



went out at 1:30 - Lot of Drizzle I got better later



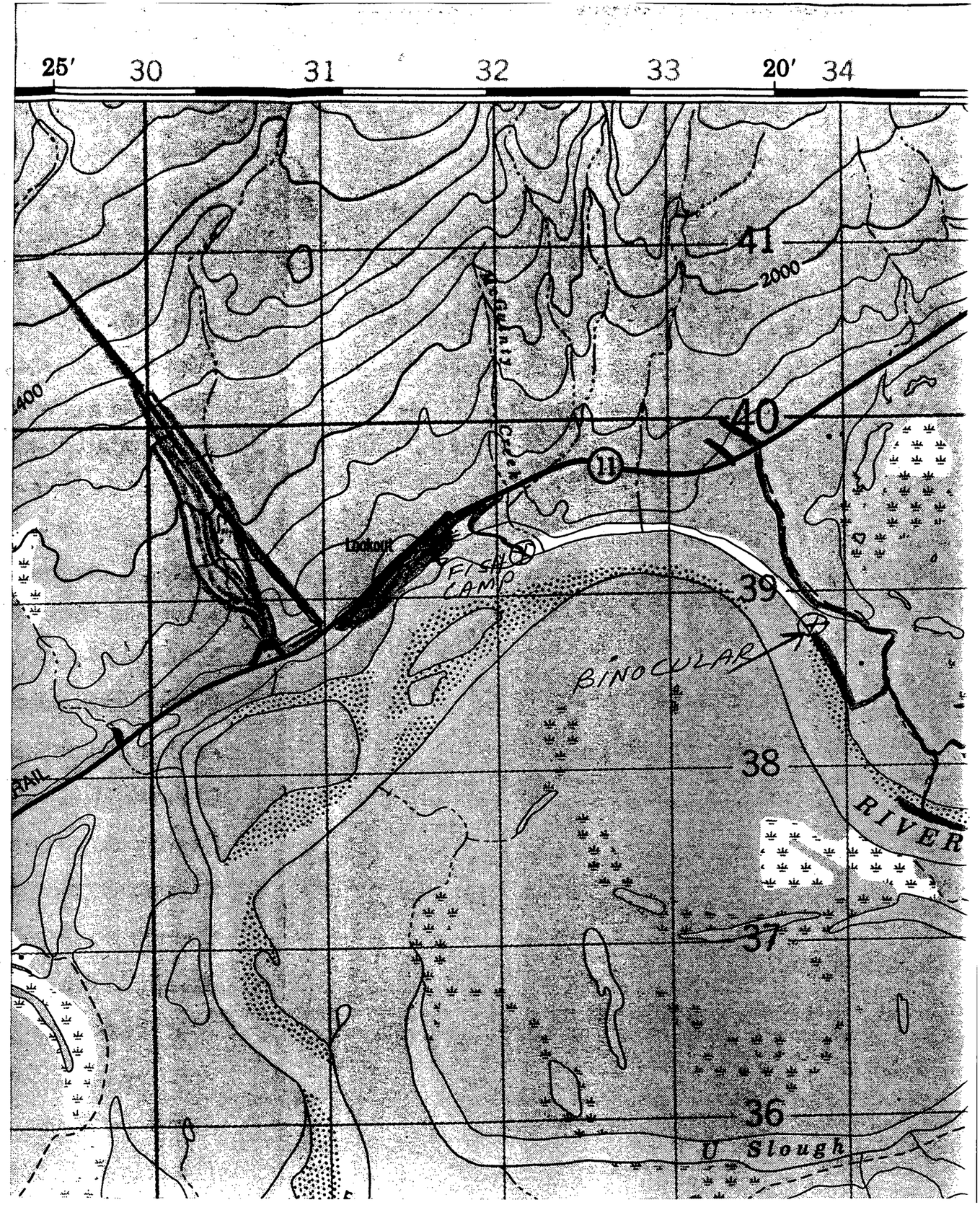
20 Aug 98

21 Aug 98

23 Aug 98

25 Aug 98

26 Aug 98



27
AUG 98

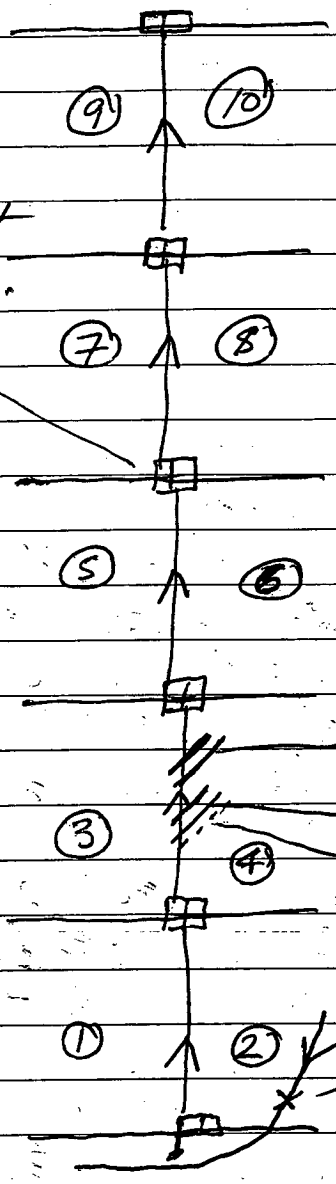
Went to Mayo.
Recorded 12 claims. Talked to
Kowalchuk, Galambos + Hudson Bay
geologists at Bedrock Motel.
60 mile heating up now.

28
AUG 1998

all 1-10 Tagged

rain

threw up roll so can put tape - so can put soil line thru it.



N

tape on most posts, chewed up by ?? squirrels ?

in past stream probably went here

350/360° or so wide = mushy = 35yd = McGinty Cr

1/2 wide = mushy 350° 35yd baby fault dry

3' wide - smaller of 2

ET 7 - in stream - limestone chunk + holes - 10 rocks on creek side - many chunks asst under gravels

5

NB

=2000-2500' wide
=5 lineas!!!!
=good esp. target

31°C

28 Aug 98

Could not find road

Cold, windy, no rain

morning mist + foggy

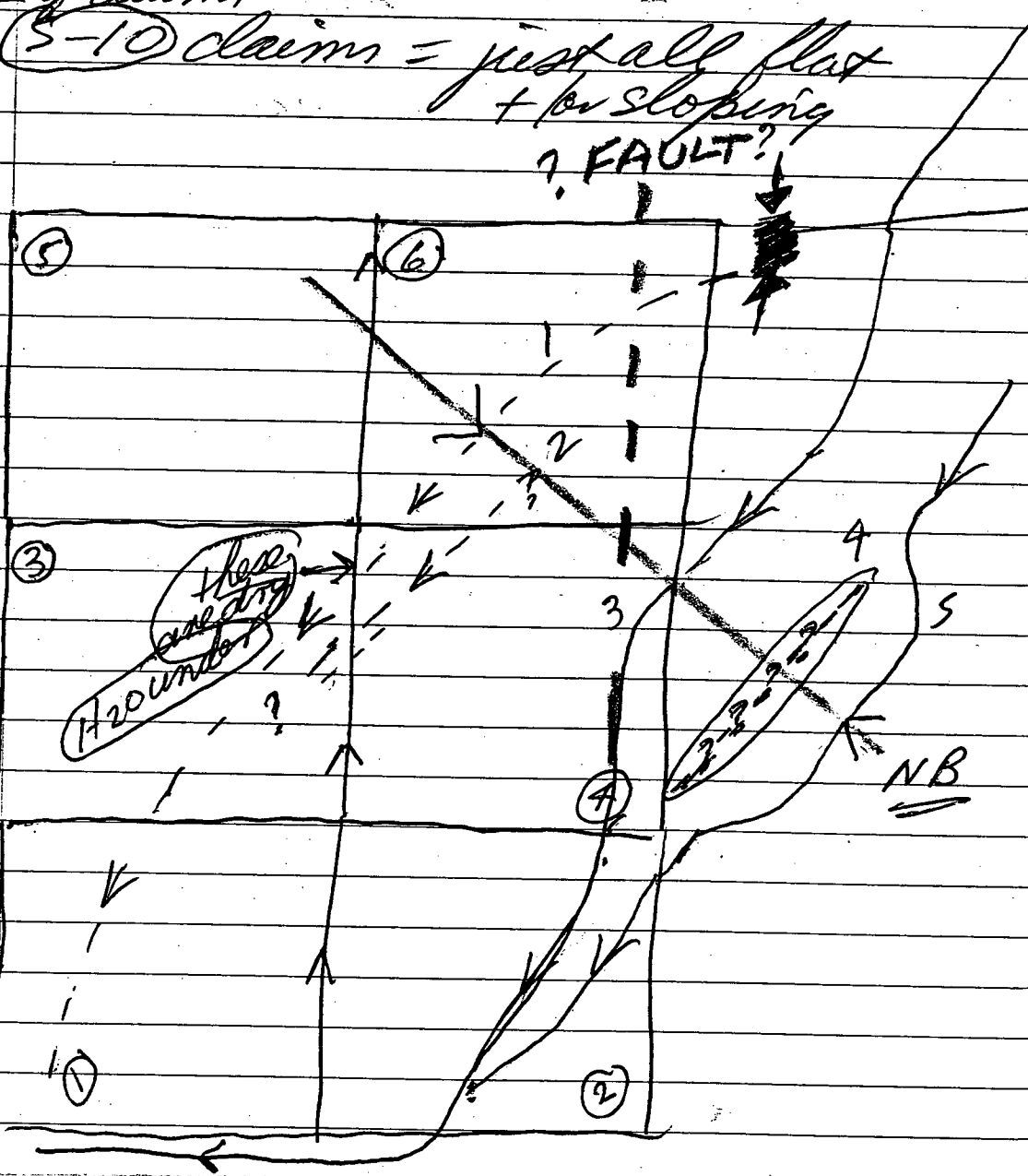
last nite 4 hr - early rain

Did not see a PLETHORA of Rocks!

back went on compass line NE of claim

NO Bedrock

5-10 claims = just all flat + or sloping



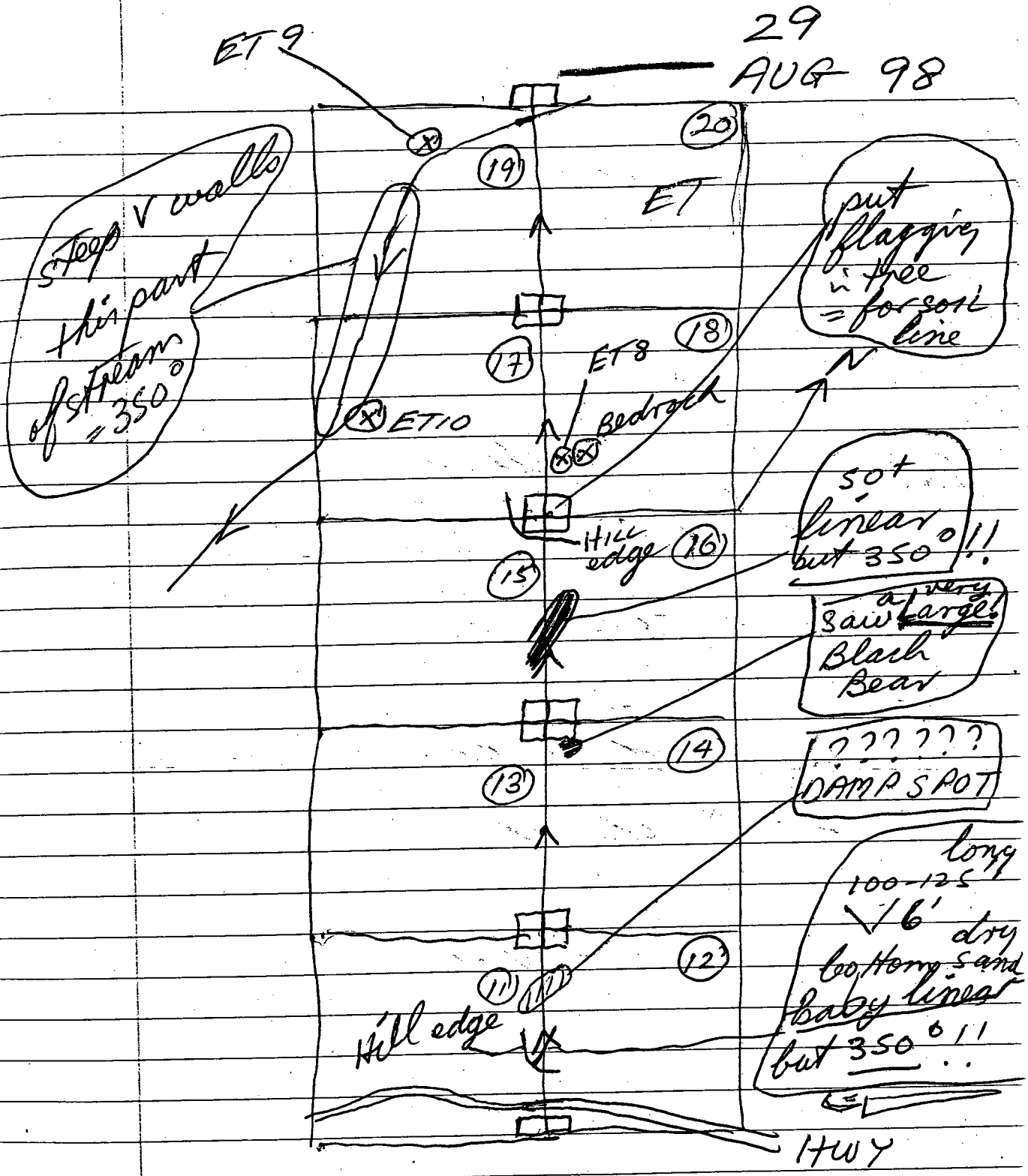
all
Trigg

threw
tape
soil

in
stre
prob
went

=2000-2
=5 lines
=good

29 AUG 98


ET 9
20
19
ET
put flagging in tree = forest line
Steep V walls this part of stream = 350°
17
ET 8
18
ET 10
Bedrock
50+ linear but 350°!!
Hill edge
16
15
saw a very large Black Bear
14
13
?????? DAMP SPOT
long 100-125' x 6' dry bottom sand baby linear but 350°!!
12
11
Hill edge
HWY

31°C

29 Aug 98

ET 8 = 50' east of line
= bedrock about 400' up hill
≈ same as ET 8 marked F/R 2 ribbon

Stop this p of stream = 35

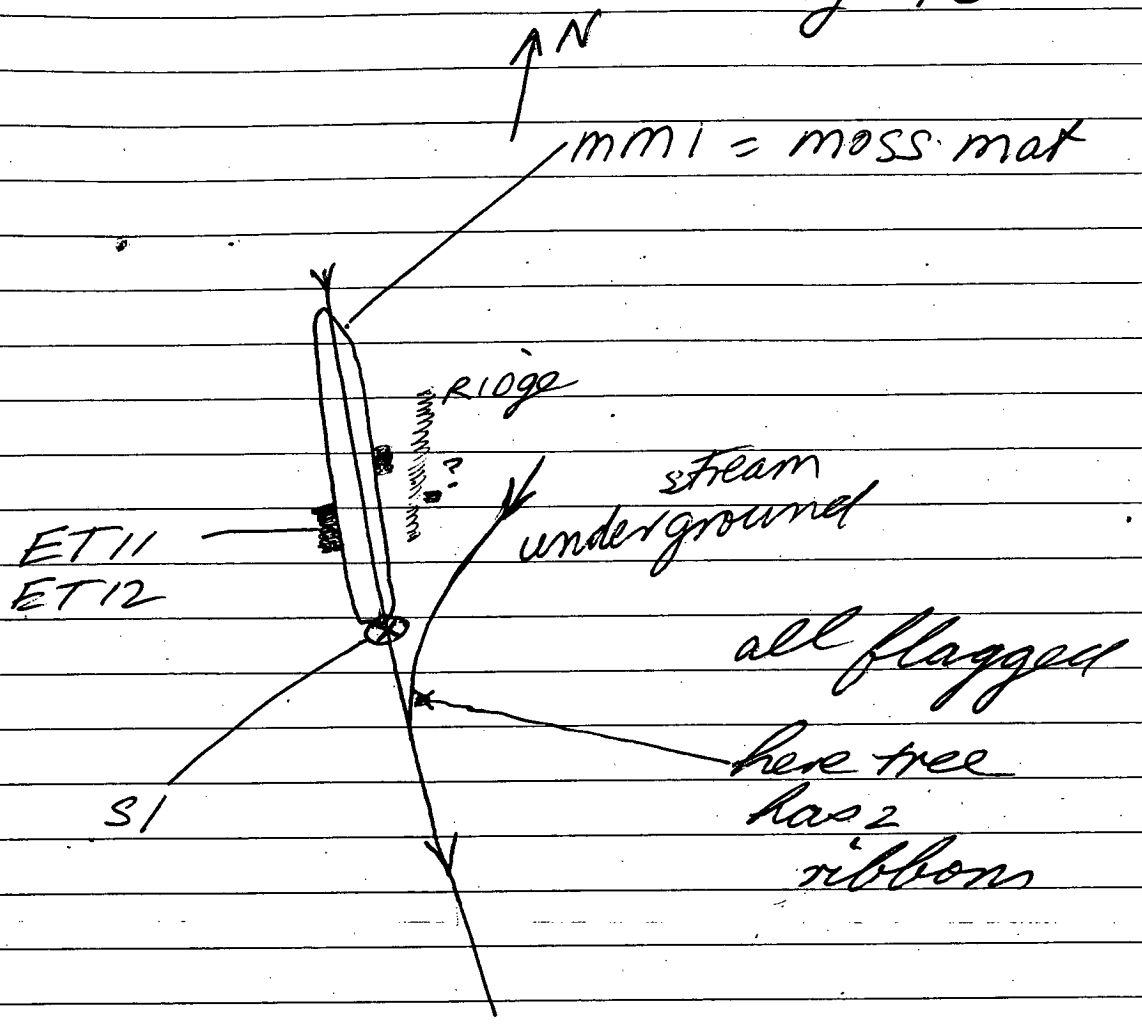
ET 9 = limestone
1" wide
in moss ???
no other rock close by
& limestone also (more solid) in stream by sim. "clay pigeon" culvert

ET 10 = bedrock ≈200' east of stream!
= there 120° back to 50+ linear
≈ ET 8 ???

ALL ET 1-20 now tagged
Did not see road.

Rain + wind AM
PM cleared up

30
AUG 98


N
mm1 = moss mat
ridge
?
stream
underground
ET11
ET12
all flagged
here tree
has 2
ribbons
S1

61°

30 Aug 98

later 2 can be compared for future

MM1 = moss mat
= 2 bags half full
= really hard to get enough for -200 m test

S1 = silt
= 2 full bags
= on a bend of stream where water slows down
not many good places

= limestone outcrop

ET11 = at area 15' x 3'
= bag of chips - randomly

ET12 = big chunk.

Both have imprints of bars or twigs

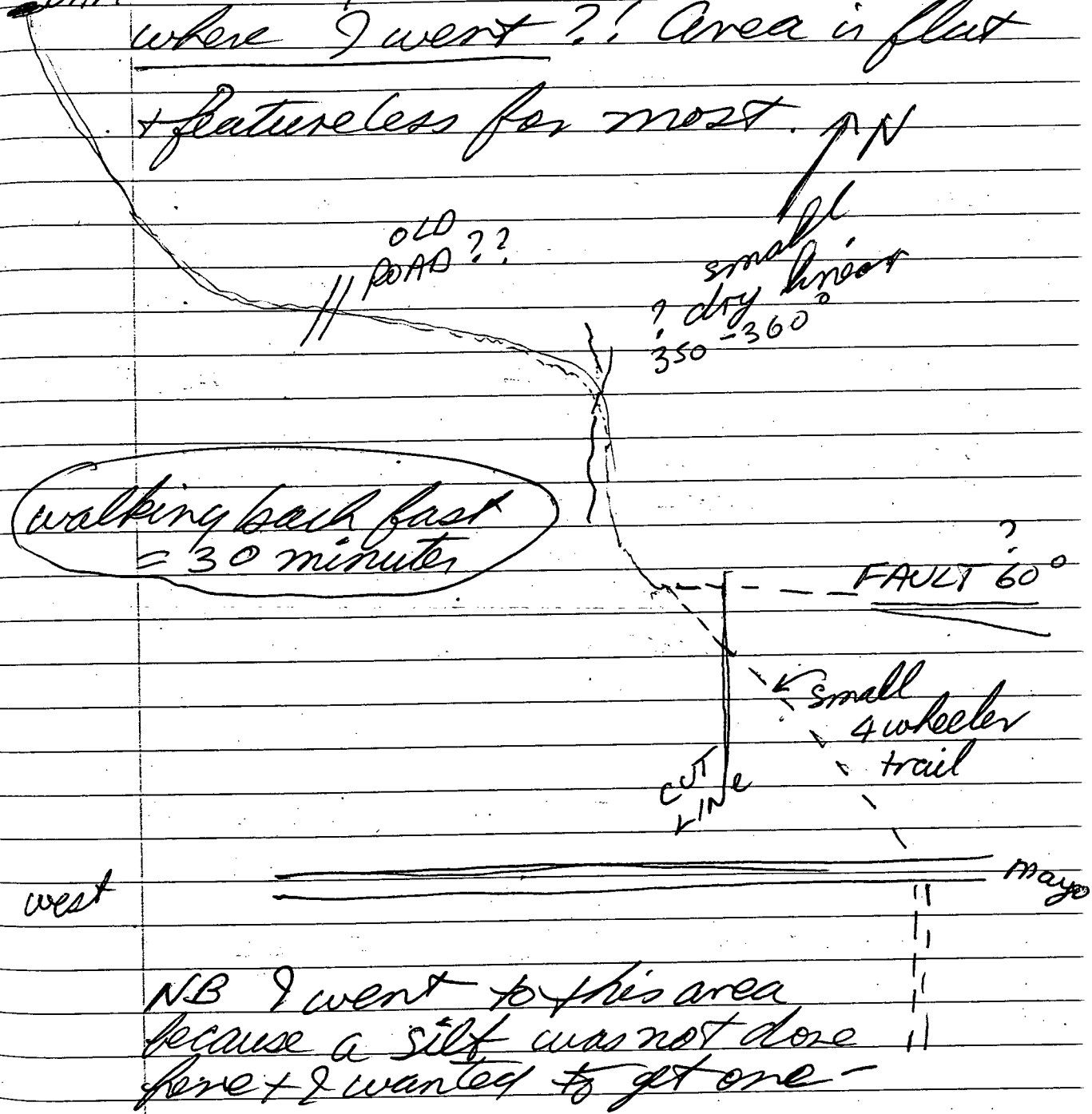
31
AUG 98

Rained most of day. Went to Mayo, to see Vicenyon Wayne Av prospect (left) + Then Elsa + Keno.

Did not go out.

1 SEPT 98

Today I am not too sure where I went ?! Area is flat + featureless for most.

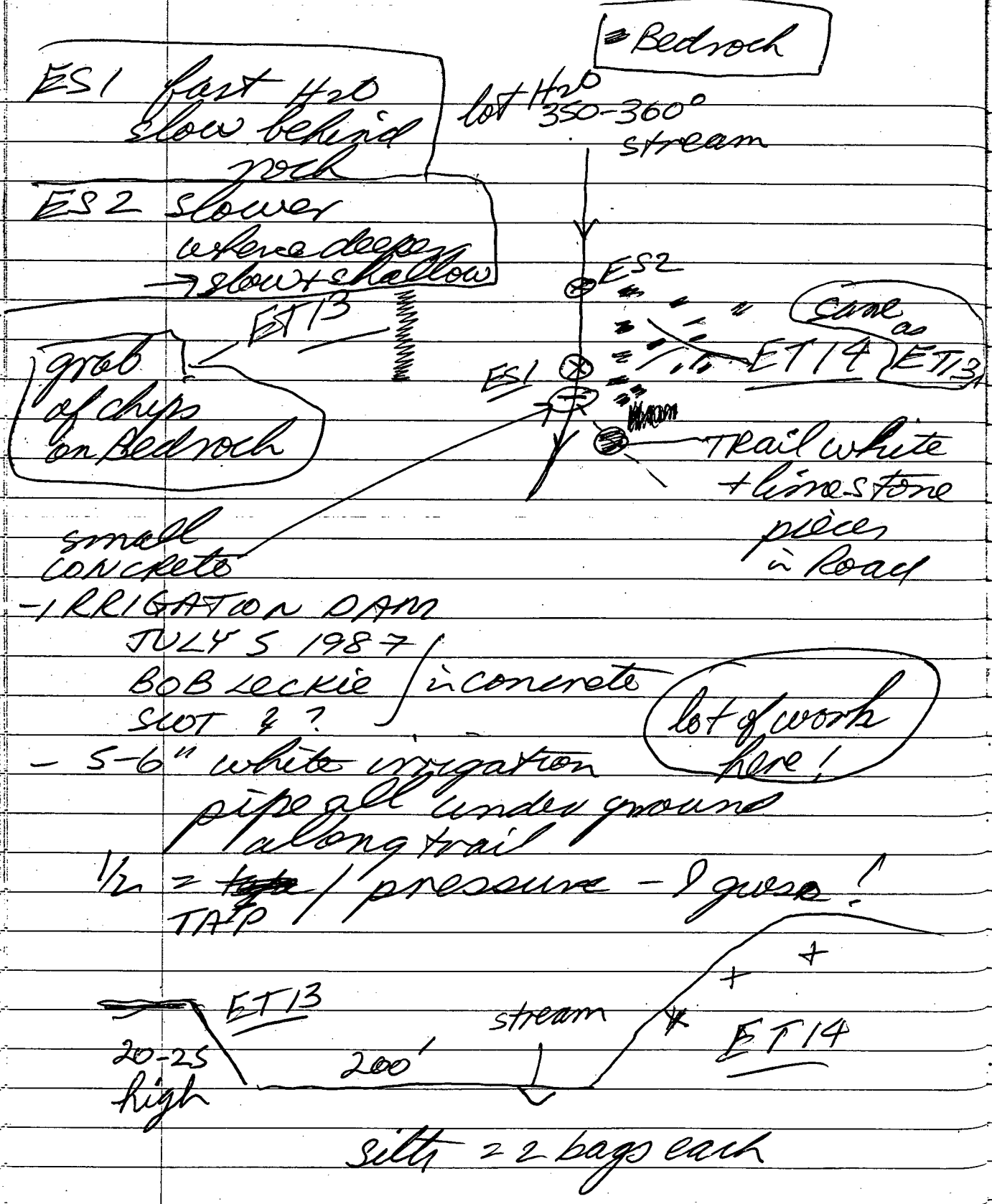


NB I went to this area because a silt was not done here + I wanted to get one -

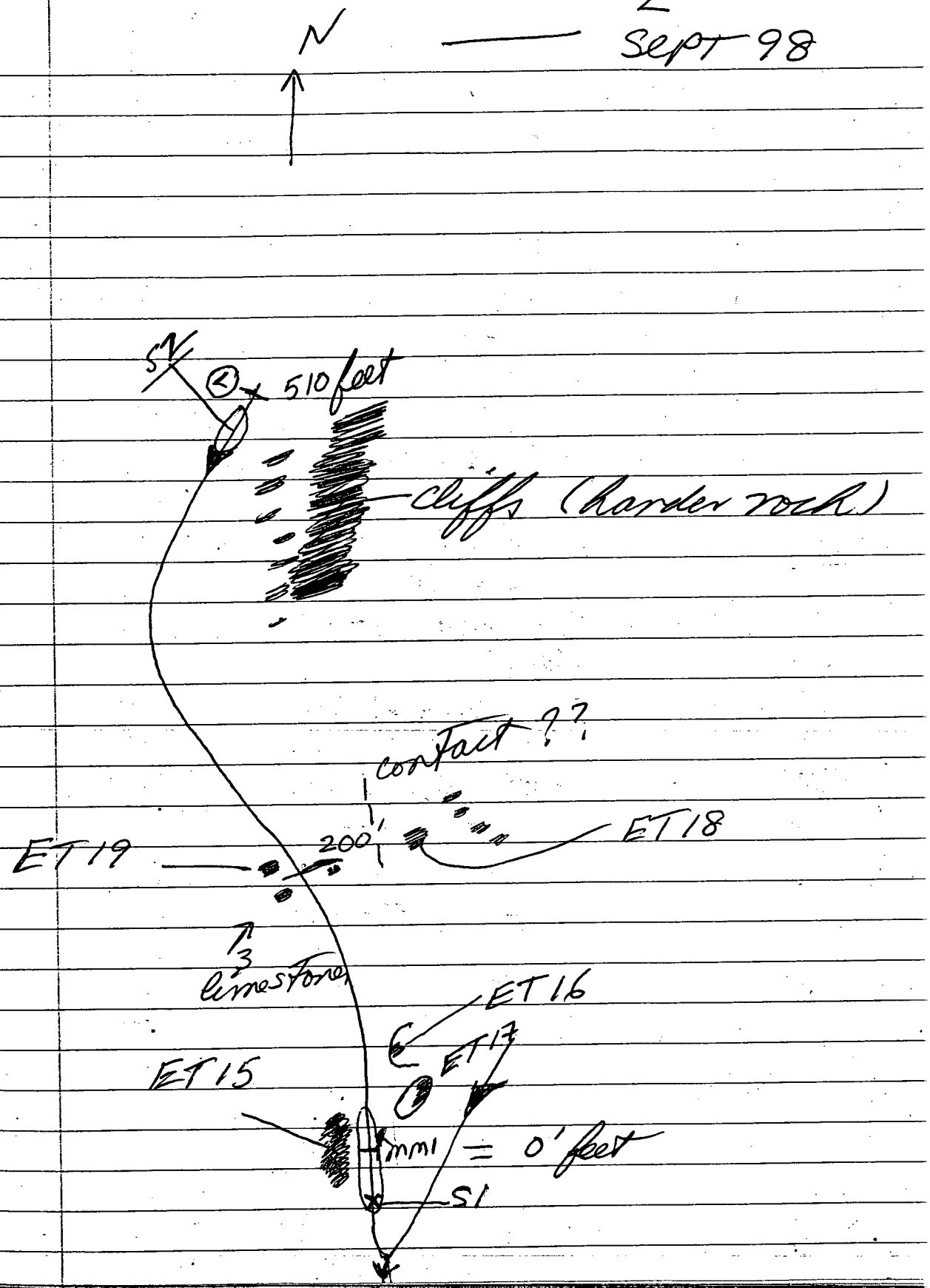
150°00 61°0

28 14

1 Sept 98



2
Sept 98


N
5N
510 feet
cliffs (harder rock)
contact ??
200'
ET 18
ET 19
3 limestone
ET 16
ET 17
ET 15
1mm = 0' feet
S1

61°0

3

2 Sept 98

SZ = 2 silt samples about 500'
= slow flow below fast area
= saw bleach sand

ET 15 - hand pickey heavy ? or shary ? - sand layers
limestone pieces - some greeny
ET 16 - grab
ET 17 - chip 16" green !??
- heavy dense
- smell ??? when hit

hardness ET 17 > ET 16 > ET ~~15~~ 15

ET 18 bedrock - some above = similar
soft + could be pulled apart
ET 19 limestone outcrop
1 piece

ET

at ET 16 / ET 17 R13 8576
found 2 flag tape

went up on to hill to west of
ET 15
no outcrop.

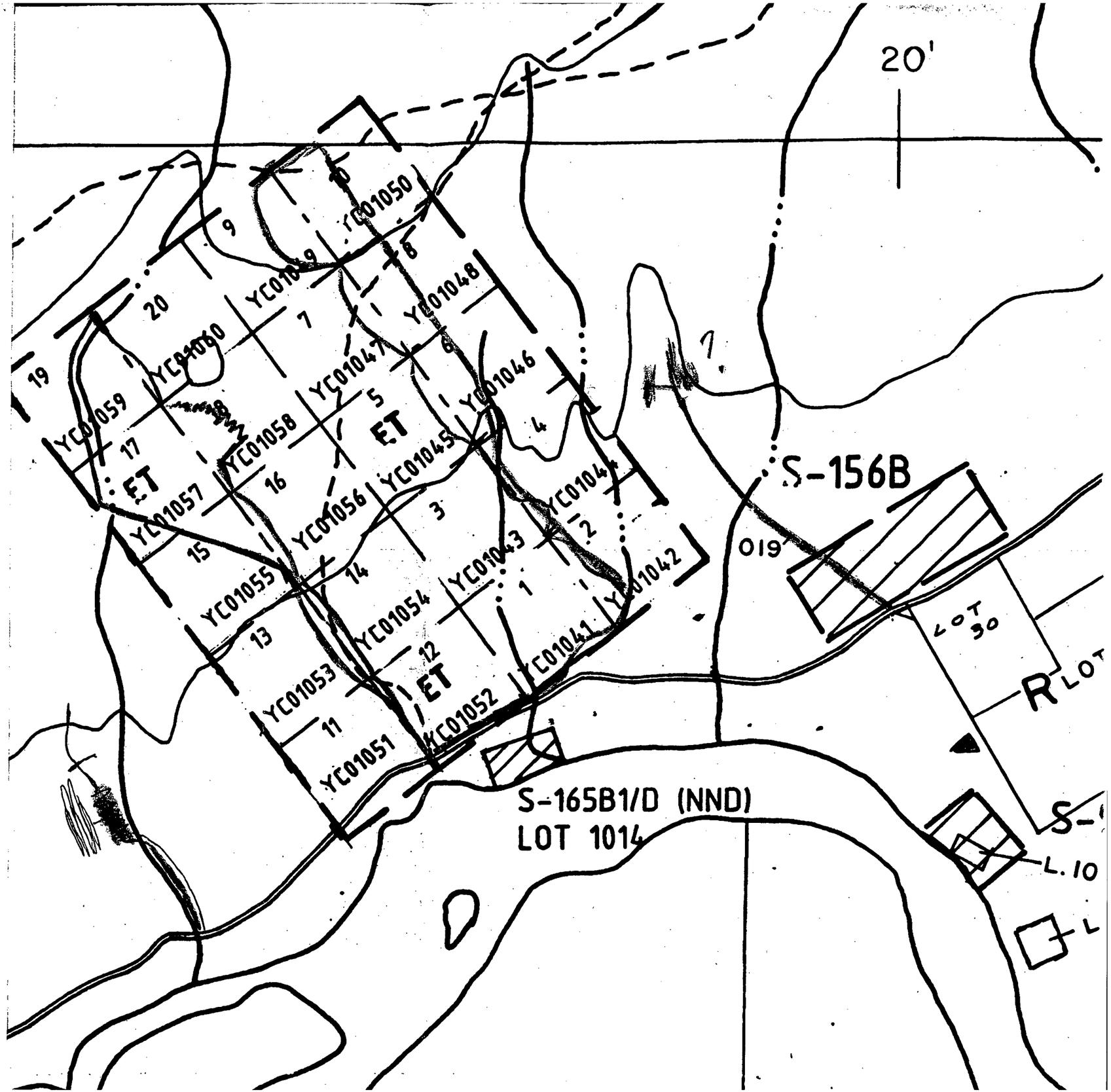
28 Aug 98

29 Aug 98

30 Aug 98

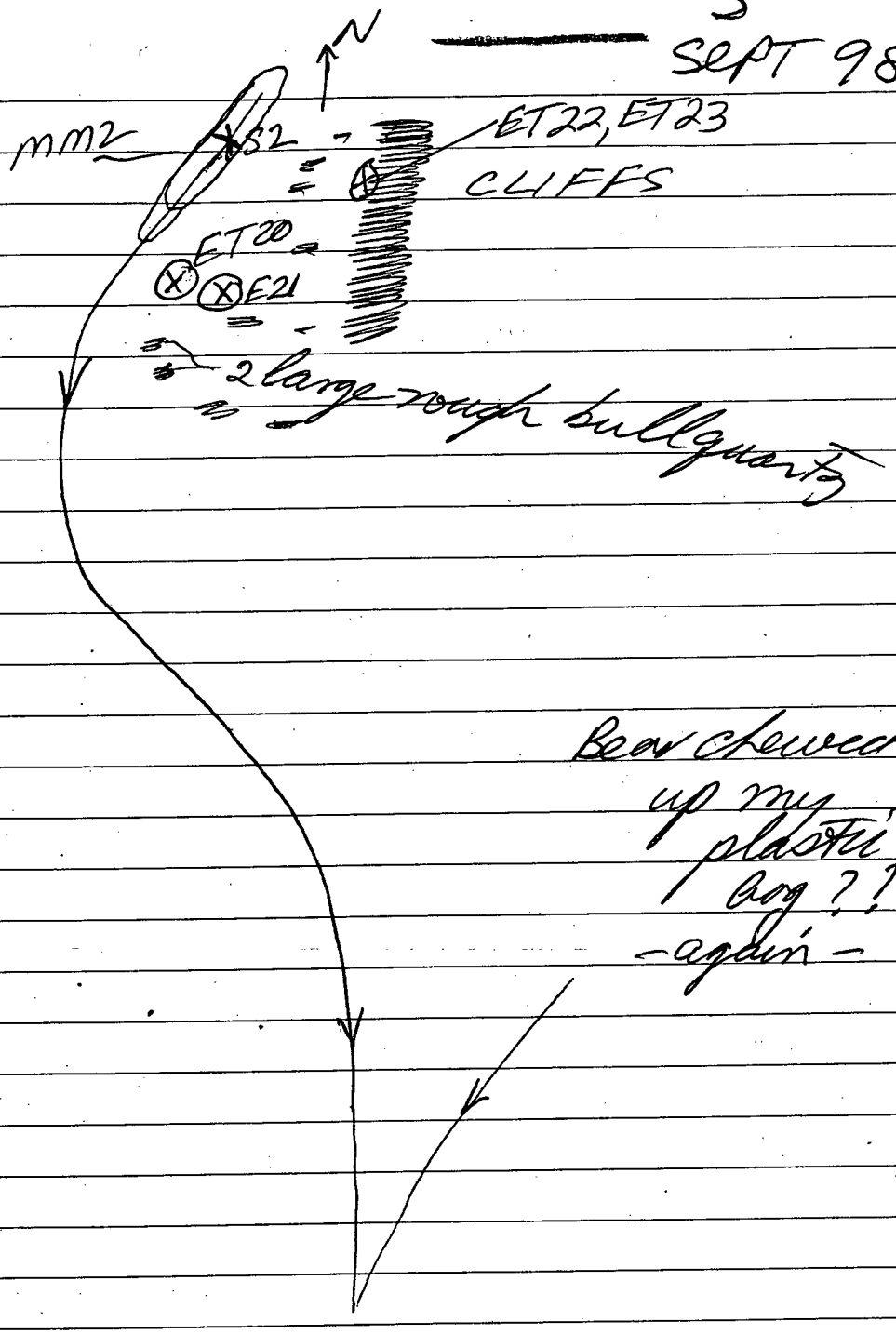
1 Sept 98

2 Sept 98



3

SEPT 98



Bear chewed up my plastic bag ?!!!
-again-

3 sept 98

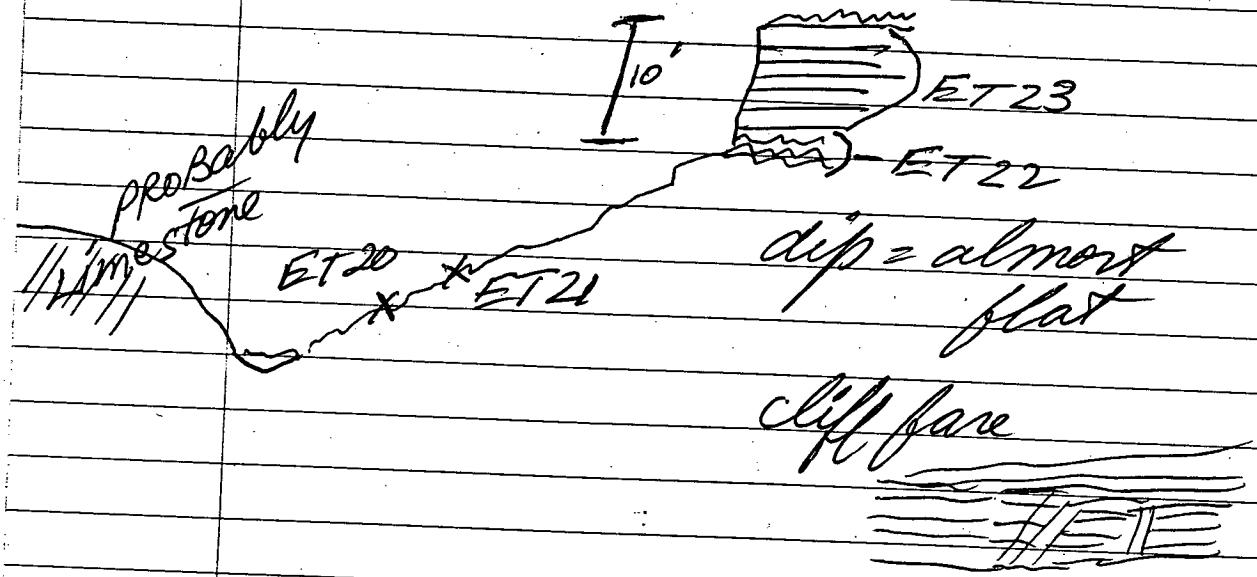
MM2 - moss mats
- took a long, long time
- 2 bags not full
hands + feet frozen

ET 20 - grab bag under fallen tree
red brown zones
white
SiO_2
fractures - prob carbonate
- 12-15' from creek
- Bedrock ?? or slide

ET 21 - just above
- lot of red brown stains
- bedrock

ET 22 - ≈ weaker than top
= about 2' wide - can bend them

ET 23 = harder + above



4
SEPT 94

Went to Mayo to call Galambos, MRA, Kowalchuk & Viceroy. Some new insight into area. Good day.

Did not go out.

5
SEPT 98

MM3+S3 x

not a diff - smaller pieces

while at S3 an animal chewed up all my plastic bags I took at S2 !!!

Pail cracked in bottom

MM2 +S2

ET25-27

ET24

MM1 +S1

all

soft

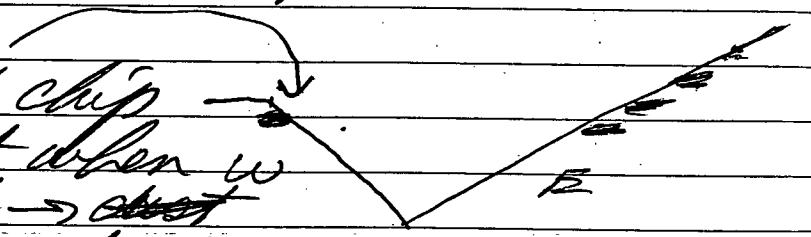
stone

5 Sept 98

S 3 - at 329 yd - 987 feet
- wider creek
- good flow + shallow
- small pebbles
- 2 bags

MM 3 - 2 bags - moss mats.
- hard to get any silt at all

ET 24 - 14" chip
- part when w hit → ~~dust~~ dust



X cliff
ET 27 grab bag of rocks

+10'(?)

ET 25 → chip

+16" hard

+2 1/2"

at least +12"

ET 26 →

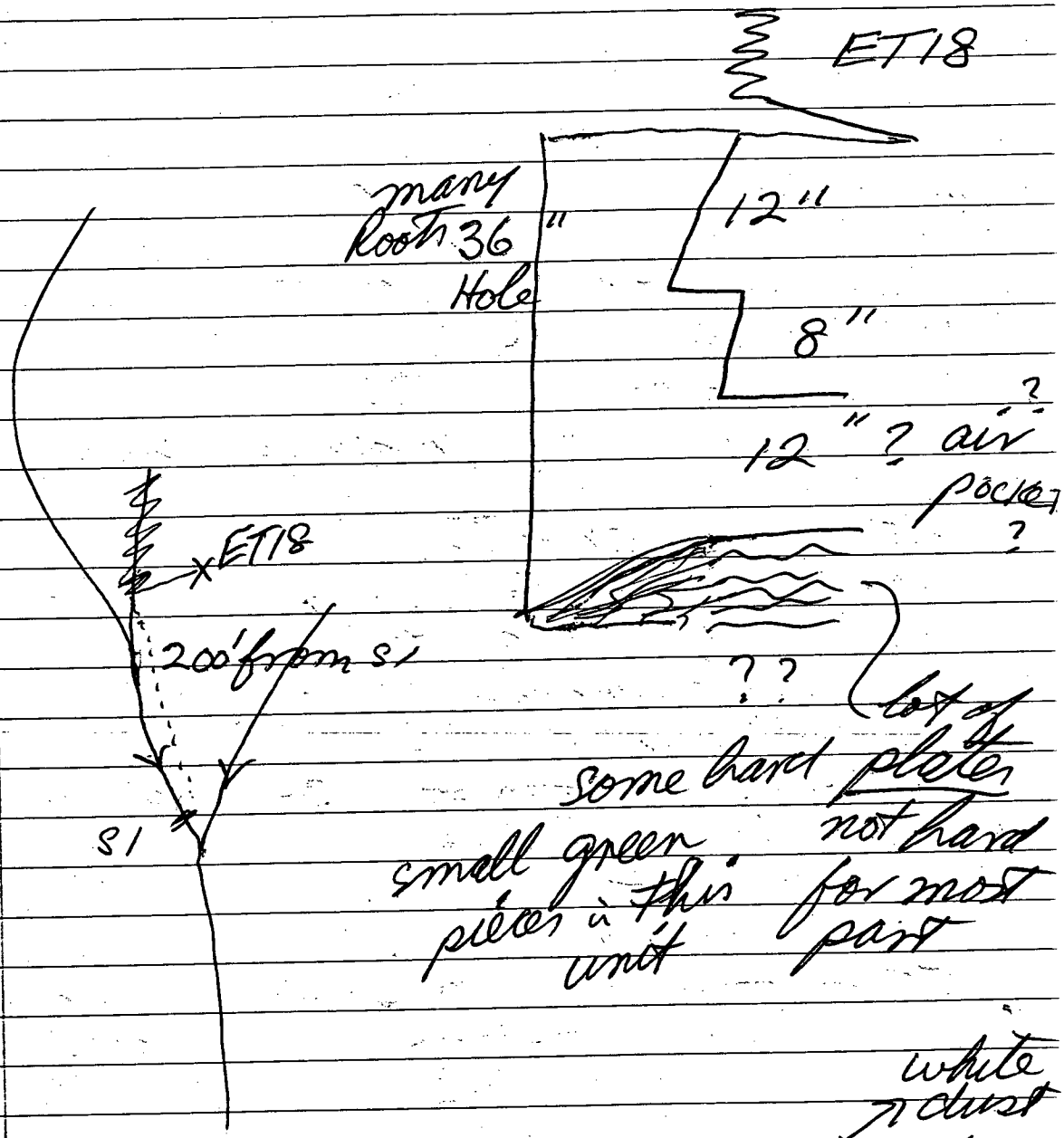
??? hard + soft areas wavy some limestone + quartz

some selected pieces
- carbonate
- quartz areas

Dug a small hole to see how deep wavy areas were!

6
SEPT 98

dismal day



east

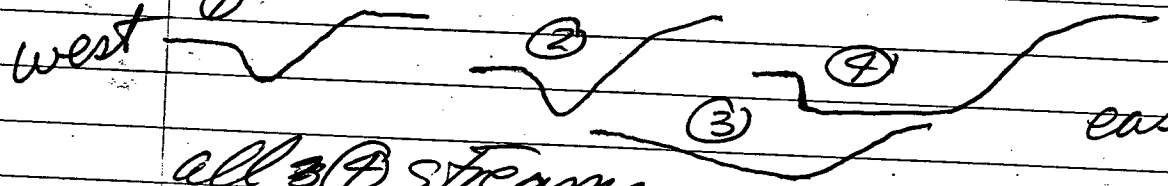
silica

12"?

ET 40 ~ 12" top area

6 Sept 98

Why did I dig hole at ET 18?
It is, stratigraphically closest to limestone bed!



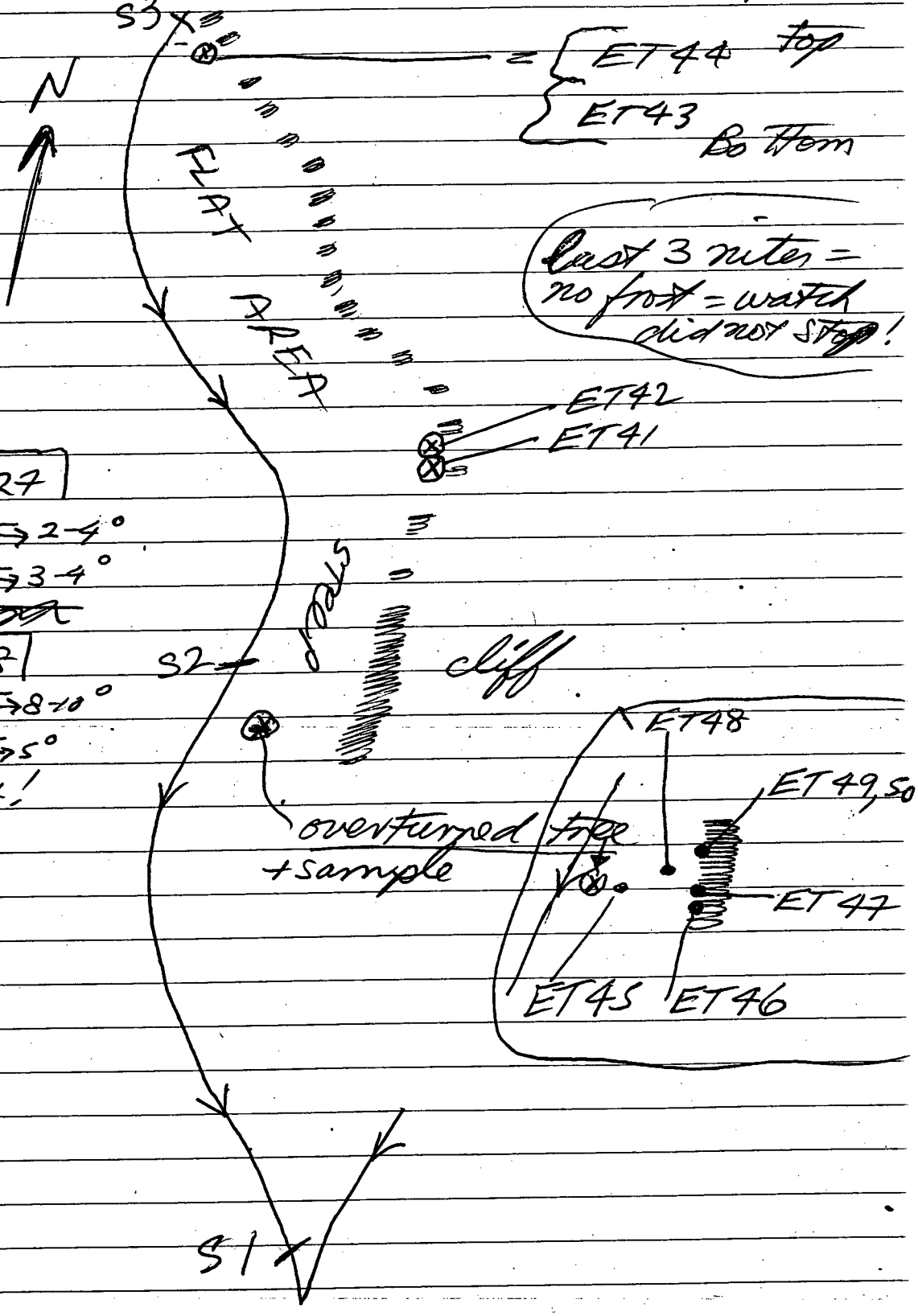
all ③ ④ streams seem to have a higher eastern bank!

→ ET 28 - (12"?) grey - greenish, silica + sulphides **
→ ET 29 - Reddish tinge - ? Cox
ET 30 - greenish - prob (12"?)
→ ET 31 - int brown black areas in ≈ area
ET 32 - 3 heavy green - (12"?)
→ ET 33 - int. quartz + sulphides (12"?)
ET 34 - heavy green cut & (12"?)
ET 35 - large angular in hole quartz rich
→ ET 36 - large platey rock - 2 cross ~~cut~~ quartz?
- in ≈ area
ET 37 - ≈ grab bag of hard heavy pieces
ET 38 - Rough coarse pieces - lower area
→ ET 39 - minute sulphides

ET

good day in am
pm - lot of rain after 3 PM

7 SEPT 98

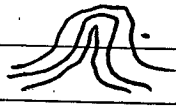


7 Sept 98

3

ET 41 - float angular
- close to top of bedrock / hill
- heavy Q/carb? ~~FE~~
cross foliation
- very heavy + green / cut it

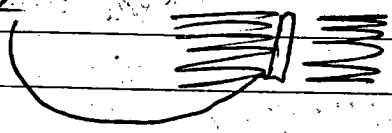
ET 42 - 0 cm ET 41
- 10' north

ET 43 -  twisted
with sulphides

ET 44 grab bag of top of rock

ET 45 interesting rock
?? + other zones
+ reddish areas

ET 46 - in cavity
angular + Q
+ calcite ??
long + angular
from hole ??

ET 47  Q + slickenside

ET 48 chip of boulder

ET 49  quartz - "wedgie"
- in hole in
Bedrock
- strange surface

ET 50 3 "wedgies"

go
PM

dip
ET 2
N-S =
W-E =
ET
N-S =
W-E =
under

8

SEPT 98

Foggy in AM + slight drizzle.

10 – 3 – lite to heavy rain. Now at

4 00 pm plus = cleared up – called Tow.

+KGB in Mayo!

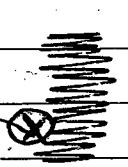
Did not go out.

9
—— SEPT 98

KGB - Ken Galambos came out to see me + to see area - he suggested area to me ~ past.

He was curious about the limestone with leaves + ~~twigs~~ - fossiling ??? !!! Lethbridge !!!

* at ET 49
ET 50

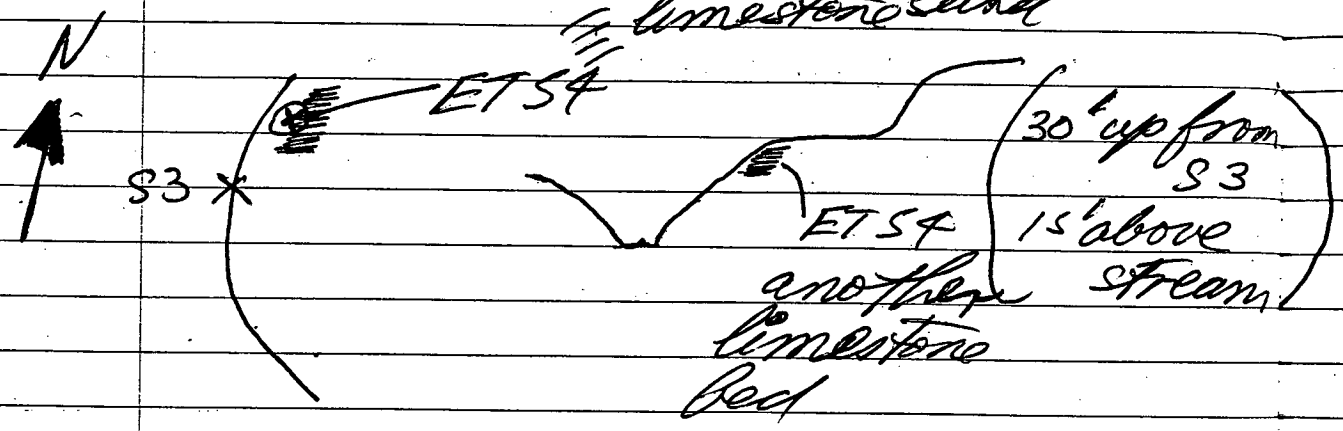


ET 51 - quartz vein at ET 49/50
ET 52 - 6' down from ET 49/50 (stream)
ET 53 - 10' up/above ET 49/50
- some manganese zones

He suggested quartz (vein) should be tested. ? Disseminated ? gold.

9 Sept 98

Found P139033
old Noranda
soil line - east of ET 18



*

some fuzzy holes
= 3½" diameter

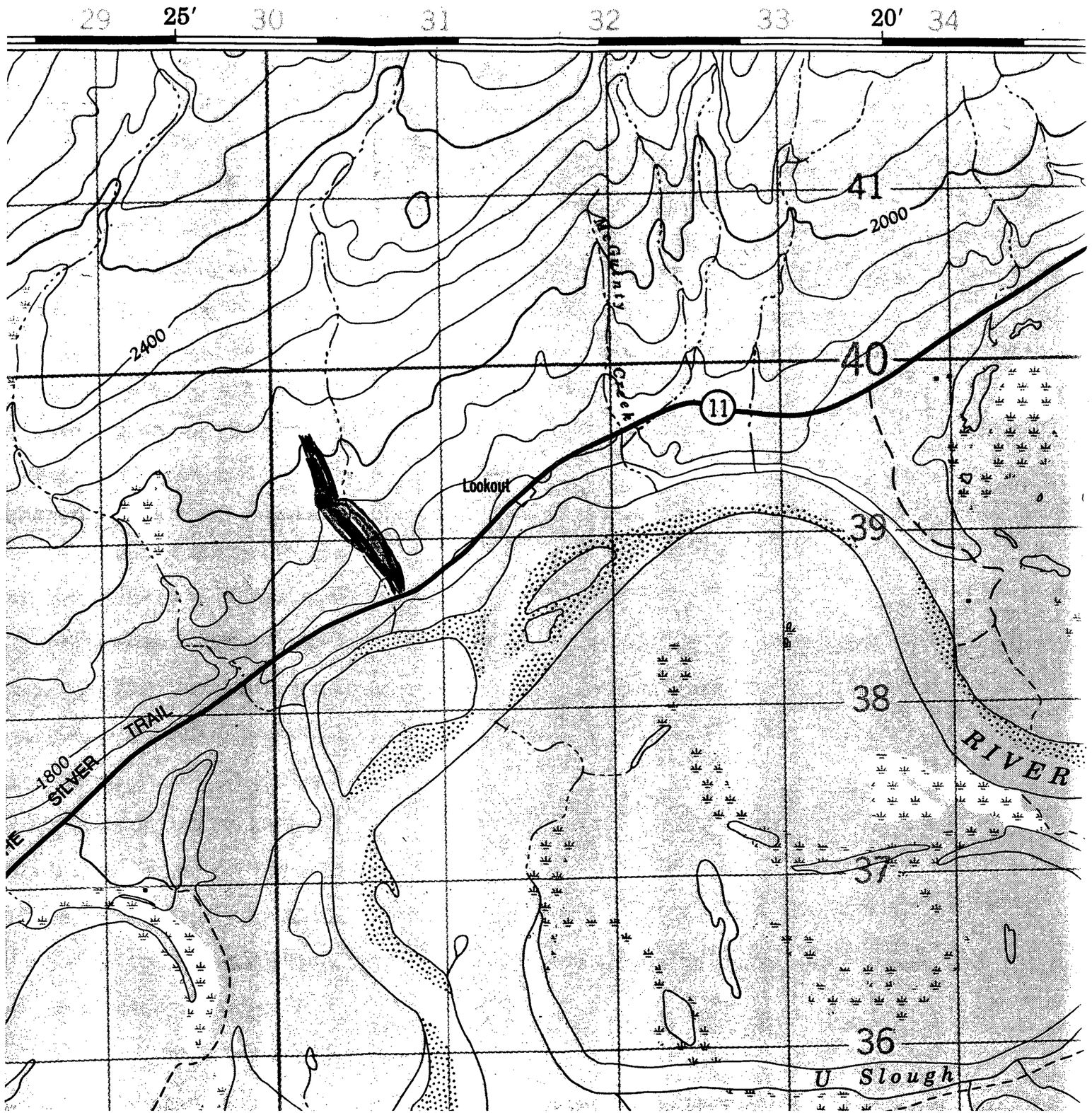
Completed ET 40 chip
(hard middle kept)
reference

3 SEPT 98

~~4~~ SEPT 98
5

6 SEPT 98

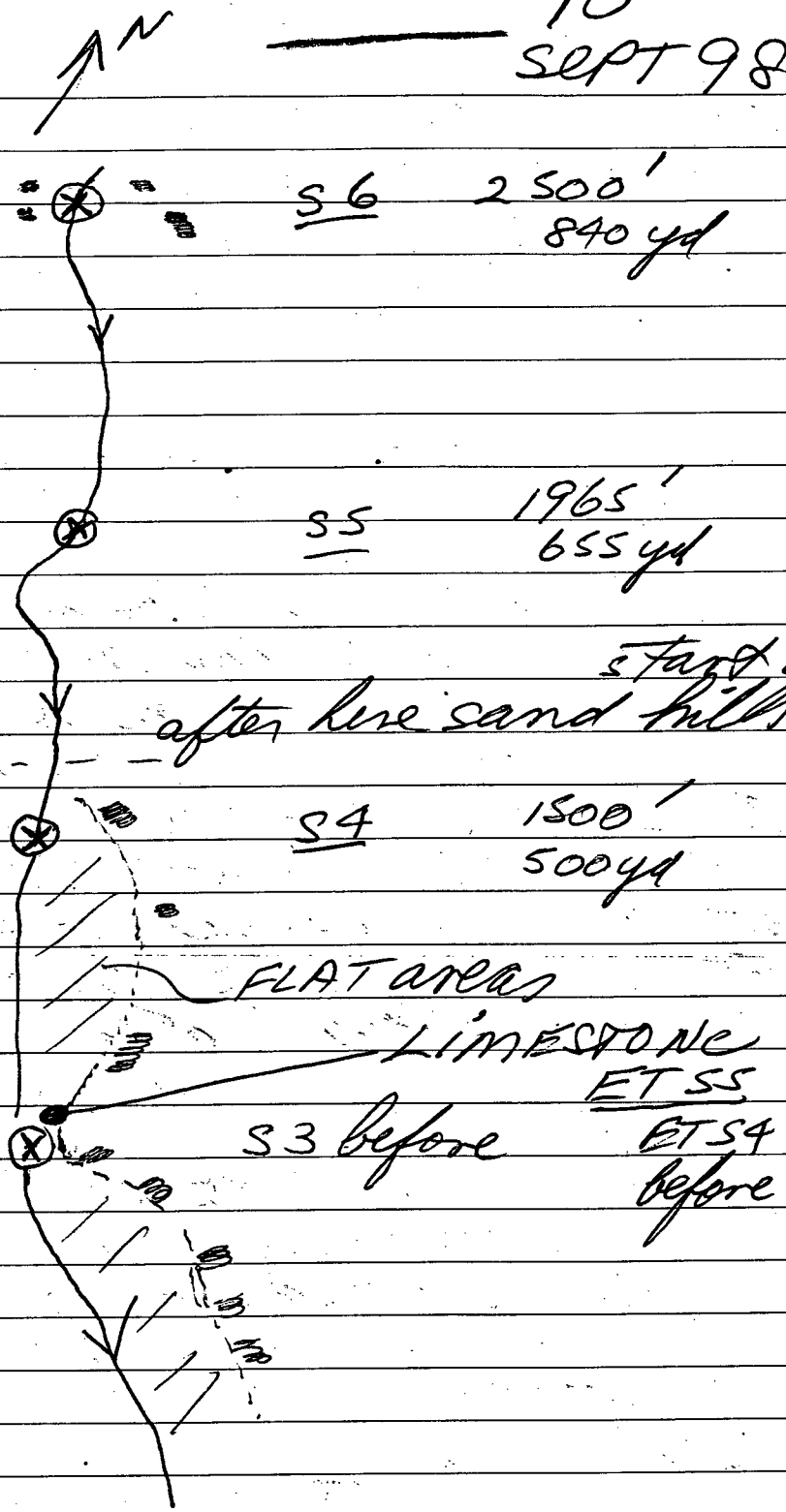
7 SEPT 98
11111
9 SEPT 98



10 SEPT 98

Froze last night

good day today!



10 Sept 98

ET S5 - bedrock limestone
- grab bag of diff. types

S4 - silt - not fast - not slow
- small sand + stones

S5 - silt - good flow - up to 12"
- med - rocks - some rough
- no limestone chips seen in stream
- dug up shovel to check

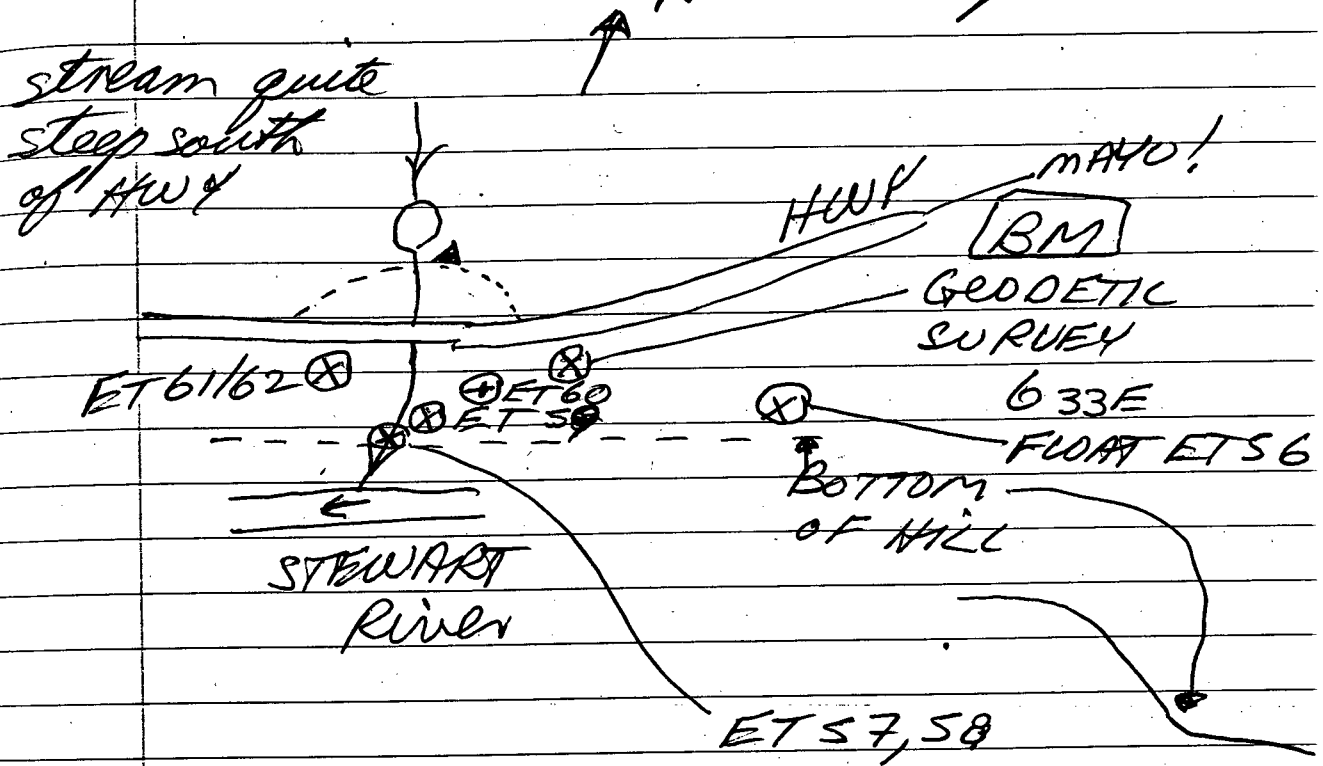
S6 - silt - 3'-6' wide
- gentle flow
- smaller stones
- no limestone seen

before + after S5 - eastern side
- very steep sand hills

Bedrock east of S6, S4 (Beckbed out) sim. to areas south

11
SEPT 98

These sand hills can be quite steep + have many rose hip bushes + spikes!!!



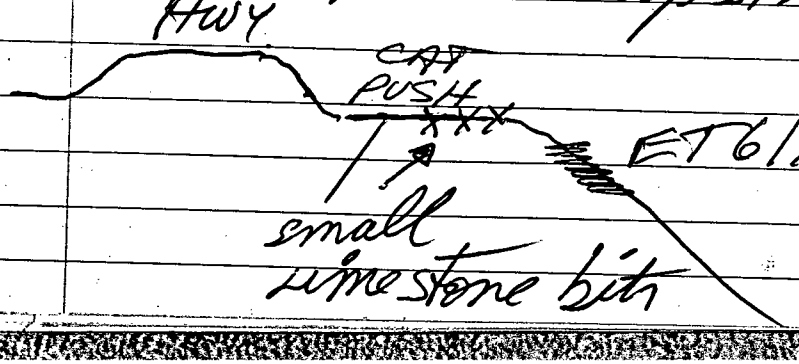
It surprised me to see bedrock at ET 61/62

* Remembered now Hot springs + B land claim Block on upper Partridge Cr (N of Mt Question River

any correlation for !!!

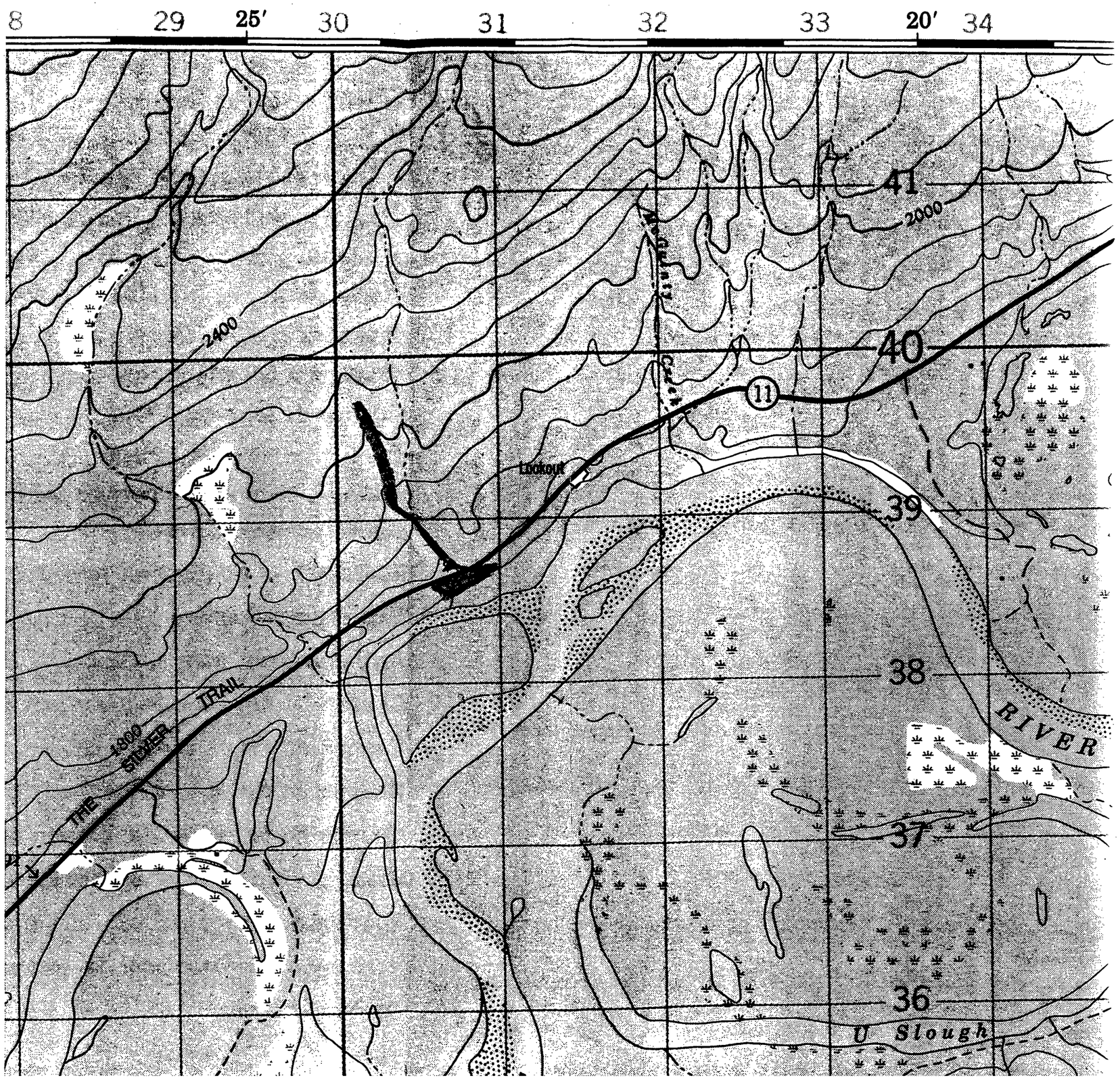
11 Sept 98

ET 56 Rough float
≈ long area of sand + veg.
ET 57 ≈ stream
float limestone (Reddish tinge)
Stream has rocks up to 12" across - smooth mostly
dug up stream looking for 2nd limestone - found 1 more only + X Reddy (45 minutes)
ET 58 float - a veins
Round cut
ET 59 a up off stream
ET 60 green phyllite a lot + limey edge (of float)
ET 61/62 Bedrock!!! Here WOW!!!
61 = grab bag limestone
62 = big piece - browner than upstream



10 sept 98

11 SEPT 98



12
SEPT 98

Back in White Horse.

206,000 KM

-204,609

1,391 Round trip

SHEET 105N-12

NOTICE

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SCALE ½ MILE To 1 INCH

FT. 1500 0 1500 3000 4500 6000 7500 9000 10500 FT.

MAGNETIC NORTH N.33°-50'E

105M-16	105N-13	105N-14
105M-9	105N-12	105N-11
105M-8	105N-5	105N-6

Note: Entry on certain lands is withdrawn from staking in cross-hatched areas to facilatate the settlement of Native Land Claims without prejudice to Existing Surface and Subsurface Rights.

NND = FIRST NATION OF NACHO NYAK DUN

WHITEHORSE, Y.T.

14 Nov. 1973
1 Nov. 1971

26 MAY 97 L
18 APR 95
29 NOV 91
03 JULY 91
27 MAY 79

134° 00'
63° 45'
133° 30'

PENAPE LAKE

105M09-0000-0003

RIVER

2500

STEWART

AREA OF INTEREST

RAINBOW CREEK

4329

R-18B (NND)

3500

4000

Canyon

HESS RIVER

Pleasant

Creek

63° 30'

105N-12

Indian and Northern Affairs Canada / Affaires indiennes et du Nord Canada

Northern Affairs Program / Programme des affaires du Nord

Mineral Rights Droits miniers

Canada

115N-15

QUARTZ

LATITUDE 63° 45' TO 64° 00'
LONGITUDE 140° 30' TO 141° 00'

ISSUED UNDER THE AUTHORITY OF THE MINISTER
OF
INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

SCALE 1:30,000

METRES 1000 0 1000 2000 METRES
FEET 1500 0 1500 3000 4500 6000 7500 9000 10500 FEET

N MAGNETIC NORTH N30° 01' E

NOTE:

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TOPOGRAPHY COMPILED FROM 1:50,000 NATIONAL TOPOGRAPHIC SERIES.
CONTOUR INTERVAL 500 FEET.
SURVEY INFORMATION COMPILED FROM LEGAL SURVEYS, BY DRAFTING SERVICES.

	116C-2	116C-1
	115N-15	115N-16
	115N-10	115N-9

FOR PLACER WITHIN DASHED LINES SEE 1:10,000
FOR PLACER SEE 115N-15PL

09 SEPT 97
04 FEB 97
06 NOV 96
21 OCT 96
5 JUN 96
29 JULY 93
22 FEB 93
25 JAN 93
20 NOV 92
24 AUG 92
28 JAN 92
24 MAR 91
21 NOV 90
25 APR 90
14 DEC 89

DAWSON 28 JULY 89

115N-15i 115N-15h

141° 00' 55' 50' 45' 40' 35' 140° 30'
64° 00' 55' 50' 45' 63° 45'

Bedrock Hill
Bedrock
BED ROCK CREEK PROJECT
Pat Murphy Creek
Sixty Mile
Mosquito Creek
ROAD
Quartz River
Mount Nolan 4566
Bourdelais Gulch
Boucher Creek
Randler Gulch
Butler Gulch
Fifty Mile Creek
Alaska
Yukon
Crag Mountain 5020
North Ladue River
3820
4023
5434Δ

115N-15