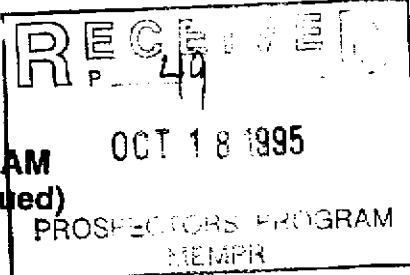


BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
MINISTRY OF ENERGY AND MINES
GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR: 1995/1996

REPORT #: PAP 95-22

NAME: ROBERT RUSSELL



BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- Refer to Program Requirements/Regulations, section 15, 16 and 17.
- If work was performed on claims a copy of the applicable assessment report may be submitted in lieu of the supporting data (see section 16) required with this TECHNICAL REPORT.

Name Robert Russell Reference Number 95/96 P049

LOCATION/COMMODITIES

Project Area (as listed in Part A) Tootsee Lake Map Area MINFILE No. if applicable _____

Location of Project Area NTS 104 0 16 Lat 59° 45' - 60° 00' Long 130° 00' - 130° 30'

Description of Location and Access AT Mile 701 Alaska highway turn left and follow Midway Mining Road for 21 KM (southerly direction). You then follow an old cat road using 4x4 for 7 KM to arrive at project area.

Main Commodities Searched For Ag Pb, Zn exhalites; Cu^{volcanogenetic}; Nephrite lodes

Known Mineral Occurrences in Project Area Ag, Pb & Zn

WORK PERFORMED

1. Conventional Prospecting (area) 3200 hectares
2. Geological Mapping (hectares/scale) 500 hectares
3. Geochemical (type and no. of samples) silt sampling 9 sample sites
4. Geophysical (type and line km) -
5. Physical Work (type and amount) 4 KM line cutting; rock sampling and digging
6. Drilling (no., holes, size, depth in m, total m) _____
7. Other (specify) _____

15 samples taken

SIGNIFICANT RESULTS

Commodities Cu, Ag Claim Name _____

Location (show on map) Lat sample no. 4 Long Rock sample Elevation 5248'

Best assay/sample type Rock sample - Ag 5410ppb; Cu 310ppm, Ag 9.9 ppm

Description of mineralization, host rocks, anomalies Rock sample no. 4 orange-yellow weathering siliceous laminated argillaceous slate Page Day 14 in Field notes.



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
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PHONE: 604-984-0221 FAX: 604-984-0218

To: RUSSELL, ROBERT M.

P.O. BOX 894
FORT NELSON, BC
V0C 1R0

A9528237

Comments:

CERTIFICATE

A9528237

(ISL) - RUSSELL, ROBERT M.

Project:

P.O. #:

Samples submitted to our lab in Vancouver, BC.
This report was printed on 28-SEP-95.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
299	9	Pulp; prepped on other workorder
3296	9	Ultra trace digestion

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
1941	9	Ag ppm: Ultra trace package	EXT-ICP	0.02	200
1092	9	As ppm: Ultra trace package	EXT-ICP	0.2	5000
1094	9	Bi ppm: Ultra trace package	EXT-ICP	0.2	5000
1095	9	Cd ppm: Ultra trace package	EXT-ICP	0.1	1000
1097	9	Cu ppm: Ultra trace package	EXT-ICP	0.2	5000
20	9	Hg ppb: HNO3-HCl digestion	AAS-FLAMELESS	10	100000
1939	9	Mo ppm: Ultra trace package	EXT-ICP	0.2	5000
1933	9	Pb ppm: Ultra trace package	EXT-ICP	0.5	5000
1089	9	Sb ppm: Ultra trace package	EXT-ICP	0.2	1000
1946	9	Zn ppm: Ultra trace package	EXT-ICP	1	5000



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 Account : ISL

CERTIFICATE OF ANALYSIS A9528237

SAMPLE	PREP CODE	Ag ppm	As ppm	Bi ppm	Cd ppm	Cu ppm	Hg ppb	Mo ppm	Pb ppm	Sb ppm	Zn ppm
1	2993296	0.36	8.2	< 0.2	2.9	22.6	80	2.6	18.5	1.2	241
2	2993296	0.14	10.4	0.4	0.6	17.8	30	3.0	15.0	1.8	138
3	2993296	0.20	7.8	0.4	3.2	18.6	30	2.0	13.5	0.4	244
4	2993296	0.20	6.4	0.2	3.4	17.6	40	2.0	13.0	0.2	257
5	2993296	0.20	6.8	0.2	3.1	18.2	40	2.0	12.5	0.4	238
6	2993296	0.12	3.2	0.4	0.4	7.8	40	1.2	10.0	0.4	8
7	2993296	0.56	9.0	0.4	11.7	20.6	80	3.8	28.0	2.0	528
8	2993296	0.14	3.0	0.4	8.3	14.6	40	1.8	7.5	0.4	128
9	2993296	0.32	6.0	0.6	4.4	34.0	30	4.8	29.5	2.4	514

CERTIFICATION:

Hart Beckler



Chemex Labs Ltd.

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(ISL) - RUSSELL, ROBERT M.

Project:
P.O. #:

Samples submitted to our lab in Vancouver, BC.
This report was printed on 21-SEP-95.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	9	Dry, sieve to -80 mesh
285	9	ICP - HF digestion charge

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
578	9	Ag ppm: 24 element, rock & core	AAS	0.2	200
573	9	Al %: 24 element, rock & core	ICP-AES	0.01	25.0
565	9	Ba ppm: 24 element, rock & core	ICP-AES	10	10000
575	9	Be ppm: 24 element, rock & core	ICP-AES	0.5	1000
561	9	Bi ppm: 24 element, rock & core	ICP-AES	2	10000
576	9	Ca %: 24 element, rock & core	ICP-AES	0.01	25.0
562	9	Cd ppm: 24 element, rock & core	ICP-AES	0.5	500
563	9	Co ppm: 24 element, rock & core	ICP-AES	1	10000
569	9	Cr ppm: 24 element, rock & core	ICP-AES	1	10000
577	9	Cu ppm: 24 element, rock & core	ICP-AES	1	10000
566	9	Fe %: 24 element, rock & core	ICP-AES	0.01	25.0
584	9	K %: 24 element, rock & core	ICP-AES	0.01	10.00
570	9	Mg %: 24 element, rock & core	ICP-AES	0.01	15.00
568	9	Mn ppm: 24 element, rock & core	ICP-AES	5	10000
554	9	Mo ppm: 24 element, rock & core	ICP-AES	1	10000
583	9	Na %: 24 element, rock & core	ICP-AES	0.01	10.00
564	9	Ni ppm: 24 element, rock & core	ICP-AES	1	10000
559	9	P ppm: 24 element, rock & core	ICP-AES	10	10000
560	9	Pb ppm: 24 element, rock & core	AAS	2	10000
582	9	Sr ppm: 24 element, rock & core	ICP-AES	1	10000
579	9	Ti %: 24 element, rock & core	ICP-AES	0.01	10.00
572	9	V ppm: 24 element, rock & core	ICP-AES	1	10000
556	9	W ppm: 24 element, rock & core	ICP-AES	10	10000
558	9	Zn ppm: 24 element, rock & core	ICP-AES	2	10000



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CERTIFICATE OF ANALYSIS A9528236

SAMPLE	PREP CODE	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)	Mn ppm (ICP)
1 <i>silt</i>	201 285	< 0.2	4.28	2190	0.5	< 2	4.61	3.5	16	58	31	2.73	1.45	2.77	545
2 "	201 285	< 0.2	3.62	1490	< 0.5	< 2	8.69	1.0	12	53	25	2.55	1.11	5.13	370
3 "	201 285	< 0.2	5.18	1720	0.5	< 2	3.93	3.5	15	68	25	2.77	1.53	2.22	580
4 "	201 285	< 0.2	5.30	1810	< 0.5	2	4.21	4.5	16	74	28	2.96	1.60	2.45	650
5 "	201 285	< 0.2	5.08	1720	0.5	< 2	3.80	3.5	15	66	23	2.67	1.55	2.11	575
6 "	201 285	< 0.2	4.67	1450	0.5	< 2	3.63	0.5	8	34	12	1.91	1.36	1.67	51
7 "	201 285	0.4	4.99	2230	0.5	4	1.10	11.5	12	71	23	2.38	1.55	0.59	585
8 "	201 285	< 0.2	4.86	1340	0.5	6	2.71	9.0	11	36	18	1.53	1.35	0.98	330
9 "	201 285	< 0.2	6.04	2080	0.5	4	0.62	3.5	10	79	34	2.65	2.16	0.75	225

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CERTIFICATE OF ANALYSIS

A9528236

SAMPLE	PREP CODE	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)				
1 <i>silt</i>	201 285	1	0.44	36	1400	24	79	0.45	191	< 10	274				
2 "	201 285	1	0.39	34	870	20	111	0.41	149	< 10	150				
3 "	201 285	2	1.09	38	1120	18	205	0.46	137	< 10	248				
4 "	201 285	1	1.07	40	1260	20	201	0.47	148	< 10	296				
5 "	201 285	1	1.10	36	1080	20	209	0.46	135	< 10	232				
6 "	201 285	< 1	1.23	14	1460	20	275	0.28	102	< 10	92				
7 "	201 285	4	0.81	51	2220	34	173	0.30	263	< 10	518				
8 "	201 285	< 1	1.17	46	1400	20	297	0.21	122	< 10	146				
9 "	201 285	2	0.65	44	1010	28	117	0.32	275	< 10	450				

CERTIFICATION: _____

John D. Ma



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(ISL) - RUSSELL, ROBERT M.

Project:
P.O. #:

Samples submitted to our lab in Vancouver, BC.
This report was printed on 25-SEP-95.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	15	Geochem ring to approx 150 mesh
226	15	0-3 Kg crush and split
3204	15	Save 1 Kg reject for 90 days
285	15	ICP - HF digestion charge

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
983	15	Au ppb: Fuse 30 g sample	FA-AAS	5	10000
578	15	Ag ppm: 24 element, rock & core	AAS	0.2	200
573	15	Al %: 24 element, rock & core	ICP-AES	0.01	25.0
565	15	Ba ppm: 24 element, rock & core	ICP-AES	10	10000
575	15	Be ppm: 24 element, rock & core	ICP-AES	0.5	1000
561	15	Bi ppm: 24 element, rock & core	ICP-AES	2	10000
576	15	Ca %: 24 element, rock & core	ICP-AES	0.01	25.0
562	15	Cd ppm: 24 element, rock & core	ICP-AES	0.5	500
563	15	Co ppm: 24 element, rock & core	ICP-AES	1	10000
569	15	Cr ppm: 24 element, rock & core	ICP-AES	1	10000
577	15	Cu ppm: 24 element, rock & core	ICP-AES	1	10000
566	15	Fe %: 24 element, rock & core	ICP-AES	0.01	25.0
584	15	K %: 24 element, rock & core	ICP-AES	0.01	10.00
570	15	Mg %: 24 element, rock & core	ICP-AES	0.01	15.00
568	15	Mn ppm: 24 element, rock & core	ICP-AES	5	10000
554	15	Mo ppm: 24 element, rock & core	ICP-AES	1	10000
583	15	Na %: 24 element, rock & core	ICP-AES	0.01	10.00
564	15	Ni ppm: 24 element, rock & core	ICP-AES	1	10000
559	15	P ppm: 24 element, rock & core	ICP-AES	10	10000
560	15	Pb ppm: 24 element, rock & core	AAS	2	10000
582	15	Sr ppm: 24 element, rock & core	ICP-AES	1	10000
579	15	Ti %: 24 element, rock & core	ICP-AES	0.01	10.00
572	15	V ppm: 24 element, rock & core	ICP-AES	1	10000
556	15	W ppm: 24 element, rock & core	ICP-AES	10	10000
558	15	Zn ppm: 24 element, rock & core	ICP-AES	2	10000



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CERTIFICATE OF ANALYSIS A9528238

SAMPLE	PREP CODE	Au ppb FA+AA	Ag ppm AAS	Al % (ICP)	Ba ppm (ICP)	Be ppm (ICP)	Bi ppm (ICP)	Ca % (ICP)	Cd ppm (ICP)	Co ppm (ICP)	Cr ppm (ICP)	Cu ppm (ICP)	Fe % (ICP)	K % (ICP)	Mg % (ICP)
01	205 226	< 5	< 0.2	0.51	70	< 0.5	< 2	0.12	< 0.5	3	263	4	1.32	0.05	0.03
02	205 226	< 5	< 0.2	1.90	690	< 0.5	< 2	4.68	1.0	9	182	9	7.44	0.66	1.80
03	205 226	< 5	0.6	0.10	60	< 0.5	< 2	0.01	0.5	1	350	10	0.42	0.02	0.01
04	205 226	< 5	9.0	2.82	830	< 0.5	< 2	0.80	3.0	1	202	306	0.68	0.82	0.52
05	205 226	< 5	1.0	0.77	470	< 0.5	< 2	0.01	1.0	1	321	32	0.78	0.27	0.09
06	205 226	< 5	1.0	1.16	470	< 0.5	< 2	0.01	0.5	< 1	173	9	0.53	0.47	0.1
07	205 226	< 5	0.4	2.73	710	< 0.5	< 2	0.14	< 0.5	5	241	5	1.46	0.95	0.11
08	205 226	< 5	0.2	0.44	90	< 0.5	2	0.30	< 0.5	2	270	7	1.11	0.10	0.15
09	205 226	< 5	1.6	1.48	1840	< 0.5	2	0.02	< 0.5	1	178	61	7.47	0.56	0.18
10	205 226	< 5	< 0.2	0.11	20	< 0.5	< 2	0.06	< 0.5	1	260	4	0.45	< 0.01	0.01
11	205 226	< 5	< 0.2	0.11	10	< 0.5	< 2	0.28	< 0.5	1	260	3	0.48	< 0.01	0.01
12	205 226	< 5	< 0.2	0.09	10	< 0.5	< 2	0.12	< 0.5	2	317	4	0.53	< 0.01	0.01
13	205 226	< 5	0.6	0.10	20	< 0.5	2	0.16	< 0.5	8	284	52	3.24	0.03	0.06
14	205 226	< 5	0.2	1.43	370	< 0.5	< 2	4.49	< 0.5	4	233	20	2.88	0.50	1.51
15	205 226	< 5	0.2	0.84	200	< 0.5	< 2	0.66	< 0.5	4	307	16	1.21	0.29	0.31

CERTIFICATION:

Hank Bickler



Chemex Labs Ltd.

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 FORT NELSON, BC
 V0C 1R0

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CERTIFICATE OF ANALYSIS A9528238

SAMPLE	PREP CODE	Mn ppm (ICP)	Mo ppm (ICP)	Na % (ICP)	Ni ppm (ICP)	P ppm (ICP)	Pb ppm AAS	Sr ppm (ICP)	Ti % (ICP)	V ppm (ICP)	W ppm (ICP)	Zn ppm (ICP)			
01	205 226	290	1	0.01	10	510	< 2	21	0.01	10	< 10	46			
02	205 226	1590	< 1	0.06	36	510	10	257	0.06	57	< 10	180			
03	205 226	20	5	< 0.01	7	130	< 2	9	< 0.01	65	< 10	64			
04	205 226	30	7	0.01	19	220	< 2	41	0.01	2970	< 10	184			
05	205 226	15	23	< 0.01	12	210	20	10	0.03	675	< 10	168			
06	205 226	10	33	< 0.01	5	90	12	8	0.06	881	< 10	48			
07	205 226	60	1	0.08	21	730	< 2	34	0.14	104	< 10	12			
08	205 226	305	1	0.01	8	170	< 2	13	0.01	19	< 10	32			
09	205 226	25	335	0.01	10	860	144	6	0.06	1395	< 10	70			
10	205 226	95	1	0.06	8	210	< 2	8	< 0.01	4	< 10	18			
11	205 226	130	1	0.05	7	760	4	29	< 0.01	3	< 10	40			
12	205 226	105	1	0.03	10	260	4	10	< 0.01	4	< 10	36			
13	205 226	75	1	< 0.01	54	70	< 2	7	< 0.01	4	< 10	6			
14	205 226	530	< 1	0.04	23	500	< 2	116	0.05	49	< 10	14			
15	205 226	155	1	0.02	19	290	< 2	37	0.03	31	< 10	8			

CERTIFICATION: _____



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Comments:

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(ISL) - RUSSELL, ROBERT M.

Project:
P.O. #:

Samples submitted to our lab in Vancouver, BC.
This report was printed on 28-SEP-95.

SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
299	11	Pulp; prepped on other workorder
3296	11	Ultra trace digestion

ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
1941	11	Ag ppm: Ultra trace package	EXT-ICP	0.02	200
1092	11	As ppm: Ultra trace package	EXT-ICP	0.2	5000
1094	11	Bi ppm: Ultra trace package	EXT-ICP	0.2	5000
1095	11	Cd ppm: Ultra trace package	EXT-ICP	0.1	1000
1097	11	Cu ppm: Ultra trace package	EXT-ICP	0.2	5000
20	11	Hg ppb: HNO3-HCl digestion	AAS-FLAMELESS	10	100000
1939	11	Mo ppm: Ultra trace package	EXT-ICP	0.2	5000
1933	11	Pb ppm: Ultra trace package	EXT-ICP	0.5	5000
1089	11	Sb ppm: Ultra trace package	EXT-ICP	0.2	1000
1946	11	Zn ppm: Ultra trace package	EXT-ICP	1	5000



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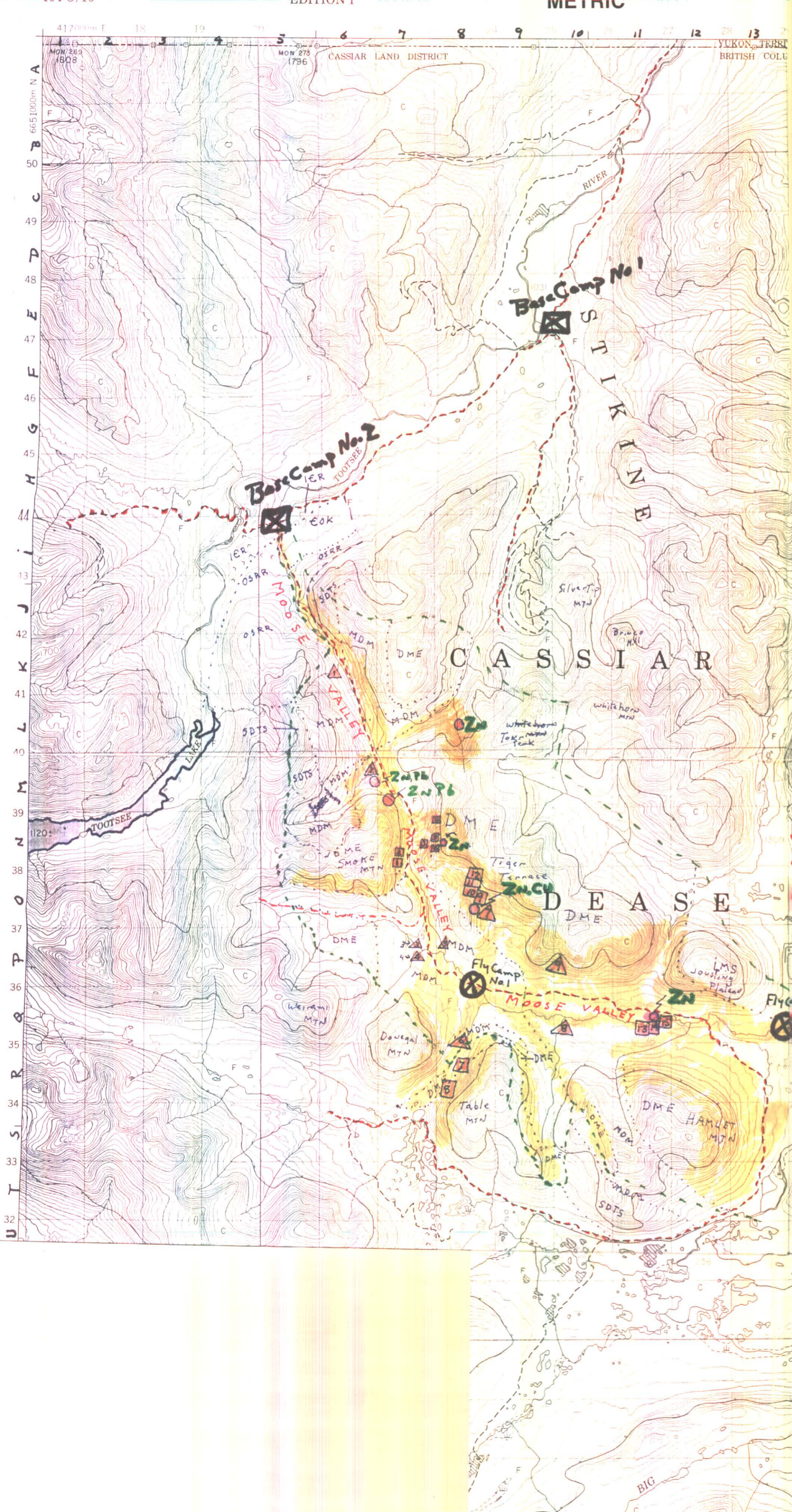
CERTIFICATE OF ANALYSIS

A9528239

SAMPLE	PREP CODE	Ag ppm	As ppm	Bi ppm	Cd ppm	Cu ppm	Hg ppb	Mo ppm	Pb ppm	Sb ppm	Zn ppm
01	2993296	0.02	2.8	< 0.2	0.1	3.8	< 10	0.6	1.5	0.4	45
02	2993296	0.08	6.8	0.4	1.5	7.6	20	0.8	16.5	< 0.2	198
03	2993296	0.26	6.6	< 0.2	1.0	8.2	240	4.6	1.5	6.0	71
04	2993296	9.90	81.0	< 0.2	4.1	310	5410	8.0	1.0	45.6	218
05	2993296	0.90	23.6	0.4	1.4	28.6	170	25.0	22.0	21.8	186
06	2993296	0.72	10.2	0.4	0.7	7.2	190	36.0	13.0	11.2	51
07	2993296	0.10	28.4	0.4	< 0.1	4.6	10	2.0	3.5	0.4	12
08	2993296	0.06	5.4	0.2	0.1	6.0	10	1.0	3.5	0.4	36
09	2993296	1.36	270	0.4	1.2	57.2	170	393	145.5	173.0	85
10	2993296	0.02	2.0	0.2	0.2	3.8	< 10	3.4	1.0	0.8	22
11	2993296	< 0.02	0.8	0.2	0.2	3.0	10	0.8	0.5	< 0.2	43

CERTIFICATION:

Hunter Bickler



- MPs** Red, green, pink, grey, black chert and argillite, minor calcarenite lenses, rare amygdaloidal basalt
- DEVONIAN TO MISSISSIPPIAN**
- EARN GROUP**
- DMEs** Slate (variably graphitic, calcareous, pyritic), siltstone, sandstone, conglomerate, porcellanite, dark grey limestone, siliceous and baritic exhalite
- MIDDLE DEVONIAN**
- MCDAME GROUP**
- mDM** Limestone, dolostone, limestone-dolostone breccia
- SILURIAN TO LOWER DEVONIAN**
- TAPIOCA SANDSTONE**
- SDTs** Dolomitic quartz arenite, quartzite, dolostone, limestone
- ORDOVICIAN TO LOWER DEVONIAN**
- SANDPILE GROUP**
- OSDs** Dolostone, limestone, dolomitic quartz arenite, siltstone, quartzite
- ORDOVICIAN TO SILURIAN**
- ROAD RIVER GROUP**
- OSRR** Black, commonly limy slate, locally graphitic, argillaceous limestone
- CAMBRIAN TO ORDOVICIAN**
- KECHIKA GROUP**
- EOk** Pale-coloured calcareous slate, siltstone, limestone, calcisilicate and biotite hornfels (may include some OSRR)
- BLUE DOME FAULT ZONE**
- PERMIAN AND OLDER?**
- BLUE DOME MELANGE**
- IBDM** Serpentinite-matrix melange: serpentinite, blocks and slice of gabbro, basalt, ultramafite; tectonic, debris-flow and talus breccia
- AGE UNKNOWN**
- SOUTH POST RIDGE VOLCANICS**
- ISPV** Trachyandesite, latite flows, subvolcanic intrusions, pyroclastic and epiclastic equivalents

- approx coverage represented by fieldnotes dealing with Earn Group black clastics (turbidites)
- Serpentinite
- Andesite porphyry breccia, lapilli tuff
- lapilli tuff & aphanitic volcanics mixed lithology and
- location of outcrops examined
- traverse
- silt sample site
- Rock sample site
- Mineral occurrence

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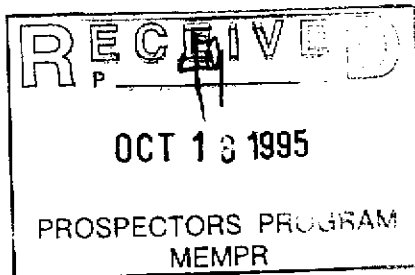
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1995 Prospecting Season

Tootsee Lake Map Area

104 0 16

Robert Russell



date

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date July 23 Sun cloudy, showers page

Day 1 left Fort Nelson, camped at Lower Post Bc.

Day 2 July 24 Mon cloudy, with showers
Set up base camp E10 SW quad

Day 3 July 25 Tues cloudy, sunny intervals

Reconnaissance along portion of access route to evaluate terrain conditions

Noted two small oteps of dolomitic sandstone at J5 NE quad and an otep of cross bedded sandstone at J5 NE quad.

Boulder size colluvial rubble of green ^{weathering} aphanitic greenstone is concentrated in two places along access trail for a distance of 100 M respectively. In the vicinity of these boulders are small oteps of white quartzite along the bank immediately east of access trail.

K6 NW quad

date

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Day 4 July 26 Wed, mainly cloudy

Opened up access at junction
E 10 SW quad - road blocked

Day 5 July 27 Thurs mainly rain
Geologist paid a visit

Day 6 July 28 - Fri 29.90, pleasant
Traverse up Moose Valley to pass
i-5 NW quad to N-7
Slashed out and corduroyed
several spots along access

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Day 7 July 29 Sat, 29.92 pleasant
Moved base camp to junction
of Moose Valley and cat trail
i-5 NW quad.

Prospected M 7 SW quadrant.
Noted sparse mineralization, galena
and sphalerite, in quartz veins
cutting phyllitic siltstone.
Gray chert quartz sandstone, in
part argillaceous outcrops predominantly.
This rock type fragments into
rectangular blocks. Gray slates are
much less common and overlay the
above. The gray slates are
pyritic and phyllitic in part.

buffalo

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Day 8 July 30 Sun, high pressure, showers.

Traverse on N-7 west half.

Main rock type is a thick bedded coarse gray chert quartz sandstone with interbeds of gray phyllitic siltstone higher up the mountain.

Vuggy quartz siderite veins up to 6" wide parallel and at rt angle to bedding are common.

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Day 9 July 31 Mon, high pressure showers

Continued work on N-7 traverse west half.

Along SE face of Smoke MTN 120 M of oxidized interbedded quartz chert sandstone and black slate. Heavily oxidized and gossaned material with narrow quartz veinlets parallel to rock cleavage. The rocks are altered; carbonate (ankeritic and pyritic) assumes porphyroblastic appearance. and also host quartz gossaned veins up to 6" wide.

Rock Samples 1 & 2 taken.

buffalo

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Day 10 Aug 1 Tues, high pressure cloudy

Traverse from 0-8 NE quad to 0-5 along 1600 M contour. Rock types encountered along traverse section 0-7 are mainly gray chert quartz sandstone with ubiquitous pyrite blebs cut by minor quartz carbonate veins up to 6" in width. Rock types along traverse section 0-6 and 0-5 are dominantly gray quartz chert sandstone and interbedded gray slate and phyllitic siltstone.

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Day 11 Aug 2 Wed, 29.96, showers

Traverse along portion of McDame-Earn contact at N-6. Black argillaceous shale and limestone shale breccia were frequently encountered. Following the contact was very difficult because of loose rubble and its undulating character.

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Day 12 Aug 3 Thur, pressure dropping,
sunny in AM.

Traverse K-6 → L-6

Small discontinuous quartz
carbonate veins are widespread
in buff weathering dolomitic
breccia and dolomitic limestone
throughout length of traverse
in close proximity to tree line.

Black slates and interbedded
gray quartz chert sandstone
rubble were examined.

Day 13 Aug 4 Fri, low pressure rain
Traverse up creek from L-8.

Main rock types encountered
are rusty thin bedded conglomerate,
black argillite and thinly to thickly
laminated dark gray siltstone.

Cobble and pebble conglomerate
float some with large clasts of
limestone and sandstone up to 4"
across were noted at the mid
point of traverse. Several pieces
of rusty weathering thinly
laminated black pyritic argillite
float contains minor sphalerite.

Day 14 Aug 5 Sat 29.76 mainly rain

Traverse along portion of west side of Tiger Terrace N-7 NE quad to N-7 SE quad.

Orange-yellow weathering siliceous exhalite horizons with baritic and ± sphalerite is contained in a laminated argillaceous slate about 100 m above tree line and can be traced discontinuously for several hundred meters along strike parallel to face of mountain.

Numerous pieces of quartz float containing angular sooty argillaceous clasts and in part leached and moderately gossaned occur along strike. Traces of Zn and minor amounts of an unidentified apple green vitreous mineral accompanies quartz on rare occasion.

This may well represent a brecciated feeder zone underlying the siliceous exhalites.

Silt samples 1 and 2 taken.

Rock samples 3, 4, 5 and 6 ^{bulk} taken

Day 15 Aug 6 Sun, 29.77 unsettled, showers

Set up fly camp at P-8 SE quad EL 1360 m where cat trail crosses creek.

Traversed to west fork on P-7 NE quad - took silt samples 3 and 4.

Traversed to north fork on P-8 NW quad - took silt sample no. 5.

End of ATV access is O-7 SE quad. cat trail junction. Cat trail leading ^{south} east is overgrown and indiscernible while the cat trail heading west appears to be in good shape. I assume this is the access trail used by hunters.

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Day 16 Aug 7 Mon, 29.90 pleasant

Prospected along face of
NE side of Donegal MTN.

Observed black interbedded slate
and crenulated gray chert quartz
sandstone and partly oxidized
siltstone.

buffalo

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Day 17 Aug 8 Tues, 30.00 showers in PM

Prospected along east side of
Donegal MTN.

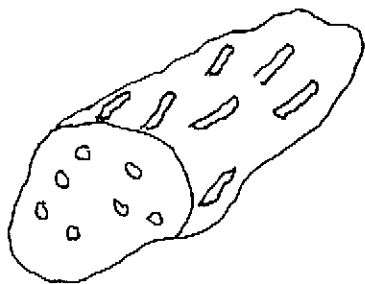
Coarse rusty sandstone float at
base of MTN towards end of traverse.
Two steep draws running up the
face of MTN contain oxidized
black slate and gray chert quartz
sandstone. Carbonate alteration
(ankeritic and pyritic) is extensive.

buffalo

Day 18 Aug 9 Wed, high pressure, pleasant.

Prospected along west side of Table MTN. Of note along traverse are the following in sequence:

- 1) light gray petroliferous limestone breccia.
- 2) buff weathering dolomite-gray sandstone contact. highly fossiliferous tube like in outline.



- 3) grayish white weathering fine gray crystalline dolomite and buff weathering dolomite breccia cut by white quartz veins - narrow and without continuity.

- 4) light gray weathering dolomitic siltstone and dark gray limestone.
- 5) shearing along bedding planes in gray weathering dark gray thinly bedded limestone producing undulations up to 3" in width and $1\frac{1}{2}$ " amplitudes - similar in appearance to mullion structure.
- 6) dark gray fissile limestone breccia breaks into lenticular and thin slabs.
- 7) Extensively oxidized, blocky dark red rusty weathering dark gray crenulated siltstone and black slate along McDame-Earn contact. Contact is very rugged, jagged and gullied.

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Day 19 Aug 10 Thur, 29.90 pleasant

Continued traverse along west side of Table MTN.

For the most part the Earn-McDame contact is highly oxidized.

Reddish rusty weathering dark gray crenulated siltstone and interbedded black slate up to 75 FT thick outcrop along traverse. Most of the rocks are altered. Carbonate alteration (ankeritic and pyritic) is extensive where quartz veining is prevalent.

Took silt sample no. 6

Vein samples no. 7 and 8

buffalo

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Day 20 Aug 11 Fri, 29.90 pleasant.

Traverse along east side of Table MTN.

The main rock types of the Earn Group are gray-black slate and interbedded quartz chert sandstone and minor gray crenulated siltstone mildly oxidized in places. Traverse terminated at S-9 SE quad. Returned to fly camp via game trail. 10:00 PM

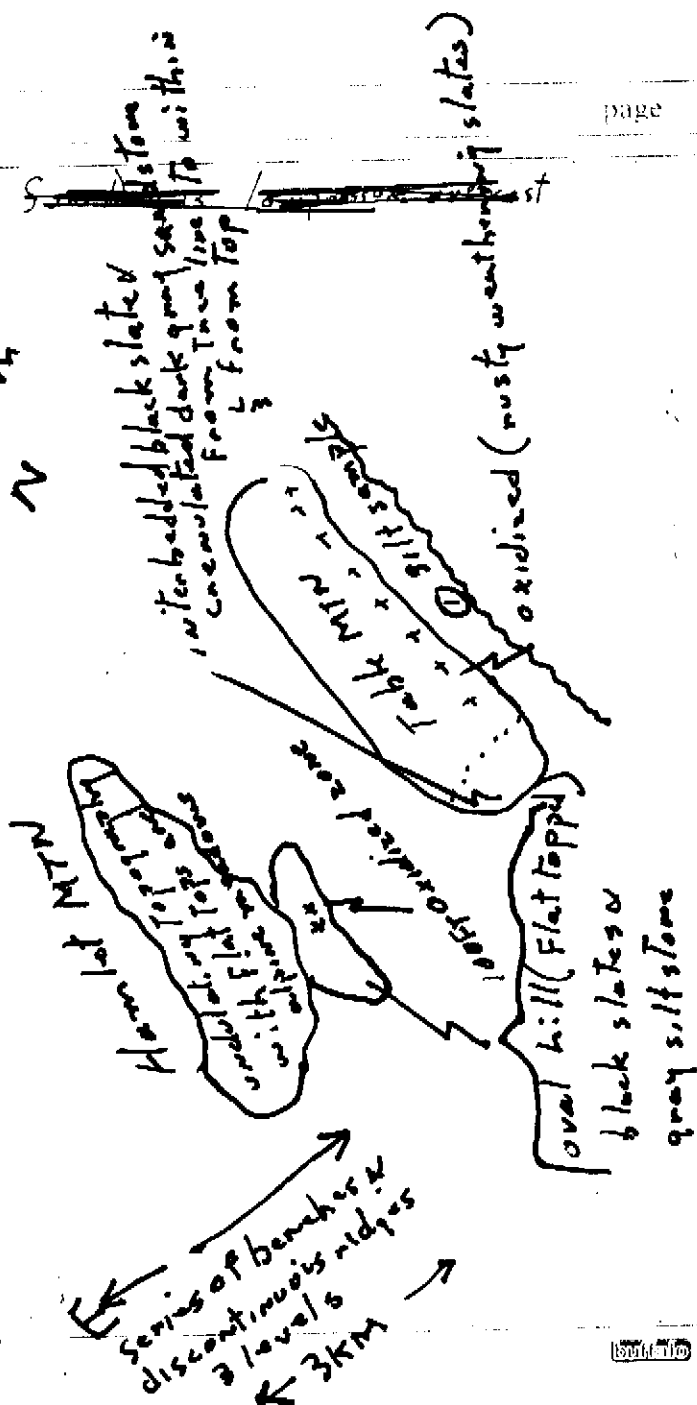
buffalo

Day 21 Aug 12 Sat, high pressure pleasant

Examined a low hill about $\frac{3}{4}$ km in length along west side of Hamlet MTN that appeared to be gossaned. R-10 sw quad.

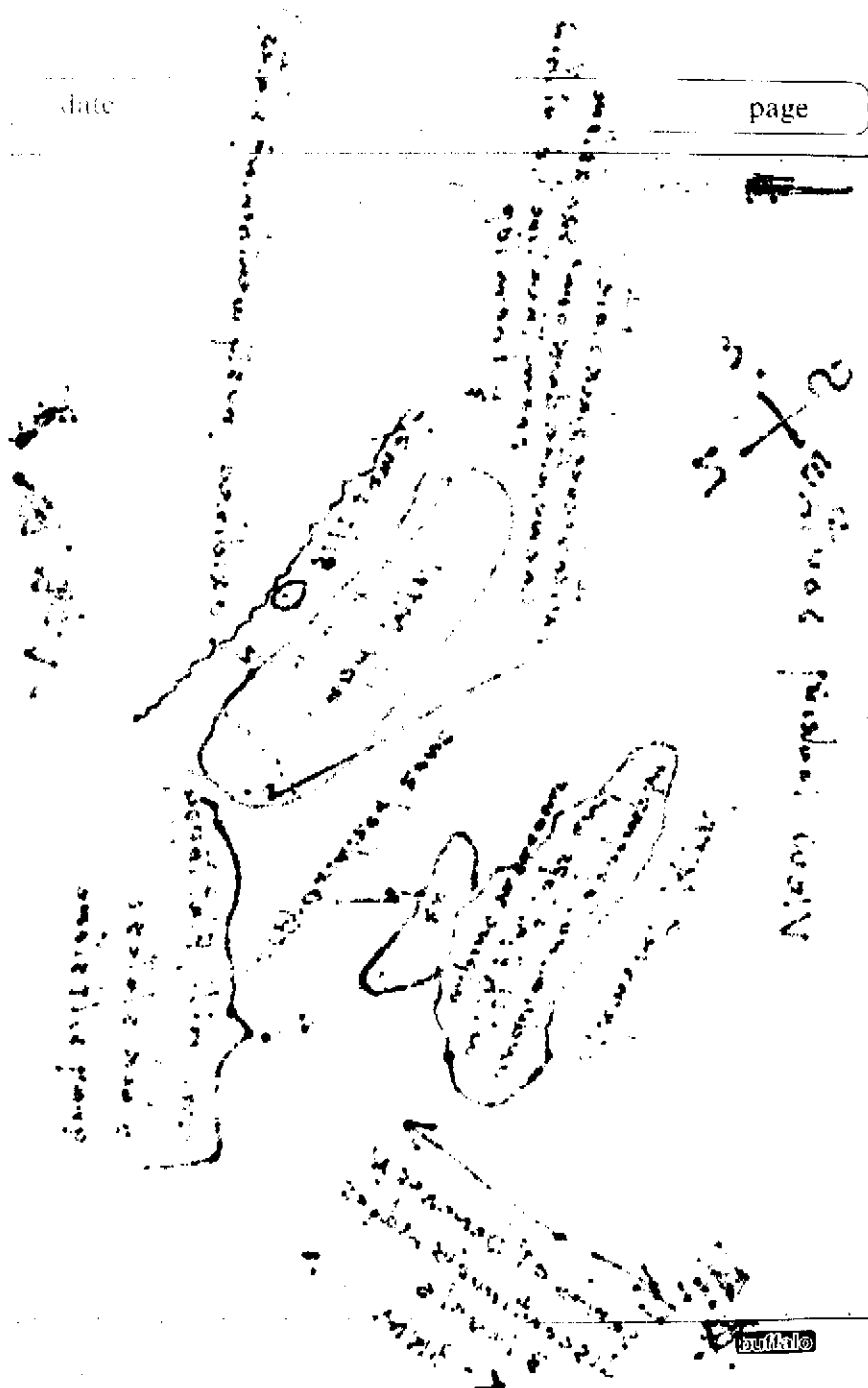
The oval shaped hill is composed of black slate with interbedded gray siltstone and contains a 35 m long oxidized zone just above tree line. Vuggy quartz veins with limonite are present. Veins are narrow, discontinuous and randomly oriented.

View looking south $\frac{3}{4}$ km N



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Day 22 Aug 13 Sun low pressure, overcast

Traverse along portion of south face of Tiger Terrace. P-8 fly camp to O-8 NW quad. Followed old NW-SE claim line to base of limestone MTN then followed a NE-SW line into basin entry continuing up a sinuous draw to saddle pass - terminating traverse 500 M towards the NW.

OF note are the following otes in sequence:

- 1) coarse grained chert quartz sandstone with interbedded argillaceous laminae. Crenulated cleavage planes show traces of ZN and rare malachite staining.
- 2) brown weathering dark gray slate with pencil fragmentation
- 3) vein stockwork leached of sulphides intrudes laminated argillaceous siltstone. Blocky to slab weathering.

- 4) black chert and siliceous quartz
chert sandstone in saddle pass, black
chert grains conspicuous. Rock type
is cut by quartz stringers leached of
sulphides. Mineral Samples No. 9,
10, and 11
- 5) Silt sample No. 7 taken at old
hunters camp site
- 6) silvery gray weathering black
siliceous argillite.
- 7) elongated pebble conglomerate
Float - clasts mainly quartz and slate
1-2 cm long.
- 8) Black siliceous gossanous slate with
traces of Zn & Cu along lemnisc
150 M below top of peak
- 9) Coarse gray chert quartz sandstone
cut by vuggy quartz limonite veins.
Traces of Zn
- 10) Brownish light gray weathering
gray slate - fragmented into pencil
like pieces up to 2 FT in length.

Day 23 Aug 14 Mon, low pressure pleasant

Returned to area (see Day 22)
to examine quartz veins along mtn
rim as seen yesterday and also to
prospect basin area.

Basin and saddle contain interbedded
black slates and crenulated gray
cherty argillaceous fine grained
sandstone and siltstone variably
weathered to a rusty color.

Traverse just below rim of mountain
contains quartz veins for almost
100 M along strike (parallel to rim)
The veins are slightly to moderately
pocketed and vuggy with limonite
infilling. The veins are small
discontinuous and short - striking
parallel, rt angles and transverse to
bedding.

It may well be that these veins
may represent a quartz-iron
carbonate and/or pyrite feeder zone
to overlying exhalites that have
since been removed by erosion.

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Day 24 Aug 15 Tues, low pressure rain & smoky.

Traverse down Moose Valley along creek to Q-11 NW quad.

Five small otes. of gray limestone and dolomitic limestone breccia occur on the south side of creek along 1st km of Traverse and two otes. of the same along cut banks on the north side of creek.

About midway on Q-10 on the south bank of creek a small outcrop of orange-yellow-red weathering gray slate and interbedded finely crenulated gray siltstone was noted. Siltstone is altered - carbonate alteration (ankeritic and pyritic). Red gossan up to 2" thick was occasionally observed and traces of sphalerite.

Nearby an abandoned dry creek channel has cut a canyon on the south side of creek for a few hundred feet. Gray slate with

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limonite staining along cleavage planes and dragfolded limonitic slate and pervasively altered and limonite matrix supported crenulated chert quartz sandstone is intruded by a stockwork of quartz gossanous veins. The veins are vuggy and ubiquitous quartz crystals up to 2cm long were noted along canyon wall. Silt sample No. 8 was taken.

Rock samples 13, 14 and 15 were taken.

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Day 25 Aug 16 Wed, 29.96 overcast smoky.

Prospected extreme SW spur of southern end of Tiger Terrace P-9 NE quad and adjoining draw P-10 SW quad.

Dark gray quartz-chert crenulated sandstone and interbedded siltstone and black slate were encountered.

Where quartz veining is encountered, the rocks take on a rusty brown appearance and carbonate alteration (ankeritic and pyritic?)

Silt sample No. 9 taken from a narrow creek 1.5 FT wide - not shown on topographic map, but which is a catchment creek for the draw.

bullfinch

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Day 26 Aug 17 Thur, 30.00 smoky, mainly cloudy

Traverse along portion of southern end of Tiger Terrace P-10 central to P-11 NE quad.

All along traverse we encountered mainly a dark gray carbonate altered (ankeritic and pyritic?) quartz-chert crenulated sandstone with interbedded slate accompanied by limonitic quartz veins.

The rocks take on a rusty red brown appearance in close proximity to veining.

bullfinch

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Day 27 Aug 18 Fri 30.10 mainly cloudy-sunny
intervals

Prospected sw portion of Lousting Plateau and creek canyon.

Rocks types encountered over 60% of traverse were a rusty red brown weathering dark gray chert quartz crenulated sandstone interbedded with slate and gray siltstone.

Carbonate alteration (ankeritic and pyritic) is extensive where accompanied by quartz veining. Quartz veins are discontinuous and small with no significant leaching.

The creek occupies a canyon where it is dammed by a glacial moraine. The canyon is about 60-70 FT deep with flaring sides and runs for 200 m ±. Q-12 SE quad. Rock type in canyon is similar to above.

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Day 28 Aug 19 Sat high pressure - ^{mainly} cloudy

Traversed about 1.5 km up mountain slope paralleling creek that divides Hamlet MTN: Q-12 SW quad to R-11 NW quad.

Followed old cat trail to Q-11 NW quad, followed good pack trail for 1 km, then headed south to mouth of creek.

Traversed up MTN. slope to just above tree line encountering mainly chert quartz argillaceous crenulated sandstone with interbedded gray fine siltstone and gray-black slate.

Returned to fly camp via same route.

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Day 29. Aug 20 Sun, high pressure, cloudy, showers

Traverse along NE portion of Hamlet MTN.

Returned to Hamlet MTN via same route as yesterday.

Traversed across R-12 to S-13 NE quad below tree line.

Encountered mainly chert quartz argillaceous sandstone and interbedded gray siltstone and rusty weathering slate.

Returned via old cat trail to creek then used previous route as the day before to return to camp exhausted.

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Day 30 Aug 21 Mon, high pressure, cloudy, showers

Returned to Hamlet MTN to complete work on Earn Group.

Continued traverse along east side of Hamlet MTN S-13 NE to T-12 NW quad following a general break in slope at 1380 M contour terminating at McDame-Earn contact.

Mildly oxidized black slate and thickly bedded quartz chert argillaceous sandstone and gray crenulated siltstone were noted. Some quartz veining was encountered but no significant gossaned outcrops or sulphides were found.

Returned to base camp.

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Day 31 Aug 22 Tues high pressure, overcast.

Set up fly camp on bench, 75 FT above creek at Q-13 SE quad. From knoll just behind fly camp one has a birds eye view of 3 mountains that are partially serpentized. -phoned home from base camp this morning - imperative that I return by Sept 6.

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Day 32 Aug 23 Wed, 29.92 cloudy, showers

Prospected 3 showings of serpentinite on west face of mountain 2 km SE of fly camp no. 2. Outcrop (1) is on a small knoll halfway up face of mountain and is in contact with orange weathering dunite. (2) outcrop occupies a narrow spur running down face of mountain. It is light green weathering, brecciated to massive.

Outcrop (3) is on a bench a few hundred feet below top of mountain. No contact reaction zones were observed. We then prospected along creek on way back to camp.

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Day 33 Aug 24 Thurs. 29.92 cloudy, sunny intervals

Prospected portions of creek that passes through R-14, then traversed along north side of mountain to a small creek that flows east and followed it to S-17 NE quad.

Examined two exposures of light green weathering serpentinitized peridotite along north face

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Day 34 Aug 25 Fri 29.95 mainly sunny

Prospected along two creeks separated by a drainage divide Q-15 centre to R-17 SE quad.

A couple of small light green weathering slickensided serpentinite outcrops were noted - contacts obscured by drift.

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Day 35

Aug 26 Sat, 29.96 mainly sunny

Prospected west of lake that runs N-S T-14-Q-14 NE quad. The area in question is a Kame-kettle complex of discontinuous ridges and irregular mounds interspersed with grassy bogs and rare Kettle lakes that are rimmed with granitic boulders.

A low box canyon rimmed with serpentized brecciated peridotite occurs about 300 M from lake.

Close by is a small light green weathering serpentinite outcrop.

Dark brown weathering, olive green-black weathering and dark gray black weathering brecciated serpentized peridotites were noted as small outcrops along cut banks and on side hills in the immediate area.

A shallow low lying ground level basin with a 200 FT high head wall and 500 FT across contains light green weathering

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serpentinite. This basin is on the SW side of a NW trending treeless ridge with a domed top on one end composed of mainly brecciated brown-black serpentized peridotite.

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Day 36 Aug 27 Sun 29.96 cloudy, sunny periods.

Prospected an area along west side of mountain N-14 west half, approx 3 km north of fly camp No. 2

Serpentinite outcrops on a bench halfway up the face of the mountain and downslope from both ends of the bench; almost totally enclosing an orange weathering dunite body. The serpentinite is brecciated and weathers to a light green. It is in part a serpentinitized peridotite breccia. No contact reaction zones were noted.

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Day 37 Aug 28 Mon, 29.92, cloudy + cool

Prospected up a draw along east face of mountain N-15 where serpentinite can be seen along its north flank from a creek 1 km ESE of fly camp No. 2. Distance to the serpentinite is 3 km.

Serpentinite outcrops in a draw that runs from near the top of the mountain to well below treeline, a distance of $\frac{1}{2}$ km.

The serpentinite weathers a light green and is very similar in nature to that which is exposed on the opposite side of the mountain. (Aug 27 notes).

No contact reaction zones were observed along traverse.

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Day 38 Aug 29 Tues, 29.96 sunny & cool

Prospected area R-18.
 Traverse consisted of skirting a small lake, proceeding up a spur, then south to base of mountain and finally NW for 1 km on way back to fly camp No. 2. The small dics. that were examined along traverse consist for the most part of gray-green porphyritic andesite and lapilli tuff that weathers a grayish and reddish brown as well as gray olive green lapilli tuff with andesite porphyry clasts up to 2 cm across containing plagioclase phenocrysts.

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Day 39 Aug 30 Wed, 29.96, sunny

Decided to set up mini fly camp No. 3 at SE end of lake R-18.

Prospected up spur to summit Q-19 SE quad, then down a draw on north side of mountain to assumed volcanic contact and then SW along base of mountain to camp No. 3.

Outcrops are poorly exposed along traverse except for the summit area and near the top of the spur. For the most part outcrops of gray-green andesite porphyry and lapilli tuff that weathers a grayish and reddish brown were noted along spur and summit areas and small exposures of grayish olive green lapilli tuff with andesite porphyry clasts occur along base of mountain.

buffalo

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Day 40 Aug 31 Thurs, low pressure - rain

Prospected in an easterly direction to south facing draw - heading up the draw we reached a low lying saddle returning to camp via a N-S trending ridge.

The N-S trending ridge is made up mostly of gray-green andesite porphyry and gray & brown weathering light green lapilli tuff. An outcrop of volcanic breccia with andesite porphyry clasts and gray green aphanitic volcanics were observed in the saddle.

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Day 41 Sept 1 Fri, 29.68 showery & cool

Conducted a traverse along the south side of mountain then headed back to camp No. 3 along mountain base.

Small exposures of gray olive green aphanitic volcanics and lapilli tuff with andesite porphyry clasts up to 2cm were noted along traverse.

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Day 42 Sept 2 Sat 29.85 mainly cloudy, showers

Conducted a traverse along east side of mountain then headed back to camp No. 3 along mountain base.

Several good exposures of gray-green andesite porphyry and brown-gray lapilli tuff were examined along steeper east flank of N-S trending ridge. Small outcrops of gray olive green lapilli tuff and aphanitic gray volcanics were observed along base of mountain.

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Day 43 Sept 3 Sun; 30.10 sunny and cool

Conducted a traverse in a SE direction, a distance of approx 3 km, terminating traverse on a low ridge T-20 NE quad.

For the most part the small outcroppings examined along traverse consist of gray and brownish weathering gray-olive green lapilli tuff and gray-green aphanitic volcanics.

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Day 44 Sept 4 Mon, 30.10 sunny

Conducted a traverse along north face of a low lying ridge that we examined yesterday. Only a few small outcrops were examined - these were composed of reddish brown and gray weathering grayish light green lapilli tuff and gray-green aphanitic volcanics.

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Day 45 Sept 5 Tues 30.15 mainly sunny

Returned to base

Day 46 Sept 6 Wed 30.15 sunny

Left for Fort Nelson

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