BRITISH COLUMBIA

PROSPECTORS ASSISTANCE PROGRAM

MINISTRY OF ENERGY AND MINES

GEOLOGICAL SURVEY BRANCH

PROGRAM YEAR:	1999/2000
REPORT #:	PAP 99-43
NAME:	JOHN HOPE

Report by: John R. Hope - prospector
P.O. Box 117
Dease Lake, B.C. V0C 1L0
Phone (250) 771-3075 or (780) 444-7147

Report in Compliance with British Columbia Prospectors Assistance Program for 1999

The main focus of the 1999 program was to due follow-up prospecting in the Northwestern part of 104I Cry Lake map sheet done by the B.C. Geological survey Branch in 1996 of the Anomals Au. stream sediments obtained in that survey. The three areas chosen comprised of the Eastern slope of Stake Mtn on the western headwaters of Beady creek - 452 P.P.b Au. The west side of the Eagle River, East of Halfmoon Lake - 117 ppb Au. and directly across the Eagle River on the East side of the river on westerly flowing streams emtying into the Eagle River - 60 ppb Au. All of these area's are on or ajoeent to the Thibert fault and comprise of the Cache Creek Terrane, Argillite Chert Quartz and Quartz stringers in Argillites, Gronits are also abundent in some localities. A massive serpentine dyke parrells most of the area south of the Thibert fault.

Although none of the 1996 Au. values were duplicated in the 1999 program, there was some significent results obtained in Cu. Au. Ag. and W. from a showing on the north side of the seconed stream to the south of the most northerly stream of the four Streams prospected in Area 3.

John R Hope

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 15 to 17, page 6.**
- 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 John R Hope Reference Number AREA 1

LOCATION/COMMODITIES

Project Area (as listed in Part A) Dease Lake BC Cry Lake MINFILE No. if applicable/104I Cry Lake

Location of Project Area NTS 1041 Cry Lake Lat 58°44'N Long 130°00 W

Description of Location and Access Location of Area 1 is East of Dease Lake along the Thibert fault aproximately 4 miles from the lake Access to the area is by helicopter.

Main Commodities Searched For Au. Ag. Cu. Ni. Pt. Zn.

Known Mineral Occurrences in Project Area none

WORK PERFORMED

1. Conventional Prospecting (area) East side of stake Mtn., west fork of upper
2. Geological Mapping (hectares/scale) Beady creek
3. Geochemical (type and no. of samples)
4. Geophysical (type and line km)
5. Physical Work (type and amount)
6. Drilling (no. holes, size, depth in m, total m)
7. Other (specify) 5 rock samples 6 silt samples

SIGNIFICANT RESULTS

Commodities (none) gf. value Au. Claim Name

Location (show on map) Lat. 58° 44'N Long 130°00 W Elevation 1120 M to 1500 M

Best assay/sample type 31 p.p.b. Au. silt sample.

Description of mineralization, host rocks, anomalies Mineralization in this area was almost nill iron oppxes in chert is small specks, some narrow quartz stringers carried small amounts of Calcopyrite, on outcrop in one of the creeks of a grey shale carried small amounts of sulphides. Host rocks of the Cache Creek Terrane, argillite, ribbon chert, quartz stringers in argillites some shales and granite comprise of the area. Moss land is abundant through out, limiting outcropping This area is indicated on the Topo Maps as area 1 sample locations and assay references are plotted

Supporting data must be submitted with this TECHNICAL REPORT

Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act*.

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 15 to 17, page 6.**
- 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 John R Hope Reference Number Area 2

LOCATION/COMMODITIES

Project Area (as listed in Part A) Deose Lake - Cry Lake MINFILE No. if applicable 104I cry Lake

Location of Project Area NTS 104I cry Lake Lat 58°42'N Long 129°50'W

Description of Location and Access Location of area 2 is East of Deose Lake along or near the Thibert fault aproximately 14 miles from the Lake. Access to the area is by helicopter.

Main Commodities Searched For Au. Ag. Cu. Ni. Pt. (Jade) Zn

Known Mineral Occurrences in Project Area ASB. serpentine. Cu. to south of area.

WORK PERFORMED

1. Conventional Prospecting (area) west side of Eagle River on streams flowing East into Eagle River
2. Geological Mapping (hectares/scale)
3. Geochemical (type and no. of samples)
4. Geophysical (type and line km)
5. Physical Work (type and amount)
6. Drilling (no. holes, size, depth in m, total m)
7. Other (specify) 12 Rock samples 7 silt samples

SIGNIFICANT RESULTS

Commodities (moderate) Zn. Ag. Cu. Claim Name

Location (show on map) Lat. 58°42'N Long 129°50 W Elevation 960m to 1360m

Best assay/sample type Ag. 4.4 ppm 2232 ppm Cu. 2.1% Zn. 18% Mg. Rock Samples

Description of mineralization, host rocks, anomalies Cache Creek Terrane is host rock in most of the area. Basalt in the northern part is everywhere. A large serpentine dyke just south and parralling the Thibert fault is predominant in places. A large quartz vein in dense bush was discovered apparent to the serpentine south west of camp 3/4 of a mile on a high knoll. A piece of quartz float found in the creek below camp a couple of miles assayed 2.1% zinc 2332 ppm copper and 4.4 ppm silver. extensive prospecting in the immediate area did not come up with any source.

Supporting data must be submitted with this TECHNICAL REPORT

Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act*.

Area: 2

In the most easterly part of the area overburden and heavy growth made prospecting difficult. The south western part of the area was mostly argilite containing clusters of brown quartz stringers. Praxonite boulders containg some Chalcopyrite and sulfphides were discovered along the edge of the ~~Lake~~ larger lake due south of camp. On the edge of a swamp at the headwaters of the anomalis AA. creek an outcroping of quartz veins in an argilite schist was sampled. Results were discouraging. There were no other obvious outcropings near or along the upper part of the creek that would of warranted sampling, the lower part of the creek became entangled in brush and overburden. Samples of the serpentine assayed as high as 1870 magnesium. This area is indicated on the Train map as area 2 and sample location are plotted along with assay references.

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 15 to 17, page 6.**
- 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 John R Hope Reference Number Area 3

LOCATION/COMMODITIES

Project Area (as listed in Part A) Dease Lake - Cry Lake MINFILE No. if applicable 104I Cry Lake

Location of Project Area NTS 104I Cry Lake. Lat 58°41'N Long 129°43'W

Description of Location and Access Location of Area 3 is East of Dease Lake along or near the Thibert fault approximately 17 miles from the Lake Access to the area is by helicopter.

Main Commodities Searched For Au. Ag. Cu. Ni. Pt. Zn. (Jade)

Known Mineral Occurrences in Project Area none.

WORK PERFORMED

1. Conventional Prospecting (area) East side of Eagle River on streams flowing west into Eagle River
2. Geological Mapping (hectares/scale)
3. Geochemical (type and no. of samples)
4. Geophysical (type and line km)
5. Physical Work (type and amount)
6. Drilling (no. holes, size, depth in m, total m)
7. Other (specify) 27 Rock samples 10 silt samples

SIGNIFICANT RESULTS

Commodities (Fair) Cu. Au. Mg. Claim Name

Location (show on map) Lat. 58°41'N Long 129°43'W Elevation 1,100 M.

Best assay/sample type Cu. 10,327 ppm 92 ppb Au. 18% Mg. Rock samples

Description of mineralization, host rocks, anomalies The host rocks for this area to the south is of the Cache Creek Terrane, argillite, chert some quartz, serpentine and granit and black shales. To the north is the Quesnel Terrane, Hornblende granodiorite - diorite, granite gneiss and biotites. In some areas in the northern part of the area granite gneisses mountaining iron and sulfphides of abundance did not carries any mineral values of significans which was discouraging. No samples taken in the streams duplicated any

Supporting data must be submitted with this TECHNICAL REPORT

Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act*.

Area 3

of the stream sediments taken in 1996 by The B.C. Regional Geochemical Survey No rock samples taken from the anomalis Au. areas returned any significate gold values. A black shale carrying sulfides near the granit contact on the anomalis Aa. creek did not assay in Au. A large serpentine dyke parrelling the aresouth of the Thibert fault carries chromite, nickel and magnesium values Nephrite (Jade) boulders were found in the most southerly creek of the area, possibley the old channell of the Eagle River. In one location rocks talluis from the north slope of the old stream bed were nephrite. The slopes on either side of the present valley are covered in trees and willow brush making prospecting difficult. Rocks of 20. to 40 pounds where taken for cutting and proved to be of marginal economic value. ~~Further~~ Further prospecting should be done in this area as the serpentine is following a granit contact making for an ideal setting for high quality Nephrite (Jade). Approximately 4½ miles from its junction with the Eagle River The second creek from the north of the prospected area, on the northern bank of the creek in a metamorphic granit porphyry is a copper showing hosting some gold and Tungesten. Malachite staining is abundent and ~~cal~~ Chalcopyrite is desseminated along fracturing through out the rock. Two samples taken from this area assayed respectivly 10,327 P.P.M. Cu. 8,980 P.P.M. Cu. 92 P.P.B. Au., 46 P.P.B. Au. Detailed mapping and prospecting should be done on this showing so that strike and dip can be established. The area is covered in overburden, so soil sampling should be done once strike is established This showing warrants further work in the veining estimation and should be proven up. An anomalis Aa creek drains the area to the north east. This creek was not prospected. This area is indicated on the Teton Maps as Area 3 and sample locations are plotted along with assay references

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 15 to 17, page 6.**
- 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 John R Hope Reference Number Stikine Cake Hill map

LOCATION/COMMODITIES

Project Area (as listed in Part A) Dease Lake Cry Lake MINFILE No. if applicable 104I Cry Lake

Location of Project Area NTS 104I-4 Cake Hill Lat 58°00 131'N Long 129°44 970'W

Description of Location and Access Location is 8 miles up the Stikine River from the bridge on Hi-way 37 Access is by road and then by ATV to anomalis Aa. creek

Main Commodities Searched For Au. Ag. Cu. Zn. Pt.

Known Mineral Occurrences in Project Area none

WORK PERFORMED

1. Conventional Prospecting (area) The 5th stream flowing into the Stikine River from
2. ~~Geological Mapping~~ (hectares/scale) the north aproximately 8 miles up from the
3. ~~Geochemical (type and no. of samples)~~ bridge on Hiway # 37
4. Geophysical (type and line km)
5. Physical Work (type and amount)
6. Drilling (no. holes, size, depth in m, total m)
7. Other (specify) 6 Rock samples 4 silts

SIGNIFICANT RESULTS

Commodities (none) of value Cu. Claim Name

Location (show on map) Lat. 58.00° 131'N Long 129.44° 970'W Elevation Between 900 and 1000 M

Best assay/sample type Cu. 1866 ppm.

Description of mineralization, host rocks, anomalies The 1996 B.C. Regional Geochemical Survey indicated stream sediments of 218 ppb Au. The host rock is of the Beggarly Creek Pluton; biotite-hornblende, diorite, gabbro, monzodiorite and pyroxenite. 100 metres north of the BCR railroad grade along the west side of the anomaly Au. Stream in a pyroxenite gabbro a mineralized zone containing iron sulphides and small specks of calcopyrite was observed. Assay results were discouraging - and no Au. values were present. No other mineralization was encountered in the stream drainage system. Sample locations are marked on Cake Hill map.

Supporting data must be submitted with this TECHNICAL REPORT

Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act.*

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 15 to 17, page 6.**
- *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 John R Hope Reference Number Porter Landing Maps

LOCATION/COMMODITIES

Project Area (as listed in Part A) Beady Creek - Seymour Creek MINFILE No. if applicable

Location of Project Area NTS 104 J. Porter Landing Map Lat Long

Description of Location and Access Location of the area prospected is just east of Hi-way 37 at and near the north end of Dease Lake BC.

Main Commodities Searched For Au. Pt pd.

Known Mineral Occurrences in Project Area Asb. Jade near Seymour Creek

WORK PERFORMED

1. Conventional Prospecting (area) on Beady creek and north fork of Seymour Creek.
2. Geological Mapping (hectares/scale)
3. Geochemical (type and no. of samples)
4. Geophysical (type and line km)
5. Physical Work (type and amount)
6. Drilling (no. holes, size, depth in m, total m)
7. *Other (specify)* 3 rock samples

SIGNIFICANT RESULTS

Commodities None of significance Claim Name

Location (show on map) Lat. Long Elevation

Best assay/sample type Mrg. 22%

Description of mineralization, host rocks, anomalies Biotite, muscovite quartz - gneiss and schist are primarily the host rocks along Beady Creek. A sulphide enriched biotite sample was assayed, and results were discouraging. Serpentinite, precipotite, shale and greywacke are the lisard host rocks along the north fork of Seymour Creek. The most significant sample assayed was Serpentini, with values of 22% Mg. Sample locations marked on Porter Landing maps

Supporting data must be submitted with this TECHNICAL REPORT

Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act*.

BRITISH COLUMBIA
PROSPECTORS ASSISTANCE PROGRAM
PROSPECTING REPORT FORM (continued)

RECEIVED
NOV 17 1999
P-116

B. TECHNICAL REPORT

- One technical report to be completed for each project area.
- **Refer to Program Requirements/Regulations 15 to 17, page 6.**
- 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 John R Hope Reference Number Porter Landing Maps

LOCATION/COMMODITIES

Project Area (as listed in Part A) Tributary of Dease River MINFILE No. if applicable ______

Location of Project Area NTS 104J Porter Landing Maps Lat ______ Long ______

Description of Location and Access The stream prospected is the first creek flowing from the west into the Dease River north of Canyon Creek. Access was by boat from Hi-way 37 at Dease River bridge.

Main Commodities Searched For Au Ag Cu Pt Pd. Ni.

Known Mineral Occurrences in Project Area none

WORK PERFORMED

1. Conventional Prospecting (area) First stream flowing into Dease River from the west north of Canyon creek
2. Geological Mapping (hectares/scale) ______
3. Geochemical (type and no. of samples) ______
4. Geophysical (type and line km) ______
5. Physical Work (type and amount) ______
6. Drilling (no. holes, size, depth in m, total m) ______
7. Other (specify) 5 rock samples

SIGNIFICANT RESULTS

Commodities Pd. Claim Name ______

Location (show on map) Lat. ______ Long ______ Elevation ______

Best assay/sample type Au. 37 ppb. pt. 25 ppb pd.53 ppb. rock samples

Description of mineralization, host rocks, anomalies Host rocks are Andesite, basalts greywacke argillite and shale. a small dyke of peridotite is cut along the Creek and a quartz veining ~~[illegible]~~ against the northern flank of the perid-otite carries sulfphides and the Au. pt. pd. values obtained in the assays. sample locations marked on Porter Landing map.

Supporting data must be submitted with this TECHNICAL REPORT

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 15 to 17, page 6.**
- 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 John R Hope Reference Number Porter Landing Prosp

LOCATION/COMMODITIES

Project Area (as listed in Part A) old Bell creek - Martin Lake MINFILE No. if applicable _____

Location of Project Area NTS 104J Porter Landing Prosp Lat _____ Long _____

Description of Location and Access Location of Area prospected is west of Dease Lake on old Bell creek and north-east of Martin Lake Acce is by the Mosquito creek road from the north end of Dease Lake.

Main Commodities Searched For Au. Ag Pt Pd.

Known Mineral Occurrences in Project Area none

WORK PERFORMED

1. Conventional Prospecting (area) On and near old Bell creek and north east of Martin Lake.
2. Geological Mapping (hectares/scale) _____
3. Geochemical (type and no. of samples) _____
4. Geophysical (type and line km) _____
5. Physical Work (type and amount) _____
6. Drilling (no. holes, size, depth in m, total m) _____
7. Other (specify) 8 Rock Samples

SIGNIFICANT RESULTS

Commodities None Claim Name _____

Location (show on map) Lat. _____ Long _____ Elevation _____

Best assay/sample type None of the samples had any significant assay results

Description of mineralization, host rocks, anomalies Follow-up prospecting was done in the area in search of any mafic-altera mafic volcanoes that may have occurred. Some were found near Martin Lake and Lower old Bell No mineralization of any significance was found. assays were discouraging. Sample locations marked on Porter Landing map

---

Supporting data must be submitted with this TECHNICAL REPORT

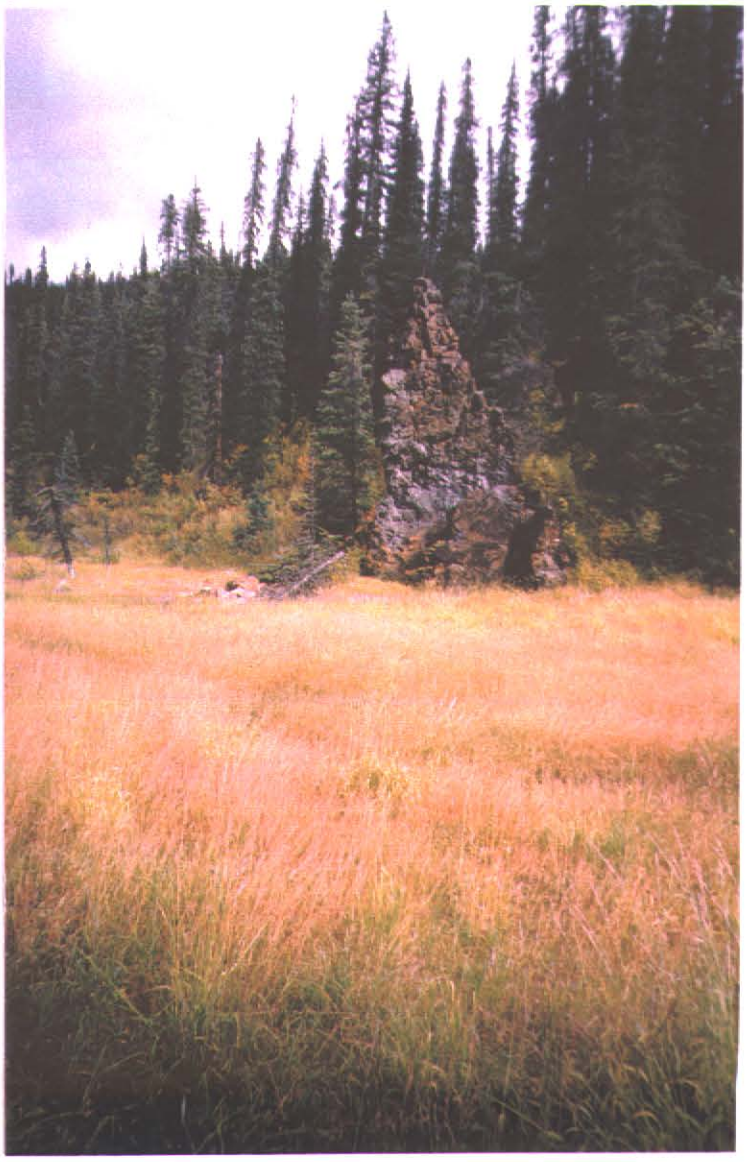
Information on this form is confidential for one year from the date of receipt subject to the provisions of the *Freedom of Information Act*.

Area 1 overburden and swamp and mosquitoes

Area 3 Copper gold showing Eagle River area.

Note malachite staining

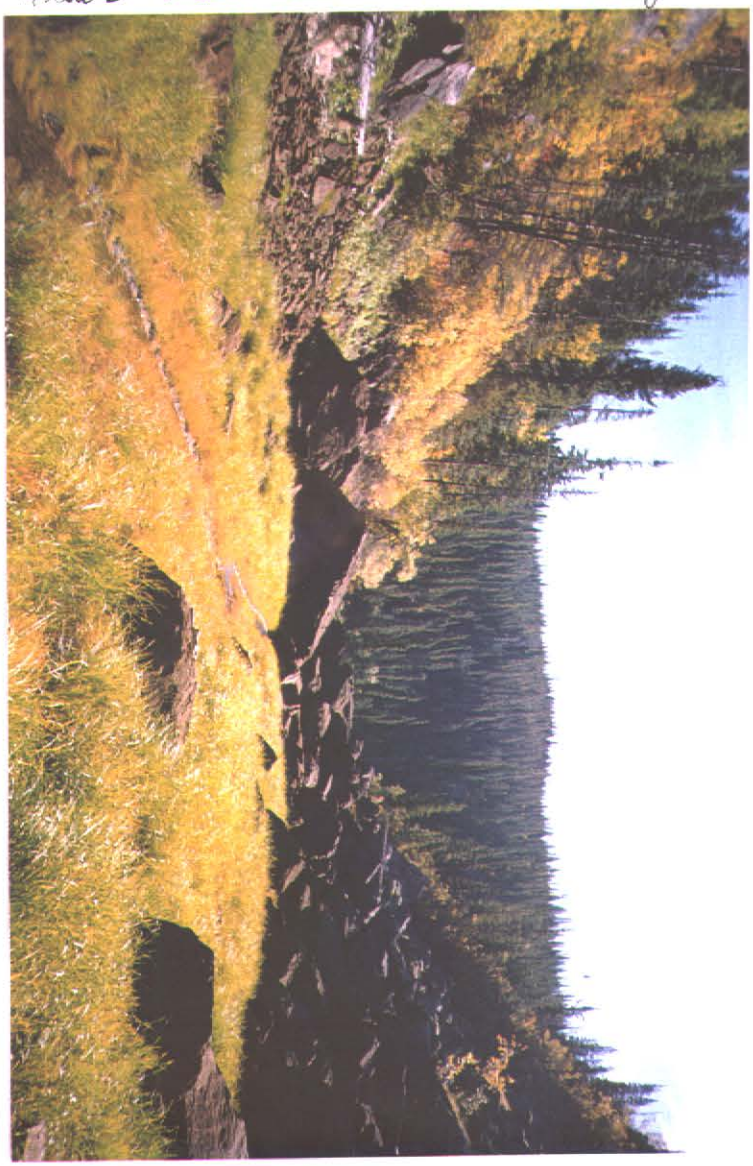
Basalt pillar in old river bed - area 3



Upper Red Bed Creek

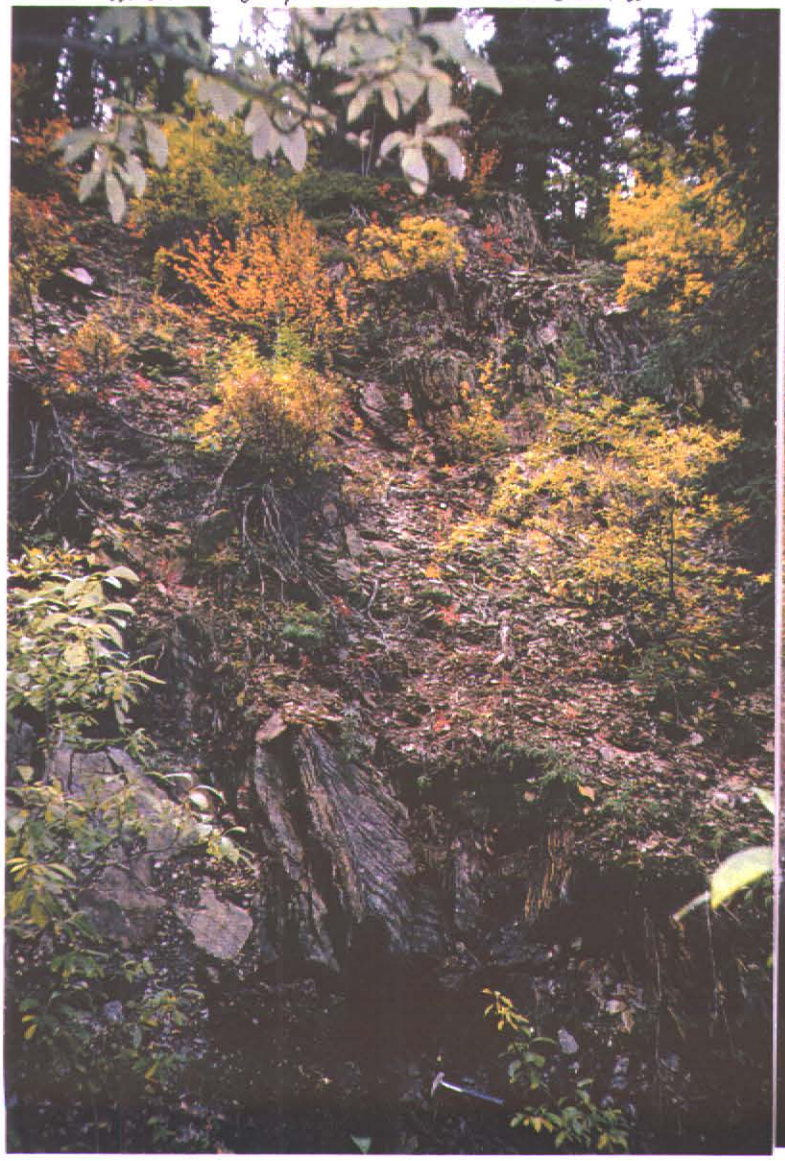
Area 3 Helicopter pick-up

Area 3 Granite boulder Train blocks valley

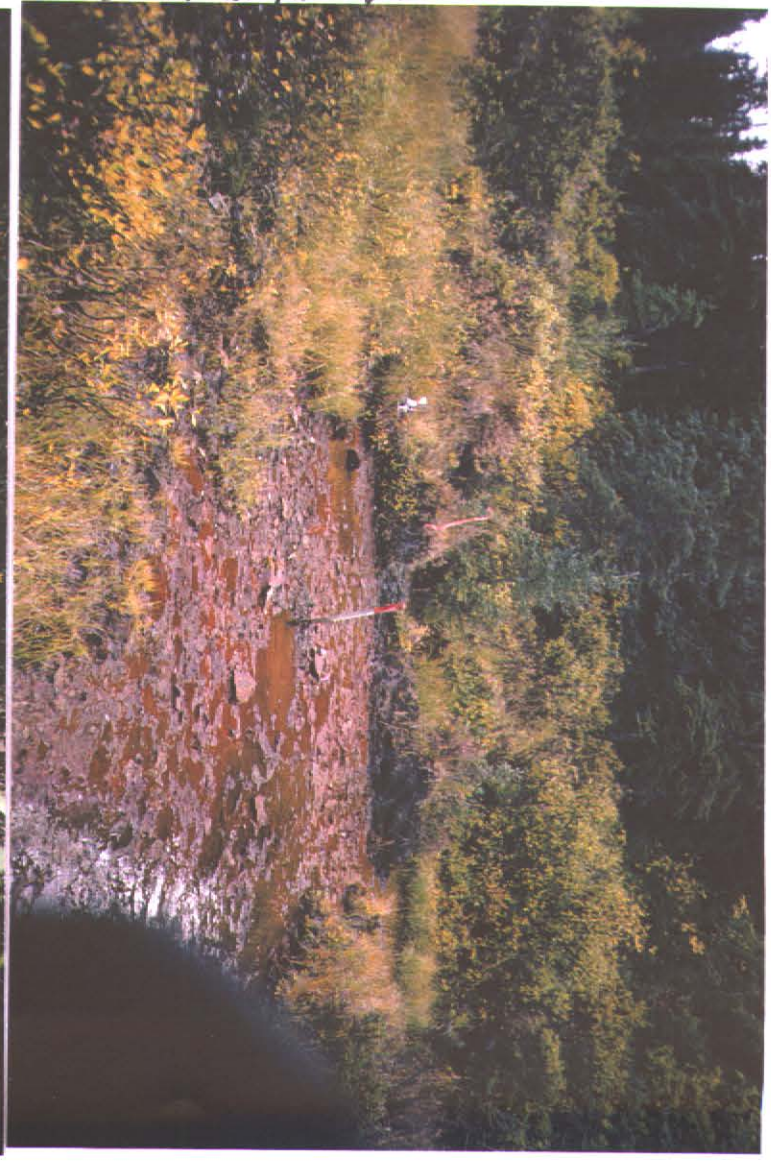


Area 3 Base Camp.

Area 3 Sulphide enriched black shale



Area 3 Iron sulphide granitic



outcrop of low grade chromite near serpentine dyke in area 3

Area 2 Massive buff quartz outcrops in dense bush

Area 2 Serpentine outcrop

Northern Analytical Laboratories ltd.

105 Copper Road
Whitehorse, Yukon
Y1A 2Z7
Ph: (867) 668-4968
Fax: (867) 668-4890
E-mail: NAL@hypertech.yk.ca

05/08/99 Certificate of Analysis

Epoch Holdings WO# 05701

John Hope Certified by

	Sample #		Au ppb
ss	ESSJ-1-2299	Eagle River area 3	<5
ss	ESSJ-2-2299		8
ss	SJ-1-1099	Stake Intn area 1	6
ss	SJ-2-1099		8
ss	SJ-3-1099		3
ss	SJ-4-1199		31
ss	SJ-5-1399		7
ss	SJ-6-1399		<5
r	56352	Stake Intn area 1	<5
r	56353		<5
r	56354		5
r	56355		<5
r	56356		<5
r	56359	Deave River	9
r	56362	Eagle River Area 3	92
r	56363		46
r	56364		<5
r	56365		<5
r	56366		<5

CERTIFICATE OF ANALYSIS
iPL 99G0686

INTERNATIONAL PLASMA LABORATORY LTD.

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

Client : Northern Analytical Laboratories
Project: W.O. 05701

23 Samples
23=Pulp

[068616:32:24:99080699]

Out: Aug 06, 1999
In : Jul 30, 1999

Sample Name	Type	Au ppb	Pt ppb	Pd ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm
ESSJ-1-2299	Pulp	—	—	—	0.2	37	15	81	50	<5	<3	3	<10	<2	7.2	16	63	307	<5
ESSJ-2-2299	Pulp	—	—	—	0.1	32	20	77	31	<5	3	3	<10	<2	2.4	12	43	385	<5
SJ-1-1099	Pulp	—	—	—	0.3	47	17	105	33	<5	<3	4	<10	<2	2.7	15	103	480	<5
SJ-2-1099	Pulp	—	—	—	0.2	46	17	108	37	<5	<3	2	<10	<2	6.9	16	56	300	<5
SJ-3-1099	Pulp	—	—	—	<0.1	40	14	117	35	<5	<3	1	<10	<2	2.1	14	57	344	<5
SJ-4-1199	Pulp	—	—	—	0.3	58	15	160	58	<5	<3	3	<10	<2	7.1	15	59	352	<5
SJ-5-1399	Pulp	—	—	—	0.1	50	14	222	48	<5	<3	4	<10	<2	0.4	13	59	481	<5
SJ-6-1399	Pulp	—	—	—	0.1	52	9	137	30	<5	<3	4	<10	<2	4.5	13	53	251	<5
56352	Pulp	—	—	—	0.1	113	13	82	63	<5	<3	<1	<10	<2	<0.1	33	46	100	<5
56353	Pulp	—	—	—	<0.1	96	12	61	28	<5	<3	<1	<10	<2	4.4	24	54	165	<5
56354	Pulp	—	—	—	<0.1	42	9	63	15	<5	<3	6	<10	<2	5.2	7	33	614	<5
56355	Pulp	—	—	—	<0.1	26	11	37	22	<5	<3	5	<10	<2	<0.1	3	17	146	<5
56356	Pulp	—	—	—	<0.1	21	<2	22	6	<5	<3	1	<10	<2	<0.1	3	11	255	<5
56357	Pulp	37	<15	8	0.8	308	14	38	20	<5	<3	3	<10	<2	6.5	48	47	24	<5
56358	Pulp	10	<15	<5	0.1	297	3	7	<5	<5	<3	<1	<10	<2	<0.1	16	6	37	<5
56359	Pulp	—	—	—	0.1	183	12	51	45	<5	<3	1	<10	<2	<0.1	29	26	56	<5
56360	Pulp	21	25	53	0.2	271	10	20	14	<5	<3	99	<10	<2	3.7	33	36	38	<5
56361	Pulp	11	<15	<5	<0.1	263	14	53	51	<5	<3	3	<10	<2	3.0	36	29	18	<5
56362	Pulp	—	—	—	1.0	10327	7	91	11	<5	<3	1	<10	<2	2.4	22	11	114	9
56363	Pulp	—	—	—	1.3	8980	2	87	100	<5	<3	4	<10	<2	4.7	20	9	345	<5
56364	Pulp	—	—	—	<0.1	130	<2	19	8	<5	<3	1	<10	<2	<0.1	4	5	933	<5
56365	Pulp	—	—	—	0.1	102	11	136	38	<5	<3	2	<10	<2	4.6	28	33	181	<5
56366	Pulp	—	—	—	0.1	77	15	128	50	<5	<3	3	<10	<2	4.5	37	70	316	<5
Minimum Detection		2	15	5	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5
Maximum Detection		10000	10000	10000	100.0	20000	20000	20000	10000	1000	10000	1000	1000	10000	100.0	10000	10000	10000	1000
Method		FA/AAS	FA/AAS	FA/AAS	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

—=No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % NS=No Sample

INTERNATIONAL PLASMA LABORATORY LTD.

CERTIFICATE OF ANALYSIS
iPL 99G0686

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

Client : Northern Analytical Laboratories
Project: W.O. 05701

23 Samples
23=Pulp

[068616:32:24:99080699]

Out: Aug 06, 1999
In : Jul 30, 1999

Sample Name	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
ESSJ-1-2299	65	79	654	10	41	3	5	0.09	1.63	0.81	2.93	0.86	0.07	0.02	0.08
ESSJ-2-2299	51	82	576	9	51	2	4	0.08	1.19	0.81	3.03	0.65	0.05	0.03	0.10
SJ-1-1099	102	68	403	9	96	2	4	0.06	1.59	0.85	3.00	0.89	0.09	0.02	0.07
SJ-2-1099	53	74	663	10	73	2	4	0.09	1.44	0.84	2.94	0.64	0.08	0.02	0.07
SJ-3-1099	55	87	658	10	64	2	4	0.10	1.50	0.81	3.14	0.68	0.07	0.02	0.07
SJ-4-1199	53	70	660	10	156	2	4	0.09	2.02	1.28	2.97	0.67	0.08	0.02	0.08
SJ-5-1399	46	68	1542	9	108	1	3	0.08	1.72	1.09	3.25	0.65	0.09	0.02	0.08
SJ-6-1399	51	57	750	9	33	1	4	0.10	1.17	0.51	2.33	0.60	0.05	0.02	0.05
56352	58	159	831	<2	11	4	4	0.31	2.84	1.48	4.50	1.58	0.04	0.03	0.04
56353	65	67	926	4	13	5	2	0.25	1.10	0.67	2.63	0.73	0.07	0.03	0.05
56354	73	26	163	7	22	5	2	0.01	0.93	0.10	2.41	0.65	0.14	0.01	0.05
56355	110	18	404	6	15	5	1	0.02	0.72	0.07	1.79	0.44	0.10	0.02	0.02
56356	135	9	720	2	171	1	<1	<0.01	0.15	0.63	0.70	0.09	0.03	0.01	0.01
56357	138	94	271	<2	14	3	5	0.15	1.58	0.60	7.33	1.75	0.02	0.02	0.15
56358	45	11	70	6	48	2	<1	0.07	0.35	2.14	1.80	0.12	0.05	0.06	0.14
56359	42	190	373	5	76	5	6	0.14	2.02	1.79	4.76	1.44	0.09	0.07	0.28
56360	78	99	141	3	50	5	6	0.17	0.89	1.15	3.94	0.67	0.07	0.08	0.13
56361	41	113	545	<2	24	7	4	0.20	2.49	1.18	3.59	2.11	0.05	0.05	0.06
56362	46	34	166	3	10	2	4	<0.01	0.24	0.15	3.90	0.06	0.05	0.05	0.04
56363	42	22	254	4	24	1	4	<0.01	0.26	0.16	2.28	0.04	0.08	0.04	0.03
56364	52	30	252	5	47	1	4	0.01	0.28	0.76	1.61	0.12	0.12	0.05	0.05
56365	54	207	1131	29	246	4	8	0.17	2.00	4.41	6.47	2.01	0.16	0.22	0.44
56366	79	209	1327	34	386	6	13	0.31	2.57	5.68	6.13	2.70	0.33	0.30	0.42
Minimum Detection	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Maximum Detection	10000	10000	10000	10000	10000	10000	10000	1.00	10.00	10.00	10.00	10.00	10.00	5.00	5.00
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

—=No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % NS=No Sample

Northern Analytical Laboratories ltd.

105 Copper Road
Whitehorse, Yukon
Y1A 2Z7
Ph: (867) 668-4968
Fax: (867) 668-4890
E-mail: NAL@hypertech.yk.ca

01/09/99 Certificate of Analysis

John Hope

WO# 05724

Certified by

	Sample #	Au ppb	Ag ppm
r	56375 } Old Bell (Thibert Creek)	<5	0.1
r	56377 }	<5	0.1
r	56379 } Beady Creek	<5	<0.1
r	56380 }	<5	
r	56381 } Stikine - Cake Hill map 104I-4	<5	
r	56382 }	<5	
r	56383 }	<5	
ss40	J-4 A1099	<5	
ss	Silt #3 A1099	<5	
ss	Stkine showing Silt #1 A1199 } Stikine	<5	
ss	Silt Stream E of Disco 1 A1099 }	<5	

INTERNATIONAL PLASMA LABORATORY LTD

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

CERTIFICATE OF ANALYSIS
iPL 99H0820

Client : Northern Analytical Laboratories
Project: PO# 05724

19 Samples
19=Pulp

[082016:15:49:99090299]

Out: Sep 02, 1999
In : Aug 31, 1999

Sample Name	Type	Pt ppb	Pd ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm
56368	Pulp	<15	<5	<0.1	7	6	21	<5	21	<3	3	<10	<2	<0.1	113	2292	2	<5	1762
56369	Pulp	<15	<5	<0.1	18	6	18	<5	13	<3	5	<10	<2	<0.1	91	1788	56	<5	1145
56370	Pulp	<15	<5	<0.1	74	5	98	<5	<5	<3	3	<10	<2	<0.1	44	157	52	<5	58
56371	Pulp	<15	<5	0.1	58	18	77	13	<5	<3	3	<10	<2	<0.1	15	21	148	<5	37
56372	Pulp	<15	<5	<0.1	127	105	85	30	12	<3	4	<10	<2	<0.1	36	46	107	<5	58
56373	Pulp	—	—	<0.1	98	8	84	14	<5	<3	2	<10	<2	<0.1	34	67	394	<5	59
56374	Pulp	—	—	<0.1	61	17	66	9	<5	<3	2	<10	<2	<0.1	16	44	602	<5	85
56376	Pulp	<15	<5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
56380	Pulp	—	—	0.4	1866	5	35	<5	<5	<3	4	<10	<2	<0.1	89	257	25	<5	58
56381	Pulp	—	—	0.1	383	19	26	<5	<5	<3	2	<10	<2	<0.1	53	67	24	<5	67
56382	Pulp	—	—	<0.1	493	12	36	<5	<5	<3	3	<10	<2	<0.1	61	149	27	<5	107
56383	Pulp	—	—	0.1	349	11	27	35	<5	<3	2	<10	<2	<0.1	49	80	31	<5	92
56384	Pulp	<15	<5	0.1	12	2	28	118	<5	<3	2	<10	10	<0.1	10	49	7	<5	127
56385	Pulp	<15	<5	<0.1	150	9	38	35	<5	<3	5	<10	<2	<0.1	28	231	661	<5	274
56387	Pulp	<15	<5	<0.1	87	5	139	5	<5	<3	3	<10	<2	<0.1	37	66	60	<5	63
J-4 A1099	Pulp	—	—	<0.1	66	25	104	16	<5	<3	3	<10	<2	<0.1	12	325	287	<5	127
SILT#3 A1099	Pulp	—	—	<0.1	55	5	67	<5	<5	<3	3	<10	<2	<0.1	23	154	61	<5	144
SILT STREAM E DISC01A1099	Pulp	—	—	<0.1	43	9	80	8	<5	<3	2	<10	<2	<0.1	13	64	122	<5	78
STKINE SHOWING SIL1 A1199	Pulp	—	—	<0.1	76	8	78	<5	<5	<3	2	<10	<2	<0.1	20	113	119	<5	103

Minimum Detection	15	5	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5	1
Maximum Detection	10000	10000	100.0	20000	20000	20000	10000	1000	10000	1000	1000	10000	100.0	10000	10000	10000	1000	10000
Method	FA/AAS	FA/AAS	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

—=No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % NS=No Sample

INTERNATIONAL PLASMA LABORATORY LTD.

CERTIFICATE OF ANALYSIS
iPL 99H0820

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

Client : Northern Analytical Laboratories
Project: PO# 05724

19 Samples
19=Pulp

[082016:15:49:99090299]

Out: Sep 02, 1999
In : Aug 31, 1999

Sample Name	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
56368	35	2081	<2	2	<1	9	<0.01	0.38	0.07	3.36	22%	<0.01	0.02	<0.01
56369	20	624	<2	5	<1	8	<0.01	0.20	0.03	3.07	16%	<0.01	0.02	<0.01
56370	36	922	5	48	13	1	0.10	1.79	1.05	6.74	3.45	0.04	0.28	0.06
56371	72	471	10	103	11	4	0.21	1.85	1.29	2.99	0.97	0.16	0.06	0.10
56372	225	961	2	14	10	8	0.33	4.72	2.83	6.48	2.83	0.04	0.04	0.07
56373	168	1587	3	65	9	7	0.26	3.04	2.58	5.23	2.70	0.08	0.03	0.04
56374	49	4252	9	53	3	2	0.06	0.66	0.61	2.61	0.58	0.11	0.03	0.03
56376	—	—	—	—	—	—	—	—	—	—	—	—	—	—
56380	51	235	<2	35	2	2	0.04	2.70	1.95	7.36	2.06	0.48	0.05	0.18
56381	81	251	2	53	2	3	0.10	2.05	1.93	5.09	1.74	0.60	0.11	0.34
56382	95	416	2	44	2	3	0.10	2.26	2.13	4.88	1.68	0.48	0.10	0.25
56383	81	295	2	56	2	4	0.10	2.37	2.39	4.55	1.68	0.45	0.10	0.29
56384	69	238	2	308	2	2	0.08	2.15	3.08	1.29	0.79	0.02	0.03	0.16
56385	152	367	9	82	2	3	0.15	2.64	1.76	3.04	3.07	1.57	0.14	0.31
56387	175	290	3	13	1	4	0.19	2.89	0.99	5.41	2.69	0.69	0.08	0.24
J-4 A1099	40	731	5	108	5	2	0.04	0.90	2.64	2.01	0.97	0.07	0.03	0.09
SILT#3 A1099	160	495	7	33	3	3	0.06	1.06	0.81	4.93	2.42	0.06	0.03	0.18
SILT STREAM E DISC01A1099	78	810	6	34	2	3	0.06	1.15	0.87	2.83	1.01	0.08	0.03	0.12
STKINE SHOWING SIL1 A1199	113	409	7	36	2	4	0.07	1.43	0.84	3.41	1.59	0.09	0.03	0.17
Minimum Detection	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Maximum Detection	10000	10000	10000	10000	10000	10000	1.00	10.00	10.00	10.00	10.00	10.00	5.00	5.00
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

—=No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % NS=No Sample

Northern Analytical Laboratories ltd.

105 Copper Road
Whitehorse, Yukon
Y1A 2Z7
Ph: (867) 668-4968
Fax: (867) 668-4890
E-mail: NAL@hypertech.yk.ca

13/09/99 Certificate of Analysis

John Hope

WO# 05745

Certified by

west side of Eagle River (Half moon Lake) (AREA 2)

	Sample #	Au ppb	Ag ppm
r	Sample #6	5	4.4
r	Sample #7	<5	<0.1
r	Sample #9	7	0.1
r	Sample #10	<5	<0.1
r	Sample #12	6	<0.1
ss	Silt #1 A2099HM	<5	
ss	Silt #2 HMA2099	<5	
ss	Silt #3 HMA2299	<5	
ss	Silt #4 HMA2399	<5	
ss40	Silt #5 HMA2499	<5	
ss	Silt #6 HMA2499	<5	
ss	Silt #7 HMA2599	<5	

CERTIFICATE OF ANALYSIS
iPL 99I0865

INTERNATIONAL PLASMA LABORATORY LTD.
2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Client : Northern Analytical Laboratories
Project: WO#05745 Area 2

19 Samples
19=Pulp

[086511:27:40:99091599]

Out: Sep 15, 1999
In : Sep 13, 1999

Sample Name (West side Eagle River (Halfmoon Lake))	Type	Pt ppb	Pd ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm
SAMPLE# 1	Pulp	—	—	0.1	26	213	26	<5	33	<3	4	<10	<2	<0.1	83	1973	<2	<5	1249
SAMPLE# 2	Pulp	—	—	0.1	72	9	64	<5	<5	<3	2	<10	<2	<0.1	24	30	21	<5	36
SAMPLE# 3	Pulp	—	—	<0.1	5	10	19	<5	12	<3	4	<10	<2	<0.1	72	1930	<2	<5	911
SAMPLE# 4	Pulp	<15	<5	<0.1	7	5	17	<5	13	<3	2	<10	<2	<0.1	69	1750	<2	<5	996
SAMPLE# 5	Pulp	<15	<5	<0.1	8	8	22	<5	13	<3	4	<10	<2	<0.1	77	1852	<2	<5	979
SAMPLE# 6	Pulp	—	—	4.2	2332	45	2.1%	20	13	<3	9	<10	<2	0.1m	31	57	16	<5	76
SAMPLE# 7	Pulp	—	—	<0.1	50	6	166	10	<5	<3	3	<10	<2	<0.1	21	28	7	<5	27
SAMPLE# 8	Pulp	<15	10	0.2	152	7	75	18	<5	<3	2	<10	<2	<0.1	19	35	48	<5	97
SAMPLE# 9	Pulp	<15	8	0.2	365	9	48	14	<5	<3	2	<10	<2	<0.1	19	43	66	<5	167
SAMPLE#10	Pulp	—	—	<0.1	34	2	29	<5	<5	<3	1	<10	<2	<0.1	5	11	46	<5	74
SAMPLE#11	Pulp	—	—	0.1	407	2	27	46	<5	<3	2	<10	<2	<0.1	21	38	67	<5	43
SAMPLE#12	Pulp	—	—	0.1	210	8	47	11	<5	<3	1	<10	<2	<0.1	22	32	121	<5	123
SILT #1 A 2099 HM	Pulp	—	—	0.6	48	19	127	20	<5	<3	2	<10	<2	<0.1	24	250	388	<5	154
SILT #2 HM A 2099	Pulp	—	—	0.3	54	11	93	7	<5	<3	3	<10	<2	<0.1	33	449	181	<5	218
SILT #3 HM A 2299	Pulp	—	—	0.3	50	10	141	19	<5	<3	4	<10	<2	<0.1	26	286	692	<5	83
SILT #4 HM A 2399	Pulp	—	—	0.2	22	8	85	8	<5	<3	2	<10	<2	<0.1	15	49	262	<5	65
SILT #5 HM A 2499	Pulp	—	—	0.4	82	14	270	20	<5	<3	8	<10	<2	<0.1	17	72	443	<5	38
SILT #6 HM A 2499	Pulp	—	—	0.1	36	4	98	<5	<5	<3	3	<10	<2	<0.1	16	47	225	<5	55
SILT #7 HM A 2599	Pulp	—	—	0.1	68	11	112	10	<5	<3	5	<10	<2	<0.1	24	239	278	<5	130
Minimum Detection		15	5	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5	1
Maximum Detection		10000	10000	100.0	20000	20000	20000	10000	1000	10000	1000	1000	10000	100.0	10000	10000	10000	1000	10000
Method		FA/AAS	FA/AAS	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

—=No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % NS=No Sample

CERTIFICATE OF ANALYSIS
iPL 99I0865

INTERNATIONAL PLASMA LABORATORY LTD.

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

Client : Northern Analytical Laboratories
Project: WO#05745

19 Samples
19-Pulp

[086511:27:40:99091599]

Out: Sep 15, 1999
In : Sep 13, 1999

Sample Name	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
SAMPLE# 1	29	620	<2	1	<1	8	<0.01	0.56	0.02	3.19	18%	<0.01	0.02	<0.01
SAMPLE# 2	83	603	2	73	7	3	0.21	1.75	0.57	3.56	1.38	0.01	0.05	0.06
SAMPLE# 3	26	799	<2	1	1	8	<0.01	0.40	0.01	2.92	17%	<0.01	0.01	<0.01
SAMPLE# 4	23	588	<2	1	1	5	<0.01	0.56	0.22	2.84	17%	<0.01	0.02	<0.01
SAMPLE# 5	23	657	<2	<1	<1	5	<0.01	0.50	0.14	2.45	18%	<0.01	0.02	<0.01
SAMPLE# 6	36	653	2	22	1	1	<0.01	1.72	1.95	2.58	1.81	0.01	0.02	0.02
SAMPLE# 7	136	717	2	37	13	6	0.43	2.88	1.28	5.03	1.98	0.03	0.05	0.11
SAMPLE# 8	100	452	<2	32	2	3	0.22	2.13	2.26	2.78	1.70	1.13	0.07	0.17
SAMPLE# 9	129	425	4	117	2	6	0.20	2.28	2.06	3.26	1.47	0.94	0.24	0.27
SAMPLE#10	14	191	2	20	4	1	0.02	0.41	0.46	0.87	0.30	0.07	0.02	0.01
SAMPLE#11	79	281	3	185	2	4	0.09	4.13	3.53	2.54	0.84	0.20	0.44	0.26
SAMPLE#12	153	565	3	85	4	4	0.19	2.26	1.67	3.93	1.53	1.12	0.17	0.28
SILT #1 A 2099 HM	74	1618	9	46	3	6	0.09	1.62	1.11	4.29	2.27	0.07	0.03	0.08
SILT #2 HM A 2099	77	1928	7	34	3	6	0.10	1.59	0.94	4.20	3.90	0.06	0.03	0.07
SILT #3 HM A 2299	77	1.5%	9	78	2	5	0.10	1.72	1.40	5.97	1.00	0.07	0.03	0.09
SILT #4 HM A 2399	97	716	6	27	2	5	0.22	2.33	1.00	3.83	1.25	0.05	0.03	0.07
SILT #5 HM A 2499	44	8294	7	104	3	3	0.04	1.89	2.36	4.01	0.43	0.07	0.03	0.17
SILT #6 HM A 2499	82	2640	7	32	3	5	0.17	1.78	1.00	4.14	0.93	0.06	0.03	0.07
SILT #7 HM A 2599	91	2074	11	39	3	7	0.14	2.04	0.88	4.74	1.27	0.10	0.03	0.08
Minimum Detection	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Maximum Detection	10000	10000	10000	10000	10000	10000	1.00	10.00	10.00	10.00	10.00	10.00	5.00	5.00
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

—=No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % NS=No Sample

Northern Analytical Laboratories ltd.

105 Copper Road
Whitehorse, Yukon
Y1A 2Z7
Ph: (867) 668-4968
Fax: (867) 668-4890
E-mail: NAL@hypertech.yk.ca

28/09/99 Certificate of Analysis

John Hope WO# 00015

Certified by

Area 3

	Sample #		Au ppb	Ag ppm
r	56322		<5	0.1
r	56322	Float (Eagle R.) } South Eagle	<5	0.1
r	56323		<5	0.1
r	56325		<5	0.1
r	56328		<5	0.1
r	56330	} North Eagle	<5	0.1
r	56337			<0.1
r	56338			<0.1
r	56342			0.1
ss	Silt #1		9	<0.1
ss	Silt #2		<5	<0.1
ss	Silt #3	} South Eagle	5	0.3
ss	Silt #4		6	0.1
ss	Silt #5		<5	0.1
ss	Silt #6		5	0.1

INTERNATIONAL PLASMA LABORATORY LTD.

Area 3

CERTIFICATE OF ANALYSIS
iPL 99I0939

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

Client : Northern Analytical Laboratories
Project: WO# 00015

28 Samples
28=Pulp

[093915:43:01:99100199]

Out: Oct 01, 1999
In : Sep 27, 1999

Sample Name	Type	Au ppb	Pt ppb	Pd ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm
56315 South Eagle	Pulp	—	—	—	<0.1	6	8	19	<5	12	<3	4	<10	<2	<0.1	65	1484	34	<5
56316 South Eagle	Pulp	—	—	—	<0.1	12	4	19	<5	9	<3	4	<10	<2	<0.1	74	1735	5	<5
56320 South Eagle	Pulp	—	—	—	<0.1	5	3	7	<5	7	<3	4	<10	<2	<0.1	48	973	11	<5
56321 South Eagle	Pulp	—	—	—	<0.1	14	8	65	<5	<5	<3	2	<10	<2	<0.1	29	48	5	<5
56324 South Eagle	Pulp	—	—	—	<0.1	270	5	21	<5	<5	<3	1	<10	<2	<0.1	26	43	107	<5
56325 North Eagle	Pulp	—	—	—	0.1	72	5	70	<5	<5	<3	10	<10	<2	<0.1	13	50	141	<5
56326 North Eagle	Pulp	—	—	—	<0.1	16	<2	25	<5	<5	<3	5	<10	<2	<0.1	3	5	425	<5
56327 North Eagle	Pulp	—	—	—	<0.1	34	9	79	<5	<5	<3	9	<10	<2	<0.1	13	38	957	<5
56328 North Eagle	Pulp	—	—	—	<0.1	56	5	68	<5	<5	<3	15	<10	<2	<0.1	10	31	133	<5
56329 North Eagle	Pulp	—	—	—	<0.1	11	6	37	<5	<5	<3	1	<10	<2	<0.1	4	6	513	<5
56330 North Eagle	Pulp	—	—	—	<0.1	107	8	42	<5	<5	<3	7	<10	<2	<0.1	18	80	122	<5
56332 North Eagle	Pulp	—	—	—	<0.1	55	6	77	<5	<5	<3	4	<10	<2	<0.1	18	55	548	<5
56334 North Eagle	Pulp	—	—	—	<0.1	28	10	55	<5	<5	<3	3	<10	<2	<0.1	7	13	755	<5
56335 North Eagle	Pulp	—	—	—	<0.1	62	6	59	<5	<5	<3	4	<10	<2	<0.1	12	29	428	<5
56336 North Eagle	Pulp	—	—	—	<0.1	19	<2	37	<5	<5	<3	2	<10	<2	<0.1	5	12	657	<5
56337 North Eagle	Pulp	2	<15	<5	<0.1	28	5	54	<5	<5	<3	5	<10	<2	<0.1	13	28	1150	<5
56338 North Eagle	Pulp	<2	<15	<5	<0.1	41	6	53	<5	<5	<3	2	<10	<2	<0.1	11	33	209	<5
56340 North Eagle	Pulp	—	—	—	<0.1	13	5	44	31	<5	<3	1	<10	<2	<0.1	6	7	238	<5
56341 North Eagle	Pulp	—	—	—	0.1	107	13	66	<5	<5	<3	12	<10	<2	<0.1	33	144	58	<5
56342 North Eagle	Pulp	<2	<15	<5	0.1	64	7	68	<5	<5	<3	12	<10	<2	<0.1	19	81	87	<5
SILT 1 South Eagle	Pulp	—	—	—	0.1	28	6	74	<5	<5	<3	3	<10	<2	<0.1	14	42	155	<5
SILT 2 South Eagle	Pulp	—	—	—	0.1	32	8	96	<5	<5	<3	3	<10	<2	<0.1	14	54	221	<5
SILT 3 South Eagle	Pulp	—	—	—	0.4	70	16	160	<5	<5	<3	5	<10	<2	<0.1	23	247	585	<5
SILT 4 South Eagle	Pulp	—	—	—	<0.1	44	9	72	<5	<5	<3	2	<10	<2	<0.1	16	62	148	<5
SILT 5 South Eagle	Pulp	—	—	—	<0.1	32	11	87	<5	<5	<3	3	<10	<2	<0.1	16	67	234	<5
SILT 6 North Eagle	Pulp	—	—	—	<0.1	69	13	140	<5	<5	<3	3	<10	<2	<0.1	24	61	183	<5
SILT 7 North Eagle	Pulp	—	—	—	<0.1	28	4	65	<5	<5	<3	2	<10	<2	<0.1	13	52	384	<5
SILT 8 North Eagle	Pulp	—	—	—	0.1	40	6	74	<5	<5	<3	2	<10	<2	<0.1	19	93	1464	<5
Minimum Detection		2	15	5	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5
Maximum Detection		10000	10000	10000	100.0	20000	20000	20000	10000	1000	10000	1000	1000	10000	100.0	10000	10000	10000	1000
Method		FA/AAS	FA/AAS	FA/AAS	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

——=No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % NS=No Sample

INTERNATIONAL PLASMA LABORATORY LTD.

CERTIFICATE OF ANALYSIS
iPL 99I0939

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

Client : Northern Analytical Laboratories
Project: WO# 00015

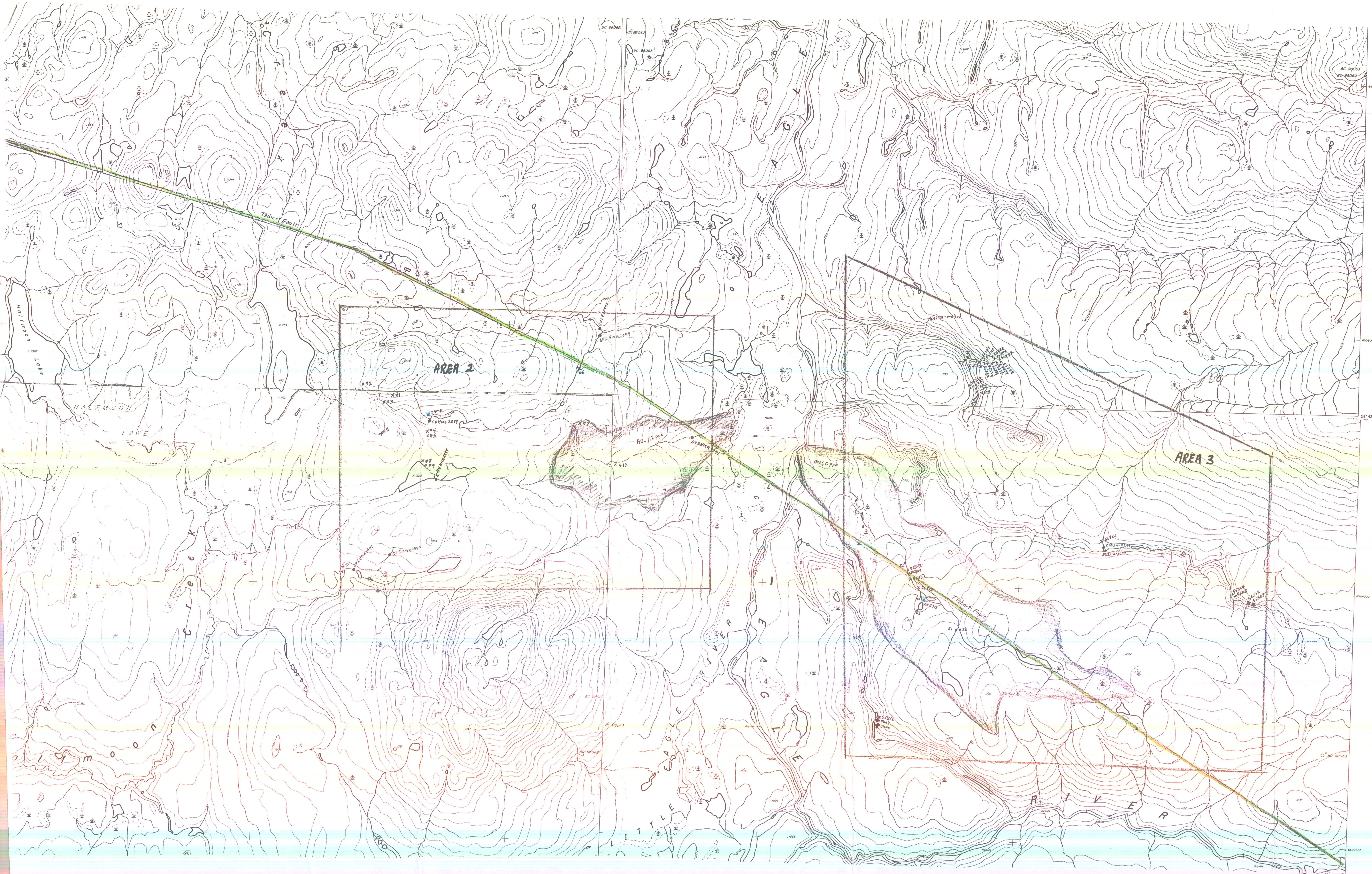
28 Samples
28=Pulp

[093915:43:01:99100199]

Out: Oct 01, 1999
In : Sep 27, 1999

Sample Name	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
56315	788	19	831	<2	19	<1	5	<0.01	0.19	1.30	2.83	18%	<0.01	0.03	<0.01
56316	640	15	422	<2	2	<1	4	<0.01	0.11	0.28	3.39	12%	0.01	0.02	<0.01
56320	363	17	770	<2	83	1	5	<0.01	0.03	1.28	3.81	17%	<0.01	0.02	<0.01
56321	32	178	729	<2	12	3	5	0.24	2.96	1.73	5.36	2.02	0.02	0.04	0.04
56324	37	61	391	<2	9	2	5	0.24	0.76	1.14	2.10	0.46	0.03	0.08	0.13
56325	160	105	340	3	24	2	5	0.17	1.59	0.37	2.98	1.40	0.60	0.04	0.07
56326	58	21	153	7	29	2	2	0.07	0.80	0.39	1.20	0.49	0.16	0.07	0.09
56327	235	119	421	7	12	1	5	0.30	2.26	0.27	3.13	1.86	1.33	0.07	0.06
56328	168	135	398	5	12	1	8	0.19	1.83	0.24	2.86	1.56	0.75	0.06	0.04
56329	35	6	340	16	65	5	2	<0.01	0.30	1.44	1.25	0.36	0.18	0.05	0.07
56330	125	48	204	5	15	2	2	0.13	0.89	0.40	2.07	0.63	0.29	0.05	0.04
56332	179	87	359	5	10	1	5	0.28	2.05	0.29	2.97	1.66	1.27	0.05	0.05
56334	118	78	430	4	9	1	7	0.17	1.42	0.17	1.93	1.10	0.68	0.05	0.02
56335	114	38	1148	3	28	1	4	0.13	1.06	0.24	2.08	0.72	0.45	0.05	0.03
56336	84	27	272	3	23	1	2	0.09	0.88	0.26	1.30	0.51	0.29	0.06	0.04
56337	121	59	248	5	33	2	6	0.11	1.48	0.35	1.67	0.86	0.49	0.07	0.06
56338	114	55	231	3	12	1	7	0.14	1.24	0.13	1.60	0.88	0.65	0.05	0.01
56340	36	7	380	7	128	2	3	<0.01	0.34	2.07	1.50	0.61	0.21	0.04	0.08
56341	206	107	249	9	7	1	3	0.23	1.95	0.40	3.43	1.78	0.95	0.05	0.09
56342	159	102	331	12	12	1	4	0.20	1.59	0.42	2.67	1.35	0.55	0.05	0.07
SILT 1	48	75	1326	6	39	2	3	0.11	1.43	0.84	3.43	0.69	0.05	0.03	0.08
SILT 2	50	59	2638	6	55	2	3	0.07	1.53	1.08	4.14	0.75	0.06	0.03	0.09
SILT 3	157	49	2585	10	87	3	3	0.03	1.68	1.15	4.35	1.89	0.09	0.03	0.11
SILT 4	60	69	580	7	27	4	4	0.12	1.42	0.80	2.86	0.86	0.07	0.03	0.07
SILT 5	46	54	1695	5	55	1	3	0.06	1.11	0.92	3.75	0.63	0.06	0.04	0.09
SILT 6	51	101	1924	7	51	2	8	0.07	1.48	0.85	5.76	1.03	0.08	0.04	0.09
SILT 7	59	66	496	6	45	3	4	0.10	1.32	0.77	3.47	0.84	0.07	0.03	0.09
SILT 8	56	65	2638	9	77	2	4	0.08	1.35	1.03	5.09	0.79	0.08	0.03	0.07
Minimum Detection	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Maximum Detection	10000	10000	10000	10000	10000	10000	10000	1.00	10.00	10.00	10.00	10.00	10.00	5.00	5.00
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

—=No Test Ins=Insufficient Sample Del=Delay Max=No Estimate Rec=ReCheck m=x1000 %=Estimate % NS=No Sample



Legend

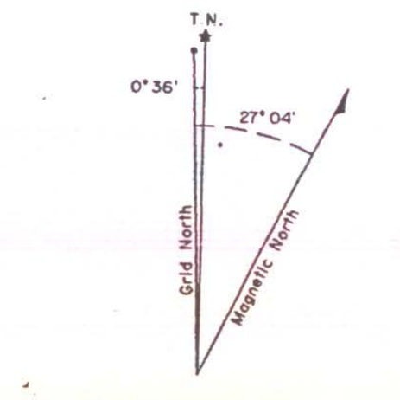
X - Camp
X showings - of significance
X Rock sample loctations
● Silt sample locatations
Fault
Au. Anomaly done by B.C. Regional Geochemical Survey 1996

Rights-of-way:
Township
District lot/Township section/Indian reserve
Mineral claim/Coal or Phosphate licence
Rights-of-way, transportation
1/4 section/Foreshore lot/Subdivision/ Rights-of-way, utilities
Cadastral tie

For complete reference to symbols, see "Specifications and Guidelines for Digital Baseline Mapping at 1:20 000" published by the Ministry of Environment, Lands, and Parks.

Notes

Digital data and additional copies of this map are available through MAPS-BC, Surveys and Resource Mapping Branch, Ministry of Environment, Lands, and Parks, Parliament Buildings, Victoria B.C. V8V 1X4.



Approximate Mean Declination 1996
for Centre of Map
Decreasing 18.0' Annually

104I.081	104I.082	104I.083
104I.071	104I.072	104I.073
104I.061	104I.062	104I.063

Adjoining Sheet Index in the British Columbia Geographic System.

LEGEND

Transportation
Road, paved
Road, gravel
Road, rough
Trail/Cutline/Seismic line
Railway, single track
Railway, double track
Railway, multiple track
Railway, abandoned
Wall, retaining
Cut/Fill
Bridge, to scale, symbolized
Tunnel, to scale, symbolized

Landmark features
Building, to scale, symbolized
Built up area
Fence
Transmission line
Tower

Drainage and related features
Coastline/River/Stream, definite
Coastline/River/Stream, indefinite
River/Stream, intermittent
River/Stream, split
Lake, definite
Lake, indefinite
Dyke
Flooded land
Swamp/Marsh
Beaver dam
Dock/Wharf/Pier, symbolized
Island, symbolized
Water level

Relief features
Contour, index, definite
Contour, intermediate, definite
Contour, intermediate, indefinite
Contour, intermediate, depression
Spot height

Vegetation
Wooded area

Control data
Control point, horizontal, permanently marked — 86H234
Control point, vertical, permanently marked — 86HA45

Cadastral
Surveys of Federal and Provincial Crown Land
Sub-division of Provincial Crown Land
Rights-of-way:
Township
District lot/Township section/Indian reserve
Mineral claim/Coal or Phosphate licence
Rights-of-way, transportation
1/4 section/Foreshore lot/Subdivision/ Rights-of-way, utilities
Cadastral tie

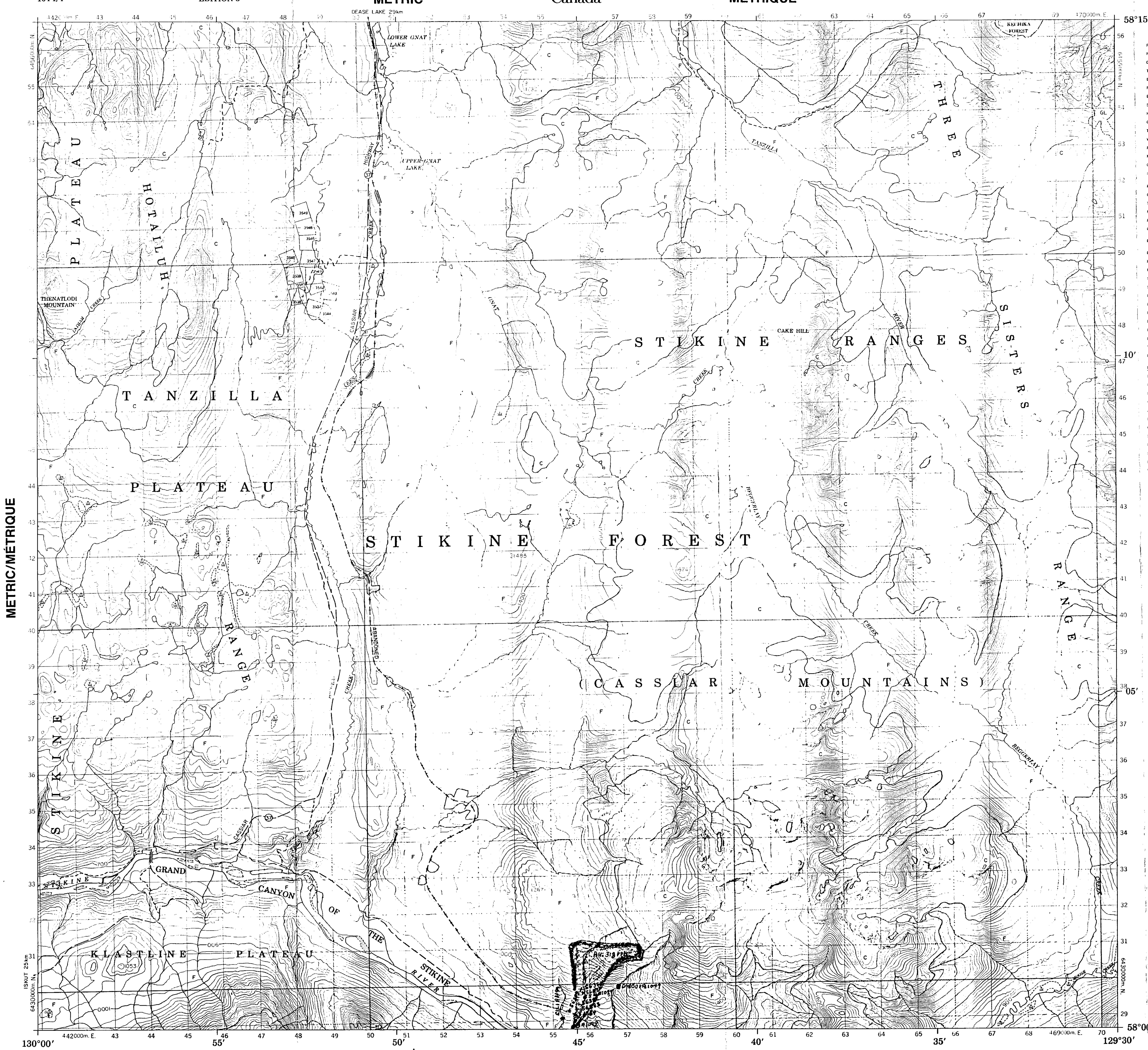
For complete reference to symbols, see "Specifications and Guidelines for Digital Baseline Mapping at 1:20 000" published by the Ministry of Environment, Lands, and Parks.

Notes

99-43 ①

Digital data and additional copies of this map are available through MAPS-BC, Surveys and Resource Mapping Branch, Ministry of Environment, Lands, and Parks, Parliament Buildings,

104-I/4 EDITION 3 **METRIC** Canada **MÉTRIQUE** ÉDITION 3 104-I/4



PRODUCED BY THE SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES, OTTAWA. CULTURE CHECK 1983. PUBLISHED IN 1984.

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

ELEVATIONS IN METRES ABOVE MEAN SEA LEVEL

CONTOUR INTERVAL .... 20 METRES

NORTH AMERICAN DATUM 1927

TRANSVERSE MERCATOR PROJECTION

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

Legend
× Rock samples
● Silt samples
Au. anomaly done by BC. Regional Geochemical survey 1996

CAKE HILL

CASSIAR LAND DISTRICT

BRITISH COLUMBIA COLOMBIE-BRITANNIQUE

Scale 1:50 000 Échelle

Miles 1 0 1 2 3 Milles

Metres 1000 0 1000 2000 3000 4000 Mètres

ALTITUDES EN MÈTRES

ÉQUIDISTANCE DES COURBES ..... 20 MÈTRES

SYSTÈME DE RÉFÉRENCE GÉODÉSIQUE NORD-AMÉRICAIN 1927

PROJECTION TRANSVERSE DE MERCATOR

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

ÉTABLIE PAR LA DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, OTTAWA. VÉRIFICATION DES OUVRAGES EN 1983. PUBLIÉE EN 1984.

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

CONVERSION SCALE FOR ELEVATIONS
ÉCHELLE DE CONVERSION DES ALTITUDES

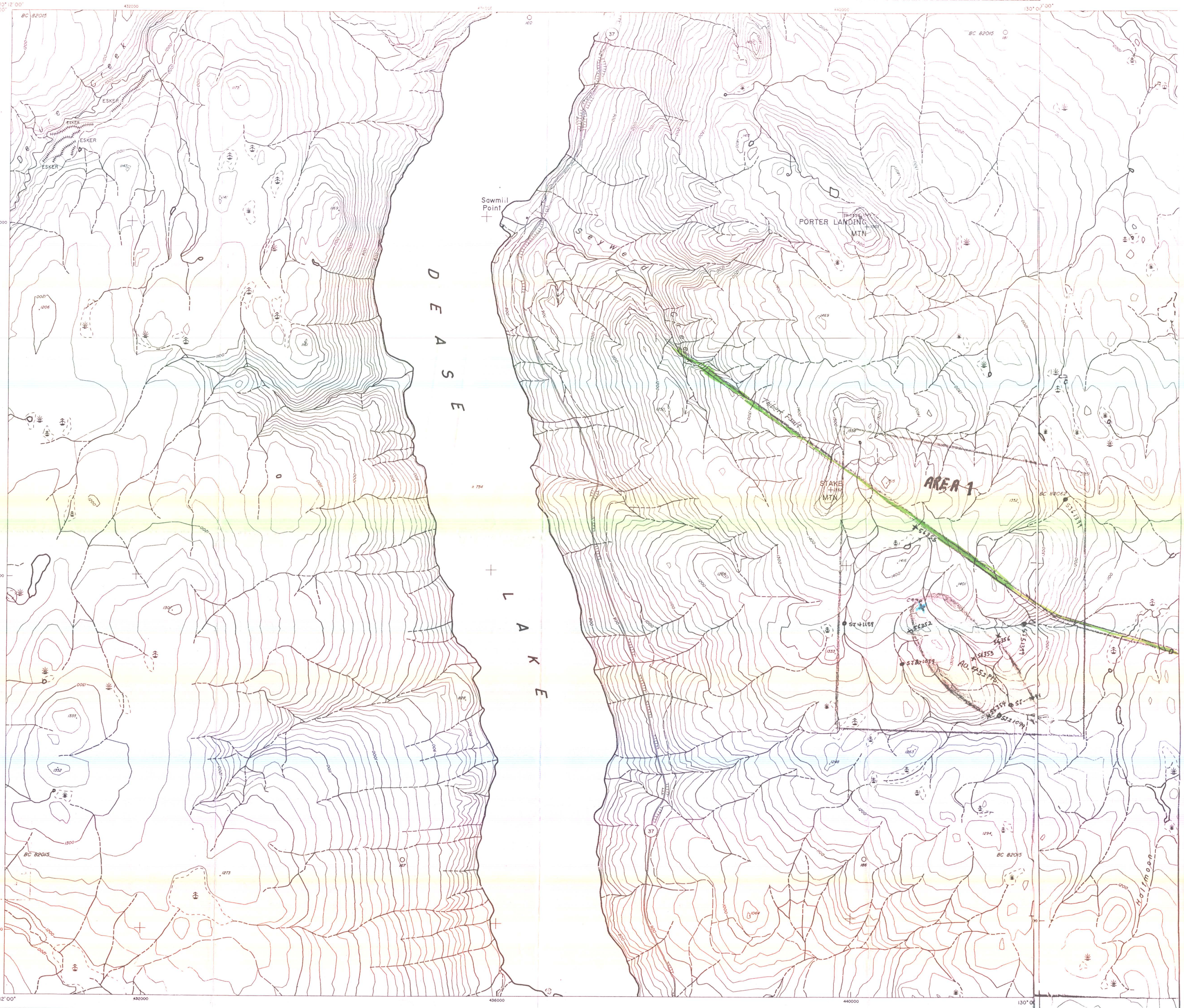
Metres 30 20 10 0 50 100 150 200 250 300 Mètres

Feet 100 50 0 100 200 300 400 500 600 700 800 900 1000 Pieds

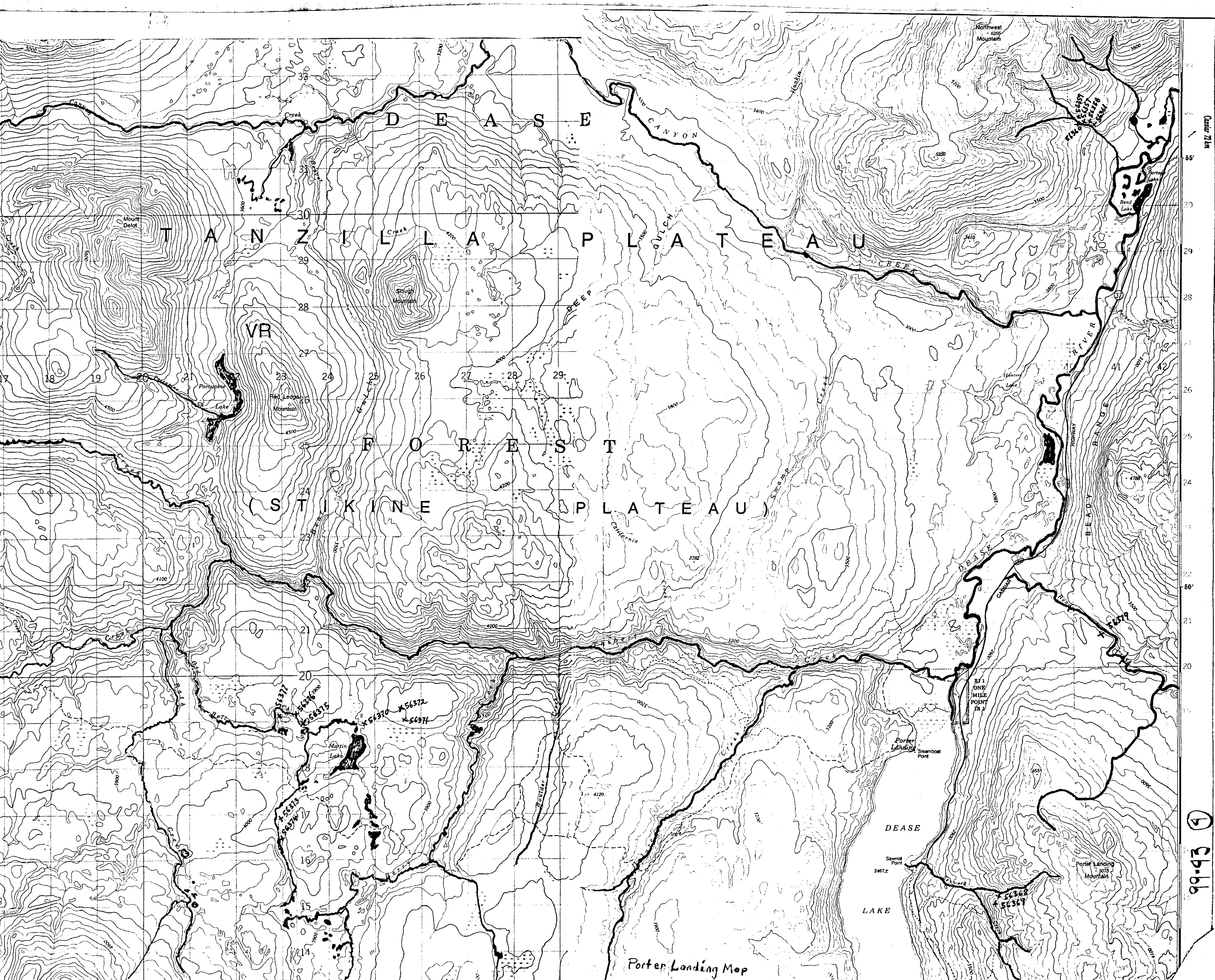
99-43 ②

CAKE HILL
104-I/4
EDITION 3 ÉDITION

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



...RITISH COLUMBIA ...nent, Lands, Parks Mapping Branch	Universal Transverse Mercator Projection North American Datum - NAD83 UTM Zone 9	Land District: Orig Land Title Dist.: Latest Plan No.: Date:	SCALE 1:20 000 200 0 200 400 600 800 1000 1200 1400 METRES 99-43 (3)	Contours generated from Digital Elevation Model. Contour interval 20 metres. Elevations in metres above Mean Sea Level.	DIGITAL DATA AVAILABLE PLANIMETRY ☒ CONTOUR CADASTRAL ☐ DEM



Porter Landing Map
SCALE 1:50,000 Legend x Rock Sample locations