

Summary report - YMIP Grant # 00-086

Grassroots- prospecting of uplands of Hasselberg Lake , map sheet 105A/13

coordinates: 129* 55' w.L., 60* 50' n.L.

Watson Lake Mining District

Dates of program: Sept.17th 2000 - Oct. 6th 2000

Grassroots - prospecting N of Ten Mile Point, 18 km NW of Teslin, map sheet 105C/07

coordinates: 132* 55' w.L., 60* 18' n.L.

Watson Lake Mining District

Dates of program: Oct.23rd 2000 - Nov. 5th 2000

author: Heiko Mueller

Summary Hasselberg Lake area

Location and Access:

Uplands N of Hasselberg Lake. Access by helicopter or 4 wheeler via trail from Campbell Highway

Previous Work:

none in relevant area

Details of evaluation:

Work consisted of conventional prospecting: breaking rocks supplemented by soil and stream sediment geochemistry.

Work was focused on mafic and ultramafic intrusive. Three targets were identified: contact zone to schist, magnetic anomaly high and magnetic bull eye anomaly.

Methods:

The uplands of Hasselberg Lake were prospected for ultramafic hosted PGE, cobalt and chromium mineralization from Sept.17th till Oct.6th 2000.

Rock samples, soil samples and stream sediment samples were taken.

Rock samples were obtained as grab samples of outcrop or float, placed in plastic bags and labeled for chemical analysis.

Soil samples were collected from holes dug with a geotul, and placed in numbered Kraft soil bags. A soil line was established where in increments of 100m soil samples were taken. The soil line was orientated in a way to cross a magnificent magnetic anomaly from their fringe to the anomaly center and a bull eye configuration.

Stream sediment samples were collected from creeks and streams by digging holes in the stream bed with a shovel and placing the extracted material in a gold pan. Because of a lost sieve the sediment were hand sorted and frequently watered to avoid losing fine material clinging to wasted pebbles and gravel. The sediment residue (still quite coarse) were placed in plastic bags and labeled. At least 1kg of sediment per bag was collected. Later high grading of the sediment was not carried out due the lack of fine meshed sieves.

Analytical Methods:

The majority of samples collected during prospecting were analyzed in one batch by Acme Analytical Laboratories Ltd. of Vancouver.

All shipped samples were analyzed by the group 1D and AU, Pt, Pd. The procedure were as follows: 0.5g sample leached with 3ml 2-2-2 HCL-HNO₃-H₂O at 95°C for one hour, diluted to 10ml and analyzed by ICP-ES.

Soil and stream sediment samples were dried at 60°C and up to 100g sieved to -80 mesh.

Rock samples were crushed, split and pulverized to 250g of mesh -150 particle size.

Analytical results:

Pt and Pd values were not anomalous and in background range.

Highest values returned were 23ppb Pt and 12ppb Pd. Nickel cobalt and chromium highest levels are: 2070 ppm Ni, 143 ppm Co, 1955ppm Cr.

Evaluation

The prospected area is characterized by a sharp contoured magnetic anomaly, which corresponds to the outcrop of ultramafic ophiolites and a contact to schist. The contact strikes along camp creek (named after the camp location). The uplands W of the camp are mainly composed of greenstone and hornblende schist, dipping towards the contact with the intrusive. The mafic and ultramafic ophiolites are composed of serpentinite, pyroxenite and hornblendite, typically dissected by serpentine veins and sometimes abundant magnetite. The ophiolite complex is morphological expressed by a high elevation plateau and gentle ridges.

The stream sediment data of the preciously carried out geochemical reconnaissance indicate high levels of chromite, cobalt and nickel.

The anomalous levels of these elements are also confirmed by results of the geochemical assay of the rock and soil samples.

The highest grades are: 2070 ppm Ni, 143 ppm Co, 1955ppm Cr.

Grades for Pt and Pd were disappointing within the background level. Highest grades are 23 ppb Pt and 12 ppb Pd.

Magnetite is associated with chromite. This fact is confirmed by the correlation of Fe-content to Cr-grades.

An another obvious direct correlation is found between Ni-grades and Mg-level. The Mg-levels are in a range expected for ultramafics. The average Mg-levels of slightly under 10% of the assayed ultramafics indicates them as not mantle derived.

The geological setting and structural appearance of the ultramafics exhibits an extensive alteration.(tremolite, steatization, serpentine veining, adjacent schist as contact)

It can be speculated , the original intrusion was not chromite and magnetite enriched but underwent later regional metamorphose alteration. As a result of that magnetite and chromite were introduced (hydrothermal?), displayed in magnetite banding at margin of serpentine and chrysotile veins, as fillings of fissures and the distorted appearance of macroscopic magnetite. Several metamorphic events can be structurally observed.

Conclusions and recommendations:

The suppose genesis does not leave much room for a potential of PGE mineralization.

Nevertheless only a small part of the intrusive body could examined , also leaving short the area of the magnetic bull eye anomaly. The results of soil samples approaching this area are encouraging and ward a further inspection. Personally I still believe this area has potential.

Appendicies

- #1 aeromagnetics
- #2 traverses A,B,C
- #3 traverses D,E,F
- #4 traverses G,H,I
- #5 traverses J,K,L
- #6 traverses M,N,O
- #7 traverses Q, stream sediment locations S
- #8 samples with Ni>1000ppm
- #9 samples with Co>100ppm
- #10 samples with Cr>1000ppm
- #11 samples with Mg>10%
- #12 sample locations
- #13 assay results

Summary Teslin Lake area

Location and Access

E of Alaska Highway, N of Ten Mile Point, 18 km N of Teslin
Access by foot from Alaska Highway

Previous Work:

none in relevant area, adjacent REO claims (lapsed) on gold prospect

Details of evaluation:

Work consisted of conventional prospecting: breaking rocks supplemented by soil and stream sediment geochemistry.

Work was focused on mafic and ultramafic intrusive. Main target was a magnetic anomaly, corresponding to the outcrop of the intrusives.

Methods:

The area E of the Alaska Highway were prospected for ultramafic hosted PGE, cobalt and chromium mineralization from Oct.23rd till Nov.5th 2000. Prospecting was partly obstructed by snow of up to one foot high.

Rock samples, soil samples and stream sediment samples were taken.

Rock samples were obtained as grab samples of outcrop or float, placed in plastic bags and labeled for chemical analysis.

Soil samples were collected from holes dug with a geotul, and placed in numbered Kraft soil

bags.

Stream sediment samples were collected from creeks and streams by digging holes in the stream bed with a shovel, sieved to -4 mesh and placed in a gold pan. The water was drained and the sediment were placed in plastic bags and labeled. At least 1kg of sediment per bag was collected. Later high grading of the sediment was not carried out due the lack of fine meshed sieves.

Analytical Methods:

The majority of samples collected during prospecting were analyzed in one batch by Acme Analytical Laboratories Ltd. of Vancouver.

All shipped samples were analyzed by the group 1D and AU, Pt ,Pd. The procedure were as follows: 0.5g sample leached with 3ml 2-2-2 HCL-HNO3-H2O at 95°C for one hour, diluted to 10ml and analyzed by ICP-ES.

Soil and stream sediment samples were dried at 60°C and up to 100g sieved to -80 mesh.

Rock samples were crushed, split and pulverized to 250g of mesh -150 particle size.

Analytical results:

Pt and Pd values were not anomalous and in background range.

Highest values returned were 35ppb Pt and 11ppb Pd. Nickel cobalt and chromium highest levels are: 994 ppm Ni, 121 ppm Co, 1077ppm Cr.

Evaluation

The prospected area is characterized by a distinct magnetic. The area N of Ten Mile Point are mainly composed of basalt and hornblendite schist, fewer greenstone and peridotite. Basalt is encountered in distinct towers and cliffs scattered throughout the dense treed area. Peridotite occur more often in the uplands closer to the Lone Tree Creek but are still scarce. Closer to the high of the magnetic anomaly rocks appear with sometimes intense rusty coating. Small specks of arsenopyrite are sparsely distributed. Basalt is frequently dissected by qtz veins up to 0.5 m thick and locally with bornite and malachite.

The stream sediment data of S100 at Ten Mile Creek show a noticeable higher value of gold of 789ppm.

Ultramafics were only very sporadic encountered ,partly due to the limited outcrop at lower elevation and the effects of glaciation.

Because of the unfavorable weather conditions the higher uplands closer to Lone Tree Creek could not evaluated, where the source of ultramafics is suspected.

Conclusions and recommendations:

The target area could only partly accessed and evaluated. The so far evaluated area does not indicate a source of PGE mineralization (mainly basalt). Despite these findings rocks closer to the magnetic high are higher in PGE and show a more favorable composition. Certainly the area is still worth to be checked out closer, especially in the vicinity to the magnetic anomaly.

Appendicies

#1 sample locations

#2 traverses A,B,C

#3 traverses D, stream sediment samples S

#4 traverses E,F,G,

#5 samples with Ni>1000ppm, Co>100ppm, Cr> 1000ppm, Mg>10%, Pt max

#6 aeromagnetics

#13 assay results: see Hasselberg Lake

Summary Report – YMPI Grant 00-086

2000 daily prospecting diary – Heiko Mueller

Sunday, September 17th, 2000:

Prospecting notes: Hasselberg Lake

After two days of waiting for clear weather to fly, departed Watson Lake from Trans North Helicopter base in Bell 205 to uplands of Hasselberg Lake with a Flying time of one hour.

Weather: in Watson Lake sunny, strong winds, showers and limited visibility while approaching target area.

Difficulties finding appropriate landing site, after extremely wet summer the ground is still swampy in most areas.

Camp set up on the left bank of unnamed creek draining into Hasselberg Lake; creek named Camp Creek, elevation 1490 m. at tree line.

Prospecting: upstream Camp Creek in the vicinity of campsite.

Stn.A1: 100m upstream of camp on left creek bank.

Float rock peridotite with blobs of magnetite, serpentine, surface steatized, brown stains on surface.

Stn.A2: 30m. upstream of A1 on left creek bank.

Hornblendite with minor disseminated magnetite, steatized, and float rock.

Stn.A3: Opposite creek side.

Hornblendite with serpentine heeled fissures, equigranular, and non-magnetic. Area has approximately 5% outcrop mainly in creek vicinity.

Stn.A4: Left site of creek 300m. upstream from camp.

Greenstone schist outcrop with banded hornblende, foliated, dense, Non-magnetic.

Stn.A5: 400m. NW from camp.

Pyroxenite, foliated with banded accumulations of pyroxene, steatized.

Monday, September 18th, 2000

Showers and flurries, windy, 0* C.

Set up food cage and kitchen area.

Prospecting: Right side of creek down stream from camp.

Stn.B1: 200m. SW from camp.

Green stone schist with qtz. filled fissures, foliation dipping at 20* NE.

Stn.B2: 500m. SW from camp.

Outcrop of fractured schist. Continue south and return along creek to camp.

Tuesday, September 19th, 2000

Showers with sunny breaks +5°C snow melting.
Change setup of food cage, supporting trees unstable.
Prospecting: uplands W from camp

Stn.C1: 400m. SW from camp.
Out crop of schist, gray, fractured, vuggy.

Stn.C2: 500m. W from camp.
Claim post WB89426, VIVI, staked June 22nd 1997 by J.P. Ross.

Stn.C3: 800m. W from camp.
Float rock, hornblendite, and non-magnetic, dark gray, weak foliation.

Wednesday, September 20th, 2000.

Sunny with showers +5°C.
Work done on suspension of food containers, only a few tall and stable trees available for food cache.
Prospecting W from camp on uplands.

Stn.D1: 300m. WNW from camp.
Float hornblendite with bands of equegranular microscopic hornblende.

Stn.D2: 500m. NW from camp.
Float of peridotite with small specks of magnetite.

Stn.D3: 800m. NW from camp.
Small outcrop of schist, foliation dipping 30° at 50°.

Stn.D4: 1 Km. W from camp.
Gray schist with qtz. stringers heeled fissures filled with Mn.

Stn.D5: 800m. WSW from camp on uplands, area generally swampy with old drainage's
Running parallel to Camp Creek, few outcrop, some float.
Hornblendite schist in chill zone of intrusive.

Thursday, September 21st, 2000.

Sunny and calm 10°C. previous night -15°C.
Takes time the thaw out frozen stiff boots.
Prospecting: Upstream to saddle, and return along right side of creek.

Stn.E1: 500m. NW from camp.
Peridotite with magnetite nodules, float mottled apperence serpentine less the 50%, brownish specks of altered magnetite (hematite).

Stn.E2: 600m. NW from camp, inactive drainage.
Subcrop of sheared basalt with tiny specks of pyrite.

Stn.E3: 800m NW from camp.
Outcrop of hornblendite with serpentine filled fractures.

Friday, September 22nd, 2000.

Overcast, fading sun, calm +6°C.

Surprised by cow moose in camp feeding on brush.

Prospecting: Upstream Camp Creek to saddle continue northward to top of unnamed mountain 2km. North of camp, named mountain Lone Caribou Mountain. (LCM).

Stn.F1: 1km. NNW from camp, crossing claim line VIVI (lapsed).
Float with magnetite blobs, microscopic plagioclase (albite?), serpentine more than 90%, striatized.

Stn.F2: South slope of LCM, 1.5km. N of camp.
Hornblendite, dull green talc coating on surface, magnetite nodules, fissures filled with magnetite, microscopic tremolite.
Magnetite and associated chromite during metamorphism introduced.

Stn.F3: 50m. E of F2.
Serpentinite with tremolite and magnetite, parallel fissures healed by magnetite and chromite (intruded as a result of hydrothermal metamorphism).

Stn.F4: 250m S of top of LCM.
Peridotite, magnetite nodules, mottled, stearitized.

Stn.F5: Top of LCM, 2km. North of camp
Steatized serpentinite, gangue fragment of serpentine vein, yellow brown stain (hematite and garnierite?) tiny bands of magnetite and chromite?

In the evening at twilight, a bull moose with an impressive posture passes through camp.

Saturday, September 23rd, 2000.

Drizzle, fog, calm, later windy temp +3°C.

Prospecting: Upstream towards saddle and beyond.

Stn.G1: 500m upstream from camp creek bed outcrop.
Foliated hornblendite.

Stn.G3: 600m upstream NW from camp.
Hornblendite, macroscopic hornblende in sequences.

Stn.G4: 800m upstream NW from camp.
Foliated hornblendite, elongated lenses of nepheline? Embedded.

Stn.G5: 50m upstream from G4.

Pyroxenite with serpentine filled fissures, non-magnetic.

2nd sample: gangue fragment of serpentine vein, steatized, orange brown coating along vein margin.

Stn.G6: On saddle plain, 1.3 km NW from camp.

Tower of sheared, foliated hornblendite with qtz. Vein dissecting entire block of
Over 5m, Vein 10cm thick and qtz. dry.

Sunday, September 24th, 2000.

Rainy, windy +5°C.

Prospecting: NE of camp, cross mountain ridge above camp, proceed towards 5000ft.

Mtn.

Stn.H1: 600m NW of camp at tree line.

Pyroxenite outcrop, steatized, magnetite nodules, some muscovite, fissures filled
With orange brown mineral (garnierite?).

Stn.H2: Ridge above camp.

Hornblendite with tremolite and (orthoclase?), brown hematite coating,
Magnetite.

Stn.H3: 50m. SE of H2.

Hornblendite with red brown surface coating (talc), veinlets of serpentine

Stn.H4: 50m W of H3.

Serpentinite with pegmatic magnetite, chrysotile, tremolite plagioclase,
Steatized, magnetite flattened and tabular as a result of regional
Metamorphism.

Stn.H6: 1km NE from camp.

Pyroxenite with hedenbergite weakly magnetic.

Stn.H7: 300m SW of top of 5000ft mtn.

Peridotite with yellow brown specks (garnierite?), steatized.

Stn.H8: Edge of 5000ft mtn.

Fracture of serpentine vein.

Monday, September 25th

Heavy rain all day, identify samples.

Prospecting downstream along Camp Creek.

Stn.I2: 300m downstream on right side of creek.

Peridotite float, magnetite nodules and fissure fillings, orange brown surface coating (talc).

Stn.I3: 400m SE from cam

Float of hornblende with parallel qtz. stringers, pyrite specks.

Tuesday, September 26th, 2000.

Frequent showers +4°C.

Prospecting along ridge above camp northwards to LCM and northern extension

Stn.J1: Foot of LCM south of to

Peridotite, magnetite, associated with massive chromite, tremolite, 1 speck of Erythrite?

Stn J2: 500m SE of top

Massive serpentine vein fragments.

Stn.J3: 300m SE of top.

Peridotite, with larger tremolite minerals.

Stn.J4: 300m. NW of LCM.

Serpentinite, embedded magnetite nodules some altered into hematite? (lamellar appearance), talc coating on surface

Stn.J5: N slope LCM. Basalt outcrop, large boulders.

Stn.J6: Knob at N extension of LCM

Peridotite, extremely magnetic, visible magnetite nodules, steatized.

Stn.J7: N most knob of LCM.

Peridotite, serpentine vein with shear stress striations in various directions (chrysotile like appearance), garnierite?

Stn.J8: Peridotite Stn.J9: N Edge of LCM, number of samples taken from upper slope, larger boulders with structural features.

Peridotite, with tremolite, macroscopic magnetite as nodules, also in microscopic fillings of fissures, and in bands.

Serpentine bolder: Serpentine vein offset, Magnetite band located on margins magnetite stringers parallel to serpentine vein, Magnetite up to 1c m scattered throughout bolder, some magnetite rolled out and flattened.

Wednesday, September 27th, 2000.

Overcast, windy +5°C.

Prospecting along W slope of LCM.

Stn.K1: 1.5Km N of camp at S slope of LCM.

Peridotite, gray brown, steatized.

Stn.K2: 100m. W of K1.

Peridotite with tremolite up to 2cm, nodules of magnetite.

Stn.K3: 50m N of K2.

Same as K2.

Stn.K4: 300m SW of mtn. top at tree line.

Peridotite, gray brown, magnetite (chromite) patches.

Stn.K5: 300m NW of mtn. Top.

Serpentinite with magnetite nodules, steatized surface (orange)

Single caribou observed like yesterday.

Thursday, September 28th, 2000.

Showers windy +3°C.

Prospecting plain in front of 5000ft mtn.

Stn.L1: 1.5km. NE of camp.

Pyroxenite composed of hedenbergite, non-magnetic.

Stn.L2: 100m N of L1.

Peridotite with brownish patched, steatized.

Stn.L3: 200m E of L2.

Hornblendite.

Stn.L4: Plateau top of 5000ft. mtn.

Hornblendite, aphanitic, dense, no magnetite, yellow brown coating
(garnierite)

Stn.L5: N slope of 5000ft. mtn.

Peridotite with shear planes and serpentine coating, magnetic, steatized.

Stn.L6: 50m E of L5.

Peridotite, magnetite on healed shear planes, yellow brown patches
(hematite?)

Stn.L7: 100m N of L6.
Peridotite with serpentine bands.

Friday, September 29th, 2000.

Heavy rain through the night, flurries during the day, snow ling at 5500ft, -1°C.
Prospecting W from camp towards uplands of 6483ft mtn.

Stn.M1: 600m SW of camp.

Hornblende schist, foliation dipping at 20° at 350° towards intrusives
macroscopic hornblende in bands not corresponding to foliation, plagioclase
on fissure planes, some qtz. lenses, few specks on pyrite in host rock.

Stn.M2: Uplands W of camp.

Same as M1.

Return to camp watch bull moose on opposite hillside walking towards camp tried to
avoid him by going further north. Temp drops in evening, tent frozen stiff, northern
lights.

Saturday, September 30th, 2000.

Overcast -8°C.

Prospecting around 5000ft mtn.

Stn.N1: Close to plateau top of 5000ft mtn., area of previously found serpentine vein
number of samples taken.

Peridotite with chrysotile veinlets, fibers up to 1cm long, scattered magnetite
nodules, yellow green patches of garnierite, overall ashbrown plaque ore like
appearance of rock.

Stn.N2: SW edge of plateau top.

Serpentine vein fragment with 2cm thick orange band on hanging wall, steatized,
Close by sample with extensive tremolite of lilac color.

Sunday October 1st, 2000.

Flurries and hail, overcast -10°C.

Soil sampling starting at campsite (sample #22134) at 25° azimuth towards LCM.

Sample #	Depth cm	Color	Horizon	Organic	Rock fragments	Texture	Slope
22134	10	Gray(gr)	B	Med	Med	Clay	Bank
22135	10	Gr/black	B	Lots	Med	Clay	Med W
22136	10	Gr/black	B	Med	Few	Clay	Gentle W
22137	20	Gr/black	B	Med	Few	Clay	Gentle W
22138	20	Gr/black	B/C	Med	Lots	Clay	Gentle W
22139	15	Green/brn	B	Med	Med	Clay	Gentle W
22140	20	Grn/yl/brn	B	Few	Med	Clay	Gentle W
22141	20	Grn/yl/brn	B	Med	Med	Clay	Gentle W

22142	20	Grn/gr/brn	B	Med	Med	Clay	Gentle W
22143	20	Grn/gr/yl	B	Med	Med	Clay	Gentle W
22144	20	Grn/brn	B	Few	Med	Clay	Gentle W
22145	15	Gr/blk	B	Med	Med	Clay	Gentle W
22146	15	Yl/br	B	Med	Med	Clay	Ridge
22147	10	Grn/brn	B	Few	Med	Clay	Ridge
22148	20	Grn/brn	B	Few	Med	Clay	Ridge
22149	15	Grn/brn	B	Few	Few	Clay	Gentle NE
22150	20	Dark/brn	B	Med	Med	Clay	Gentle SE
22151	20	Dark/brn	B	Med	Lots	Clay	Gentle SE
22152	20	Dark/brn	B	Med	Lots	Clay	Med SE
22153	10	Dark/brn	B	Lots	Lots	Clay	Steeper SE

Monday, October 2nd, 2000.

Clear cold night -18°C., partly sunny -8°C.

Prospecting and continuation of soil line of previous day at E slope LCN,

Stn O1: End of soil line.

Pyroxenite with hedenbergite, garnierite, disseminated

Stn.O2: 100m. NE of O1.

Pyroxenite, garnierite.

Stn.O3: 200m. NW of O2.

Peridotite, steatized.

Stn.O4: Peridotite with yellow and orange stains.

Tuesday, October 3rd, 2000.

Sunny strong N winds, -5°C.

Stream sediment sampling, due to a lost sieve sediment sorted by hand in a gold pan.

Sampling S1 and S2, 800m and 900m NW of camp.

Sample #	Location	Velocity	Width	Depth	Sediment	Direction
S1	Spring	Slow	1.0m	Bdrk/surf	Organic	S
S2	Creek/W	Fast	1.5m	Bdrk/surf	Gravel	W
S3	Creek/NE	Slow	0.4m	Sed/surf	Clay	NE
S4	Camp/Ck	Med	1.5m	10cm	Gravel	N
S5	Camp/Spr	Slow	0.3m	15cm	Clay	N
S10	NofMag	Fast	4.0m	10cm	Gravel	W
S11	SeofMag	Fast	4.0m	20cm	Gravel	W

Wednesday, October 4th, 2000.

Cold night -22°C. sunny 0°C.

Stream sediment sampling and prospecting at the ridge above camp.

Sample S3 taken 300m. E of camp

Stn.Q1: Plateau NE of camp.
Peridotite with magnetite nodules.

Stn.Q2: Center of highland plateau (drainage line)
Peridotite.

Stn.Q3: 100m N of Q2
Peridotite with large tremolite needles.

Stn.Q4: 200m E of Q3
Peridotite with magnetite nodules.

Thursday, October 5th, 2000.

Heavy snow fall -5°C.

Stream sediment sampling S4 and S5, 200m upstream of Camp Creek and 200m W of camp in small drainage, data see table October 3rd.

Friday, October 6th, 2000.

Overcast, melting snow, 0°C.

Pack and prepare for departure, helicopter supported stream sediment sampling of S10 and S11, 4.5 km NE of camp, see table October 3rd. Arrival in Watson Lake 4:30 pm

Teslin Lake area daily diary – Heiko Mueller

Monday, October 23rd, 2000

Overcast ½ft of snow, +4°C.

Set up camp at 10 mile point boat launch.

Stream sediment sampling S100 and S101 at Ten Mile Creek 400m E of Alaska Highway.

Sample #	Location	Velocity	Sediment	Width	Depth	Direction
S100	10 Mi Ck	Med	Gravel	3.0m	10 cm	NE
S101	10 Mi Ck	Med	Gravel	3.0m	20 cm	NE
S102	No sample	Taken				
S103	Moose Ck	Med	Silt	0.5m	10 cm	E
S104	Moose Ck	Med	Grvl/silt	0.5m	10 cm	E
S105	Long Ck	Fast	Gravel	2.0m	10 cm	E
S106	Ln Tre Ck	Fast	Gravel	2.0m	20 cm	W

Tuesday, October 24th, 2000.

Overcast +3°C

Prospecting upstream Ten Mile Creek and left foothills, dense forest and undrebrush, area glaciated.

Stn.A1: 3 km NE of camp.

Basalt outcrop with phenocrysts of plagioclase.

Stn.A2: 100m. N of A1.

Float basalt with qtz stringers, dull qtz. with hematite stain.

Stn.A3: 300 N of A1.1

Basalt, aphanitic, qtz. stringers, orange stain;
Hornblendite silicified close by.

Stn.A4: Cliff 300m N of A3.

Basalt with qtz. fissures.

Wednesday, October 25th, 2000.

Sunny +4°C.

Prospecting 2.5 km NE of camp, area of Mtn. Lake.

Stn.B1: Right side of Mtn. Lk. Ck.

Basalt outcrop as part of semigraben running parallel to Teslin Lake, glacial ice movement along these structures from SE to NW, sessions of semigrabens with same orientation.

Stn.B2: 300m E of B1.

Float greenstone with chrysotile, fiber max.2mm long, silicified, and also hornblende
qtz, hematite.

Stn.B3: Cliff on W shoreline of mtn. Lk 20m long trench running E-W, N wall
Intersected by qtz. vein, dull qtz. wall composed of gray basalt.

Stn.B4: Foothills E of mtn lk. ascending mtn., thick underbrush.
Basalt cliffs with qtz. veinlets and bornite, intensely faulted.

Thursday, October 26th, 2000.

Overcast -2°C.

Prospecting E of mtn. lk.

Stn.C1: Close to B3.

Basalt cliff with 0.5m thick qtz. vein, striking 25m, vein with pyrite, bornite, malachite, number of samples taken from vein, foot and hanging wall.

Stn.C2: 400m NE of C1 in semigraben valley.

Basalt tower with intense metallic redbrown stain (vanadinite?).

Stn.C4: 600m E of highway.

Basalt cliff.

Friday, October 27th, 2000.

Cloudy, -2°C. strong N winds.

Prospecting N of mtn lk.

Stn.D1: Foothills N of mtn lk, semigraben.

Basalt layered, manganese stain, faulted.

Stn.D2: Close to Moose Ck, 1.5km NW of D1.

Serpentinite with little specks of arsenopyrite, non-magnetic.

Stn.D3: 200m W of D2.

Serpentinite similar to D2.

Saturday, October 28th, 2000.

Overcast, light snow fall, -4°C.

Stream sediment sampling S103, S104, at tributary to Moose Ck. 2km NE of Highway, S105 on Moose Ck. 1km N of S 104.

Data see table October 23rd.

Return to Whitehorse to get stove and discuss glaciation of area with Jeff Bond

Thursday, November 2nd, 2000.

Overcast snowfall -4°C. 1 ft of snow.

Soil sampling T100 to T104, uphill slope of plateau mtn N of Long Ck.

Sample #	Depth in cm	Color	Horizon	Organics	Rock fragment	Texture	Slope
T100	20	Brown	B	Few	Few	Silt	Med
T101	20	Grn/brn	B	Few	Few	Silt	Med
T102	20	Grn/brn	B	Few	Med	Silt	Gentle
T103	25	Grn/brn	B	Few	Med	Silt	Med
T104	20	Brown	B	Few	Few	Silt	Med
T110	25	Red/brn	B	Few	Lots	Silt	Gentle
T111	20	Red/brn	B	Med	Med	Silt	Flat
T112	20	Grn/gry	B	Med	None	Clay	Flat

Prospecting SW of plateau mtn, area of magnetic high.

Stn.E1: Outcrop of peridotite, ash colored, rusty, disseminated magnetite.

Stn.E2: 300m SE of plateau mtn, end of soil line (T104).

Peridotite, black, foliated planes in different directions.

Friday, November 3rd, 2000.

Overnight snow, calm cloudy 0°C.

Soil sampling T110 to T112, N of Lone Tree Ck. in glacial shadow of little knob

See above table November 2nd.

Prospecting in same area.

Stn.F1: 800m E of Alaska Highway.

Outcrop of young basalt, aphanatic, not mineralized.

Stn.F2: 200m NE of F1.

Outcrop of older basalt, steatized, Mn-stain, foliated

Stn.F3: 200m W of F2.

Peridotite.

Saturday, November 4th, 2000.

Light snowfall, sunny -8°C.

Prospecting S of mtn. lk.

Stn.G1: 1.2 km SW of mtn lk.

Hornblendite with macroscopic hornblende, yellow brown patches, non-magnetic.

Stn.G2: 800m SW of mtn lk
Same as G1.

Sunday, November 5th, 2000.

Light snowfall -5°C.

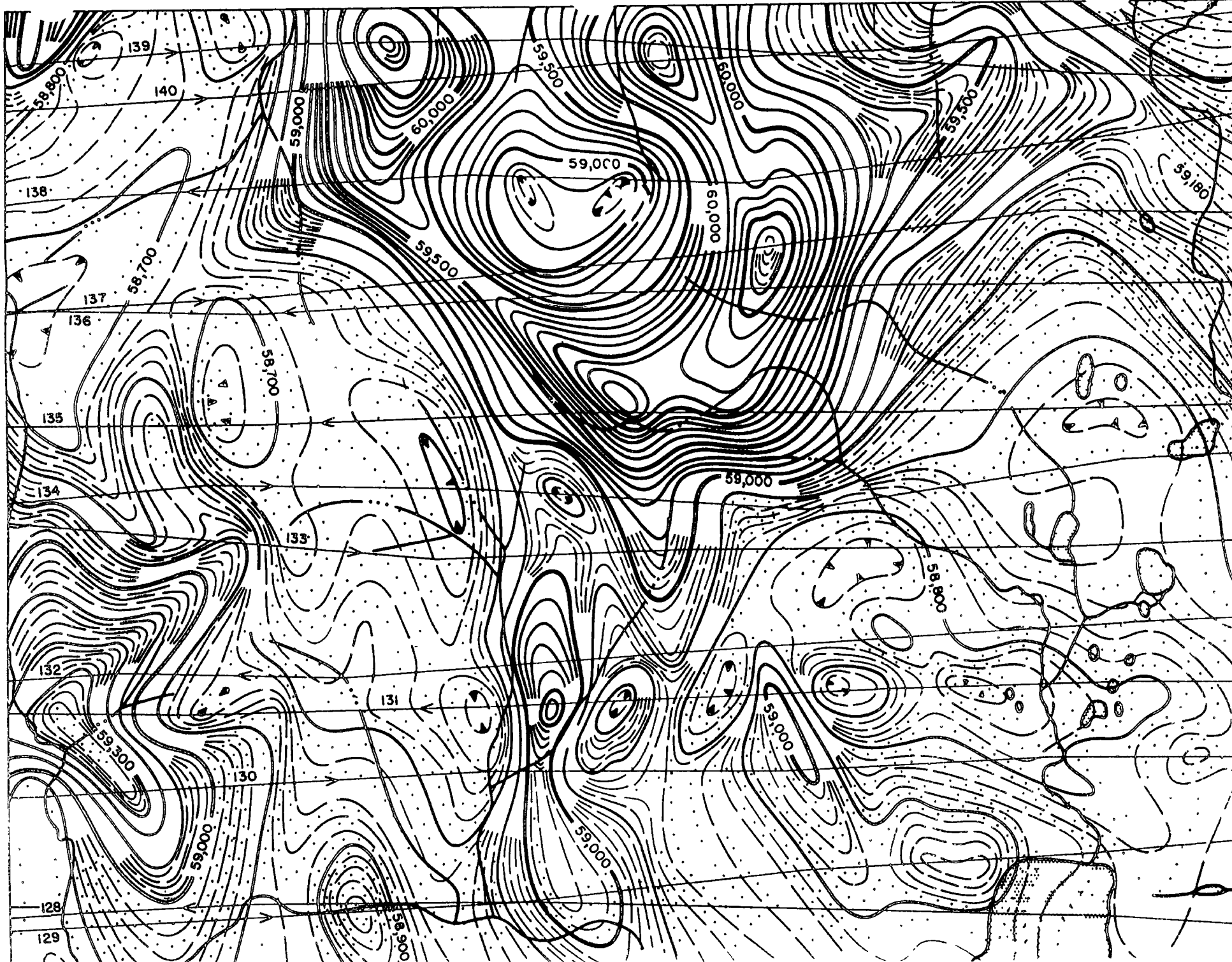
Fold camp and prepare for departure.

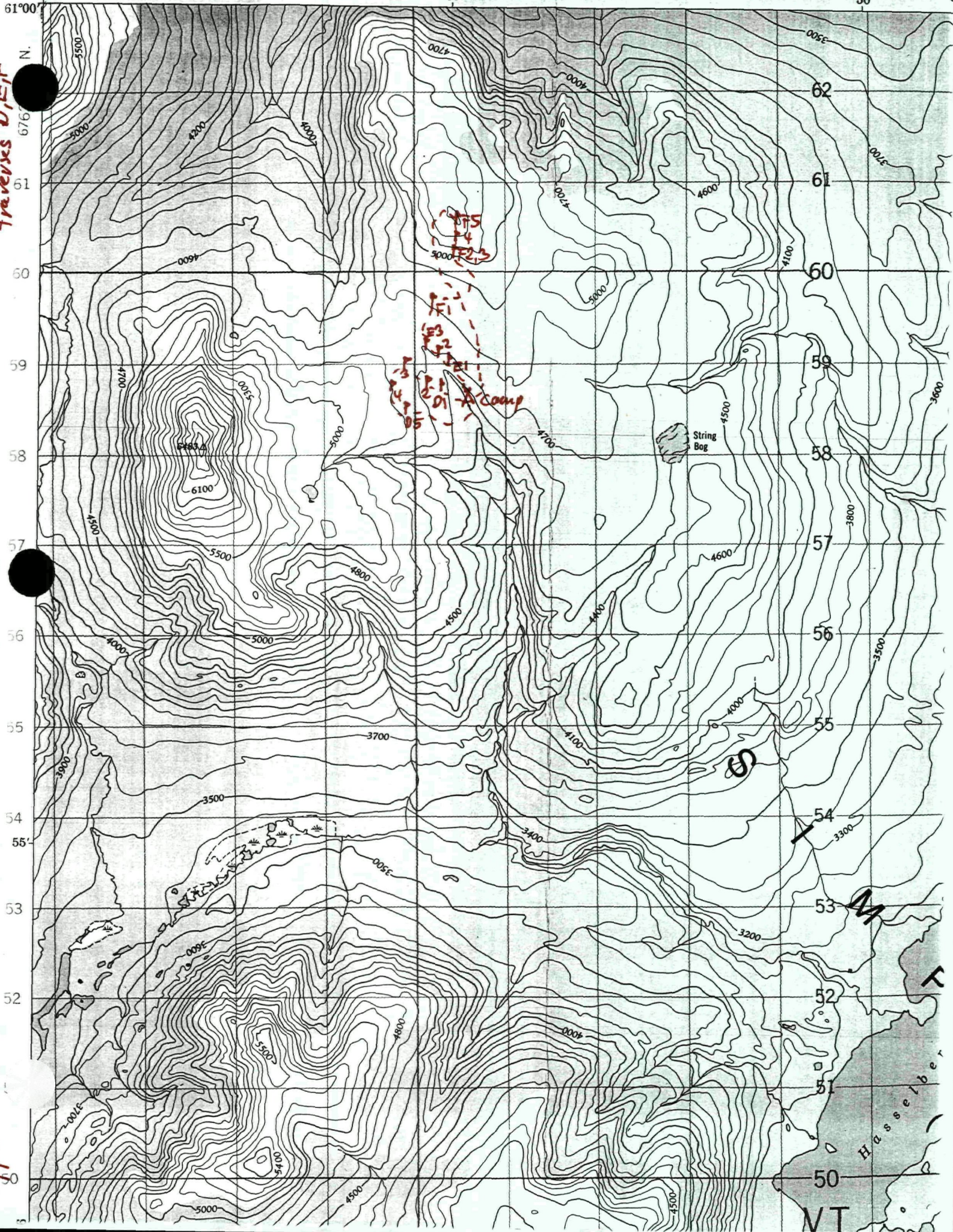
Stream sediment sampling S106 100m E of Alaska Highway at Lone Tree Ck.

See table October 23rd,

61°00'

Haselberg & app. 1 aeromagnetics





traverses D, E, F

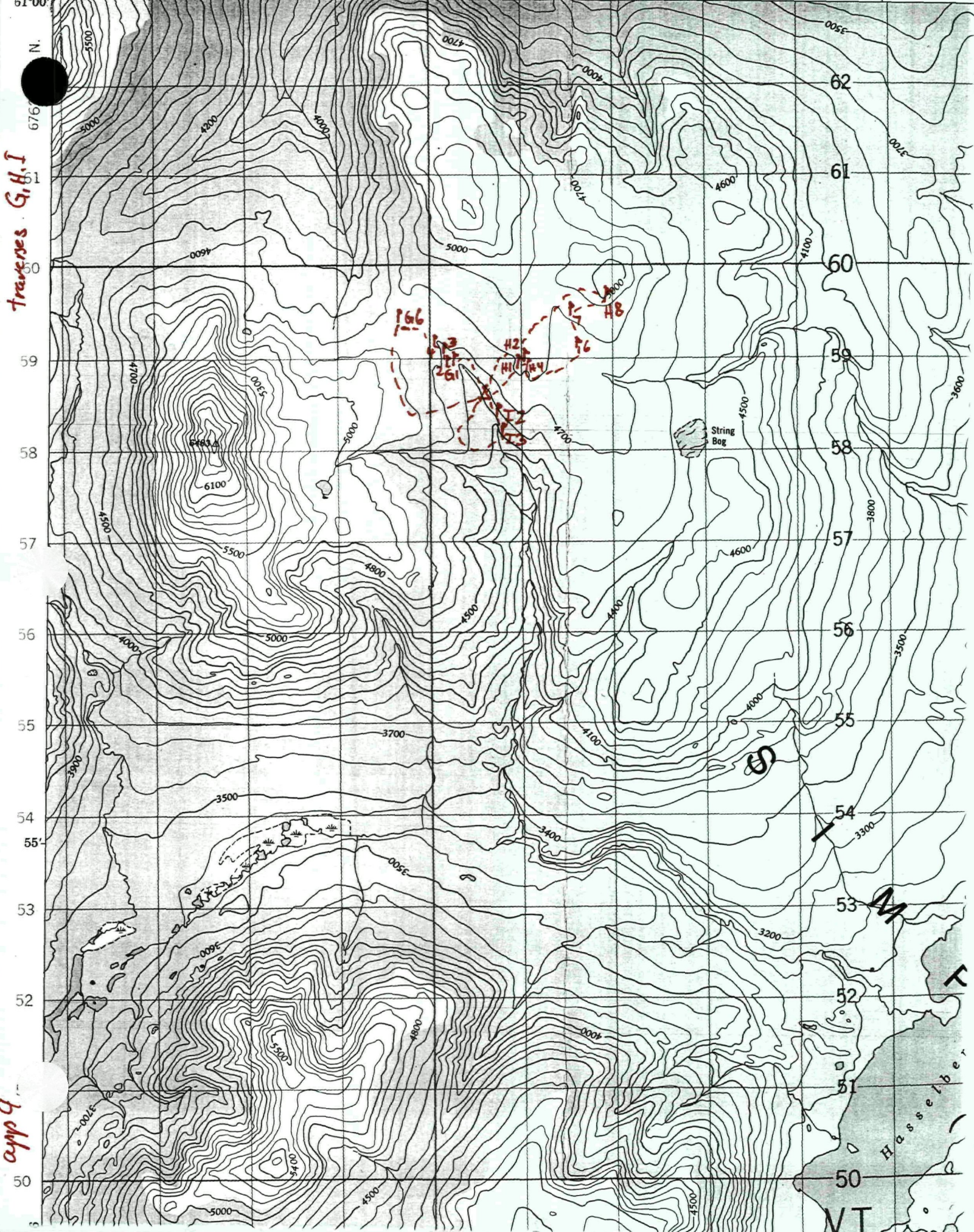
Camp

String Bog

app 3

Hasselber

NT



Traverses G.H.I

app 4

54

53

52

51

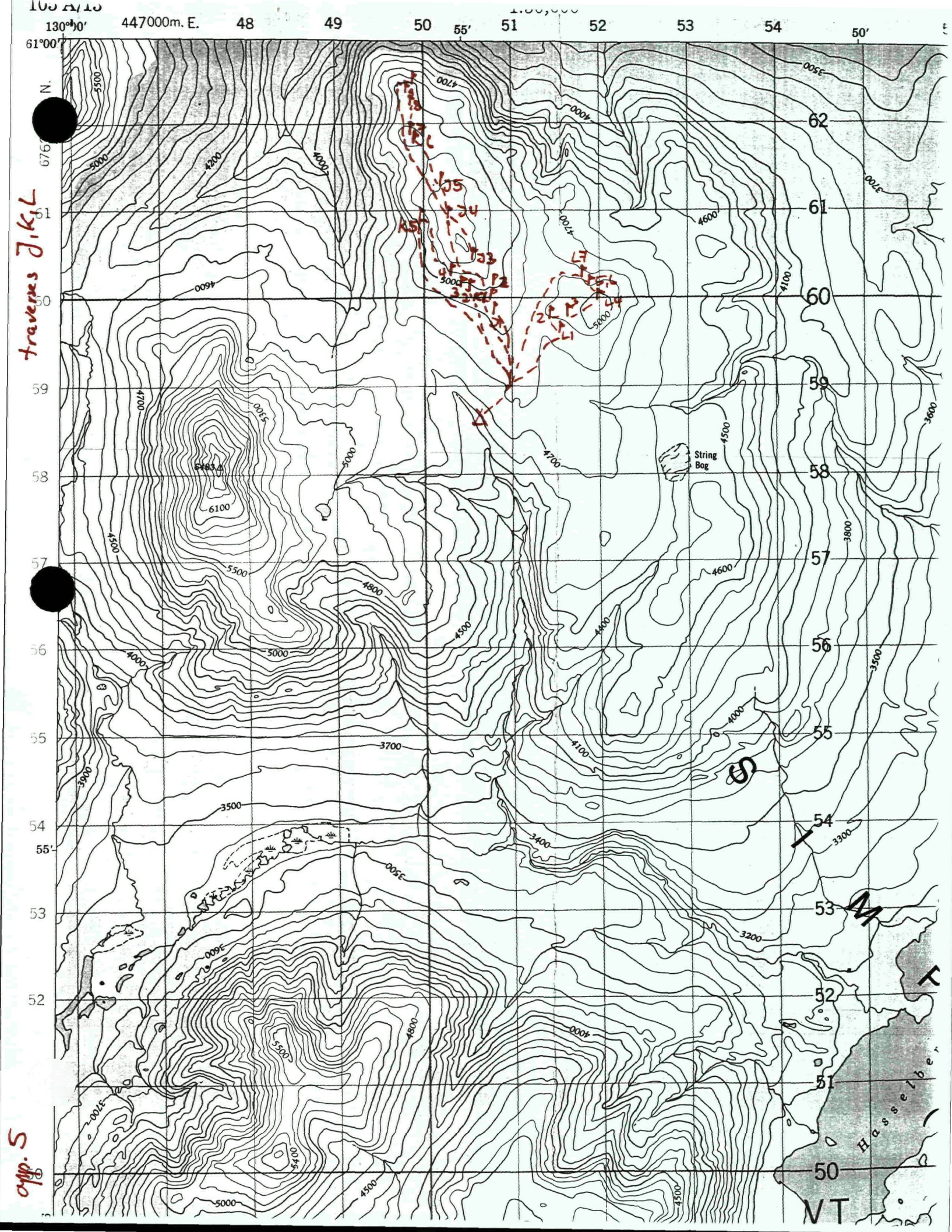
50

VT

Hasselber

String Bog

N.



Traverses T.K.L.

S. 10/10

130°40' 447000m. E. 48 49 50 55' 51 52 53 54 50'

61°00' N. 676

61
60
59
58
57
56
55
54
53
52
51
50

62
61
60
59
58
57
56
55
54
53
52
51
50

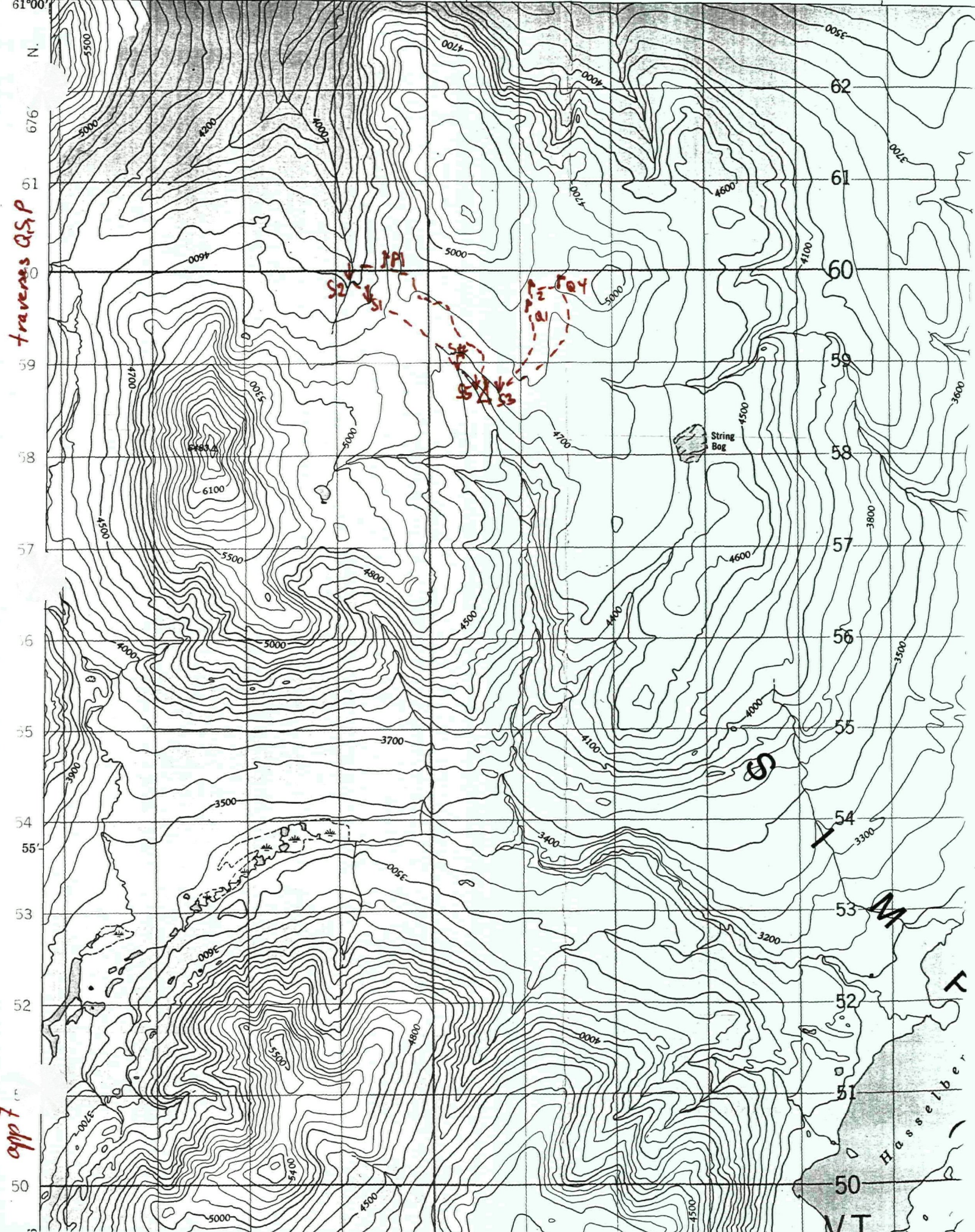
String Bog

60

61

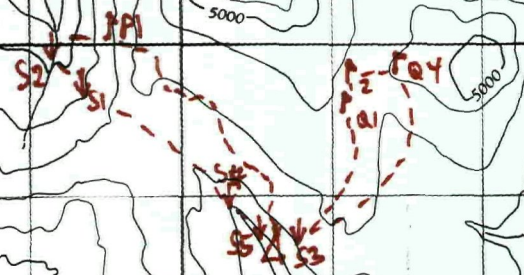
VT

Hesseler



traverses QSP

app 7

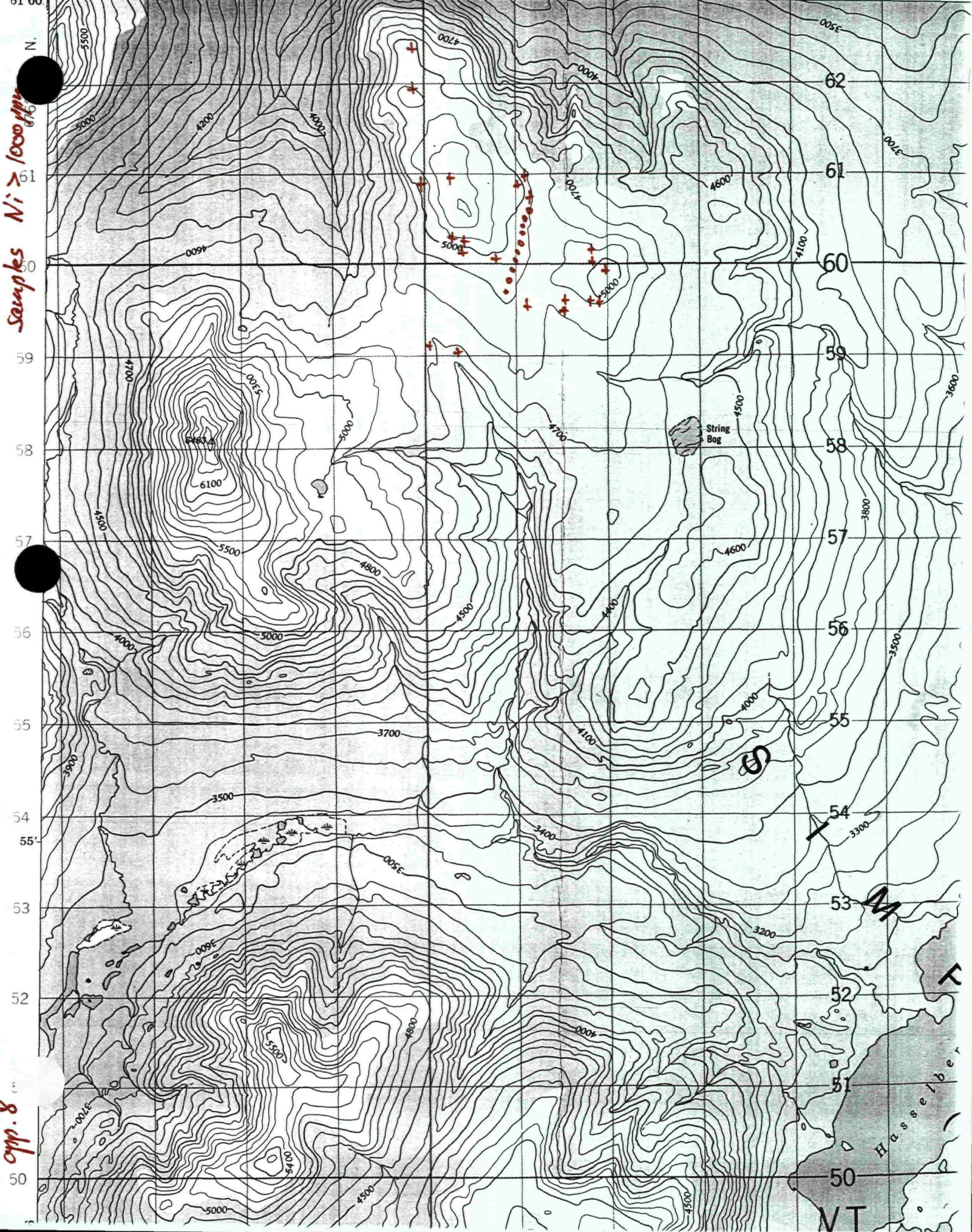


String Bog

Hasselber

VT

130° 00' 447000m. E. 48 49 50 55' 51 52 53 54 50'



Samples Ni > 1000ppm

app. 8

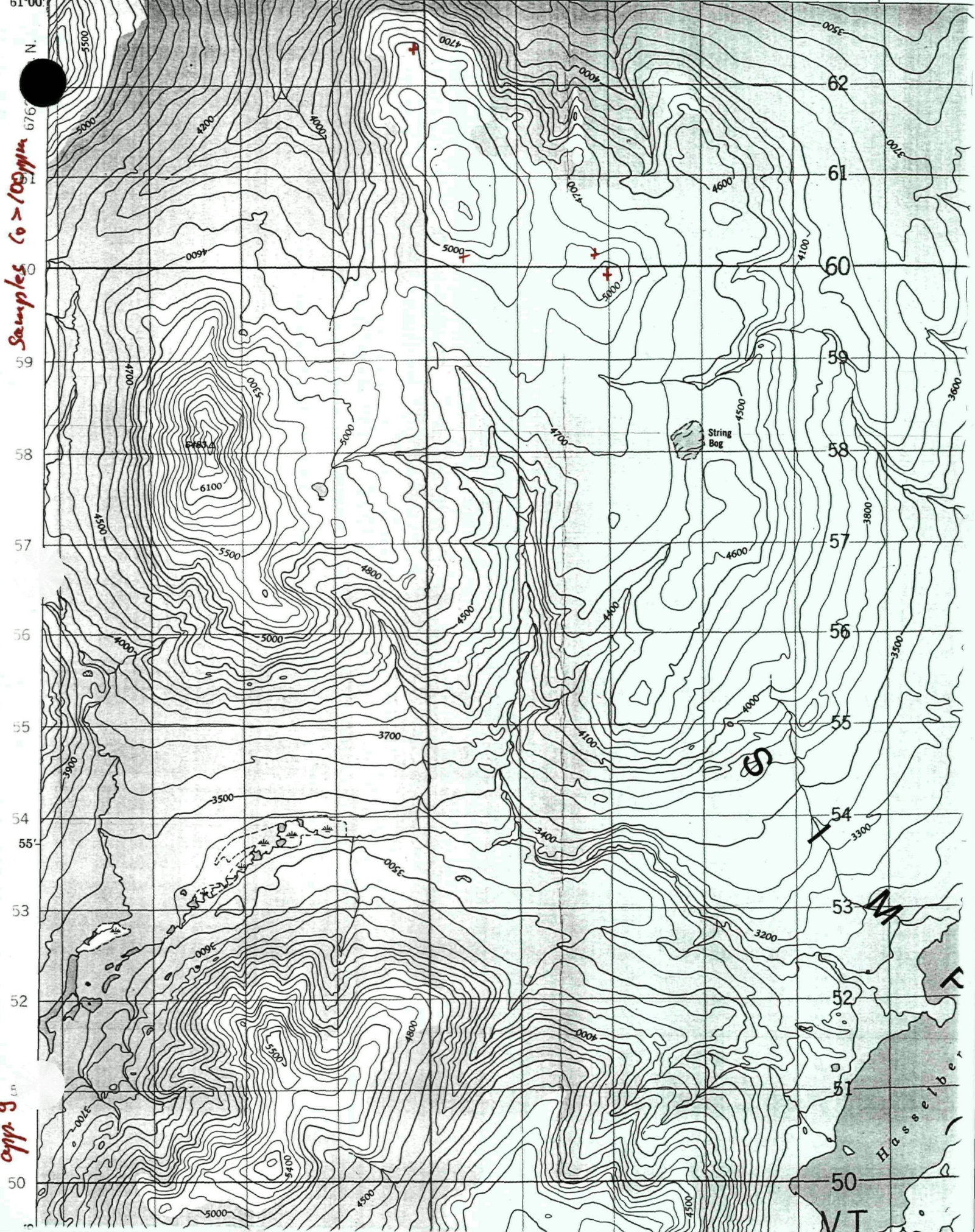


String Bog

Hasslebe

VT

105 A/10 130°00' 447000m. E. 48 49 50 55' 51 52 53 54 50'



Samples Co > 100 ppm

ppm 9



String Bog

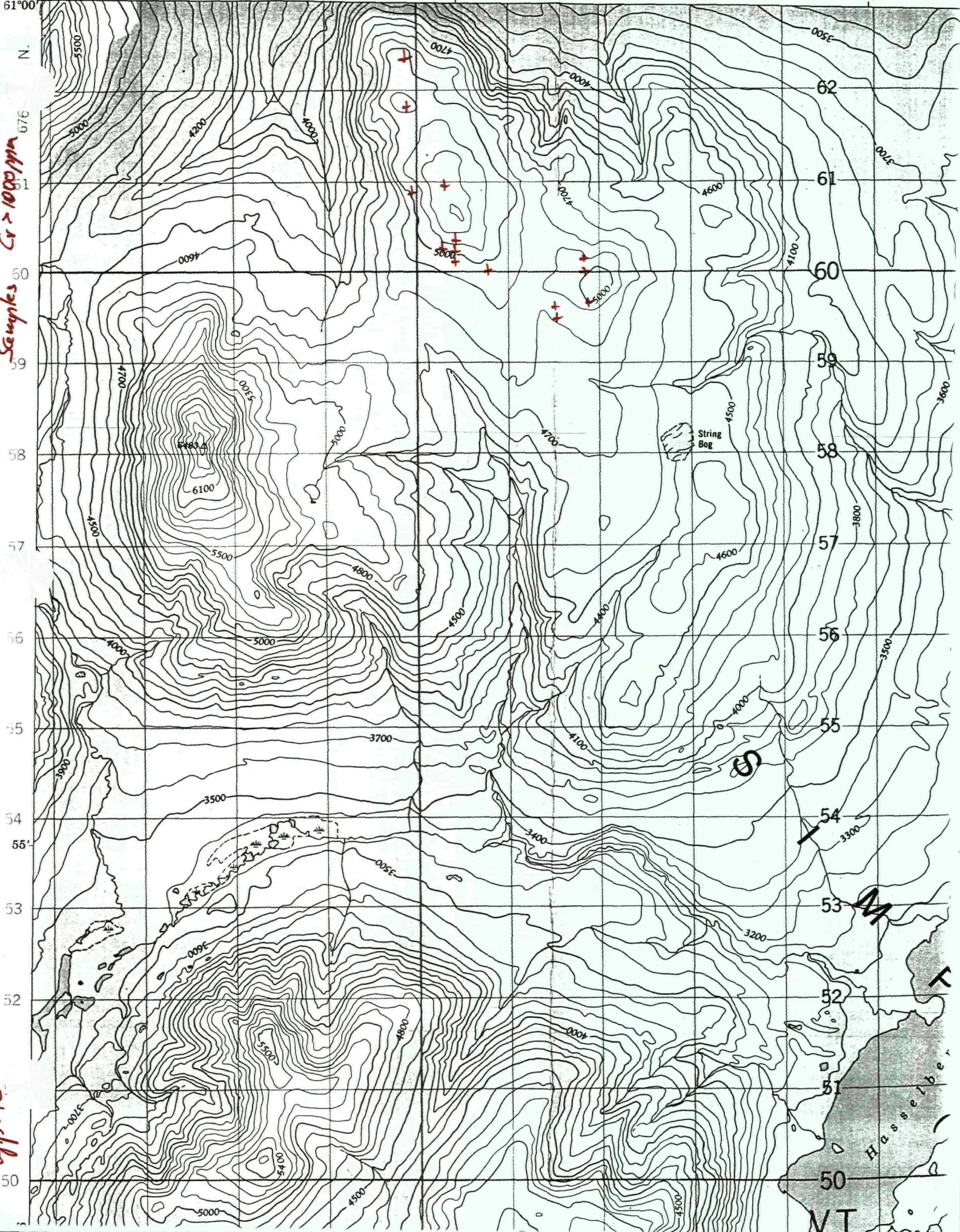
Hasselber

VT

105 A/13 130°00' 447000m. E. 48 49 50 55' 51 52 53 54 50'

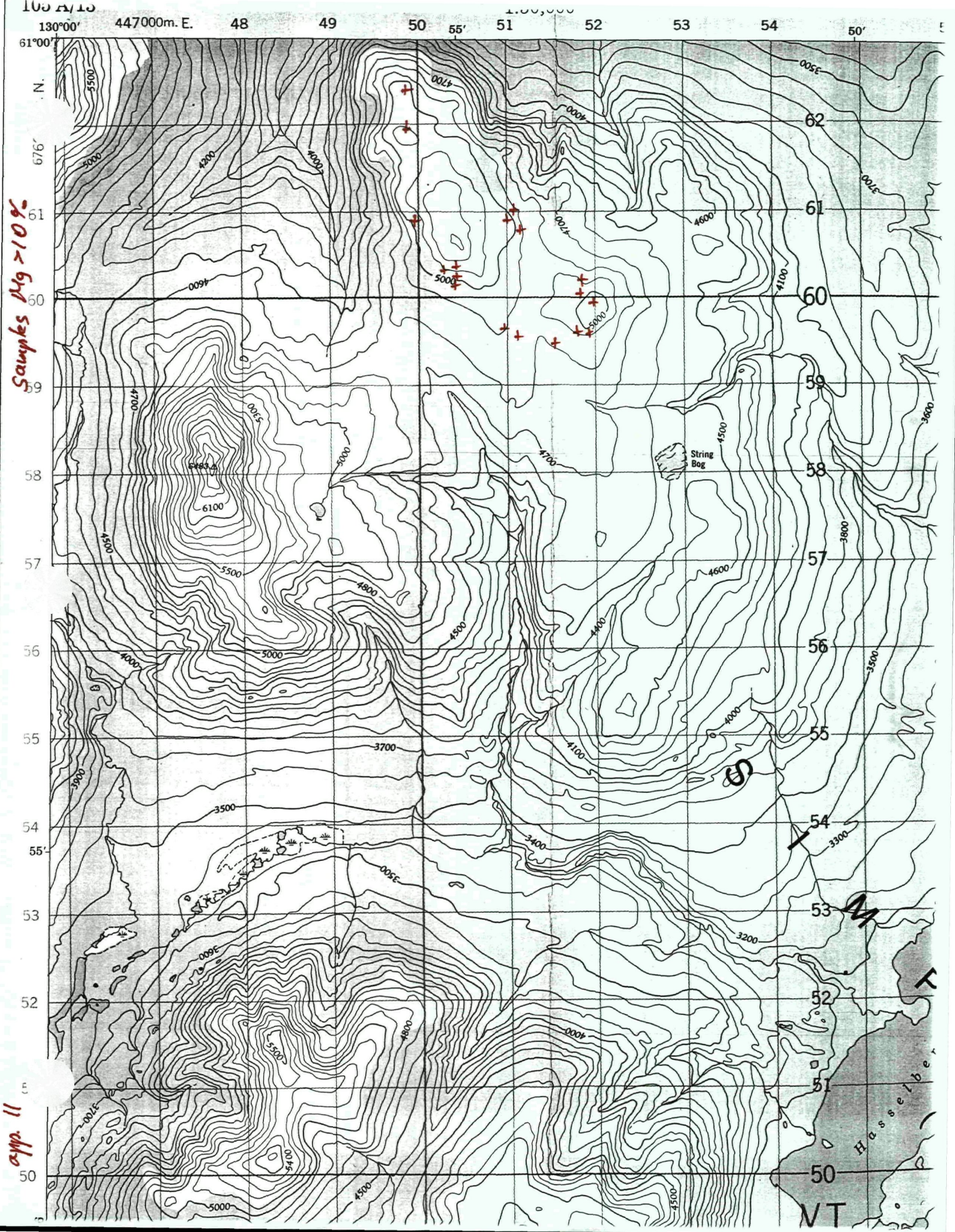
Samples Cr > 1000 ppm

app. 10



60
61
62
59
58
57
56
55
54
53
52
51
50

VT

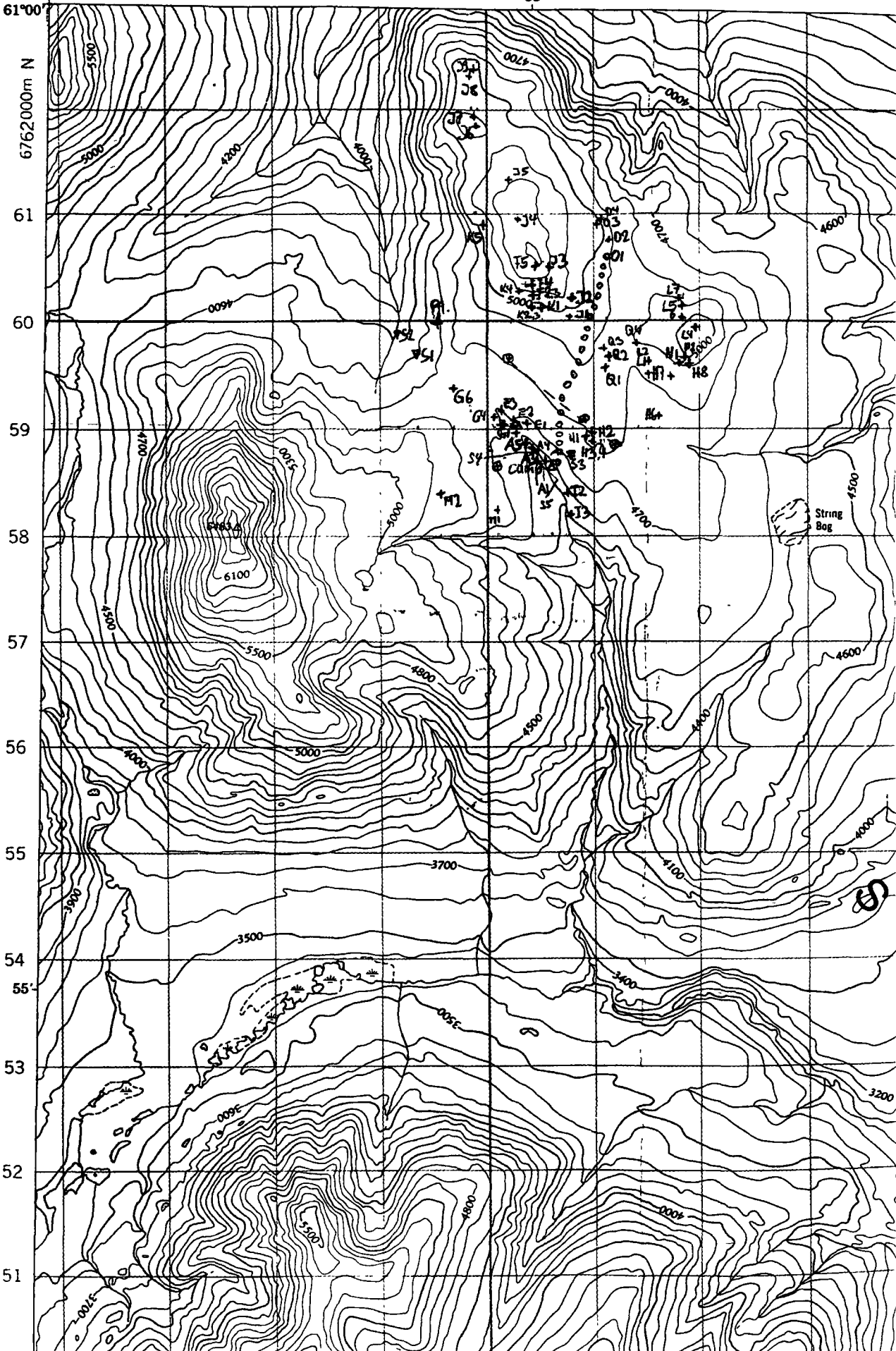


PROVISIONAL MAP

105 A/13

1:50,000

130°00' 447000m E 48 49 50 55' 51 52 53



Appendix 12. Sample locations
Hasselberg Lake

P.02/05

604 253 1716 TO 18679943154

15:02 FR ACME LABS

GEOCHEMICAL ANALYSIS CERTIFICATE

Muller, Helko File # A004715 Page 1
For 3007 WITFORD, V.A. 302 Analyzed by Helko Muller



Testin Lk

Hasselberg Labe

K3
K2
K1
H4

STANDARD C3/FA-10R
STANDARD G-2

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Y	Be	Al	Ne	K	W	Au**	Pt**	Pd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb	ppb	ppb
023202 C1	5	542	142	282	3.5	12	1	131	.59	11	<8	<2	<2	80	3.3	76	<3	<1	.78	.001	1	31	.32	15	<.01	3	.05	.01	.03	5	21	<2	<2
023203 C1	1	44	12	31	<.3	210	33	833	4.06	62	<8	<2	3	448	.3	37	<3	23	6.09	.082	7	145	5.66	85	<.01	4	.88	.01	.16	2	16	<2	2
023204 C2	1	63	5	38	<.3	16	15	483	4.49	25	<8	<2	<2	18	<.2	<3	<3	173	1.01	.102	4	65	1.96	51	.19	16	2.53	.08	.09	2	6	3	8
023206 D2	<1	119	8	83	<.3	27	25	1145	5.87	9	<8	<2	<2	43	.3	3	3	242	3.16	.103	3	41	2.39	59	.30	<3	2.87	.04	.10	2	14	3	8
023209 B4	2	116	9	53	<.3	34	26	839	5.22	5	<8	<2	<2	16	.2	<3	<3	199	2.47	.099	4	60	2.10	17	.25	6	3.57	.04	.05	2	3	3	6
023210 G1	1	87	8	54	<.3	148	48	1536	6.93	89	<8	<2	<2	345	.8	101	<3	93	9.21	.094	4	427	5.12	54	<.01	<3	1.93	.01	.15	3	8	9	11
023211 E2	1	12	<3	23	<.3	297	78	913	9.38	10	<8	<2	<2	4	.7	<3	3	102	.49	.005	1	1077	6.78	11	.13	<3	.67	.01	.01	<2	4	8	<2
023212 F3	<1	2	5	75	<.3	108	37	610	5.11	18	<8	<2	<2	21	<.2	<3	<3	106	.74	.122	3	136	3.23	53	.11	<3	2.77	.03	.05	<2	6	9	9
023213 E1	3	5	<3	35	<.3	994	121	1385	6.17	8	<8	<2	<2	1	.3	<3	<3	4	.11	.005	<1	78	21.10	2	<.01	6	.02	<.01	<.01	<2	<2	35	<2
023214 F2	<1	6	4	76	<.3	114	39	443	3.93	20	<8	<2	<2	12	<.2	<3	<3	66	.67	.095	2	130	3.34	22	.09	3	2.33	.02	.07	3	2	12	8
023215 F1	1	84	10	61	<.3	23	18	786	4.51	4	<8	<2	<2	26	<.2	<3	<3	133	2.24	.113	5	25	1.42	30	.35	9	2.65	.08	.05	2	4	2	5
166002 F2	<1	10	<3	19	<.3	1307	71	509	4.49	14	<8	<2	<2	2	<.2	<3	3	42	.23	.004	<1	1331	11.44	5	<.01	22	.20	<.01	<.01	2	8	4	4
166003 H7	<1	5	<3	7	<.3	1112	68	284	4.71	23	<8	<2	<2	<1	<.2	<3	<3	26	.07	.003	<1	651	9.82	1	<.01	22	.08	<.01	<.01	<2	13	<2	<2
166005 E1	<1	10	<3	18	<.3	1025	50	268	2.52	13	<8	<2	<2	<1	<.2	3	<3	23	.01	.003	<1	666	9.51	8	<.01	19	.16	<.01	<.01	<2	3	2	<2
166006 O4	<1	8	3	13	<.3	1640	74	463	3.95	15	<8	<2	<2	<1	<.2	<3	<3	30	.06	.004	<1	556	12.95	20	<.01	22	.24	<.01	<.01	<2	2	5	3
166007 O2	<1	11	<3	11	<.3	1360	61	438	2.80	3	<8	<2	<2	<1	<.2	<3	<3	26	.01	.003	<1	810	10.93	3	<.01	24	.13	<.01	<.01	<2	<2	6	3
166008 O3	<1	3	<3	10	<.3	1366	61	437	2.97	39	<8	<2	<2	<1	<.2	3	<3	18	.16	.003	<1	574	12.15	4	<.01	21	.19	<.01	<.01	<2	2	3	2
RE 166008	<1	4	<3	12	<.3	1615	63	449	3.05	38	<8	<2	<2	<1	<.2	3	<3	20	.17	.004	<1	590	12.70	4	<.01	25	.20	<.01	<.01	<2	3	4	3
166010 L6	<1	4	<3	18	<.3	1339	74	534	4.17	2	<8	<2	<2	<1	<.2	<3	<3	35	.01	.004	<1	1075	11.38	6	<.01	26	.17	<.01	<.01	<2	<2	6	2
166011 C5	<1	3	6	24	<.3	1595	93	704	5.43	7	<8	<2	<2	<1	.2	<3	3	41	.06	.004	<1	1061	11.45	21	<.01	28	.12	<.01	<.01	<2	<2	4	2
166014 L4	1	23	<3	15	<.3	1790	105	925	4.82	1236	<8	<2	<2	<1	.3	5	3	6	.18	.003	1	362	17.15	1	<.01	27	.07	<.01	<.01	<2	8	7	5
166015 L2	<1	2	5	11	<.3	1111	53	393	2.60	72	<8	<2	<2	<1	<.2	4	<3	23	.01	.003	<1	1150	9.09	13	<.01	35	.13	<.01	<.01	<2	5	6	2
166018 L1	2	141	6	11	<.3	75	12	155	1.16	5	<8	<2	<2	73	.2	<3	<3	21	4.65	<.001	<1	25	.95	42	.01	<3	6.68	.47	.02	2	4	<2	<2
166019 J9	<1	2	<3	5	<.3	332	36	963	2.34	5	<8	<2	<2	1	<.2	<3	<3	12	.04	.004	<1	433	8.67	12	<.01	5	.12	<.01	<.01	<2	<2	5	<2
166020 J8	<1	6	6	11	<.3	1338	68	430	4.74	34	<8	<2	<2	<1	<.2	<3	3	32	.22	.002	<1	1096	10.03	2	<.01	21	.16	<.01	<.01	<2	15	8	2
166022 J9	<1	3	<3	13	<.3	1381	77	547	4.45	17	<8	<2	<2	<1	<.2	<3	<3	27	.04	.003	<1	883	10.04	2	<.01	27	.08	<.01	<.01	<2	10	7	<2
166023 J9	<1	10	3	2	<.3	1266	55	315	2.73	17	<8	<2	<2	<1	<.2	3	<3	20	.01	.003	<1	579	9.46	3	<.01	23	.08	<.01	<.01	<2	17	11	9
166025 J9	<1	6	<3	2	<.3	1223	55	287	3.54	18	<8	<2	<2	<1	<.2	<3	<3	21	.03	.004	<1	617	8.91	3	<.01	21	.07	<.01	<.01	<2	19	10	2
166026 J9	1	4	8	13	<.3	1021	93	722	7.11	40	<8	<2	<2	<1	.4	<3	<3	33	.31	.003	<1	714	9.54	8	<.01	26	.10	<.01	<.01	<2	4	6	<2
166029 J4	<1	4	<3	28	<.3	1604	90	733	5.14	28	<8	<2	<2	1	<.2	<3	<3	39	.04	.004	<1	1451	13.99	5	<.01	33	.16	<.01	<.01	3	2	2	<2
166030 K3	1	8	<3	34	<.3	1657	108	704	6.46	17	<8	<2	<2	<1	.2	<3	<3	43	.01	.004	<1	1487	14.79	5	<.01	23	.08	<.01	<.01	2	<2	6	2
166031 K2	<1	7	<3	34	<.3	1549	78	546	3.14	17	<8	<2	<2	<1	<.2	<3	<3	23	.02	.003	<1	1191	15.16	2	<.01	27	.11	<.01	<.01	4	6	7	4
166032 K1	<1	4	<3	51	<.3	1560	80	1039	3.56	12	<8	<2	<2	<1	<.2	<3	<3	19	.02	.004	<1	968	15.25	3	<.01	43	.08	<.01	<.01	3	2	5	<2
166033 H4	<1	1	<3	3	<.3	339	36	510	3.24	3	<8	<2	<2	1	<.2	<3	<3	17	.03	.004	<1	708	3.80	12	<.01	5	.09	<.01	<.01	<2	2	5	<2
STANDARD C3/FA-10R	26	66	34	173	5.6	41	12	795	3.50	58	19	2	22	31	23.8	18	24	81	.59	.098	20	174	.62	154	.09	24	1.83	.04	.18	17	476	471	469
STANDARD G-2	1	3	4	42	<.3	9	4	553	2.17	<2	<8	<2	4	78	<.2	<3	<3	42	.68	.105	8	80	.61	243	.14	<3	.96	.08	.49	3	-	-	-

GROUP 10 - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
 UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
 ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1X, AG > 30 PPM & AU > 1000 PPB
 - SAMPLE TYPE: ROCK R150 60C AU** PT** PD** GROUP JB BY FIRE ASSAY & ANALYSTS BY ULTRA/ICP. (30 gm)
 Samples beginning 'RE' are Returns and 'ARE' are Reject Returns.

RECEIVED: NOV 22 2000 DATE REPORT MAILED: *Dec 1* SIGNED BY: *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED *SSAYERS*

are considered the confidential property of the client. Acme will assume the liabilities for actual cost of the analysis only.





SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Hg	Ba	Fl	B	Al	Na	K	V	Au**	Pt**	Pd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	X	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	X	X	ppm	ppm	X	ppm	X	X	X	X	X	ppm	ppb	ppb	ppb
166034 H2	<1	5	<3	21	<.3	699	42	765	3.19	3	<8	<2	<2	3	<.2	<3	<3	14	.09	.004	<1	672	9.79	5<.01	4	.29<.01	<.01	<2	4	2	2		
166035 H3	<1	9	<3	58	<.3	841	53	629	3.15	3	<8	<2	<2	7	<.2	<3	<3	25	.16	.006	<1	988	7.17	25<.01	3	.39<.01	<.01	<2	6	7	8		
166036 F3	<1	9	<3	19	<.3	1508	83	638	2.84	15	<8	<2	<2	<1	<.2	3	3	20	.01	.002	<1	1238	13.61	2<.01	21	.18<.01	<.01	2	12	8	9		
166037 F4	<1	10	<3	9	<.3	570	32	271	1.37	16	<8	<2	<2	<1	<.2	3	<3	18	.12	.003	<1	949	11.62	4<.01	19	.23<.01	<.01	<2	6	23	12		
166038 G4	2	10	7	91	<.3	49	12	514	3.25	9	<8	<2	11	2	<.2	<3	<3	97	.20	.079	22	70	.90	136	.20	<3	2.03	.04	1.08	6	2	<2	<2
166039 G3	1	96	6	126	.6	191	64	857	6.97	2	9	<2	<2	116	.6	<3	<3	200	2.75	.094	2	227	3.55	741	.28	<3	5.53	.21	2.03	2	23	2	6
166042 A4	<1	34	<3	63	<.3	155	31	434	3.60	2	<8	<2	<2	99	.4	<3	<3	129	2.48	.111	2	324	2.57	910	.27	<3	4.18	.29	1.19	<2	3	2	<2
166044 I3	1	17	7	105	<.3	32	9	355	3.98	6	<8	<2	10	3	<.2	<3	<3	62	.15	.073	30	42	.81	263	.23	<3	2.24	.04	1.41	3	6	4	4
166046 A5	1	99	11	42	<.3	166	24	302	2.90	3	<8	<2	<2	149	.3	3	<3	126	3.86	.091	4	396	1.53	140	.25	<3	5.41	.22	1.06	2	2	<2	2
166047 A2	<1	87	7	32	<.3	125	26	302	2.64	<2	<8	<2	<2	99	.4	<3	<3	91	2.47	.078	5	250	1.43	229	.19	3	3.43	.43	.20	3	3	4	4
166048 J1	<1	1	<3	23	<.3	1236	66	617	3.64	13	<8	<2	<2	<1	<.2	<3	<3	31	.03	.004	<1	1064	12.10	5<.01	24	.25<.01	<.01	3	18	<2	7		
166049 J6	<1	<1	<3	11	<.3	630	52	563	5.33	3	<8	<2	<2	<1	<.2	<3	<3	44	.13	.003	<1	1955	8.64	15<.01	8	.19<.01	<.01	<2	2	9	<2		
166050 J7	<1	3	<3	12	<.3	1114	51	587	1.78	8	<8	<2	<2	<1	<.2	<3	<3	13	.11	.004	<1	186	16.29	12<.01	27	.24<.01	<.01	<2	3	3	7		
RE 166050	<1	2	<3	12	<.3	1107	50	585	1.77	9	<8	<2	<2	<1	<.2	<3	<3	13	.11	.004	<1	189	16.22	12<.01	25	.24<.01	<.01	<2	<2	<2	8		
166401 J4	<1	<1	<3	11	<.3	1341	65	637	3.91	87	<8	<2	<2	<1	<.2	4	<3	24	.01	.003	<1	1385	9.94	7<.01	46	.15<.01	<.01	3	4	4	3		
166403 J5	<1	<1	<3	18	<.3	206	37	267	5.54	10	<8	<2	<2	<1	<.2	<3	<3	77	.10	.002	<1	70	5.43	4 .01	3	2.00<.01	<.01	2	3	<2	2		
166405 Q1	<1	3	<3	22	<.3	1001	57	479	2.04	2	<8	<2	<2	<1	<.2	3	3	17	.04	.003	<1	657	12.34	4<.01	8	.20<.01	<.01	<2	2	5	9		
166407 G4	<1	8	<3	37	<.3	1273	67	892	3.62	75	<8	<2	<2	<1	<.2	3	<3	22	.01	.006	<1	1474	9.81	71<.01	49	.14<.01	<.01	<2	<2	2	<2		
166410 F5	<1	1	3	23	<.3	461	36	425	4.28	<2	<8	<2	<2	<1	<.2	<3	<3	55	.24	<.001	<1	700	7.02	7 .01	<3	4.65<.01	.01	<2	2	7	12		
166411 N1	<1	<1	5	15	<.3	664	37	182	4.09	6	<8	<2	<2	13	<.2	<3	<3	27	.45	.003	<1	1007	6.19	18 .01	10	.90<.01	<.01	<2	<2	3	4		
166412 N1	<1	1	<3	22	<.3	2070	92	595	6.26	13	<8	<2	<2	<1	.2	5	3	43	.14	.004	<1	1578	12.93	13 .01	47	.58<.01	<.01	<2	6	<2	<2		
166415 H6	<1	25	<3	9	<.3	125	14	238	2.73	2	<8	<2	<2	<1	<.2	<3	<3	61	.32	.006	<1	872	1.11	21 .01	<3	.31<.01	<.01	<2	4	7	6		
166416 H1	<1	13	<3	11	<.3	1219	77	485	3.36	2	<8	<2	<2	22	<.2	<3	<3	31	.82	.004	<1	829	8.64	8<.01	<3	.29<.01	<.01	<2	3	3	9		
166417 H7	<1	34	<3	67	<.3	1484	81	1033	5.14	6	<8	<2	<2	1	.2	<3	<3	39	.03	.004	<1	1498	10.69	53<.01	3	.60<.01	<.01	<2	3	5	6		
166418 H8	<1	3	<3	20	<.3	1243	64	453	3.03	8	<8	<2	<2	<1	<.2	<3	<3	26	.03	.006	<1	809	13.02	4<.01	25	.42<.01	<.01	<2	3	5	4		
166419 H4	<1	<1	<3	7	<.3	408	38	651	4.28	<2	<8	<2	<2	8	<.2	<3	<3	36	.20	.003	<1	1009	8.02	7<.01	<3	.11<.01	<.01	<2	7	<2	2		
166420 N2	<1	<1	3	5	<.3	562	16	69	.67	2	<8	<2	<2	1	<.2	3	<3	20	.21	<.001	<1	14	7.74	2 .01	<3	3.46<.01	<.01	<2	2	<2	<2		
STANDARD C3/FA-10R	26	68	40	173	5.6	42	12	808	3.60	59	20	<2	22	31	23.6	17	23	82	.61	.098	20	185	.63	155	.09	20	1.88	.04	.18	14	477	464	486
STANDARD G-2	1	3	<3	42	<.3	9	4	564	2.17	<2	<8	<2	4	79	<.2	<3	<3	40	.69	.104	8	83	.62	242	.13	<3	.98	.08	.49	2	-	-	-

Hasselberg Lk

Sample type: ROCK R150 60C. Samples beginning 'RE' are Retuns and 'RRE' are Reject Retuns.

P.01/00
P.04/05
15:03 FR ACME LABS
604 253 1716 TO 18679943154
101/444.1134

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au**	Pt**	Pd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb	ppb	ppb
22134	<1	13	18	62	<3	20	5	237	2.74	5	<8	<2	<2	6	.3	<3	<3	50	.08	.035	19	41	.59	122	.16	<3	1.70	.01	.40	<2	2	<2	<2
22135	<1	30	10	138	<3	52	8	741	3.07	77	<8	<2	<2	20	.7	<3	<3	71	.55	.156	13	75	.67	213	.03	4	1.86	.02	.23	3	2	<2	<2
22136	1	7	11	20	<3	8	2	145	1.15	58	<8	<2	<2	5	<2	<3	<3	42	.03	.026	13	18	.16	47	.09	<3	.74	.01	.08	<2	<2	2	<2
22137	<1	26	9	51	<3	56	8	219	2.84	15	<8	<2	3	6	<2	<3	<3	68	.07	.043	11	88	.57	78	.15	<3	1.47	.01	.20	2	<2	3	<2
22138	<1	12	8	41	<3	14	5	173	1.71	6	<8	<2	2	6	<2	<3	<3	33	.05	.033	20	19	.23	75	.08	<3	.79	.01	.25	<2	<2	<2	2
22139	<1	18	13	56	<3	74	10	292	2.81	7	<8	<2	3	6	.2	<3	<3	70	.10	.027	12	129	.86	83	.12	3	1.50	.01	.12	<2	<2	<2	<2
22140	<1	35	11	65	<3	91	12	222	3.63	8	<8	<2	3	6	.3	<3	3	81	.07	.046	14	174	1.01	72	.11	<3	2.24	.01	.16	2	2	3	4
22141	<1	23	13	49	<3	38	6	150	2.98	7	<8	<2	3	5	<2	<3	<3	55	.04	.041	17	70	.44	70	.11	<3	1.41	.01	.25	<2	2	<2	<2
22142	<1	13	12	81	<3	88	9	213	3.06	4	<8	<2	3	5	.2	<3	<3	59	.07	.023	16	138	.86	88	.14	<3	1.64	.01	.19	2	<2	<2	<2
22143	<1	25	12	77	<3	169	12	391	3.69	6	<8	<2	3	6	<2	<3	<3	77	.06	.036	13	169	.97	123	.16	3	1.94	.01	.18	3	3	6	2
22144	<1	19	11	43	<3	293	19	250	2.87	5	<8	<2	3	6	<2	<3	<3	44	.08	.029	13	294	.94	73	.08	<3	1.42	.01	.07	<2	<2	<2	2
22145	<1	17	8	57	<3	490	20	285	3.36	5	<8	<2	2	8	.2	<3	<3	41	.11	.068	10	482	1.44	140	.05	<3	1.21	.01	.05	3	2	<2	2
22146	<1	26	8	57	<3	708	62	715	5.18	15	<8	<2	<2	3	.2	<3	4	72	.04	.033	5	712	4.48	82	.09	10	.92	.01	.03	<2	5	<2	3
22147	<1	14	6	45	<3	678	27	273	3.07	3	<8	<2	4	8	.2	<3	<3	32	.09	.026	14	567	2.35	83	.05	6	.85	.01	.02	2	4	<2	<2
22148	<1	8	8	49	<3	501	30	349	3.07	4	<8	<2	2	8	.2	<3	<3	28	.06	.032	11	539	2.39	84	.03	7	.79	.01	.03	3	2	2	<2
RE 22149	<1	12	8	48	<3	532	32	358	3.26	5	<8	<2	4	9	.3	<3	3	35	.08	.017	17	534	1.91	88	.05	4	.94	.01	.02	3	4	3	5
22149	<1	12	5	49	<3	530	32	355	3.25	4	<8	<2	4	9	.3	<3	3	35	.08	.018	16	539	1.91	87	.05	4	.95	.01	.02	2	3	<2	2
22150	<1	12	8	78	<3	637	59	1009	5.21	8	<8	<2	<2	10	.3	<3	<3	44	.08	.115	9	860	2.30	139	.02	4	.84	.01	.05	3	2	6	3
22151	<1	8	6	56	<3	515	53	918	3.38	4	<8	<2	<2	9	.2	<3	<3	31	.07	.060	8	526	1.79	101	.02	6	.67	.01	.04	<2	4	<2	<2
22152	<1	8	11	70	<3	565	59	1146	4.39	3	<8	<2	<2	8	<2	<3	4	44	.11	.111	8	849	2.60	147	.02	8	.58	.01	.05	2	5	<2	3
22153	<1	11	6	56	<3	895	143	1993	5.53	8	<8	<2	<2	7	.3	<3	3	37	.10	.130	3	970	3.74	133	.01	12	.50	<.01	.03	<2	19	3	4
023222 T110	<1	14	4	91	.3	27	16	616	2.58	2	<8	<2	<2	20	.4	3	<3	71	.41	.056	5	35	.53	222	.10	3	1.70	.01	.06	<2	3	2	<2
023223 T111	<1	24	11	130	<3	44	18	346	3.80	7	<8	<2	2	23	.3	<3	<3	98	.45	.041	6	59	.83	176	.16	3	2.41	.01	.11	2	<2	<2	2
023224 T112	1	70	10	94	<3	101	20	802	4.36	9	<8	<2	5	78	.2	<3	<3	74	1.40	.094	19	81	1.63	422	.16	<3	2.52	.04	.14	2	5	3	4
023225 T110	<1	18	6	89	<3	32	14	475	2.77	7	<8	<2	3	19	.5	<3	<3	63	.33	.076	9	43	.64	161	.12	4	1.41	.01	.07	3	2	<2	<2
023226 T101	<1	11	<3	66	<3	24	10	596	2.11	<2	<8	<2	<2	17	.2	<3	<3	51	.31	.052	5	29	.43	167	.11	<3	1.26	.01	.05	2	<2	<2	<2
023227 T102	<1	17	<3	87	<3	53	19	334	2.90	3	<8	<2	2	19	.4	<3	<3	60	.34	.047	7	56	.94	144	.12	<3	1.34	.02	.06	2	3	<2	<2
023228 T103	<1	17	<3	47	<3	46	13	277	2.21	4	<8	<2	3	17	<2	<3	<3	46	.33	.053	7	38	.69	123	.09	<3	1.01	.01	.07	<2	9	3	2
023229 T104	<1	19	3	57	<3	35	14	431	2.81	6	<8	<2	2	23	<2	<3	<3	72	.37	.037	7	59	.77	120	.14	<3	1.53	.01	.04	2	2	4	2
STANDARD C3/FA-10R	26	64	35	174	5.4	39	11	773	3.43	57	22	2	22	30	22.9	16	21	78	.58	.094	19	169	.60	149	.09	22	1.82	.04	.17	16	481	473	474
STANDARD G-2	1	3	<3	42	<3	8	4	533	2.06	<2	<8	<2	5	75	<2	<3	<3	38	.65	.099	8	78	.58	232	.14	<3	.92	.08	.47	3	<2	<2	<2

Hasselberg Lk
Soil samples
Testin Lk

GROUP 10 - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
 UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
 - SAMPLE TYPE: SOIL SS80 60C AU** PT** PD** GROUP 3B BY FIRE ASSAY & ANALYSIS BY ULTRA/ICP. (30 gm)
 Samples beginning 'RE' are Returns and 'RRE' are Reject Returns.

DATE RECEIVED: NOV 22 2000 DATE REPORT MAILED: Dec 4/00 SIGNED BY: C. L. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

P.05/05

604 253 1716 TO 18679943154

15:04 FR ACME LABS

ACME ANALYTICAL LABORATORIES LTD. 852 B. HASTINGS ST. VANCOUVER BC V6A 1R5 PHONE (604) 253-1198 FAX (604) 253-1716
 GEOCHEMICAL ANALYSIS CERTIFICATE
 Muller, Heiko File # A004714
 Nov 2007, Millshore VT (A) 192 (Sample by Heiko Muller)

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	V	Au**	Pt**	Pd**
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	%	ppm	ppb	ppb	ppb
023216 S106	1	62	5	63	<3	73	16	735	3.27	9	<8	<2	2	31	.4	<3	<3	69	.76	.070	7	82	1.79	144	.13	3	1.45	.02	.10	<2	51	4	<2
023217 S103	<1	29	<3	50	<3	36	10	1162	2.18	7	<8	<2	2	44	.4	<3	<3	45	1.04	.067	9	41	.68	106	.10	6	.90	.01	.06	<2	11	2	2
023218 S101	1	97	8	83	<3	47	13	708	3.00	11	<8	<2	3	39	.6	<3	<3	65	.82	.077	10	55	1.03	157	.12	<3	1.27	.02	.10	2	110	2	<2
023219 S104	1	31	<3	50	<3	40	10	1750	2.49	9	<8	<2	2	44	.6	<3	<3	49	1.00	.061	10	41	.69	130	.10	7	.89	.01	.06	<2	7	3	4
023220 S100	1	74	10	68	<3	47	12	682	2.97	8	<8	<2	4	40	.5	<3	<3	66	.83	.075	13	51	.93	161	.12	6	1.19	.02	.10	<2	789	2	<2
023221 S105	1	118	10	71	<3	52	14	847	3.22	14	<8	<2	<2	41	.4	<3	<3	72	.99	.083	8	64	1.39	129	.13	3	1.72	.02	.08	2	110	7	4
166422 S11	<1	30	11	57	<3	339	23	657	2.49	15	<8	<2	3	20	.3	<3	<3	23	.42	.073	14	208	1.66	235	.04	3	1.26	.04	.11	3	22	<2	3
166423 S10	1	85	10	62	<3	167	20	663	2.98	12	<8	<2	2	26	.3	<3	<3	55	.69	.060	8	196	1.65	174	.12	<3	1.66	.06	.17	4	103	<2	<2
166424 S2	1	81	18	77	<3	62	16	707	2.79	17	<8	<2	3	25	.4	<3	<3	69	.68	.075	13	110	.99	177	.13	<3	1.83	.05	.27	6	58	<2	<2
RE 166424	1	63	17	79	<3	62	16	711	2.82	19	<8	<2	2	25	.4	<3	<3	70	.68	.075	13	111	1.00	179	.13	<3	1.85	.05	.28	5	62	<2	2
166425 S5	1	131	255	458	4.4	295	33	486	6.28	219	<8	<2	6	28	1.1	<3	<3	81	.43	.188	70	131	.99	452	.10	<3	4.86	.01	.63	<2	34	<2	10
166426 S4	2	57	11	175	<3	104	14	1064	3.19	19	<8	<2	2	22	.7	<3	<3	52	.64	.096	21	71	.72	233	.12	<3	1.89	.02	.35	3	2	4	4
166427 S1	1	86	<3	214	<3	76	14	1981	2.07	47	<8	<2	<2	36	1.1	<3	<3	71	1.20	.126	14	145	.75	301	.05	3	2.48	.03	.12	<2	<2	3	5
166428 S3	1	33	5	114	<3	117	21	439	3.46	17	<8	<2	3	14	.3	<3	<3	75	.36	.066	14	187	1.30	183	.15	<3	2.09	.02	.26	3	11	<2	3
STANDARD C3/FA-10R	25	63	32	169	5.5	39	10	749	3.33	55	19	3	20	29	22.4	15	22	75	.57	.091	19	168	.59	145	.09	21	1.81	.04	.16	16	482	475	474
STANDARD G-2	2	4	<3	45	<3	9	4	543	2.10	<2	<8	<2	4	74	<2	<3	<3	38	.65	.102	8	79	.60	235	.14	<3	.97	.07	.47	3	<2	4	<2

GROUP 10 - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
 UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
 - SAMPLE TYPE: STREAM SED. AU** PT** PD** GROUP 38 BY FIRE ASSAY & ANALYSIS BY ULTRA/ICP. (30 gm)
 Samples beginning 'RE' are Reruns and 'ARE' are Reject Reruns.

DATE RECEIVED: NOV 22 2000 DATE REPORT MAILED: Dec 4/00 SIGNED BY: *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

DATA *ca* *sp*

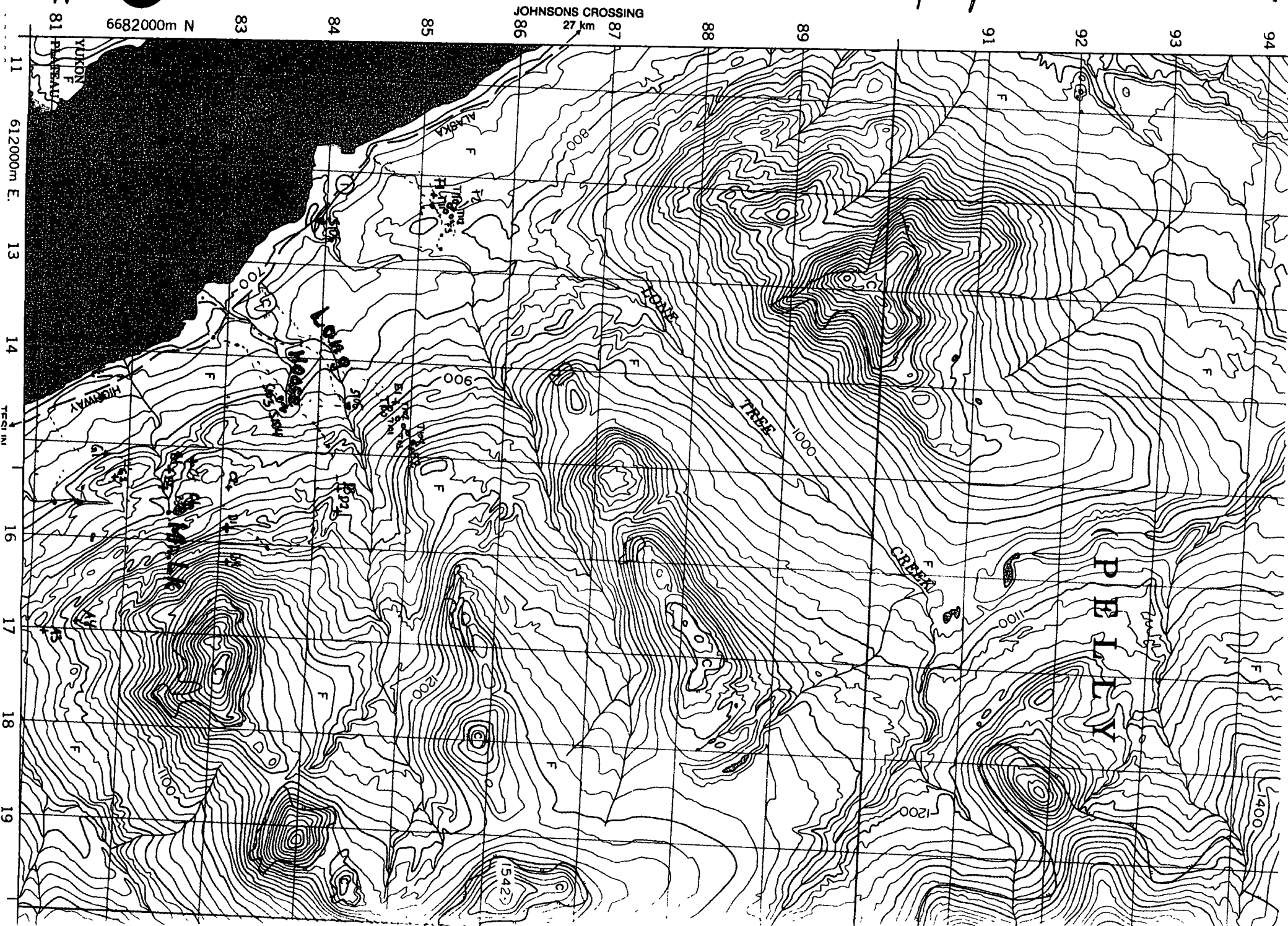
** TOTAL PAGE. 005 **

append

Testin e

Location of sample sites

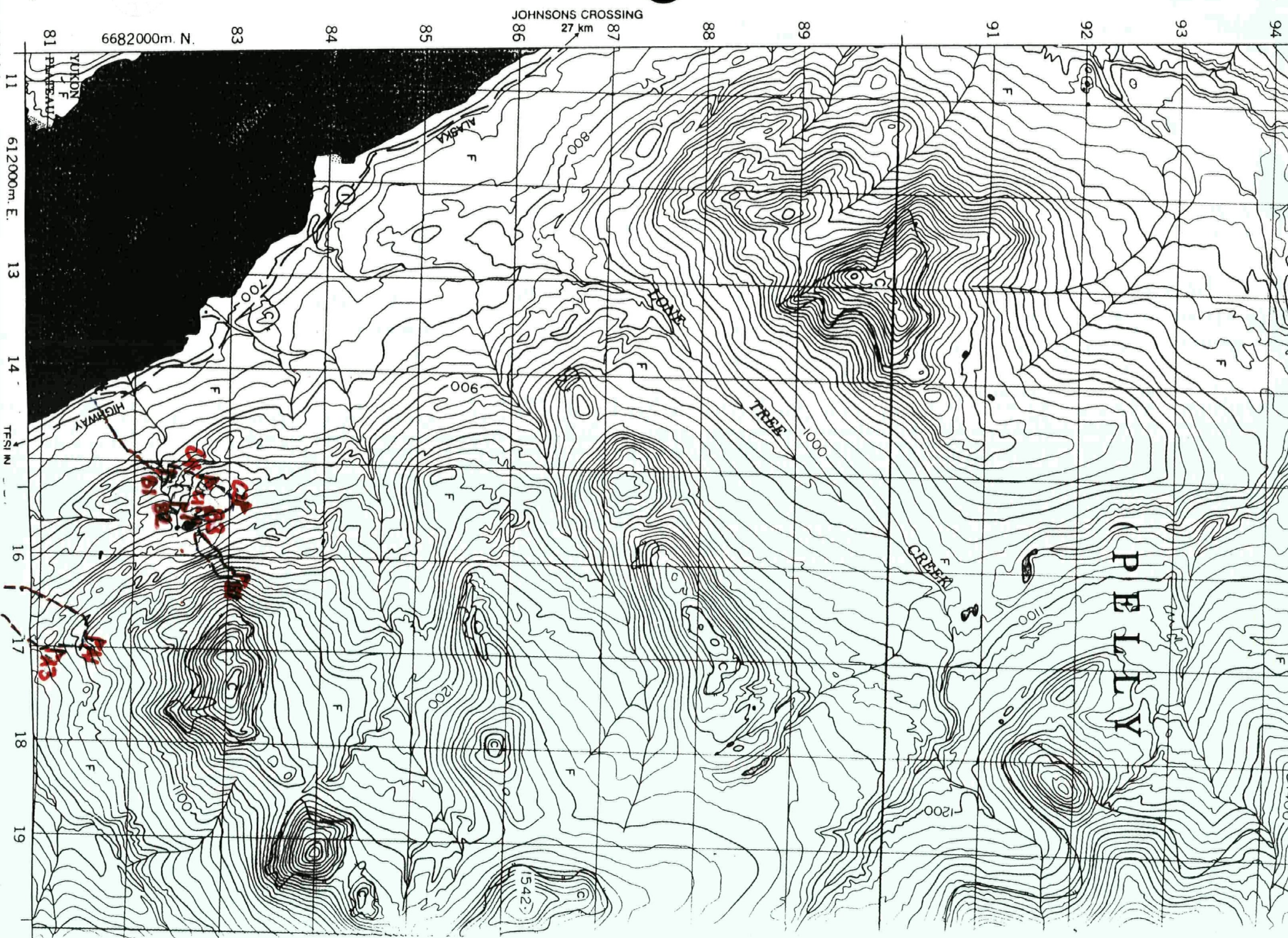
ME C/MÉT



appendix

traverses A, B, C

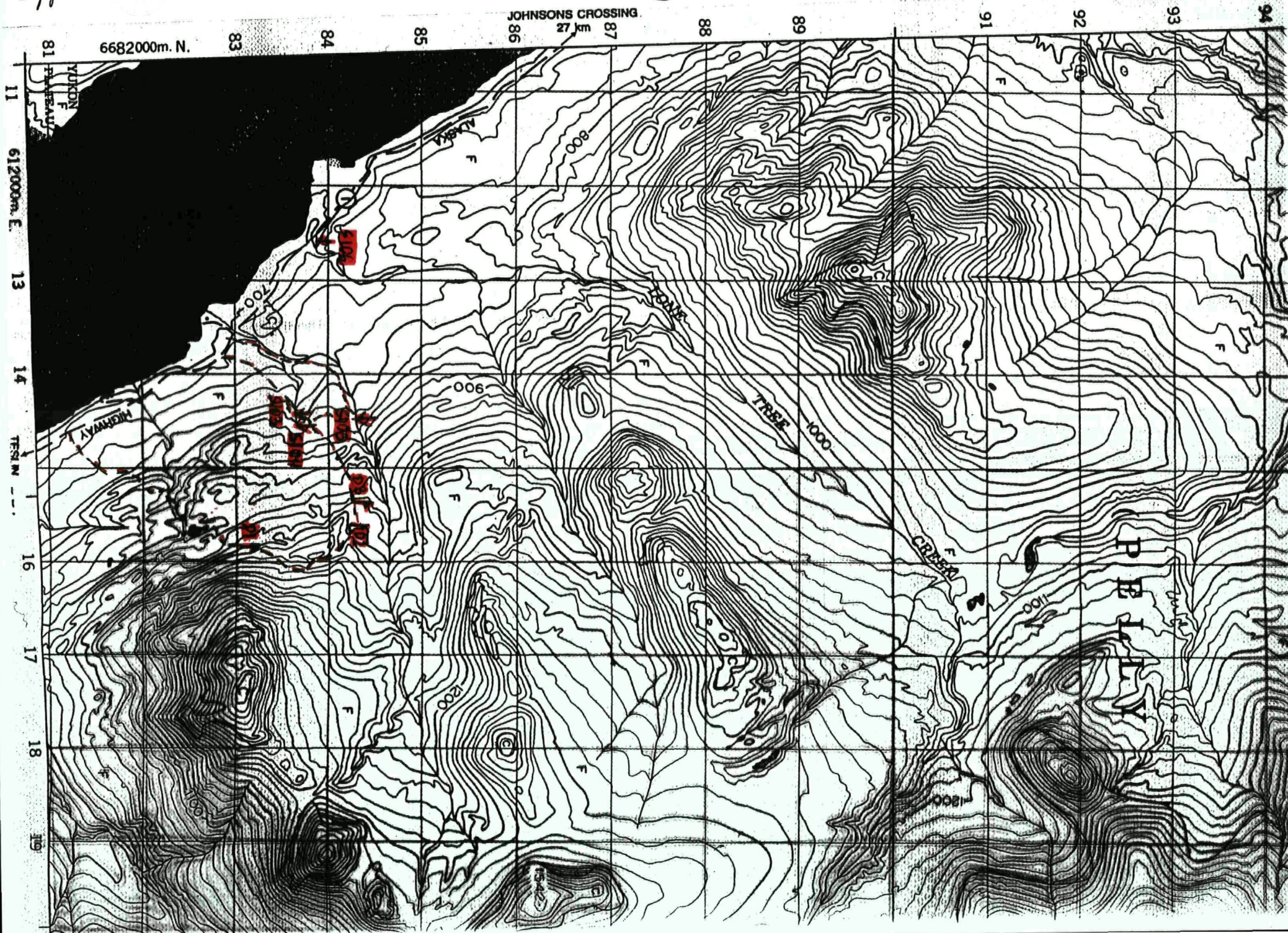
ME IC/ME



appendix

traverses D, S

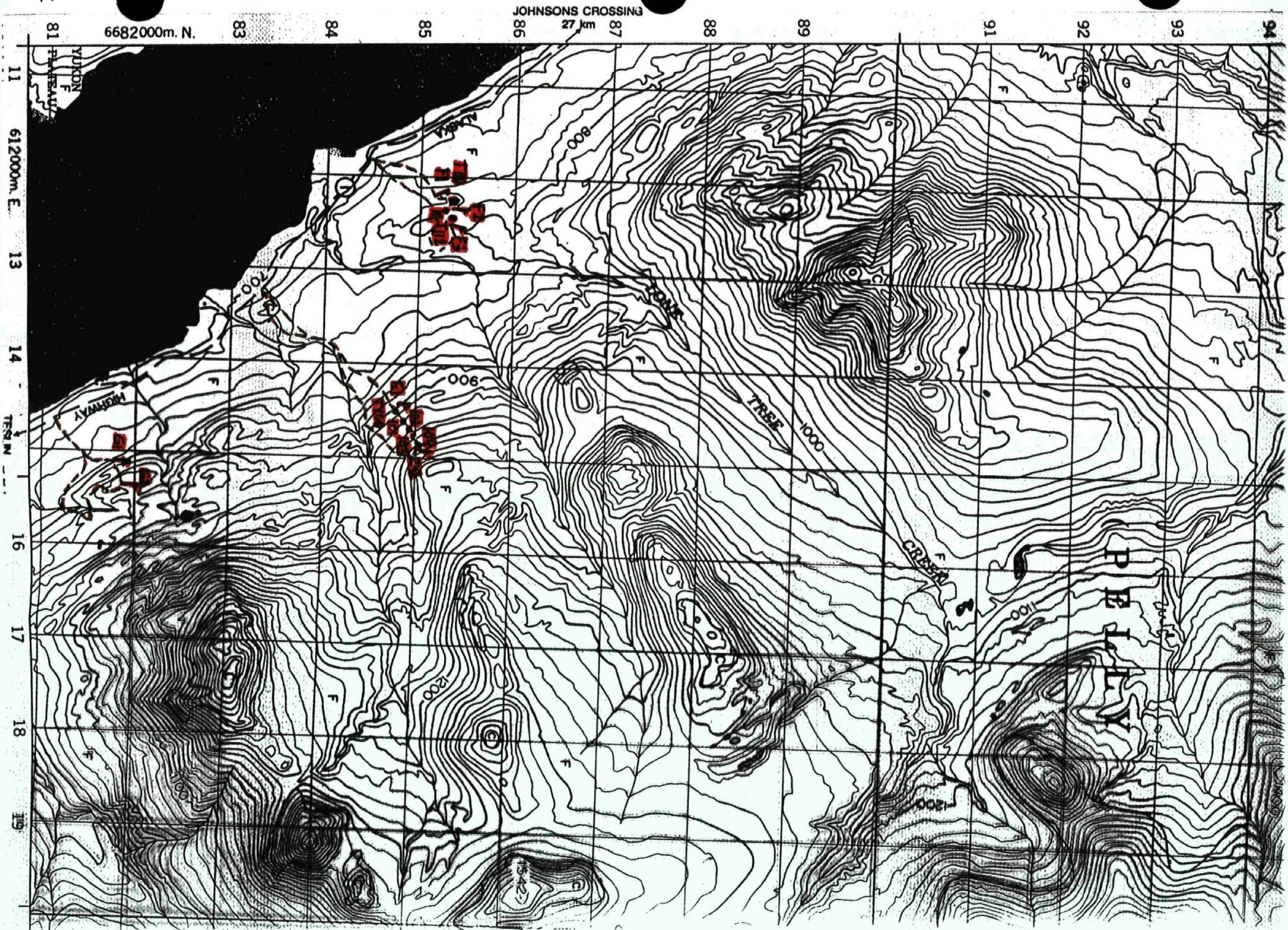
METRIC/MÉT



appendix 11

traverses E, FG

METRIC/MÉTR

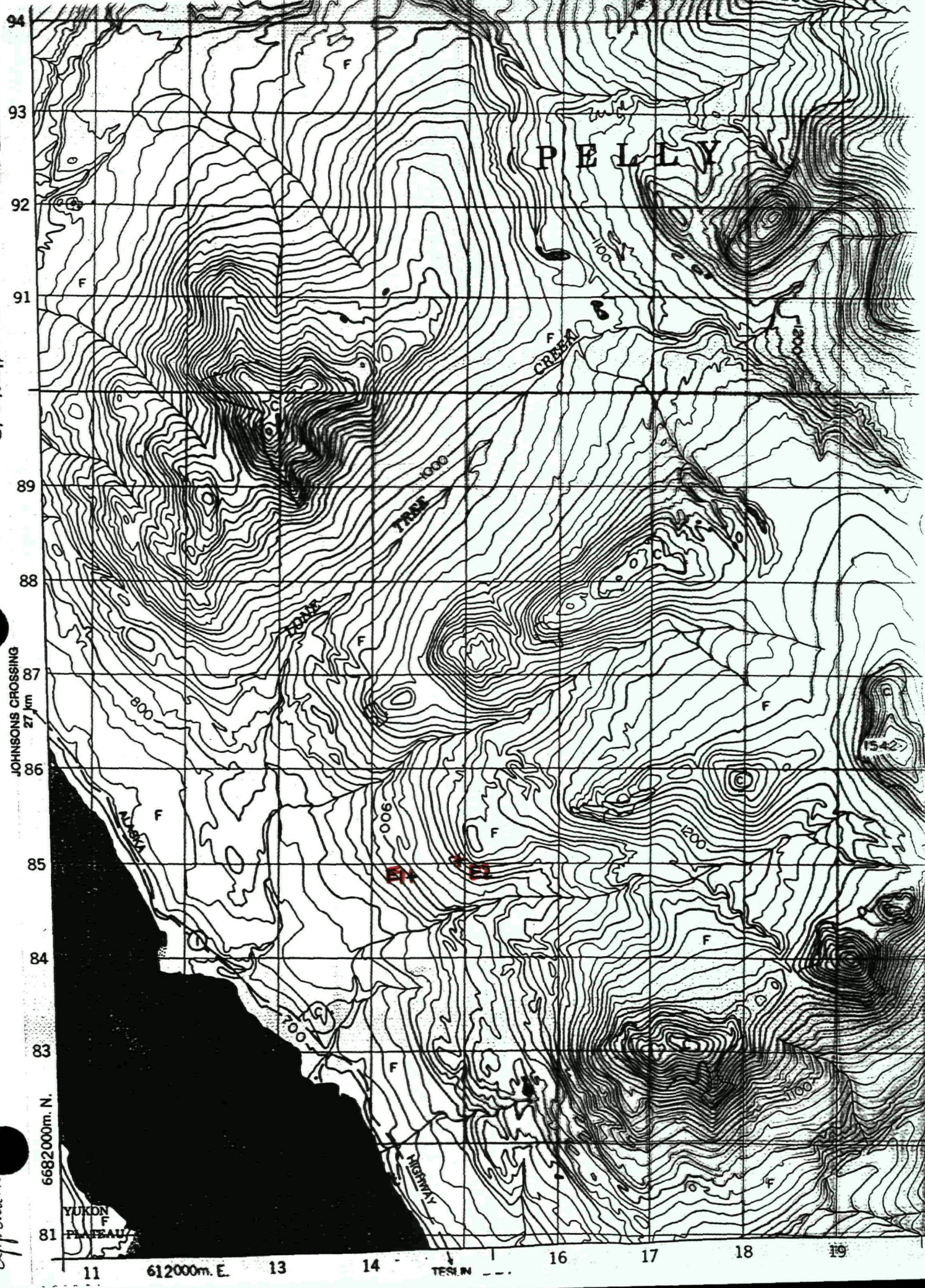


MEIC/MÉ-

Ni > 1000ppm : E1
Mg > 10% : E1
Co > 100ppm : E1
Cr > 1000ppm : E2

Samples with

appendix



11 612000m. E. 13 14 16 17 18 19

