REVIEW OF PROSPECTING 1993
YUKON MINING INCENTIVES PROGRAM

JAMES S. DODGE

93-065

REVIEW OF PROSPECTING RESULTS

JAMES S. DODGE YMIP-1993

1.0 INTRODUCTION

Prospecting under the 1993 Yukon Mining Incentives Program focused on several areas of southern Yukon within the alkalic geologic terrane which were "open" for claim staking. Selection of areas evolved from the interrelation of the following criteria:

1.1 Tectonically Favorable Environments:

a) Zone of extensional faulting and/or of deep seated sutures.

b) Off-cratonic "mobile zone" where strontium initial isotopic ratios were high; thus, indicating probable presence of buried Precambrian crust.

1.2 Lithologic Units Indicative of Alkali Suite Derived from Deep Crustal/Upper Mantle Sources:

a) Syenite

b) Pyroxenite

c) Carbonatite

d) basalt

e) Serpentinite (peridotite)

f) Eclogite

1.3 Targeted Economic Mineral Deposits:

a) Advanced (high-tech) materials components such as heavy rare earths (yttrium), light rare earths (lanthanum, cerium, neodymium), niobium, and zirconium.

Examples: Lancer deposit, Ketza River, Yukon
Niobec mine, Quebec
Mountain Pass mine, California
Bayan Obo mine, Inner Mongolia, China
Strange Lake deposit, Quebec-Labrador
Powderhorn deposit, Colorado

3.0 PROSPECTING MODUS OPERANDI

3.1 Pelly Mountains

Reference was to the Quiet Lake, Yukon NTS 105F 1:250,000 scale geology as compiled in 1977 by D.J.Templman-Kluit published as GSC Open File 486.

Belt of syenitic terrane was transposed onto Yukon quartz claim mining recorder's sheets 105F-07,08.09.10 in order to display areas "open" for staking.

Within "open" areas, the sub-areas of intrusive or volcanic syenite were identified for detailed ground prospecting.

Several successive base camps were serviced by helicopter from Ross River with from 7 to 15 field days prospecting from each of 3 camps during the season. Two overnight fly camps were included.

Prospecting involved continuous scanning of float and bedrock with a rented handheld scintillometer model Precision 111-B. Anomalous thorium gamma radiation is characteristic of minerals carrying anomalous values in the rare earths, niobium, and zirconium.

Particular attention was paid to mela-syenite, phologopite-bearing pyroxenite, and fluorite-rich outcrops.

The rented binocular microscope was used at base camp to assist in lithologic identification.

3.2 Tintina Trench

Reference was to the Finlayson Lake, Yukon NTS 105G 1:250,000 scale geology as compiled in 1977 by D. J. Templman-Kluit published as GSC Open File 486.

Reference also to GSC Aeromagnetic Series Map 1391G Starr Creek, NTS 105G-12, 1961.

Time and limited vehicular access permitted only an initial investigation of the Hoole River upstream for approximately 9km from its junction with the Pelly River near the Campbell Highway 105G-12/13.

First priority was given to detailed examination of coarse stream float on shore of Hoole River although it was apparent that much was glacially derived from sources remote from Hoole River bedrock exposures.

Focus was on the recognition of lamproite or kimberlite rocks and/or their zenoliths. Evidence from geophysical surveys in Australia on these rocks from "mobile zones" indicated that the majority were found in distinct and large magnetic anomalies, and situated commonly on the low side. Tote road access west of Hoole River and possible access to some east-flowing drainage of tributaries of the Hoole (i.e. from part of the high-mag contrast area) was was reason, apart from time, for choice of initial approach to area.

4.0 RESULTS OF PROSPECTING

4.1 Pelly Mountains

a) Upper Sheep Creek to Seagull Lakes

Back-packed in 17 kilometers from South Canol Road along muddy Sheep Creek 4x4 trail to ridge overlooking Seagull Creek where leuco-syenite outcrops on the nose of last ridge into the Seagull valley. Only 2x background radiometrics was detected after several traverses within the syenite and in Cambrian dolomite nearby. No anomalous radiometric readings were observed along the access route crossing Cambrian and Ordovician clastics and carbonates.

b) Upper McConnell River

Two exposures of coarse grained, mafic sub-volcanic syenite were prospected - one of which was a phlogopite-bearing pyroxenite. Although several sites in the surrounding medium grained leuco-syenite displayed 2x background radiometrically, no further prospecting in the area for REE and related specialty metals can be recommended.

c) Upper Porcupine Creek

Prospecting was conducted in a broad area to the cirques at the heads of several upper tributaries of Porcupine creek from a base camp north of the 1992 Gamma claims. Several carbonatite dikes and a syenite autobreccia were examined. However, radiometric readings were only 2x-3x background. Nevertheless, several samples were assayed for cerium only, since Ce is normally the dominant light rare earth element in the suite (c.f. Lancer property). Several anomalous values were reported out (Chemex Certificate A9317860), but none were high enough to warrant additional assaying for other rare earths.

d) Lower McConnell River

Although numerous bedrock syenite exposures and talus boulders were seen to host purple fluorite, unfortunately (contrasted with the Lancer deposit) no radiometric readings exceeding 2x background were noted. Thus, no samples were submitted for REE analysis.

e) Ketza and McNeil River

Prospected the area on the divide between the Ketza and McNeil rivers which had been covered by the Pescod claims (now lapsed). Examined the several bulldozer trenches exposing Cambrian calcareous shales. One in particular exposed a 0.5meter wide vein of galena. Two samples gave high values in silver, zinc, and, of course, lead (NAL report). A third sample from a hematitic ault zone gave only very low values in all three elements.

Nevertheless, because of its 4x4 accessibility, ease of conducting a soil sampling and EM survey, plus proximity to the Lancer REE claims - a decision was made to acquire the ground; the two DIG claims were staked.

4.2 Tintina Trench

a) Lower Hoole River

Several days meticulous prospecting of cobbles and boulders along the banks of the lower (0-6km) Hoole River were rewarded by recognition of a very small percentage, but none the less significant presence, of serpentinite, coarse-grained eclogite (omphacite mostly retrograde to amphibolite),

medium-grained peridotite with olivine, tiny garnets, and clinopyroxene(?). Phlogopite observed in several pieces.

Use of binocular microscope proved to be a necessary adjunct in identification of minerals.

b) Hoole River to Starr Creek

At 5km south of the mouth of the Hoole River, and at an altitude of approximately 3300 feet, serpentinite and minor listwaenite silicocarbonate replacement (vein ?) dominate the float exposed in an old bulldozed trail on the Eldorado claims. From float this sppears to be the boundary of serpentinite with the phyllonite to the north. Serpentinite float extends over 2km to the south where it is well exposed in old (1963 ?) bulldozer trenches. Southern boundary of serpentinite on the former LUG claims was not seen.

5.0 EVALUATION OF RESULTS

5.1 Rare Earths

Am now reasonably confident that no Y+Nb+Zr+REE deposit with commercial production potential is present in the "open-for-staking" areas in or adjacent to intrusives of the Pelly Mountains syenite belt in the Porcupine Creek and McConnell River drainages. This contrasts with the potential for economic development of the Lancer deposit at the head of the Ketza River.

5.2 Silver-Lead Showing

One bold exposure of sulfide vein with good grades in silver, zinc, and lead - staked as DIG claims - offers a target for exploration by soil sampling and an EM survey.

5.3 High Pressure Rocks

Discovery of float in Hoole River containing eclogite, along with ultramafic rocks rich in olivine, with tiny garnets and/or minor phlogopite, points to probable bedrock source within the Tintina suture zone.

Isotopic signatures indicate the presence of Precambrian crust underlying the Tintina trench. On the premise that the Tintina represents locus of deep persistent faulting in the "mobile zone", it likely is a reflection of the structural framework estab-

lished in Precambrian time. Although the known eclogite rocks (in place) may have crystallized above the mantle source of diamonds, they do reinforce the belief that the Tintina suture is very deep seated.

A prospecting proposal for 1994 will concentrate on detailed search for diamond indicator minerals in south-central Yukon.

PHOTO 1 UPPER McCONNELL RIVER

Upper Devonian/Mississippian black slate (far right) flanking mela-syenite plug and surrounding pyritic rusty weathering Mississippian syenite tuffs/flows .

PHOTO 2 UPPER McCONNELL RIVER

Distant ridge comprises syenite tuff. Rusty, rounded hill far left is dolomite intruded by phlogopitic pyroxenite (dark patch left flank of hill).

PHOTO 3 UPPER PORCUPINE CREEK

Campsite north of Gamma claims covering mid-distant cliffs (partly in shadow). Binocular microscope used in identification of minerals in pyroxenite and adjacent skarn from syenite volcanics at right edge of photo.

PHOTO 4 UPPER PORCUPINE CREEK

Syenite auto(?)-breccia with dark tuff clasts in leuco-tuff matrix. Radiometrics 2x background.

PHOTO 5 UPPER PORCUPINE CREEK

Carbonatite dike characterized by radiometric readings from 2x to 3x background values.

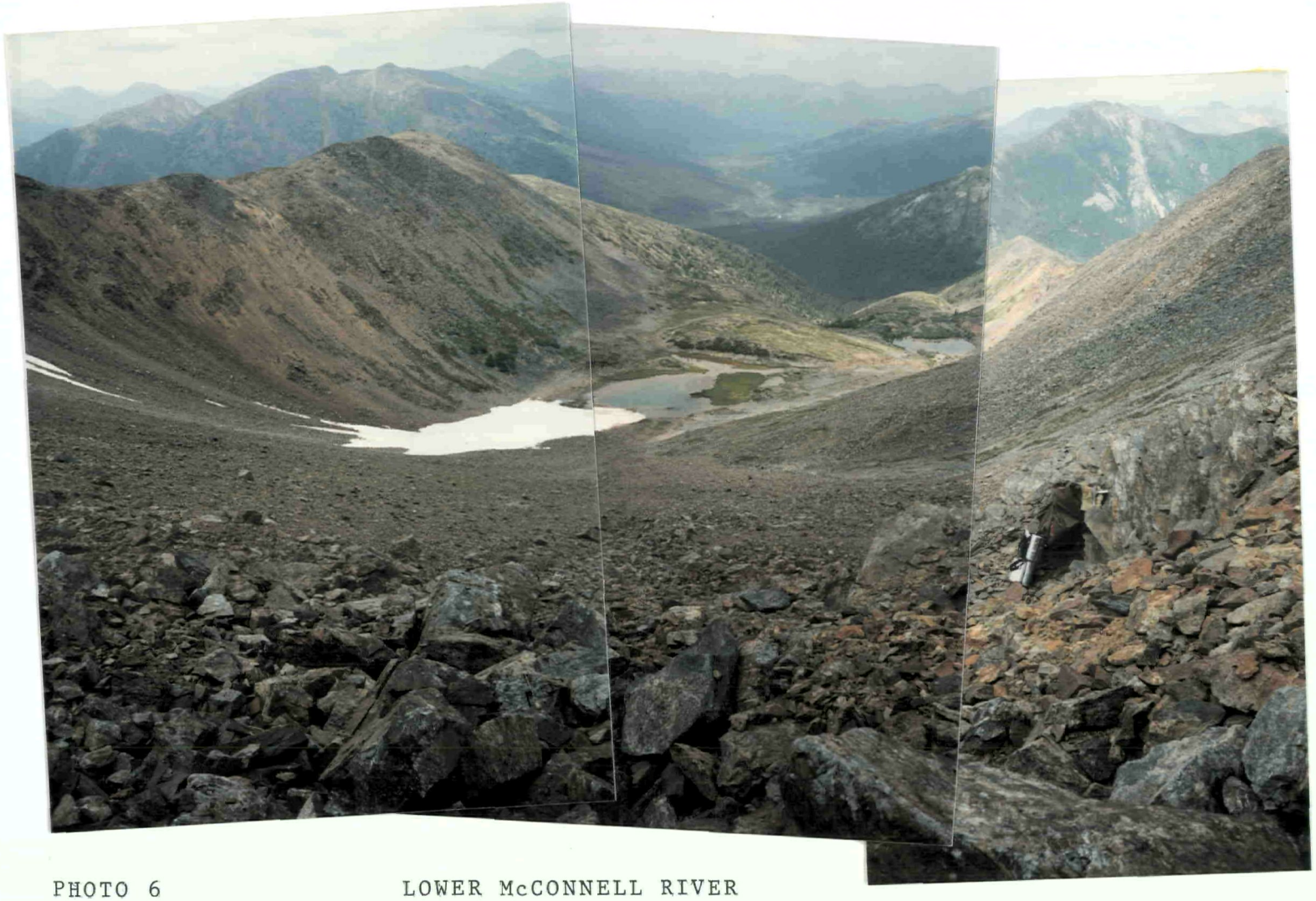


PHOTO 6 LOWER McCONNELL RIVER

Looking north from base of cirque cliffs where fluorite splotches and stringers lace blocky-weathering syenite flow. Radiometrically 2x background. McConnell River valley centre distance.

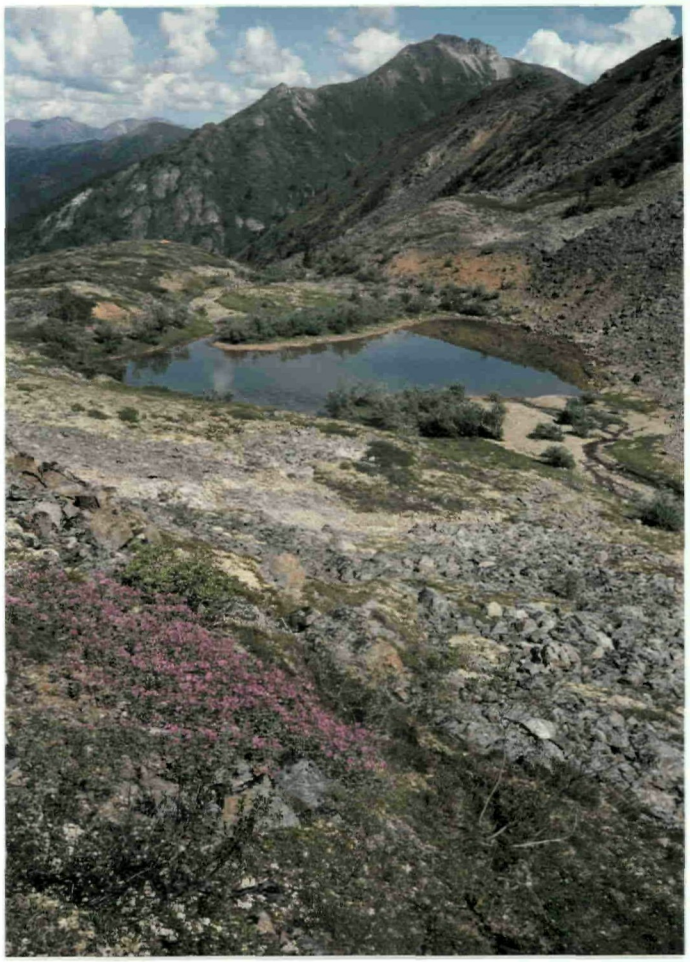


PHOTO 7 LOWER McCONNELL RIVER

Tarn at base of pyritic syenite tuff cliffs. Mid-distant forested ridge and peak Silurian/Devonian dolomite with probable Cambrian/Ordovician limestone near preak. Camp situated on mid-distant green rounded ridge.

PHOTOS 8 & 9 UPPER KETZA/McNEIL RIVERS

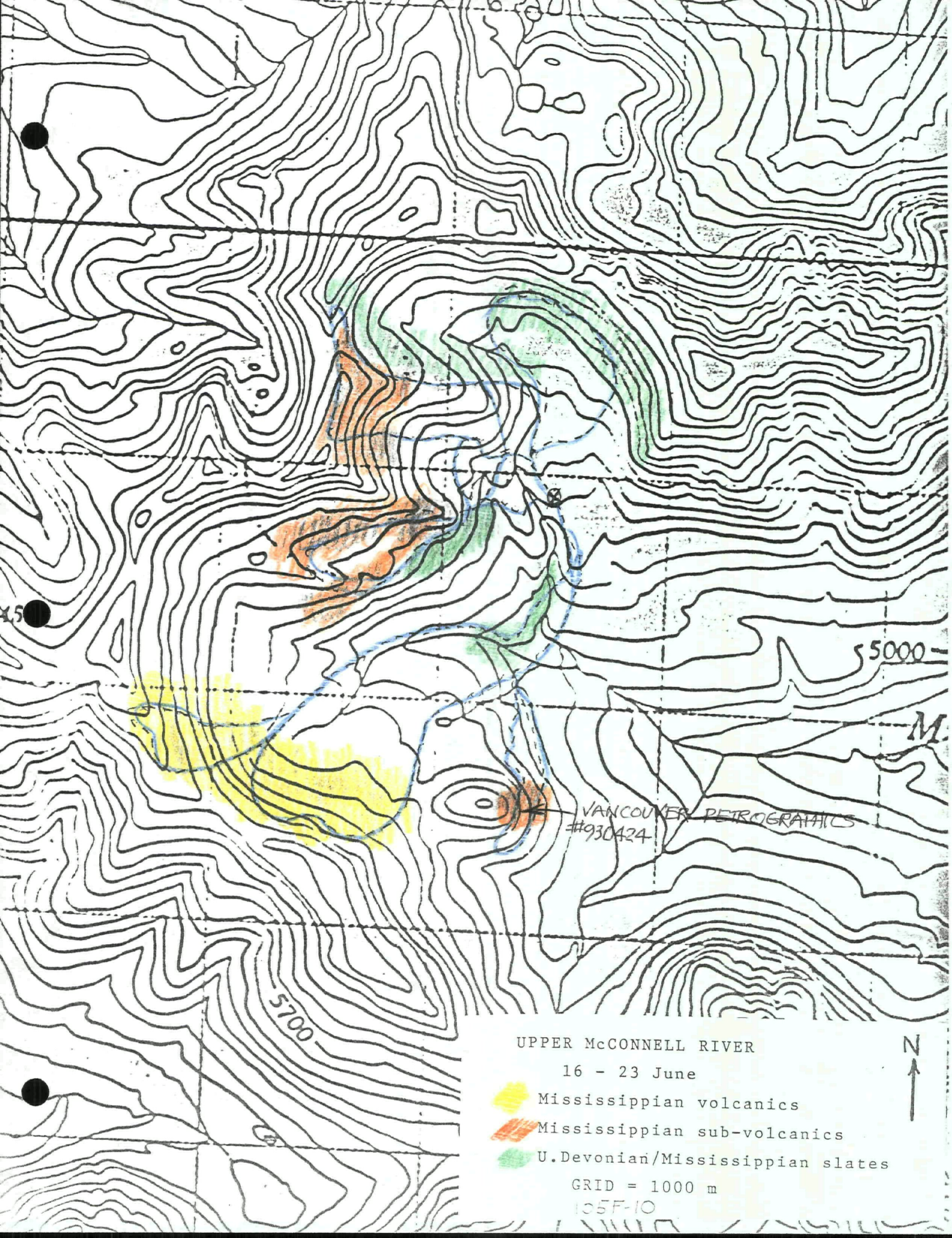
Extensively trenched Cambro-Ordovician brown shales on DIG claims. Sulfide outcrop bottom of trench: 68%Pb, 65oz.Ag, 6%Zn average.

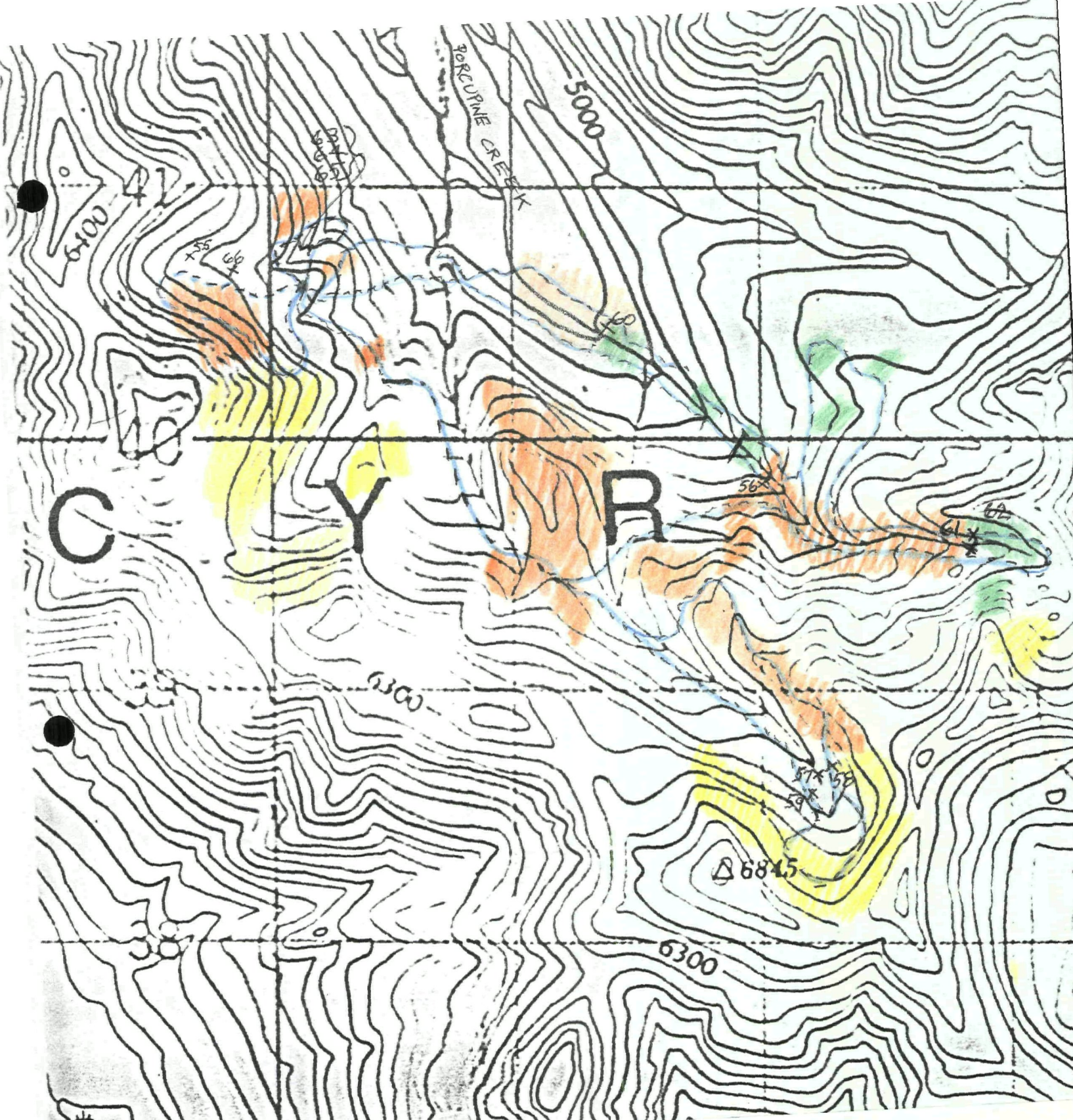
PHOTO 10 LOWER HOOLE RIVER

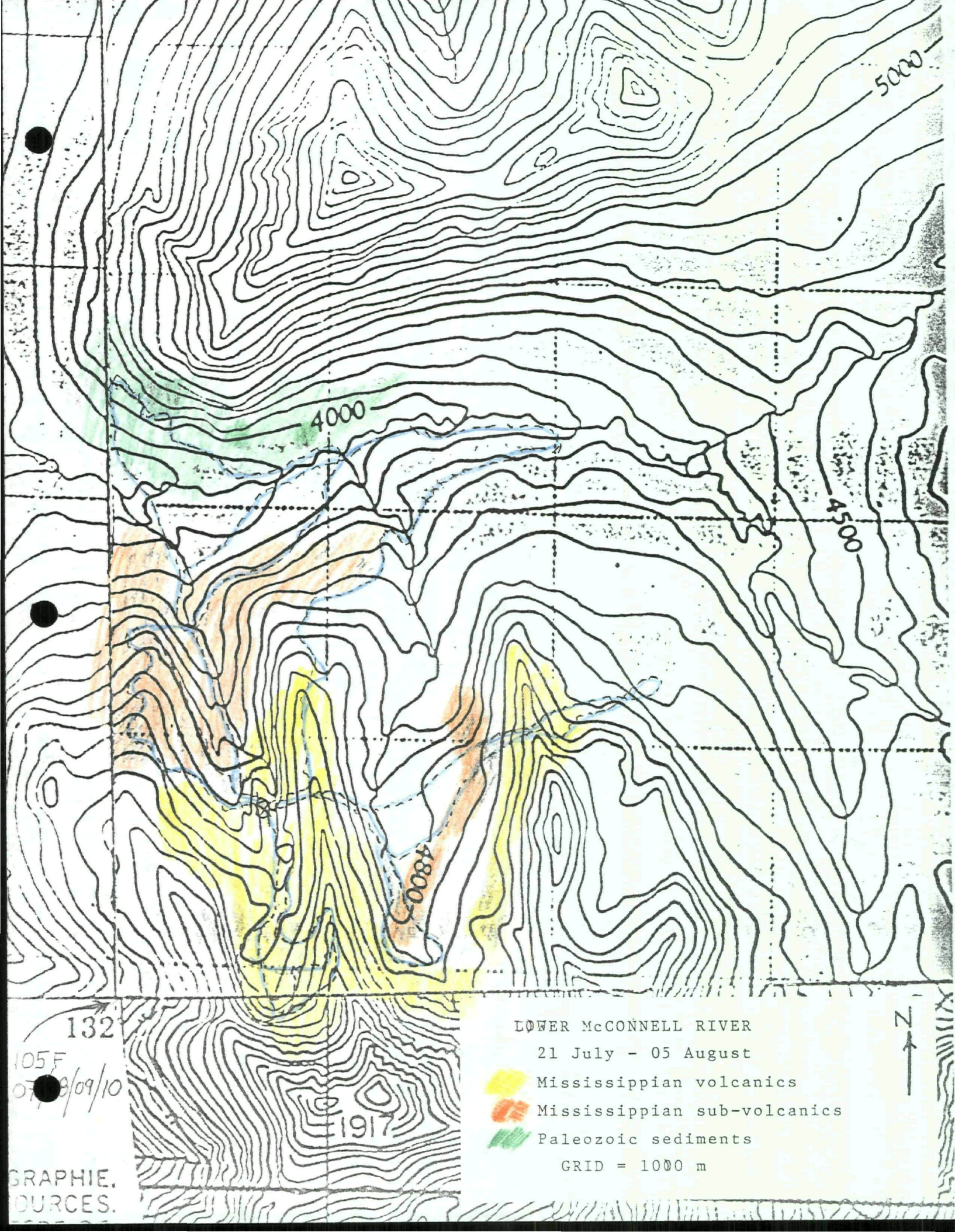
Sedex-type of sulfide mineralized folded phyllonite inclined away from viewer.

PHOTO 11 LOWER HOOLE RIVER

Sedex-type sulfide (pyrite) in phyllonite locally tightly folded but generally 140°A 40° NE exposed for over 50 meters along river.


5000
5700
VANCOUVER PETROGRAPHICS
#930424
UPPER McCONNELL RIVER
16 - 23 June
Mississippian volcanics
Mississippian sub-volcanics
U.Devonian/Mississippian slates
GRID = 1000 m
N


PORCUPINE CREEK
5000
6400
41
C
Y
R
6300
6845
38
37
UPPER PORCUPINE CREEK
01 - 16 July
Mississippian volcanics
Mississippian sub-volcanics
U.Devonian/Mississippian slates
x = sample sites
GRID = 1000 m
105F-10
N



of Native Land Claims without prejudice to Existing Surface and Subsurface Rights.

61° 39.50
132 07.08
DIG 1 & 2

19-22 Aug.
Camp I

3 km to Camp II
23-25 August

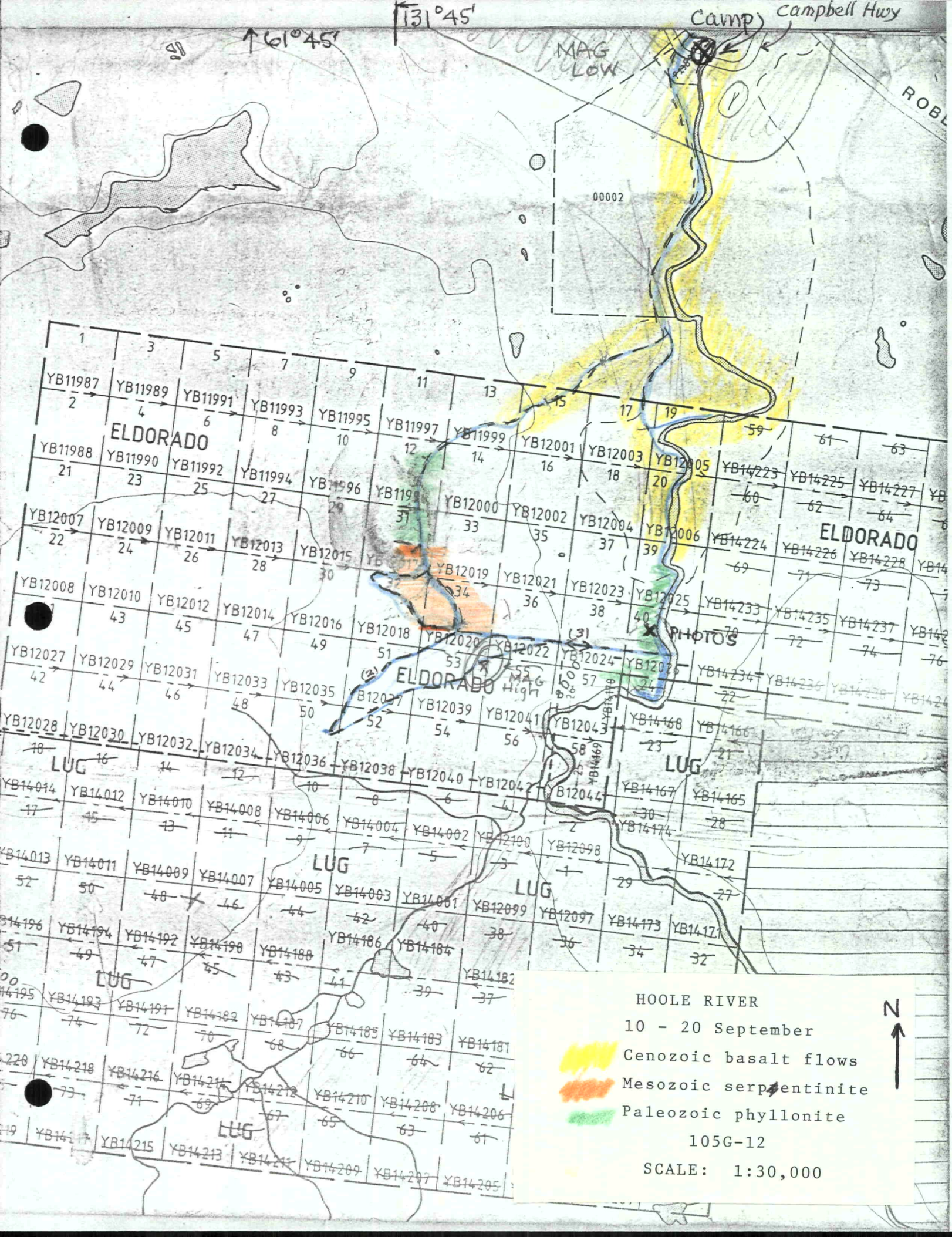
Sulfide vein exposed in trench on newly staked DIG #1 claim

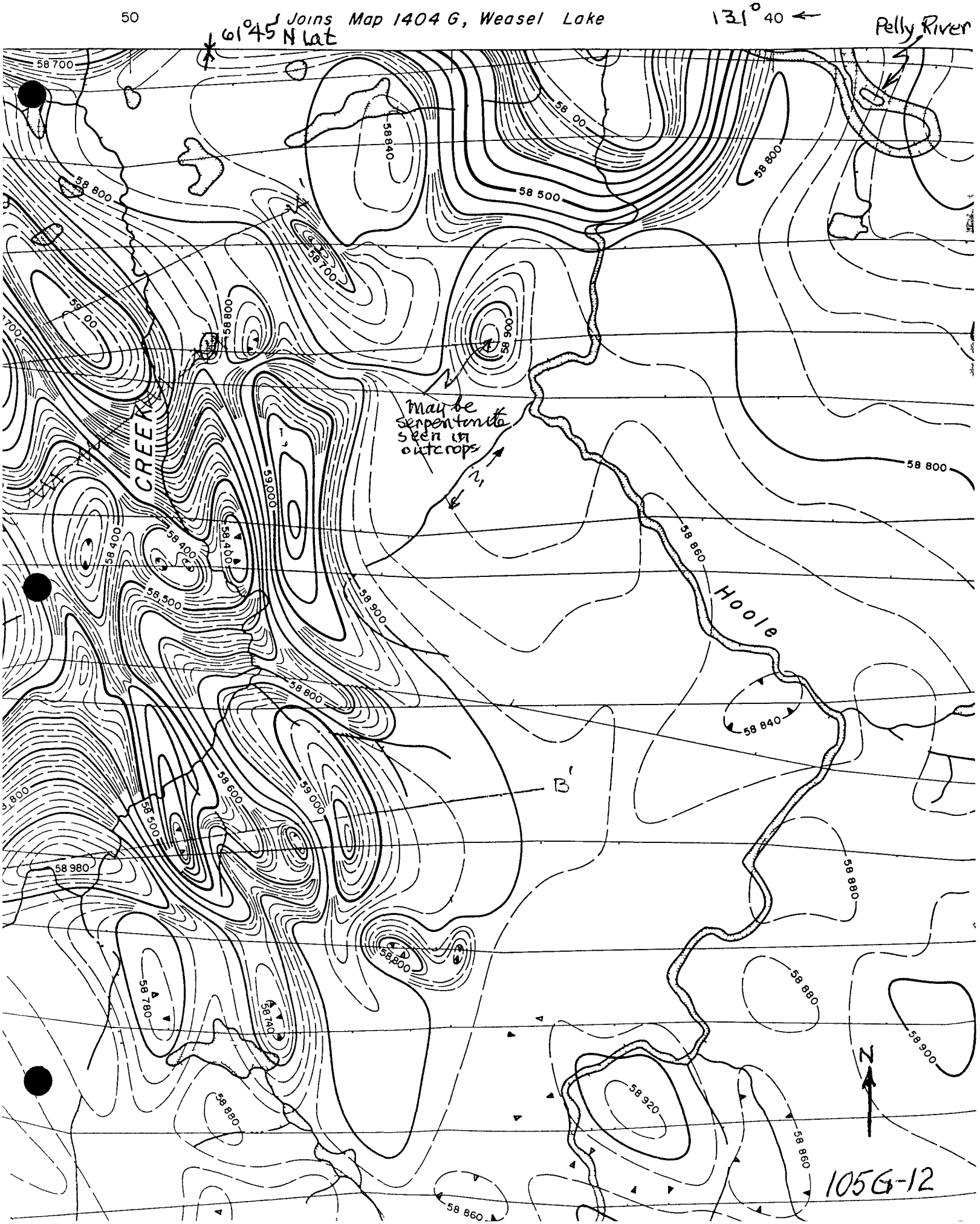
05'

1166

1215

105F-08


131°45'
61°45'
Camp
Campbell Hwy
MAG LOW
ROBL
00002
ELDORADO
ELDORADO
ELDORADO
MAG High
PHOTOS
LUG
LUG
LUG
LUG
LUG
HOOLE RIVER
10 - 20 September
Cenozoic basalt flows
Mesozoic serpentinite
Paleozoic phyllonite
105G-12
SCALE: 1:30,000
N


Joins Map 1404 G, Weasel Lake
61°45' N Lat
131° 40 ←
Pelly River
58 700
58 840
58 00
58 800
58 500
58 700
58 800
59 00
58 900
May be serpentinite seen in outcrops
CREEK
59 000
58 400
58 400
58 400
58 500
58 900
58 800
58 860
Hoole
58 840
B'
58 600
59 000
58 500
58 980
58 880
58 800
58 780
58 740
58 880
58 900
58 920
58 860
58 860
N
105G-12

Vancouver Petrographics Ltd.

JAMES VINNELL Ma age
JOHN G PAYNE Ph D G log t
CRAIG LEITCH Ph D Geolog st
JEFF HARRIS Ph D Geologist
KEN E NORTHCOTE Ph D Geolog st

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Report for James S Dodge,
14 MacDonald Rd ,
WHITEHORSE,
Yukon, Y1A 4L2

Job 930424

July 9th, 1993

SAMPLES

One sample (unnumbered) of suspected ultramafic rock was submitted for thin sectioning and petrographic examination

DESCRIPTION **PYROXENITE**

Estimated mode

Clinopyroxene	87
Phlogopite	6
Tremolite	3
Chlorite	trace
Apatite	trace
Sphene	trace
Quartz	4
Carbonate	trace

This is a rock of simple mineralogy, consisting predominantly of fresh, colourless clinopyroxene - probably of diopsidic composition

The pyroxene mainly forms a blocky, anhedral aggregate of grains 0 5 - 5 0mm or more in size This locally grades to patches or lenses of minutely microgranular texture (grain size 10 - 50 microns)

The principal accessory is a very pale coloured (phlogopitic) variety of biotite This occurs most prominently as sporadic, discrete pockets of coarse flakes (of similar grain size to the pyroxene) It is also sparsely developed as smaller included flecks, 0 1 - 0 2mm in size, throughout the coarse pyroxene crystals

Tremolite, of minutely felted form, occurs as rare localized pockets and incipient veinlets These areas also include occasional patches of chlorite

A few rather coarse, subhedral grains of sphene were seen in one of the tremolite segregations, and euhedral apatite is a notable minor component in the coarse phlogopite pockets

The sectioned area is cut by a 1 5mm veinlet of microgranular quartz with traces of intergrown carbonate

The rock is classifiable as a phlogopite-bearing pyroxenite

J F Harris Ph D

((604) 929-5867)

Chemex Labs Ltd.

Analytical Chemists Geochemists Registered Assayers
212 Brooksbank Ave North Vancouver
British Columbia Canada V7J 2C1
PHONE 604 984 0221

To: DODGE JAMES S

14 MACDONALD RD
WHITEHORSE YUKON
Y1A 4L2

Project
Comments

Certificate Date 05 AUG 93
Invoice No I9317860
P O Number
Account BKY

CERTIFICATE OF ANALYSIS A9317860

SAMPLE	PREP CODE	Ce NAA ppm	UPPER PORCUPINE CREEK
578251	205 274	220 0	GAMMA CLAIMS (not charged to 1993 YMIP)
578252	205 274	528 0	
578253	205 274	154 0	
578254	205 274	968 0	talus north of Gamma claims
578255	205 274	106 0	
578256	205 274	74 0	carbonatite dike at waterfall (Photo) 2x/3x background
578257	205 274	118 0	breccia from couth cirque
578258	205 274	152 0	leuco-syenite above breccia
578259	205 274	1216 0	syenite tuff above (south) of breccia
578260	205 274	24 0	carbonatite dike near pyroxenite boulder in creek
578261	205 274	182 0	Pink carbonate float north cirque float
578262	205 274	2044	Black carbonate float north cirque 3x
578263	205 274	< 2 0	carbonatite in canyon north of camp 5x background
578264	205 274	74 0	carbonatite in canyon north of camp 2x background
578265	205 274	274 0	carbonatite in canyon north of camp 2x background
578266	205 274	218 0	syenite tuff talus northwest of camp

CERTIFICATION: Luiana Alexandre

Northern Analytical Laboratories ltd

3 Sep 93date | Assay Certificate | Page1

James Dodge | WO 00288

Sample	Au oz/ton	Ag oz/ton	Cu %	Pb %	Zn %
2305	0 005	65 7	0 211	68 7	6 56
2306	0 007	60 4	0 181	68 4	5 14
2309	0 002	0 46	0 010	0 012	0 669

Certified by

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

J. Dodge

"Rite in the Rain"®

ALL-WEATHER

FIELD

Notebook No. 351

YMTP 1993

#1 V

15 June - Travel - Porter Creek to Ross River GMC

31333 → 31575 = 242m

16 June

Flew out of Ross River via Trans North helicopter to campsite @ headwaters McConnell River - situated @ 5650' altitude and coordinates 245° 389°

Traversed rock avalanche ridgette NW/W. 500m from camp - 95% meta-argillite (thermal meta-?) with minor thin orange carbonate veinlets. One section displayed 0.5-1.0cm wide white qtz veinlets.

Beneath two dark weathering cliffy outcrops 600m due W of camp - increasing amounts in talus of mela-syenite - some fine grained, some coarse (mostly pyroxene). Also leuco-

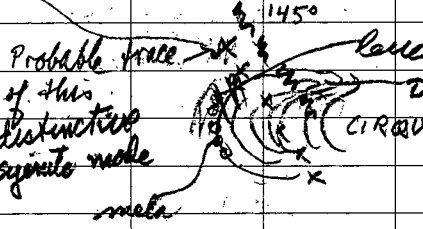
syenite fine to medium grained - visible patchy zircon. No fluorite yet. Very encouraging to locate evidence of a mela-syenite as a 'core' sector intrusive - vis-a-vis Lamont dike. Will need to examine bedrock outcrops to determine if fine grained pieces are from chilled border or from dikes.

(17) June Thursday sunny 9:15 AM. Cloudy 7 pm Thunderstorm.

Radiometric traverse up through cirque W. of Camp. Only max 2x background esp. mela-syenite float - Dun colored syenite had qtz stringers 0.2 - 1.0 cm wide - many ways looked similar to Lamer vein.

Gained ridge @ 6158 @ 3 pm. Main ridge South is fine^{++} to med mela-syenite. Contact

of crigne ridge is leuco-syenite light grey weathering, siderite splotches in feldspar qtz host evidently intrusive into mela-syenite. Fracture trend & that of pyritic fissures is 130°±. - near vert. Leuco-syenite ca. 50-60m wide, ank a narrow 10m exposure to north. Some 35m north of saddle - coarse grained dun-colored syenite with narrow qtz stringers exposed for 35m to its contact with a 10-15m wide fault zone north of which cherty argillite w rusty streaks.



Barometer falling.

(18) June Fri — RaEu began 3 am on & off until 11 am

Traversed 400 m east to min outcrops of argillite – slaty banded light/dark grey – chalky sediments. Close & horizontal – no limonite streaks.

AM.

Traversed south slope of ridge W of camp which forms southern wall of corrie of 1706.

PM

Lowest outcrops are chalky banded grey argillite. Next a pair of near vertical dykes trending 120° one a 2m wide lamprophyre the other (in contact w west side of lamprophyre) a off-white, v. fine grained dyke. Syenite?

Next to west for 50-60 m, rusty blocky migmatitic mode – banded argillite partial digested by a steeping leuco-syenite.

Then westerly medgrained leuco and medium

Colored syenite intrusive. One lobe of syenite on a low ridge extending south (50 m lower than cliff outcrops) displayed epidote, calcite, ~~k-spar~~ skarn

Still no anomalous radiometric readings, no fluorite and (in contrast with 17-26) no dun colored syenite w narrow quartz stringers.

Barometer still falling
Temp 4° am
Mixed rain/snow

(19) June Sat

Prospected SW-facing open cirque 1 km north of camp.

Dominantly u DMs clasty, banded argillite - clasty - with rusty frac coatings and narrow (5-15 cm) stringers of sidorite + pyrite - generally striking 160°.

Two sites of fine-grained leucosyenite with calcite, qtz + stringers - as dikes - one 4 m wide striking 140°, the other undetected in bedrock; seemingly as float.

No anomalous radioactivity assoc with syenite dikes - although their presence was postulated as likely to be found as "outriggers" from the syenite stock 600 m to west/southwest.

uDMs argillite avg strike 98° - 10°N

(20) June Sunday

Partly sunny until noon — then heavy snow & rain until 2 pm — again 6 pm — driving rain

Prospected east down slope — examining FeS_2 gossan in stream valley walls — partly as replacement in N dipping 40° argillites of uDMs. Float of skarn (epidote, calcite, grossular) prominent.

A dun-colored, fine grained, epidote streaked + calcite skarn uniformly 2x background radiometrically. Working up streambed to locate bedrock source. Original rx might have been an argillaceous limestone — or dolomite.

Blizzard conditions forced return to camp (drenched) by 2 pm.

(Snow squall at camp — 2 mm —) Partly sunny — no heavy rain — only showers

(21) June — longest day of '93 — "Summer"

Prospected north flank of south cirque — argillites then to west syenite hybrid followed by feldspar porphyry syenite — all talus. No radiometric anomalies.

Checked float in main stream — and because of 1½× background in epidote skarn and in dun colored — weakly foliated, sometimes epidote bearing syenite volcanics — chose middle branch of creek to climb to east facing wall of cirque.

Much remnant snow drifts prevented complete radiometric survey, but traverse of 1 km (N to S) revealed consistently 1½× background from syenite volcanics (the dun colored fluff. much autobreccia of syenite volcanics — containing chips of

black argillite and leuco-syenite was generally not anomalously radioactive. No syenite cross-cutting veins material was seen - although it was common to find syenite tuff with many narrow white qtz (no fluorite) stringers. Bedrock at most ridge-tops off cornice - where not concealed by snow cornices. Exposed syenite tuff and dense fine grained dark mela-syenite dikes. No anomalous radioactivity. Wolf track in snow bank.

Mostly sunny
Bar. rising

(22) June Tuesday

Prospected lower slope of "orange hill" 1.5 km SSW of camp. Gully NE part thermal meta, rusty streaky argillite wDMs - somewhat slaty. One site was syenite vol with weak foliation filling 5 m wide erosional slot in surface of argillite.

Orange talus east slope - dolomite perhaps Ordovician/Silurian.

Some "flashy" pieces of coarsely xline biotite+/pyroxene++/orange garnet(-) dark colored rx - first conument was it was so ultramafic it could be kimberlitic - but not able to detect breccia mode. Spent several hours search bedrk cliffs (½ way up east slope) for source of this exotic rx. Apparently a dike-ish phase in possibly peridotite - will need petrographic description of dike + host rxs.

Dropside

much oxidation (rusty streaks) of pyrite in the fine grained "peridotite", but none in the "flasky" rx (latter so-called because of prominent books of biotite).

One has to reflect on this entire syenite belt as one of extensional tectonics, plus presence of carbonatite on GAMMA claims, as clear evidence of very deep seated - possibly upper mantle derived - hi pressure, hi temp. rocks. Yes, this appears far west of Pre-C craton boundary - but the several unique rks imply mantle taps. Russians have found diamonds in off-craton peridotites.

Farther south around to SE-facing slope of 'orange' hill - cross from peridotite? into orange-weathering dolomite.

23 June

Ann. (13) day

As helicopter not arriving until noon – decided on quick reconnaissance to cliffs due east (1½ km) of camp.

In all – bedrock and talus – upper Devonian Mississippian Beacon slate dominated (i.e. except for occasional pieces of syenite tuff float (not glacially derived).

Chopper arrives 11:50 am

Ross River to Whitehorse

315 75 → 318 25 miles = 250 mi

250
175

= 425 km

30 June Wed.
Drove Whitehorse - Ross River
via Johnson's Crossing

230 mi

01 Valley - Thur. noon 11 Aug
Helicopter via TNTA from
Ross River to campsite @ 5575' alt.
west side of Porcupine Creek valley.

Prospected talus in hanging valley
WNW of camp. Several boulders
2x background radiometrically. All
identical lithology - grey, fine grained,
narrow white qtz stringers coalescent
(no fluorite). Appears to be fine grained
Z. ron.

02 July Fri Heavy, prolonged rain noon to 4 pm

a.m. Prospected N projection of carbonatite located in 92. Melasyenite (coarse) grades to leuco-syenite within 20 m of carbonatite. The carbonatite/fenite occurrence has an outcrop of only 50 meters N-S and pinches out (partly covered by talus) to north. No unusual gamma radiation today; no further work planned.

pm
Took scintillator to GAMMA claims to calibrate it with level of radiation obtained in '92 with Scintrex discriminating scintillometer.

Attached 1 Post #1 tags for GAMMA 1 & 2 claims.

Directly above camp; Broad area of talus with 50-60% coarse grained, pyroxenite (saussuritized feldspar = 10-15%) with 5% magnetite. Pouring rain!

03 July Sat. am partly sunny pm heavy rain showers

Returned to talus slopes west and southwest of camp. Climbing to spurs of bedrock cliffs. Indeed, all outcrops (even those above skarn rock w 40% skarn) were ultramafic to progressively (slowly) to melasyenite to normal syenite to leuco-fine-grained syenite in contact - chilled? - with the replacement mode carbonatite → 3x 4x background radiometrically.

Concluded from varieties of skarn in talus

that a roof pendant of argillite, cherty calcareous (dolomitic - see diapids) sediments is exposed somewhere among unscalable aretes (between 5700'-6000' altitude - since crest of ridge comprises Mississippian (younger) volcaniclastics. Skarn shown to be background gamma only.

Scirrus clouds @ noon - rain in 36 hrs?

04 July Sun - Partly sunny, a few light showers.
Mackerel sky
5575'
Descended from camp easterly - all med grained normal to Cuco - syenite - to 4900 @ jct of Porcupine Cr and a SW trib. Traversed NE-facing talus slopes revealing entire first peak to SW comprised syenite (normal dominantly - Cuco at NW end).

At 5000' alt began checking float in main Porcupine creek. Entered gorge-like canyon with bedrock a meta-argillite / chert banded sequence. Strike 145 40°E.
At jct with an easterly flowing tributary just below first cataracts of Porcupine 5050' altitude - a 4-m wide, fine grained, gray dike of carbonate was 2x background radiometrically. Strike N/S 80°W - parallel to pyritic fissures and (upstream) lamprophyre dikes (3). This carbonatitic style dike compares (petrologically)

closely with GAMMA claims occurrence. Tracing this dike westerly 50m into small SW tributary it disappeared into (?) leuco-syenite. Overburden concealed easterly extension.

Upstream @ 5780' alt boundary between argillite-chert unit with underlying leuco-syenite which shows partly digested fragments & apophyses of argillite - intrusive (not tectonic) contact. Syenite not gneissoid - and 70-80% of float there-up for 50m is leuco to normal syenite.

Climbed ridge to west across several talus exposures - all 90% normal syenite - to cross the prominent steep walled canyon of the principal southwest fork of Porcupine Creek - all cliffs normal syenite.

Reached saddle @ 5650 and dropped down into a northeasterly flowing trib. and returned to camp 7pm. Will return to clarify significance of skarn

boulders on some talus slides.

Conclusion: The My oval-shaped syenite intrusive shown by Dirk T-K is much larger than presumed - as (so far) can be assuredly shown to underlie an area at least 5k * 1k with a WNW trend - possibly further yet to WNW.

(05-) July Mon - Rain all day

Barely light enough in tent for use of the binocular microscope

06 July Tues. 5°C am
Cloudy – Heavy rain began 7pm & all night drizzle

Prospected southeasterly into the valley floor of the southerly of the 2 main west tributaries of Porcupine Creek.

By 11 am (5500' alt) was noting 2-2½ x (0.03-0.04 R.) background radiometrics on boulders of breccia. Matrix is black weathering dark gray, fine grained carbonate (either old acid is weak, or there is a dolomitic factor) with weak to moderate effervescence. Clasts are variable in size 1-20 cm and dominantly light colored - creamy to white very fine grained - will use microscope to see if are chips/frags. of stearn. Most clasts are rounded at edges, but range from egg-shaped to melon-shaped. Clasts vary from crowded to a distribution with matrix "gaps" of up to 5 cm.

Traced float in creek to 5850' where bedrock of dominantly dun-colored syenite outcropped. Continuous outcrops on east side of creek bed extended for 55 meters (165 feet). Breccia and unbrecciated syenite "panels" made up exposures — ca. 1/2 each in roughly 5m intervals with the "panels" trending generally E/W. Collected several samples — as it began to rain (what's new?) and would plan to return tomorrow to map geol and attempt to interpret significance of the breccia.

For instance — as I recall from last year — a breccia in syenite volcanics was noted on a spur of the main NW/SE ridge about 0.7 km due south. At the time I presumed that was an autobreccia in volcanoclastics — now am not sure. Perhaps we are dealing with an intrusive breccia. Anyway — it's radioactivity

is primary reason for pursuing follow-up of the syenite breccia — perhaps a carbonatized setting. Even "low" radioactivity may suggest presence of light rare earths. Clearly the 55m-wide bedrock exposure containing numerous well-defined breccia zones — and the alternating fine-grained (hi K-spar) intrusive character of syenite — bodes well for an interesting sleuth prospecting in the vicinity for supplemental radiometric / geologic survey.

07-07 Wed

Rain - from drizzle to downpours all day - 3 ½-hour 'breaks'. Too wet for use of scintillator which is not w-proof. Fresh grizzly scat 60 m from tent!

08-07 Thur

Fog (dense) until 10 am - clouds remaining @ 6100' alt.

Began trek southeast to the breccia site of 06-07, but heavy rain forced return to camp by 1 pm without reaching the site - necessitated by fact cannot expose scintillator to the wet (and the backpack was already leaky).

Cleared from 2-4 pm when checked samples from breccia site under binocular microscope. Dark matrix mostly feldspar (very fine grained) with light clasts apparently silicified? Lamprophyre. Matrix has calcite and ankerite veinlets?? fillings could this structure be the throat

of a volcanic source of the younger Mississippian (Mv, Mva) volcanics, might the breccia be a "second pulse" following the unbrecciated dun-colored aphanitic syenite intrusive root of the volcano. Perhaps volatiles in brecciation phase carried radioactive minerals (allanite, thorite, etc.) — will run cerium analyses to test concept.

6-7 pm very heavy rain again — what a "summer"!

09-07 Fri

Retraced route of 06-07 up to (5850'), breccia bedrk zone - trend, from panels of variations in mode of breccia is 75° 70°N Unable to find float of similar rock up-slope to E or to W. To E is med grained normal to bruce-

Syenite; to west is Mv clastics creamy colored, mostly blocky talus with some breccia-but matrix and clasts are generally similar - could be auto-bx as I had described rks on highest ridge to west (1992).

Up-stream found similar distribution of syenite (E) and volcanics (W). One carbonated Mv selected for Ce assay (typically 1½-2× gamma background); likewise one specimen of carbonated My dun-colored fine grained syenite for Ce assay (also 1½-2× gamma bkgrnd.

Talus dominance of Mv at head and left (E) side fairly well defines boundary between My (syenite) and Mv (syenite volcanics) as shown on sketch.

Soaked by 20 minute thunderstorm.

(what else is new??

10. July Sat

- Prospected down to Porcupine Creek to check on hydrothermally altered zones (of equigranular normal syenite) exposed in canyon walls of tributary issuing from 1992 base camp Finnegan Valley.

Only occassional 1½× radiometric (over background) response where weak Ca-metasomatic alteration noted.
No further work planned

11 July Sun
Day off from Y mtP
Mapped Gamma Cls for assessment.

(12) July Mon. Sunny 10° a.m @ noon, heavy 2 hr rain - tried to seal scintillator.

Prospected up main Porcupine Creek valley. Narrow (2 m), contorted weathering dike (carbonatized) x-cutting 75° 80N banded argillite + chert hornfels @ 4850' altitude in east bank of creek. Displayed 2x background.

Curiously noted lemon-sized pc. of leucosyenite on boulder - fluorite in qtz veinlets. Too small, uncertain if radioactive.

Reaffirmed easterly extension of 04-07 carbonatized dike across tributary to east - then covered by OB. Still 2x background and 3 m wide.

Climbed into cirque to examine prominent gossan boss - toe of talus @ 5900'. Detected 2 samples w. radioactivity from carbonatized tan and dark gray

dike(?) material - float. Float in stream bed a mix of leuco-syenite from north bullside, then skarn from north bullside (5990' alt). Pyritic gossan on south side developed in skarn with no anomalous radioactivity. Lathes still upright from 1977 staking Iggarchem on TAKU claims by Noranda.

@ 4800' alt noted concentration of coarse ultramafic syenite float coming into main Porcupine from N-flowing tributary. Pyroxenitic boulders closely resemble lithology of mafics in cliff outcrops above camp. This float not noted in creek above 5500' (06-07), so must be coming from inaccessible vert. canyon walls @ an intermediate altitude (between ca. 5150-5400).

Completely overcast

13. July Tues. barometer plunged overnight -

am - Used binocular microscope to examine specimens (radioactive) from yesterday. Also described the rod-shaped mineral distributed throughout the pyroxenite - appears to be.

p.m. - really a howling downpour rain all afternoon reduced by 5 pm to fast moving squalls.

(14) July - Wed

clear - best day yet
16°C

a.m.

Re-sampled replacement carbonatite in narrow gulch. Coarse $CaCO_3$ replaces feldspars (of syenite) and largely replaces pyroxenes - with pale green 'ghosts' remaining to identify parent syenite. Scattered limonitic patches of ferro-carbonate (ankerite?).

Dense, fine-grained, gray carbonate at boundary between fine-grained equigranular pinkish leuco-syenite and the carbonatite.

Generally - lows but 1½× background with one anomaly in float (creamy carbonatite) near 4× background radiometrically. The III-B scintillometer is calibrated .025 R/hr = 250 cps. ← background in gulch syenite = .015.

p.m.

Carefully evaluated a talus train in Spangua valley N of camp which displays a broad anomalous gamma radiation - .020 → .025 MR. Host is syenite volcanics - some trachyte, some volcaniclastics both exhibiting epithermal narrow (0.5-1.5 cm) white quartz (fracture filling) stringers. Some chocolate brown, crystalline, ankerite in stringers. Host is purple in some stringers - probably fluorite.

15th July - 1/2 day

Early am. retraced traverses in talus (below) cliffs & cornices collecting specimens of melo-syenite, more accurately, biotite (phlogopite) pyroxenite.

Returned to Race River

16. Return drive Ross River - Whitehorse

21 July - Wed
Drive - Whitehorse - Ross River

261 miles

22 July Thurs.
Early am helicopter to site east of McConnell River 61°30'28" / 132°29'15" @ 4900' altitude - just N of MATHEW claims #77 / #78.

Reconnoitered cirque and found mostly leuco-melanin granitoid syenite. Several limonite-stained ankerite-bearing fissure zones 40-50° A. No anomalous radiometric readings. Band near crest of cirque 35-40° W is MV - syenite tuff?

23 July Fri

Climbed cirque east wall to 5200' still entirely in quco-syenite (with bull caribou hanging around 100m away). Carried on north along spine of ridge and down steeply on nose of ridge to 4200' alt then traversed west to creek which flows from camp-cirque. Came up creek bed 700' to camp.

Noted 5% float of med grained mela-syenite; < 5% diopsidic skarn among majority med-to fine-grained leuco-syenite. Several boulders of marble-ized ls - could be glacially dropped into this drainage.

One small boulder of banded ultramafic 1-2cm wide anthophyllite and tremolite - gave 1½x background radiometrically

24 July - Sat.

Retraced route down stream flowing past camp to identify the steam boulder train and try to locate source. No luck - although a few steam boulders (≤ 25 cm) were spotted 500 m below camp. Searched lower timberline horizon (camp altitude) of east steep wall of canyon north of camp, but found only tuff-syenite - no steam. Some a guess - so far - maybe up stream in cirque?

clear - hi beaverslide

25 July Sunday Smoky

Re-traced game trails down to 3800
main west-flowing stream.
Examined float for 1500 m
up stream. 70% dull-orange
weathering mela-granular leuco-
syenite. 15% mela syenite - often
partially carbonatized giving a
characteristic pockmarked
weathered appearance (non radioactive)
10% skarn, 5% limestone

One piece float (1 kg) of banded
calcite/ankerite with much
galena and chalcopyrite.
One outcrop of grey-weathering, bk slate - OSS, probably
worst band of stream. No anomalous radiometrics.

Returned up via mouth of hanging
valley east of camp - a climb of
1250' - brush + bugs. 2 carbon.

3[30] pm - helicopter from north landed a
party on west side of McConnell River
ca 6 K north of this camp

(26) July Monday mostly sunny temp up to 16°C

Climbed east wall, crossed first-east valley - all boulders are syenite with variations in grain size and mafic content. Leuco-syenite is younger than mela-syenite - note xenoliths.

Climbed next east wall - crossing in a notch @ 5330' and down into second-east valley to 5000' - still in plutonic syenite. So far no sign of the NE "contact" with Sdl mapped (?) on Quest Lake sheet.
Aplite vein 0.5m wide at "notch".
No radiometric anomalies.
Caribou on snowbanks to escape bugs.

(27) July - Tues. Gray - clouds lowering

Climbed east wall - but by 10 am showers began and waited until 11:30 before returning with scintillator.
Pouring rain by 3 pm.

(28) July. Wed. Mostly clear
Bar. steady 16°C

Rain, at times heavy — most over by 1 pm — however, inasmuch as didn't want to chance wetting scintillometer — decided to use binocular microscope, as lighting was good.

clear am. +2°C

29) July Thur Bar fell sharply overnight.

Prospected entire ridge (down to dense timber @ 4100' alt.) west of camp. Entirely leucocratic syenite (with <10% normal syenite) in gray weathering blocky exposures.

Several orange-weathering fissure zones 60°-70°A with ribbons of ankerite and quartz - yielding a pseudo-gneissic appearance - inasmuch as host rock within fissure zone was dark gray fine grained melatic syenite - possibly a metasomatic product?

No anomalous radiometrics.

Heavy blustery thunder storm 5-6:30 pm.

Cirque Traverse

30 July Fri Sunny a.m 17° nsoy
Showers w pm w.
high wind

Prospected talus along toe of east wall. Leuco-syenite, equigranular from campsite to SE corner of term where talus ethology abruptly changes from sub-volcanic syenite to syenite volcaniclastic including creamy to olive tuff, dark grey to black greywacke, thinly bedded dolomite

Conspicuous are white quartz stringers in >50% of talus. Just as first heavy shower began - noted a 3x background radiometric reading from olive green + gt, strs boulder - upon breaking found copious purple fluorspar. Plan detailed exam of long talus slope tomorrow.

cloudy all day

31 July Sat Bar: rising strongly
11°C

Resumed examination of talus in cirque. S and SW talus exhibit only a few boulders with anomalous radioactivity + CaF_2. Mostly tuff and graywacke, but generally very sparse qtz stringers.

The SE corner talus @ 5100' displays many boulders with 3-3½ x background and always considerable CaF_2 - purple (gamma irradiated) - in veinlets and splotches usually with the qtz stringers.

Most of more radioactive boulders lie in a trend about 30m wide - will go to bedrock cliffs to sample the source tomorrow.

Will definitely send samples for ass. REE, Y, Nb, Zr. Packed down ~ 15 Kg of samples.

Heavy smoke - ptly sunny

01 Aug Sun 14°

Returned to cirque (so. of camp) main south wall prospecting talus until reached bedrock at 5260 alt.

Rusty weathering slatey cleavage volcaniclastics 120°A 40°S overlain by massive, blocky, resistant fine grained syenite sill (??) since "basal" unit 3m thick exhibits sparse streaked mafic schlieren (probably of underlying slate).

white qtz stringering in "sill" often very pronounced, but pervasive as very narrow stringers. CaF_2 common. Most radioactive are cream colored tuff (above sill) and a dark gray, med to coarse grained massive dike? with quartz "eyes", i.e. replacing feldspar - often up to 5mm dia. Both display 2½ - 4× background.

Most qtz stringering is parallel with only occasional cross banding. Centrally net of stringering 20° and ± vertical. Stringering does not show in underlying slaty volcaniclastic.

On east ridge of cirque wall @ 5760' slaty volcaniclastic ca 20 m thick overlies 60 m width of off-white weathering sucrosic quartz mass which resembles a qtz metasomatism of igneous (porphyritic) syenite with which it is in "overlying" contact.

Where does all this qtz come from in a syenitic terrane?

Sunny - warm

02 Aug - Mon. " 16°C

Crossed over cliff east of camp then down to valley floor carrying on south to taking slides on west side of cirque.

Immediately noted similarities and differences in lithology of yesterday in "camp" cirque. Here dominantly was skarn - isopleidic - even serpentinite. Also present was the black, fine to med grained "sill" with its qtz stringers (one of the anomalously high radiometric rock types), but also present were many pyroxenite boulders with no qtz stringering - thus evidence for thermal metamorphism producing qtz-rich pelite + skarn.

Again the dun-tan to olive - silicified syenite tuff? frequently exhibited CaF_2 in qtz stringers + 2½ × radiometrics. Wonder if may have a stratiform concentration of radioactive minerals - even zircon. Cliffs make prospecting dicey.

Sunny Hot 25°C

03 Aug Tues

Return to west arroyo to check on clear evidence of skarn - and finally noted that there is in fact say 5% diopside - epidote - even some serpentinite but the lower talus slopes (finer size mode) is dominantly dark slate with 15-20% cream to olive colored syenite tuff - silicified from qtz stringers mesh (often or near pervasive 50% white qtz infiltration).

Collected several specimens of the "white spot" black, massive, tough fine grained porphyry ?? Many spots (± 5 mm) appear to be feldspar - others quartz but most spots are round to oval shape and weakly to strongly elongated suggesting flow direction. Is this (weakly anomalous radioactive) a sub-volcanic, sill, perhaps

04 - Aug Wed.

Set up binocular microscope to identify macro-minerals in all types of rock specimens collected over past 5 days.

05 August
Holiday Start
Return from Ross River to
Whitehorse

"Rite in the Rain®"

ALL-WEATHER

FIELD

Notebook No. 351

YMIP 693

#3

Kotza-McNeil Divide

19 Aug 105F-8

Drove Wiese to Kotza Mine road and up 5½ miles to watershed divide head of Kotza R. and south-flowing tributary of McNeil River

304 miles

20 Aug.

Prospected area formerly held by Prescod claims (only 1000 m east of Lancer REE claims which I hold). Discovered in bottom, north end (part sloughed) of deep (5 meter) trench a 0.5 meter wide in-place exposure of sulfides - 70% galena, <5% chalcopyrite and 25% dark grey to black splotches of uncrystallized sooty mineral. Hematitic gossan exposed near subcrop at north end of trench - to depth of 2 meters - where covered by bleached overburden. Host is braun fan Cambrian shales.

20 cont'd -

Staked 2 claims as DIG 1 + 2 covering a cluster of 6-8 bull-dozer trenches in general vicinity.

21 Aug

Returned to DIG claims for further prospecting of old trenches - all exposing (mostly) sloughed walls of Cambrian shale. Although numerous fractures were hematite stained, no sulfides were noted. On other hand perhaps trenching wasn't deep enough - c.f. 5m to depth to sulfides in the "discovery" trench.

22 Aug.

Dense fog at ground level restricted prospecting to the two northerly-most trenched area. Again, the relatively shallow trench east of "main"

showing (2 meter depth) exposed only hematite stained fracture clusters — i.e still in oxidized zone. Nevertheless, even close exam did not find vuggy, porous casts as evidence of presence formerly of massive sulfide vein. Collected 3 grab samples (15 kg) of sulfide vein (2) and hematitic fracture zone (1).

23 Aug

Rain began @ 2am and began to turn last mile of 4×4 access road into mud which, if continued (from experience @ Lander in previous years) would have required chaining up to get out. Decided to drive back (@ 3am) to top of hill in Kelza drainage (3 km). Retreated to DC camp on foot and briefly examined several more old, shallow trenches to south - no sulfides or dumps

24 Aug

Rain and high winds all morning and until 3pm - leaving little time after the 2 mile hike to the upper part of the DIG ridge — i.e. formerly covered by Pescod 1 & 29. Still ten Cambrian shales.

25 Aug (Sarah's birthday)

Heavy wet snow above 5500' with driving showers & persistently moving dense fog at lower elevations. However made loop traverse south of DIG claims along ridge formerly held by Pescod #4 & #27 (Strathcona), but saw only sheet of ten Cambrian shales with virtually no hematite

Recommend soil sampling and EM on 1994 grid always encouraging

HOOLE RIVER / STARR CREEK
105 G-12

10 September

Drove out from Whitehorse to Hoole River (bridge) on Campbell Hwy at its confluence with Pelly River. 312 miles.

11, 12, 13 September - all from campside at junction of Hoole w/ Pelly 150 m N. Pelly Hwy. Rain showers each afternoon, required that all binocular microscope work be undertaken usually noon to 1:30 or 2 pm.

Worked cobble/boulder stream shore E/W of Hoole River for approx 1 km up from mouth beneath cliffs of basalt flows - at least 60 m thickness exposed beneath variable thickness of

coarse glacial till (latter which probably contributes >50% of source of cobbles (not boulders for basalt obviously) found on banks of river. Found several obvious-rich, pyroxenene, possible tiny (4.0 mm) garnets. Several cobbles of distinct eclogite (probably amphibole from retrograde after omphacite (pyroxene) with rounded 1-3 mm brown/orange garnets. Amphibole coarser (up to 10 mm) than in other eclogites in alpine terrane environment. However, would need to find source of eclogite to see if it is "C" type as at Furo and Stewart Cabs) — or if it is xenolith in other hi-P + hi-T rocks.

Other prominent stream boulders are feldspar mega-porphyroblasts in gneiss (of course much basalt flow boulders).

14 Sept.

Long 10 km hike up old (road survey camp) trail passing up section over top of basalt flows and into (from float in road cuts) phyllonite then float of weathered, sheared serpentinite on Eldorado claim group.

15 Sept.

Returned same route only continued on overgrown trail to old (circa 1965) bulldozer trenches exposing serpentinite — probably in that period in exploration for asbestos.

North of trenching 1500m - noted considerable chunky float of silicified brecciated (vein?) cream-colored rock — so much in fact that it likely represents a sub-crop not far removed

from bedrock source. Didn't sample, as was on Eldorado claims (in good standing). Had hoped to locate easy trail route to return to shores of Hook up-stream from basalt-walled canyon which - even in low water - was difficult negotiating at river level.

16 SEPTEMBER

On return to bulldozer trenches, found old (1963) claim posts at east end of middle trench and also found the well-cut E-W survey line. Followed cut line east 2 km to Hook River and commenced reconnoitering of outcrops across forested island in River - more serpentinite, no basalt, but none of ultramafics.

17.

Returned to cut line and down to Hoole - then downstream to 50-60m wide, sulfides in phyllonite outcrop. Phyllonite 15-20° E and 20°/40° NW No samples of the folded, 3m-thick sulfide outcrop, since was on Edorado claims. Apparently a sedex-type deposit unique by tightly folded character of phyllonite only where sulfide-bearing.

Still no ultramafic cobbles. However, as of yesterday - more serpentinite than near mouth of Hoole.

18 Sept.

Returned to serpentinite trenching and followed weaker and weaker trail of bulldozer heading south onto LOG (lapsed) claims - no outcrops in burn slopes and virtually no reliable float - mostly muskegy terrain. Ick! Black flies abound.

19 SEPT.

Again followed cut trail to Hook and worked cobbles & W. shoreline up stream for 1 km. Found several cobbles olivine-rich ultramafic - one was phlogopitic.

20 20 Sept

Drove arm W. to Starr Creek and spent several hours examining cobbles both up + down stream (500 m each) from Campbell River culvert. Mostly basalt boulders (as seen in cliffs bordering Starr Creek. Glacially derived cobbles of gritte, porphyroblastic gneiss, some serpentinite — few ultramafics.

Return drive to Whistler

Conclusion

Need systematic <1.0 mm stream sand test programme to further evaluate Poole, Starr + Horton drainage areas, as to possible indicator mineral (assuming there could be an "up ice" bedrock source in the Trench)

YMP - 1993 J.S. Dodge

UPPER SHEEP CREEK AREA

01 June (2) day.

Drove out from Porter Creek via Johnson's Crossing and South Canol Road to the Upper Sheep Creek turnoff and camped 0.5 km off Canol - 492 miles.

Because snowmelt and recent rains, road very muddy - decided to hike in for several km in afternoon to determine plan for reaching goal: an area identified on Quiet Lake 105F geology (D. Templeman-Kluit 1977 OF) just west of Seagull Creek as "My" - sub-volcanics Mississippian syenite.

Bold cliffs @ 2 km from Canol are black slate + quartzite on north side of trail W of little pond.

02 June.

Set out to follow mud-hole 4×4 road east - found Trapper's cabin (Trapline # 231) at about 10 km from camp, and a north-flowing tributary of Upper Sheep Creek @ 12 km where trail splits. Carried on up a steepening rocky (quartzite) trail to a point (± 13 km) where a 20m-wide, sloughed bankside revealed black (manganiferous) fault gouge with calcite, barite, limonite, few chips of galena. Called it "Poplar Site", as several mature poplar trees were sliding / leaning over trail. This most likely is the brushy curving E-dipping fault shown on Quiet Lake sheet. Immediately east of fault - bankside float is calcareous brown phyllite and several <0.5 m wide chloritic fine grained (dacite?) sills or dikes.

02 - cont'd

Found end of a 4×4 negotiable trail @ about 15 km from Canol - returned to campsite near Canol.

03. June.

Still camped at Canol waiting for U. Sheep Cr. road to dry out more. Hiked back to end of trail and up right bulldozer trail (formerly passable to 4×4's) climbing south-facing steep slope to point above tumberline overlooking pond at divide with tributary to Seagull Creek. Concluded that target area was two ridges to the

JSD

03 cont'd

east with total of over 3000'
in vertical ups and downs to
the east (about 6 km airline
distance) ⊥ so no question will
have to make camp 1 (or 2)
away from Canol to reach it.

04. June.

Managed to drive pickup as far
as trapper's cabin and set about
packing for a fly camp tomorrow -
heavy showers in afternoon, doesn't
bode too well weatherwise. Dwelt

05 June

Backpacked with Tent grub + scintillator some 12 km to end of passable road on southeasterly over snow covered down to first gully/bench @ 5600' altitude Camping on MPR claim 23. Several bedrock exposures were Cambrian? calcareous shaly/ slate phyllite.

06 June.

Left fly camp and climbed nayt 500' high ridge, down 500' then up 500' again crossing limestone and in to near vertical orange-weathering dolomite - possibly ℄? carried on down ridge to east onto lenco-syenite (sub-volcanic) and after several traverses had a maximum of only 2x at a few sites.

JSD

06 Cont'd
Ridge site of syenite still perhaps 900' in altitude above Seagull Creek & did not go down to valley floor. Returned to fly camp (and grizzly tracks) for 2nd nite - heavy evening shower - a bit soaked.

07 June.
Backtracked - after drying out somewhat in morning sun - reached trapper's hut and toasty wood stove dry out.

08
Rain, drizzle with patches of high grey clouds. Examined stream float at junction of creeks 2 km east of cabin. No "exotic" mafic or syenite float from either main Upper Sheep Creek or

08 (Cont'd)

its principal north-flowing tributary along which a bulldozer trail had been constructed (east bank).

09. Bright - breezy morning.

While unpacking some drying of 4×4 road, used binocular microscope to re-examine syenite samples collected on 06 June - Normal syenite with 0.5 to 6.0 mm laths of orthoclase in finer grained groundmass (pinkish tan color) of K-spar and lesser pyroxene.

Drove to Canol Road in afternoon and out to Johnsons Crossing - into Whitehorse by evening - 204 miles.

JSD

61° 35'
South Canol Road
5 km
N.
105F-10
J.S. Dodge
YMIP
1993
133°0'
Trapper's Cabin
Upper
SHEEP
Sheep
Creek
Packing route
MPR
(PELLY
PASS PEAK
TRAIL
Fly camp
MOUNTAINS)
SEAGULL
Creek
RAM
LP
TAY
TERN
GULL
Syenite
6000
5500
5000
4500
4000

61° 35'
(PELLY
MOUNTAINS)
SEAGULL
Creek
Upper
Sheep
Creek
Trapper's Cabin
Packing route
CAT TRAIL
Fly camp
Syenite
PASS PEAK
MPR
SHEEP
TERN
GULL
RAM
TAY
LP
N
J.S. Dodge
YMIP
1993
105F-10
133°0'