004667

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"Rite in the Rain®"
ALL-WEATHER WRITING PAPER

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Project (EAGLE PLAIN NORTH YUKON 2001) SMAS 2002

"Rite in the Rain" - A unique All-Weather Writing paper created to shed water and enhance the written image. It is widely used throughout the world for recording critical field data in all kinds of weather.

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TF = Talus Fines

DATE 2002	AREA	SAMPLES ROCK	SOIL	SILTS	OTHER (stations geology etc)
MAY 29	LEWES MARSH	(-RS samples)			
JUNE 5	TAGISH NARROWS	(-FA Samples)			
JUNE 10	Pick handle	JvR02001-003			
JUNE 11	Scottie Cr.	97662			JvR02004-005
JUNE 12	Scottie	97660 JvR02007, 016	JvR02006	JvR02009-011 JvR02013-015	JvR02008, 012
JUNE 13	Scottie	(-RS SOIL SAMPLES)			
JUNE 14	WELLESLEY		JvR02017-019	JvR02020	
JUNE 20	SNAFU	-		97701	
JUNE 24	KUSAWA	97702-05		97706	JvR02021
JUNE 25	Kusawa	(core 14-16)	~~97707~~ 97617	97618 97708-10	
JUNE 26	SNAFU	97712-16	97711		JvR02022-23
JULY 3	KUSAWA	mob into camp late (-RS samples)			
JULY 4	KUSAWA	97718	(TF) 97719	97717, 97720-21	JvR02024-25
JULY 5	Kusawa	~~97725~~-26 ~~97734~~	97727-33	97722-24	JvR02026
JULY 6	Kusawa	97735, 97742 97743-	TF 97736-37	97744-45	JvR02027-28
JULY 7	Kusawa	56501-		97746-50 56502-506	JvR02029-33
JULY 8	KUSAWA	56509-10	56511	56507-8 56512-15	JvR02034-47
JULY 9	Kusawa	56516	56518-19	56517-19	JvR02048

sample 97743 missing

pickup up Aug 2/2002 (SEE BOOK #2 2002)

Robert, Roger, Floyd, JR

i

LEWES MARSH

MAY 29/2002

△ RH 02 01 station on creek draining into proposed Lewes Marsh SMA on creek draining behind Gunnars Mill
- see RH notes for geology of boulders in creek
Pan concentrate RS02-001

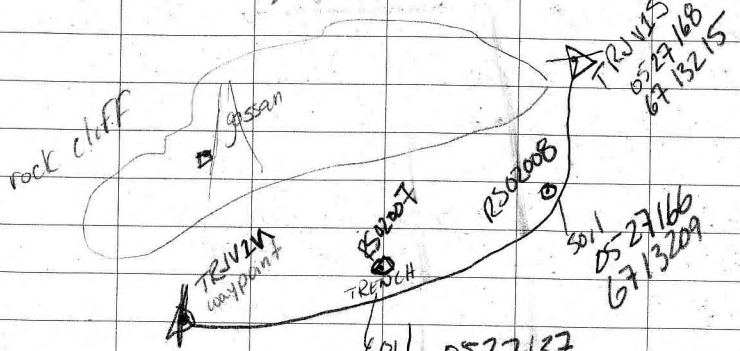
△ RH 02 02
creek draining through Black Mikes property north side of Alaska Hwy - see RH notebook
Pan Concentrate RS02-002

△ RH 02 006 old Adit north side of road near turn off before Swan Haven (sample RS02003

(tons of trenches! blasting too!)

△ RH 02 007 drill collar ~200m north from old Adit;
* looks like black current bush at collar, tons of strawberries

trenching on south side of highway across from Adit.



S011 0527137
UTM 6713199

TRJV1V
- 0527135
UTM 6713200

//

- FARRER
- Roger
- Robert
- JR

June 5/2002

Tagish Narrows

- drove to SW edge; no o/c beach
  - beaver on beach
- drive over bridge ↑ up on Penny Cock Creek

A RHOZ 009

sample of skarn border

sample FA0Z001, FA0Z002
pan concentrates >12 colors
see Robert's notes for descriptions

green intrusive into Labarge group rx causing skarn (Miles further up creek)

- old A-frame on creek

//

* WGS 84 is Nad 83
on GPS

Robert
Roger
Farrell
Jo

Pickhandle Lakes June 10/2002

A FA02004 station
→ ~~Windy assemblage~~ / oceanic U/M & metamorphic assemblages
FG green to purple black mafics/
~~ultra mafics~~ in road cut
#Sample by Farrell

(NAD 83 scothe Creek only)

(took 3 photos Roll 1; 8, 9, 10)

shistocity 318/70E

see F.A. note 539708E
zone 7 6863714 N

Nasina - muscovite chlorite schist

North of Road across from Pickhande lake SMA

STATION

△ JvR02001 station @ contact btwn Nasina & Windy M-Unit rocks

UTM coords Nad27 Zone 7 0542630 6861912

Pit - rock mined for road fill

10 11, 12, 13 roll 1 - 0542685E NAD27
JvR02001 6862007N
sample @ contact: sheared fault zone (see RS notes for attitude of fault)
same rx as Minfile RGS qtz ± rusty veinlets ± py anomaly

JvR02002 - WGS 84 0542601E 6862134N Roger Way point
? fg dark grey qtz vein? dyke 5cm rusty shear zone 0.25m wide trending ~065/70S ~~5m~~ decalcified & limy in FW of contact

~30m east of fault zone

JVR02003 - graphitic shear HW of fault @ JVR01001 station bx qtz minor limonite, no fg. pyrite

Fly to Scottie Creek SMA

June 11

Traverse 4 0521000
6961000

TRAV
c̄ Robert

Nisling range Alaskite
- looking for veins.

Next target Min file - staked in 56
restaked '73
1?skarn

07V 0501150E
UTM 6956500N

⇒ next few days setting on Klondike Schist
try to figure out statrigraphy
+ looking for metamorphic
felsic volc & lmst pelite; felsic
marbles @ contact (skarn)

Bad bush; all 4 set camp
on Starvation Mountain

Robert & I flew east to our
target area & sampled qtz monzonite
o/c - mapped Alaskite but
none found. - Robert notes &
samples RS02S01

97662 assay #

JvR02004 Medium to coarse grained qtz monzonite, foliated, biotite hornblende; sheeted qtz stringers 3/m 8cm apart // veins, local rusty patches - no visible sx GPS 07v 052105 UTM 6961492

Klondike schist RS0253 station near camp

knob just east of camp has rusty qtz vein in schist (see Robert's notes) Minfile occurrence? ~

0500975
6956821

JvR02005 ↑ no sample as Robert sampled instead.

? old pit sample qtz vein 2m wide, 0.5m deep

June 12/2002

Each RS
Trav RH
Trav FA
alone JvR

South of camp, trav toward border crossing

△ JvR02006 station & soil sample break in slope @ 05 01169 6956195

JvR02007 05 01021 6955807 2x5 m outcrop of finly laminated dirty sandstone/siltstone up to 8 cm qtz sweats; locally rusty; ?bedding @ 052/41NW better reading on o/c 25m south of 038/01PNW

JvR02008 10x25 m o/c of dark f.g meta sandstone, finer laminated than JvR2007 sample; less qtz sweats but smaller qtz veinlets/laminae contain rusty blebs (05 01 049, 6955345 — rep sample)

JvR02009 0501347 6952821
silt sample south of tiny lake
water not moving much, rx
frags dark grey schist/sandstone

JvR02010 0501758 6952452
silt below east of small lake
silt sample, no distinguishable
rock frags, water is moving

JvR02011 0501589 6952645
silt on east arm draining starvation
Mountain lots of organics, dark
brown silt in 30cm wide creek.

JvR02012 rep sample
subcrop of green/dark grey
schist with fine(mm) layering,
bands have coarse lensoidal
qtz grains; ? boudinaged qtz
sweats? also X cutting
// qtz stringers 3mm wide
0501602 6953585

⊙ JvR02013 silt sample of NW draining small creek 0501597 6957421

⊙ JvR02014 silt @ 0501601 6955061 creek 40cm wide

⊙ JvR02015 silt @ 0501643 6955397

⊡ JvR02016 rock sample float on game trail 0501548 6956255; rusty Qtz with chloritic pods & vein lets, yellow/white sericite on fracture surface (assay tag 97660)

504650
6957500 5

June 13

helicopter couldn't pick us up today so did soil lines from camp.

Robert & I went to boarder 50m off on GPS but did find a monument (took some cool pictures)

* cut helicopter pad
* packed samples
* checked out Wellesley maps for Tomorrow.

SCOTTIE CREEK

10 of _

SOILS/SILTS

RS02507 8 9 12 13 14 25 27 28 29 30 31 32 33 36 38 39 40 41 42 RS025 43

21

JvR02006 9 10 11 13 14 JvR020 15

7

SCOTTIE CREEK

REP SAMPLES
RS025 01
RS025 03
RS025 04
RS025 12
16
19
20
RS025 37
JvR 02007
JvR 02008
JvR 02012
11

WO
RSOZ WO1
3
RSOZ WO5
4

ROCKS FOR ASSAY
97651
2
3
4
5
6
7
8
9
97660
97661
97662
12

WHOLE ROCKS
RSOZ 5002
RSOZ 5011
12
RSOZ 5016
RSOZ WO1
RSOZ WO3
6

plus Roger & Farrells samples
(~20 soil/silt & 6 rocks)

Robert & I
Roger Farrell

WELLESLEY LAKE

11 of —
JUNE 14/02

Robert & I to fly out to snag drop off gear then off to Wellesley
- if we can land, chopper will come back to p/u Roger & Farrell go to snag with their gear & come out to Wellesley
- two to fly to Haines Junction, two to drive out.

→ change GPS to NAD 83

Wellesley geology

from GSC paper 73-41

West side:

PMv massive greenstone: dark green, massive aphanitic epidotized basalt; includes gabbro PMb - dark weathering medium grained equigranular hornblende gabbros

East & south sides

TTvd Dorsey volcanics: grey weathering, resistant green & purple tuff breccia. Volcanic fragments characteristically contain feldspar phenocrysts.

TTvr (may contain white to buff recessive weathering felsic vole flow rocks and qtz feldspar porphyries; commonly pyritic)

Doug heli pilot says there is a B24 liberator in Wellesley Lake!

gold anomaly draining into Wellesley Lake @ 6911350 564900
"Au Well" in GPS

Wellesley Lake, Robert & I get dropped off & sample Carmacks Volcanics North of where we wanted to be.

split up & ran down two creeks

⊙ JvR02017 006 0566598 6924426
soil lots of organics, not much soil ? below ash?
50cm deep

⊙ JvR02018 007 0566692 6924081
soil overturned tree
light brown 40cm deep

⊙ JvR02019 008 0566666 6923794
~~dark grey brown stiff~~ soil
red brown overturned tree
60cm deep

· JvR 02020 | 009 0566602
6923741

dark grey brown silt, water barley moving

p/u @ 0566423 6923400
"Well PU" on GPS

RH JVR RSFA

Road Trip to Snafu

June 20/02

Cache Creek Terrane

> north 1/2 of SMA
- locally crinoidal Carboniferous to Jurassic grey limestone; roof pendants of strongly magnetic ultramafic
> southern portion
- well bedded, ribbon chert interbedded with shale, siltstone ± greywacke (middle Triassic to lower Jurassic
> SW corner
- Mid Jurassic Bryde Suite granitic body hornblende ± biotite monzo dioritic in composition

---

DEPOSIT MODELS
- qtz veins
- poly metallic veins
- copper gold quartz veins
- copper skarns
- porphyry moly
- High S Epithermal Au-Ag

MINFILE

1963 → 105C 007 TARFU Drilled geophysical anomaly
1980 → 039 LISA Trenched
→ 053 HANNA ?
1987, 97

target #7 As Sb Ba V U Mo
+ placer claims — did not find active workings.

⊙ 97701 SILT on creek
btwn o/c Roger + Roberts
sample numbers supposed
to be on Calahan
discovery Claim.
Good sample
OEV 0574166 6653967

Snafu samples

97701 silt J.R
97664
665 } rock RS
666
97667
97175
76 } rock RH
97177

7 rock
1 silt.

KUSAWA AREA

JUNE 24/2002

- Deb – Pb Zn Cu Skarn – contact Nisling phyllite, qtzite etc Qtz diorite
- Rose Gold Qtz vein . qtz diorite & andesite dykes
- Prim Zn Skarn

Devil holz - Roger & Robert

* if you see Mo take sample for age dating of mineralization (smaller) (tals are best)

* Mag Sus - set to SI units take readings of all intrusive units.

* GPS for magnetic declination

DIAND frequency. – 154.46 Ground to Ground

Capital Helicopters, Contract # ~~[illegible]~~ 28045

June 24/02

GPS

S1 = 1st stop @ VEIN Minfile (ROSE)

- vein in rock cliff, took pictures of Robert

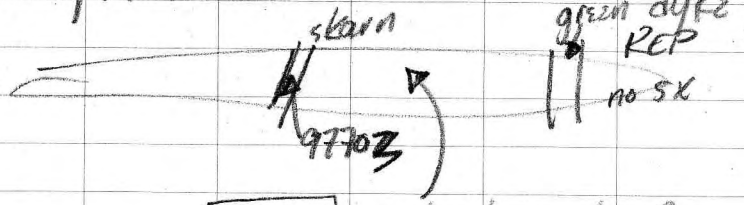
- Farrell & I fly to Deb Minfile skarn occurrence trenches with massive galena & sphalerite (SHOWING A trench 1.)

[97702] sample in trench @
08V 0450691 6684808
skarn with <1% Galena plus sphalerite, 5% open space rusty, 2nd ary qtz/calcite veinlets up to 3 mm wide lined with sx in vein selvages [0.20 mag sus reading]
sample is frothy

Showing A trench 2
[97703], skarn massive GN up to 8% in euhedral Xtals up to 3mm across throughout
450699 6684800
mineralized structure bears 318°
[MS reading on o/c 0.25]

△ JVR02021 DEB MINFILE? diorite

showing A trench #2



97704 intensely rusty fg intrusive with 2% f.g. diss py, light yellow matrix, deep weathering rind © 450702 6684808

showing A trench #3

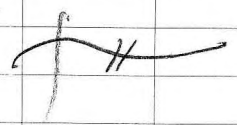
rep sample of large garnets up to 1.5 cm across & green layers skarn

97705 assay of grey & white qtz vein material, cryptocrystalline rusty fracture surfaces but no SX observed 450717 6684825

99706

SILT sample on 2m wide creek draining NW target @
97706 @ 429809 6669704
P/U 25m south

SILT - FA took sample @
97612 - 431406 6669787



SNOW! WINDY

June 25/02

KUSAWA – FARRELL + I dropped off @ head of Cirque with rusty stress slope @ headwaters of Bleed, W stream EGS anomalies.

Farrell's notes for sample descriptions; my GPS for some locations (Farrell assay tags 97600 series)

* stack of claim posts ready to go (wired together) but no tags & not standing grey but not that old.

* GPS 0456370 6715064

soil sample 97617 - orangy brown frost heaved on grass patch at base of rusty stress slope GPS 456659 6715026 within blocks of coarse grained grey weathering granodiorite talus blocks.

97618 SILT @ mouth of cirque @ 455656, 6714707 side of main channel, low velocity stream up to 5m wide; very little silt but pockets give good quality sample, orange/rust gathering granodiorite boulders and decomposed granite, + organic mat in sample

97707 Farrell: I each lake one creek valley to silt; this sample is on whale's back of large granite boulders, dark brown soil 40cm deep, good sample @ 455004 6714700

Creek I walked north to was dry so back in creek draining main cirque we sampled.

97708 silt in creek draining main Cirque, 2 m wide, flowing fast brown silt moderate quality sample
● 1=4661 6914366

walk down creek - not much to see but Granodiorite boulders, dyke material that we sampled in cirque

below 97708, round boulders of vesicular grey weathering basalt, ? glacial features?

continue to walk down main creek towards meeting place with Farrell

*awesome game trail for a while

97709 @ 454419 6713849
silt, poor quality, granule boulders

97710 @ 454193 6713453
fine sand; decomposed granite in southern creek that Farrell sampled; right at mouth with main creek.

SNAFU

(NAD 27 ZONE 8)

JUNE 26/2002

TARGET	N	E	REASON	AREA
MAP SHEET				
105 C4 — 1	6672450	567675	86 Au	East of Snafu Cr.
C5 — 2	6690300	568750	19 Au, Mag High ?ultramafic body?	East of White Mt.
C4 — 3	6678850	582350	1460 Au	N of Snafu Lake
C4 — 4	6657750	580800	761 Au	SE corner
C5/4 — 5	6679900	566350	Ni, Cu, Pb, Zn, Iron, ?Elevated As, Sb, F, V, Mo, Ag	S end of Imst
C3 — 6	6665800	584900	65 229 Cu, Hg + Au, Zn, Fe, V U Mo	S of Snafu Lk
C4 — 7	6653967	574166	Calahan placer claims	South end
C4 — 8	6659100	577750	105C009 Minfile + ↑ mag feature	SE corner
C4/5 ↗ 9	6679000	562000	Moderate Mag	W central side
low priority C4 ↗ 10	6663000	569000	weak Mag	SSW side
(# Gold RGS #'s)				
C3 — 11	6669775	583650	11 ppb Au	W side of Snafu Lk
C3 — 12	6673775	586550	12 ppb Au	NW of Snafu Lk

SNAFU

JUNE 26/2002

Roger & Farrell check out Target #2 Robert SE of their drop off.

I fly just North of Target 5 lmst o/c everywhere

JvR020022 rep sample of lmst o/c white grey weathering massive LST with red rusty patches on fracture surfaces.

97711 567304 6682359
soil in 10m wide gully on ridge line ? fault structure or recessive unit bearing ≈ 360° dark red & black soil; moderate quality

97712 567289 6682339
sub crop of brown weathering dark grey matrix (f.g) ? basalt dyke trending 350 40NE?
- 90% matrix with vesicles filled with olivine Xtals up to 2 mm wide

567173 6682537

97713 buff pink weathering dolomitized lst with calcite veinlets & fracture coating, sub crop grab sample

P/o @ 566903 6682209

RH/FA 3:6 to check out targets

RS/JVR to go to #8 & 4 plus fly by placer claims

@Target 8 chert dark grey weathering black massive cherty argillite with local rusty fractures; Rep sample of b/c above eskers, above Roberts sample - JVR02023
0.01 to -0.05 Mag Sus readings on 90/350/80E ? bedding but major joint set for sure

Drill Core

Tarfo Minfile (105C 007)

OLD Drill pad with last core box - three samples 97714 97715 97716 taken from box - not split; @ 057 8558 6659174

- 97714 - green serpentinized body whole pieces but ground.
- 97715 - further down hole, sheared, less serpentinized, graphitic chert → argillite; 1mm white calcite on frac surfaces
- 97716 - end of hole; badly ground core pieces; dark grey chert with <1% disseminated py, brassy blebs up to 6mm wide on frac surfaces; late calcite veining

Fly east of target 4 ± up creek on foot, creek dry, but found sample marker in tree @ 581063 6659257 that said T1297-3, saw flagging tape further down same dry creek

Kusawa KampOut

3 Jul	(2-2 person camps, setouts)	½ day 4hr	set at in afternoon, >1pm
5 Jul	(move, setouts)	½ day 3hrs	afternoon > 1 pm
7 Jul	(mov, SetOuts)	½ day 3hrs	11 - 5 pm
9 Jul	(demob)	½ day 4 hrs	1-5pm

Robert & Jo to targets

Roger & Farrell to targets

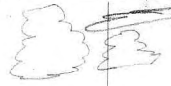
TO DOWNLOAD GPS on laptop

- plug in GPS cable & GPS to cable to laptop
- turn on GPS & navigate to "interface" (under system)
  - choose "Grmn / Grmn" option
- open GPS utility
  - download all
  - click only waypoints
- save file

Nav in Excel

open (make sure "all file types" available)

- delimited
- space
- do not import column "skip"



KUSAWA JULY 3/2002

Drive at Wheaton Valley with two camps + two drums heli fuel ⇒ Bracker Creek Bridge washed out as well as Upper Wheaton Bridge.

Met DIAND Mining Inspector up for a site visit to Tagish Gold Corp (opening decline @ 5km Past Producing mine site).

Had to ford Wheaton River + drive to good heli pad across from Ocean Vein drill sites @ 480894 6671623 (TRUCWR on GPS)

TARGET "C" on Tahini Lake

July 4th

JJ on say can view size...

Robert & I traverse up creek just north of camp with W anomaly

⊙ 97717 s.H in granitic boulder fast flowing creek, quality of sample mod to good @ 448029 6661165 Creek is 3 m wide [MS readings on boulders of granodiorite range btwn 5.1 to 6.2 SI]

97718 grab of pyritic fracture in large granodiorite boulder field, 1% set of rusty fractures with <1% f.g. Py giving an orange 1 cm weathering rind

JR02024 447378 6664347 geology station, high bluff of 70% granodiorite boulders 30/c with up to 1m xenoliths of more mafic intrusives + small amounts of pink granite

△ JR02025 447195 6663922 station geology; rep sample of FG felsic intrusive phase of granodiorite o/c @ 1140m elev buff brown weathering granular intrusive with 2mm muscovites, no sp

97719 talus fine of ground granodiorite at base of steep scree slope; particle size 1cm to 2mm 2% orange rusty frags. @ 447170 6663050 1172m elevation; Robert took silt <10m away in creek

97720 silt on creek south of camp @ 843 m elevation 447944 6662846 very high velocity stream 1.5m wide silt behind a large grdr boulder. O. of S. mod

97721 silt on same creek as 720 0.5 m wide slower, coarse silt O. of S. = good; 448290 6662930 759m elev; still in Granodiorite boulders

CAMP C TO CAMP F-1 MOVE JULY 5

sample creek we are camped beside
⊙ 97722 @ 448450 6663896 (752m elev)
good dark grey fine silt on active stream bar, creek is split 5 metres apart sample north branch; grdr boulders & decomposed fragments make up coarse fraction

⊙ 97723 1st major drainage north of camp @ 448256 6665819 (Elev 790m) small low velocity stream 0.30m wide, coarse grdr gravel Q. of S. = mod SIH on active stream bed; walked over lots of dry creek gullys not sure if this is the main one

★JUR02026 station on large boulder train where main creek is supposed to be (must be U/G) Rep sample of black lichen covered grey weathering coarse grained granodiorite, abundant black hornblende & feldspars average 4mm in diameter, grey qtz 2mm in size, fractures

97724 on second creek north of camp @ 835 m elevation 448038 6666437 moderate velocity creek of 2.5 m wide producing active sand bars & deposits of silt & granodiorite gravel behind large grdr boulders

* helicopter calls - he is early
oo Roger called him last night!
run down north side of 2nd creek

97725 Grdr float in large boulder train east of silt sample rusty fractures in 0.5 m boulder giving orange stain as envelope around 4-6 mm biotites & rare f.g. py blebs & specs, boulder is angular so not glacially deposited
@ 448621 6666683

move to target F, Minfile locale, drop camp then lift up to claim posts

97726 rock grab of rusty metaseds with crystalized granular texture, layered, orange dark maroon weathering skarn, <1% diss py + black specs non magnetic low loster 447506 6681312 1912 m elevation

also rep sample in a recessive 1m wide depression oriented 350° with 1mst o/c & subcrop on both sides — 125 station, also some crystalline marble (calcite bad) + not far away garnet skarn mineralogy.

97727 soil in frost boil on FW of 1mst in metaseds with garnets @ 447391 6681496 (1913m elev) good quality sample taken 4-10 cm deep, yellow brown lots of clay & fines.

97728 soil in lmst unit
frost heave again, rusty
brown fine soil 20 cm deep
447370 6681476 elev 1913 m elev

97729 soil in frost heave, good
soil development on top
of ridge, depression 1 m2
in lmst, but also mafaseds
from HW mixed in with lmst
447394 6681432 (1916m elev)

97730 soil on HW of limstone in
mafaseds 20cm deep, dark
brown/red, less clay @ 1955m elev
447390 6681367

97731 soil in frost heave, less well
developed, mix of sub crop?
float lmst, mafic altered rocks,
less clay in sample
447407 6681289 (1922m elev)

97732 soil in small poorly developed frost heave near contact with intrusive, fragments 95% mafic seds with increased qtz content (some rose qtz) 447371 6681158 (1892m elev); on south facing slope now

97733 soil south of 32 poorly developed frost heave rocks are less altered, more qtz rich, weak hornfels, distinct purple/green hue to matrix, locally, finer laminated, 20cm deep, talc 447321 6681042 1868m elev

97734 rock - grab angular 0.5 m^2 boulder in intrusive talus slope, rusty weathering rhyolite dyke with <1% silvery grey pyrite in blebs up to 5mm wide; 447208 6680711 1775m elevation

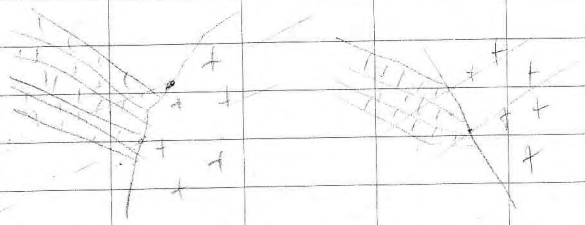
105 D/5

TARGET F-1 (PRIMROSE MINFILE) WOW

JULY 6

hike up behind camp over to intrusive / metased contact then make our way over towards the Dab!

97735 rock grab of o/c very near contact with intrusive 2% f.g. py in siliceous ? bld with diss biotite, limonite on fractures ? one spec cpy?
446121 6682157 1813m elev



97736 talus fines below meta sediment outcrop on south facing wall of steep cirque; rusty weathering biotite rich metaseds make up talus slope; fines are dark brown/red in color QofS. = fair
445763 6682619 (1855m elev)

97737 #36 talus fine west of sample closer to intrusive contact also near the buff weathering sill sampled earlier by RS.
445725 6682633 (1861m elev)

97738 - 97742 RS descriptions & way points of silts & skarn

97743 rock grab of skarn mineralization on HW of lmst
446529 6682250 (~750m s/sw)
40 cm thickness of skarn bed, massive sphalerite with green actinolite xtals & blebs
@ lmst contact (HW) with bedding of lmst 130/44S

97744 silt below skarn mineralizations & lmst crossing creeks

@ 446555 6682259 (1748 m s/sw)
good silt behind boulders, mostly 10% lmst cobbles in creek

△ JR02027 skarn in o/c @
446571 6682207 20cm
wide, with malachite blebs
less sphalerite than in creek

◎ 97745 RS notes on silt

△ JR02028 1mst above camp
@ 447211 6681559
elev 1872m, splits in
two (other section we
sampled yesterday
gray white weathering 1mst
subcrop, 3-5m wide
on west facing slope,
on HW side, 2mm - 4mm
pink garnets in thinly
laminated metased's

(sampled flouressent green zinc moss
near camp).

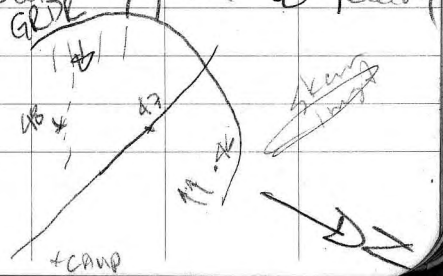
F-1 to next camp (Mag hi) Mar July 7

JvR Target 6686100, 439800

⊙ 97746 silt above camp F-1 on north side draing Contact but Grdr boulders Q of S. = poor, very low stream velocity, goes u/g 447121 6680498 (1716m elev) high organic content

⊙ 97747 silt in main creek above camp F1; major screek draining cirque, Quality of Sample = good, fast flowing 1m wide creek @ 446975 6680532 1726m elev; Grdr boulders 100%

⊙ 97748 silt mod quality, on NE facing slope, south of main creek, Grdr boulders 446920 6680439 (1725m elev)



A JiR02029 station on blocky Gdr subcrop southwest of camp, grey weathering megacrystic biotite rich granodiorite, rep sample (rusty fracture observed in talus pile; [Mag Sus readings: 0.74, 0.68, 10.6, 0.33]
446887 6680151 (1738m elev)

97749 silt poor quality, lots of moss mat but just downstream of zinc moss @ 447202 6680185

97750 silt good quality drains steep cirque south southwest of camp F-1, all granodiorite 447026 6679429

Heli Move @ 11 am to geology above anomalous Pb stream sediment sample (CBS check out U RGS geology above).

MS 0.2-0.4

MS 0.00-0.01

0.4-0.6

△ JuR02030 geology station at helicopter drop off location 439171 6686153 (1846m elev)
→ o/c of thinly bedded? steep dipping medium grey weathering gneissic unit (molasses) @ 159/70E, abundant biotite and elongated phenocrysts; unit X at by 40cm to 1m wide
→ white weathering, medium grained qtz/felspar dyke trending 065° (rep sample
Also some grey weathering dark green intrusive blocks just south of station (rep sample also.

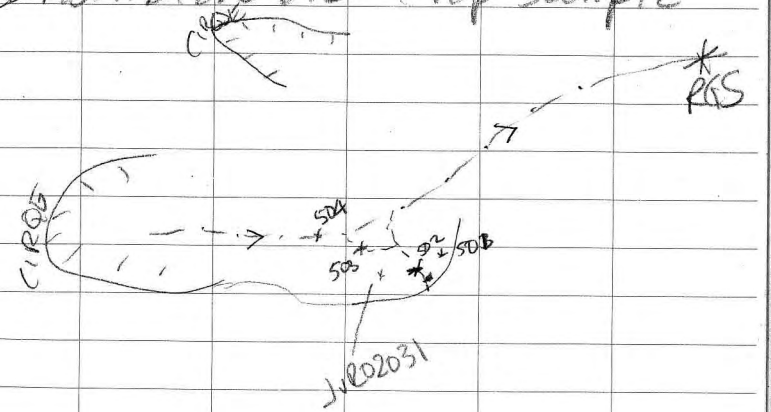
The sediments become less gneissic & more schistose as I walked towards sample
⊡ 56501 439404 6685863 (elev 1808m) intenssly rusty rock grab of subcrop on south facing slope, thinly laminated biotite rich, local but rare f.g. Py.

⊙ 56502 silt mod quality on SW facing slope @ 439503 6685645 elev 1755m just below some Zn moss? on low velocity 1m wide creek with schist boulders everywhere

△ JvR02031 @ 0439199 6685637 1667m elevation; just crossed contact into light grey weathering biotite/hornblende granodiorite (creek is contact down slope) also large 5m² angular boulders of dark green megacrystic amphibolite? or hornblendite (rep sample

MS 0.49
0.23

MS 0.99
1.69

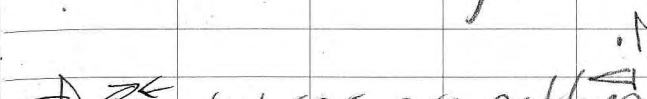


⊙ 56503 see map poor quality silt in left branch of creek traversed down goes u/g periodically, mixed boulders intrusive & metaseds very low velocity 40cm stream @ 439057 6685458 elev 1599 m

⊙ 56504 silt good quality far enough up stream so previous creek doesn't affect this sample @ 439125 6685169 1577m elev 2m wide mod flowing creek, mix of meta seds & 70% intrusive boulders

△ JvR02032 geology station & rep sample @ 438937 6685277 elev 1561m; Grdv o/c with jointing at 017/60E with prominent rusty weathering fractures, local slicks on same orientation

⊙ 56505 poor quality silt in dry creek bed at 437922 6685446 (1540m elev) draining southern cirque, walked over Cirdr 90% of boulders btwn samples 504 & 505, this light brown silt behind a huge boulder is sitting in Cirdr



⇒ my ears are getting burnt!

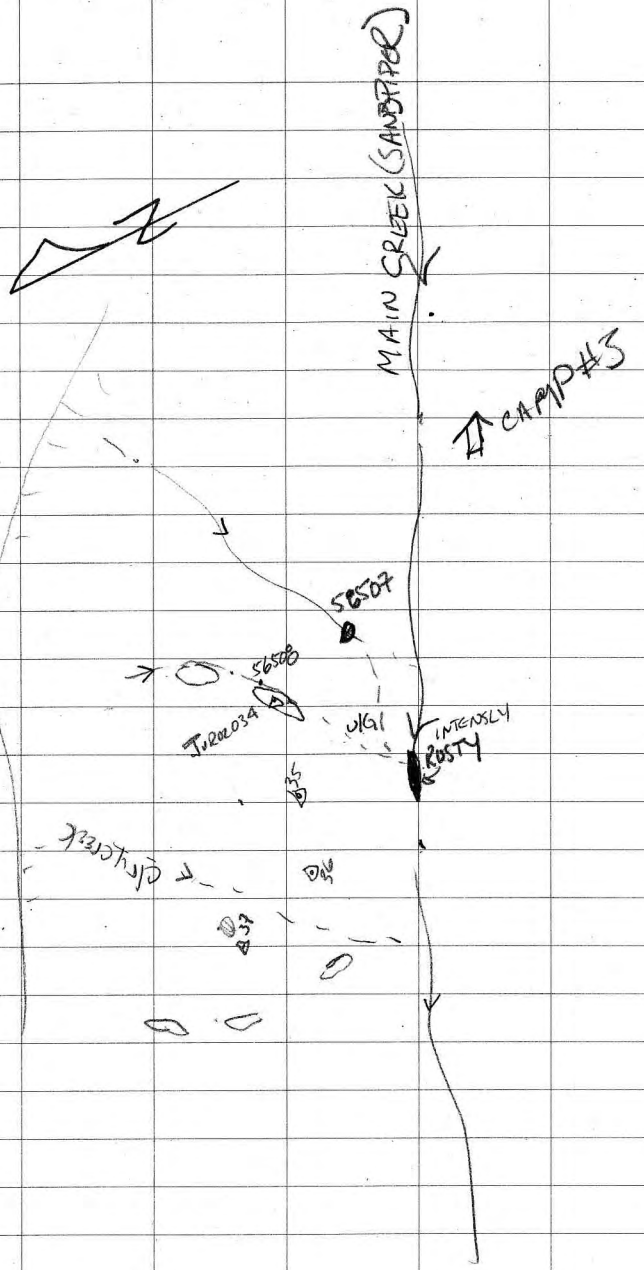
△ JuR02033 437990 6685653 (1534m elev) qzo station of schist? gneiss thinly laminated 1cm wide beds average with large up to 8cm orangy white qtz boudins & interbeds with intensely biotite rich layers ? bedding & layering ⊙ 337/68N 100m+ long ok in creek [MS readings 0.23, 0.29, 0.31] no limy beds observed

⊙ 56506 silt good quality on widening of slow rusty creek below o/c described on JVR02033 station; silt taken @ 437695 6686040

P/U & move back to camp.

//

- ship out rocks with Wayne's "P-Lot"
- 42.5 km to truck in Wheaton Valley from this camp
- ~~37.5~~ km to fuel dropped @ Kusawa River campground.



HOT

Camped on Mag high SW side Jul 18

JVR traverse to NW of camp along Mag high southern edge towards white weathering sediment o/c exposed on ridge.

RS travel opposite direction to intrusive / metased contact

⊙ 56507 silt mod quality on west draining creek not sampled during RGS survey, hornblende granodiorite boulders 5% metaseds in creek of moderate velocity (m wide @ 440922 6687562 (1485m elev)

△ JVR02034 geo station, silt + rock rep sample 440839 6687792 (1514 m elev) o/c of consistently jointed grey weathering green hornblende rich monzodiorite [MS reading 30.7, 29.6, 17.9, , 21.3, 26.7] jointing @ 049/90 every 15-25cm, same joint orientation commonly very rusty

⊙ 56508 silt poor quality in dry creek bed below o/c described in JvR02034 (1512 m elev) intrusive o/c & cobbles in creek bed 5% rusty metaseds 440836 6687803

△ JvR02035 o/c of intrusive dark grey weathering hornblende ?monzodiorite @ 440577 6687977 1565 m elev

△ JvR02036 contact? intrusive & rusty weathering qtz rich biotite metasediment. 440474 6688087 (1572 m elev) on steep side slope so not possible metased o/c (could be slumped). [MS readings on Metaseds 0.45, 1.69, 3.2, 0.07]

△ JvR02037 o/c 12 m exposed of. grey weathering blocky thinly laminated ?hornfels ?layered intrusive? prominent jointing 360/72E and

304/64 NE ; ? bedding but for sure orientation of layering is 289/29 SW
440396 6688250 (1582 m elev)
Contact is in creek gully which is dry but full of angular intrusive talus fragments 10 m south of o/c ; Rep Sample of metased?
[MS reading on o/c = 0.56, 0.57, 0.65, 1.04]

AJvR02038 coarse crystalline recrystalized limestone white weathering @ 440338 6688239 1586 M elev, recessive gully btwn last two station (no float) rep sample here

(1592 m elev)
AJvR02039 Inst o/c 440260 6688217 ? bedding 131/70 SE - orientation of thinly layered wafer like calcareous partings 1.7 m wide aslo similar cloudy calcite layers betwn beds that are 15 cm to 0.6 m apart
@ this location lime green & light pink weathering garnet skarn

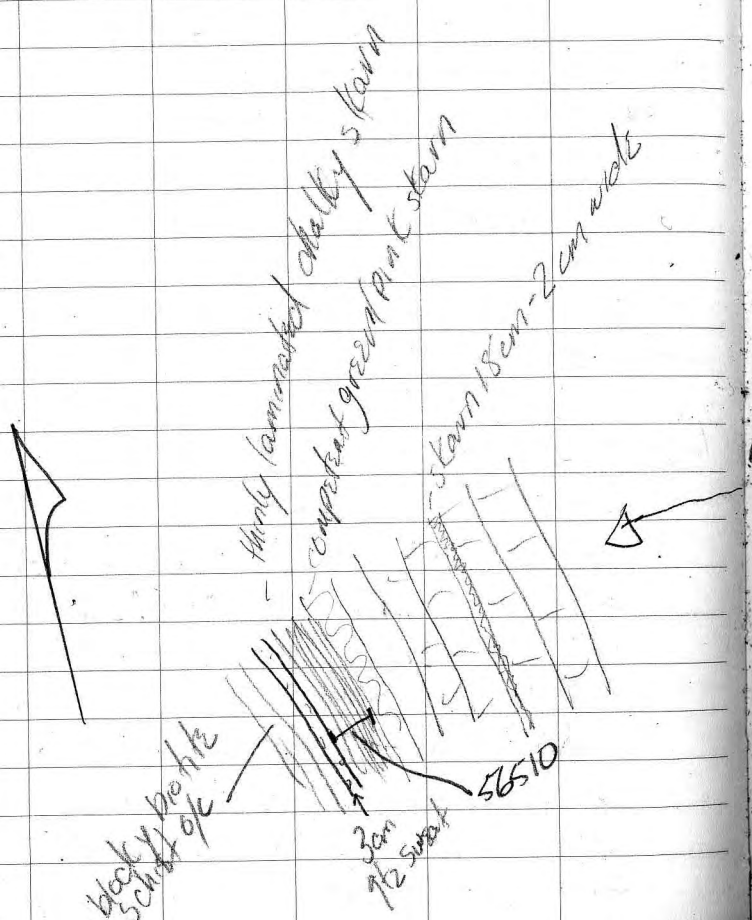
(JoR02039 con't)

with non magnetic red streak crystals ?sphalerite (see sample 56509)
[MS readings 0.0, 0.02, 0.03 on lmst]

56509 rock grab of garnet±skarn with drop side blebs of ?Sphalerite (non magnetic, red streak dull grey tabular crystals) - could be siderite? but does not fizz
440250 6688213 1595 m e/w
on FW of lmst unit; within up to 15cm wide, garnets best developed @ contact with lmst up to 4mm across
[MS readings on metased 30.9, 27.6, 40.2]

"OK Robert, where are the massive sulphides?"

56510 440214 6688275 1623 m e/w
@ FW contact of limestone & skarn with biotite rich blocky schist oriented 139/72 E [MS readings of 14.1, 21.6, 12.9 on schist]; grab sample across thinly laminated skarn that is 1.7 thick with more competent green/pink skarn (garnet) on HW side, no Sx seen
[MagSus on skarn 0.16, 0.21, 0.16]

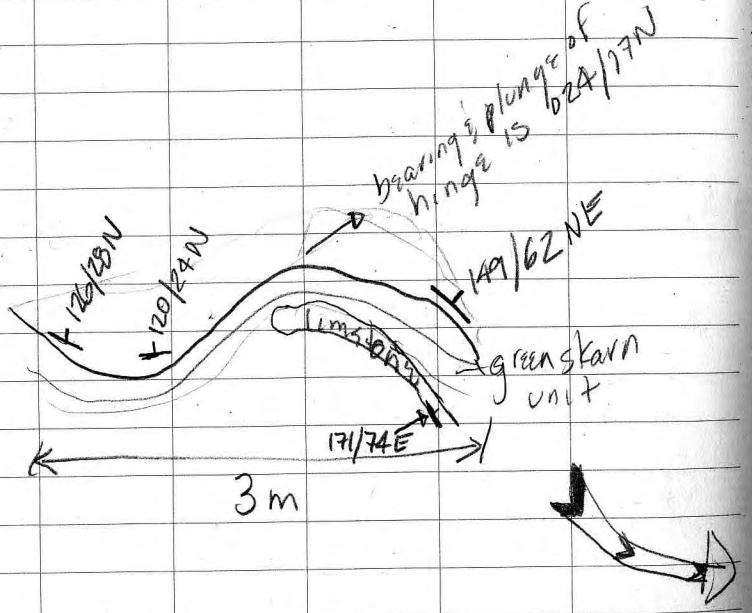


△ JR02040 lmst knob, white weathering coarse xtalline weathering surface gently warped with xcutting 5 cm wide skarn ± garnet/diopside

440213 6688334 1647m elev

△ JR02041 garnet/diopside skarn green/grey weathering 2m wide o/c above lmst knob in HW; competent blocky but thinly laminated green & pink striped skarn; rep sample @ 440219 6688385 (1671m elev) ? bedding 154/68SE [MS readings 0.24, 0.22, 0.28]

△ JR02042 skarn/lmst fold at highest o/c of lmst 440202 6688473 (1696m elevation)



⊙ 56511 dark brown soil sample @ 45 cm depth below limestone & skarn (laminated garnet diopside Fig.) o/c but in boulder train, frost heaving & solofluction evident. <10% clay Q of S. good
440373 6688514 (1721 m elev)
south facing slope.

△ JUR02043 small o/c of biotite (& hornblende) rich monzodiorite?, brown matrix with olive green fringe @ 440512 6688516
REP sample [MS readings: 24.2, 22.6, 18.9, 27.0]

△ JUR02044 rock tor o/c on edge of ridge @ 440769 6688219
grey weathering blocky intrusive
[MS readings: 26.5, 35.7, 57.9, 32.2, 33.3] rep sample
jointing 110/85 NE

50 m NE of station 44, large angular boulders of white weathering qtz monzonite? alaskite?. with platey biotite Xtals up to 5mm across

@ 56512 silt in dry creek bed @ 441059 6688423, poor quality but entire creek is dry: intrusive boulders in creek & trains leading into gully. [MS on boulders 34.6, 29.5, 427, 33.6]

△ JvR02045 MS readings on intrusive talus @ 441302 6688188 [31.7, 46.9, 21.3, 428]

△ JvR02046 more mag sus readings again in large blocks of monzodiorite boulders on scree slope @ 441433 6688100 on route to collect silts; [29.8, 36.1, 30.7, 51.2]

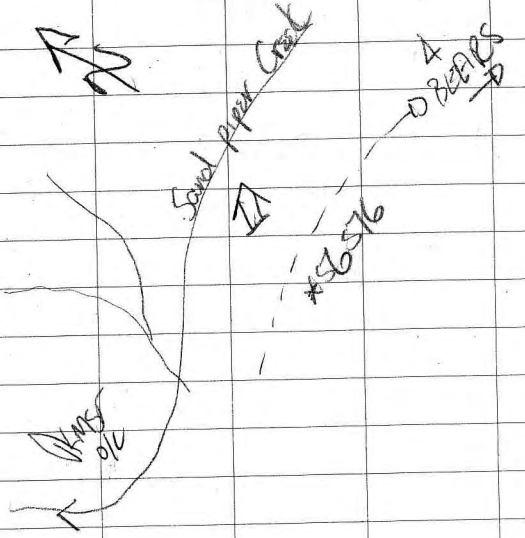
△ JvR02047 as above only @ 441528 6688627 with [MS readings of 26.1, 46.3, 30.2, 27.5]

silt
56513 NW fork of creek above glacier intrusive float in 40 cm mod velocity stream, quality of sample - good
441697 6688201

silt
56514 Eastern fork above glacier, 1m wide stream low velocity quality of sample = mod; intrusive boulders & talus on both sides, still has glacier sitting in creek. 441756 6688147

56515 silt on same creek below intrusive o/c on eastern side of creek (below glacier)
441459 6687824, good quality

Significant Mag suc readings on Target E - Mag High



WINDY

July 9

WAKE UP TO FOUR GRIZZLYS MOVING PAST OUR CAMP! AWESOME (200 m away)

Robert & I trav together (with the shotgun) south of camp to o/c on side of hill

◊ 56516 rock grab of intensly rusty float with heavy iron oxide throughout, visible pyrite clots & disseminated throughout plus dusting of malachite on fracture surfaces, lots of open space hematite limonite/gothite and manganese coatings, Cpy grains as well; ~20 m NW of Roberts sample of pyritic limestone in o/c (# 56417) @ 440613 6686567

⊙ 56517 silt on steep sidehill draing o/c Robert is taking measurements on; @440579 6686514, seep is 20 cm wide with active stream silt buildups, quality of sample=good

JR02048 rep sample of abundant blocky garnet diopside skarn talus @ GPS 013 en route to silt sample on creek; 440337 6686492

56518 silt 440151 6686241 1.5 m wide creek drains to north in argillaceous ± pyrite scree slope. quality of sample is good, mod blocky slope with glaciers still on half the creek

56519 silt on same creek as 56518 only lower (not sampled by RGS survey), meta sediment boulders, quality of sample is good.

walk back to camp for p/u don't see sign of bears.

RADIO CALL SIGNS

ZM0523	6023
ZM0583	6023
ZM0526	6023

TNTA	HAINS JNC	634	2242
✓	WHSE	668	2177
RADIO 165.SA	DAWSON	993	5494

CAPITAL HELICOPTERS ("Jennifer")

ROGER
393-7189 (office)
667-3340 (nicole)

Robert
668 3297
393 7187 (office)

FARRELL
668-4773 (home)

YGP OFFICE
667-8508

⟨DIAND RADIO FREQUENCY 154.46⟩

SAT PHONE
(PIN CODE 1111)

DIAL
001 (area code) (phone #)

[& YGP OFFICE 001 867 667 8508]

KUSAWA JVR
ASSAY REPS

Oct 3/2002

176409
176441
176444
176447

97726
97734
97742

JVR KUSAWA
REP SAMPLES

Sept 20/2002

JVR 02 002 > pickhandle
002

JVR 02 023
025
026
030
BAG #1 031 (3 samples)
* 032
033
034
037
038
BAG #2 041
041
044 (3 samples)
046 (2 samples)
047 (2 samples)
048 (Bag)
* 071
077
079
BAG #3 080
082
JVR 02 083

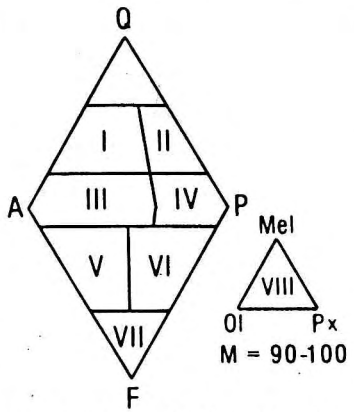
Sample reps
- bag of Ponoas

ALL REPS IN ONE BUCKET

CAMP 1 7174400
597500

IUGS Group name classification for volcanic rocks

THE APHANITES[1]



I rhyolitoids
II dacitoids
III trachytoids
IV andesitoids, basaltoids
V phonolitoids
VI tephritoids
VII foiditoids
VIII ultramafitites

Q—quartz; A—alkali feldspar (including orthoclase, sanidine, perthite, and anorthoclase); P—plagioclase; F—feldspathoids; Mel—melilite; Ol—olivine; Px—pyroxene; M—mafic minerals.

Most true aphanites cannot be named without knowledge of their mineral components, which requires employment of non-megascopic procedures. Many aphanitic rocks, however, are porphyritic and for those, the group names may be applied tentatively by estimating the overall percentages of the component minerals on the basis of the assumption that the compositions of the phenocrysts reflect the bulk mineral composition of the rocks.

A diagram for the IUGS general nomenclature scheme for volcanic rocks is given on Data Sheet 48. Additional information and suggestions for naming aphanites and porphyries may be found in the following references:

Dietrich, R.V. and Skinner, B.J., 1979, Rocks and Rock Minerals: Wiley, N.Y., 369p.

Streckeisen, A., 1978, Classification and nomenclature of volcanic rocks. . .:N. Jb. Min. Abh., v. 134, p. 1-14.

Streckeisen, A., 1979, Classification and nomenclature of volcanic rocks. . .of the IUGS Subcommission. . .:Geology, v. 7, p. 331-335.

1. Under the IUGS scheme, these rocks are termed volcanic rocks.

eral	Composition	S&H	S.G.	Distinguishing Features
RATES AND BORATES				
atite	$NaNO_3$	R 2	2.27	10$\bar{1}$1,cool taste,deliq
ɛr	KNO_3	O 2	2.11	011,cool taste,non-deliq
ıite	$Na_2B_4O_7 \cdot 4H_2O$	M 2½	1.91	001,100,splintery cl,sg
ax	$Na_2B_4O_7 \cdot 10H_2O$	M 2½	1.72	100,sweet alk taste,xls
ɨite	$NaCaB_5O_9 \cdot 8H_2O$	Tr 2½	1.96	"cottonballs",h,tasteless
ɛmanite	$Ca_2B_6O_{11} \cdot 5H_2O$	M 4½	2.43	010,exfoliates if heated
ıcite	$Mg_3B_7O_{13}Cl$	O 7½	3.1	h,isometric xls
FATES				
te	$BaSO_4$	O 3½	4.50	sg,001,110,tab xls
ɔstite	$SrSO_4$	O 3½	3.98	sg,001,110,tab xls
lesite	$PbSO_4$	O 3	6.39	sg,ad,conch
ydrite	$CaSO_4$	O 3½	2.98	100,010,001
sum	$CaSO_4 \cdot 2H_2O$	M 2	2.32	h,010,100,$\bar{1}$11
lcanthite	$CuSO_4 \cdot 4H_2O$	Tr 2½	2.29	azure-bl,met taste
ınterite	$FeSO_4 \cdot 7H_2O$	M 2	1.90	cap agg,met taste
ɔmite	$MgSO_4 \cdot 7H_2O$	O 2½	1.68	cap agg,bitter taste
ɛrite	$Cu_3(SO_4)(OH)_4$	O 3½	3.88	grn,010,non-eff in cld HCl
ite	$KAl_3(SO_4)_2(OH)_6$	R 4	2.9	massive,w,gy or reddish
site	$KFe_3(SO_4)_2(OH)_6$	R 3½	3.26	y to br,strk pale-y
SPHATES, ARSENATES, AND VANADATES				
azite	$(Ce,La,Y,Th)PO_4$	M 5½	5.4	res,y to r-br,001 prtg
ite	$Ca_5(PO_4)_3(F,Cl,OH)$	H 5	3.20	prisms,h,grn,br,bl,purp,c
morphite	$Pb_5(PO_4,AsO_4)_3Cl$	H 4	7.08	res to ad,sg,grn,br,y,gy,w
uoise	$CuAl_6(PO_4)_4(OH)_8 \cdot 4H_2O$	T 6	2.8	bl,bl-grn,grn,h
ɛllite	$Al_3(PO_4)_2(OH)_2 \cdot 5H_2O$	O 4	2.33	radiating globular agg
ernite	$Cu(UO_2)_2(PO_4)_2 \cdot nH_2O$	T 2½	3.2	pale to dk-grn,rad,001
nite	$Ca(UO_2)_2(PO_4)_2 \cdot nH_2O$	T 2½	3.2	y to grn,rad,fl y-gr,001
ADIUM OXYSALTS				
otite	$K_2(UO_2)_2(VO_4)_2 \cdot nH_2O$	M 2	5	y to grn-y,rad,001
amunite	$Ca(UO_2)_2(VO_4)_2 \cdot nH_2O$	O 2	3.62	y,rad,turns grn in sun,001
YBDATES AND TUNGSTATES				
ɔnerite	$MnWO_4$	M 4	7.2	res,sg,010,transp
ɾamite	$(Fe,Mn)WO_4$	M 4½	7.4	brn-blk to Fe-blk,met-ad, sg,010
ɛrite	$FeWO_4$	M 4½	7.51	blk,met-ad,sg,010
elite	$CaWO_4$	T 5	6.12	vit,sg,fl bl-w,101
ɛnite	$PbMoO_4$	T 3	7.0	tab xls,vit,y,or,r,gy,w,h

TRANSPORTATION

Helicoptors	**Fireweed Helicoptors** – out of Dawson City ★ $935.00/hour (wet)	**PH (867)393-5700** Fax (867)993-6839
	Trans North. – rest of Yukon ★ $935.00/hour (wet) except Eagle Plains - $985.00/hour fob Inuvik until July 31; then $935.00/hour fob Dawson ★ Trans North requires 24-hour notice (give as much notice as possible) ★ Base camp available at all communities (except Eagle Plains – parking available at hotel) ★ In the event of forest fires, Trans North has no choice if helicopters are appropriated by Forestry but will honour prebooked flights (may have to reschedule camp moves to evening)	**PH (867) 668-2177** Fax (867) 668-3420 www.tntaheli.com
Truck	Report mileage every month. We'll put a reminder on voice mail.	

FIELD SEASON 2001
Information Sheet

VOICE MAIL / LOCATION		
Monique or Rod	***Call in every day*** – we'll send a helicopter out if you miss two phone calls.	**(867) 667-8508**
Magnetic Declination Calculation: **www.geolab.emr.ca/geomag/e_cgrf.htm** (you will need latitude and longitude)		
EMERGENCY PROCEDURES		
1. Take care of and/or medivac injured person(s).		
2. Call/inform Rod.		Work (867) 667-5384 Home (867) 633-3755
MEDIVAC: Dispatch operates out of Whitehorse – provide details/nature of injury/illness and location (latitude & longitude).		**(867) 667-3333**
Community	Beaver Creek	(867) 862-3333
Ambulance	Burwash Landing	(867) 841-3333
&/or	Carcross	(867) 821-3333
Nursing Station #'s	Carmacks	(867) 863-4444
	Dawson	(867) 993-4444
	Destruction Bay	(867) 841-3333
	Faro	(867) 994-4444
	Fort Liard, NWT	(867) 770-4301
	Haines Junction	(867) 634-4444
	Mayo / Elsa	(867) 996-4444
	Old Crow	(867) 966-4444
	Pelly Crossing	(867) 537-4444
	Ross River	(867) 969-4444
	Tagish	(867) 821-3333
	Teslin / Swift River	(867) 390-4444
	Watson Lake	(867) 536-4444
	Whitehorse General Hospital – Nursing Station	(867) 393-8700
Northern B.C. Fire / Medical Emergency		(800) 461-9911
Marine & Air Search & Rescue: Rescue Coordination Centre		(800) 567-5111
Forest Fire – Yukon (888) 798-FIRE		(888) 798-3473
Forest Fire – Northern B.C.		(800) 663-5555

RADIO & SATELLITE PHONE NUMBERS
2001 Field Season

User	*Satellite #*	*Radio #*	*Radio Pin #*
Rod Hill	Work 867-667-5384 Home 867-633-3755		
Tammy Allen	(403) 997-1307 (Dilman)	2M-5119	2121
Jeff Bond	---	2M-0947	2020
Maurice Colpron	(403) 997-1150 (Dilman)	2M-5173	3825
Anna Fonseca Mineral Assessments	(403) 997-1141 (Dilman)	2M-0523	6023
Ken Galambos	---	2M-0845	6729
Craig Hart	available July 3 (Total North)	2M-5072	3421
Julie Hunt	(403) 997-4061 (Total North)		
Grant Lowey	(403) 997-0725 (Dilman)	2M-3253	4444
Don Murphy	(403) 997-1110 (Dilman)	2M-8223	6115
Lee Pigage	(403) 997-2236 (Total North)	2M-8360 2M-0524	6594 6023
Charlie Roots	(403) 997-1101 (Dilman) 2nd available July 27 (Total North)	2M-5141	3808
Mineral Assessments Daniele Heon/Kel Sax	(403) 997-0771 (Dilman)		

Unassigned radio #'s:
2M-0526 pin #6023
2M-0527 pin #6023
2M-0528 pin #6023
(password = geology)