REPORT OF ACTIVITIES
YMIP 96-014
JAMES S. DODGE

YMIP 96-014
GRASSROOTS PROSPECTING

SUMMARY REPORT

105 F/10 PORCUPINE CREEK
105 G/12 HOOLE RIVER
105 G/11 MINK CREEK

WATSON LAKE MINING DISTRICT

Prepared by:

James S. Dodge, P.Eng.

June-October, 1996

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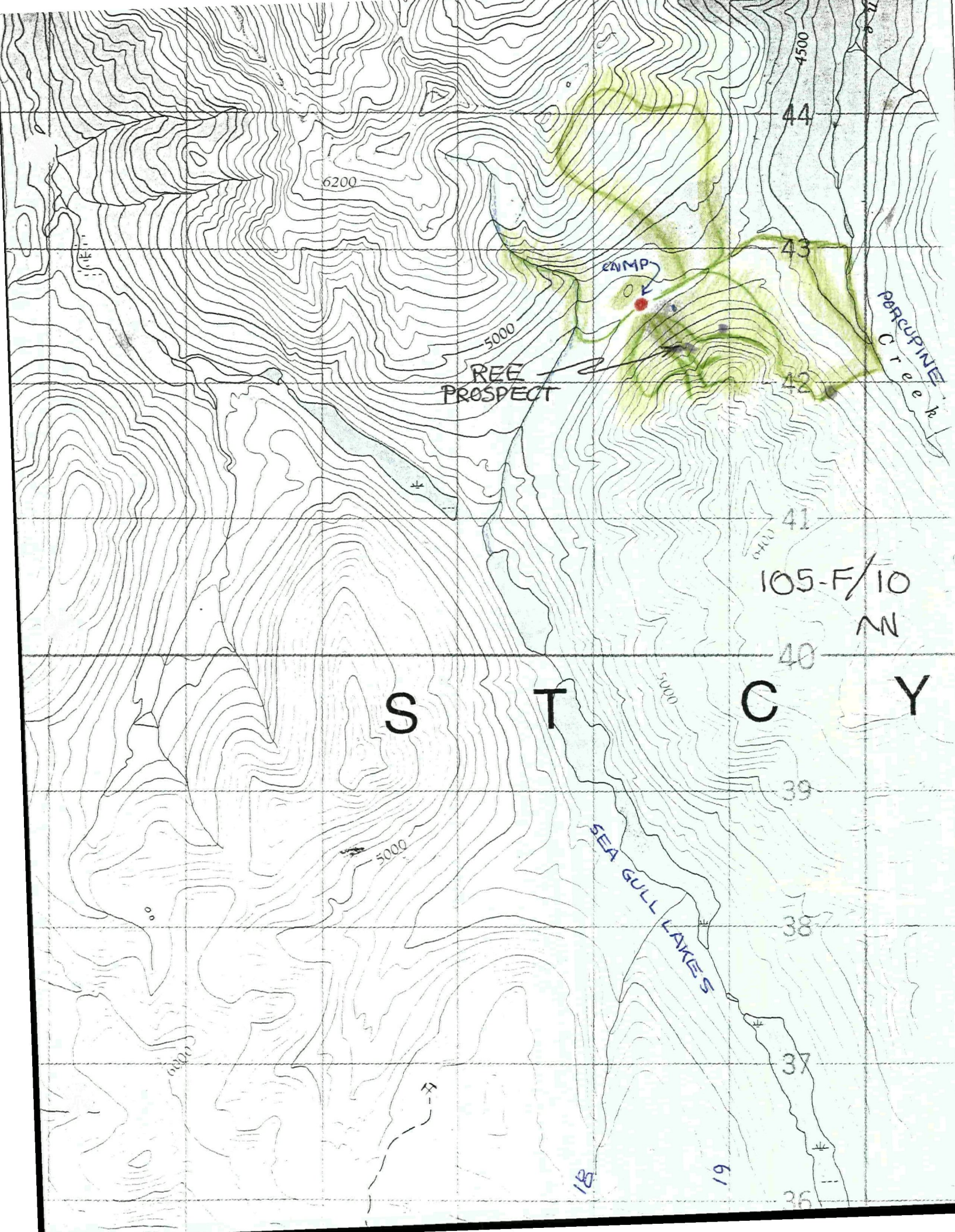
4500
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ILLUSTRATIONS

SUMMARY

Prospecting activities under the YMIP 96-014 targeted three distinct geological settings, namely (a) rare-earth elements in the syenite terrane of Porcupine Creek NTS 105 F/10; (b) gold and copper in epithermal quartz veins along the Hoole River NTS 105 G/12; and (c) stratiform zinc in metaquartzite in the Hoole River and Mink Creek drainages NTS 105 G/11 and G/12.

(a) Prospecting was successful in tracing talus/scree float to bedrock outcrops where anomalously high radioactivity (from thorium) was revealed by hand-held spectrometer traverses. As elsewhere in the Mississippian syenitic volcanics and intrusives of south-central Yukon, thorium was shown to be a reliable pathfinder element in prospecting for co-rare-earth element deposits (e.g. Lancer and Gamma claims).

Assays of five rock samples revealed highly anomalous, but still sub-economic values in cerium, yttrium, and niobium from a steeply inclined 10 meter wide panel within the melasyenite intrusive outcropping over a 500 square-meter area. Further prospecting for rare-earths in this area is not proposed until development of the Lancer deposit is underway.

(b) Detailed prospecting for auriferous epithermal quartz+sulfides was carried out near and along the right bank of the Hoole River south of the sites where in 1995 many pieces of vuggy quartz with sulfides were found (south of MAX claims that Dodge staked in 1995). Once again, many cobbles and small boulders were found which further confirmed the presence of a prominent mineralized fault zone paralleling the NNW trend of the Hoole River south of the MAX claims.

Twenty samples of float were assayed for gold+ICP. Two were anomalous in gold and arsenic; two were anomalous in copper, zinc, molybdenum, and bismuth. However, the epithermal setting and overall relatively low grade of the samples lessens the opportunities for the discovery of an economic ore shoot. Therefore, further ground prospecting of this prominet mineralized fault zone can not be recommended.

(more)

SUMMARY (cont'd)

(c) The enigma of the location of a bedrock source for the boulder of stratiform syngenetic sphalerite in metaquartzite (MIDAS Claim # 1) was the focus of over half of the 1996 prospecting program concentrated along the and west of the left bank of the Hoole River.

Again, although a score of cobbles and boulders of thin- to medium-bedded metaquartzite (weakly calcareous and with sericite on the bedding planes) were found, no sulfide mineralization was seen. No metaquartzite bedrock was encountered within the sparse outcrops of chlorite schist and interbedded limestone (Pn) formation.

Thus, the nearest up-ice area where metaquartzite (within the so-called Klondyke schist) has been mapped is the headwaters of the west branch of Mink Creek at the eastern border of 105 G/12 and the western border of 105 G/11. Whether it is within the lower member of biotite garnet muscovit schist is unknown. A prominent garnet schist float train was noted in YMIP 1995 up the "cabin" creek tributary of the Hoole River; yet, there was no corresponding concentration of metaquartzite float.

Recommendations are made for 1997 to prospect the Mink Creek drainage in "open" ground, i.e. the general vicinity of the Ling and Argus claim blocks.

1.0 Introduction

1.1 Location and Access

Prospecting was conducted during June-October 1996 in three principal areas and a fourth area only briefly in mid-October, namely, (a) Porcupine Creek 105 F/10 UMT 184426; (b) Right Bank Hoole River 105 G/12 UMT 578369; (c) Left Bank Hoole River 105 G/12 UMT 569490; (d) Mink Creek 105 G/11 UMT . Maps are enclosed which indicate these sites and the prospecting areas covered from them.

Access to Areas (a) and (b) was by helicopter set-in from Ross River by Trans North Air. Access to Area (c) was on foot either from the Hoole River bridge 14 miles return on the Campbell Highway, or 8 miles return from the end of a 4x4 trail on the Eldorado claims, and (d) was on foot from the Campbell Highway to the trail crossing of the Mink Creek 8 miles return.

1.2 Terrain

Area (a) prospecting extended from base camp altitude of 4650 feet (sub-treeline) to altitudes of 6000 feet on both the South and North mountains. Bedrock exposures were common above 4800 feet throughout the area.

Areas (b) and (c) comprised glaciofluvially derived flights of terraces bordering the Hoole River, and increasingly steeper bouldery banks of the Hoole River and its moraine till-covered slopes above the terraces. The area is covered by mature stands of mixed black spruce and aspen.

Area (d) was covered largely by glacial moraine till deposits and, at the higher altitudes of the Mink Creek trail by 5-8 cm of new snow. Steep banks of Minek Creek 2 km from the Campbell Highway exposed for a true thickness 20 meters of phyllite and chlorite quartz schist with sulfate florescense.

1.3 Claim Holdings

In Area (a) no claims are known to be in good standing. In Area (b) Dodge's 1995 MAX 1-10 claims lay immediately north of the 1996 prospecting area along the right bank of the Hoole River. In Area (c) COMINCO's BOD claims and Carlos's Eldorado claims are in contact with the 1996 prospecting area. No claims are staked along the 7 km of trail followed during foot prospecting of Area (d) up Mink Creek in October.

1.4 Personnel

Prospecting was carried out solo by James S.Dodge in all areas usually in 10-17 day stints before returning with samples for analysis. The 3- to 7-week wait for laboratory returns made significant delays in decisions to re-enter areas of earlier sampling. The analyses for rare-earth elements had to be forwarded to CHEMEX Toronto lab thus requiring a 6½-weeks turnaround and one week delivery time.

1.5 Previous Relevant Investigations

1.5.1 REE The GAMMA 1-2 claims were staked during the 1993 YMIP by Dodge in the Porcupine Creek area on a low grade rare-earth element outcrop which was located by using a hand-held spectrometer in detecting the accompanying concentration of radioactive thorium - as a pathfinder to REE-bearing minerals. The Mississippian syenitic rocks extending over 10km north-northwest of the GAMMA claims (now cancelled) had not been prospected, but remained having a good geologic potential for the discovery of additional REE occurrences.

1.5.2 MAX 1-10 claims were staked by Dodge in 1995 under YMIP to cover a largely concealed mineralized fault zone from which large volumes of limonitic spring water emerged, and along which many cobble-sized epithermal quartz (drusy open spaces) plus pyrite, plus low grade Cu/As were collected and assayed geochem for gold and 30-element ICP. The presence of Bi and Mo in the higher grade assays suggested a high-sulfidation style of epithermal mineralization. No commercial grade values were reported cut, however further detailed prospecting for float appeared called for especially SSE toward the quartz-eye feldspar porphyry outcrop on the fault zone.

1.5.3 The bedrock source of the high grade (13%-15% Zn) boulder found under the YMIP in 1995 along the banks of the Hoole River remained undetermined by the end of the field season. Interest in this boulder was fueled by the petrographic description provided by Vancouver Petrographics which reported the clean sphalerite (28% by volume) to be genetically contemporaneous with the weakly calcareous metaquartzite host. Thus, there was indicated the potential for a stratiform deposit.

2.0 Details of 1996 Surface Evaluation

2.1 Rare-earth Elements in Syenite Terrane

Based on the My designation for syenite intrusive (Quiet Lake map sheet) north of the REE outcrops formerly discovered by Dodge and staked as the GAMMA claims, a base camp was set in by helicopter from Ross River to a site on the divide between Porcupine Creek and Seagull Creek (UTM 184426).

Within the first day of prospecting, six boulders of anomalously radioactive intrusive syenite were found at the base of the mountain south of camp. The radioactivity was detected by the hand-held Scintrex GS-4 spectrometer rented from T.Hasek Assoc. in Vancouver.

A series of ascents of the mountain (over 500m topographic relief) conducted over the following 10 days encountered numerous other boulders which eventually led to pinpointing the bedrock sources. One bedrock area was unusually radioactive, i.e. 5500 counts per second compared to a 100 cps background.

Five rock samples were chosen on the basis of their relatively high radiometrics and areal diversity. These were submitted to CHEMEX Ltd. laboratory in North Vancouver for determinations of cerium, yttrium, and niobium - these, on the basis of the principal diagnostic elements found in the large REE deposit on the LANCER 1-8 claims. Cerium usually is the most prevalent among the suite of light rare-earths.

Attached is CHEMEX Certificate of Analysis #A9630536 displaying results of geochem analysis of the five samples on which are indicated the collection sites.

Although all values for each element are clearly anomalously high, none appear to be in the range of economic grade. The Sample No. 002693 was from the bedrock site where 5500 cps was detected comes closest; at least in combined credits in cerium and niobium content - but still much lower than the LANCER average values with its 2.5M-3.0M tonnes resource of 3000 ppm Ce and 5000 ppm niobium.

2.2 Hoole River Right Bank Epithermal Vein

In 1996 Dodge carried out detailed prospecting for mineralized float along the trend of this prominent fault zone along the Hoole River south from the southern boundary of the 1995 staked MAX 1-10 claims. All 20 of the samples of float - selected by their dominantly epithermal quartz plus sulfides - were assayed for geochem gold and 30-element ICP by Northern Analytical Lab in Whitehorse and by International Plasma Lab of Vancouver, respectively.

2.3 Boulder of Stratiform Sphalerite

Continued detailed examination (boulder-by-boulder) up-stream along the left bank of the Hoole River from the site of the sphalerite-rich boulder -as far as the abrupt change of direction of the river at UTM 597398 - no other Zn-rich boulder was found.

However, a score or more of large cobbles to small boulders of layered metaquartzite were found, but none carried Cu/Zn sulfides. Two cobbles had up to 0.5% pyrite train along one bedding plane.

Subsequently, prospecting was carried out along the base of the second bench of glacial till looking for evidence that the old channel of the river scouring of bedrock might have deposited Zn-rich cobbles from a now-concealed metaquartzite member (albeit unusual) of the Pn formation mapped by Templeman-Kluit. Nine samples with pyrite (and sphalerite ?) were assayed by Northern Analytical Lab for gold and for ICP by International Plasma Lbs for 30-ICP. Results are shown on NAL WO#07071 and IPL 9610956. Only the massive sulfides sample #14572 gave important returns - 1.13% Zn; high As of 347, but no significant Au to go with it.

The conclusion is that the metaquartzite host bedrock is most likely in the headwaters of Mink Creek up-ice to the ESE - possibly in the direction of the Ling and Argus claim blocks. It is recommended, at the earliest opportunity in 1997 that the metaquartzite potential of the "open" ground be carefully prospected.

2.4 Eclogite Cobbles Left Bank Hoole River

At the mouth of the Hoole River and along the left bank of the river on MIDAS #3, 5 cobbles of eclogite and several pieces of biotite garnet muscovite schist were found. The field distinction between the two garnet-bearing rocks is readily made on the basis of schistosity in the latter and by the unique spacial distribution of equidimensionally sized garnets as well as absence of micaceous minerals in the former.

Eclogite (as pointed out by P. Erdmer of U. of Alberta) in a number of Yukon occurrences comprises a retrograded hornblendite after the original omphacite (augite) host. The presence of eclogite - a very high pressure/temperature product - is common among the kimberlitic terranes. However, eclogite does not a diamond guarantee.

No recommendations are made for locating the bedrock source of the eclogite which most likely lies within or adjacent to the shear zones of the Tintina fault (as at Faro, Stewart Lake, etc.), inasmuch as the presence of other kimberlite pathfinder minerals (ilmenite, diopside) have not been reported. Eclogites in this area may be distantly related to the minette pipes near Dawson City (which Dodge has examined) that may be lamproite derived but doubtfully diamondiferous.

3.0 Areal Geology

3.1 Paucity of outcrops lessens the accuracy of geological mapping in the Hoole River areas (b) and (c). Nevertheless, several broad geologic features are evident.

(a) A well-defined north-northeast trending fault zone divides the prospecting area into two distinct geologic terranes. A host of limonite laden springs, land slides, epithermal chalcedony breccia float, and a quartz feldspar porphyry plug define the trend and extent of this fault zone.

(b) East of the fault zone, north dipping (15°- 20°) amphibolites are well exposed along Reel Creek (Cabin Creek). The preserce of garnet amphibolites, as well as nephritic and listwaenite carbonate boulders along the Hoole River, point to the probability of an ophiolitic package. In fact, as at Canol Creek (P.Erdmer/J.Dodge), the progenitor could be an eclogite regressed to garnet amphibolite.

(c) West of the fault zone, a triad of basal chlorite schist, middle limestone, and upper quartz chlorite schist dominate, and as a unit dip gently 15°-20° west.

(d) One interpretation of the geologic interrelationships is that the fault zone has had normal movement with the west side Cambrian (?) schists down with respect to the Carboniferous (?) ophiolite to the east.

(e) The discovery of several large cobbles of quartz hosting sulfides anomalously high in Ag+Cu+Pb+Zn+As+Mo+Bi suggest the presence of a high sulfidation epithermal regime.

3.2 In the Porcupine Creek area (a) outcrops and scree derived from them enables reasonably accurate geological mapping in above-timberline areas.

(a) The oldest rocks in the prospected area are grey to tan weathering medium bedded Silurian-Devonian dolomites (SDd) outcropping on the upper east flank of North Mountain with easterly inclinations of 25°-30° toward Porcupine Creek.

(b) Above these are gently southeasterly dipping black shales and limestone which have been thermally metamorphosed to argillites and marble on the north facing slope of South Mountain. The age of these rocks may be upper Devonian.

(c) Magmatic, equigranular, weakly pyritic, buff weathering melasyenite crops out on the north face of the South Mountain, and a grey leucosyenite intrusive cores the North Mountain. This intrusive syenite is similar in appearance and mineralogy to the syenite terrane extending over 40 km to the south and is considered to be Mississippiar age.

(d) Volcaniclastic syenite tuffs and agglomerates surround and overlie the intrusive syenite - and appear to be contemporaneous - Mississippian. The tuffs on South Mountain trend N/S and are inclined 25°-30° west.

(e) During prospecting all the anomalcusly high radiometric readings (from thorium), using a Scintrex GS-4 handheld spectrometer, were obtained from talus boulders and bedrock sites of only the melasyenite intrusive on South Mountain. No anomalous readings were obtained from talus on North Mountain.

(f) No anomalously high radiometric signals were detected during traverses across volcaniclastic syenite terrane. In many instances a distinctive green fluorite coats volcaniclastic syenite tuff bedding plares; this in contrast to purple fluorite prevalent in tuffs 8-10 km to the south.

4.0 Conclusions

4.1 Area (a) Porcupine Creek

Intrusive mela-syenite rocks, as contrasted with leuco-syenite volcaniclastics, in the Mississippian syenite terrane of the Porcupine-McConnell- Ketze-Seagull area of southern Yukon, are the most favorable host rocks for the discovery of rare-earth elements and niobium. This genetic distinction was used in selecting the area for 1996 prospecting and, tru to form, led to the discovery of a new area of rare-earth elements and niobium - albeit of sub-economic grades as determined by analysis of five outcrop samples.

4.2 Area (b) Right Bank Hoole River

Prospecting added further evidence of the probable presence, and SSE extension, of a prominent fault zone on-trend with a large outcrop of Tertiary quartz-eye feldspar porphyry near the Tintina suture. Epithermal milky, vuggy, pyritized quartz cobbles and boulders found only tens to scores of meters from the projected trace of the concealed fault zone from which very large volumes of limonitic spring water flows. None of the 20 samples assayed for gold plus 30-element ICP - supplementing an equal number of 1995 samples - returned an ore-indicator grade assay; e.g. 1000+ppb Au. Statistically at least one sample should have been anomalously high if a quaisi-commercial "ore" shoot existed along the fault zone. Consequently, there appears to be no field evidence to indicate that the mineralized fault zone is host to a promising epithermal vein deposit. The MAX 1-10 claims have now been dropped.

4.3 Area (c) Left Bank Hoole River

Continued grassroots cobble/boulder search was unsuccessful for a repeat of the discovery of the high-grade stratiform sphalerite in co-genetic metaquartzite found in late 1994 along the Hoole River within the boundary of MIDAS #1 claim. The presence of a few non-sulfide boulders of layered metaquartzite indicates a moderate to long glacial dispersion distance from a bedrock source up-ice. This is in contrast to only 1+km of glacial destructive train for "soft" VMS deposits of the Finlayson Lake areas. The unique and possibly extensively mineralized stratiform host remains a serious grassroots prospecting target.

5.0 Recommendations

5.1 Area (a) Porcupine Creek 105 F/10

Examination in 1996 of the northernmost intrusive melasyenite outcrops of the south-central Yukon syenite (Mississippian) belt concluded that only sub-economic grades of rare-earth elements and niobium are present.

Further prospecting for rare-earths and niobium are not recommended in the syenite belt, with the exception of the vicinity of the LANCER deposit at the head of the Ketza River 105 F/08 where further detailed radiometric surveys are proposed for 1997.

5.2 Continued prospecting is recommended in the search for the bedrock source of the boulder of high grade stratiform sphalerite in weakly calcareous meta-quartzite, i.e. found on the left bank of the Hoole River on MIDAS #1 claim 105 G/12.

The up-ice area with the most promise for prospecting in a metaquartzite terrane appears to be in the divide between drainages of Mink Creek and the Hoole River. A program of grassroots prospecting of that area in 1997 is redommended.

STATEMENT OF QUALIFICATIONS

I, James S. Dodge, of 14 MacDonald Road, Whitehorse, Yukon submit the following information which establishes some of the qualifications bearing on the necessary level of competence required to carry out the field work and preparation of this summary report on the YMIP 96-014 project.

Education

Missouri School of Mines, BS Mining Engineering, 1941
Princeton University, Field Geology, 1940
Stanford University, MS Economic Geology, 1951
Albert Ludwigs Universitaet(Germany), Economic Geology, 1952

Experience

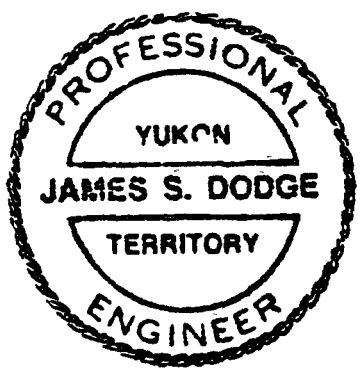
Active in mineral industry since 1941 (including U.S. Army Engineers) in North and South America, Asia and Africa as prospector, company geologist, mining engineer, mine operator, and consultant in ferrous, non-ferrous, and industrial minerals. Among the many organizations that I have been associated as an employee and consultant:

Anaconda, ESSO, Mitsui, USAEC, Ventures, DIAND, SCAP-Japan, Atlas, Glidden, Spartan/Nuspar, Hirst-chicagof, Floyd Odlum, Yukon Barite and numerous small mining ventures.

Experience in vein gold mines in Colorado and Alaska, in SEDEX/VMS deposits in Yukon and British Columbia and Japan, and in nephrite and chromite deposits in ophiolite terrane are specifically applicable to evaluation of grassroots prospecting under YMIP 96-014.

Professional Affiliations

Registered Professional Engineer (No. 311) by Association of Professional Engineers of the Yukon Territory
Senior Fellow of the Society of Economic Geologists
Senior Member of Society of Mining, Metallurgy and Exploration



James S. Dodge, P.Eng.

Chemex Labs Ltd.

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To: DODGE, JAMES S. = YMIP 96-014
14 MACDONALD RD.
WHITEHORSE, YUKON
Y1A 4L2

Project :
Comments: ATTN:J.DODGE

Certificate Date: 08-OCT-96
Invoice No. I9630536
P.O. Number :
Account :BKY

CERTIFICATE OF ANALYSIS A9630536

SAMPLE	PREP CODE		Ce NAA ppm	Y ppm XRF	Nb ppm XRF	LOCATION 105F/10	Pass Peak					
002693	208	226	1780	320	3080	187	423					
002694	208	226	120	88	1100	186	423					
002695	208	226	570	140	1040	185	423					
002696	208	226	780	510	3360	189	424					
002697	208	226	250	120	1005	185	426					
						UTM GRID						

CERTIFICATION: Melissa Fraser

Chemex Labs Ltd.

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To: DODGE, JAMES S.

14 MACDONALD RD.
WHITEHORSE, YUKON
Y1A 4L2

INVOICE NUMBER I9630536

BILLING INFORMATION

Date: 9-OCT-96
Project:
P.O. No.:
Account: BKY

Comments:

Billing: For analysis performed on
Certificate A9630536

Terms: Payment due on receipt of invoice
1.25% per month (15% per annum)
charged on overdue accounts

Please Remit Payments to:

CHEMEX LABS LTD.
212 Brooksbank Ave.,
North Vancouver, B.C.
Canada V7J 2C1

# OF SAMPLES	ANALYSED FOR CODE - DESCRIPTION	UNIT PRICE	SAMPLE PRICE	AMOUNT
5	208 - Assay ring to approx 150 mesh	2.50		
	0-3 Kg crush and split	2.60		
	135 - Ce NAA ppm	2.00		
	801 - Y ppm XRF	2.00		
	191 - Nb ppm XRF	2.00		
	288 - NAA encapsulation/irradiation	6.75		
	289 - X-RAY pellet prep charge	6.75	24.60	123.00

Total Cost $ 123.00
(Reg# R100938885) GST $ 8.61

TOTAL PAYABLE (CDN) $ 131.61

Northern Analytical Laboratories ltd.

105 Copper Road
Whitehorse, Yukon
Y1A 2Z7
Ph: (403) 668-4968
Fax: (403) 668-4890

05/08/96 Assay Certificate Page 1

James Dodge WO#10426

Sample #	Au ppb	105 G-12 UTM
14551	<5	
14552	<5	
14553	<5	
14554	7	
14555	<5	
14556	<5	
14557	10	
14558	<5	
14559	29	
14560	33	
14561	7	
14562	332	585 372 } Hi As, Sb (ICP
14563	<5	
14564	36	
14565	412	584 378 }
14566	15	574 365 } Hi Cu, Zn, Mo, Bi (ICP)
14567	<5	574 365 }
14568	6	
14569	<5	
14570	7	

Certified by

CERTIFICATE OF ANALYSIS
iPL 96G0669

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

Client: Northern Analytical Laboratories iPL: 96G0669 Out: Aug 01, 1996 Page 1 of 1 Section 1 of 1
Project: W.O. 10426 20 Pulp In: Jul 30, 1996 [066916:57:32:69080196] Certified BC Assayer: David Chiu

Sample Name	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
14551	<	41	21	48	<	<	<	3	<	<	<	23	42	78	9	148	96	344	31	21	1	7	0.03	2.26	0.51	3.93	1.37	0.18	0.07	0.02
14552	<	142	6	43	<	7	<	5	<	<	<	57	186	17	<	98	51	783	54	24	2	3	0.09	1.35	1.24	6.45	1.02	0.01	0.05	0.35
14553	0.1	9	11	4	<	<	<	3	<	<	<	63	243	27	<	37	18	383	8	32	3	14	<	0.37	7.55	4.61	3.91	0.26	0.04	0.06
14554	0.1	10	322	100	41	28	<	7	<	<	<	9	174	85	5	956	22	111	<	6	1	1	<	0.39	0.12	1.56	0.51	0.01	0.03	0.01
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14556	<	13	<	3	<	10	<	3	<	3	<	6	15	9	<	237	3	79	<	19	<	<	<	0.05	0.46	0.92	0.03	0.02	0.03	0.01
14557	<	60	8	4	<	<	<	4	<	<	<	135	32	28	6	151	3	102	<	6	1	<	<	0.08	0.36	2.80	0.08	0.01	0.03	0.01
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14563	<	436	<	16	<	<	<	3	<	<	<	8	7	75	<	61	8	4848	<	149	1	14	<	0.09	11%	5.36	3.26	0.03	0.03	0.01
14564	<	18	3	9	69	7	<	4	<	3	<	2	5	15	5	202	5	125	2	10	2	1	<	0.34	1.65	1.13	0.27	0.04	0.06	<
14565	0.6	12	27	5	484	23	<	2	<	<	<	2	4	10	5	97	3	98	3	6	2	<	<	0.14	0.20	5.94	0.05	0.11	0.03	<
14566	0.1	15015	122	1867	15	7	<	76	<	24	<	39	26	36	9	139	26	80	<	9	2	1	<	0.07	0.15	2.61	0.01	0.05	0.03	0.05
14567	<	5315	54	4371	8	6	<	46	<	7	0.2	22	19	55	11	143	21	255	2	78	2	2	<	0.08	1.29	0.96	0.02	0.06	0.03	0.03
14568	<	152	8	70	16	<	<	5	<	<	<	7	14	64	7	145	17	78	5	33	2	1	0.03	1.15	1.07	1.28	0.40	0.08	0.05	0.02
14569	<	59	<	24	<	<	<	3	<	<	<	10	23	9	5	210	2	69	<	22	1	<	<	0.06	0.46	1.05	0.04	0.01	0.03	0.01
14570	<	39	2	91	<	<	<	6	<	<	<	2	43	42	<	137	41	1326	<	53	3	<	<	0.11	1.21	13%	0.63	<	0.02	0.05
Min Limit	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Max Reported*	99.9	20000	20000	20000	9999	9999	9999	9999	999	999	99.9	999	999	9999	999	9999	999	9999	9999	9999	999	99	1.00	9.99	9.99	9.99	9.99	9.99	5.00	5.00
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

---=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

CERTIFICATE F ANALYSIS
iPL 96I0956

INTERNATIONAL PLASMA LABORATORY LTD

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

Client: Northern Analytical Laboratories iPL: 96I0956 Out: Oct 04, 1996 Page 1 of 1 Section 1 of 1
Project: WO 7071 9 Pulp In: Sep 30, 1996 [095617:03:00:69100496] Certified BC Assayer: David Chiu

Sample Name		Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
14571	P	0.3	72	3	20	9	21	<	2	<	<	0.2	4	15	140	<	124	6	61	4	9	2	1	<	0.40	0.05	0.88	0.20	0.12	0.02	0.02
14572	P	1.5	129	1110	11269	347	26	<	2	<	2	17.7	19	23	10	<	151	2	532	3	201	1	<	<	0.07	2.98	3.59	0.04	0.02	0.01	<
14573	P	<	421	22	142	<	7	<	6	<	190	<	15	6	16	<	179	5	93	<	4	2	<	<	0.02	0.08	12%	0.02	<	0.01	<
14574	P	0.3	28	55	70	73	15	<	5	<	<	0.1	1	16	202	<	210	46	36	7	82	3	1	<	0.43	0.84	1.38	0.04	0.21	0.02	0.46
14575	P	0.2	31	57	20	<	11	<	11	<	<	<	8	16	31	<	77	3	16	34	17	6	<	<	0.24	0.07	3.92	0.02	0.31	0.01	0.02
14576	P	<	63	11	28	7	7	<	8	<	<	<	27	87	31	<	88	225	73	14	6	7	3	<	2.01	0.20	4.99	2.23	0.03	0.03	0.10
14577	P	<	33	6	12	35	10	<	7	<	<	<	30	11	25	<	44	11	74	7	14	3	1	<	0.30	0.49	4.05	0.12	0.07	0.10	0.32
14578	P	<	23	6	15	<	7	<	6	<	<	<	8	5	42	<	52	10	152	4	32	2	2	<	0.95	1.29	3.10	1.20	0.08	0.05	0.26
14579	P	0.2	138	43	73	<	6	<	3	<	<	<	44	52	96	<	85	24	562	17	36	1	5	<	1.69	0.71	4.31	0.75	0.11	0.06	0.01
Min Limit		0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2	5	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Max Reported*		99.9	20000	20000	20000	9999	9999	9999	9999	999	999	99.9	999	999	9999	999	9999	999	9999	9999	9999	999	99	1.00	9.99	9.99	9.99	9.99	9.99	5.00	5.00
Method		ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

---=No Test ins=Insufficient Sample S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined m=Estimate/1000 %=Estimate % Max=No Estimate

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CERTIFICATE OF ANALYSIS
iPL 96I0956

Northern Analytical Laboratories — **9 Samples**

	0= Rock	0= Soil	0= Core	0=RC Ct	9= Pulp	0=Other	[095617:02:59:69100496]
Raw Storage:	--	--	--	--	12Mon/Dis	--	Mon=Month Dis=Discard
Pulp Storage:	--	--	--	--	12Mon/Dis	--	Rtn=Return Arc=Archive

Out: Oct 04, 1996 Project: WO 7071
In : Sep 30, 1996 Shipper: Norm Smith
PO#: 054629 Shipment: ID=C030901
Msg: ICP(AqR)30
Msg:

Document Distribution

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1 Northern Analytical Laboratories					
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YT Y1A 2Z7	0	0	0	1	0

ATT: Norm Smith
Ph:403/668-4968
Fx:403/668-4890

Analytical Summary

##	Code	Method	Title	Limit Low	Limit High	Units	Description	Element	##
01	721P	ICP	Ag	0.1	100	ppm	Ag ICP	Silver	01
02	711P	ICP	Cu	1	20000	ppm	Cu ICP	Copper	02
03	714P	ICP	Pb	2	20000	ppm	Pb ICP	Lead	03
04	730P	ICP	Zn	1	20000	ppm	Zn ICP	Zinc	04
05	703P	ICP	As	5	9999	ppm	As ICP 5 ppm	Arsenic	05
06	702P	ICP	Sb	5	9999	ppm	Sb ICP	Antimony	06
07	732P	ICP	Hg	3	9999	ppm	Hg ICP	Mercury	07
08	717P	ICP	Mo	1	9999	ppm	Mo ICP	Molydenum	08
09	747P	ICP	Tl	10	999	ppm	Tl ICP 10 ppm (Incomplete	Thallium	09
10	705P	ICP	Bi	2	999	ppm	Bi ICP	Bismuth	10
11	707P	ICP	Cd	0.1	100	ppm	Cd ICP	Cadmium	11
12	710P	ICP	Co	1	999	ppm	Co ICP	Cobalt	12
13	718P	ICP	Ni	1	999	ppm	Ni ICP	Nickel	13
14	704P	ICP	Ba	2	9999	ppm	Ba ICP (Incomplete Digest	Barium	14
15	727P	ICP	W	5	999	ppm	W ICP (Incomplete Digest	Tungsten	15
16	709P	ICP	Cr	1	9999	ppm	Cr ICP (Incomplete Digest	Chromium	16
17	729P	ICP	V	2	999	ppm	V ICP	Vanadium	17
18	716P	ICP	Mn	1	9999	ppm	Mn ICP	Manganese	18
19	713P	ICP	La	2	9999	ppm	La ICP (Incomplete Digest	Lanthanum	19
20	723P	ICP	Sr	1	9999	ppm	Sr ICP (Incomplete Digest	Strontium	20
21	731P	ICP	Zr	1	999	ppm	Zr ICP	Zirconium	21
22	736P	ICP	Sc	1	99	ppm	Sc ICP	Scandium	22
23	726P	ICP	Ti	0.01	1.00	%	Ti ICP (Incomplete Digest	Titanium	23
24	701P	ICP	Al	0.01	9.99	%	Al ICP (Incomplete Digest	Aluminum	24
25	708P	ICP	Ca	0.01	9.99	%	Ca ICP (Incomplete Digest	Calcium	25
26	712P	ICP	Fe	0.01	9.99	%	Fe ICP	Iron	26
27	715P	ICP	Mg	0.01	9.99	%	Mg ICP (Incomplete Digest	Magnesium	27
28	720P	ICP	K	0.01	9.99	%	K ICP (Incomplete Digest	Potassium	28
29	722P	ICP	Na	0.01	5.00	%	Na ICP (Incomplete Digest	Sodium	29
30	719P	ICP	P	0.01	5.00	%	P ICP	Phosphorus	30

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DL=DownLoad 3D=3-1/2 Disk 5D=5-1/4 Disk BT=BBS Type BL=BBS(1=Yes 0=No) Totals: 2=Copy 2=Invoice 0=3-1/2 Disk 0=5-1/4 Disk

PHOTO 1 Base camp on Hoole River UTM 577369 set-in by Trans North Air from Ross River

PHOTO 2 Outcrops of Pn probably of chlorite quartz schists 60 Az 15-20S. West of MAX claim boundary

PHOTO 3 Sulfide-bearing boulders right bank of Hoole River 300 m up-stream from base camp. Center boulder NAL#14566 at 1.5% Cu. Quartz boulder left NAL#14562 332ppbAu, 2955ppmAs.

PHOTO 4 Limonite-rich springwater issuing from fault zone right bank Hoole River UTM 589387 - over 400 lt/minute flow

PHOTO 5 Typical limonite encrusted seepage issuing from evident fault zone parallel to right bank of Hoole River near UTM 575356. Several cobbles nearby display epithermal vuggy vein quartz with pyrite and minor arsenopyrite

PHOTO 6 View of South Mountain from Porcupine Creek. Base camp out of sight over skyline far right. Argillites with minor limestone underlie most of willow-brush covered terrane with syenite folcaniclastics and intrusives as dominant outcrops above. Vein-type rare-earth occurrence of former GAMMA claims crosses flank of this mountain; while 1996 discovery sites are behind high outcrops of right skyline.

PHOTO 7 View of North Mountain; Porcupine Creek to far right. Base camp is orange tarp in valley far left draining west to Seagull Creek. Argillite outcrops covered by caribou moss lower-left; intrusive fine grained syenite talus lower-right foreground. Core of South Mountain is light-melasyenite intrusive surrounded by Paleozoic dolomite/ limestone and (far left) syenite volcaniclastics.

PHOTO 8 Base camp viewing north into "moat" terrain of North Mountain. Another Day in Paradise!

Photo 9 Site @ 5500' melasyenite where spectrometer detected up to 5500 cps gamma-thorium radiation (monazite probably). Sample in bag is CHEMEX#002693.

PHOTO 10 First-day discoveries of radioactive talus boulders near base camp. Maximum of 1200 cps. Sample this boulder is CHMEX#002697.

PHOTO 11 Grizzly-dug prospect pit of pyritic syenite at contact with argillite near ribbon. Sample from this outcrop and 2 similar outcrops were not auriferous.

PHOTO 12 View south up Porcupine Creek valley from the 6000' altitude on South Mountain. Grey outcrops foreground are bedded syenite tuff and agglomerate. Weakly pyritic cliffs in mid-distance are westerly dipping syenite volcaniclastics which have not been prospected except along talus slopes at edge of vegetative zone (alder, willow, buckbrush) lower left of photo where only 3 cobbles were 2x to 3x background radiometrically.

105G-12

QUARTZ & PLACER

LATITUDE 61° 30 TO 61° 45
LONGITUDE 131° 30 TO 132° 00

ISSUED UNDER THE AUTHORITY OF THE MINISTER
OF
INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

SCALE 1:30,000

METRES 1000 0 1000 2000 METRES

FEET 1500 0 1500 3000 4500 6000 7500 9000 10500 FEET

N

MAGNETIC NORTH
N 33° 56' E

45 40

HOOLE RIVER BRIDGE CAMP

ROBERT CAMPBELL HIGHWAY

4x4 CAMP

ELDORADO

ZOO

ZINC BOULDER SITE

MIDAS

AREAS PROSPECTED IN DETAIL 1996

BOD

MAX

RAN

07-21 JULY 96 BASE CAMP

SPITZ

REEL

HOOLE

P E L L Y

U N T A I N S

3000 3500 4000

YMIP 96-014

"Rite in the Rain®"

BOOK I

ALL-WEATHER

LEVEL

Notebook No. 311

J S DODGE

30 days

07 July Sun. S 20° Showers

Lv Whse Norcan rental 8 am
Gas, coffee, Carmack
Arr Ross River 3 pm
No helicopter due in until
6 pm Monday.
Dinner @ Wongs 16

(1)

08 July Mon S 22° Shower. 3 pm

Met Dave Caulfield. Equity Engr.
Meals @ hotel Wongs B/L/D
TNA (Whitehorse) set me in on
E side Hoole w radio
@ afternoon.

(1)

09 July - Tues.
Rain steady began @
3 am - began to abate 6 pm

10 July Wed. Drizzle 15° (1)

Prospected riverbank float down stream 2km to Wolf Creek - then up steep morain slope to top where much float exposed. 100 pcs > 8cm - 60% were chl schist; 20% garnet sericite-chlorite schist; 10% macro phenocryst feldspar gneiss; 5% feldspar, black qtz eye, w. chips of black hornfels - melange - crystal rhyolite tuff? 5% variety acidic qtz, FeOx, serp., qtzite. 15 Several garnet-schist pcs. have steel gray metallic minerals usually proximity of garnets - similar to that from float on REEL creek.

18° (1)

11 July Thurs. Partly sunny showers a.m.

100 km east

Prospected downstream again and examined several score river bank cobbles -

5 trips by water bomber - SE in TRENCH

Only interesting specimen was dark grey healed breccia (fragments 1 cm) of calcite, ankerite, buff rhyolite - sparse pyrite.

Curious hematitic, vuggy, stained-glass-like 2 mm "chips" of chert in a mosaic not seen before. Sparse pyrite.

One slab of layered le + ang quartzite ⊕ somewhat resembling the stratiform host for sphalerite boulder on Midas #1 - but too limy.

Airborne geophysical flights on 2 occasions.

20° ①

12 July Fri mostly sunny

Down river past wolf creek to 2 very rusty brooks for silt samples.

One 30 cm boulder silicified Felx coatings & impregnations - drusy cavities could be Au-bearing.

One 25 cm boulder - much fine grained pyrite, chalcopyrite (-) as tiny veinlets in olive to tan (non-carbonate) matrix aphanitic. Weak but pervasive silicification. Try for Au.

A number of slabs of sericite-chlorite-garnet schist. Some burgundy colored macro-garnets (up to 3 cm).

20° (1)7
mostly sunny,
18 July Sat 5pm shower

Down river past Wolf Creek 500 m to edge of sterile zone (overlying fault zone) - 100m wide - spare spruce - NE/SW trend.

One 25 cm boulder - white quartz with hem/limonite staining on all fractures - partly breccia, carrying silvery sulfide in pockets & on fractures - need to check for tellurium in assay - as the ppt has drusy vugs typical of high sulfadation environment - like McLaughlin, El Indio, Dominican Republic.

Am convinced this fractured boulder couldn't have survived abrasion of Wood R environment - it must be vertically in near vicinity of bedrock vein in main suture of Wood R.

13 July – Cont'd

Large cobble 50m upstream displays white qtz from wall of main vein, as ½ is qtz-healed breccia – w dominant chips of argillite.

No similar boulders qtz veining was seen in careful exam of glacial moraine up 50m (vert.) on bluffs above river – although the chlorite-sericite-garnet schist slabs are seen with equal representation between river-bank and bluff moraine.

Heavily limonitic seeps prevail along bank of river – again probably from fault zone.

Took 2 silt samples.

14 July - Sun cloudy 80% 15° 9 (1)

Downstream.
The packing back of 5 sample sacks of rocks highlights the probability that there is progressively more vein float being delivered to the pwer - of 11, 12, 13 samples 1-3 respectively.

Today found the 3rd similar boulder to those of white & ±3 stained extensively w. felt and the ubiquitous reflective steel black mineral - again, will have assayed - incl Te.

One boulder 30 cm (see photo of this and following pyritic boulder) of fairly tough pebble dike with chips of olive chalcedony, reddish jasper and a cementing by hematitic quartz.

14 July (cont'd)

One 30cm boulder of white granular quartz (weakly schistose) with ca. 10% pyrite in strings and seams and a couple thin cuts of graphite. Most py is the 1 mm size range.

Across river bedrock outcrops up to 6 m thick - 70° N3, 20° to south, may be chl-muscovite schist - inaccessible - river flowing furiously.

(11)

Rain all day —

15 July Mon

easing up @ 4^30 pm.

(1)

16 Jul Tues Torential downpour

midnite to 5 am. Then

clearing — 20°

Down river to —

collected qtz healed qtz breccia

excellent qtz cockscomb veins

linings w some pyrite. Very

much high sulfidation setting vs fault?

One small boulder of weakly

Magnetic, olivenite pyrrhotite

+ chalcopyrite — will run for

Ni, Cu

20m high bedrock outcrop

across river — all veined

TO A3 205.

Photographed heavy limonite seeps @: — — — —

(1)

17 July Wed. Motusek
Sunny 22°

Traversed projected extension of fault zone southwesterly from south end of MAX 1-10 claims.

No outcrops for 2 claim-length distance although some sterile effects noted and aligned ⊥ to fault zone.

Photographed limonite springs @ Wolf Creek - ca. 50m SW of MAX #10 end line.

(1)

18 July - Downerstag - sunny a.m. 18°
cloudy p.m. 16°

Dried out most of rock samples for cumulative weight of ca. 20 kg. todate

Set E to W @ 5000m altitude @ 11^{55} am.

Traversed up-river to first gravel bar (1 km) and turned up to boulders of interest.

a) Grey. fine grained silicified hornfels with up to 20% pyrite - mostly very finely xline with drusy open spaces

b) Limonite stained white quartz with remnants of absorbed fine grained grey hornfels - vcoy vuggy - some < 1% pyrite

(1)

19 July Freitag ≥2° sunny a.m.

Revisited up-river long gravel shoreline bar - turned up remarkable 35 cm boulder of shattered grey hornfels laced with qtz stringers 0.5 - 1.0 cm wide — and grey qtz healing some fractures. Conspicuous is malachite staining of fractures and chalcopyrite as stringers and glob - with Cu estimated to be ~1%.

Much drusy-lined linear open spaces attests to a vein-type origin — epithermal. Pyrite is very minor.

Across river s-bnt(?) in 30°A 15°N — big change in attitude of outcrops downstream

(1)

19° Sunny a.m.

20 July Samstag Cloudy 4pm on

Ranged down-river 3 km to pickup 5 rock samples which had had to have been left at several sites, as the pack was too heavy from previous samples. Now have approx 35 kg of bagged samples for tomorrows move out by TNA Rose River.

Plane was found & person on board ok - so I heard @ 5 pm on 4441 via Don Taylor

(1/2)

21 ~~Jul~~ Aug. Grey - warm, Partly Sun pm

Packed samples & broke camp
TVA lifted out to Ross Creek

13 1/2 field camp days

01 August - Thurs

Rented Norcan sedan 4pm

02 August Fri

Drove to Rass River by 1pm and was told helicopter TNA would be available @ 6:30-7:00 pm However, rain delayed helicopters drill move (cominco) and it didn't reach Rass River until 10 pm - decided too late + pilot had put in long day - postponed departure until early 03 Aug.

Slept o'nite in Rass River

03 Aug. - Sat.

Raining when left Ross River @ 9am - and continued rest of day after helicopter put me into a camp site on divide (4650' alt) between Porcupine and Seagull creeks. 3 skunked sheep hunters came along game trail by my tent on return to Seagull Lakes. Too stormy to carry out field work with the Scintrex GIS-4 spectrometer. approx 61°42' N, 132°45' W.

04 Aug - Sunday

AM merely cloudy then rain, mixed with snow - snow level down to 5500' - heavy rain all afternoon - again merely trying to get second tent fly sheet up to stop soaking of sleeping bag, etc. Slept in rain gear at night as water coming up through tent floor.

05 Aug. Monday morning seemed like weather improving – merely cloudy – but barometer unchanged from its low point.

During a.m. used Spectrometer to check out large talus boulders at outwash of the main gulley of the South Mountain – about 250 m east of camp.

Surprisingly, 4 boulders registered over a maximum of 400 counts per second (cps) – in fact, one 70cm boulder yielded a very high 1200 cps reading.

This boulder made up of creamy colored splotches up to 10 mm wide by 15 mm long in a fine grained, grey, non-foliated, equigranular matrix (feldspar?) with 1 mm grains of pyrite singly & as discontinuous trains 3 mm wide. Weakly reactive to 10% HCl – bastnaesite? No CaF_2 so far.

Snow / rain began during night - strong E wind

06 Aug Tuesday - there goes Lenore.
Raining until noon.
3 hunters returning from Ram Creek with fair-sized sheep curl - on way to Seagull Lakes. Rain eased up at noon.

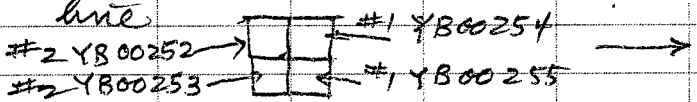
Traversed ca. 300' vert above yesterdays 1200 cps float in gully between argillite cliffs forming outcrops 110° 60°S on east side and skarny limestone on west - one large 70cm boulder giving a maximum 900 cps reading - approx. 15 times the background of 60 cps.

The geology suggest this main gully result of weathering of a fault zone.

Heavy showers - a.m
Snow showers - p.m.

07 Aug Wed - NWT left over 8:50 am to Whitehorse

Carried on up the west of main gulley to 5325' alt where 4 claim posts - upright, wired, and tagged. On an E(W) staking line



5m Above claim posts a 20-30m wide, white granular, stringery quartz zone between downslope marbleized ls and the up-slope syenite which, except for one 10m wide, sheared syenite, is blocky, fine grained, grey to pale salmon, equigranular, massive - very much indicative of high level intrusive rather than volcanoclastic, etc.

At 5350' alt on ridge (W side main gulley) 2 pcs float - one was 1.2 m long the "slab" 50cm wide - max. 800cps

At 5525' right (W) of main gulley in the bottom of a sub-gulley - was bedrock reading 400 cps - yellowish fungi-like

limonite coating fine grained
sequite with a vague steep southerly
inclination. Several small boulders
on E. side of gulley up to 300 cps -
but extent of bedrock radiometric
highs remains unclear - tomorrow?

Hopefully sleet/snow showers will
cease & can no longer have to keep
spectrometer in/out food bag continually.

Have noted that - especially notable
in rocks above, say, 250 cps that
fine grains of sulfide are prevalent -
appear to be pyrite, but I wonder if
some are thorite - only a very
few grains of chalcopyrite.

08 Aug Thursday 1 cm thick ice in water pail this am. Sunny am - sleet + rain showers in p.m. Really sad Aug weather.

Returned to East Gully @ 5300' asl in area of Syenite intrusive

One boulder 600 cps @ 5495'
Then another 5 m up-slope on E side of gully - @ 5500' ran an amazing 5500 cps - much of the steely sulfides in bunches + distended stringers.

Several boulders up-slope ran 400-600 cps but after about 20 m (5530') no radiometres above 150 cps - then light gray syenite agglomerate (volcanogenic) somewhat layered w olive colored lithoclasts.

Several dark reddish weathered syenite with the unidentified steely sulfides - but no anomalously hi radiometres

Area remains incompletely prospected in the parallel sub-gully to the west (50m distant) where the only bedrock anomalous radiometrics has been noted.

39 Aug. Friday Very dense fog—
75-150m visibility until
11 am; then, rain until 2 pm

Reconnoitered low area north of camp along moose game trail @ 4700' altitude to the east. to creek bed @ drainage divide (easterly toward Porcupine creek) Segenite volcanics; no anomalously high radiometrics.

As usual many (20±) ptarmigan clucking in the alder clumps.

10 Aug - Sat. Heavy, 1 cm icy frost clear, clear - W. breeze.

Went up ridge east of main gully to 6000' altitude (photo to south)

Low background count (45-50 cps) up until base of syenitic gneisses when 75-80 cps dominated - @ approx. 5500'.

Fenetization of dolomitic sediments 110° 50S dominant feature below 5500' Pink feldspar replacement of dolomite beds.

On returning from highest (6000') shoulder @ 4900' found what appears to be a white (milky) quartz vein with much pyrite in fenitized host - with dark grey phyllite above and below 100° Az 45S at the "grizzly hole" exposures (photos). Will return tomorrow to reassess possible gold bearing potential.

Small areal extent ~50m of nela-
syenite, equigranular mid to fine
grained, weakly magnetic 5000'
altitude.

11 Aug. Sunday

Clear again from sunrise to 10am
10 to noon cloudy w wind from
W. Noon to 8pm RAIN at
times heavy Barometer falling
(450' alt equivalent) - so storm on the
way.

Replace batteries in Spectrometer.

Traversed up-slope 100m west of
main gully - but found no anomalously
high radiometrics.

One isolate manto-type pyrite
body (20m x 40m) in jointed
sediments. Into syenitic pyro-
clastics @ 5200' altitude.

Went up next gully (W of main
gully) recrossing site of previously

(on 07 Aug) grid-picked, but couldn't see any lateral extension of anomalous radiometrics.

Almost as an afterthought, cut east across the steep blocky-talus slope (this is slope above the site of the 800 cps "slab" discovery) and in 4 or 5 boulders found up to 700 cps - raining so hard couldn't really describe lithology adequately - but there appears to be a white, coarse 4-5 mm flaky mineral ??

Packed 10 kg of samples down in rain-bit soaked. Gopher a real 'terror' trying to bite its way into tent - even when Jim there.

12 Aug - Monday Fog lifting to 6000' by 11 am - Descended with steady rain by 12:30 - continued rain. Barometer slowly rising.

Everything soggy at lower altitudes and fog enshrouded above 5000' - stayed in camp.

Helicopter @ 11:15 flew SSW over camp NWT jet over @ 6:45 pm southwestbound toward Whitehorse.

Reading Malraux's "Anti-Memoirs"

13 August - Tuesday - Grey in a.m. Barometer still rising. Sunny, partly cloudy afternoon.

Traversed up the "gorge" to the north of camp. Much grizzly dung from two biggies - matted grass still rising from their tread which meant they saw me as they came down same gully -

No radiometrics at all above 50 cps - with exception of one syenite (leuco) boulder giving 120 cps reading.

Dominantly dark grey equigranular med-grained plutonic syenite - not the coarse, augite-rich mela-syenite of the LANCER property.

Flooding down from steep west-bank hillside were qtz-calcite-ankerite veinlet'ed blocky leuco syenite. One small piece (4cm) had much visible galena, sphalerite, & some pyrite. Most limonite coated rx in creek bed had only pyrite visible. Saw one ribbon on an alder at the creek - for geochem? - not older than 2 field seasons (1994 perhaps).

14 August Wednesday 16°

Met over @ 8:50 am. to Wrose. Cloudy early am by 10 am clear rest of day.

[Warmest day yet]

Traversed east @ 5185' and around SE overlooking Porcupine Creek.

Curiously, turned up 3 chunks (i.e. 15-25 cm) of dun-colored, fine grained syenite notably radiometric high, e.g. 400 cps from these relatively small pieces. However, even by using the French "Prospection Systematique" crosscrossing the small-rock float train, could find no additional pieces - even over the 200' (vert rise) of this scree slope - very odd.

Photographed a well exposed bedrock cliff face @ 5250' (farthest SE point of traverse). Med-grained, mela-syenite with considerable mantle-type pyrite-weathered & produced much black-red & yellow-green oxides. Narrow (1 cm) veinlets

stringers of white quartz 60° Ax/vert @ 20cm parallel spacing.

Several pieces back @ the scree slope had emerald green coatings - intrusive. Could be ~~prehnite~~ X too soft. Maybe fuchsite.

Golpher(s) finally ate through tent & crapped on everything inside.

15 August - Thurs 16°
Clear @ 7am, partly cloudy by 10am E wind - very warm.

Climbed main mountain north of Camp to the 6025' altitude.

Took a route to east side of south-facing mass - dolomite, black slate, quartzose dolomite 50° Az 305.

float from "Hat" on crest is fine

to medium grained dark grey syenite - can't tell whether is sill or pluton(s).

Light brown, schistose syenite float is probably ash flow tuff - containing some emerald green splotches, seams - probably fluorite. Interestingly, on the high ridge South of the old "GAMMA" claim, the fluorspar was of purple color.

Radiometrics were surprisingly low - with background around 25-30 cps - highest reading of 55 cps was in gully with majority of float being black slate. The fluorite-bearing schist was only 40-45 cps. No mantos pyrite float.

Took photo of the South Wall.
(Did the earlier hi-grade, e.g. 5500 cps ~~xxx~~ radiation cloud the film?).

16 AUGUST Friday 15°

Barometer still rising slowly - one rain shower.

Followed game trail and creek bed east from Camp @ 4650' up, then down, East to Porcupine Creek @ 4400'.

Followed game trail & creek bed south (up stream) to a gorge. Where 20m thickness of creamy dolomite is exposed 90°/Z 30S On the nearly carbonaceous covered rise - 3 huge moose antlers (photo of valley) and 10 bundled claim posts.

Followed banks of stream up 1.5 km without detecting any anomalously hi radiometrics on boulders, cobbles, pebbles etc. Turned west up 4th gorge (from N.), Stopped for rest on a grassy hump & (like discovery of GAMMA claims) noted a reading of 150cps. Cleared off 30cm thickness of moss & soil exposing 1.0m slab of light grey, fine grained

syenite w. 200 cps max. This @ ±700' altitude

Continued up to mouth of gorge with its waterfall and found only one other boulder - up to 100 cps reading

Traversed north at roughly 4750' alt and did not detect any anomalously high radiometrics at mouth of other 3 gorges. Continued N/NW about 100 metres below the mantle cliff as previous (photod) 14 Aug traverse

17 AUGUST cloudy. Very intense thunderstorm @ noon. Barometer still falling. Rebagged samples for assays, labelled, &.

18 August - Sunday Raining hard when helicopter arrived after lunch

(½ day in field)

YMIP 96-014

"Rite in the Rain®"

ALL-WEATHER

FIELD

Notebook No. 351

J.S. DODGE
PART II

29 Aug. - 08 Sept. (9)
13 Sept. - 23 Sept. (10)
04 Oct. - 13 Oct. (9)
28 d
+2 Report

29 August Thurs.

Rented vehicle NORCAN - checked out 5:30 pm & drove to Drury Creek campground off Robt. Campbell Hwy (75 km E of Carmacks).

(1)

30 Aug Fri Cloudy -

Early 3 hrs to Hoole River bridge & ~~searched~~ pitched camp and searched river cobbles for evidence of calcareous meta quartzite (with sericite partings).

Found several cobbles with uniform 1-2 cm wide bandings - but not the lensoidal aspect of meta-quartzite host for sphalerite as in "flashy" zincy boulder.

6

Am concluding that zircy boulder source is a unique ~~total-sulfur-poor~~ volcano-genic environment → → unlike the common VMS seafloor "smokers" with hi sulfur (pyrite) mineralogy.

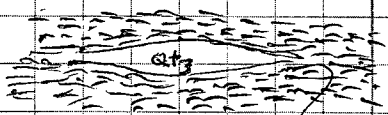
Thus, am wondering if ~~one~~ those could be a resemblance to a Broken Hill, NSW, Australia paradigm

(4)

31 Aug

Hiked 7 km in from Hoole R. bridge tent campsite and up along left bank of river - just east of MIDAS #3 claim boundary -

again searching for zincy float. The continued evidence of only uniformly banded qtzite gives no clue to a stratiform-style lite



(true scale)

qtz w sphalerite (30%) in stratiform mode w massive qtzite lenses.

However, it is still worth further detailed boulder-prospecting for more sphalerite laced metaqtzite, keeping in mind that paucity of pyrite & chalcopyrite in fancy boulder (CRM 559439) results in a virtual rusty-free weathered surface & thus very difficult to spot in prospecting.

Only surface weathered field clue is the vaguely lineations of 1-2 mm pock-marked, soft sphalerite weathering.

01 September Sunday
+10° Cloudy

The conundrum of a single juicy boulder keeps me reflecting on the 4 to 5 chalcopyrite boulders along left bank of Hoole near SE corner of Eldorado claims — boulders which seem certainly to have been plucked out of bedrock wall of a west-meander of Hoole - about 20 m vert above present Hoole River bed — mineralized in-place outcrop has been seen!

accordingly, hiked 7½ km up Hoole valley from base camp to determine if the solitary Zn-fancy boulder on MIDAS #1 could have companion boulders in the first erosional scarp above existing Hoole R. plain — i.e. reworked glacial terrace deposits somewhat up-ice from

the zinc-boulder site. No zinc-mineralized cobble or boulder was found. Here

However, on the terrace southward on to MIDAS #3, at base of a 20m-thick 60°Az gently 15°W dipping, thinly bedded, buff weathering limestone, one piece of VMS float [12cm] was found with visible fine-grained pyrite & collected for assaying.

[[#sample 14572 = 1.12% Zn]]

It appeared most likely that float came out of glacial till overlying the limestone cliff.

Question: how far could the VMS float "survive" glacial transport - i.e. are we looking @ 3km, 10km?, or much closer if the VMS horizon is in the Pn on MIDAS claims.

(1)

X2 September

Cloudy - ~25-30 km/hr wind

Returned Hoole from campsite & km to search for more VMS float similar to that found yesterday - continuing south for ~1 km to the "CLUSH" designated area, i.e. a boulder-strewn gully as an outwash of glacial moraine deposits - extending down onto the river terrace.

Found only 1 small (~cm) VMS cobble, but sulfide appears to be merely pyrite - (no assay planned) in stratiform black phyllite.

Still no hint of the Zn meta-gabbro genre.

(1)

03 Sept. - Wed.

+4° Very low 100m Clouds

Drizzle increasing to rain by noon.

Nevertheless, hiked the 8km from base tent camp to Hoole river, but found prospecting less than effective owing to wet handlens & fogging safety glasses.

On return after lunch passed north via Test pit area on MUDAS #25 to re-examine Eldorado in-place chalcopyrite

(1)

4 Sep - Downstag 02°C
Snowing lightly all a.m.

Retraced 8km route up from campsite but by 10 am found 1cm ✓ new snow covering all cobbles/boulders - making prospecting less than conclusive.

Did turn up 2 cobbles of vuggy white quartz with scattering ? pyrite, sans chalco.

Retreated by 2 pm hoping for improved weather tomorrow - one big grizzly track 15cm across.

(1)

05 Septembre Freitag
02° snow flurries
cloudy all day

Carried up 8-lbm 10 lb sledge hammer to break several flagged boulders which appeared to be banded qtzite — yet did not reflect the quasi-leisey mode of qtzite as displayed by the "fancy" Zn boulder.

Smashing revealed that the weathered 'pits' — somewhat similar to the sphalerite pits of Zn-boulder — were in fact sites of micaceous (sericite) clumps along bedding planes.

Footnote:
In the final analysis, I now believe that the scattering of 20 to 30 cobble/boulder pieces of float characterized by vuggy white quartz, pyrite +/- chalcopyrite

in glacio-fluvial debris on left bank of Hoole - have been moved down-ice and down-stream from their probable source as epithermal narrow vein deposits in the NNE trending Fe-Ox springs, fault zone paralleling right bank of Hoole ~~0.5 km distant~~ 0.6-0.8 km distant.

Moreover, the Hoole Creek lineament being parallel to the above-mentioned fault zone and having a 23 ppb-Au silt (105 G/12 Geochem Map), and arsenopyrite-bearing phyllite on Eldorado near confluence with Hoole R. - only 300 m off MIDAS #1 + #25 - makes the lineament (no known bedrock on MIDAS along lineament) an attractive exploration target for epithermal (??) vein-type deposit.

Hoodlo Creek geol / tectonics also similar in that a KT porphyry intrusive (like the 11 fault zone) is on the lineament close to the Tintina suture.

(1)

06 Sept. Sat. 02° Threatening Snow

hiked 8 km in to bring out a 12 kg sample of bi-sphalante boulder — leaving behind another 10-15 kg at discovery site.

Also, stockpiled a dozen or so py/cp mineralized white quartz cobbles.

(1)

07 Sept Sunday 04° cloudy

Drove west from base camp to Stan Creek crossing of Robert Campbell Highway.

Searched unsuccessfully for both epithermal vein float or/and metaquartzite ~ ½km up and down stream from culvert.

Returned to tent base camp @ Hook by 4^30 pm.

08 Sep Monday Broke camp

Drove rental vehicle back to Whitehorse.

Break

13 September Fri
LV Whitehorse GMC 4 x 4
@ 233,560 miles odometer reading
(½ day)

Arr. Hoole River area 2pm -
set up camp

(1)

14 September Sat +4° Steady rain
from 4am to midnight -
really camp-bound - leaky tent.

(1)

15 Sep Sun 06° cloudy
unable to start engine - located
shorted ground to starting
motor then found battery too low
to be sure solenoid was being
activated. Could have been
ameliorated by a dry day perhaps.

Finally unbolted starting motor,
disconnected solenoid, cleaned,
dried - reassembled and waited

late afternoon for ~~gas~~ a vehicle to give jump start. No luck.

(1)

16 Sept Monday 01° Frosty
no vehicle by mid-morning, so hiked 4½ miles to left bank of Hoole River.

Found cobble of eclogite with 5mm dia equidimensional orange garnets - equispaced, i.e. non-clustered in a non-foliated (augite apparently) matrix.

Two cobbles 20cm of macro-garnets (10 mm dia) in ellipsoidal clusters in biotite-garnet-schist - limonite on pyrite train ~~as an~~ rind around garnets. Distinctly different from the eclogite float.

One 10cm cobble milky white quartz breccia healed by an interlacing network of metallic-grey sulphides - will assay for Au/As as mineralization appears to be arsenopyrite.

(1) 17 Sept (Tues) 01°C Frosty.

Jump started GMC by heavier from Watson Lk - so it evidently was the solenoid sticking, or wet or "whatever".

Down 4½ miles onto Edwards claims to area where core drilling by MacWest in Jul-Aug was conducted. Examined core holes and drill sites - nothing significant; several core boxes are missing - perhaps munched core entombed?

(1) 18 Sept. Wednesday 03° cloudy

Re-prospected east boundary of COMINCO's BOD claims without turning up any VMS float – with emphasis on fine-med chips on surface of ice-pit depressions or "pockmarks" scattered randomly on the flat lying, muskeg covered glacial moraine.

By far majority of chips were phyllite – unmineralized.

(1) 19 Sep Donnerstag +02° partly sunny

In light of discovery on 01 Sept. of a zinc-VMS cobble of float on MIDAS #3 – decided to inspect the VMS (mostly pyrite – didn't see sphalerite or galena) bedrock outcrop on Hoole River at SE corner of Eldorado

claims with view to determining extent of and float concentration of VMS down-river (down-ice, too). Was surprised to find that at ca. 100m down-river, only an occassional small (10cm) rusty VMS float was seen. Float prospecting in glaciated terrain isn't easy.

① 20 Septembre Friday +03° Cloudy

Set out on a long trek (5km) up Hoole River to the cliffy area of chlorite qtz schist (UTM 580410) where Rad (1995) found two cobbles of VMS — planning to climb outcrops in search of bedry VMS. However about noon (only ½ way) I came down with diarrhea attack & was forced to return to camp (4 pm) unsuccessful in reaching target area

21 Sept. Saturday
10°-02° Snowy - increasing by noon with little let up and no melting - so as to uncover float along left bank of Hobo River. Returned to camp mid-afternoon (4 pm).

①

22 Sept - Sunday - lite snow + 0°
Started engine of 4×4 and got into gear, but when let out clutch - loud bang indicated broken primary fulcrum of clutch linkage. Attempted 4 different temporary wire/chain hang-ups to substitute for broken linkage plate. With help of Ross River hunter, managed (4pm) to wire up enough washers to compensate for broken plate - and got clutch reactivated into low-low 4×4 gear down to Campbell Hwy - couldn't shift up for highway speed - so camped overnight to try for daylite run

1/2

23 September Cloudy - snow flurries
Broke camp.; rewired clutch
linkage & drove back to
Whitehorse by 5 pm.
39165 miles

Break

04 OCTOBER - Friday
(B9220 mdes) Lite snow + 02°C

Lv. Whitehorse GMC 4x4 to Hoole River bridge - in snow - camped and re-evaluated presence of 4 cobbles of eclogite - could they remotely be related spatially/genetically to the basalt flows in vicinity of mouth of Hoole River? A rather unlikely proposition, but why more eclogite near mouth of river compared to upper reaches?

(1/2)

(1)

05 Oct. Saturday +0°C snow
Broke camp and drove on to Mink Creek crossing of Robt Campbell Hwy - 15 miles. Snowing all day - camped 1/4 mile west of Mink Creek.

(1) 06 Oct Sunday +01°
Snow in morning - cloudy thereafter.

In afternoon located the pioneer 4x4 road leading to Mink Creek valley and hiked in approx. 3 km on glacial morraine dissected at 2 points by E-trending gullies.

Road too dicey to attempt driving on.

(1)
07 oct Monday - rain (drizzle) most of day +02°-03°C.
melting snow on 4x4 trail.
Hiked in 4 km to an overlook of Mink Creek (50 m vertically below) where noted outcrops exposed on steep slope to the Creek.

Outcrop comprise a 15m thickness of chlorite and qtz-chlorite schists 80°AZ-20S with one unit ca. 1 meter thick distinctive because of its white sulfate florescence - pyrite? source of sulfide apparently very fine grained. No malachite visible. Outcrop only 10-15m wide.

Another similar outcrop ca. 100m to west below Mink Creek trail.

(1)

08 Oct. - Tuesday - +04°C

Partly sunny.

Retraced Mink Creek trail following it for 7 km to point where there is a fording of Mink Creek. No outcrops and only the occassional pebble or small cobble of glacial till exposed in the trail. Had planned

to carry on to get close enough to the high (sub-timberline) terrane to see if snow melt on south facing slopes would offer opportunity to verify presence of metaquartzite outcrops.

Clearly, the recent snows had not been melted back enough - several high rises of the trail gave glimpses of the mountains to the west (10-12 km) which remained snow covered - although most of recent snows had melted from the trail.

(1)

09 Oct - Mittwoch +04°C
Partly sunny - lite W wind

hiked up Munk Creek trail - taking right fork (flagging spread out in trees @ jct.) Left fork leads 1/4 mile to fording crossing of Munk Creek).

Carried on for additional 1 km, but no change in terrane and no sites for better visibility of smart conductors on metagabbrite - target mountains.

Concluded - from evidence of bog holes where a 4x4 was stuck several places - that, unless one had a wide-trac all-terrane vehicle, plans for 1997 prospecting of the metagabbrite should be from second heli-

copter set-in base camps.

(1)

10 October Thurs +02° snow spitting

In borrow pit along Robt Campbell hwy - 1/4 mile west of Milk Creek crossing - noted concentration (relatively - say 2-3%) of granite pebbles - salmon pink orthoclase + quartz (both coarse grained) + minor biotite. Found it interesting in that the glacial dispersion from a mapped K intrusive 6-8 km up-ice was well displayed - because of the distinctive color of feldspar which highlighted its presence. Once again it emphasizes that "reading" glacial till is an important aspect of grassroots prospecting

(P.S.) Had to replace flat tire today

(1)

11 October Friday Snowing again 00°C

Prospected up and down-stream from culvert of Robt Campbell Hwy crossing of Muck Creek. No sign of metaquartzite — virtually all cobbles are of phyllite & schist Pn — with a few cpm and granite pebbles. The ubiquitous augengneiss appears again.

(2)

12 October Sat. Cloudy 0°3

Pulled in and examined 5 borrow pits along Robt Campbell Hwy over the 65-mile stretch from Muck Creek to Hoole River. No significant ~~float~~ mineralized float at any site. Camped @ Hoole River for last time.

(1/2)

13 Oct Sunday Cloudy +05°

Have concluded that no further prospecting for the bedrock source of Zn-metaquartzite is prudent from the Hoole River drainage - rather attention in 1997 should focus on the Hoole River/Mink Creek divide area. Although that area has received some reconnaissance (airborne geophysical exploration) the "new" volcanogenic (low sulfur) style of sphalerite - minor chalcopyrite does not give a typical Fe-gossan field signal to the prospector. It is my familiarity with the weathered expression of the "fancy" Zinc boulder

that gives me the enthusiasm to search for its metaquartzite host bedrock area; possibly it could even be a unit within the Klondike schists' garnet-schist - much float from which was found in 1995 along "Cabin" or "Reel" creek - NW-flowing tributary of the Hoole River.

Broke camp and returned to Whitehorse via Carmacks. 5 pm.