

REPORT OF FINDINGS
YMIP #03-001

By

JAMES S. DODGE, P.ENG.
P.O. BOX 31013
WHITEHORSE, YUKON TERRITORY
Y1A 5P7

10 NOVEMBER, 2003

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10 NOVEMBER, 2003

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SUMMARY

Grassroots Prospecting under YMIP 03-001 was carried out by the author, James S. Dodge, in three contiguous areas in Map Sheet 105G-06 in the search for emeralds.

The chosen geologic terrane was believed to have some of the favorable characteristics hosting the emerald deposit being developed by True North Gem approximately 30 km to the southeast.

A prudent subordinate prospecting target was recognition of concentrations of arsenopyrite, with or without accompanying tourmaline, inasmuch as these minerals could be pathfinders for a MAUI Claims look-alike with silver-gold-zinc hydrothermal replacement deposits in schist.

Weakly anomalous gold assays were obtained in two arsenopyrite-bearing samples from Area "A". Closely spaced follow-up prospecting traverses did not locate any other alteration sites.

It is concluded that there are no sites in the Work Area which point to the potential for the discovery of emeralds or of precious metal concentrations. Further prospecting in the three work areas can not be recommended.

LOCATION AND ACCESS

The center of the three-part work area is situated at approximately: UTM 382000E/809000N and some 3 km northeast of the Hoole River where it follows the Tintina Trench.

Access is by helicopter from the Trans North Helicopters base at the settlement of Ross River 85 km to the northwest. Mink Creek on the Robert Campbell Highway is the nearest "35 km as the crow flies" vehicular access to the work area. A winter road originating at Mink Creek on the highway crosses the Tintina Trench (Hoole River) at a point only 5 km northwest of the work area.

Three two-week base camps (Map 11) were set in by Trans North Helicopters from their Ross River base. Daily traverses on foot were made from the valley floors at 1300 meters and then up to approximately 1640 meters, the vicinity of timberline. A hand held Garman GPS was used to locate outcrops and sample sites.

The three prospecting areas are lettered "A", "B", and "C" as shown on the topographic map. Outcrops were plentiful near or above timberline, but poor or non-existent below the 1450 meter altitude. Southwest facing slopes, because of dominance of buckbrush rather than mature conifers, exposed bedrock outcrops at the lowest altitudes

GEOLOGY

Two geologic terranes are recognized in southeastern Yukon; namely, the Yukon-Tanana (YTT) and the Slide Mountain (SMT). The schist package underlying the YMIP 03-001 work area is identified as being the Upper Devonian unit "Dq" which comprises interbedded tan- to brown-weathering biotite-muscovite-feldspar-quartz psammite schist, and quartz-biotite-muscovite metapelite schist. Thin intervals of marble and calc-schist have been seen on the southwest slopes in Area "C".

Several poorly exposed cliffs of augen gneiss (MGag) were seen near the base of the west-facing slope of Area "C".

FIELD RESULTS

Grassroots Prospecting was carried out in three contiguous areas northeast of the Hoole River in Map 105G-06 from three base camps set in by helicopter as shown on the Claim and Geology maps.

The work area was selected as being geologically favorable for the presence of emeralds: namely, quartz muscovite schist, felsic Cretaceous intrusives nearby on the MAUI and BOOT claims, tourmaline-healed breccias nearby on the MAUI property, and large areas underlain by chromium/vanadium-bearing serpentinite, mariposite, and garnet-bearing amphibolite to the northwest and north. Pneumatolitic/pegmatitic processes in magma differentiation - of which the two known young intrusives are products - would incorporate chromium in any crystallizing beryl to yield its variety: emerald.

Within the designated areas two sites were found exhibiting >9999 ppm arsenic (as arsenopyrite) hosted by brecciated, and tourmaline-healed, quartz muscovite biotite schist. Maximum gold values were 439 ppb and 362 ppb respectively. Representative of beryllium is a single spike of 30 ppm Be. Harris Exploration Services of Vancouver prepared a petrographic report on samples of the gold-bearing rocks which confirmed the field examination that very fine grained brownish

Elsewhere, prospecting did not expose additional bedrock warranting sampling and assaying. Consequently, no further work is recommended for the 2003 Program.

CONCLUSIONS

Detailed grassroots prospecting located only two outcrop areas in the extensive quartz-muscovite schist which were weakly auriferous. One in a gently dipping pyritic horizon; the second a tourmaline-healed quartz breccia zone hosted by moderately dipping quartz-muscovite schist -also, with only one weakly auriferous sample.

RECOMMENDATIONS

No further prospecting or soil sampling can be recommended for the 2003 YMIP work area.

SUMMATION 2003 YMIP PROGRAM

	YMIP	SUPPLEMENT	TOTAL
Transportation			
Helicopter	\$3,397.15	6,907.32	10,304.47
Vehicle	1,194.00	1,074.00	2,268.00
Assays	862.02		862.02
Subsistence	1,820.00	280.00	2,100.00
Communications	1,023.50		1,023.50
Office/Expendables	<u>151.21</u>	<u>127.16</u>	<u>278.37</u>
	8,447.88	8,388.48	\$16,836.36

REFERENCES

Templeman-Kluit, D.J 1979a: Transported cataclasite, ophiolite, and granodiorite in Yukon: evidence for arc-continent collision; Geological Survey of Canada, Paper 79-14, 27p.

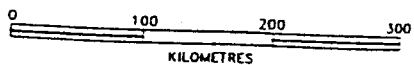
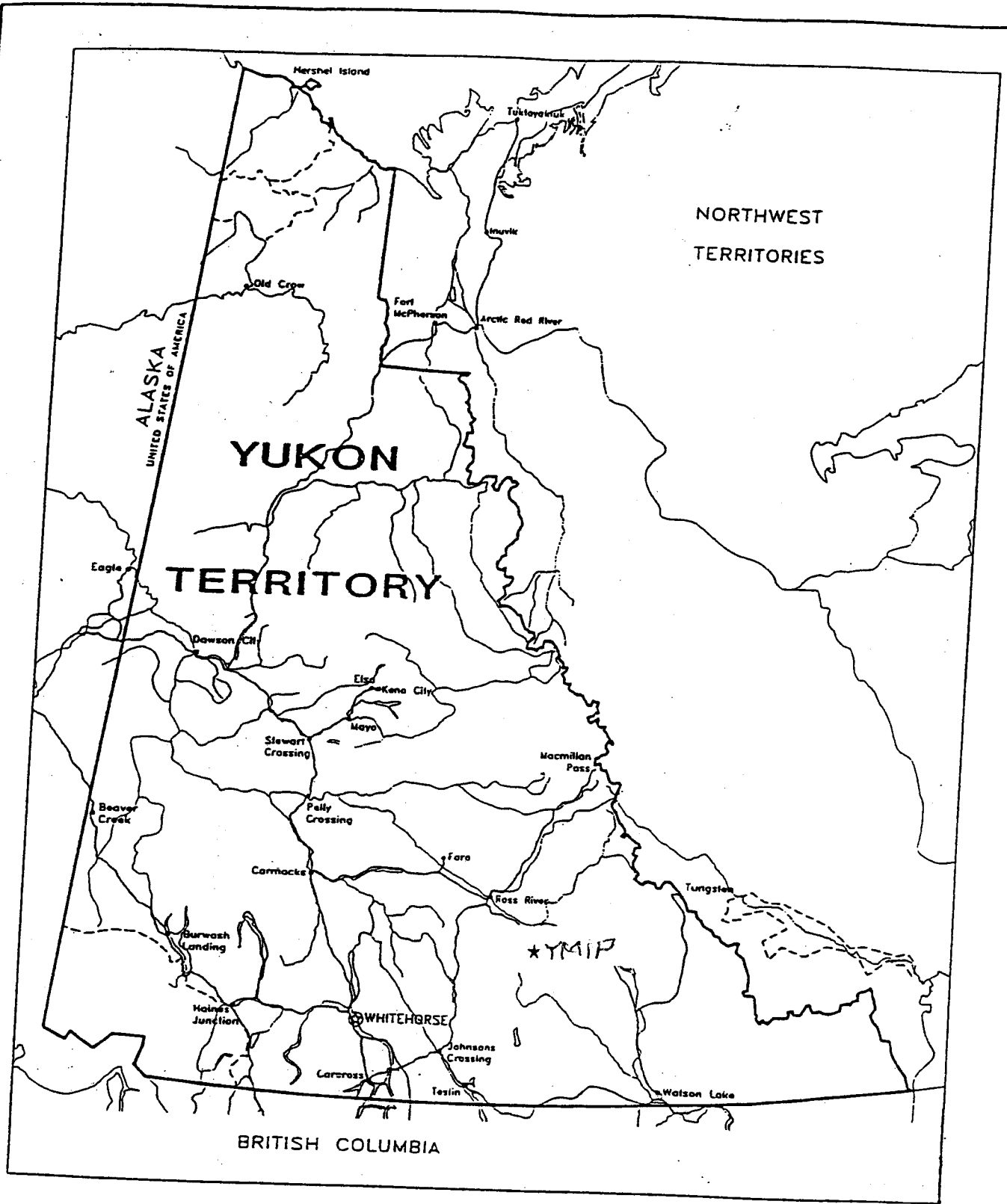
Mortensen, J.K. and Jilson, G.A. 1985 Evolution of the Yukon-Tanana terrane: Evidence from southeastern Yukon Territory: *Geology*, v. 13, no. 11, p.806-810.

Jackson, L.E. jr. 1993 Surficial Geology, Hoole River, Yukon Territory; Geological Survey of Canada, Map 1794A.

Yukon Exploration and Geology 1999; Indian and Northern Affairs Canada: Emerald Exploration, p.26.

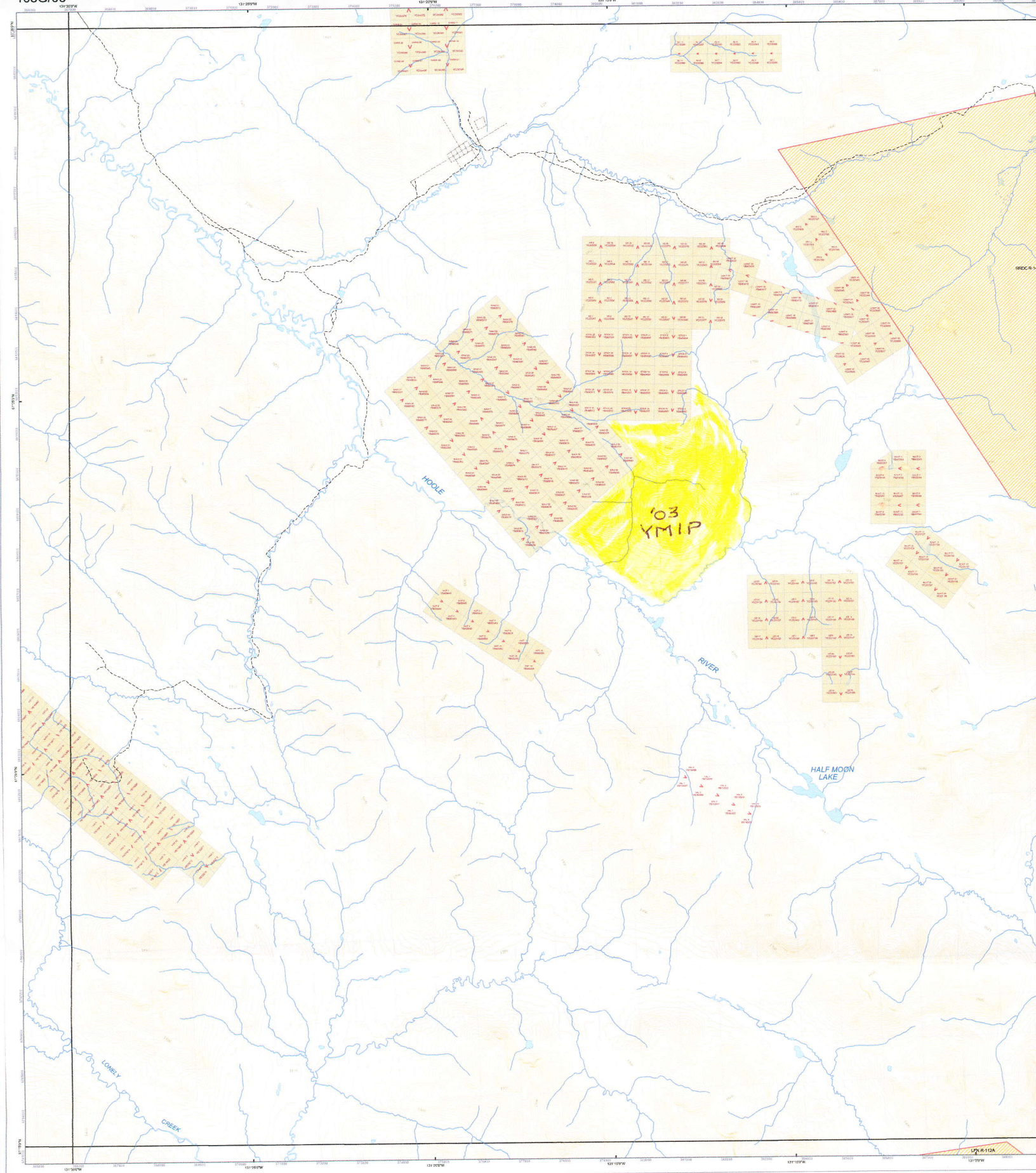
Bond, J.D., Surficial Geology and Till Geochemistry of Weasel Lake Map Area, (105G-13), East-Central Yukon in Yukon Exploration and Geology 2000, Yukon, Indian and Northern Affairs Canada, p. 73-96.

Murphy, D.C. et al, 2001: Preliminary Bedrock Geological Map of Northern Finlayson Lake Area (NTS 105G) Yukon Territory, Yukon Geological Survey, Energy Mines and Resources, Yukon Government: Open File 2001-33.



Lambert Conformal Conic Projection
with Standard Parallels at 49°N and 77°N

LOCATION MAP		
03-001 YMIP		
SCALE: 1 : 6 000 000		DATE:
N.T.S.: 105	DRAWN:	FIGURE 1



This map is a compilation of data obtained from many sources. As such, the Mining Lands Branch accepts no responsibility for errors, inaccuracies, or omissions. When the map differs from the actual post locations on the ground, the ground location has precedence.

Category A Land - Current Final Assent for Mining
 Category B Land - Current Mining District office for staking

For mining claim information, please contact the Mining Recorder's Office for the appropriate mining district:

Whitcomb District Office:
 114 S. Main St.
 Whitcomb, VT 05781
 Ph: (802) 563-6160
 email: whitcomb@vtr.ca.gov

Watkins District Office:
 Box 245
 Watkins, VT 05795
 Ph: (802) 963-6343 Fax: (802) 963-6747
 email: watkins@vtr.ca.gov

Watkins Lake District Office:
 100 Main St.
 Watkins Lake, VT 05795
 Ph: (802) 536-7966 Fax: (802) 536-7942
 email: watkinslake@vtr.ca.gov

Maple District Office:
 Main St.
 Maple, VT 05759
 Ph: (802) 988-2254 Fax: (802) 988-2617

County:
 Mining claim locations obtained from staking structures record for Canada's Mining System (CMS) located in Vermont.
 1:20,000 scale digital topography obtained from National Resources Canada National Geographic System data.
 Query data obtained from Natural Resources Canada Legal Services Division. For more information, please contact:
 Natural Resources Canada Legal Services Division, Whitehorse
 226 Main St.
 Whitehorse, Y.T. X1A 2S5
 Ph: (867) 663-2665 Fax: (867) 369-6747
 email: land_operations@nrc.ca

Lands Information obtained from Energy, Mines, and Resources Lands Branch, for more information, please contact:
 Energy, Mines, and Resources Lands Branch
 226 Main St.
 Whitehorse, Y.T. X1A 2S5
 Ph: (867) 663-2614 Fax: (867) 363-4236
 email: land_operations@nrc.ca

Agricultural information obtained from Energy, Mines, and Resources Lands Branch, for more information, please contact:
 Energy, Mines, and Resources Agriculture Branch
 226 Main St.
 Whitehorse, Y.T. X1A 2S5
 Ph: (867) 663-4826 Fax: (867) 393-6722

Survey Information and Claims Information obtained from Indian and Northern Affairs Canada, Claims and Indian Operations Branch, for more information, please contact:
 Claims and Indian Operations Branch
 Main St.
 Whitehorse, Y.T. X1A 2S5
 Ph: (867) 663-3614 Fax: (867) 647-3372

Other Resources:
 For access to topographic, Mining Assessment Records, and geologic information:
Yukon Energy, Mines, and Resources Library
 1000 2nd Ave.
 Whitehorse, Y.T. X1A 2S5
 Ph: (867) 663-3111 Fax: (867) 455-2656
 email: library@nrc.ca

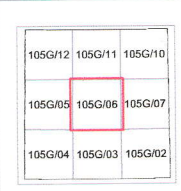
Yukon Geological Survey
 1000 2nd Ave.
 Whitehorse, Y.T. X1A 2S5
 Ph: (867) 663-3688 Fax: (867) 667-2188

or:
 1000 2nd Ave.
 Whitehorse, Y.T. X1A 2S5
 Ph: (867) 663-3688 Fax: (867) 363-2323

Yukon Geological Survey Maps and Publications are available for purchase:
 Yukon Geological Survey
 1000 2nd Ave.
 Whitehorse, Y.T. X1A 2S5
 Ph: (867) 663-3688 Fax: (867) 667-2188

Online Publications:
 Mining claims maps are also available online at the Yukon Mining Recorder Website:
www.yukonmrb.ca

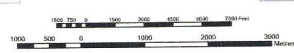
Yukon Geological Survey Maps, Utility, and Publications are also available at the Yukon Geological Survey Website:
www.yukonmrb.ca



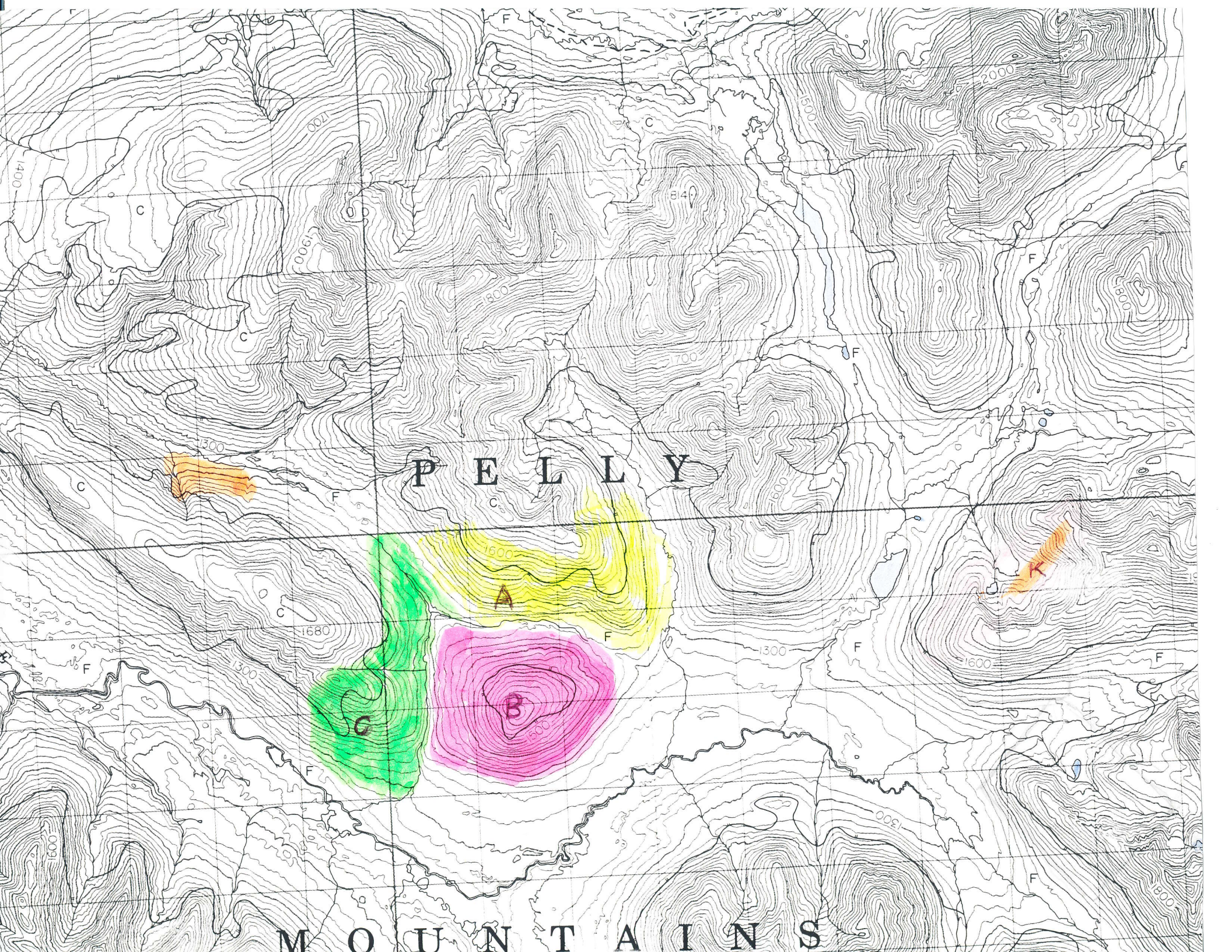
105G/06

MINING CLAIMS

UTM Zone: UTM Zone 9
 Datum: NAD 83
 Mining District: Watson
 Map Creation Date: Sep 30, 2003

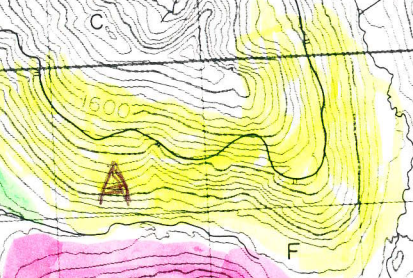
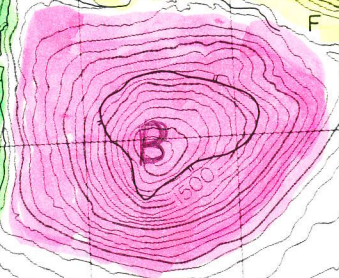
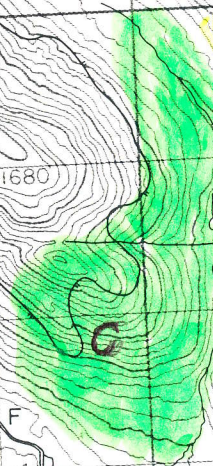
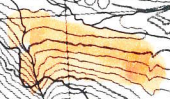


- Mining
 - Staking Direction
 - ✕ GPS Located Claim Post
 - Place Boundaries
 - ▭ Mining District Boundaries
- Claims Status
 - ▭ Active Quartz Claim
 - ▭ Active Placer Claim
 - ▭ Expired Claim
- Areas Withdrawn from Staking
 - ▭ First Nation Inherent Protected Lands
 - ▭ Parks and Special Management Areas
- Coal
 - ▭ Coal Exploration Licenses
 - ▭ Coal Mining Leases
- First Nation Settlement Lands
 - Category
 - ▭ AD-1
 - ▭ B
- First Nation Surveyed Lands
 - Category
 - ▭ A
 - ▭ B
 - ▭ FS
- NRCan Surveyed Lands
 - ▭ Surveyed Assent
 - ▭ Access through FN Land
- Mapsheet Index
 - ▭ 1:50,000 Mapsheet Index
 - ▭ 1:50,000 NTDB Mapsheet Index



PELLY

MOUNTAINS





magnetic declination 2001 for 105G varies
 from 26°39' easterly at centre of west edge
 to 26°54' easterly at centre of east edge.
 Mean annual change decreasing 11.5'.



GEOCHEMICAL ANALYSIS CERTIFICATE



Dodge, Jim File # A302711
Box 31013 MPO, Whitehorse YT Y1A 5P7 Submitted by: Jim Dodge

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SI	2	8	10	16	.7	<2	<2	36	.12	<5	<10	<4	<2	174	<.4	<5	<5	2	6.66	.012	3	6	.14	155	.03	1.41	10.61	.21	4	81	2	3	<2	<1	<1	
C 118689	3	12	42	20	<.5	15	12	141	.61	42	<10	<4	<2	15	<.4	<5	<5	6	.07	.006	2	15	.09	24	.02	.65	.17	.11	<4	2	<2	<2	<2	1	<1	
C 118690	<2	55	<5	146	<.5	38	22	1427	5.20	<5	<10	<4	16	1436	.5	<5	103	61	8.81	.047	60	86	1.19	312	.38	9.84	1.11	1.59	48	9	36	25	11	30	14	
C 118691	2	18	35	5	<.5	<2	<2	147	.87	6	<10	<4	3	15	.4	<5	<5	<2	.32	.049	2	6	.03	59	.01	7.02	2.79	2.95	16	10	10	4	25	6	1	
C 118692	<2	211	<5	69	<.5	72	68	885	6.02	<5	<10	<4	4	422	.4	<5	<5	190	3.94	.042	16	185	3.31	1009	.57	6.99	1.68	.87	4	4	10	23	9	3	29	
C 118693	3	6	<5	<2	<.5	2	<2	39	.55	14	<10	<4	<2	3	<.4	<5	7	<2	.02	.002	<2	9	.01	7	.01	.08	.02	.02	<4	<2	<2	<2	<2	<1	<1	
C 118694	<2	33	5	16	<.5	27	17	95	1.57	114	<10	<4	2	39	<.4	<5	<5	36	.13	.037	10	18	.34	36	.13	1.95	.18	.20	<4	2	3	4	4	1	4	
C 118695	<2	16	<5	33	<.5	70	41	101	4.14	>9999	<10	<4	16	369	<.4	<5	7	64	.86	.043	32	101	1.22	252	.51	6.56	1.17	1.14	5	10	37	18	16	11	11	
C 118696	<2	140	11	42	<.5	11	20	624	8.39	47	10	<4	12	517	<.4	<5	77	77	3.82	.037	41	78	1.75	1295	.31	7.03	1.00	2.59	47	11	41	24	10	3	10	
C 118697	<2	144	6	52	<.5	34	19	506	3.70	62	<10	<4	11	239	<.4	<5	11	68	5.11	.039	35	82	1.34	1336	.41	8.16	.85	2.67	<4	7	15	21	12	4	12	
RE C 118697	<2	150	11	50	<.5	34	18	507	3.72	63	<10	<4	10	245	<.4	<5	11	70	5.17	.042	35	82	1.37	1395	.42	8.69	.86	2.71	<4	7	16	22	13	4	12	
C 118698	<2	89	13	46	<.5	11	13	555	5.63	<5	11	<4	10	499	<.4	<5	86	68	4.41	.034	39	74	1.74	976	.30	6.52	.85	2.35	11	9	22	18	8	2	9	
C 118699	<2	229	15	36	<.5	15	19	500	11.47	<5	<10	<4	10	477	<.4	<5	203	86	2.76	.047	31	83	1.46	172	.32	7.26	1.22	2.44	44	12	42	22	12	3	10	
STANDARD DST5	13	147	30	166	<.5	32	16	1087	4.14	23	10	<4	7	374	5.3	7	6	118	2.48	.113	24	246	1.21	692	.43	7.13	1.83	1.49	10	47	7	14	9	2	13	

GROUP 1E - 0.25 GM SAMPLE DIGESTED WITH HClO4-HNO3-HCL-HF TO 10 ML. UPPER LIMITS - AG, AU, W = 200 PPM; MO, CO, CD, SB, BI, TH & U = 4,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM. DIGESTION IS PARTIAL FOR SOME MINERALS & MAY VOLATIZE SOME ELEMENTS, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

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GEOCHEM PRECIOUS METALS ANALYSIS



Dodge, Jim File # A302711R

Box 31013 MPO, Whitehorse YT Y1A 5P7 Submitted by: Jim Dodge

SAMPLE#	Au** ppb
C 118689	2
C 118690	85
C 118691	3
C 118692	5
C 118693	72
C 118694	<2
C 118695	23
C 118696	139
C 118697	12
C 118698	178
C 118699	362
STANDARD AU-R	498

GROUP 3B - FIRE GEOCHEM AU - 30 GM SAMPLE FUSION, DORE DISSOLVED IN AQUA - REGIA, ICP ANALYSIS. UPPER LIMITS = 10 PPM.
- SAMPLE TYPE: ROCK PULP

DATE RECEIVED: OCT 8 2003 DATE REPORT MAILED: *Oct 10/2003* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

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852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

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GEOCHEMICAL ANALYSIS CERTIFICATE

Dodge, Jim File # A302286

Box 31013 WFO, Whitehorse YT Y1A 5P7 Submitted by: Jim Dodge



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Mt	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	Al	Na	K	W	Zr	Sn	Y	Nb	Be	Sc	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SI	<2	22	13	17	<5	3	<2	39	.11	8	<10	<4	2	166	<4	<5	<5	2	6.91	.012	3	4	.13	151	.02	1.20	10.21	.20	<4	91	4	3	<2	<1	<1	
C 118679	<2	37	18	27	<5	2	<2	97	.93	18	16	<4	10	26	<4	<5	<5	7	.13	.052	6	3	.05	135	.05	4.25	1.51	2.31	4	5	9	11	12	2	2	
C 118680	4	10	<5	7	.5	3	<2	50	.40	6	13	<4	4	11	<4	6	<5	5	.04	.015	2	8	.03	79	.02	1.55	.22	1.15	5	4	4	2	4	1	<1	
C 118681	<2	33	18	28	<5	2	<2	70	.73	7	<10	<4	11	44	.4	<5	5	2	.21	.072	9	<2	.04	374	.05	5.65	1.70	3.50	4	5	19	20	14	2	3	
C 118682	<2	91	14	58	<5	23	13	513	5.35	<5	<10	<4	12	715	.7	<5	20	68	5.73	.045	61	77	1.55	306	.39	9.72	1.01	1.70	<4	6	19	25	9	3	13	
C 118683	<2	3	13	36	<5	30	10	106	6.34	>9999	<10	<4	12	312	.6	<5	<5	55	.33	.023	65	44	1.11	174	.17	5.73	.59	1.45	7	2	21	15	5	5	9	
C 118684	2	12	6	25	<5	10	3	96	1.73	338	<10	<4	4	101	<4	<5	6	26	.11	.005	14	26	.50	59	.11	2.97	.34	.34	5	4	7	3	3	2	4	
C 118685	2	6	5	12	<5	4	5	60	3.12	>9999	<10	<4	3	57	<4	<5	18	15	.69	.003	8	15	.22	188	.05	1.29	.10	.12	<4	4	6	4	4	1	2	
C 118686	4	11	6	9	<5	6	3	338	1.03	193	<10	<4	<2	238	<4	<5	<5	7	2.56	.006	7	20	.19	28	.03	1.08	.11	.16	7	3	3	4	2	1	1	
RE C 118686	4	12	<5	9	<5	6	3	325	.97	158	<10	<4	2	230	<4	<5	<5	8	2.49	.006	6	18	.19	27	.02	1.04	.10	.18	11	3	3	4	2	<1	1	
C 118687	<2	92	8	45	<5	27	10	700	4.06	160	<10	<4	10	605	.5	<5	<5	74	2.08	.029	25	87	1.05	888	.36	7.89	2.68	1.37	<4	2	18	18	15	8	10	
C 118688	3	26	8	49	<5	32	12	1194	2.13	22	<10	<4	5	97	<4	<5	<5	56	.86	.028	20	51	.75	1982	.17	3.68	.53	1.78	<4	2	6	12	4	2	8	
STANDARD DST4	7	123	37	173	.5	38	14	965	3.80	25	<10	<4	5	233	5.9	5	5	126	1.45	.697	27	270	.90	1012	.37	6.24	1.76	1.82	6	52	4	14	9	3	9	

GROUP 1E - 0.25 GM SAMPLE DIGESTED WITH HClO4-HNO3-HCl-HF TO 10 ML. UPPER LIMITS - AG, AU, W = 200 PPM; MO, CO, CD, SB, BI, TH & U = 4,000 PPM; CU, PB, ZN, MT, MN, AS, V, LA, CR = 10,000 PPM. DIGESTION IS PARTIAL FOR SOME MINERALS & MAY VOLATIZE SOME ELEMENTS, ANALYSIS BY ICP-ES.
- SAMPLE TYPE: ROCK R150 60C Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: JUN 30 2003 DATE REPORT MAILED: July 9/03 SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

P. 02

FAX NO. 6042531716

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GEOCHEM PRECIOUS METALS ANALYSIS



Dodge, Jim File # A302286R
Box 31013 MPQ, Whitehorse YT Y1A 5P7 Submitted by: Jim Dodge

SAMPLE#	Au** ppb
C 118679	3
C 118680	2
C 118681	3
C 118682	39
C 118683	84
C 118684	2
C 118685	439
C 118686	4
C 118687	10
C 118688	2
STANDARD AU-R	498

GROUP 3B - FIRE GEOCHEM AU - 30 GM SAMPLE FUSION, DORE DISSOLVED IN AQUA - REGIA, ICP ANALYSIS. UPPER LIMITS = 10 PPM.
- SAMPLE TYPE: ROCK PULP

DATE RECEIVED: OCT 8 2003 DATE REPORT MAILED: *Oct 10/2003* SIGNED BY *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

YMIP 2003

Tourmaline
Breccia

Photos #2 & #3



Photo #1 Area "A"
West Facing Slope



PHOTO #2
View Southeast from West Facing Sloope Area 'A'

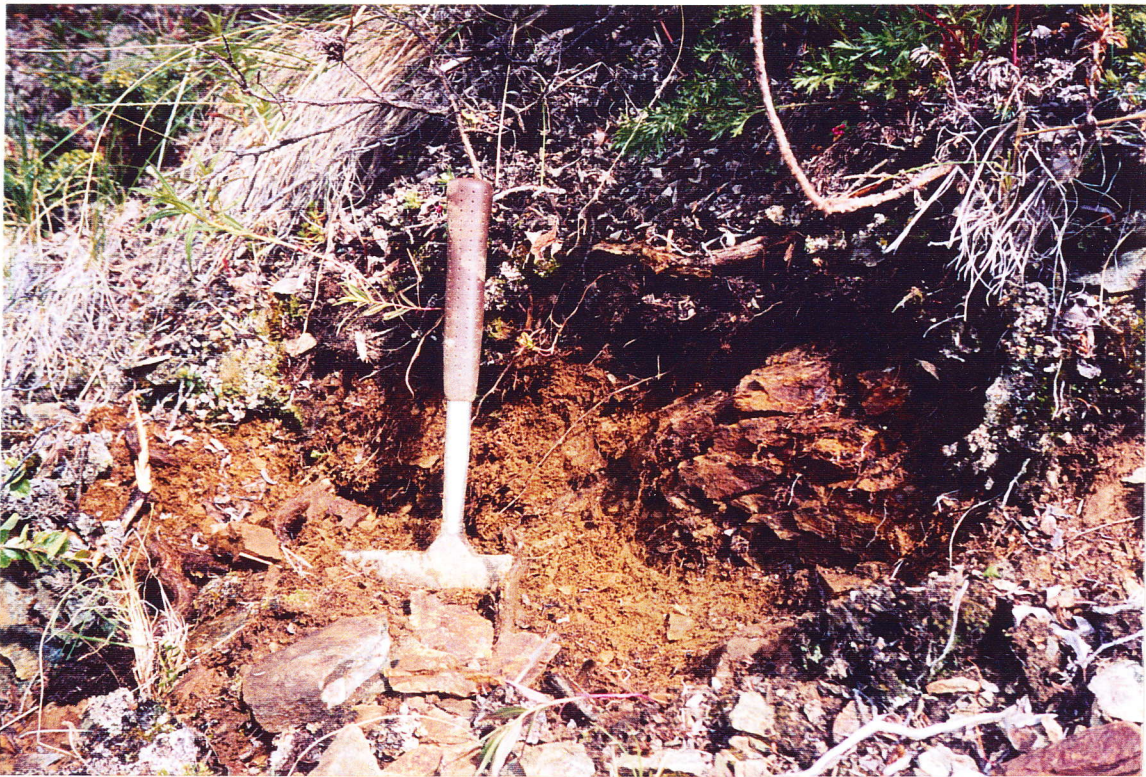


PHOTO #3
Sampling Pyritic Schist Area "A" near Photo #2

Harris
**EXPLORATION
SERVICES**

MINERALOGY AND GEOCHEMISTRY

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Report for: James Dodge,
Box 31013 RPO,
WHITEHORSE,
Yukon Y1A 5P7

Report 030420

August 20, 2003

SAMPLES

2 pieces of rock from a vein outcrop were submitted for petrographic examination. The two pieces differ somewhat in appearance (one being dominantly quartz, and the other containing major proportions of a dark mafic mineral). A separate polished thin section was prepared from each.

Examination shows that they are actually made up of the same minerals in different proportions, and observations on the two sections are combined in a single description.

DESCRIPTION

Estimated mode

Section A

Quartz	85
Tourmaline	15
Rutile	trace
Arsenopyrite	trace
Scorodite?	trace

Section B

Quartz	40
Tourmaline	58
Rutile	trace
Mineral X	2
Pyrite	trace
Limonite	trace

Section A consists dominantly of quartz, as a varigranular mosaic of anhedral grains, 0.05 - 1.0 mm in size. The quartz shows strong strain polarization and partial grain elongation, and grain boundaries which are diffuse and/or the locus of small-scale granulation - all features of cataclastic deformation.

The principal accessory is tourmaline, as thin, anastomosing wisps and irregular bands. The tourmaline is an olive brown variety, and its form ranges from strings of euhedral grains 0.1 - 0.5 mm in size, to minutely felted aggregates of acicular crystals.

The tourmaline bands at one end of the section are oriented parallel to the grain elongation of the quartz, but at the other are mainly discordant to it.

The only other constituents are scattered flecks of rutile (mainly associated with the tourmaline wisps); one or two small, euhedral grains of probable arsenopyrite - now more or less strongly corroded and altered; and occasional hairline veinlets of a minutely felted, pale brown material. The latter could be scorodite formed by redistribution of As from the breakdown of arsenopyrite.

Section B is likewise composed essentially of quartz and tourmaline, but in this case the tourmaline is mainly of minutely fine-grained, compact form, and is much more abundant. The two constituents form an intimate intergrowth, with quartz grains and clumps enclosed within streaks and patches of compact tourmaline, or forming irregular/elongate, varigranular segregations between tourmaline concentrations. As in Section A, the quartz typically shows strong deformational/recrystallization features.

Traces of rutile occur as sporadic disseminated flecks in the tourmaline, and the slide also incorporates rare specks of sulfides. In this case the latter appear to be pyrite rather than arsenopyrite, and are more or less strongly oxidized to limonite.

Cross-cutting veinlets of Mineral X (a pale brown, minutely felted material similar in appearance to that classified as possible scorodite in Section A) are relatively prominent, ranging from 0.05 - 1.0 mm or so in thickness. These are hard (not scratched by steel), so cannot be scorodite (which has a hardness of only 3.5 - 4). The physical and optical properties of this constituent suggest that it could possibly be prehnite.



J.F. Harris Ph.D.