Table 1. Carbon, Oxygen and Hydrogen Isotope Data for Babine Lake area veins

Bell Deposit (data from Zaluski et al., 1994)

Sample	Description	Mineral	Alteration	$\delta^{18}O$ (‰)	$\delta^{13}C$ (‰)	$\delta DH_2O(FI)$ (‰)
B2	qtz vein	qtz	phyllic			-130
B4	qtz+py+cpy+ca vein	qtz	phyllic	8.2		-111
		ca	phyllic	3.3	-4.1	
B8	qtz vein	qtz	phyllic	8.5		-101
B66	qtz+py+cpy+ca vein	qtz	phyllic	7.7		-113
		ca	phyllic	3.9	-3.7	

Morrison Deposit

Sample	Description	Mineral	Alteration	$\delta^{18}O$ (‰)	$\delta^{13}C$ (‰)	$\delta DH_2O(FI)$ (‰)
M25-93'	qtz vein	qtz	potassic	8.8		-116±4 (2)
M29-362.5'	qtz vein	qtz	potassic	8.2		-135±3 (2)
M30-147'	ca vein	ca	argillic	5.5±0.1 (2)	-0.9±0.0 (2)	-153±5 (2)
M34-274'	dol breccia	dol	argillic	17.4±0.1 (2)	1.2±0.1 (2)	-142±7 (2)
M36-384'	dol+py+cpy vein	dol	propylitic	14.2±0.0 (2)	0.3±0.1 (2)	-119±8 (2)
M44-130'	ca+py+cpy vein	ca	propylitic	11.6±0.2 (2)	-3.3±0.0 (2)	-122±5 (2)

Dorothy Deposit

Sample	Description	Mineral	Alteration	$\delta^{18}O$ (‰)	$\delta^{13}C$ (‰)	$\delta DH_2O(FI)$ (‰)
D24-157'	qtz+gyp+ca	qtz	potassic	9.1±0.1 (2)		-100±4 (2)
	+cpy±py vein	ca	potassic	6.1±0.1 (2)	-5.2±0.0 (2)	
D28-261'	qtz vein	qtz	potassic	10.6		-118±1 (2)

Nakinilerak (Nak) Lake Prospect

Sample	Description	Mineral	Alteration	$\delta^{18}O$ (‰)	$\delta^{13}C$ (‰)	$\delta DH_2O(FI)$ (‰)
NL10-86'	ca+cpy+sph breccia	ca	argillic	7.5	-1.7	-139
NL18-382'	qtz vein	qtz	potassic	7.8±0.3 (3)		-115
NL21-338'	qtz vein	qtz	potassic	9.2±0.1 (2)		-116±2 (2)

Hearn Hill Prospect

Sample	Description	Mineral	Alteration	$\delta^{18}O$ (‰)	$\delta^{13}C$ (‰)	$\delta DH_2O(FI)$ (‰)
HH89-6-94'	stockwork qtz vein w/	qtz	potassic	8.9		-110
	adjacent ca breccia	ca	argillic	8.2±0.2 (2)	-1.7±0.1 (2)	-138
HH90-1-105'	ca+qtz breccia vein	qtz	argillic	9.7		
		ca	argillic	16.1±0.0 (2)	0.2±0.0 (2)	-152±5(3)
HH90-1-205'	qtz filled breccia	qtz	argillic	8.9±0.1 (2)		-152±1 (2)
HH90-1-482'	stockwork	early dol	propylitic	9.2±0.1 (2)	0.1±0.1 (2)	-129±5(2)
	dol+ca+cpy+py vein	late ca	argillic	9.6	-1.1	-153±1(2)
HH90-2-282'	stockwork ca+py+qtz	qtz	propylitic	11.9		
	vein	ca	propylitic	14.5±0.0 (3)	-3.3±0.1 (3)	-118±8(3)

Wolf Copper Occurrence

Sample	Description	Mineral	Alteration	$\delta^{18}O$ (‰)	$\delta^{13}C$ (‰)	$\delta DH_2O(FI)$ (‰)
W1-192'	qtz+dol vein	qtz	potassic	14.2±0.3 (2)		
		dol	potassic	16.5	-3.0	-100±2 (2)
W2-125'	qtz vein	qtz	potassic	10.2±0.2 (2)		-120
W4-410'	qtz vein	qtz	¿argillic?	11.9±0.2 (2)		-151
W6-304'	qtz+py+cpy vein	qtz	potassic	11.0±0.5 (2)		-112
W6-361'	qtz+ca vein	qtz	sericite-	10.1		
		cc	carbonate	10.6	-2.2	-132±0 (2)

Regional Veins Associated with Babine Intrusions

Sample	Description	Mineral	Alteration	$\delta^{18}O$ (‰)	$\delta^{13}C$ (‰)	$\delta DH_2O(FI)$ (‰)
93-052-2	ca vein in shrd rhyd	ca	unaltered	9.3±0.0 (3)	-3.3±0.0 (3)	-94±2(2)
RB867	ca+gyp vein in Hzltn	ca	unaltered	9.4	-3.3	-101
94-004B	ca vein in rhyd	ca	unaltered	12.1	-0.3	-147
94-015	ca vein in Hzltn	ca	unaltered	3.3	-3.8	-110
94-023B	qtz vein in Topley	qtz	unaltered	10.2		-150

Mineral name abbreviations: ca = calcite, cpy = chalcopyrite, dol = dolomite, gyp = gypsum, py = pyrite, qtz = quartz, sph = sphalerite. Rock name abbreviations: shrd rhyd = sheared rhyodacite, rhyd = rhyodacite, Hzltn = Hazelton Formation volcanic rocks, Topley = Topley granite.

$\delta^{18}O$ and $\delta DH_2O(FI)$ values are reported relative to standard mean ocean water (SMOW) with analytical uncertainties of ±0.1‰ and ±5.0‰, respectively. $\delta^{13}C$ values are reported relative to Peedee Belemnite (PDB) with analytical uncertainty of ±0.1‰. See Zaluski et al. (1994) and Nesbitt and Muehlenbachs (1995) for further details of analytical procedures. The number of duplicate analyses are given in parenthesis.