

DRILL HOLE RECORD

822248

093K/14

PROJECT NAME : <u>Mt. Sidney Williams</u>		DATE STARTED (M/D/Y): <u>08/17/91</u>		DIRECTIONAL DATA: A = Acid Test L = Light Log					M = Multishot T = Tropari	
HOLE NUMBER : <u>MSW-91-3</u>		DATE COMPLETED (M/D/Y): <u>08/18/91</u>		DEPTH (m)	TYPE A/L/M/T	ASTRONOMIC AZIMUTH	DIP	FLAG	COMMENTS	
LOCATION : <u>Upper Zone</u>		DATE LOGGED (M/D/Y): <u>08/19/91</u>								
PROJECT NUMBER : <u>671</u>		UNITS (F/M) : <u>M</u>								
CLAIM NUMBER :										
PLOTTING COORDS	GRID : <u>estimated</u>	ALTERNATE COORDS	GRID : <u>pad 90-7</u>							
	NORTH : <u>213.00 S</u>		NORTH : <u>2+13 S</u>							
	EAST : <u>102.00 E</u>		EAST : <u>1+22 E</u>							
	ELEV : <u>1493.00 m</u>		ELEV : <u>-----</u>							
COLLAR BRNG	GRID : <u>094° 00' 00"</u>	COLLAR SURVEY (Y/N) : <u>N</u>								
	ASTRONOMIC : <u>094° 00' 00"</u>	RQD LOG (Y/N) : <u>N</u>								
	COLLAR DIP : <u>-45° 00' 00"</u>	PULSE EM SURVEY (Y/N) : <u>N</u>								
CONTRACTOR : <u>S.T. Thomas</u>		LOGGED BY : <u>A.R. Hill</u>								
CORE STORAGE : <u>on site</u>		START DEPTH : <u>0.0</u>								
CASING : <u>pulled</u>		FINAL DEPTH : <u>81.4</u>								
PLUGGED (Y/N) : <u>N</u>										
HOLE SIZE : <u>BDBGM</u>										
PURPOSE/COMMENTS : <u>To test beneath the creek in the "Upper Zone", from the same pad as 90-7.</u>										

HOLE NO. MSW-91-3

LOGGED BY A. Hill

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
0.0 to 3.0	<CSG/OB>							
3.0 to 3.5	<SIL HARZ>			Light buff to orange coloured matrix with 15% rusty brown spots (5mm-1cm). Spots also hematitic and definitely relict nodules from harzburgite. Core is very hard to scratch.		Pervasive silicification although it contains no veinlets. Only very, very trace malposite colouring at 3.4m. Possibly overprinting of silica on carb listwanite.	Very magnetic spots only. Trace rusty pyrite also in spots. Very peculiar, weathered looking rock with <u>no</u> grey patches.	Recovery: 3.0-6.1 = 85% 6.1-7.6 = 67% (broken and ground) 7.6-9.1 = 95%
3.5 to 6.7	<CARB-TALC ALT>			Light to dark green matrix with white to hematite stained spots (5mm-1.5cm). Patchy and fracture controlled limonite also.		Pervasive serpentine mostly altered to talc and carbonate. Core is scratchable and stains well. Recovery is poor as core is weathered and broken.	Trace py in uncommon dark spots. Weakly magnetic.	

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
6.7 to 16.0	SIL-CARB LISTWAN			<p>Strong silicified listwanite, interspersed with patchy carb/qtz and carb/talc facies.</p> <p>Detail log:</p> <p>6.7-9.1: sil/carb with 5% mariposite and grey patches. Estimate 3% pyrite, 1% aspg, mostly over first meter. Relict nodules are bleached, mariposite green, or orange.</p> <p>9.1-12.0: predominantly light green matrix with white nodules, talc-carbonate listwanite, with minor hem. stained nodules. Short 2-3cm intervals of sil. enveloping fractures at:</p>	25°	<p>Silicification, carbonatization, and talc alt. of serpentized hornburgite, (in decreasing order of abundance) related to anastomosing structure expressed as a fracture set at about 25 degrees to core axis.</p>	<p>Minor sulphides restricted to most silicified portions</p>	<p>Recoveries:</p> <p>9.1-12.2 = 95%</p> <p>12.2-14.6 = 80% due to limonitic fractures + withrg.</p> <p>14.6-16.8 = 90% ditto</p> <p>16.8-18.3 = 98%</p> <p>Note: badly broken core from 14.0 to 14.6 with 30% core loss due to limonitic fracturing at all orientations.</p>

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
				<p>12.0-16.0: mostly silicified listwanite, but with talc-carb-limonite on fractures that cause core to be badly broken. Mariposite common, light ghosted nodules. Best sulphides: +15.5-16.0 of (3% py, 1% ospy) with minor acicular needles.</p>				"Type 7 (4, 6) Listwanite"
16.0 to 16.7	<SL FAULT BX>			<p>Sharp contact at: Angular clasts of type 7 listwanite and quartz from .1mm to 7mm, in a milled up matrix, almost mylonitic. Lower contact is broken.</p>	25	pervasive sil. Core is an orange colour throughout.	Trace dissem pyrite only.	

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
16.7 to 17.6	<ALT'D NORITE>	-		Upper contact broken, lower contact at 5' (although slightly irregular). Very well disguised by limonite staining, broken core, pervasive carb, and even patchy silicification. Aphanitic chill margin from 17.4-17.6, is stained olive to rust coloured. Remainder is bleached and stained with relict fine to med. diabasic texture.	20°	Pervasive carb and patchy sil and limonite stained throughout.	"Spider-web" fracture filling fine pyrite over first 15cm. (3% py). Only trace dissem. py afterwards. <u>Not</u> magnetic.	Very well disguised.
17.6 to 20.0	<CARB-TALC +/- SIL HAZ>			Predominantly light green carb-talc matrix with light to dark grey nodules. Limonite stained from 18.6 to 20.0 m.		Pervasive carb- talc with thin enveloping sil'n around fractures at 20 degrees. Very trace mariposite.	11% dissem. py mostly in "spots". A few grey patches in unaltered areas, with possible trace v.f.g. aspy.	Recovery: 18.3-20.7 = 98% "Type 4 (+/-6) Listwanite"

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
20.0 to 21.9	<TALC-CARB LISTW>			Orange, rust stained, with intense "hairlike" talc, wavy, at about: occupying fractures. Matrix is pervasively carbonatized. Igneous (harzburgite?) textures all but destroyed, with rare mariposite pseudomorphing nodules.	25°	Type 4 alteration (good example).	Trace pyrite disseminated, and now oxidized.	Very fractured core with some black staining from 21.7-21.9m. Recovery: 20.7-23.5 = 95%
21.9 to 27.3	<NODULAR HARZ + CARB>			Gradational weakening of above alteration enables recognition of nodular immiscibility textures (all stained orange) in an orange carb-talc to serpentine matrix.		patchy talc-carbonate alteration, weakening downhole. Black to dark green serpentine proportion increases to 60% by EDI.	Trace accessory py and poss. po. Moderately magnetic.	Recovery: 23.5-24.7 = 95% 24.7-26.5 = 93% 26.5-29.6 = 98%

FROM TO	ROCK TYPE	COLOUR	GRAIN SIZE	TEXTURE AND STRUCTURE	ANGLE TO CORE AXIS	ALTERATION	SULPHIDES	REMARKS
27.3 to 81.4 End of hole.	(HARZBURGITE)			<p>Nodular harzburgite with a black serpentine matrix down to about 47.0m. Nodules are rounded 'immiscibility' features, light grey to patchy orange (up to 29m).</p> <p>From 29.0m downhole the nodules are more crystal like and a few pyroxene cores are preserved. Serpentine is strong but assoc. with fractures mainly to EOH. Crude mantle layering:</p>	35° to 55°	<p>Strong serpentine weakening to moderate fracture controlled downhole from about 50m to EOH.</p> <p>Minor dunite bands about 30cm thick, are now sugary serpentine with 5-10mm magnetite patches. Gradational layering expressed by cumulates and concentrations of nodules (5mm-15mm)</p>	<p>Trace access py (± po) and magnetite.</p> <p>Very magnetic interval.</p>	<p>Recoveries:</p> <p>29.6 - 32.6 = 98%</p> <p>32.6 - 33.5 = 85% minor bleached flt bx.</p> <p>33.5 - 37.8 = 95%</p> <p>37.8 - 39.6 = 83%</p> <p>39.6 - 42.7 = 100%</p> <p>42.7 - 45.7 = 90%</p> <p>45.7 - 48.8 = 65% (broken core, talcy flt bx zone)</p> <p>48.8 - 51.8 = 85%</p> <p>51.8 - 53.6 = 100%</p> <p>53.6 - 56.1 = 100%</p> <p>56.1 - 57.6 = 80%</p> <p>57.6 - 60.4 = 100%</p> <p>60.4 - 63.4 = 100%</p> <p>63.4 - 65.5 = 85%</p> <p>65.5 - 68.3 = 90%</p> <p>68.3 - 81.4 = 95%</p> <p>END OF HOLE.</p>

ASSAY SHEET

Mo

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm. T Ag	gm. T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	AS ppm	Ba ppm	Sb ppm	Ag ppm	Au ppm	
			Cu	Zn																				
98198	3.0	3.5			0.5																			2
98199	3.5	6.7			3.2																			1
98200	6.7	7.6			0.9																			23
98201	7.6	9.1			1.5																			63
98202	9.1	10.2			1.1																			18
98203	10.2	12.0			1.8																			11
98204	12.0	13.0			1.0																			161
98205	13.0	14.6			1.6																			192
98206	14.6	15.5			0.9																			400
* 98207	15.5	16.0			0.5				5.46	* FIRE ASSAY *														4910
98208	16.0	16.7			0.7																			341
98209	16.7	17.6			0.9																			145
98210	17.6	18.1			0.5																			1
98211	18.1	19.2			1.1																			350
98212	19.2	20.0			0.8																			286
98213	20.0	20.8			0.8																			482
98214	20.8	21.9			1.1																			420
98215	21.9	23.4			1.5																			6
98216	23.4	24.9			1.5																			3
98217	24.9	26.1			1.2																			12

Per assay

MS111-91-3

ASSAY SHEET

Mo

Sample Number	From (m)	To (m)	Estimate		Length (m)	% Cu	% Zn	% Pb	gm. T Ag	gm. T Au	% SiO ₂	% TiO ₂	% Na ₂ O	% MgO	% Fe	PPM Cu	PPM Zn	PPM Pb	AS ppm	Ba ppm	Sb ppm	Ag ppm	Au ppm
			Cu	Zn																			
98218	26.1	27.3																					2
19	27.3	29.3																					15
20	29.3	32.3																					1
21	32.3	35.1																					2
22	35.1	38.3																					20
23	38.3	41.4																					19
24	41.4	44.3																					1
98225	44.3	45.8																					1
26	45.8	48.4																					1
27	48.4	51.8																					1
28	51.8	53.8																					4
29	53.8	56.8																					3
30	56.8	59.8																					1
31	59.8	62.8																					7
32	62.8	65.8																					1
33	65.8	68.8																					7
34	68.8	71.8																					13
98235	71.8	74.8																					12
36	74.8	77.8																					2
37	77.8	79.6																					1

