R. V. KIRKHAM

DRILL HOLE LOG

LOCATION: 185 m. along azm 340° from K87-1

HOLE NO.: K-89-10 PAGE NO.: 1 of 7.

AZIM.: 170°
INCLINATION: -70°
STARTED: Oct 4, 1989
COMPLETED: Oct 6, 1989

ELEV.:
LENGTH: 231.34 m
CORE SIZE: BQ Thin Wall

SURVEYS

METEREAGE	AZIMUTH	INCLINATION	CORR.INCLIN.
100.00	----	-73°	-66.5°
231.34	----	-74°	-68.°

PROPERTY: Kitsault Lake
NTS 103P/14W
CLAIM NO.: Sault 3
SECTION:
LOGGED BY: DWT
DATE LOGGED: Oct 7, 1989
DRILLING CO.: Falcon
ASSAYED BY: Ecotech

PURPOSE: Test for down clip extension of Sulphide horizon North of K-87-1, K-88-8

CORE RECOVERY:

From	To	Description	Sample	From	To	Length	Pb	Zn	Ag	Sr	Au	As
0	2.13	Casing.										
2.13	19.03	Basaltic Lapilli-Ash Tuff/Ash Tuff - deep maroon, red brown, minor green - ash supported lapilli, Lapilli faint at top, coarser (to 8 cm) and more abundant (60%) towards base; matrix generally hematitic, magnetic; calcite blebs and veins common thru-out;										
	25.82	Basaltic Feldspar Porphyry Crystal Ash Tuff - green speckled white and dk. green. - massive, uniform thru-out feldspar phenocrysts (1-2 mm.; 20%); minor magnetic hematite thru-out; 5% mafic pheno's thru-out; calcareous;, calcite blebs observed; upper contact gradational.										
	35.07	Basaltic Lapilli-Ash Tuff - deep maroon, red, deep green with red hue. - massive ash supported (40%)) with coarse lapilli (to 10 cm) of various composition; matrix & Lapilli magnetic; calcite blebs thru-out (v. common in Lapilli); Epidote vein at 33.43 (3 cm; 30 to c.a.); upper contact gradational										

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From	To	Description	Sample	From	To	Length	Pb	Zn	Ag	Sr	Au	As
35.07	37.68	Red-Green Calcareous Basaltic Lapilli Ash Tuff - crowded lapilli (60%) with ash (20%) and calcite (20%) supporting matrix; lapilli magnetic; white calcite thru-out matrix; upper contact gradational.										
	42.37	Basaltic Feldspar Porphyry-Crystal Ash Tuff - as above (19.03 - 25.82) - epidote vein @ 41.12 (30° to c.a.) - upper contact gradational.										
	45.74	Basaltic-Ash Tuff - green (white) - brecciated ash tuff with calcite flooding (frags. to 10 cm) between 43.3 and 44.8; faint lapilli at base; upper contact gradational.										
	54.57	Basaltic Lapilli Ash Tuff - as above (25.83 - 35.07) - upper contact gradational.										
	59.05	Basaltic Ash Tuff/Lapilli-Ash Tuff - green, minor deep maroon - abundant fair lapilli (to 70%); upper contact gradational.										
	90.61	Basaltic Hetrolithic Lapilli-Ash Tuff - deep maroon; green, mottled; variously coloured lapilli; generally colourful; hetrolithic; lapilli (some zone by alteration); magnetic; ash supported 40-60%; top contact gradational (although broken core); calcitic toward base.										
90.61	99.60	Basalt Ash/Lapilli Ash Tuff/Crystal Ash Tuff - green, minor deep red/maroon - faint coarse angular lapilli (to 2.0 cm; 20%) generally green andesite, some red; feldspar crystal tuff at base; calcite veins thru-out; upper contact gradational.										

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From	To	Description	Sample	From	To	Length	Pb	Zn	Ag	Sr	Au	As
	111.00	Red Basaltic Lapilli Ash Tuff - red, deep maroon - as above (59.05 - 90.61) - matrix contains abundant hematite; upper contact gradational.										
	114.03	Green Basalt Lapilli Ash Tuff - green - as above, no hematite (ned).; upper contact gradational.										
	117.58	Andesite Lapilli Ash Tuff - green - coarse (to 10 cm.) Lapilli; ash supported (70%); weakly calcareous lapilli dark green andesite; upper contact gradational.										
	119.93	Andesite Ash Tuff with minor Carbonate Mudstone Laminae - green - laminated ash flows with minor carbonate horizons (85° to c.a.); thick ash flows (up to 40 cm); contacts sharp.										
	127.81	Andesite Lapilli Ash Tuff - as above (114.03 - 117.58)										
127.81	132.64	Diamictite - grey mottled - coarsens downward (frags to 5 cm); massive; upper contact sharp (60° to c.a.)	31202 31203	129.76 131.22	131.22 132.64	1.46 1.42	22 18	71 47	.2 .2	840 897	5 5	10 15
	134.41	Argillaceous Epiclastic Siltstone and Chert - dk grey - v. finely laminated (60° to c.a.) locally calcareous.										

From	To	Description	Sample	From	To	Length	Pb	Zn	Ag	Sr	Au	As
	141.30	Andesite Epiclastic Siltstone Ash Tuff - Lapilli Ash Tuff - pale grey green - generally faintly laminated (60° - 90° to c.a.); locally calcareous laminae; minor LAT flows; minor accretionary lapilli noted.										
	142.71	Diamictite/Epiclastic Sandstone - grey mottled - poorly laminated calcareous diamictite; epiclastic sdst. (141.80 - 142.30) with 2% disseminated coarse Py (to 2 mm); calcite breccia at top contact (60° to c.a.)	31223	141.80	142.30	0.50	14	97	<0.2	250	10	70
	147.86	Andesite Epiclastic Siltstone Ash/Lapilli Ash Tuff - as above (134.41 - 141.30) - top contact sharp (45° to c.a.)										
	150.56	Diamictite - grey, pale grey, mottled, paler grey downward. - coarsens downward, sulphate clasts common (to 3 cm); top contact sharp (60° to c.a.)										
150.56	157.52	Andesite Ash Tuff/Lapilli Ash Tuff - pale green - lapilli frags small (to 0.5 cm); flow banding evident (50° to c.a.) moderately calcareous; upper contact sharp (60° to c.a.)										
	161.02	Diamictite-Andesite Epiclastic Sandstone Lapilli Ash Tuff - pale green grey; grey. - fine diamictite, interlayed with thick epiclastic & minor LAT; internal contacts gradational to brecciated; upper contact sharp (60° to c.a.)										
	178.98	Diamictite - Chert - Faults - dark grey, grey - abundant (approx. 30 cm) cherty zones in diamictite;										

From	To	Description	Sample	From	To	Length	Pb	Zn	Ag	Sr	Au	As
		numerous calcite veins thru-out (notably in cherty horizons; thin epiclastic ash horizons common; broken core thru-out; Faults: 164.25 - 164.29 168.44 - 168.89 170.38 - 170.88										
	180.94	Dacitic (?) Lapilli Ash Tuff - pale green grey - non-calcareous; generally massive; 1-3% disseminated Py; Lapilli coaser towards bottom (to 1 cm) upper contact sharp (45° to c.a.)	31324 31225	178.90 179.80	179.80 180.94	0.90 1.14	4 6	102 95	<0.2 0.2	374 468	25 5	15 15
180.94	182.07	Diamictite - dk. grey - no coarse frags; moderate calcite; argillaceous with minor pale coarse sand sized frag. (2%) thu-out; upper contact brecciated.										
	182.42	Lithic Tuff(?) - mottled grey; green, dk. grey - crowded, clast supported angular cuspate frags of widely variable compositions; (felsic volc; argillaceous; chert; andesite); lass coarse at base; upper contact sharp (80° to c.a.)										
	185.52	Diamictite - Carbonate Mudstone - dk. grey; grey - interlayered fine to sand grained diamictite & massive liny mudstone; contacts indiscernable to sharp (70° to c.a.); generally massive										
	185.72	Fault - calcite comented fault breccia and gouge										

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From	To	Description	Sample	From	To	Length	Pb	Zn	Ag	Sr	Au	As
	186.87	Brecciated Mudstone - vein mented with calcite (minor qtz); coarsely but uniformly brecciated	31204	185.77	186.87	1.10	16	17	.4	973	10	160
	193.18	Carbonate Mudstone/Sulphate Laminate + Calc. Vein - grey banded; white. - poorly laminated limy mudstone with 10% sulphate lams. & minor (<1%) Py Lams. thu-out; calcite veins (0.3 - 2 cm; 15%) upper contact faulted; fault gouge (190.55 - 190.61)	31205 31206 31207 31208 31209	186.87 188.67 189.97 190.61 191.72	188.67 189.97 190.61 191.72 192.72	0.80 1.30 0.64 1.12 1.00	30 24 42 34 28	36 43 45 14 11	.8 1.0 .6 .6 .6	957 952 943 906 907	5 5 10 10 5	160 275 190 175 155
193.18	193.80	Fault - breccia and gouge with abundant calcite in mudstone	31210	192.72	193.18	0.46	368	519	.6	915	5	130
	195.57	Diamictite - as above (180.94 - 182.07) - coarsens at base.										
	199.57	Epiclastic Sandstone-Lapilli AshTuff - pale grey green - non-calcareous; argillite & felsic volc. clasts; upper contact gradational. Faults: 197.42 - 197.50 196.95 - 197.02	31211	100.46	200.98	1.41	120	.40%	1.4	968	5	85
	203.62	Carbonate Mudstone - dk grey, grey - faintly laminated (70° - 80° to c.a.); calcareous; upper contact sheared. Faults: 199.57 - 199.60 201.92 - 202.00 202.79 - 203.42	31212 31213	200.87 202.07	202.07 203.62	1.20 1.55	234 178	0.38% 0.26%	1.0 .2	983 479	5 10	300 240
	205.97	Carbonate Mudstone - Sulphate - Sulphide Laminate - dk.grey, grey banded	31214 31215	203.62 204.72	204.72 205.12	1.10 0.40	154 346	0.38% 1.22%	.6 .4	972 414	5 5	315 360

DRILL HOLE LOG

From	To	Description	Sample	From	To	Length	Pb	Zn	Ag	Sr	Au	As
		- poorly laminated to massive (80° to c.a.); 15% Sulphate lams. with minor Py-Zn lams.; well disseminated; Zn in last 40cm.; minor calcite veins	31216	205.12	205.97	0.85	404	0.94%	.2	544	10	320
	220.22	Diamictite	31217	205.97	206.97	1.00	134	0.27%	.2	592	10	110
		- dk grey, grey mottled	31218	208.52	210.02	1.50	164	0.53%	.2	951	5	145
		- abundant sulphate clasts, minor sulphide clasts thru-out; clast	31219	210.02	211.52	1.50	110	0.24%	.6	1170	5	200
		coarse (to 5 cm); calcareous fines towards base; minor poorly	31220	211.52	213.07	1.55	138	1571	0.4	1099	10	275
		laminated with sulphate	31221	213.07	214.47	1.40	112	706	0.4	990	15	275
			31222	214.47	215.50	1.03	108	1460	0.2	757	10	260
	231.35	Andesite Lapilli AshTuff - feldspar Porphyry										
		- green										
		- andesite lapilli (to 4 cm) thru-out; with zones of feld. porphyry texture in matrix; calcareous										
	231.35	End of Hole										