

1990
Rainbow
Drilling
824156

SUMMARY LOG - RDH-90-01

COLLAR: 89+25 N
93+75 E

ORIENTATION: 180/-45

ELEV: 975 m

0 - 6.4 m CASING

6.4 - 44.0 m QTZ-FSP PORPHYRY

9.9 - 15.8 m 2-5% py, mod silic'n + minor
qtz vnlts.

21.4 - 44.0 m 2-5% py, diss, vnlts and as
alt'n envelopeds adj to qtz-py
vnlts. Mod silic'n. Local
massive py/gal vns to 3 cm.

44.0 - 70.5 m SERPENTINE

Well foliated, local str talc
alt'n. Fault zones @ 55.3 - 56.0 m
and @ 64.1 - 64.4 m.

70.5 - 84.45 m FSP PORPHYRY

Mod clay alt'n and local silic'n,
up to 5% py. Mod-str epid alt'n @
78.5 - 82.0 m.

84.45 m END OF HOLE

PURPOSE: To test the Midway shear zone at a depth of about 15
metres below surface.

RESULTS: Intersected about 23 metres of altered qtz-fsp
porphyry, mineralized with pyrite and local massive
py/gal vns to 3 cm.

RDH-90-02: SUMMARY LOG, CONT...

114.0 - 127.9 m MICRODIORITE

127.9 - 138.3 m CONGLOMERATE (Brooklyn Sharpstone Congl??)
Clast supported with 80% angular clasts
up to 6 cm of: 50% gst, fng diorite,
30% chert, 15% limestone, minor arg +
mudstone. 1-2% interstitial py and
minor late qtz vnlt. Local silic'n in
mtrx.

138.3 - 141.1 m FSP PORPHYRY FLOW
2% fine diss py and py strngs.

141.1 - 142.0 m TERTIARY BIOTITE MONZONITE DYKE

142.0 - 154.57 m CONGLOMERATE (Brooklyn Sharpstone Congl??)
as in 127.9 - 138.3m. % of lst clasts
increases downwards. Rims of lst clasts
are skarnified to reddish garnet - 1-2
mm rims on clasts to 6 cm. Weak epidote
alt'n throughout.

145.9 - 148.0 m Str epidote alt'n of mtrx
and gst clasts. Local
str hem flooding.

154.57 m END OF HOLE

PURPOSE: To test the Midway Mine shear and associated alteration
at a depth of about 70 metres below the surface.

RESULTS: Intersected several zones of Qtz-Fsp Porphyry, clay
altered and silicified, and mineralized with up to 10%
pyrite locally. These intrusives appear to be flat
lying sheets, intruding along the foliation in the
serpentine, rather than "plugs" as previously believed.
A thick conglomerate (sharpstone?) unit was intersected
at the base of the hole, containing 1-2% interstitial
pyrite and skarnified limestone clasts.

RDH-90-03: SUMMARY LOG, CONT...

94.95 -100.61m FSP PORPHYRY

100.3 - 100.61 m Str perv silic'n + 2%
fine py.

100.61 m END OF HOLE

PURPOSE: To test the eastern extension of the Midway shear and alteration system at a depth of about 25 metres below the surface.

RESULTS: Intersected about 26 metres of Qtz-Fsp Porphyry at the top of the hole with local silic'n and bleaching and up to 5% pyrite.

SUMMARY LOG - RDH-90-04

COLLAR: 89+55 N ORIENTATION: 180/-60 ELEV: 1005 m
 94+55 E

0	-	3.05 m	CASING
3.05	-	6.6 m	QTZ-FSP PORPHYRY Mod perv clay alt'n, minor py. 5.9 - 7.7 m Fault zone
6.6	-	9.75 m	SERPENTINE Mod talc alt'n, local silic'n.
9.75	-	35.55 m	QTZ-FSP PORPHYRY Mod-str perv clay alt'n, local silic'n, minor py. 10.5 - 11.0 m Fault zone 11.7 - 12.0 m Fault zone 13.0 - 13.35m Fault zone, min qtz-py vning 18.4 - 19.0 m Fault zone, silic'd with qtz banding, 2-5% py. 24.7 - 34.4 m 5% py
35.55	-	43.8 m	SERPENTINE 39.0 - 43.8 m Str talc alt'n 41.0 - 41.7 m Fault zone 43.0 - 44.5 m Fault zone
43.8	-	58.1 m	FSP PORPHYRY - MICRODIORITE 43.8 - 48.6 m 2-5% py
58.1	-	79.8 m	TERTIARY BIOTITE MONZONITE DYKE
79.8	-	120.4 m	MICRODIORITE - FSP PORPHYRY 79.8 - 79.9 m Intensely serpentinized 93.0 - 93.7 m Bleached, str silic'n, 5% py 94.3 - 94.4 m Str silic'n, 5% py 113.5-120.4 m Mod-str perv silic'n, 5% py
120.4	-	122.8 m	SERPENTINE V. str perv silic'n + late qtz-py vnits, 2% py
122.8	-	134.4 m	FSP PORPHYRY 122.8 - 127.0 m Bx, str silic'n, 5% py, Fault zone 133.6 - 134.1 m Silic'd, Fault zone
134.4	-	136.7 m	CONGLOMERATE Brooklyn Fm

RDH-90-04: SUMMARY LOG, CONT...

136.7 - 151.6 m	TERTIARY BIOTITE MONZONITE DYKE
151.6 - 222.2 m	CONGLOMERATE Brooklyn Fm, Coarse conglom with 80+% angular clasts, avg 0.5 cm. Clasts are 40-60% chert, 40-60% gst, 10% mudstone, 10-20% lst.
151.6 - 156.4 m	3% py
159.0 - 164.0 m	Local str silic'n + late qtz-py vnlts, 2-3% py
165.8 - 168.2 m	Local str silic'n, min mariposite, 2-3% py
172.0 - 174.9 m	Silic'd, minor marip, 2% py
196.2 - 196.7 m	Fault zone, 5% py strngs
222.2 - 223.1 m	TERTIARY BIOTITE MONZONITE DYKE
223.1 - 224.08m	CONGLOMERATE
224.08	END OF HOLE

PURPOSE: To test the eastern extension of the Midway Mine shear zone and alteration system at depth.

RESULTS: Intersected about 25 metres of Qtz-Fsp Porphyry, clay alt'd and silic'd, with up to 5% py, near the top of the hole. Intersected over 70 metres of Brooklyn Fm Conglomerate at depth.

SUMMARY LOG - RDH-90-05

COLLAR: 89+00 N
95+60 E

ORIENTATION: 270/-45

ELEV: 967 m

0	-	9.45 m	CASING
9.45	-	27.9 m	SERPENTINE Local str talc alt'n. Cut by several narrow microdiorite dykes with str epid alt'n. 19.9 - 20.2 m Fault Zone
27.9	-	33.8 m	MICRODIORITE DYKE
33.8	-	38.0 m	SERPENTINE Mod talc alt'n.
38.0	-	40.0 m	MICRODIORITE DYKE Str chl/serp alt'n. 38.0 - 38.3 m Fault Zone 39.8 - 40.0 m Fault Zone
40.0	-	48.7 m	SERPENTINE Mod - str talc alt'n. Local hem rich bands. 47.4 - 49.45 m silic'd, bx fault zone
48.7	-	59.2 m	TERTIARY BIOTITE MONZONITE DYKE
59.2	-	65.36 m	SERPENTINE Local talc alt'n and silic'n. Contains fng greenstone dyke (?).
65.35	-	84.90 m	GREENSTONE Fng, pale green volc, locally grades into coarser grained subvolc. Contains minor conglom interbeds. 65.35 - 68.0 m Fault zone. Mod-str chl alt'n, minor py, bx with local gouge zones. 71.0 - 73.8 m Bx with minor py, maripos 82.5 - 84.9 m Str perv carb. Str chl/clay alt'n.
84.9	-	87.6 m	TERTIARY BIOTITE MONZONITE DYKE
87.6	-	96.15 m	GREENSTONE
96.15	-	103.6 m	DIORITE Prob subvolc equiv of greenstone above and below.

RDH-90-05: SUMMARY LOG, CONT...

103.6 - 104.9 m GREENSTONE

104.9 - 224.0 m CONGLOMERATE

Brooklyn Fm, generally green, clast supported conglom with 70-90% subangular clasts (sand to cobble size), averaging 0.5-1 cm in size. Clasts are 40-70% gst, 30-50% chert, 10-20% lst (locally showing garnet replacement). Grades into sandy or muddy bands.

122.0 - 123.0 Minor mariposite + py.

135.85- 137.3 Minor bleaching, silic'n + ep alt'n in mtrx. 2% py.

149.5 - 151.0 Weak bleaching, min qtz-py stringers.

167.3 - 168.0 Bleached, silic'd. Minor maripos, 5% py.

186.1 - 194.4 Bleached, silic'd with 5% epithermal qtz vns & flood zones. 1-2% marip, minor py.

202.8 - 208.1 Str perv epid alt'n.

209.0 - 210.6 Min qtz vns with py rich envelopes.

211.4 - 211.7 Bleached silic'd with minor epith qtz vning.

212.5 - 213.5 5% py

214.5 - 217.7 Fault zone.

224.0 - 226.4 m DIORITE DYKE

Mod chl alt'n, Prob older dyke intruding along fault, cut by later Tertiary dyke.

226.4 - 235.85 m TERTIARY BIOTITE MONZONITE DYKE

235.84 - 237.1 m DIORITE DYKE

237.1 - 240.8 m CONGLOMERATE

240.8 - 250.0 m MUDSTONE

Str perv ep and hem alt'n. Weak perv carb. 1% py. Well dev bedding at 45 degrees to CA, strat tops up.

250.9 - 271.33 m CONGLOMERATE

Min perv ep alt'n.

271.33 m END OF HOLE

SUMMARY LOG: RDH-90-05, CONT...

PURPOSE: To test for northeast trending structures, east of the Midway Mine, and to better define the geology in the mine area.

RESULTS: Intersected a thick sequence of Triassic Brooklyn Conglomerate (over 100 metres), with local strong epidote alt'n, pyrite, mariposite and rare epithermal qtz vnls.

SUMMARY LOG - RDH-90-06

COLLAR: 88+85 N
93+20 E

ORIENTATION: 270/-45

ELEV: 968 m

0	-	6.1	m	CASING
6.1	-	25.2	m	TERTIARY BIOTITE MONZONITE DYKE
25.2	-	30.2	m	QTZ-FSP PORPHYRY Mod perv clay/chl alt'n, 1-2% py
30.2	-	39.5	m	TERTIARY BIOTITE MONZONITE DYKE
39.5	-	90.15	m	QTZ-FSP PORPHYRY 5% qtz eyes, 25% coarse subhedral plag in fng grey-green mtrx.
41.1	-	45.5		Weak silic'n, perv clay-chl alt'n, 2% py, diss, vnltls, enveloped to 1 cm around vnltls.
45.5	-	49.7		Mod silic'n, 2-5% py
49.7	-	50.1		Bx, str silic'n, 5-10% py, Fault zone.
50.1	-	60.1		Bleached, silic'd with 5% py
61.0	-	61.5		Bleached, silic'd, 10-15% py with qtz in flood zones.
61.5	-	71.0		Bleached silic'd mtrx, 2% py
71.0	-	81.0		Mod silic'n, 1-2% py
82.9	-	83.0		Fault zone
90.15	-	93.90	m	SERPENTINE
93.0	-	93.90		Fault zone
93.9	-	105.7	m	TERTIARY BIOTITE MONZONITE DYKE
105.7	-	109.1	m	FSP PORPHYRY Local str clay-chl alt'n.
108.6	-	109.9		Fault zone
109.1	-	114.8	m	TERTIARY BIOTITE MONZONITE DYKE
114.8	-	142.15	m	MICRODIORITE - FSP PORPHYRY
119.5	-	121.2		Fault zone
131.7	-	135.0		Local str silic'n and bleaching
142.15	-	145.3	m	TERTIARY BIOTITE MONZONITE DYKE

RDH-90-06: SUMMARY LOG, CONT...

145.3 - 153.96 m FSP PORPHYRY - MICRODIORITE
Fng with 5% fine mafics (alt'd to chl),
locally 20-30% rem fsp visible. Locally
bx (crackle type).
147.3 - 148.3 Fault zone, bx, silic'd clasts
with py mtrx
148.3 - 153.75 Mod-str silic'n
153.75- 153.96 Bx, silic, 5% py

153.96 m END OF HOLE

PURPOSE: To test for northeast trending structures to the west
of the Midway Mine, and to better define the geology in
the mine area.

RESULTS: Intersected about 50 metres of Qtz-Fsp Porphyry,
silic'd and bleached with py mineralization for much of
this distance.

SUMMARY LOG - RDH-90-07

COLLAR: 89+00 N
92+10 E

ORIENTATION: 270/-45

ELEV: 975 m

0	-	6.1	m	CASING	
6.1	-	76.5	m	QTZ-FSP PORPHYRY	
		22.4	-	29.0	Weak silic'n and bleaching, tr py.
		35.1	-	37.3	Str clay alt'n and weak silic'n, 2% py.
		39.0	-	46.3	Str clay alt'n and weak silic'n, 2% py.
		59.3	-	59.6	Fault zone
		65.0	-	65.3	Fault zone
		68.2	-	76.5	Rusty, clay alt'd, local silic'n, bx and gouge zones. Major Fault zone.
76.5	-	82.9	m	SERPENTINE	
					Fault zone, v. str silic'n, tr mariposite.
82.9	-	86.8	m	KETTLE RIVER SEDIMENTS	
86.8	-	95.12	m	TERTIARY FSP-BI PHYRIC FLOW	
					Local str clay alt'n. Min chalcedony vning, minor py.
95.12	-	99.1	m	SERPENTINE	
					Intense silic'n, minor mariposite and py.
		95.12	-	98.3	Fault zone
99.1	-	100.61	m	QTZ-FSP PORPHYRY	
					Strongly alt'd + fault gouge. Fault zone.
100.61	-	127.6	m	SERPENTINE	
		100.61	-	106.0	V. str silic'n + chalc qtz flood zones and late qtz vnlt. Fault zone 104.88 - 105.7m.
		106.0	-	111.0	2% mariposite, intense silic'n and abund late white qtz vns to 1 cm.
		111.0	-	113.1	Silic'd, rusty, 5% mariposite.
		113.1	-	115.5	Intense silic'n and banded buff-grey qtz flood zones. Up to 30% mariposite.
		115.5	-	118.5	Str silic'n, 2% marip

RDH-90-07: SUMMARY LOG, CONT...

118.5 - 119.6 Silic'd, rusty, local gouge
and bx zones.
119.6 - 127.6 Str silic'n. 1-2% mariposite.

127.6 - 182.46 m QTZ-FSP PORPHYRY
Local pale grey bleached and clay alt'd
zones.
128.0 - 132.3 Mod clay alt'n, local str
bleaching, 2% py
132.3 - 133.6 Str bleaching
138.8 - 139.9 Bleached, perv silic'n, 2-3%
py
148.0 - 149.1 Bleached, silic'd, minor py.
Fault zone.
181.9 - 182.46 Weak perv chl/hem alt'n.

182.46 m END OF HOLE

PURPOSE: To test for NE trending structures west of the Midway Mine and to better define the geology in the mine area.

RESULTS: Intersected two zones of Qtz-Fsp Porphyry, 70 and 50 metres thick respectively, each with local bleaching, silic'n and clay alt'n and py mineralization. These two zones are separated by a major steeply dipping Tertiary fault, about 15 metres in width, below which is a complex sequence of Tertiary sediments and volcanics, porphyry and serpentine, locally intensely altered. This sequence is underlain by a 25 metre zone of strongly silic'd serpentine, with up to 30% mariposite, and local qtz flood zones.