

DIAMOND DRILL LOG

Company: SHAKWAK EXPLORATION CO. LTD. Hole No: 86-14
 Drilling Co: KLUANE DRILLING Project: Vesuvius Hill
 Started: 20 October 1986 Code: 312
 Completed: 21 October 1986 Location: NTS 105-D-6
 Grid Co-ordinates: 1+41.24N/13+54.20E
 Elevation: 1588.26 m Dip: -50°
 Azimuth: 230° Horizontal Advance: 48.02 m
 Depth: 74.67 m Vertical Depth: 57.20 m
 Core size: NQ Acid Test: 36.60 m - 47°30'
 Logged by: RR/CC 71.60 m - 46°15'

PRINCIPAL UNIT	SUB-UNIT	DESCRIPTION/NOTES
		Cased to 2.44 m. Casing removed.
0 - 3.05 m		Overburden.
3.05/74.67 m		Massive porphyritic andesite: purple-red colour, hematite pervasive, silicification generally strong. Jasper locally in areas of brecciation. Tabular plagioclase phenocrysts (2-3 mm), average 3-5%; show alteration to soft green-white (clay or sericite), occasional tiny grains of epidote. Mafic phenocrysts, tiny, inconspicuous, altered to hematite.
	3.05/8.96	Strongly vesicular: some areas also have plag. phenos. Heavy Jasper with strong silica + hematite flooding particularly in vesicular areas and areas of primary(?) brecciation.
	10.45/11.06	Breccia zone: sharp upper contact 55° to C.A. Clasts 2 mm to 2 cm. (Variably bleached and silicified andesite.) Sphericity 3 to 5, roundness 5 to 7. Abundant Jasper. Main structure parallel to core axis.
	12.86/13.47	Grey-pink breccia. Upper and lower contacts narrow gouge zones approx. 90° to C.A. Narrow area of finer-grained vesicular andesite (only moderately silicified). Clast size 1-4 mm, rarely to 2 cm. Sphericity 3 to 7; roundness 3 to 7. Matrix siliceous grey in colour. Rare softer pale pink areas to 1 cm, seem moderately clay altered, with minor hematite.
	13.84/17.07	Brown porphyritic andesite with dark grey and dark purple areas of incipient brecciation (sharp contacts between areas of different colour - note plag. phenos. in dark areas.) Few thin

PRINCIPAL UNIT	SUB-UNIT	DESCRIPTION/NOTES
		(1 mm) late quartz-calcite-orange carbonate(?) veinlets. Breccia matrix quartz-hematite with minor clay.
	17.07/19.66	Blue-grey coarsely porphyritic andesite-plag. phenos. 5% of rock, up to 5 mm. Mafic phenos. originally larger and more abundant than normal (average 2 mm and 1% of rock) - now altered to clay and hematite. Plag. phenos. softened - pale yellow-orange colour. Matrix fine-grained, less siliceous than normal - mostly quartz-clay-hematite. Minor local brecciation. Top unit contact sharp - 50° to C.A: lower contact in broken rock - seems gradational.
	22.50/31.87	Grey-pink andesite - medium to strong silicification; several zones of strong brecciation and widespread incipient brecciation. Andesite grey to pink, moderately porphyritic, tabular plagioclase phenocrysts, 2 to 4 mm long, moderately altered. Mafic phenocrysts common (1 mm or less), altered to hematite. Breccia zones matrix - supported, small numbers of large clasts (5 mm to several cm) in dark matrix with tiny clasts and crystal fragments (e.g. at 22.80 to 23.76) - contacts 50° to C.A. - breccia becomes crowded, clast-supported towards base and in narrow spaces between larger clasts. Zones of incipient brecciation are narrow (less than 1 cm to few cm wide), ramifying. Abundant small clasts, clast-supported, hematitic. Strong zone of bleaching, hematite flooding, upper contact 50° to C.A., lower contact gradational (26.65 - 27.45). Occasional narrow soft pink veinlets (clay + hematite?), few mm wide, rim clasts or at 25° to C.A. clasts in breccias seem local, except that small, strongly altered or bleached clasts are not identifiable.
	34.00/34.05	Pale brown clay gouge zone at 90° to C.A., in broken andesite.
	34.05/40.55	Dark purple-red hematitic andesite, similar to 22.50 - 31.87, with breccias, incipient brecciation, stronger silica-jasper-hematite flooding. Strong breccia zones at 36.30 - 38.00 and 38.52 - 39.52. (Upper and lower contacts: 15-20° to C.A.)
	40.55/74.67	Dark purple-red hematitic andesite, moderately porphyritic throughout. True brecciation almost absent but crackling and incipient brecciation widespread. Common silica flooding, as patches filling voids (and vesicles?) and pervasive replacements; dark grey colour with tiny grains of specular hematite. In these areas plag. phenos. are soft, greenish. Gouge zones at: 42.75: 1 cm wide, 55° to C.A. 46.30: 2 cm wide, 55° to C.A.

[illegible]