Appendix 2 Some published analyses of Manx rocks

Analyses from Dickson and Holland's paper:—on "An Examination of some Volcanic Rocks of the Isle of Man", in Proc. Liverpool Geol. Soc., vol. vi. (18S9), pp. 126–129.

Specimen' showing junction of microgranite dyke at Crosby with the slates.

"Analysis of Elvanite portion of specimen". "Sp. Gray. 2.72<ref>Mr. Hobson states that the sp. gray. of this rock is 2.62 (Quart. Journ. (eol. Soc., vol. xlvii., p. 439).</ref>

SiO ₂	74.39
Al ₂ O ₃	15.55
Fe ₂ O ₃	1.35
FeO	0.22
CaO	0.48
MgO	0.33
K ₂ O	2.14
Na ₂ O	3.79
Combined water	1.18
	99.43

"Analysis of the slaty portion of the rock at the point of function

0:0	40.00
SIO ₂	49.03
Al ₂ O ₃	24.83
Fe ₂ O ₃	3.68
FeO	5.57
MnO	0.26
TiO ₂	1.09
CaO	1.80
MgO	2.68
K ₂ O	5.09
Na ₂ O	2.96
Combined water	2.57
	99.56

"Not enough of the specimen remained to enable a satisfactory estimation of the carbonaceous matter to be made. P_2O_5 was detected in this specimen, but was not estimated, as also S.

"Thinking it would be interesting to have a specimen of the unaltered slate rock examined chemically so as to compare it with the rock near the point of junction, a specimen was kindly sent by Dr. Tellet of Ramsey, from Sulby, a place about 5 miles from Crosby".

"Analysis of unaltered Silurian from near Sulby. "Sp. Grav. 2.79.

SiO ₂	57.25
Al ₂ O ₃	21.51
Fe ₂ O ₃	1.30
FeO	5.11
MnO	0.48
TiO ₂	0.94
CaO	0.61

MgO	1.92
P ₂ O	0.30
S	0.12
K ₂ O	3.15
Na ₂ O	1.82
Combined water	4.32
	99.46

"Carbonaceous matter approximately 0.5 per cent.

"It seems remarkable that there should be 8 per cent. more silica in the unaltered than in the altered rock".<ref>As the specimens were from widely separated localities, the disparity commented on may only indicate that the Sulby rock was originally more sandy than the other.[G. W. L.]</ref>

"Specimen ['altered basalt'] from summit of Scarlet Stack. SD. Gray. 2.62<ref>Mr. B. Hobson re-determined the sp. grav. and found it to be 2.76. (Quart. Journ. Geol. Soc., vol. .civil., p. 441.)</ref>

SiO ₂	46.70
Al ₂ O ₃	1314
Fe ₂ O ₃	5.43
FeO	9.88
MnO	a trace
TiO ₂	1.94
CaO	3.95
MgO	614
K ₂ O	1.36
Na ₂ O	3.48
CO2	1.68
Combined water	5.88
	100.16

"Specimen of gabbro from the most westerly quarry at Rockmount. "Sp. Gray. 2.26<ref>Sp. grav. corrected by Mr. B. Hobson to 2.76.</ref>

SiO ₂	47.13
A1 ₂ O ₃	8.48
Fe ₂ O ₃	6.15
FeO	5.54
MnO	0.64
TiO ₂	0.58
CaO	11.34
MgO	13.61
K ₂ O	0.22
Na ₂ O	1/8
CO ₂	0.47
$P_2 O_6$	0.32
Combined water	3.90
	99.66

"Carboniferous shale from a deep boring. [Knock-e-Dooney] in the Isle of Man", by W. Maynard Hutchings (in "Clays, Shales and Slates"; Geol. Mag., July, 1896, dec. iv., vol. iii., p. 309).<ref>The specimen analysed by Mr. Hutchings was from a depth of 805 feet in the above boring.</ref>

Alumina	19.15
Ferric Oxide	3.90
Lime	1.15
Magnesia	1.95
Potash	3.48
Soda	1.54
Carbon dioxide	1.36
Water and organic matter	8.87
	100.15