

## Appendix C: Magnetic susceptibility and remanence data

location	code	N	suss	NRM	initial direction		Palaeo direction	
			$\chi$ 10 <sup>-2</sup> SI	M <sub>r</sub> Am <sup>-1</sup>	D(0) deg ETN	I(0) deg down	D deg ETN	I deg down
<b>Cleveland Dyke</b>								
Shearington	SHE295	10	2.65	1.24	121	33	156	-64
	SHE395	7	2.25	2.18	177	-35	144	-65
Lochanhead	LNH194	6	2.17	3.32	137	-64	157	-68
	LNH1	7	2.87	5.93	135	-60	142	-61
	LNH495	6	2.81	4.96	143	-59	152	-68
Braco	BRA3	6	2.63	1.06	67	-60	165	-63
	BRA1	6	4.21	1.30	187	-46	166	-61
Skeoch lower	G001	10	3.25	1.40	135	-51	143	-63
Skeoch upper	SK2	11	3.35	0.55	225	-45	159	-62
Bishop Forest Hill	BFH	2	2.65	1.22				
Muil Hill	MU1	8	2.80	2.77	143	-46	146	-62
Darngarroch Hill	DN1	6	3.79	4.82	159	-41	147	-67
Castramon Hill	CAS	1	3.08	12.52				
Craigmuiie Moor	LUG1	9	3.07	2.92	160	19	136	-27
Shield Burn	MG10	7	3.15	1.52	142	-30	142	-64
	MG6	7	2.66	3.09	157	-60	158	-62
	MG5	7	2.36	0.76	123	-15	152	-70
	MG4a	6	2.02	1.54	306	63	219	-76
Cornharrow	CRN		2.27	23.40				
Dodd Hill	WK3	2	3.18	10.04				
Midrig	WS989	2	2.49	5.47	279	-1		
Windy Standard	WS976	4	2.05					
Glenhastel	GLH	1	3.40	16.27				
Polga Burn	PB	2	2.03	8.64				
Polmath Burn	PMB	1	3.58	14.55				

location	code	N	suss	NRM	initial direction		Palaeo direction		
			$X$ $10^{-2}$ SI	$M_r$ $Am^{-1}$	D(0) deg ETN	I(0) deg down	D deg ETN	I deg down	
<b>Other Dykes</b>									
Kello Water	KW01	1	4.62	0.53					
Afton Water (Dalleagles Burn)	AW07	1	7.78	4.72					
Mossdale	M001	1	0.65	4.04					
Stoneyburn	SB01	3	3.73	1.21					
Dalgig Burn	D001	2	0.94	0.99					
Kirkland (Vennel)	V001	1	2.21	0.92					

#### Average palaeomagnetic direction for Cleveland Dyke sites in northern England

		suss	Palaeodirection	
		$X$ $10^{-2}$ SI	D deg ETN	I deg down
Dagley, 1969	3 sites, 16 samples	2.3	160	-65
Giddings, 1974 (averaged by PD)	9 sites, 76 samples		159	-63

#### Directional data for some non-Tertiary dykes and sills for comparison

Wackerfield dyke	Tarling et. al., 1973		186	-26
Whin Sill	Creer et. al., 1959		188	-5
Whin Sill	Storetvedt and Gidskehaug, 1969		194	-22

#### References

- Creer, K.M., Irving, E., and Nairn, A.E.M., 1959. "Palaeomagnetism of the Great Whin Sill." *Geophysical Journal of the Royal Astronomical Society*, 2, 306.
- Dagley, P. 1969. "Palaeomagnetic results from some British Tertiary Dykes." *Earth and Planetary Science Letters*, 6, 349-254.
- Giddings, J.W., Tarling, D.H. and Thomas, D.H., 1974. "The Palaeomagnetism of the Cleveland-Armathwaite Dyke, Northern England." *Transactions of the Natural History Society of Northumberland, Durham, and Newcastle-upon-Tyne*, 41(3), 220-226.
- Storetvedt, K.M., and Gidskehaug, A., 1969. "The magnetisation of the Great Whin Sill, Northern England." *Physics of the Earth and Planetary Interiors*, 2, 105.
- Tarling, D.H., Mitchell, J.M. and Spall, H., 1973. "A Palaeomagnetic and Isotopic Age for the Wackerfield Dyke of Northern England." *Earth and Planetary Science Letters*, 18, 427-432.