

TABLE 5. CHEMICAL ANALYSES SEDIMENTS AND VOLCANICLASTICS CASTRA - SHEFFIELD AREA

Name	Sprent Con	Sprent Con	Sprent Con	Isandula Gw	Isandula Gw	Vcl breccia	Vcl sandst	Vcl sandst	Sprent Con	Pumic. Ss	Pumic. Ss	Crystal ss	Vcl sandst	Vcl sandst	Vcl sandst	Pumic. Ss	Pumic. Ss	Kerrison Volc'	Vcl sandst
Number	103	104	105	106	108	111	112	110	113	115	116	118	120	151	128	145	147	184	173
Locality	Lolbolly Rd	Lolbolly Rd	Lolbolly Rd	Isandula Rd	Gawler R	Fork of Gawlers	Below Isand Dam	Isandula Dam	Isandula Rd	McPhersons	McPhersons	McPhersons	13 Mile Rd	Castra Plant'n	Flints Rd	Castra Plant'n	Castra Plant'n	North Motton	Leven Gorge
Easting	425245	425480	425350	427720	428075	427950	427750	427380	326900	427500	427140	427155	428800	430825	423650	431125	430225	427200	417750
Northing	5429795	5430335	5430555	5436600	5434250	5433245	5433190	5432970	5433600	5427850	5428250	5428825	5425750	5424150	5422200	5427175	5426700	5439125	5418300
SiO2	72.3	66.4	65.5	54.1	58.8	57.8	57.4	75.6	57.9	74.4	55.1	63.7	69.2	71.8	60.5	71.2	57.9	58.8	74.9
TiO2	0.34	0.86	0.78	1.92	2.03	0.63	0.98	0.2	1.29	0.65	1.02	0.93	0.64	0.35	0.65	0.47	0.89	0.83	0.18
Al2O3	13.9	8.9	9.07	16.5	11	17.1	13.8	11.7	14.4	13.6	18.2	10.7	13.8	14.4	16.3	14.1	16.4	16.7	12.4
Fe2O3	3.51	7.5	6.75	12.2	13	5.28	6.72	1.87	11.6	1.72	6.1	7.18	4.76	3.45	5.13	2.84	6.78	7.25	3.16
MnO	0.07	0.12	0.12	0.05	0.27	0.07	0.11	0.02	0.14	<0.01	0.23	0.13	0.07	0.05	0.1	<0.01	0.1	0.16	0.04
MgO	0.84	3.07	3.05	2.34	4.04	3.42	2.42	0.67	5.11	0.68	1.1	1.96	1.78	0.82	1.79	1.49	2.73	3.22	1.1
CaO	0.36	4.89	4.77	0.07	0.9	4.22	4.98	0.14	0.2	0.13	2.74	2.7	0.24	0.55	1.46	0.04	6.79	3.02	0.84
Na2O	7.28	2.9	2.72	0.14	2.64	3.56	3.14	3.3	2.42	0.07	0.23	1.42	4.53	4.39	5.7	0.07	3.41	5.1	3.35
K2O	0.21	0.68	0.97	2.1	0.81	1.6	2.08	3.15	0.51	4.35	5.06	1.9	2.46	3.34	3.57	5.17	2.11	2.6	1.76
P2O5	0.06	0.16	0.13	0.18	0.2	0.1	0.14	0.04	0.05	0.02	0.16	0.16	0.1	0.09	0.17	<0.01	0.16	0.16	0.01
LOI	1.42	4.06	4.3	8.5	4.3	5.61	6.98	1.63	6.17	3.11	8.4	7.04	2.18	1.47	2.55	3.69	3.16	2.42	2.6
Ba	100	160	210	180	210	1550	300	550	240	600	600	270	650	600	950	200	300	850	420
Rb	1	17	29	70	32	50	78	94	8.5	190	200	76	62	120	105	210	58	80	72
Sr	58	92	110	8	64	330	200	78	70	12	19	82	135	135	140	5	350	350	36
Y	15	20	37	45	37	22	26	18	10	19	21	24	64	36	21	25	26	32	29
Nb	14	8	8	40	10	14	18	20	<5	18	18	20	26	24	18	24	16	28	30
Zr	150	60	60	250	250	150	210	100	70	230	160	230	220	210	200	350	170	200	140
Ni	4	46	62	155	98	15	32	7	86	8	6	64	32	<2	5	8	5	8	6
Cr	50	120	110	190	380	50	120	20	140	60	40	240	90	30	30	40	30	30	30
As	12	4	6	<3	<3	6	<3	8	4	4	<3	4	6	4	12	4	4	4	<3
Sb	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1.5	0.5	0.5	1	1.5	1	<0.5	1	1	1.5	<0.5	1.5	<0.5
Th	5.5	3.8	3.8	10	8	9.5	9	28.5	1.75	12.5	8.5	9.5	15.5	16	12	19.5	8	9.5	24.5
U	0.93	0.84	0.86	2.1	1.75	2.2	1.9	3.8	0.53	2.4	1.85	1.8	3.8	4.1	2.4	4.3	2	2.4	5.5
La	14	9.5	10.5	42	26	21.5	22	52	13.5	22.5	14.5	27	56	33.5	32	39	23	30.5	47.5
Nd	13	10.5	11.5	50	27	20.5	21	32.5	9	23	17.5	25.5	52	52	31	17	52	30	27
Ce	24.5	21	22	58	56	46.5	48	100	18.5	52	36	58	105	74	62	94	49.5	60	94
Sm	2.5	2.5	3	10	6	3.7	4.3	5	1.6	4.3	3.7	5	7.5	6	5.5	7.5	4.7	5.5	5
Eu	0.64	0.87	1	2.8	1.8	1.55	1.25	1.05	0.56	1.1	1.2	1.35	2.1	1.5	1.75	1.45	1.5	1.9	0.93
Gd	2.5	3.2	4.6	11	6.5	4.4	4.4	4	1.75	3.7	4	4.8	9.5	5.5	5.5	6	4.8	5.5	4.1
Tb	0.36	0.49	0.72	1.45	0.96	0.66	0.64	0.53	1.28	0.48	0.59	0.71	1.35	0.82	0.72	0.82	0.71	0.85	0.62
Yb	2.2	2.2	3.2	4.4	3.4	2.8	2.6	2.7	1.55	2.4	2.6	2.8	4.9	3.7	2.6	3.7	2.9	3.8	3.9
Tl	<0.1	<0.1	0.2	0.5	0.2	0.3	0.3	0.3	<0.1	0.7	0.9	0.4	0.3	0.5	0.5	0.8	0.2	0.4	0.4
Cu	14	72	88	115	21	26	19	15	42	5	7	31	21	4	18	8	19	9	6
Pb	30	14	14	16	6	<5	6	8	<5	<5	<5	<5	12	6	<5	<5	6	130	<5
Zn	160	76	90	290	98	39	45	15	100	14	27	58	52	52	42	17	52	480	27
Au	0.001	0.003	0.003	0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.003	0.006
S	1400	600	600	300	300	1400	900	200	600	100	400	400	<100	300	700	400	400	200	<100

