

## DR 2002130

Table DR1. Major and trace element compositions of the Anjishan intrusive rocks in the Ningzhen area

<b>Rock</b>	<b>Intermediate to acid rocks</b>									<b>Mafic rocks</b>	
<b>SAMPLE</b>	21	22	25	28	30	31	32	33	34	29	35
<b>SiO<sub>2</sub></b>	64.46	65.12	64.89	65.05	63.12	63.93	62.34	64.97	60.26	51.96	54.89
<b>TiO<sub>2</sub></b>	0.52	0.44	0.46	0.47	0.47	0.48	0.51	0.48	0.71	0.94	1.05
<b>Al<sub>2</sub>O<sub>3</sub></b>	15.53	14.84	15.80	14.98	15.70	15.93	15.25	15.52	15.24	16.45	15.02
<b>Fe<sub>2</sub>O<sub>3</sub></b>	1.13	0.93	1.72	2.56	1.59	1.40	1.05	1.68	1.97	2.51	0.95
<b>FeO</b>	2.97	2.76	2.53	2.22	2.33	2.73	2.95	2.55	3.30	4.98	4.22
<b>MnO</b>	0.08	0.07	0.04	0.04	0.06	0.06	0.12	0.06	0.13	0.08	0.16
<b>MgO</b>	1.53	2.38	1.69	1.52	2.88	2.24	1.97	2.11	3.99	5.87	6.27
<b>CaO</b>	5.31	4.25	4.48	4.28	3.69	4.54	4.09	4.31	6.71	7.93	8.91
<b>Na<sub>2</sub>O</b>	4.88	4.45	4.58	4.38	4.05	4.62	4.03	4.90	5.54	5.01	5.20
<b>K<sub>2</sub>O</b>	2.87	2.69	2.67	2.98	2.81	2.60	2.12	1.74	0.42	1.37	0.95
<b>P<sub>2</sub>O<sub>5</sub></b>	0.35	0.24	0.25	0.26	0.29	0.27	0.31	0.27	0.36	0.77	0.52
<b>LOI</b>	0.27	2.06	0.43	0.80	2.55	0.71	4.79	0.95	0.88	1.70	1.39
<b>SUM</b>	99.90	100.23	99.55	99.54	99.54	99.51	99.53	99.54	99.51	99.57	99.53
<b>Sc</b>	5.6	3.3	5.2	5.1	3.8	4.6	5.0	5.0	11.4	14.6	16.8
<b>V</b>	80.8	57.3	62.6	69.2	62.1	69.2	70.1	63.3	110	169	457
<b>Cr</b>	35.4	19.6	27.7	22.0	24.9	32.0	44.6	32.3	113	131	196
<b>Co</b>	9.8	9.3	8.8	10.5	9.9	11.2	11.2	11.7	20.5	19.1	27.5
<b>Ni</b>	18.9	12.0	22.5	12.2	17.5	64.6	23.2	16.5	42.9	77.3	79.3
<b>Cu</b>	119	37.2	34.2	291	13.7	16.1	11.7	30.1	17.9	17.0	9.71
<b>Zn</b>	29.3	69.7	31.7	34.7	39.6	55.2	76.8	47.0	64.1	50.5	57.2
<b>Rb</b>	50.4	38.1	47.6	43.8	44.6	25.3	35.3	21.0	5.09	41.3	27.2
<b>Sr</b>	845	822	972	906	1093	843	550	1210	1579	1974	1667
<b>Ba</b>	1744	1904	1843	1591	2066	1665	667	2559	707	1580	726
<b>Y</b>	10.4	7.5	8.1	9.2	8.2	8.8	8.9	8.4	12.4	13.7	16.9
<b>Zr</b>	80.9	77.9	61.8	69.7	78.3	98.9	110	40.1	103	111	122
<b>Hf</b>	2.9	2.7	2.3	2.5	2.7	3.3	3.3	1.7	3.3	3.5	3.8
<b>Nb</b>	17.2	13.3	13.6	14.5	15.2	13.6	12.3	14.5	22.4	27.7	31.7
<b>Ta</b>	1.2	1.1	1.1	1.1	1.1	1.0	0.8	1.0	1.4	1.5	2.1
<b>Pb</b>	9.8	17.1	10.0	8.4	11.9	9.0	15.2	14.4	41.7	4.0	4.1
<b>Th</b>	15.7	8.92	10.3	11.9	9.8	9.3	7.9	8.8	12.3	16.6	14.5
<b>U</b>	3.5	2.3	2.6	2.6	2.8	2.2	2.2	2.4	3.5	4.2	3.3
<b>La</b>	45.1	37.5	37.4	40.1	36.7	37.7	32.5	34.9	42.0	75.4	48.6
<b>Ce</b>	73.7	71.9	73.1	78.1	68.7	60.9	59.0	67.1	84.1	142	102
<b>Pr</b>	8.04	6.80	7.18	7.76	6.68	7.08	6.14	6.58	8.27	13.8	10.3
<b>Nd</b>	27.6	23.5	25.2	26.9	23.0	25.2	22.6	23.2	30.7	49.3	39.9
<b>Sm</b>	4.41	3.71	4.00	4.20	3.56	4.07	3.91	3.89	5.20	7.79	7.08
<b>Eu</b>	1.36	1.33	1.40	1.39	1.28	1.35	1.16	1.36	1.53	2.38	2.04
<b>Gd</b>	3.69	3.44	3.44	3.40	3.36	3.48	2.80	3.55	3.82	5.90	4.95
<b>Tb</b>	0.47	0.37	0.39	0.42	0.37	0.40	0.39	0.37	0.55	0.72	0.77
<b>Dy</b>	2.29	1.92	2.01	2.12	1.92	2.10	1.95	1.93	2.80	3.54	3.93
<b>Ho</b>	0.40	0.31	0.32	0.35	0.32	0.34	0.30	0.30	0.47	0.55	0.67
<b>Er</b>	1.04	0.84	0.89	0.94	0.84	0.89	0.81	0.85	1.28	1.41	1.74
<b>Tm</b>	0.14	0.11	0.11	0.12	0.11	0.12	0.10	0.10	0.16	0.17	0.23
<b>Yb</b>	1.06	0.81	0.86	0.94	0.88	0.91	0.78	0.79	1.16	1.23	1.64
<b>Lu</b>	0.16	0.12	0.13	0.14	0.13	0.14	0.12	0.11	0.19	0.19	0.26

Table DR2. Sr, Nd and Pb isotopic compositions of the Anjishan intrusive rocks in the Ningzhen area

<b>Sample numer</b>	21	22	25	28	30	31	32	33	34	29	35
<b>Rb</b>	50.4	38.1	47.6	43.8	44.6	25.3	35.3	21	5.09	41.3	27.2
<b>Sr</b>	845	822	972	906	1093	843	550	1210	1579	1974	1667
$^{87}\text{Sr}/^{86}\text{Sr}$	0.7056	0.7059	0.7057	0.7056	0.7057	0.7059	0.7068	0.7063	0.7066	0.7054	0.7070
$^{87}\text{Rb}/^{86}\text{Sr}$	0.173	0.134	0.142	0.140	0.118	0.087	0.186	0.050	0.009	0.061	0.047
$(^{87}\text{Sr}/^{86}\text{Sr})_i$	0.7053	0.7056	0.7054	0.7053	0.7055	0.7057	0.7065	0.7062	0.7066	0.7053	0.7069
<b>Sm</b>	4.41	3.71	4	4.2	3.56	4.07	3.91	3.89	5.2	7.79	7.08
<b>Nd</b>	27.6	23.5	25.2	26.9	23	25.2	22.6	23.2	30.7	49.3	39.9
$^{147}\text{Sm}/^{144}\text{Nd}$	0.097	0.096	0.097	0.095	0.094	0.098	0.105	0.102	0.103	0.096	0.108
$^{143}\text{Nd}/^{144}\text{Nd}$	0.51221	0.51206	0.51216	0.51221	0.51216	0.51217	0.51220	0.51218		0.51231	0.51251
$\epsilon_{\text{Nd}(123 \text{ Ma})}$	-6.8	-9.7	-7.8	-6.8	-7.8	-7.6	-7.1	-7.5		-4.9	-1.1
<b>U</b>	3.5	2.3	2.6	2.6	2.8	2.2	2.2	2.4	3.5	4.2	3.3
<b>Th</b>	15.7	8.92	10.3	11.9	9.8	9.3	7.9	8.8	12.3	16.6	14.5
<b>Pb</b>	9.8	17.1	10	8.4	11.9	9	15.2	14.4	41.7	4.0	4.1
$^{238}\text{U}/^{204}\text{Pb}$			15.9		14.5	15.0				66.1	
$^{232}\text{Th}/^{204}\text{Pb}$			65.2		52.3	65.7				269.8	
$^{206}\text{Pb}/^{204}\text{Pb}$			17.045		17.148	17.180				17.997	
$^{207}\text{Pb}/^{204}\text{Pb}$			15.479		15.487	15.483				15.534	
$^{208}\text{Pb}/^{204}\text{Pb}$			37.353		37.465	37.484				38.267	
$(^{206}\text{Pb}/^{204}\text{Pb})_i$			16.738		16.869	16.890				16.724	
$(^{207}\text{Pb}/^{204}\text{Pb})_i$			15.464		15.473	15.469				15.472	
$(^{208}\text{Pb}/^{204}\text{Pb})_i$			36.955		37.146	37.083				36.620	

Note: Sm, Nd, Rb, Sr, U, Th and Pb concentrations are determined by ICP-MS, which are as same as values in the Table DR1.  $\epsilon_{\text{Nd}(123 \text{ Ma})}$  values are calculated using  $t= 123$  Ma, which is the age of the Anjishan pluton.  $(^{87}\text{Sr}/^{86}\text{Sr})_i$ ,  $(^{206}\text{Pb}/^{204}\text{Pb})_i$ ,  $(^{207}\text{Pb}/^{204}\text{Pb})_i$  and  $(^{208}\text{Pb}/^{204}\text{Pb})_i$  are initial isotopic ratios at 123 Ma.